



Amateur Radio Products Autumn/Winter 2013

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WORLD-CLASS PRODUCTS SHIPPED WORLDWIDE



DX Engineering
High Performance
Cable and Assemblies

Page 103



DX Engineering
U-Bolt, V-Bolt, Saddle,
Element and Band Clamps

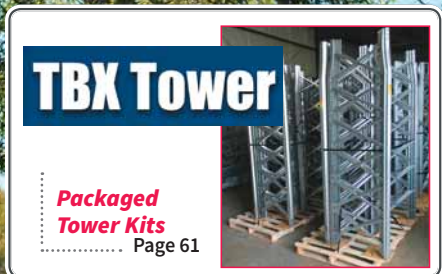
Pages 42-44



RigExpert®

Antenna
Analyzers

Pages 61,78



TBX Tower

Packaged
Tower Kits

Page 61

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In-Stock Items,
Details Inside

DXENGINEERING.COM
800.777.0703

Calling CQ DX!

When DX Engineering opened, our goal was to provide serious amateur radio operators with no-compromise antenna solutions. While that is still true, we have expanded our product offering to many other areas of our hobby. Inside this newly expanded catalog you will find thousands of great products. You can rest easy knowing that each product was vetted and chosen for a specific reason: to improve your on-air experience. From radios and microphones to antennas and cable, all the gear on these pages will help you become a more efficient operator.

You want your order fast. DX Engineering ships faster than anybody. Which means, as long as your order is in by 10 pm ET Monday through Friday and it's in stock, it will be heading your way within hours. Our DX Engineering Customer Service Team is available to help you with your order or answer questions 8:30 am to 4:30 pm ET, Monday through Friday.

If you're ordering from outside the USA, we've made shipping even easier. Industry-leading tools like our international shipping calculator and an expanded FAQ section help answer any logistical questions you may have. Simply order online (anytime, 24/7), and you can get a total shipping cost before you check out. No confusing estimates, no weird disclaimers—just simple, straightforward international shipping rates.

Thanks for reading through our catalog. We value your time and want to ensure that you're happy with us, and our products. If you have any feedback on how we can better serve you, don't hesitate to let us know: President@DXEngineering.com

I am proud to have recently joined the team here at DX Engineering. I hope you will give us the opportunity to show you we are serious about delivering a great customer experience.

73,
Tim K3LR

Tim Duffy K3LR

Chief Marketing Officer and General Manager



On Our Cover: The main 10 meter array at multi multi contest station K3LR, featuring four 8-element custom-designed Optimized Wideband Array (OWA) Yagis in a stacked array, at 135, 100, 66, and 33 feet. They're mounted on a 135 foot PiRod tower and each antenna can be rotated independently. All antenna hardware (aluminum tubing, coax, element clamps, etc.) is from DX Engineering.

John 15:12-15 - "This is my commandment, that you love one another as I have loved you. Greater love has no one than this, that someone lay down his life for his friends. You are my friends if you do what I command you. No longer do I call you servants, for the servant does not know what his master is doing; but I have called you friends, for all that I have heard from my Father I have made known to you."

DX ENGINEERING® Ultra-Crimp



New!

A Complete Crimping Solution.
For Coaxial Cable and Powerpole® Connectors.

Ultra-Grip Crimp Connector Tool Kit

Made precisely for coaxial and Powerpole® connectors, this kit is filled with the exact prep tools and dies you'll need to make full-ferrule connections. The kit comes with:

- DXE-UT-CRIMP Ultra-Grip Crimp Tool
- DXE-UT-DIE-8U Crimp Die for RG-8U/LMR-400 size cable
- DXE-UT-DIE-8X Crimp Die for RG-8X/LMR-240 size cable
- DXE-UT-DIE-PP Crimp Die for Powerpole® 15, 30, 45A connectors
- CNL-911 Coaxial cable shears
- DXE-170M Precision braid trimmers
- 2.5mm Allen wrench
- DXE-CRIMP-CASE Custom Crimp Tool Case

The Ultra-Crimp Tool, interchangeable dies and specialized carrying case are also available separately. Check out page 99 in the Tools, Cables & Connectors section.

DXE-UT-KIT-CRIMP Ultra-Crimp Connector Kit **\$113.95**

Icom + Team K3LR = USA Multi Multi CQ WW Phone Contest #1 for 8 Years in a Row!



**Icom + K3LR 2013 ARRL DX CW
MM #1 USA and #1 World
= World Record**

**Icom + K3LR 2013 ARRL DX Phone
MM #1 USA and #1 World**

Play like a winner.

ICOM®

ICOM IC-7200 HF/50 MHz Portable Base Station Transceiver

This entry-level transceiver has advanced digital features, like IF DSP technology that higher class transceivers have. It is built tough and water-resistant for outdoor use. Power Requirement: 13.8 Vdc @ 22A. Dimensions: 9.5" W x 3.3" H x 11" D. Weight: 12.1 lbs.



- Covers 160-6 meter transmit bands and 0.03-60 MHz receive bands
- 2-100 watt output on SSB, CW, RTTY (1-40 watt on AM)
- IF DSP filtering (51 passband widths)
- Hand mic, DC power cable, and spare fuses
- Water intrusion protection similar to Icom Marine radios
- Digital IF filter, twin passband tuning (PBT) and noise reduction
- LCD backlight (hi/lo/off), front facing speaker, voice synthesizer
- Rear bumper protects rear panel connectors while transporting
- 201 scannable memory channels
- Dual VFOs
- CI-V interface
- Manual notch filter
- ± 0.5 ppm frequency stability
- USB port for PC control

ICO-IC-7200 Portable HF/6M Transceiver..... **CALL/WEB**

ICOM IC-7700 HF/50 MHz All Mode Transceiver

The top performance, contest and DX chasing transceiver! It features the latest technology including two independent IC-7800-type DSP units (one for the transmitter/receiver, one for the spectrum display). Dimensions: 16.7" W x 5.9" H x 17.1" D. Weight: 52.9 lbs.



- 40 dBm third order intercept point
- Typical 134 dB @ 5 kHz dynamic range
- Selectable 3, 6 and 15 kHz roofing filters
- Exceptional out-of-band signal rejection
- Built-in switching power supply
- 7" color TFT (800 x 480 pixel) LCD
- Automatic tracking preselector and relay-switched front end
- Push-pull 48 Vdc MOSFET amplifiers—200 watts at full duty cycle
- Accepts external VGA monitor
- Built-in RTTY/PSK31 mode—requires only an external keyboard
- Rear-panel I/O allows interface of a second Icom transceiver
- Digital voice recorder, DSP noise blanker, USB flash drive socket

ICO-IC-7700 All Mode Transceiver **CALL/WEB**

ICOM IC-7410 HF/50 MHz Base Station Transceiver

This dedicated HF/50 MHz transceiver has a DSP unit and double conversion super-heterodyne system developed from the IC-7800/7700/7600 series transceivers. It features a built-in 15 kHz first IF filter and can accept up to two optional filters (3 kHz/6 kHz, not included) to protect narrow mode signals (such as CW and SSB) from adjacent strong signals. Power Requirement: 13.8 Vdc @ 23A. Dimensions: 12.4" W x 4.57" H x 11" D.



- 32-bit floating point DSP unit provides high dynamic range and superior S/N ratio
- Double conversion super-heterodyne system reduces signal distortion, improves in-band IMD characteristics
- +30 dBm third-order intercept point (in 14 MHz band)
- Operates in all modes (SSB/CW/RTTY/AM/FM)
- Optional RS-BA1 unit for IP remote control
- ± 0.5 ppm frequency stability
- Built-in automatic antenna tuner

ICO-IC-7410 HF/50MHz Base Station Transceiver **CALL/WEB**

ICOM IC-718 HF Base Station Transceiver

The most practical DSP rig you'll ever own! Covers 160 to 10 meters (except 60 meter) in CW, RTTY and AM modes. Power Requirement: 13.8 Vdc @ 20A. Dimensions: 9.4" W x 3.75" H x 9.4" D. Weight: 8.5 lbs.



- 5-100 watts adjustable output power
- 101 scannable memory channels
- IF shift control
- RF gain control, RF attenuator/preamp
- Electronic CW keyer, VOX voice operation
- High frequency stability
- Front facing speaker
- 2-40 watts AM
- 0.03-30 MHz RX coverage
- Mic compressor
- Auto-notch filter
- Digital S/R meter
- Optional filter selection
- Hand mic included

ICO-IC-718 HF Transceiver/SW Receiver **CALL/WEB**

ICOM IC-7600 High Performance HF/50 MHz All Mode Transceiver

This unit has the latest DSP technologies used in the IC-7800/7700 transceivers, plus Icom's 45 years of analog circuit expertise to give you a pronounced performance advantage. Power Requirement: 13.8 Vdc @ 23A. Dimensions: 13.4" W x 4.5" H x 11" D. Weight: 25 lbs.



- Covers 160-6 meter transmit bands and 30 kHz-60 MHz receive
- 2-100 watt output for SSB, CW, FM, RTTY, PSK31
- 1-30 watt output for AM
- 101 scannable memory channels
- Separate DSP units for transmitter/receiver and spectrum scope
- Three built-in 1st IF (roofing) filters: 3, 6 and 15 kHz
- Double conversion receiver with image rejection mixer to improve in-band IMD
- Two SO-239 antenna connectors with automatic antenna selector
- Widescreen 5.8" (400 x 240 pixel) color display
- High-resolution real-time scope using a dedicated DSP unit
- USB connectors for keyboards, flash memory drives, and PCs
- Built-in PSK and RTTY operation with a USB keyboard—PC not required
- DC power cable, spare fuses, CW key plug, HM-36 hand mic, carrying handle

ICO-IC-7600 High Performance Transceiver **CALL/WEB**

ICOM IC-9100 HF/VHF/UHF Transceiver

This compact, all-in-one transceiver provides sophisticated HF/VHF/UHF operation with room to grow. The IC-9100 covers most ham bands and modes, and offers a wide variety of operating styles. Add the optional UX-9100 1200 MHz band unit and UT-121 D-Star unit for increased communications capabilities. Power Requirement: 13.8 Vdc @ 24A. Dimensions: 12.4" W x 4.57" H x 13.5" D.



- Covers HF/50, 144, 430/440 amateur bands in SSB, CW, AM, and FM modes
- Built-in voice synthesizer announces operating frequency, mode and S-meter level
- Voice Squelch Control (VSC) function
- AFC function (FM/DV mode)
- Five scanning modes: program, memory, select memory, mode select, Δf scan
- RF speech compressor
- Microphone equalizer and adjustable transmit bandwidth
- Two preamplifier types for HF/50 MHz bands (low-level and high-gain)
- CTCSS and DTCSS tone encoder and decoder
- Audio equalizer function
- SSB/CW synchronous tuning
- 9600 bps data socket
- Automatic and one-touch repeater functions
- Optional UX-9100 unit for operating on the 1200 MHz band
- Optional UT-121 D-Star unit for digital voice and low speed data communication

ICO-IC-9100 HF/VHF/UHF Transceiver **CALL/WEB**

ICO-UX-9100 1200 MHz Band Unit, Adds 1240-1320 MHz Capabilities **\$679.95**

ICOM IC-7800 Deluxe HF/50 MHz Transceiver

The ultimate fusion of 45 years of analog RF circuit development and cutting-edge digital technology. You get dual receivers with an astonishing 110 dB dynamic range, +40 dB 3rd order intercept point in HF, and many other features. No other transceiver comes close! Dimensions: 16.6" W x 5.9" H x 17.1" D. Weight: 55 lbs.



- Covers 160-6 meter transmit bands and 30 kHz-60 MHz receive
- 5-200 watt output (5-50 watt AM)
- USB, LSB, CW, RTTY, PSK-31, AM, FM, SSB DATA modes
- Four 32-bit floating point DSP units and 24-bit AD/DA converters
- Built-in power supply (85-265 Vac)
- Ultra high stability oscillator
- Main and sub receivers, separate 50 MHz preamp and mixer
- Digital twin passband tuning
- 7" color TFT LCD with spectrum scope S-meter and RTTY/PSK31 decode messages
- Digital RF speech compressor, voice synthesizer, mic equalizer
- RTTY/PSK-31 without PC connection
- UTC/local clock and timer function
- External CRT display connector, four antenna connectors
- Includes 64MB CF memory card and rack mount handles

ICO-IC-7800 Deluxe HF/6M Transceiver..... **CALL/WEB**

ICOM IC-7100 HF, VHF and UHF Transceiver

Icom gives you leading-edge technology in an attractive package with the IC-7100. Controlling the IC-7100 is easy and intuitive with an industry-first multi-function, dot-matrix LCD touch screen. The control head is angled to provide a clear view and the buttons are spaced to accommodate large fingers. For clear communications, there is a large speaker plus an integrated CW keyjack, microphone and control cable.

The IC-7100 provides D-STAR DV mode digital voice and low speed data communications with an optional module. It is also equipped with a state-of-the-art 32-bit floating point DSP. Find all of the specs on this groundbreaking transceiver at DXEngineering.com.

- Dual DSP chips deliver versatile digital processing performance
- Built-in SD card slot for voice storage and data cloning
- Built-in RTTY demodulator and decoder
- Multi-function meter/SWR graphic display
- DSP controller RF speech compressor
- 505 memory channels
- Voice recording and playback functions
- ± 0.5 ppm high frequency stability

Included Accessories

- Hand microphone
- ACC, separation and DC power cable
- Electronic keyer and hand key plug

ICO-IC-7100 HF, VHF and Digital Transceiver **CALL/WEB**



ICOM IC-7000 All-Band Multi-Mode Mobile Transceiver

This mobile transceiver has features normally found only in the top base stations, like 41 filter bandwidths with sharp or soft filter shape. The variable twin PBT allows you to narrow the IF passband or shift the entire passband to eliminate QRM. The 2.5 inch (diagonal) color TFT screen supports a two-mode band scope. It includes a backlit remote microphone, spare fuses, key plug, DC power cable, and remote mounting package. Power Requirement: 13.8 Vdc @ 22A. Dimensions: 6.56" W x 2.59" H x 7.09" D. Weight: 5.1 lbs.

- Covers HF/6M/2M/440 MHz bands with .03-199 MHz RX coverage
- Power: 100 watts (HF+6M), 50 watts (2M), 35 watts (440 MHz)
- 503 alpha tag memories
- Internal 4-memory CW keyer
- Detachable control head
- Digital RF speech processor
- S/PWR/SWR meter
- Preamp and attenuator
- RTTY demodulator
- Adjustable SSB TX bandwidth
- DTMF memory
- VOX plus full break-in CW with adjustable pitch

ICO-IC-7000 All-Band Transceiver **CALL/WEB**



ICOM ID-1 1200 MHz Digital Transceiver

Icom's D-STAR ready ID-1 1200 MHz digital transceiver is equipped with a system that connects repeater sites over microwave links and the Internet to form a wide-area ham radio network. With this Icom digital transceiver, your voice and data will reach further than ever before.

The ID-1 1200 MHz digital transceiver embeds your own and the called station's call signs, which can automatically be stored in memory. You can send a short message in DV mode and communicate with an analog FM transceiver. Plus, you can enjoy DSQ1 that opens the squelch only when your call sign is received and CSQ1 when sharing a single call sign for quiet standby while others are talking. And, when you need the attention of all stations in the area, the enhanced monitor request (EMR) bypasses the CSQ1 and DSQ1 so all stations will hear your audio!

- 1240-1300 MHz frequency coverage
- 100 memory channels, 3 calls and 2 scan edges
- 950 bps (approximate) data communication capability in DV mode
- AFC (Automatic Frequency Control) function (FM and DV only)
- S-meter squelch
- Break-in communication
- Programmed memory and select mode scan
- Standby beep

Included Accessories

- Microphone
- Ethernet cable coupler
- USB, Ethernet and power cable
- SP-22 External speaker

System Requirements

- Microsoft Windows 98/98SE/ME/2000/XP
- USB port
- Ethernet port (for DD mode operation)

ICO-ID-1 1200 MHz Digital Transceiver **CALL/WEB**



ICOM			ICO-IC-718 *	ICO-IC-7200	ICO-IC-7410	ICO-IC-7600	ICO-IC-7700 *	ICO-IC-7800 *	ICO-IC-7000	ICO-IC-7100	ICO-IC-9100
Accessory	Description										
Amplifier	ICO-PW1	1 kW Linear Amplifier Power Supply and ATU	x	x	x	x	x	x	x	x	x
Antenna	ICO-AH-2B	Antenna Element/Base (Compatible with AH-2, AH-3 and AH-4)	x	x	x	x			x	x	x
	ICO-AH-710	Folded Dipole	x	x		x	x	x	x	x	
Antenna Tuner	ICO-AH-4	Automatic Antenna Tuner	x	x	x	x			x	x	x
	ICO-AT-180	160M-6M Automatic Antenna Tuner for Coax Feed Antennas	x	x					x	x	
Brackets and Handles	ICO-MB-105A	Mobile Transceiver Mounting Bracket, for ICO-7000							x	x	
	ICO-MB-106	Carrying Handle							x	x	
	ICO-MB-116	Front Handles		x							
	ICO-MB-117	Carrying Handle		x							
	ICO-MB-118	Mobile Mounting Bracket		x							
	ICO-MB-123	Carrying Handle			x						x
	ICO-MB-23	Carrying Handle Kit	x								
	ICO-MB-62	Transceiver Mounting Bracket							x	x	
	ICO-MBF-1	Transceiver Mounting Bracket				x			x	x	
	ICO-RMK-7000F1	MB-62, MB-105, OPC-1443 Kit									x
Cable	ICO-OPC-025D	Power Cable, DC, Molex 6-Pin, 9.8', ATO/ATC Inline Fuse Holder	x								
	ICO-OPC-1443	Remote Faceplate Separation Cable, 11.5'							x	x	
	ICO-OPC-1444	Remote Faceplate Separation Cable, 16'							x	x	
	ICO-OPC-1457	Power Cable, DC, 4-Pin, 9.8', ATO/ATC Inline Fuse Holder		x	x	x			x	x	x
	ICO-OPC-1529R	RS-232 Type PC/GPS Cable									x
	ICO-OPC-589	Mic Adapter Cable							x	x	
	ICO-OPC-599	13-Pin Connector with Cable	x	x	x				x	x	x
Crystal	ICO-CR-338	Crystal Unit, High Stability	x								
Desktop Mic	ICO-SM-30	Electret Stand Mic for HF	x	x	x	x	x	x	x	x	x
	ICO-SM-50	Dynamic Stand Mic for HF	x	x	x	x	x	x	x	x	x
Filter	ICO-FL-222	Crystal Filter, 1.9 kHz, 455 kHz	x								
	ICO-FL-430	Roofing Filter, 1st IF Stage, 6.0 kHz, 64.455 MHz			x						x
	ICO-FL-431	Roofing Filter, 1st IF Stage, 3.0 kHz, 64.455 MHz			x						x
	ICO-FL-52A	Crystal Filter, 500 Hz, 455 kHz	x								
Hand Mic	ICO-HM-151	7000 Standard Hand Mic (Same as Supplied)							x	x	
	ICO-HM-154T	Microphone, Hand Type, Single Element, Push-to-Talk, RJ-45							x	x	
	ICO-HM-36	Hand Mic (Same as Supplied)	x	x	x	x	x	x			x
Level Converter	ICO-CT-17	Transceiver Level Converter, CI-V, RS-232, Remote Jack Cables, Kit	x	x	x	x	x	x	x	x	x
Power Supply	ICO-PS-125	13.8V/25A Power Supply	x								
	ICO-PS-126	13.8V/25A External Power Supply with 4-Pin, 110V		x	x	x			x	x	x
Plug-In Module	ICO-UT-106	Plug-in Module, DTMF Decoder Unit	x								
	ICO-UT-121	D-STAR Digital Board									x
	ICO-UX-9100	1200 MHz Band Unit									x
Preamplifier	ICO-AG-25	2 Meter Preamplifier									x
Software	ICO-RS-BA1	IP Remote Control Software		x	x	x	x	x			x
Speaker	ICO-SP-21	External Speaker for Base Stations	x	x	x	x	x	x			x
	ICO-SP-23	5 Watt External Speaker with 4 Audio Filters and Headphone Jack	x	x	x	x	x	x	x	x	x
	ICO-SP-33	Base Station Speaker	x	x	x	x	x	x	x	x	x
	ICO-SP-34	Base Station Speaker					x	x			
	ICO-SP-35	Heavy Duty Slim-Line Mobile Speaker	x	x					x	x	

* Covers HF frequencies except for 60M

Orders by 10 pm ET Ship Same Day, See Page 58 for Details

ICOM IC-2820H 2M/400 Dual Band Mobile Transceiver

Covers 144-148 MHz and 430-450 MHz transmit. Left band receive: 118-549.95 MHz wideband. Right band receive: 118-173.995/375-549.995/810-990.990 MHz cellular blocked. Inputs for two antennas allow diversity reception (compares signal strength from the two antennas, automatically selects the strongest signal) in the 127/136/146/375/440/500 MHz bands. V/U and U/U simultaneous receive antennas required. Includes a full-function backlit remote DTMF hand microphone, mounting bracket, DC power cable, separation cables, and spare fuses. Power Requirement: 13.8 Vdc @ 13A. Dimensions: 5.9" W x 1.65" H x 7.4" D. Weight: 3.3 lbs.

- D-STAR/GPS and DV (digital voice) upgradeable with optional UT-123 Receiver
- Selectable Power: 50/15/5 watts on both bands
- 522 memory channels
- Weather Alert
- CTCSS/DCS encode/decode
- PC compatibility
- Removable front panel
- Selectable (amber/green) display
- Packet ready (9600 bps/6-pin DIN)

ICO-IC-2820H Analog Dual Band Transceiver.....CALL/WEB



ICOM IC-2300H 2M Single Band Mobile Transceiver

Covers 144-148 MHz transmit with 136-174 MHz receive. Large selectable (amber or green) LCD display with four levels of brightness, backlit keys, and a large oversized tuning dial. It includes a remote control microphone, DC power cable, and mobile mounting bracket. Power Requirement: 13.8 Vdc @ 15A. Dimensions: 5.5" W x 1.6" H x 5.25" D. Weight: 2.75 lbs.

- Selectable transmit power levels: 65/25/10/5 watts
- Choice of FM Narrow mode
- 207 alpha tag memories w/call channel
- Dynamic Memory Scan
- 50 CTCSS and 104 x 2 DTCSS encode/decode, tone scan function, pocket beep
- 24 DTMF autodial memories
- Squelch delay

ICO-IC-2300H 2M Single Band Transceiver.....CALL/WEB

ICO-CS-2300H Cloning Software for IC-2300H\$64.95



ICOM IC-V8000 2M Single Band High Power Mobile Transceiver

Covers 144-148 MHz transmit with 118-174 MHz receive. User selectable power (75/25/10/5 watts, 75 watts maximum). It includes a remote control microphone, DC power cable, and mounting bracket. Power Requirement: 13.8 Vdc @ 15A. Dimensions: 5.9" W x 2" H x 5.9" D. Weight: 2.22 lbs.

- 207 alpha tag memories with Call Channel and priority watch
- Transceiver to transceiver or PC to transceiver cloning
- Weather channel scan and alert
- DMS scan system
- CTCSS/DTCS tones
- Customized memory banks
- DTMF encode and pager
- 10 DTMF memory channels
- Front facing speaker
- One-piece, die-cast aluminum chassis
- Selectable display (amber or green)

ICO-IC-V8000 2M High Power TransceiverCALL/WEB

ICO-CS-V8000 Cloning Software for IC-V8000\$34.95



ICOM ID-880H VHF and UHF Digital Transceiver

ICOM's ID-880H VHF and UHF digital transceiver lets you easily switch between bands. This 50 watt transceiver is D-STAR ready with an integrated wideband receiver for aviation, marine, weather, and utility communications. You can store and label 1,052 memory channels in one of the 26 memory banks. Multiple scan functions for maximum reception; the microphone keypad navigation provides quick access to the ID-880H's multiple settings.

- Built-in CTCSS/DTCS encoder and decoder
- Built-in noise filter (AM/FM) mode
- Data and 9600/1200 bps packet jacks on the rear panel
- ± 2.5 ppm frequency stability
- Monitor function to listen to a weak signal
- Auto repeater function (USA versions only)
- Weather channel receive with weather alert
- 16 DTMF memory channels using 24 digits
- Drip-resistant construction, equivalent to IPX4
- Auto power save, power off and on
- 10 dB (approximate) built-in attenuator

Included Accessories

- Hand microphone HM-133
- 11.2 foot separation cable
- DC power cable OPC-1132A
- Mounting bracket kit
- Remote control bracket

ICO-ID-880H VHF and UHF Digital TransceiverCALL/WEB



ICOM AH-4 Antenna Tuner

ICOM's AH-4 antenna tuner lets you automatically tune a 23 foot or longer wire antenna for portable or mobile HF/50 MHz use. The PTT tune function makes changing bands easy, too.

ICO-AH-4 Antenna Tuner.....\$289.95

ICO-OPC-136 AH-4 Control Cable, 16.4'\$32.95



ICOM			ICO-IC-2300H	ICO-IC-V8000	ICO-IC-2820H	ICO-ID-880H	ICO-ID-1
Accessory	Description						
Bracket	ICO-MB-28H	Mobile Mounting Bracket	x				x
	ICO-MBF-1	Transceiver Mounting Bracket			x	x	
	ICO-V8000-MMB	Standard Mounting Bracket		x			
Cable	ICO-OPC-1132	Power Cable, DC, T-Style, 2-Pin, 9.8'	x	x	x	x	x
	ICO-OPC-1154A	Separation Cable 11.2' (Same as Supplied)				x	
	ICO-OPC-1529R	RS-232 Type PC/GPS Cable			x	x	
	ICO-OPC-1663	Separation Cable 11.2' (Same as Supplied)			x		
	ICO-OPC-1712	Controller Cable 3.9' (Same as Supplied)			x		
	ICO-OPC-346	DC Power Cable 9.8' (Same as Supplied)		x			
	ICO-OPC-347	Power Cable, DC, T-Style, 2-Pin, 23', ATO/ATC Inline Fuse Holder	x	x	x	x	x
	ICO-OPC-440	Mic Extension Cable	x	x	x	x	x
	ICO-OPC-441	Speaker Extension Cable	x	x	x	x	x
	ICO-OPC-474	Radio to Radio Cloning Cable	x	x	x	x	
Cloning Software	ICO-OPC-478	PC to Radio Programming Cable, RS-232, Stereo 3.5mm Male Plug	x	x	x	x	
	ICO-OPC-478UC	PC to Radio Programming Cable, USB	x	x	x	x	
	ICO-OPC-589	Mic Adapter Cable	x	x		x	
	ICO-CS-2300H	Cloning Software	x				
	ICO-CS-2820	Windows Programming Software			x		
Control Software	ICO-CS-V8000	Cloning Software		x			
	ICO-RS-ID1	ID1 Control Software					x
Hand Mic	ICO-HM-103	Lightweight Hand Mic				x	
	ICO-HM-133	Remote Control Mic (Same as Supplied)			x	x	
	ICO-HM-133V	Microphone, Hand Type, Single Element, Push-to-Talk, RJ-45	x	x			
Plug-In Module	ICO-UT-108	Plug-In Module, DTMF Decoder Unit		x			
	ICO-UT-123	D-STAR Digital GPS Unit with GPS Antenna			x		
Speaker	ICO-SP-22	External Speaker	x	x	x	x	x
	ICO-SP-35	External Speaker	x	x	x	x	x
Speaker Mic	ICO-HM-154	Speaker Mic	x	x	x	x	x
	ICO-HM-154T	Microphone, Hand Type, Single Element, Push-to-Talk, RJ-45	x	x			

Note 1: IC-T70A and IC-T70ASPORT require the OPC-2006; ID-31A and ID-51A require the OPC-2006LS.

Accessory	Description	2 Meters		Dual/Tri-Band					70cm
		IC-V80	IC-V80 SPORT	ID-51A	IC-T70A	IC-T70A SPORT	IC-80AD	IC-92AD	ID-31A
Adapter	ICO-AD-92SMA	Antenna Connector Adapter (SMA to BNC)		X	X	X	X	X	X
Antenna	ICO-FAB-2E	UHF Antenna	X	X					
	ICO-FAS-270C	UHF Antenna		X	X	X	X	X	X
Charger	ICO-BC-139-02	Rapid Charger					X		
	ICO-BC-167ND	Wall Charger for BP-271, 220V		X	X	X	X	X	X
	ICO-BC-167SA	Wall Charger for BP-271		X	X	X	X	X	X
	ICO-BC-177-02	Rapid Charger						X	
	ICO-BC-191-12	Rapid Desktop Charger for BP-264	X	X		X			
	ICO-BC-193-12	Rapid Desktop Charger for BP-265	X	X		X			
	ICO-BC-202-02	Rapid Desktop Charger for BP-271, BP-272		X					X
Battery Pack	ICO-BP-217	Li-Ion Battery Pack 7.4V/1300 mAh					X		
	ICO-BP-256	Li-Ion Battery Pack						X	
	ICO-BP-264	Ni-MH 7.2V/1400 mAh	X	X		X			
	ICO-BP-265	Li-Ion 7.4V/1900 mAh (Minimum), 2000 mAh (Typical)	X	X		X			
	ICO-BP-271	7.4V 1150 mAh Li-Ion Battery		X					X
	ICO-BP-272	7.4V 1880 mAh Li-Ion Battery		X					X
Battery Case	ICO-BP-216	Alkaline Battery Pack (Holds 2 AA Batteries)					X		
	ICO-BP-257	Alkaline Battery Pack (Holds 2 AA Batteries)						X	
	ICO-BP-263	Alkaline Battery Pack (Holds 6 AA Batteries)	X	X	X	X			
	ICO-BP-273	AA Alkaline Battery Tray (Holds 3 AA Batteries)		X					X
Cables	ICO-CP-12L	Cigarette Lighter Cable with Noise Filter (to Charge Radio)		X	X	X	X	X	X
	ICO-CP-17L	Cigarette Lighter Cable for Charger (Use with BC-191 or BC-193)	X	X		X			
	ICO-CP-18A	Cigarette Lighter Cable							
	ICO-CP-19R	Cigarette Lighter Cable, Charges While in Use, Built-In DC Converter		X	X	X	X	X	X
	ICO-OPC-1797	Plug Adapter Cable						X	
	ICO-OPC-2004	Cable for Use with HS-94, HS-95, and HS-97	X	X					
	ICO-OPC-2006	Cable for Use with HS-94, HS-95, and HS-97			X	X			
	ICO-OPC-2006LS	Plug Adapter Cable (Required for Use with HS-94, HS-95, and HS-97)		X					X
	ICO-OPC-2144	Slim L-Type Plug Adapter Cable for Speaker Mic and Headphone		X					X
	ICO-OPC-2218LU	Cloning/Data Cable (USB)		X					X
	ICO-OPC-254L	DC Power Cable (for Use of the Transceiver with an External Power Supply)		X	X	X	X	X	X
	ICO-OPC-474	Radio to Radio Cloning Cable	X	X		X	X	X	
	ICO-OPC-478	PC to Radio Programming Cable, RS-232, Stereo 3.5mm Male Plug	X	X		X		X	
	ICO-OPC-478UC	PC to Radio Programming Cable, USB	X	X		X	X		
	ICO-OPC-515L	DC Power Cable for Use with BC-191, BC-192 or BC-193	X	X		X	X		
Level Converter	ICO-CT-17	Transceiver Level Converter, CI-V, RS-232, Remote Jack Cables, Kit		X					X
Speaker Mics	ICO-HM-128	Lightweight Earphone					X	X	
	ICO-HM-131	Speaker Mic with Earphone Jack and Revolving Clip			X	X	X	X	
	ICO-HM-153	Durable Earphone Mic			X	X	X	X	
	ICO-HM-153L	Durable Earphone Mic	X	X					
	ICO-HM-153LS	Compact Speaker Mic with Slim L-Type Connector		X					X
	ICO-HM-158L-LG	Speaker Mic with Metal Clip and Screw Down L-Shaped Connector	X	X					
	ICO-HM-159L-LG	Full Size Durable Speaker Mic	X	X					
	ICO-HM-166LS	Light-Type Earphone Mic with Slim L-Type Connector		X					X
	ICO-HM-174	Waterproof Speaker Mic						X	
	ICO-HM-175GPS	Waterproof Speaker Mic with GPS receiver						X	
	ICO-HM-186LS	Compact Speaker Mic with Slim L-Type Connector		X					X
	ICO-HM-189GPS	GPS Speaker Mic					X		
	ICO-HM-75A	Speaker Mic		X			X	X	
	ICO-HM-75LS	Remote Control Speaker Mic with Slim L-Type Connector		X					X
Headsets	ICO-HS-85	Headset with VOX, PTT					X	X	
	ICO-HS-94	LM Earpiece-Type Headset (See Note 1)	X	X	X	X			X
	ICO-HS-95	Headset with Boom Mic (See Note 1)	X	X	X	X			X
	ICO-HS-97	Earphone with Throat Mic (See Note 1)	X	X	X	X			X
Carrying Case	ICO-LC-163	Carrying Case					X		
	ICO-LC-168	Carrying Case						X	
	ICO-LC-174	Carrying Case			X	X			
	ICO-LC-178	Leather Carrying Case							X
	ICO-LC-179	Carrying Case		X					
	ICO-SJ-1	Silicone Jacket Case		X					
Belt Clip	ICO-MB-107	Belt Clip					X		
	ICO-MB-111	Belt Clip						X	
	ICO-MB-124	Alligator Style Clip	X	X		X	X		
	ICO-MB-127	Belt Clip		X					
	ICO-MB-86	Swivel Belt Clip					X		
	ICO-MB-98	Belt Clip							
Earphone	ICO-SP-13	Earphone		X			X	X	X
	ICO-SP-27	Acoustic Tube Earphone with Clothing Clip			X	X			

ICOM IC-T70A Dual-Band Transceiver

ICOM's IC-T70A Dual-Band FM Transceiver gives you 5 watts of RF power on 2M and 70cm in a small, lightweight handheld package. IC-T70A handhelds also have an internal VOX function for hands-free operation when used with an optional headset and plug-adaptor cable. CTCSS and DTCS tone codes provide quiet standby and allow you to use tone-access repeaters. The BP-264 Ni-MH battery (ICO-IC-T70A only) offers over 10 hours of power on a single charge.

- Wide/narrow channel spacing
- WX channel and WX alert function
- Power save function
- SMA type antenna connector
- Automatic repeater function
- TOT (time out timer) setting
- Repeater lockout and busy channel lockout
- PC programmable with optional CS-T70
- Optional transceiver-to-transceiver cloning
- Direct keypad frequency entry
- 16 DTMF autodial memories
- Auto power off
- LCD backlight

Included Accessories

- Ni-MH battery pack (IC-T70A)
- AA battery case (IC-T70ASPORT)
- Belt clip
- Wall charger (IC-T70A)
- Antenna
- Hand strap

ICO-IC-T70A Dual-Band FM Transceiver..... **CALL/WEB**

ICO-IC-T70ASPORT Dual-Band FM Transceiver..... **CALL/WEB**

ICOM IC-92AD VHF/UHF Dual-Band Transceiver

The ideal 5 watt transceiver for the field; this is a tough, rugged radio that's packed with features. It is completely submersible to IPX7 specifications and is D-STAR ready. The IC-92AD also uses Icom's dualwatch capability, allowing you to monitor receive on two bands simultaneously. There's a large display for clear readability and the one-touch reply mode makes quick transmissions easy.

- 1,304 memory channels
- External DC power jack (10-16 Vdc)
- 10 channel DTMF memory (16-digit)
- Squelch disable function to monitor a weak signal
- Built-in CTCSS/DTCS tone encoder and decoder (FM mode)
- 26 memory banks with selected bank and bank link scanning
- 10 dB (approx.) built-in attenuator
- Automatic repeater function
- Weather channel with weather alert

Included Accessories

- Battery pack and charger
- Antenna

ICO-IC-92AD VHF/UHF Dual-Band Transceiver..... **CALL/WEB**

ICOM IC-V80-Sport VHF Transceiver

ICOM's most economical full-featured 2 meter handheld gives you 5.5 watts of RF power. The external DC power jack allows for operation and charge when used with an external DC power supply. With its 207 alphanumeric memory channels, you can pick and choose your scanning. CTCSS and DTCS tone codes provide quiet stand-by and allow you to use tone-access repeaters.

The IC-V80 handheld has passed the MIL-STD-810 environmental tests for practical outdoor use.

- WX channel and weather alert function
- Program, memory, skip, priority and tone scans
- Automatic repeater function
- TOT (time out timer) setting
- Repeater lockout and busy channel lockout
- PC programmable with optional CS-V80 Software
- DTMF auto-dial memories
- Wide/narrow channel spacing

Included Accessories

- BP-263 AA Battery Case
- Belt clip
- BNC flexible antenna

ICO-IC-V80-SPORT VHF FM Transceiver..... **CALL/WEB**

ICOM ID-51A VHF/UHF Dual-Band Transceiver

You get a powerful, feature-laden dual-band transceiver in a compact unit with the ID-51A. This D-STAR ready handheld also features an integrated GPS receiver with an automatic position reply function. For added versatility, the ID-51A's groundbreaking dualwatch feature allows you to listen to FM, AM and shortwave broadcast stations while monitoring the Ham bands.

- TX voice memory (1 channel, 60 seconds) for repeated calls
- Voice synthesizer function announces frequency, mode and call sign
- Voice memory function records incoming and outgoing calls and can be used as a voice recorder
- CSV formatted communication log
- 10-step battery voltage indicator
- IPX7 submersible
- Micro SD card slot for voice and log data storage and data cloning
- Repeater search function searches up to 20 nearby repeater sites

Included Accessories

- Battery pack and charger
- Cloning software (CS-51)
- Antenna

ICO-ID-51A VHF/UHF Dual-Band Transceiver..... **CALL/WEB**

ICOM ID-31A UHF Handheld Transceiver

The ID-31A UHF Transceiver offers global D-STAR connectivity in a small and lightweight package—so you can carry one with you all the time. Waterproof to one meter for 30 minutes, this transceiver is rugged enough to carry an IPX7 rating.

Multiple scan functions and 1,252 memory channels allow for maximum convenience. The Icom ID-31A transceiver's extended range receiver lets you listen from 400 to 479 MHz. The built-in GPS receiver displays your current position and altitude, and features a position-reporting function in Digital Voice mode. The GPS will even locate the nearest D-STAR repeater for you.

The Icom ID-31A UHF Transceiver is the most advanced UHF handheld available today—visit DXEngineering.com for all of the specs and features.

- 5 watt power output
- 4-step RF power selection
- 16 DTMF memory channels of 24 digits
- Wide or narrow analog FM mode
- Built-in CTCSS/DTCS encoder and decoder for analog FM
- 1,252 memory channels
- Squelch release function to monitor a weak signal

Included Accessories

- CS-31 Software
- Battery pack
- Wall charger
- Antenna

ICO-ID-31A UHF Handheld Transceiver..... **CALL/WEB**

ICOM IC-80AD VHF/UHF Dual-Band Transceiver

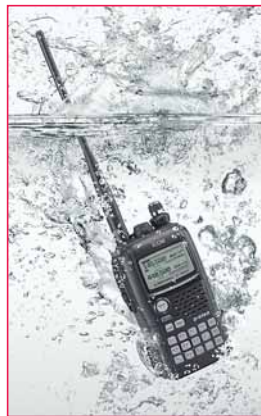
This IC-80AD VHF/UHF dual-band transceiver is the perfect companion for your ID-880H mobile unit. This water-resistant transceiver offers D-STAR technology and carries an IPX4 rating with the cover attached. Switch between VHF/UHF bands easily. Listen to aviation, marine, weather and utility communications. Multiple scan functions allow for maximum reception and 1,052 memory channels that can be named and sorted into one of the 26 memory banks. You can download cloning software for free, allowing you to share memory channel info and radio settings between the IC-80AD and ID-880H!

- 5 watt power output
- Built-in CTCSS/DTCS encoder and decoder
- Monitor function to listen to a weak signal
- Auto repeaters function
- Weather channel receive with weather alert
- 16 DTMF memory channels (24 digits)
- 4-step RF power selection
- 10 dB (approximate) built-in attenuator

Included Accessories

- Battery pack
- Antenna
- Wall charger
- Belt clip

ICO-IC-80AD VHF/UHF Dual-Band Transceiver..... **CALL/WEB**



New!

ICOM IC-R9500 Communications Receiver

Icom's IC-R9500 delivers professional quality functions in a high-end communications receiver. From quality and functionality to signal detection and monitoring, everything about the IC-R9500 contributes to a professional-grade design. This receiver covers SSB, AM, FM (WFM), CW and FSK modes. It achieves amazing receiver performance by using a D-MOS FET array in the first mixer and an excellent IMD roofing filter.

You'll get vivid spectrum analysis with the wide color display. Four different spectrum modes are available to monitor signal strength and characteristics. With 1,220 memory channels and ten VFO channels, you can store, group, name and bank all of your favorite frequencies, modes, filter widths and tuning steps. The IC-R9500 offers top-of-the-line performance in a feature-laden package, giving you an unparalleled listening experience. Visit DXEngineering.com to learn more.

- 0.005-3335 MHz wideband coverage (800 MHz cellular is blocked)
- +40 dBm third order intercept point
- 109 dB dynamic range at 14.1 MHz
- ± 0.05 ppm high-frequency stability
- ± 3 dB accuracy signal meter
- SSB/CW/AM mode auto tuning functions
- 1/4 tuning step function and dial click function
- CW-R (reverse) mode
- Input overload protection (HF bands only)
- Optional P25 digital mode reception
- CTCSS and DTCSS tone squelch

ICO-IC-R9500 Communications Receiver **CALL/WEB**



ICOM IC-R75 HF+50 MHz All Mode Communications Receiver

Expand your frequency horizon with a receiver that covers 30 kHz to 60 MHz, including FM reception for 29 and 50 MHz. Enjoy marine, amateur and shortwave broadcasts—even worldwide communications. The IC-R75 has a wide dynamic range, a triple conversion system and twin passband tuning to eliminate interference. The IC-R75 receiver also offers selectable RF gain/squelch control to match your operating preference.

You can upgrade your IC-R75 by installing up to two optional filters for more flexible bandwidth selection and filter combinations. Or, gain DSP capabilities like noise reduction and an automatic notch filter with an optional DSP unit.

This all-mode communications receiver gives you the ability to listen to the world!

- Digital bar S-meter with peak hold
- Large alphanumeric display
- Front-mounted speaker
- Internal clock with sleep timer
- Numeric keypad for direct input
- Attenuator and 2-level preamp
- Selectable AGC (fast/slow/off)
- Noise blanker
- 99 memories, plus two program scan edges
- Ample scanning functions available
- CW pitch control and CW reverse mode

Included Accessories

- AC adapter
- DC power cable

ICO-IC-R75 Communications Receiver **CALL/WEB**



Remotely Control Icom Transceivers Through an IP Network!

Icom IP Remote Control Software

The IP Remote Control Software allows you to operate an Icom radio installed in another room using your home network or even from a remote location over the Internet. The software works with Icom IC-9100, IC-7800, IC-7700, IC-7600, IC-756PROIII, IC-746PRO, IC-7400 IC-7200, and IC-7000 transceivers. System requirements: Windows® XP (SP3), Vista, or Windows® 7.

ICO-RS-BA1 Icom IP Remote Control Software **\$95.95**



ICOM IC-R6 Communications Receiver

Designed for serious listening in the field, the Icom IC-R6 Communications Receiver has an ultra-wideband frequency range that covers 100 kHz to 1309.995 MHz (800 MHz cellular is blocked). That range includes government, amateur, utility and AM/FM/SW broadcast stations. To help sort out clutter while scanning, the IC-R6's Voice Squelch Control opens the squelch only when a modulated signal is detected. It's a handy feature when listening for news, talk and music while avoiding data bursts and beacons.

The IC-R6 has 100 channels per second of high-speed scan capability when in VFO mode. This superior scanning power provides efficiency when searching over 1300 MHz of spectrum. With 1,300 alphanumeric memory channels, 50 scan edges, 200 auto-write memories and 22 memory banks, the Icom IC-R6 Communications Receiver gives you unparalleled scanning flexibility.

- Built-in audio low pass filter
- ± 1.0 ppm high frequency stability at 25°C
- Ferrite bar antenna for AM broadcast
- 150 mW loud audio with internal speaker
- DTCSS and CTCSS tone squelch and reverse tone squelch
- Duplex operation monitoring
- Built-in RF attenuator
- Auto memory-write scan stores frequencies/settings
- Weather channel receive with weather alert

Included Accessories

• Two AA Ni-MH cells • AC adapter, BC-196SA/SD • Antenna
ICO-IC-R6 Communications Receiver **CALL/WEB**



ICOM IC-R20 Communications Receiver

This communications receiver features Icom's dualwatch technology, which lets you monitor two frequencies at once for excellent listening versatility. It covers 150 kHz to 3304.999 MHz (800 MHz cellular is blocked) in SSB, CW, AM, FM and WFM modes. This includes commercial radio and TV broadcasts, plus communications for boaters, aviation, public safety and more. The receiver features an internal 32MB digital recorder capable of storing received communications, useful for recording audio, and has a USB port to download data to a computer.

It also includes a band scope and multiple scanning controls, making this the ideal receiver for signal monitoring in the field.

- 1,250 memory channels
- 50 Ω antenna impedance
- Voice Squelch Control opens only when a modulated signal is detected
- Auto squelch and squelch monitor capability
- Built-in attenuator and RF gain control
- Noise blanker, ANL (Auto Noise Limiter), AF filter
- AFC (Auto Frequency Control) function
- Built-in ferrite bar antenna for AM broadcast
- Weather channel and weather alert
- Preprogrammed with TV and popular shortwave channels
- Uses 3 AA batteries (not included)

ICO-IC-R20-SPORT Communications Receiver **\$499.95**
ICO-BP-206 Li-Ion Battery Pack for IC-R20 **\$55.95**



More Battery Packs and Cases For Your Icom Radios

Part Number	Description	Volts (Vdc)	Current (mAh)	Fits Radio(s)	Trickle Charger	Rapid Charger
ICO-BP-216	2 AA Battery Case	—	—	IC-80AD IC-91A	—	—
ICO-BP-217	Li-Ion Battery Pack	7.4	1,300	IC-80AD IC-91A	BC-167SA	BC-139-02
ICO-BP-222N	Ni-CD Battery Pack	7.6	600	IC-U82 IC-V82	BC-146, BC-147	BC-119N-01**
ICO-BP-256	Li-Ion Battery Pack	7.4	1,620	IC-92AD	BC-167SA	BC-139-02
ICO-BP-257	2 AA Battery Case	—	—	IC-92AD	—	—
ICO-BP-263	6 AA Battery Case	—	—	IC-T70A IC-V80	—	—
ICO-BP-264	Ni-MH Battery Pack	7.2	1,400	IC-T70A IC-V80	BC-192-12	BC-191-12*
ICO-BP-265	Li-Ion Battery Pack	7.4	1,900	IC-T70A IC-V80	BC-167SA	BC-193-12*
ICO-BP-271	Li-Ion Battery Pack	7.4	1,150	ID-31A ID-51A	BC-167SA	BC-202-02
ICO-BP-272	Li-Ion Battery Pack	7.4	1,880	ID-31A ID-51A	BC-167SA	BC-202-02
ICO-BP-273	3 AA Battery Case	—	—	ID-31A ID-51A	—	—

* Requires ICO-BC-123S AC Adapter ** Requires AD-101 Charger Adapter



QSL 7" Digital Picture Frame and Scanner

This kit, consisting of one digital scanner and one 7" digital picture frame, is the perfect way to digitally capture and display your QSL Cards or 4" x 6" photos.

Simply feed your QSL cards through the scanner, then transfer the scanner's SD memory card to the digital picture frame. It's a great way to preserve the cards and remember QSOs, while showing off your collection. Over 3,000 QSL cards can be stored and displayed. The XYL will be happy to see the wall again, and you'll have more room to hang certificates!

DXE-QSL-KIT\$89.95



Radio Interface Cables

RT Systems has cables for many of the most popular radios in use today. They are compatible with various handhelds, mobiles, HF rigs and receivers from common manufacturers. Don't see the cable you need? Check out DXEngineering.com, there's a good chance we have it online.

Part Number	Cable Type	Price
RTP-USB-63	USB to Female DB-9	\$29.95
RTP-USB-64	USB to Male DB-9	\$29.95
RTP-USB-65	USB to 9-Pin DIN CAT Data Cable	\$29.95
RTP-USB-81	USB to 6-Pin Mini DIN	\$29.95
RTP-USB-29B	USB to 6-Pin Mini DIN	\$29.95
RTP-USB-82	USB to Stereo 2.5mm Male	\$29.95
RTP-USB-29C	USB to 4-Pin Modular Plug	\$29.95
RTP-USB-K4Y	USB to Kenwood 3.5mm/2.5mm Plug	\$29.95
RTP-USB-92	USB to 12-Pin Icom Plug (for IC-92AD)	\$49.95
RTP-USB-29F	USB to 6-Pin Modular Plug	\$29.95
RTP-USB-K5D	USB to 8-Pin Modular Plug	\$29.95
RTP-USB-92D	USB to 12-Pin Icom Plug (for IC-92AD)	\$49.95
RTP-USB-57A	USB to 4-Conductor (TRRS) 3.5mm Plug	\$29.95
RTP-USB-K5G	USB to 8-Pin Mini DIN	\$29.95
RTP-USB-62	USB to 8-Pin Mini DIN	\$29.95
RTP-USB-29A	USB to Stereo (TRS) 3.5mm Male Plug	\$29.95
RTP-USB-K4S	USB to 6-Pin Mini DIN, Programming Cable	\$29.95
RTP-USB61	USB to 6-Pin Mini DIN, Data Cable	\$29.95
RTP-USB-57B	USB to 4-Conductor (TRRS) 3.5mm Plug	\$29.95
RTP-RTS-03	USB to 9-Pin Serial Male with Driver Software	\$22.95
RTP-USB-RTS05	USB to Stereo 2.5mm Male Plug	\$29.95
RTP-OPEN-VX8	Yaesu VX8 Mic/Data Cable to Open Wire Pigtail	\$7.95
RTP-USB-RTS01	USB to Stereo (TRS) 3.5mm Male Plug	\$29.95

RT SYSTEMS RADIO PROGRAMMING MADE EASY

Programming/Cloning Software and Cables

In order to get the most out of your radio, it needs to be programmed properly. RT Systems makes the process much less tedious with intuitive and user-friendly CD-ROM software. Instead of pressing buttons and reading small LCD screens, you can simply scroll through checkboxes and enter information with your keyboard. Program memories, adjust D-STAR options, configure APRS settings and more—all without eyestrain and finger fatigue.

The appropriate interface cables are included with the software. They are also available separately.

Part Number	Radio	Cable Type	Price
RTP-WCS-208	Icom IC-208	USB-29A	\$49.95
RTP-WCS-2100	Icom IC-2100	USB-29A	\$49.95
RTP-WCS-2200	Icom IC-2200	USB-29A	\$49.95
RTP-WCS-2300	Icom IC-2300	USB-29A	\$49.95
RTP-WCS-2720	Icom IC-2720	USB-29A	\$49.95
RTP-WCS-2820	Icom IC-2820	USB-29A	\$49.95
RTP-WCS-2820DATA	Icom IC-2820	USB-RTS05	\$49.95
RTP-WCS-7000	Icom IC-7000	USB-RTS01	\$49.95
RTP-WCS-7200	Icom IC-7200	USB-RTS01	\$49.95
RTP-WCS-7200-U	Icom IC-7200	—	\$24.95
RTP-WCS-80	Icom IC-80	USB-29A	\$49.95
RTP-WCS-80-DATA	Icom IC-80	USB-RTS05	\$49.95
RTP-WCS-91	Icom IC-91 A/D	USB-29A	\$49.95
RTP-WCS-9100	Icom IC-9100	USB-RTS01	\$49.95
RTP-WCS-9100-U	Icom IC-9100	—	\$24.95
RTP-WCS-92	Icom IC-92	USB-92	\$69.95
RTP-WCS-Q7	Icom IC-Q7A	USB-29A	\$49.95
RTP-WCS-R2	Icom IC-R2	USB-29A	\$49.95
RTP-WCS-R10	Icom IC-R10	USB-29A	\$49.95
RTP-WCS-T2	Icom IC-T2	USB-29A	\$41.95
RTP-WCS-T7	Icom IC-T7	USB-29A	\$49.95
RTP-WCS-T70	Icom TC-T70	USB-29A	\$49.95
RTP-WCS-T8	Icom IC-T8	USB-29A	\$49.95
RTP-WCS-T81	Icom IC-T81	USB-29A	\$49.95
RTP-WCS-U82	Icom IC-U82	USB-29A	\$49.95
RTP-WCS-V8	Icom IC-V8	USB-29A	\$49.95
RTP-WCS-V80	Icom IC-V80	USB-29A	\$49.95
RTP-WCS-V8000	Icom IC-V8000	USB-29A	\$49.95
RTP-WCS-V82	Icom IC-V82	USB-29A	\$49.95
RTP-WCS-V85	Icom IC-V85	USB-29A	\$49.95
RTP-WCS-W32	Icom IC-W32	USB-29A	\$49.95
RTP-WCS-D31	Icom ID-31	USB-RTS05	\$49.95
RTP-WCS-D51	Icom ID-51	USB-RTS05	\$49.95
RTP-WCS-D880DATA	Icom ID-880	USB-RTS05	\$49.95
RTP-KRS-D7G	Kenwood TH-D7G	USB-K5D	\$49.95
RTP-KRS-D72	Kenwood TH-D72	—	\$24.95
RTP-KRS-F6-F7	Kenwood TH-F6/F7	USB-K4Y	\$49.95
RTP-KRS-K2	Kenwood TH-K2	USB-K4Y	\$49.95
RTP-KRS-271-281	Kenwood TM-271/281	USB-K5D	\$49.95
RTP-KRS-D700	Kenwood TM-D700	USB-63	\$48.95
RTP-KRS-D710	Kenwood TM-D710	USB-K5G	\$49.95

Proven Products, Expert Advice, Same-Day Shipping



WMT-58407-949

West Mountain Radio ClearSpeech Noise Reduction Speaker and Processor

The CLRSpkr is a compact, portable loudspeaker containing an adaptive DSP noise reduction circuit with a 10 watt audio amplifier. The ClearSpeech® adaptive DSP algorithms analyze the noise content of the incoming signal, then attenuate or completely remove hum, hiss, ignition and power line noise, static and heterodynes. What you hear is clean voice and CW with over 85% of the noise removed.

If you have an external speaker that you like, the ClearSpeech DSP processor unit will give you the clean sound you want. It installs between your radio and the speaker.

WMT-58407-948 CLRSpkr ClearSpeech DSP Speaker **\$199.95**

WMT-58407-949 CLRdsp ClearSpeech DSP Processor **\$199.95**

WMT-58410-951 12 Vdc Power Supply for CLRSpkr & CLRdsp **\$14.95**

West Mountain Radio COMSpkr Computer Speaker System

This amplified speaker system is optimized for close range operation with any radio transmitter. It features exceptionally high rejection of Radio Frequency Interference from 1 to 1000 MHz.

WMT-58409-950 COMSpkr Computer Speaker System **\$37.95**

MFJ-281 ClearTone Communications Speaker

Plug in the ClearTone speaker and bring out communication speech fidelity that you never knew existed. It restores the smooth sound of sine waves that CW naturally generates and makes it easy to copy. The ClearTone speaker improves speech intelligibility in the 600 to 4000 Hz frequency range while reducing undesirable noise, static, and hum. It has a 6' cord and 3.5mm mono plug. Output: 8 watts. Impedance: 8 Ω. Dimensions: 3.75" H x 3" W x 2.25" D.

MFJ-281 ClearTone Communications Speaker **\$12.95**

MFJ



Palstar

LA30 Indoor Loopstick Antenna

The new Palstar LA30 Ferrite Loopstick Antenna is designed for the avid LF, MW and Tropical Band SW listener. The LA30 is a rotating Loopstick antenna that uses active electronics for high selectivity and gain. The Palstar LA30 Loopstick Antenna is perfect for AM DXing, shortwave and low band listening without static crashes and RF noise from nearby devices or strong stations. Visit DXEngineering.com to see the full specs.

PAS-LA30 Indoor Loopstick Antenna **\$395.95**



PAS-SP30HC

PAS-SP30HB

Palstar

Genuine Palstar
Accessories Enhance
Your Listening Experience



Part Number	Description	Price
PAS-SP30B-B	SW Radio Speaker, tonally-matched to the R30A Receiver Compact design, offers excellent audio reproduction, black finish	\$99.95
PAS-SP30B-C	SW Radio Speaker, tonally-matched to the R30A Receiver Compact design, offers excellent audio reproduction, cherry finish	\$99.95
PAS-SP30HB	Ultimate Communications Speaker, handles up to 25 watts 6.5" speaker, optimized for voice audio reproduction, black finish	\$179.95
PAS-SP30HC	Ultimate Communications Speaker, handles up to 25 watts 6.5" speaker, optimized for voice audio reproduction, cherry finish	\$179.95

WEST MOUNTAIN
RADIO

WMT-58407-948



Palstar

R30A Shortwave Receiver

This compact, high performance receiver covers the long wave, medium wave and short wave bands with a frequency range of 100 kHz to 30 MHz. It is also capable of receiving AM, CW and SSB mode signals. The R30A receiver is not desensitized on the LF and MW bands, making it ideal for standard broadcast band DXing.

The Palstar R30A Shortwave Receiver has simple controls, but it doesn't sacrifice performance. This receiver has outstanding strong signal handling, high sensitivity and a wide dynamic range to eliminate annoying intermodulation interference.

- +18 dBm 3rd order intercept
- 100 kHz - 29.9999 MHz AM, SSB (U/L)
- 20 Hz/100 Hz tuning steps, synthesized (low phase noise performance)
- Variable rate tuning: 20 Hz to 100 Hz and 100 Hz to 500 Hz
- 100 kHz up/down buttons
- 45 MHz 1st IF, 455 kHz 2nd IF
- RF derived AGC, fast/slow
- 4-pole crystal filter at 45 MHz IF
- 8-pole Collins torsional mode filters, 5.8 kHz AM and 2.5 kHz SSB
- 100-channel memory
- 5 watt low-distortion full fidelity audio amp
- Line audio output
- 455 kHz IF output
- Automatic switchable 7-pole input filters
- Portable battery operation
- 12V 1 Amp regulated wall transformer supplied

PAS-R30A Shortwave Receiver **\$869.95**

MFJ-434B Contest Voice Keyer™

Let this microprocessor-controlled Contest Voice Keyer call CQ, send your call, and do contest exchanges for you in your own natural voice!

You can record and play back five natural-sounding messages in a total of 75 seconds. EEPROM technology stores messages for up to 100 years with no battery backup needed.

You can repeat messages continuously and vary the repeat delay from 3 to 500 seconds. A receive audio jack lets you record and play back off-the-air signals—no more "please repeat." It makes a great voice beacon, too. This keyer requires a 9-volt battery, 9-15 Vdc power source, or 110 Vac with optional MFJ-1312D Wall Adapter. It uses an 8-pin modular or 8-pin round microphone plug.

MFJ-434B Contest Voice Keyer **\$189.95**

MFJ-1312D Power Supply, 12 Vdc/500 Milliamp **\$15.95**

MFJ



ICOM Remote Control USB Encoder

This unit works with your RS-BA1 Remote Control Software and lets you control your radio without hassling with your computer's mouse. In other words, it actually feels like you're tuning a REAL radio! The module includes a PTT switch, large tuning knob and two extra programmable function keys. Visit DXEngineering.com for software and computer requirements.

ICO-RC-28 Remote Control USB Encoder **\$259.95**

New!



Additional Icom Radio Accessories

Part Number	Description	For Radio(s)	Price
ICO-MB-72	Carrying Handle Kit	IC-706	\$17.95
ICO-OPC-581	Remote Separation Cable, 11.6'	IC-706	\$61.95
ICO-OPC-1156	Remote Separation Cable, 11.5'	IC-2820H IC-2720H IC-R1500 IC-R2500	\$16.95
ICO-UT-122	Digital Module to Add P25 Digital Receive Capability	IC-R2500 IC-R9500	\$199.95



Lido Lets You Install Your Radio Practically Anywhere with Rugged, Safe and Versatile Mobile Mounts!



LDO-LM-801EXP

LDO-LM-500H



LDO-LM-300



LDO-LM-100H



LDO-LM-1202



LDO-LM-600



LDO-LM-900



LDO-LM-700

(Radios pictured are for illustration purposes only and are not included.)

Cup Holder Mount

Here's a mounting solution that doesn't involve drilling or glue. The LM-801 settles into any cup holder. Then, with the twist of a knob, its base expands for a secure connection. Whether it's a mobile remote head or a handheld, this mount may be the perfect answer for your mobile installation. Call DX Engineering and we'll set you up with your radio's specific mounting attachment.

LDO-LM-801EXP Cup Holder Mount\$24.95

LoBoy Mount

This low-profile mount is ideal for many handheld electronic devices, from Ham and satellite radios to cell phones and TFT video displays. The flexible mounting pad secures to any vehicle with super-strong 3M adhesive (which can be removed without damaging your interior). The LoBoy Mount uses the mobile industry's AMPS mounting point pattern to securely hold your radio. It is fully adjustable and works in a horizontal or vertical orientation.

LDO-LM-600 LoBoy Mount\$14.95

Suction Cup Gooseneck Mount

Using a powerful suction cup, this mount secures to your windshield or side glass, placing your radio at eye level for easy visibility. The mount is easy to remove, and doesn't leave any residue so you can store your radio out-of-sight for added security.

The LM-400EXP uses your handheld's leather case, belt clip or mounting button to secure your radio.

LDO-LM-400EXP Suction Cup Gooseneck\$19.95

Floor Mount

You simply attach the base of the flexible 15" gooseneck to your seat's mounting bolt to get a secure and versatile mount for your radio. From there, you can position the mount exactly where you want it. It uses the industry-standard AMPS mounting pattern to make installation a breeze.

LDO-LM-300 Floor Mount.....\$24.95

Friction Base

Windshield suction-type mounts are prohibited in some states. As an alternative, Lido offers a Friction Base. The weighted bean bag has a non-skid surface to ensure the mount won't slide around. For added stability, there's a plastic hook that can be attached to your dash.

The open design in front gives you a smooth, flat surface where you can adhere your suction cup mount. It's universal too, compatible with many suction cup-style mounts from other manufacturers.

LDO-LM-25 Friction Base.....\$19.95

Vehicle mounting solutions for many popular radio models and styles.

Motorcycle Mount

Lido didn't forget about you two-wheelers. This rugged mount is made of marine-grade aluminum with stainless hardware and uses a U-bolt design to clamp directly to your handlebars. The LM-1000EXP Mount features a button-style mount that uses the belt-clip button found on many common phones, cases, HTs and mics.

LDO-LM-1000EXP Motorcycle Mount.....\$19.95

Side Grip Adapters

If you've got an HT, cell phone, GPS, or remote head, Lido's Side Grip Adapter may be the best way to securely attach it to a mount. It has two arms that gently squeeze tight to hold your device; a simple push of a button releases the arms for easy removal. The adapter works with any Lido mount, opening up many mounting possibilities.

For smaller devices, check out the Narrow Side Grip Adapter, it works the same way as its larger counterpart, but is better suited for narrow-profile devices.

LDO-LM-H Side Grip Adapter.....\$14.95

LDO-LM-H208 Narrow Side Grip Adapter\$12.95

Microphone Hooks

Here's an easy way to mount your mic within arm's reach. The hooks attach to your dash with an included 3M adhesive pad, which is easily removed without leaving a residue. The LM-1202 Mount is made specifically for Yaesu and Kenwood-style mics. If you've got an Icom, you'll want the LM-1201 Mount.

LDO-LM-1201 Microphone Hook\$4.95

LDO-LM-1202 Microphone Hook\$6.95

Yaesu FTM-350 Mounting Adapter

This special adapter threads into the socket on newer-design display heads to resolve the mounting issues.

LDO-LM-AD1 Yaesu FTM-350 Mounting Adapter.....\$8.95

Replacement Adhesive Disks

Moving your adhesive mounted installation? Here are high-quality 3M replacement adhesive disks made specifically for Lido mounts.

LDO-KIT1 Adhesive Disks for LM-400EXP and LM-500 Mounts\$4.95

LDO-KIT2 Adhesive Disks for LM-600/700/900 Series Mounts.....\$5.95

Friction Mount

This mount lets you put your mobile radio right in your line-of-sight, with easy access to the controls. It is compatible with Icom, Yaesu, Kenwood, Alinco, Elecraft and other popular radios. This two pound mount features a non-skid surface. On top, there's a place to attach Lido's LM-500 suction cup mount, in case you want to use the mount without the bean bag.

The Gripomatic side grip has padded arms to secure your transceiver, so you can use the mount even if you don't have your radio's specific remote head bracket.

LDO-LM-2500H Friction Mount.....\$39.95

The BUG Mount

If you have a radio with a small, narrow-profile head (including popular satellite radios), then check out the BUG. It has two arms that can be positioned and aligned to support radio heads of varying sizes and mounting styles. The 3M adhesive mounting pad lets you mount the BUG on almost any flat surface, for ultimate flexibility. A complete installation guide and surface prep kit is included.

LDO-LM-900 The BUG Mount.....\$19.95

Suction Cup Mount

Specifically tailored for your radio, this is the ultimate low-vibration mobile mount. It features two directional adjustment knobs and a telescoping shaft to position your radio perfectly.

LDO-LM-500H Suction Cup Mount.....\$24.95

UltiMount Universal Mount

This mount can handle practically anything: Ham radios, satellite radios, cell phones, MP3 players, and even GPS systems. The Universal Mount lets you position your handheld electronics right where you need them. Included with this mount are two adhesive-backed buttons, a surface prep kit and belt clip.

LDO-LM-700 UltiMount Universal Mount.....\$24.95

Vent Mounts

Trying to figure out where to mount your radio? Lido has a suggestion: your vents. Vents are often the perfect location, placing your radio within arm's reach and easy eyeshot. For security, you can remove this mount easily, away from prying eyes. We can supply you with your radio's specific mounting attachment—just call DX Engineering to get started.

LDO-LM-100H Side Grip Vent Mount.....\$24.95

FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details

Heil Sound Headsets Are the Best Way to Keep an Ear on Things!

Pro Set 6 Headsets

These lightweight and versatile headsets let you stay in the action longer. The microphone uses the HC-6 element for unmatched performance, and the heavily padded earpieces ensure that you'll stay comfortable during long-haul contests. Pro Set 6 Headsets also include Heil Sound's exclusive phase reversal switch, which can significantly improve copy during pileups.

The iC Pro Sets feature a high-output electret condenser mic element that works well with the low-gain inputs on many Icom transceivers.

Pro Set Elite Headsets take comfort and performance up a notch, with larger, more heavily padded earpieces.

HLS-PS-6	Pro Set 6 Headset.....	\$139.95
HLS-PSE-6	Pro Set 6 Elite Headset	\$169.95
HLS-PSE-IC	Pro Set 6 Elite iC Headset	\$179.95

Pro Micro Headsets

Outfitted with the same HC-6 element used in the Pro Set, these headsets are perfect for the serious amateur. The Pro Micro Headsets are fully adjustable for comfort and performance. They include a microphone windscreen and are available in both single side and dual side earphone variations.

HLS-PMD-6	Pro Micro Headset, Dual Side	\$99.95
HLS-PMS-6	Pro Micro Headset, Single Side.....	\$78.95

Pro Set 3 Headphones

Setting a new standard for sound reproduction, these headphones offer exceptional articulation and quality. They include detachable cables that allow you to use the right cord for the environment. The cables terminate in an iPod-/iPad-compatible 1/8" plug with a gold plated, screw-on 1/4" adapter. The replaceable earpieces are heavily padded for comfort and are bound together with an internal steel headband.

Pro Set 3 Headphones are perfect for any audio, from a casual ragchew to your favorite Bach Concerto.

HLS-PROSET-3	Pro Set 3 Headphones	\$109.00
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Pro Set iC Headset

If you've got an older Icom receiver, you know that you need a mic that has a lot of gain to compensate for early Icom low-gain mic preamps. Heil Sound worked with Icom to develop the iC condenser mic element to give you a mic that boosts audio output.

This Pro Set Headset uses that innovative iC element, while incorporating the features that made the Pro Set series legendary. It comes with a 1/8" mic connector, 1/4" headphone connector, and a special AD-1-IC adapter cable for your Icom receiver.

HLS-PS-IC	Pro Set iC Headset.....	\$166.95
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Pro Set Media Pro Headset

Made to work specifically with your computer, this award-winning headset delivers beautiful articulate audio. The earphones are acoustically tuned and use Heil Sound's exclusive phase-reversing feature to create a spatial widening effect that makes audio easier to discern. The mic element is also tailored to sound card input requirements.

Pro Set Media Pro Headsets are plug-and-play, with two standard 1/8" plugs that connect to the microphone and speaker jacks of your computer.

HLS-PSM	Pro Set Media Pro Headset.....	\$119.95
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MFJ-616 Speech Intelligibility Enhancer

"As I got older, my high frequency hearing loss was destroying...ham radio for me..."
Martin F. Jue, K5FLU/President and Founder of MFJ Enterprises, Inc.

Developed by Martin Jue to compensate for his hearing loss, this enhancer significantly increases speech energy above 500 Hz where 83% of intelligibility is concentrated. Amateur radio communications limit audio to about 300 to 2700 Hz. The enhancer splits the audio band into four overlapping octave ranges centered at 300, 600, 1200 and 2400 Hz. You can boost or cut each range by nearly 20 dB to maximize speech intelligibility for most kinds of frequency loss.

Output audio is split into left and right channels with separate 2.5 watt amplifiers; a balance control lets you equalize the perceived loudness to each ear. The enhancer works with SSB, FM, AM, CW or any voice mode on ham, marine, aircraft, and CB bands.

MFJ-616	Speech Intelligibility Enhancer	\$179.95
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HLS-PS-6



HLS-PSE-6



New!



New!

MFJ-392B

Communications Headphones

These headphones are perfect for amateur radio and shortwave listening in all modes—SSB, FM, AM, data, and CW in mono or stereo. Each earphone has an individual volume control. The padded headband and ear-cushioned design make listening extremely comfortable. The headphones handle 450 mW and have 100-24000 Hz frequency response. Impedance: 16 Ω at 1 kHz. Sensitivity: 102 dB/mW.

MFJ-392B	Communications Headphones	\$24.95
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Genuine Heil Sound

Accessories to Complete Your Setup

HS-2 Pistol Grip Hand Switch

This ergonomic switch lets you key your transceiver when using a microphone that doesn't have a PTT switch or when noisy environments render VOX operation impossible. It installs easily, terminating in a 1/4" phono plug.

HLS-HS-2	Pistol Grip Hand Switch	\$31.95
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Single/Dual Channel Footswitches

These switches provide hands-free keying. You can even configure the dual switch to activate your RF Amplifier and transceiver in sequence. These sturdy steel switches are built to withstand even the hardest of stomps and they install quickly with a 1/4" phono plug.

HLS-FS-3	Single Channel Footswitch	\$25.95
HLS-FS-2	Dual Channel Footswitch	\$44.95



CB-1-PTT Microphone Base Stand

Improving upon a timeless design, these heavy, polished chrome bases include a PTT switch that can also be used as a "cough" switch. It uses standard mic mounting threads and a 24" jumper cable is included to make mic installation a breeze.

HLS-CB-1-PTT	Microphone Base Stand	\$78.00
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SM-1/PRSM Microphone Shock Mounts

Using an 8-point suspension support system, these mounts fight off low frequency rumble and absorb noise caused by vibration and impact. The SM-1 is designed for slim-line Heil Sound microphones, while the PRSM is tailored to larger diaphragm professional-grade mics. It's important to check your microphone's fit before ordering.

HLS-SM-1	Shock Mount	\$80.00
HLS-PRSM-B	Shock Mount, Black Finish	\$104.95
HLS-PRSM-C	Shock Mount, Champagne Finish	\$104.95



New!



Microphone Boom/Arm Mounts

Available in several styles, these genuine Heil Sound mounts are the ideal way to secure your boom and keep your valuable microphone safe.

HLS-FL-2	Flange Mount	\$28.00
HLS-DT1	Desktop Flush Mount	\$35.00
HLS-WM1	Vertical Surface Mount	\$22.00
HLS-PL2CLAMPR	Replacement Mount for PL2T/SB-2/HB-1	\$22.00

New!

Microphone Booms and Riser

Don't put your prized microphone on anything less than a professional-grade Heil Sound Boom. These quiet booms are sturdy and durable enough to go in the most active Ham shacks and sound studios. All booms are threaded to accept standard mic accessories and are the perfect compliment to your Heil Sound Microphone. The Riser is a great solution for mounting your boom behind your transceiver.

HLS-PL2T	Topless Proline Microphone Boom	\$120.00
HLS-HB-1	Large, Articulated Microphone Boom	\$70.00
HLS-SB-2	Straight Boom, 17" with Stealth C-Clamp	\$63.00
HLS-RS1	Boom Riser	\$28.00



MFJ**New!****Ham Station Console Desktop Microphone**

Incorporating several key features in a single console, this microphone always sends clear audio at the optimum levels. Compression and level adjustments are at your fingertips. There's also a built-in graphic EQ so you can fine-tune your sound for maximum "punch" or eliminate specific background frequencies/noise.

In addition to the standard PTT/Lock functions, this console also gives you the ability to control your radio with frequency selection buttons. If you've got a Kenwood radio, then you can use the integrated Call, VFO, MR and PF controls. A VU meter lets you keep an eye on your output level. The microphone requires a 9V battery.

MFJ-299 Ham Station Console Desktop Microphone **\$99.95**

Universal Microphone Converter**MFJ****New!**

Use any 8-pin microphone with any 8-pin transceiver. Internal jumpers custom tailor each pin assignment. That means you won't have to ditch your favorite mic if you've upgraded to a new radio.

MFJ-1251 Universal Microphone Converter **\$22.95**

MFJ**PTT Operator Foot Switch**

Keep your hands free for working your radio or computer, you'll be surprised how much quicker you get! This professional-grade switch is a perfect complement for a boom headset mic or for noisy areas where VOX operation is difficult.

MFJ-1709 PTT Operator Foot Switch **\$19.95**

LDG ELECTRONICS**ALK-2 Audio Linear Key Switch**

LDG Electronics' Audio Linear Key Switch is a two-port switch box that can be used to switch between ALC lines, keying lines, speakers, or anything else you'd need. It has one common jack and two switched sets of jacks in the back, with 1/8" stereo and RCA jacks in parallel. You can even pre-set or control the switch remotely using 12 Vdc.

LDG-ALK-2 Audio Linear Key Switch **\$49.95**

**USBQ Microphone Preamp**

A microphone preamp, headphone amp, equalizer, and D/A converter in a compact package—complete with a balanced XLR input. This professional-quality mic preamp plugs directly into a USB port. No other external power is required. This small wonder makes desktop recording easy!

HLS-USBQ USBQ Microphone Preamp **\$89.00**

HEIL SOUND**PR 28 Microphone**

At first glance, you might dismiss this as a simple "drumset" mic. However, if you look at its characteristics (wide frequency and quick transient response) you'll realize that it makes an ideal microphone for the Ham operator. It also has excellent rejection qualities, which makes it a great option if your shack has a lot of ambient noise from fans or fluorescent lights.

HLS-PR28 PR 28 Microphone **\$149.00**

**HEIL SOUND****PR 20 Microphones**

As do-it-all microphones, the PR 20 series can be a valuable asset in your shack. They have a large diaphragm that captures a wide range of frequencies, particularly tailored to the upper-mid range where the human voice resides. Three interchangeable mesh screens (gold, silver and black) are included, so you can make sure your PR 20 is a great-looking complement to your transceiver.

HLS-PR20 PR 20 Mic, Black Finish **\$155.00**
HLS-PR20R PR 20 Mic, Red Finish **\$199.00**

**GM Series Microphone**

The gold standard of radio microphones—Heil Sound's GM Series mics offer crystal-clear audio response. They feature an exclusive light-touch PTT switch and a 4-pin XLR connector, and include a mic clip and windscreen.

The GM Vintage Microphone is tailored to full-range articulate SSB audio, particularly when paired with some high-impedance inputs typically found on older tube-type equipment.

HLS-GM-V GM Series Vintage Microphone **\$144.95**

**Gold Elite Microphone**

Heil Sound specifically crafts this microphone for the Ham radio community. The microphone includes two distinct dynamic elements, selectable with the flip of a switch. The "Wide" setting is ideal for general voice articulation. The "Narrow" setting accentuates the lower frequency range of human voice to help smooth out the audio response.

HLS-GM-ELITE Gold Elite Microphone ... **\$144.95**

**iCM Microphone**

Owners of early Icom transceivers know that they don't have a lot of gain in the microphone preamp stage. Heil Sound gives you a boost with a mic specifically suited to those transceivers. Heil Sound worked closely with Icom engineers to build a mic with an excellent frequency response, coupled with a higher output to compensate for the lack of gain from early Icom transceivers.

HLS-ICM iCM Microphone **\$109.95**

**Handi Mic Microphones**

These mics are the answer to muffled audio response. Well-suited to Amateur radio use, they capture crisp, clean and articulate audio. Their rugged internal shock mount makes them a durable addition to your shack. They also feature low noise handling characteristics, making them great for use in mobile or field applications. A dash/wall mount and windscreen are included.

The Handi Mic iC uses a high-performance output specifically tailored to Icom transceivers. The Handi Mic Pro contains the wide-range broadcast element, ideal for VHF FM rigs.

HLS-HM-IC Handi Mic iC **\$88.95**
HLS-HM-PRO Handi Mic Pro **\$88.95**

HLS-HM-IC



HLS-HM-PRO

**Heil Sound Microphones—the First Step to a Crystal-Clear Transmission "The Fin" Microphone**

Classic style with cutting-edge performance: The Fin recreates a classic vintage vibe, but uses a voice coil similar to Heil Sound's modern PR 20 microphone. You get excellent frequency response, specifically in the human voice sweet spot.

But what really makes this mic stand out is the brilliant chrome finish and colored windscreens. For a final touch, activate the four hidden LEDs and the Fin will really make your shack shine.

HLS-FIN The Fin Microphone, Blue **\$220.00**
HLS-FINR The Fin Microphone, Red **\$241.00**
HLS-FINW The Fin Microphone, White **\$241.00**

HM-12 Genesis Series Microphone

A Microphone designed specifically for you, the Ham radio operator. Made to work well with almost any low-impedance transceiver, this microphone is well suited to reproduce the human voice. It also features an internal windscreen to cut down on annoying P-pops. This mic uses a 4-pin XLR connector with a soft touch PTT switch wired to pins 3 and 4, while pins 1 and 2 carry audio.

HLS-HM-12 Genesis Series Microphone **\$69.95**

**PR 781 Microphone**

Heil Sound gives you a professional-quality microphone that will provide years of service in your shack. Building upon the legendary PR 780, this dynamic cardioid microphone features a wide frequency response that retains the signature Heil Sound voice articulation.

The PR 781 works well with practically any high-quality transceiver. In fact, you'll find these same mics in use in many commercial broadcast studios.

HLS-PR781 PR 781 Microphone **\$169.95**

**PR 40 Microphone**

With the widest frequency range of any dynamic mic in the PR series, this microphone is the workhorse of professional sound recording studios. It features a shock-mounted, low mass diaphragm, which gives you stellar sound reproduction in a durable chassis. An internal filter prevents dreaded breath blast and cuts down on P-pops, too. This microphone is simply one of the best all-around mics for audio engineers and Ham operators alike.

HLS-PR40 PR 40 Microphone **\$327.00**

**PR 30 Microphone**

The PR 30 Microphone is packed with features you don't normally see at this price. It is ideal for the operator who doesn't want to compromise on audio reproduction. This mic uses a humbucking coil and shock-mounted diaphragm for virtually noise-free performance. The internal passive filtering cuts down on P-pops and minimizes hissing, making it a perfect complement for your rig.

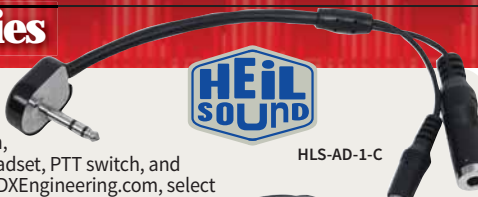
HLS-PR30 PR 30 Microphone **\$252.00**



Cable and Adapters

These assemblies let you connect your Heil Sound mics and accessories to your transceiver. Depending on the application, they include the manufacturer-specific plugs for your mic/headset, PTT switch, and transceiver. If you need help choosing the right adapter, visit DXEngineering.com, select your mic or headset, and the "suggested parts" tab will show you some options.

Part Number	Description	Price
Icom		
HLS-AD-1-I	Pro Set 8-Pin Adapter Cable	\$22.95
HLS-AD-1-IM	Pro Set Modular Adapter Cable	\$22.95
HLS-AD-1-IC	Pro Set 8-Pin Adapter Cable	\$22.95
HLS-AD-1-ICM	Pro Set Modular Adapter Cable	\$22.95
HLS-CC-1-I	XLR4 to 8-Pin Mic Cable	\$38.95
HLS-CC-1-IM	XLR4 to Modular Mic Cable	\$38.95
HLS-CC-1-XLR-I	XLR3 to 8-Pin Mic Cable	\$38.95
HLS-CH-1-I8	XLR4 to 8-Pin Mic Coil Cable	\$25.95
HLS-CH-1-IM	XLR4 to Modular Mic Coil Cable	\$25.95
HLS-HSTA-IC8	Traveler Headset Adapter, Icom 8-Pin	\$25.95
HLS-HSTA-IM	Traveler Headset Adapter, Icom Modular	\$25.95
HLS-HTA-IHT	Traveler Headset Adapter, Icom HT Dual Plug	\$25.95
Kenwood		
HLS-AD-1-K	Pro Set 8-Pin Adapter Cable	\$22.95
HLS-AD-1-KM	Pro Set Modular Adapter Cable	\$22.95
HLS-CC-1-K	XLR4 to 8-Pin Mic Cable	\$38.95
HLS-CC-1-K4	XLR4 to 4-Pin Mic Cable	\$38.95
HLS-CC-1-KM	XLR4 to Modular Mic Cable	\$38.95
HLS-CC-1-XLR-K	XLR3 to 8-Pin Mic Cable	\$38.95
HLS-CH-1-K8	XLR4 to 8-Pin Mic Coil Cable	\$25.95
HLS-CH-1-KM	XLR4 to Modular Mic Coil Cable	\$25.95
HLS-HSTA-K8	Traveler Headset Adapter, Kenwood 8-Pin	\$25.95
HLS-HSTA-KM	Traveler Headset Adapter, Kenwood Modular	\$25.95
HLS-HTA-KHT	Traveler Headset Adapter, Kenwood HT Dual Plug	\$25.95
Yaesu		
HLS-AD-1-Y	Pro Set 8-Pin Adapter Cable	\$22.95
HLS-AD-1-Y4	Headset 4-Pin Adapter Cable	\$22.95
HLS-AD-1-YM	Pro Set Modular Adapter Cable	\$22.95
HLS-CC-1-Y	XLR4 to 8-Pin Mic Cable	\$38.95
HLS-CC-1-YM	XLR4 to RJ-45 Modular Mic Cable	\$38.95
HLS-CC-1-XLR-Y	XLR3 to 8-Pin Mic Cable	\$38.95
HLS-CH-1-Y8	XLR4 to 8-Pin Mic Coil Cable	\$25.95
HLS-CH-1-YM	XLR4 to Modular Mic Coil Cable	\$25.95
HLS-AD-100	Yaesu 8-Pin Round to 6-Pin Modular Adapter	\$21.95
HLS-ADMY-817	Yaesu 8-Pin Mic to FT-817 Modular Adapter	\$28.95
HLS-HSTA-YM	Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ-45	\$25.95
HLS-HSTA-YM6	Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ-45	\$25.95
HLS-HTA-VX	Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug	\$25.95
Miscellaneous		
HLS-HSTA-PC	Traveler Headset Adapter, Computer, Data/SP/Mic Plugs	\$25.95
HLS-CC-1-T	Microphone Adapter, Ten-Tec, XLR4 to 4-Pin	\$38.95
HLS-AD-1-C	Headset Adapter, Collins/Drake, 3/16" Plug, 1/4" Jack	\$28.95
HLS-CC-1-C	Microphone Adapter, Collins/Drake, 4-Pin to XLR4	\$47.95
HLS-CC-1-XLR-3	Mic Cable with Connectors, 3-Pin XLR Male to Female, 8'	\$38.95
HLS-CC-1-XLR-4	Mic Cable Adapter, for XLR4 HM/GM Mics to XLR3	\$38.95



HLS-AD-1-C



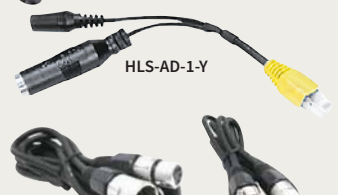
HLS-HSTA-YM6



HLS-AD-1-ICM



HLS-AD-1-K



HLS-AD-1-Y4



HLS-CC-1-XLR-4

HLS-CC-1-XLR-3



HLS-CC-1-IM



HLS-CH-1-IM



HLS-HSTA-PC



HLS-HTA-VX



HLS-CC-1-XLR-3

HLS-CC-1-XLR-4



HLS-XT-1

HLS-HMCLIP

HLS-WSPS



HLS-EP-PMP

**Genuine Heil Parts and Accessories**

If you want to give your mic or headset a tune-up, then Heil Sound offers you accessories and replacement parts to do it. If you're looking for a specific part, don't hesitate to let us know and we'll do our best to find it for you.

Part Number	Description	Price
HLS-BAG1	Headset Gear Bag for Pro Set	\$27.95
HLS-BC	Boom Clip for Pro Set	\$5.95
HLS-PS-EPC	Cotton Ear Pad Covers for Pro Set (Pair)	\$6.95
HLS-EP-FOAM-PS	Foam for Pro Set Ear Pads (Pair)	\$2.95
HLS-EP-PSP	Ear Pads for Pro Set Plus/Elite (Pair)	\$8.95
HLS-EP-PMP	Ear Pads for Pro Micro/New Traveler (Pair)	\$8.95
HLS-EP-PS	Ear Pads for Pro Set Series (Pair)	\$8.95
HLS-HMC	8-Pin Round Female Mic Connectors (Pair)	\$8.95
HLS-HMCLIP	Clip for GM/HM/PR Mics, 5/8"-27 Thread	\$9.95
HLS-WSHM	Windscreen for Handi Mic Series	\$5.00
HLS-WSM	Windscreen for PR 20/35 and GM Mic	\$5.00
HLS-WSPR40	Windscreen for PR 30 and PR 40 Mic	\$20.00
HLS-WSPS	Windscreen for Pro Set Mic	\$4.95
HLS-WSPSP	Windscreen for Pro Set Plus Mic	\$4.95
HLS-WSTRAV	Windscreen for Traveler Headset Mic	\$4.95
HLS-XLR-3F	3-Pin XLR Female Connector	\$4.95
HLS-XLR-4M	4-Pin XLR Male Connector	\$4.95
HLS-XT-1	High-to-Low Impedance Matching Transformer	\$16.95

**New!****Heil Wire Bulk Microphone Cable**

Specifically designed for mics, switches, keys, paddles, and other audio/control devices, this cable consists of two 18 AWG shielded internal wires plus 2 18 AWG wires external to the braid. Heil's cable is specially shielded to reduce hum, PTT pulses, and RFI. It is made to fit neatly into 1/4 inch connectors and receptacles.

HLS-HW-10	Heil Wire Microphone Cable, 10 Feet.....	\$10.95
HLS-HW-20	Heil Wire Microphone Cable, 20 Feet.....	\$21.95

Missing Something?

We can't put everything we carry in our catalog. If you need a part from one of our manufacturers and you don't see it here, you'll probably find it at DXEngineering.com. If it's not listed online, call us, and we'll gladly special order it for you.



RIGblaster Pro Digital Mode/Rig Control Interface

New!

This module is the easy way to connect your radio to your computer so you can start using over 100 existing sound card programs. It's easy to set up and operate. The front panel display shows signal level and PTT, CW and FSK control.

The interface is compatible with almost any radio and mic combo. A standard DB9 serial interface cable and USB cable is included, plus there are several interface cables available separately if you have a specific need. All the details on this powerful piece of gear can be found at DXEngineering.com

WMT-58002-953 RIGblaster Pro Interface, 120 Vac.....\$269.95
WMT-58002-955 RIGblaster Pro Interface, 12 Vdc.....\$259.95

RIGblaster Plus II Digital Mode/Rig Control Interface

New!

Compatible with practically every radio ever made, the Plus II Interface includes over 150 Amateur Radio programs. It works through your radio's mic connector and lets you unlock a world of digital operating modes.

Instant setup connectors make it easy to configure your mic input and the USB port makes operation practically plug-and-play. The USB port also facilitates positive PTT, CW/FSK keying and CAT/CI-V rig control. Read more at DXEngineering.com.

WMT-58005-1158 RIGblaster Plus II Interface, 12 Vdc.....\$159.95

RIGblaster nomic Digital Mode/Rig Control Interface



New!

Carry a RIGblaster in your pocket! This small and rugged module lets you operate digitally on your next Field Day or DXpedition—it can even work in your QRP rig. Just like its big brothers, the nomic works with almost every radio and gives you access to the latest digital modes.

You still get easy hookup and support for dozens of Ham software programs. No external power is required and it includes a standard DB9 serial cable and USB cable.

WMT-58008-959 RIGblaster nomic Interface.....\$59.95

CW TOUCHkeyer

New!

If you're a blazing-fast CW operator and need a keyer that can keep up, here's your ticket. The paddles don't use any pressure, because there is zero paddle movement and no electrical contact. They keyer responds to your lightest touch without error.

Programming is easy; it uses less than 2mA and relies on either external or internal power. The keyer can be adjusted to suit your operating style and is good up to 50 WPM.

WMT-58142-1012 CW TOUCHkeyer.....\$118.95

RIGtalk USB Computer Interfaces

If your radio doesn't have a USB or serial port (but you desperately want one), West Mountain Radio comes to your rescue. It provides a USB interface for CAT and CI-V radios. That allows you to use any rig control or logging software that is compatible with your radio. It's small enough to stick in your pocket and is compatible with USB 2.0 and earlier.

The RIGtalk includes a CD-ROM with Windows drivers and is not for RS232 DB9-controlled radios.

WMT-58201-1004 RIGtalk USB Interface.....\$54.95
WMT-58202-1005 RIGtalk USB Interface, Icom CI-V Cable.....\$56.95
WMT-58203-1006 RIGtalk USB Interface, Yaesu DIN Cable.....\$61.95
WMT-58203-1007 RIGtalk USB Interface, Yaesu DIN Cable, Not for FT-1000D.....\$64.95



RIGblaster Plug and Play Digital Mode/Rig Control Interface

New!

Light, small, simple. Powered by your USB port, this interface is tailor-made for DXpeditions and Field Day. Despite its compact size, you get several key RIGblaster features including rig control, isolated audio and keying, control indicators and matched/RF suppressed audio. It's USB powered and Echolink-ready.

The interface works with most modern radios; you can check compatibility at DXEngineering.com.

WMT-58009-960 RIGblaster Plug and Play Interface.....\$119.95



WMT-58012-1288



Digital Modes + Rig Control Interface!

West Mountain Radio RIGblaster Advantage

Connect the RIGblaster Advantage to your radio's microphone connector, and a computer USB connector and you'll have access to over 100 existing and future ham radio sound card software programs! You'll also get over 20 exciting modes that radio could not otherwise operate. The Advantage also links your computer software and radio using CAT, CI-V or DB9 interfaces cables.

WMT-58012-1288 RIGblaster Advantage.....\$189.95

RIGblaster Cables and Accessories

To maximize the potential of your RIGblaster, there are adapters, kits and accessories.

Part Number	Description	Price
WMT-58107-971	RIG Control Cable for CI-V (Icom and Ten-Tec) Radios	\$9.95
WMT-58108-972	CAT Cable for Yaesu FT-100/100D/817/857/897	\$9.95
WMT-58108-974	CAT Cable for Yaesu FT-736/747/767/990/1000	\$9.95
WMT-58214-1295	RIGblaster DB9F to DB9F Serial Cable	\$9.95
WMT-58111-975	Instant Setup Quick Connector Kit for Icom, Yaesu, Kenwood	\$19.95
WMT-58126-990	USB to R232 Radio Interface Cable	\$23.95
WMT-58136-1000	4-/8-Pin to RJ-45 Conversion Kit	\$18.95
WMT-58137-1001	AC Power Supply for RIGblaster M8, Plus, Pro	\$14.95
WMT-58140-1010	Replacement Sound Card Software CD-ROM	\$9.95

RIGblaster Digital Mode Interface Cables



These cables connect your RIGblaster to your radio. There are cables available for many specific models and digital modes. There are even cables that can actually key your CW jack on your radio for true FSK/RTTY transceiver inputs.



Part Number	Description	Price
WMT-58112-976	8-Pin Mic to Sound Card, 36"	\$18.95
WMT-58112-977	8-Pin Mic to Sound Card, 72"	\$18.95
WMT-58112-978	4-Pin Mic to Sound Card	\$18.95
WMT-58115-979	RJ-45 Modular, 36"	\$9.95
WMT-58115-980	RJ-45 Modular, 72"	\$14.95
WMT-58118-982	RJ-11 Modular	\$18.95
WMT-58119-1374	3-Plug Cable for Wouxun-KWD, Set-Up Connector	\$32.95
WMT-58119-1431	3.5mm TRRS Cable for Elecraft K3	\$18.95
WMT-58119-1432	RS-232, DB9F, for Kenwood	\$9.95
WMT-58120-984	Stereo 3.5mm for Keyboard CW, with 1/4" Adapter	\$9.95
WMT-58129-993	8-Pin DIN, 36"	\$18.95
WMT-58102-966	8-Pin DIN, 6"	\$9.95
WMT-58129-994	9-Pin DIN, for Icom FSK Input	\$9.95
WMT-58129-995	13-Pin DIN, for Icom FSK Input	\$18.95
WMT-58131-996	RCA to Stereo 3.5mm	\$18.95
WMT-58131-997	6-Pin Mini-DIN	\$18.95
WMT-58131-998	4-Pin DIN, for RTTY	\$18.95
WMT-58131-999	13-Pin DIN, for Kenwood FSK Input	\$18.95

More cables are available at DXEngineering.com.

USB to RS232 Radio Interface Cable



New!

Give RS232 connectivity to your computer. Go from USB to RS232 male OR female with the included adapter. A link to all the drivers you'll need is at DXEngineering.com.

WMT-58206-1009 USB to RS232 Radio Interface Cable.....\$33.95

FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details



VIB-VIBROKEYER-D

VIBROPLEX®


VIB-IAMBIC-D

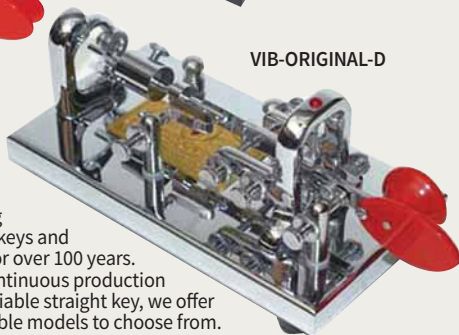


VIB-HK-STD



VIB-CODEWARR-JR

VIB-IAMBIC-D



VIB-ORIGINAL-D

Vibroplex Keys and Accessories

Vibroplex has been a leading manufacturer of quality CW keys and amateur radio accessories for over 100 years. From the Original Bug (in continuous production since 1905) to the always-reliable straight key, we offer a wide selection of dependable models to choose from. Over 300,000 Vibroplex keys are in circulation today because of their durability and unwavering performance.

Keys

VIB-BLRACER-STD	Blue Racer	\$199.95
VIB-CODEWARR-JR	Black Code Warrior Jr.	\$99.95
VIB-IAMBIC-S	Iambic Paddle Standard	\$149.95
VIB-IAMBIC-D	Iambic Paddle Deluxe	\$189.95
VIB-IAMBIC-P	Iambic Paddle Presentation	\$269.95
VIB-IAMBIC-G	Iambic Paddle Gold	\$289.95
VIB-VIBROKEYER-S	Vibrokeyer Single Paddle Standard	\$149.95
VIB-VIBROKEYER-D	Vibrokeyer Single Paddle Deluxe	\$189.95
VIB-VIBROKEYER-G	Vibrokeyer Single Paddle Gold	\$299.95
VIB-ORIGINAL-S	Original Bug Standard	\$189.95
VIB-ORIGINAL-D	Original Bug Deluxe	\$239.95
VIB-ORIGINAL-P	Original Bug Presentation	\$299.95
VIB-ORIGINAL-G	Original Bug Gold	\$369.95
VIB-HK-STD	Straight Key Standard	\$149.95
VIB-HK-DELUXE	Straight Key Deluxe Chrome	\$189.95
VIB-HK-GOLD	Straight Key Gold	\$299.95

Accessories

VIB-DC-VIBRO	Dust Cover for HK/Iambic/Vibrokeyer	\$32.95
VIB-DC-ORIG	Dust Cover for Original Bug	\$33.95
VIB-DC-RACER	Dust Cover for Racer	\$29.95
VIB-DC-BY	Dust Cover for Bencher BY Series	\$32.95
VIB-405-CCS	Contact Cleaner Abrasive Strip	\$4.95
VIB-CP-2	2-Conductor Cable 1/4" Plug (Bug or Hand Key)	\$9.95
VIB-CP-3	3-Conductor Cable 1/4" Plug (Paddles)	\$9.95
VIB-CP-3-3-5MM	3-Conductor Cable 3.5mm Plug (Paddles)	\$9.95
VIB-COFFEMUG	Vibroplex Coffee Mug	\$8.95



VIB-DC-VIBRO



VIB-COFFEMUG



VIB-CP-2

KENT KMK
KENT MORSE KEYS GERMANY

Straight Keys

Engineered to the strictest standards, these Kent Keys are precision-machined from solid brass. They feature silver plated contacts and ball race bearings for tight and smooth operation. You can easily fine-tune these keys by using the knurled-head adjustment screws.

You can select from the SK-1 Key, with a beautifully finished wood base, or the KT-1 Key, with a steel base and a sleek black finish.

KMK-KT-1	Straight Key, Wood Base	\$178.95
KMK-SK-1	Straight Key, Steel Base	\$154.95


KENT KMK
KENT MORSE KEYS GERMANY

New!

Single and Double Paddle Keys

Made with versatility in mind, these keys can be adjusted to your precise operating style. Thanks to the paddles' unique spring design, you can change left and right spring tension separately. Adjustment is easy, with large knurled screws.

Like all Kent Keys, the mechanisms are machined from solid brass and use a quality ball race bearing. A heavy steel base keeps the paddles stable and the intuitive gap settings ensure a positive "feel."

KMK-SP-1	Single Paddle Key	\$159.95
KMK-TP-1	Twin Paddle Key	\$164.95


VIBROPLEX®

Vibrocube

How many times have you had to reposition your paddles after a few minutes of use? Smaller, lightweight paddles can slide around your table, causing frustration and aggravating delays. Vibroplex tackles this problem head-on with the Vibrocube. These heavy-duty paddles tip the scales at over six pounds! They're made of steel, zinc and brass for a durable and stable iambic paddle—ideal for the enthusiastic CW user.

VIB-VIBROCUBE-D	Vibrocube Deluxe	\$289.95
VIB-VIBROCUBE-SU	Vibrocube Standard Upgraded	\$219.95
VIB-VIBROCUBE-S	Vibrocube Standard	\$189.95


BENCHER, INC.

Bencher Keys and Accessories

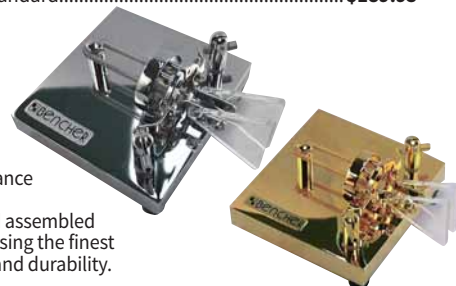
Equip your station with the performance of Bencher keys and accessories. All Bencher products are fabricated and assembled by skilled professionals in the USA, using the finest materials for superior performance and durability.

Keys

BNR-RJ-1	Hand Key, Black Base	\$139.95
BNR-RJ-2	Hand Key, Chrome Base	\$159.95
BNR-BY-1	Iambic Paddle, Black Base/Chrome Parts	\$119.95
BNR-BY-2	Iambic Paddle, Chrome Base and Parts	\$154.95
BNR-ST-1	Single Lever Paddle, Black Base/Chrome Parts	\$129.95
BNR-ST-2	Single Lever Paddle, Chrome Base and Parts	\$154.95

Accessories

BNR-EZ-1	4' Hook-Up Cable Kit, 1/8" & 1/4" plugs	\$12.95
BNR-YA-1	Low Pass Filter, 1.8 to 29.7 MHz	\$129.95
VIB-DC-BY	Dust Cover for BY Paddles	\$32.95



MFJ-464

CW Keyer/Reader

Build your ultimate CW station! You can send CW or load messages with your paddle, keyboard or your computer's serial port. The MFJ-464's AutoTrak feature locks on, tracks and displays CW up to 99 WPM. Using this keyer is easy, thanks to its large LCD screen, intuitive interface and internal speaker. You can repeat messages, adjust from normal to Farnsworth spacing, insert pauses and even embed commands to automatically change weight or speed.

MFJ-464	CW Keyer/Reader Unit	\$189.95
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MFJ


CW50A Electronic Keyer

The Palstar CW50A Electronic Keyer has a speed control adjustable from 10 to 40 WPM, crystal-controlled for high accuracy. You can easily flip from mode A to mode B iambic keying and the built-in sidetone generator and speaker make monitoring your transmission easy. The CW50A also doubles as a training unit. Character spacing and dash weight are adjustable, as well.

The Palstar CW50A Electronic Keyer works with any straight key, semi-automatic bug key, single lever paddles and iambic dual lever "squeeze" paddles. Plus, it's compatible with both tube and solid state rigs. You can hook up your paddle through a convenient front panel jack, and there's a separate jack for your straight key—allowing for two keys to be attached at the same time! Read more details at DXEngineering.com.

- Sidetone pitch: 500-1000 Hz, front panel adjustable
- Keying output: positive, negative, and high-speed reed relay
- Operating current: 10-50 mA, depending on sidetone level

PAS-CW50A Palstar Electronic Keyer **\$159.95**

MFJ-461 Pocket Size Morse Code/CW Reader**MFJ**

Carry perfect code in your pocket—just put this reader near the speaker of your transceiver and it will instantly decode CW and display it in English. The AutoTrak speed tracking automatically locks on and displays CW speed up to 99 WPM and a serial port lets you plug the reader into a monitor—using terminal software for display. It runs off a 9-volt battery and fits in your pocket, so you'll never miss a CW exchange again.

MFJ-461 Pocket Size Morse Code/CW Reader **\$79.95**

**MFJ-418 Pocket Size Morse Code Tutor**

Got some downtime on a lunch break, layover or lazy Sunday afternoon? Instead of the mundane letter-by-letter method, practice copying realistic on-air style English QSOs with a huge library of commonly used words. You can select from normal or Farnsworth spacing, adjust WPM and program custom characters. There's even a headphone jack so you can practice code without upsetting the folks around you.

MFJ-418 Pocket Size Morse Code Tutor **\$89.95**

For All the Specs on MFJ Keyers, Visit DXEngineering.com

MFJ-492 Menu Driven Memory Keyer

A keyer that's loaded with features, yet still easy to operate. The controls and instructions are easy to understand and intuitive, so you can get on the air quicker. You can store messages and the edit mode lets you correct mistakes. This keyer can automatically insert incremental contest serial numbers and you can adjust from normal to Farnsworth spacing. The MFJ-492 even includes a code trainer to hone your technique.

MFJ-492 Menu Driven Memory Keyer **\$109.95**

MFJ**MFJ-407D Curtis Deluxe Electronic Keyer**

Using cutting-edge microprocessor control, the MFJ-407D gives you iambic key operation and dot-and-dash memory to help you send perfect code. You can adjust code speed, weight and side tone frequency, plus this keyer is compatible with your key, single or dual paddle.

MFJ-407D Curtis Deluxe Electronic Keyer **\$79.95**

MFJ-495 Millennium CW Memory Keyer**MFJ**

With the MFJ-495, you get a feature-laden keyer with dual microprocessors and nonvolatile EEPROM chip for excellent reliability. You can key in CW with your paddle, keyboard or through a computer serial port. MFJ-495's battery backed-up memory allows you to store messages and settings. This user-friendly keyer also features an internal speaker and simple interface, which makes it easy to set up and start sending CW.

MFJ-495 Millennium CW Memory Keyer **\$169.95**

**Palstar****Tigertronics**
Grants Pass, Oregon**SignalLink™ PC/Radio Sound Card Interface**

The all-new SignalLink USB combines the legendary performance of the original SignalLink SL-1+ with a state-of-the-art, built-in low-noise sound card. All sound card digital and voice modes are supported by the SignalLink USB. This includes traditional modes such as RTTY, SSTV and CW, as well as today's hottest new modes like PSK-31, MT-63 and EchoLink®. The front panel controls let you adjust your Transmit Audio, Receive Audio and Transmit Delay on the fly.

The SignalLink USB needs just one USB connection to the computer and one connection to the radio (in most cases). Convenient front panel controls make setup and operation very easy. The SignalLink USB is fully isolated and is compatible with all radio Mic, Data, and Accessory ports. The SignalLink USB allows you to use your computer's sound card for other functions while enjoying digital communications.

Just order the correct, fully-assembled interface cable for your radio(s) and simply "plug and play." Cables are available for a Mic connector interface or rear DIN plugs on radios so equipped. It makes for a neat, clean installation.

- Easy to set up
- Just plug in two cables
- Software included
- Built-in sound card
- Works with all radios
- Powered through USB cable
- Easy hookup to Macintosh or PC
- Comprehensive, easy-to-follow instructions

TGR-SL-USB SignalLink USB unit **\$84.50**

Any cable only **\$14.95** when ordered with TGR-SL-USB. Order one cable for each radio.

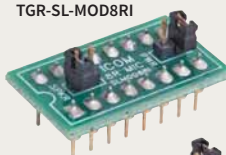
SignalLink Radio Interface Cables

You need the right cable for your SignalLink. These cables use either your radio's mic connector or rear DIN port. Some radios do not have the "RX Audio" signal on the mic connector and will require a mono cable between the SignalLink USB and the radio. You can avoid this issue by attaching the SignalLink to your radio's Data or Accessory port.



Part Number	Description	Price
TGR-SL-CAB4R	4-Pin Round Mic Connector Interface Cable	\$17.95
TGR-SL-CAB8R	8-Pin Round Mic Connector Interface Cable	\$17.95
TGR-SL-CABRJ1	RJ-11 Mic Connector Interface Cable	\$17.95
TGR-SL-CABRJ4	RJ-45 Mic Connector Interface Cable	\$17.95
TGR-SL-CAB5PD	5-Pin Ten-Tec/Yaesu DIN Interface Cable	\$17.95
TGR-SL-CAB8PD	8-Pin DIN Interface Cable	\$17.95
TGR-SL-CAB13I	13-Pin DIN Icom Interface Cable	\$18.95
TGR-SL-CAB13K	13-Pin DIN Kenwood Interface Cable	\$18.95
TGR-SL-CAB6PM	6-Pin Mini-DIN Interface Cable	\$16.95
TGR-SL-CABNC	Unterminated Cable Interface Cable	\$9.95
TGR-SL-CABK3	Special Elecraft K3 Interface Cable	\$19.95
TGR-SL-CABKX3	Special Elecraft KX3 Interface Cable	\$19.95
TGR-SL-HEAD	Header Plug for Radio Programming	\$7.95
Preprogrammed "Plug and Play" Radio Jumper Modules		
TGR-SL-MOD8RI	Jumper Module, Icom 8-Pin Mic Interface	\$7.95
TGR-SL-MOD13I	Jumper Module, Icom 13-Pin Accessory Port	\$7.95
TGR-SL-MOD8RK	Jumper Module, Kenwood 8-Pin Mic Interface	\$7.95
TGR-SL-MOD13K	Jumper Module, Kenwood 13-Pin Accessory Port	\$7.95
TGR-SL-MOD8RY	Jumper Module, Yaesu 8-Pin Mic Interface	\$7.95
TGR-SL-MOD6PM	Jumper Module, 6-Pin Mini-DIN	\$7.95
TGR-SL-MOD8PD	Jumper Module, 8-Pin DIN	\$7.95
TGR-SL-MODK3	Jumper Module, for Elecraft K3	\$7.95
TGR-SL-MODKX3	Jumper Module, for Elecraft KX3	\$7.95

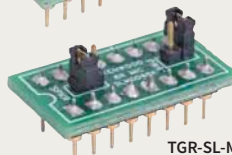
TGR-SL-MOD8RI



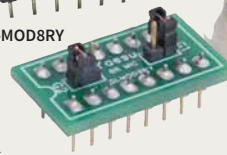
TGR-SL-MODKX3



TGR-SL-MOD8RY



TGR-SL-MOD8RK



TGR-SL-CAB13I

DIAMOND ANTENNA



DMN-SX100



DMN-SX600



DMN-SX1100



DMN-SX20C



DMN-SX200



DMN-SX400

Diamond Meters can measure forward and reflected power, SWR, and PEP on certain frequencies. Illuminated meter faces ensure excellent readability.

SX20C 30/300 Watt Power Meter

- 3.5-30 MHz, 50-54 MHz, 130-150 MHz frequency range
- SO-239 Connectors

DMN-SX20C\$89.95

SX40C 30/300 Watt Power Meter

- 144-470 MHz frequency range
- SO-239 Connectors

DMN-SX40C\$79.95

SX100 30/300/3,000 Watt Power Meter

- 1.6-60 MHz frequency range
- SO-239 Connectors

DMN-SX100\$124.95

SX200 5/20/200 Watt Power Meter

- 1.8-200 MHz frequency range
- SO-239 Connectors

DMN-SX200\$89.95

SX240C 30/300/3,000 Watt Power Meter

- 1.8-54 MHz, 140-470 MHz frequency range
- SO-239 Connectors

DMN-SX240C\$299.95

SX400 5/20/200 Watt Power Meter

- 140-525 MHz frequency range
- SO-239 Connectors

DMN-SX400\$109.95

SX600 5/20/200 Watt Power Meter

- 1.8-160 MHz, 140-525 MHz frequency range
- SO-239 Connectors

DMN-SX600\$179.95

SX-1100 5/20/200 Watt Power Meter

- 1.8-160 MHz, 430-450 MHz, 800-930 MHz, 1230-1300 MHz frequency range
- SO-239 and N Female Connectors

DMN-SX1100\$199.95



Palstar



Keep an Eye on Your Transmitter with Accurate and Precise Meters

Wattmeters

- Display SWR, forward and reflected power
- 1.8-60 MHz frequency range

PAS-PM2000A Wattmeter, 2,000 Watts\$179.95

PAS-PM2000AM Mobile Wattmeter, 2,000 Watts\$179.95

Palstar

PAS-DL5K

Fan-Cooled Dummy Load and Wattmeter, 5,000 Watts

- SWR under 1.2:1 to 54 MHz
- Built-in wattmeter, thermostatically-controlled fan

PAS-DL5K\$459.95



PAS-DL2K

Fan-Cooled Dummy Load and Wattmeter, 2,000 Watts

- 0-30 MHz frequency range
- Built-in wattmeter, thermostatically-controlled fan

PAS-DL2K\$379.95



PAS-DL1500

Air-Cooled Dummy Load, 1,500 Watts

- 0-500 MHz frequency range

PAS-DL1500\$189.95



DIAMOND ANTENNA

Diamond Compact Dummy Loads

DMN-DL30A Compact Dummy Load, 15 W Avg./100 W Peak, DC-500 MHz, PL-259\$39.95

DMN-DL30N Compact Dummy Load, 15 W Avg./100 W Peak, DC-500 MHz, Type N Connector\$54.95



VECTRONICS

...World Class Quality

Dummy Loads

- Air-Cooled
- 1,500 Watts, 0-650 MHz
- SWR under 1.3:1 at DC-300 MHz, under 1.5:1 at 300-500 MHz, under 2.0:1 at 650-1000 MHz

VEC-DL650M\$79.95

- Fan-Cooled
- 2,500 Watts, 0-150 MHz
- SWR under 1.31 to 30 MHz

VEC-DL-2500\$199.95



AMERITRON

ADL-1500

Oil-Filled Dummy Load, 1,500 Watts

- SWR under 1.2:1 to 30 MHz and low SWR to 400 MHz
- 7 1/2" H x 6 5/8" D

AME-ADL-1500\$69.95



CMX-2300

Comet CMX-2300 Power Meters offer dual readings in one unit. The meters display FWD, REF and SWR, and can operate simultaneously. The left meter covers 1.8 to 200 MHz with a 3,000 watt power max. The right meter covers 140 to 525 MHz with a 200 watt power max.

CMA-CMX-2300\$224.95



COMET

LDG gives you large, easy-to-read analog meters that are virtually plug-and-play. Depending on the model, these backlit meters can display critical measurements like signal strength, SWR, modulation, ALC action, power output and transmit supply voltage.

Meters for Yaesu 857/897 Transceiver

LDG-FTL-METER\$74.95

- 7 Function Meter
 - 4.5" Display
- LDG-FT-METER\$44.95
- 6 Function Meter
 - 2.5" Display

LDG ELECTRONICS

LDG-FTL-METER



LDG-FT-METER



Meter for Icom IC-7600 Transceiver

LDG-M-7600\$79.95

- 7 Function Meter
- 4.5" Display



Meters for LDG Auto Tuners

LDG-M-1000\$119.95

- Peak hold and average power modes
- 0-100 watt and 0-600 watt power ranges
- For AT-1000ProII tuner



LDG-M-600\$124.95

- Peak hold and average power modes
- 0-100 watt and 0-1,000 watt power ranges
- For AT-600ProII tuner



New!

MFJ

MFJ-267

Air-Cooled Dummy Load and Wattmeter, 1,500 Watts

- SWR under 1.3:1 at 30 MHz
- Built-in wattmeter can be used independently

MFJ-267\$149.95



MFJ-264

Air-Cooled Dummy Load, 1,500 Watts (SO-239)

- SWR under 1.1:1 at 30 MHz and 1.3:1 at 30-650 MHz

MFJ-264\$74.95

MFJ-267

MFJ-264



MFJ-264N



MFJ-264N

Air-Cooled Dummy Load, 1,500 Watts (N-Connector)

- SWR under 1.1:1 at 30 MHz and 1.3:1 at 30-650 MHz

MFJ-264N\$84.95

MFJ-260C

Air-Cooled Dummy Load, 300 Watts

- SWR under 1.1:1 to 30 MHz and 1.5:1 at 30-650 MHz

MFJ-260C\$39.95

MFJ-260C



Get Your Gear Faster. If you get your order in by 10 pm ET and the parts are in stock, DX Engineering will ship it immediately. We carry thousands of items, that means you'll get your order as quickly as possible. If you don't like to wait, count on us to get your order out quickly.



New!

Digital SWR Wattmeter

- Bar graph display combines digital accuracy with analog readability
- 25/250/1,500 watt min./mid./max. power ranges
- 1.8-54 MHz frequency range
- Power, SWR and frequency displayed simultaneously
- Adjustable SWR alarm

MFJ-826B Digital SWR Wattmeter.....\$179.95

MFJ

Giant SWR/Wattmeter

- Quit squinting: giant 6.5" display
- 20/200/2,000 watt min./mid./max. power ranges
- 1.8-60 MHz frequency range
- Uses MFJ's "TrueActive" circuit for true peak or average forward reflected power readings



MFJ-868B Giant SWR/Wattmeter.....\$149.95



AMERITRON

Flat Mount Mobile SWR/Wattmeter

- Easy dashboard mount
- 1.8-30 MHz Range
- LED illuminated cross-needle meter
- Remote sensor included
- Uses 12 Vdc source or 9V battery

AME-AWM-35H Flat Mount Mobile SWR/Wattmeter.....\$159.95

New!



DWA-CN-101

Daiwa meters deliver high quality at a value price, making them ideal for sophisticated and simple setups. The cross-needle meters display SWR, power output and reflected power.

DWA-CN-101.....\$99.95

- 15/150/1,500 watt min./mid./max. power range
- 1.8-200 MHz frequency range

DWA-CN-801HP.....\$159.95

- 20/200/2,000 watt min./mid./max. power range
- 1.8-200 MHz frequency range

DWA-CN-801HP3.....\$189.95

- 30/300/3,000 watt min./mid./max. power range
- 1.8-200 MHz frequency range

DWA-CN-801V.....\$149.95

- 20/200 watt min./max. power range
- 140-525 MHz frequency range

DWA-CN-801SH.....\$249.95

- 0.2/200/2,000 watt min./mid./max. power range
- 900-2500 MHz frequency range



LST-WT-3129B



LST-WT-3102S



LST-WT-3129B

New!



LST-WS8117UITOAK



LST-WT-8112



LST-WT-8005U-B



LST-WS-8115U-S

Wall Clocks

These large, easy-to-read wall clocks are more than mere timepieces; they display weather conditions, the date and even moon phases. Available in several styles, they will look great on almost any wall. Ensure that you're never late for dinner, your job or wedding day again by using a wall clock from La Crosse Technology to stay on schedule!

LST-WT-3102S Analog Clock, White Face, Silver Bezel, 10" Diameter\$19.95

LST-WT-3129B Analog Clock, White Face, Black Bezel, 10" Diameter\$29.95

LST-WT-8005U-B Wall Clock with Inside Temperature and Date\$24.95

LST-WS-8115U-S Atomic Digital Clock with Inside/Outside Temperature\$24.95

LST-WS-8418AL-IT Atomic Digital Clock with Moon Phase\$31.95

LST-WS8117UITOAK Digital Clock with Calendar, Temperature, Moon Phase\$31.95

LST-WT-8112U Solar Atomic Digital Clock, Temperature, Moon Phase.....\$24.95



LST-WT5220UITCBP



Desk Clock

Keep the time and inside/outside temperature on your desk AND your wall with this innovative desk clock. This self-setting atomic clock has a traditional display, plus it can project the time and temperature onto your wall in stunning color. It features an alarm with a snooze button, making it perfect for the bedroom or your shack. An AC adapter is included.

LST-WT5220UITCBP Desk Clock with Projection and Alarm.....\$34.95

Digital Altimeter Watch

Carry an altimeter, thermometer, barometer, and compass on your wrist! This watch even lets you take bearing readings and gives you accurate weather forecasts. A full chronograph mode includes a stopwatch and counting timer, with memory. The watch is water-resistant to 30 feet and has an electro-luminescent backlight. (Oh, and it tells time, too.)

LST-XG-55 Digital Altimeter Watch\$64.95



MFJ-113



MFJ-108B

MFJ-121B



MFJ-133RC



MFJ Desk Clocks

Maintain an accurate log and ensure that you don't lose track of time.

Available in 12 and 24 hour formats, these MFJ clocks have large, easy-to-read displays.

MFJ-108B Dual Time Zone LCD Clock, Silver Face\$21.95

MFJ-121B Dual Time Zone LCD Clock, Green Face.....\$69.95

MFJ-133RC Atomic Dual Time Zone Compact Clock.....\$34.95

MFJ-113 LED Desk Clock.....\$19.95

MFJ

How's the Weather?

Get used to answering that question, because these monitoring tools will make you an instant authority on Mother Nature. From basic thermometers to advanced meteorological measurement equipment, outfit your shack with accurate weather monitoring gear and "how's the weather" becomes more than just small talk. Find all the specs on each weather station at DXEngineering.com.



LST-308-807



LST-WS-1912U-IT



LST-WS-2815UITAL

New!

LST-WS-450B



LST-WS-1516-IT



LST-WS9049UITAL



LST-WS-7014CH-IT

Professional Weather Stations

Tailored to the enthusiast, these are powerful and versatile stations. In addition to the standard measurements, these stations let you monitor wind direction/speed, wind chill, dew point and more, depending on the one you choose. There are stations with solar powered sensors, USB connectivity, storm warnings and alarms. Many are compatible with La Crosse Technology's own "Heavy Weather" software. Data storage is non-volatile and the stations transmit wirelessly at 915 MHz. Find all the specs on each station at DXEngineering.com.

LST-308-807	Color Display, Remote, Shows Photos, 5 Vdc Adapter.....	\$139.95
LST-WS-1516-IT	Backlit Display, Wireless Indoor Console, 3 AA Batteries....	\$99.95
LST-WS-1912U-IT	Backlit Display, Stores 17 Days of Data, 3 AA Batteries.....	\$56.95
LST-WS-1612AL-IT	Backlit Display, Stores 25 Days of Data, Aluminum Trim....	\$94.95
LST-WS-1612CH-IT	Backlit Display, Stores 25 Days of Data, Cherry Trim	\$94.95
LST-WS-2810U-IT	Stores 72 Days of Data, USB, Windows Compatible.....	\$159.95
LST-WS-2811SALIT	Stores Data, 7.5" Wide Bezel, Windows Compatible.....	\$159.95
LST-WS-2815UITAL	Stores Data, 9.5" Wide Bezel, Windows Compatible.....	\$169.95

Wireless**Weather Stations**

Depending on the model, these weather stations allow you to monitor, record, and track several key weather conditions like temperature, dew point, humidity, barometric pressure, and even rainfall. From basic measurements to comprehensive forecasts, these feature-laden weather stations are invaluable tools for your shack.

LST-WS-7014CH-IT	Cherry Trim, Expandable to 3 Temp. Sensors.....	\$34.95
LST-WS-7017U-IT	Aluminum Trim, Expandable to 3 Temp. Sensors	\$32.95
LST-308-145B	Color Display, Atomic Time/Date, Wireless.....	\$44.95
LST-WS-450B	Animated Graphs, USB Charging Port, 6 Vdc Adapter	\$44.95
LST-WS9049UITAL	Displays Forecast, Pressure History, Moon Phase.....	\$49.95

New!

LST-308-145B

Handheld Anemometer**New!**

Planning for a DXpedition, Field Day or Hill-Topping? Add accurate weather monitoring tools to your gear and make sure you're ready for Mother Nature. This Anemometer lets you monitor wind speed, wind chill and temperature, plus it's small enough to fit in your pocket.

LST-EA-3010U	Handheld Anemometer, Uses CR2032 Lithium Battery.....	\$37.95
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**Wireless Rain Center****New!**

Find out how much rain you've received in the last 24 hours with this easy-to-use tool. It can also display total cumulative rainfall levels. The display updates every six seconds and you can configure the alarm to signal excessive rainfall. The wireless sensor is self-emptying and durable.

LST-WS9004UITCBP	Wireless Rain Center.....	\$28.95
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**Outdoor Thermometers**

These thermometers and sensors are made to withstand the elements and provide accurate readings for years. They have large, easy to read displays and incorporate several key features. Choose from outdoor standalone units and indoor units with wireless sensors.

LST-306-605	Window Thermometer, Clock, Solar Powered, Backlit.....	\$24.95
LST-WS6020UITCBP	Thermometer with Wireless Sensor, 5.7" x 3.6"	\$24.95
LST-WS6010UITCBP	Thermometer with Wireless Sensor, 6.1" x 5.3"	\$27.95

**Internet Weather Station**

Harness the power of the World Wide Web. Get access to the same reports that professional meteorologists use. You can use La Crosse Technology's own website (WeatherDirect.com) to get accurate up-to-the-minute weather data, 24 hours a day. This station works without Wi-Fi, there's no software to install and the forecasts are totally free. You can even use the wireless sensor to get temperature readings from your own backyard. High speed Internet access, a network router, and a computer (for initial set-up) are required.

LST-WA-1240U-WAL	Talking, Scroll Display, 4-Day Forecast, Walnut Trim	\$94.95
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**New!**

LST-WS9023UITCBP

New!**Indoor/Outdoor Thermometers**

Affordable and accurate tools to measure indoor and outdoor temperatures. They have a wireless outdoor sensor, and can display temperature and humidity. The WS9080UIT-CBP features a self-setting Atomic clock.

LST-WS9245UBKIT	Thermometer, Clock, Min./Max. Temp.	\$14.95
LST-WS9023UITCBP	Thermometer, Clock, Min./Max. Temp., Humidity.....	\$23.95
LST-WS9080UITCBP	Thermometer, Clock, Min./Max. Temp., Atomic Time	\$24.95



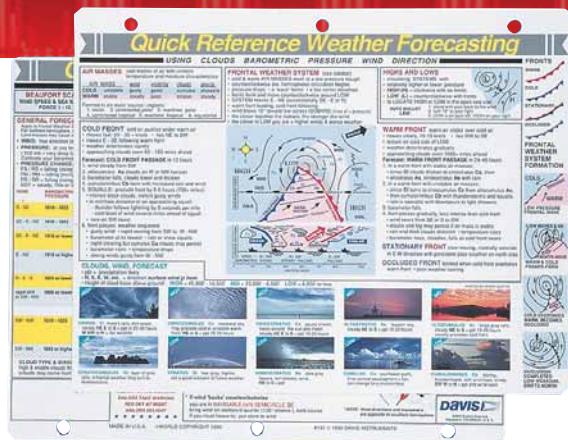
LST-WS9080UITCBP

Indoor Thermometer

Get accurate temperature, time and humidity readouts in an attractive device. This handy tool can record minimum and maximum temperatures, plus there's a smiley face icon that instantly tells you how comfortable the conditions are.

LST-302-604B	Indoor Thermometer	\$17.95
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New!



New!

Weather Forecasting Quick Reference Cards

This card shows you how to use the information from your fancy weather station. It tells you how to interpret barometric pressure, wind direction, cloud types, and more. Get years of meteorology lessons on a single card—perfect for weather-watchers, boaters and Hams.

DVI-131 Weather Forecasting Quick Reference Cards (2) \$8.99

DAVIS
Davis Instruments



New!

Vantage Vue Weather Station

Get critical weather details on a sleek LCD console. The Vantage Vue Weather Station displays barometric pressure, wind speed/direction, temperature, wind chill, rainfall, dew point and more. It uses a Weather Center function that records conditions over the past 25 days.

This solar-powered wireless sensor uses frequency-hopping spread spectrum radio technology to transmit at distances up to 1,000 feet with updates every 2.5 seconds. The station is compatible with Vantage Pro2 weather stations, so you can mix-and-match components.

DVI-6250 Vantage Vue Weather Station \$355.50

DAVIS
Davis Instruments



New!

Vantage Pro2 Weather Station

Tailored to the serious sky-watcher, this station uses a wireless, solar-powered sensor array to provide precise weather data. The easy-to-use LCD controller shows graph readouts and forecasting icons. As with many of Davis Instruments' Weather Stations, the Vantage Pro2 is fully expandable with a variety of sensors, wireless repeaters and probes. Find them at DXEngineering.com

The station gives you precise readouts on wind speed/direction, barometric pressure, temperature, wind chill, relative humidity, rainfall, dew point and more.

DVI-6152 Vantage Pro2 Weather Station \$535.50

DAVIS
Davis Instruments

Exclusively from DX Engineering!



MSQ-6M-1K2



MSQ-6M-1K2-NOPS

Six Meter 1,200 Watt Amplifier

M2 Antennas' 6M-1K2: excellent performance in a lightweight package. It's compact design makes it perfect for Field Day and DXpeditions, and it's equally at home in your shack. The standalone unit weighs only 13 pounds, or you can add a built-in 92% efficient switching power supply and it still only weighs around twenty pounds.

The 1K2 is designed for EME (CW and JT65), SSB, CW, or the very popular JT6M for meteor scatter. Full power output is possible for hours using 50 second transmissions for JT65A.

MSQ-6M-1K2 6 Meter 1,200 Watt Amplifier with Power Supply \$3,299.00

MSQ-6M-1K2-NOPS 6 Meter 1,200 Watt Amplifier without Power Supply ... \$2,699.00



MSQ-2M-1K2-NOPS



MSQ-2M-1K2

Two Meter 1,200 Watt Amplifier

An amplifier that's beautiful in its simplicity.

At the heart of this 2 meter amplifier is single LDMOS FET rated at an incredible 1,250 watts. The 2M-1K2 can handle up to a 65:1 mismatch, and it monitors temperature, current, VSWR, drive and mode to adjust output.

At just 13 pounds, it is the smallest 1,200 watt amplifier ever offered. You can order it with a built in, 92% efficient switching supply, and the total weight is still just 20.5 pounds.

Like its 6 meter counterpart, the 6M-1K2, this lightweight and reliable 2 meter amp is perfect for portable remote operations or permanent installation in your shack. It is well suited for EME (CW and JT65), SSB or CW.

MSQ-2M-1K2 2 Meter 1,200 Watt Amplifier with Power Supply \$3,299.00

MSQ-2M-1K2-NOPS 2 Meter 1,200 Watt Amplifier without Power Supply \$2,699.00

DAVIS
Davis Instruments

Wind Speed Meters

Perfect for SKYWARN activities, these ultra-accurate meters let you keep one eye on the wind and the other on the weather.

The WindScribe uses patented ultrasonic sensor technology to give you wind speed, highest positive speed, lowest negative speed and average wind speeds. The meter can also determine wind chill. It includes a replaceable coin cell battery that lasts up to 600 hours, a wrist lanyard and mounting bracket.

Perfect for quick, easy wind measurement, the Wind Wizard is a handheld vane anemometer with an analog display. It uses a small built-in wind tunnel to show wind speed without the need for batteries. A lanyard and protective case is included.

Find more wind meters and detailed specs on each, at DXEngineering.com

DVI-276 WindScribe Digital Meter \$121.50

DVI-281 Wind Wizard Analog Meter \$48.59



New!

World-Class Products Shipped Worldwide



ALS-500M Solid State Mobile Amplifier

- Coverage: 1.5 to 22 MHz (10-12 meters with optional install kit)
- Power output:
 - 500 watts PEP
 - 400 watts CE
- (4) 2SC2879 high power linear RF power transistors
- On/off switch, optional remote on/off control
- DC current meter
- Quiet, thermostatically-controlled low-speed fan
- Instant bandswitching, no tuning required

AME-ALS-500M Solid State Mobile Amplifier.....\$789.95



ALS-500RC Remote Head

- DC current meter
- Remote head for Ameritron's ALS-500M, ALS-600, ALS-600S and ALS-1300
- Operates amplifier's power and frequency select switches
- Power, transmit and overload indicator LEDs

AME-ALS-500RC Remote Head\$49.95

ALS-500MR Mobile Amplifier and Remote Combo

AME-ALS-500MR Mobile Amplifier and Remote Combo\$849.95

Ameritron Amplifier Modification Kits

Add 10 and 12 meter band coverage to your Ameritron amplifier. Proof of U.S. Amateur License is required when purchasing 10 meter modification kits. Be sure to check your amplifier's serial number for modification compatibility before you order.



Part Number	For Amp Model	Serial Number	Price
AME-MOD-10M	ALS-500M, 600	12521 & -	\$29.95
AME-MOD-10MB	ALS-600, 600S	12522 & +	\$29.95
AME-MOD-10MK	ALS-1300	Any	\$39.95



ICP-120 & ICP-240

In-Rush Current Protectors

- Designed to stop damaging in-rush current
- Protect your tubes from thermal shock
- No complicated wiring, plugs right in to AC

AME-ICP-120 In-Rush Current Protector, 120 Vac\$79.95

AME-ICP-240 In-Rush Current Protector, 240 Vac\$79.95



ALS-600

Solid State Linear Amplifier

- Coverage: 1.5 to 22 MHz (10-12 meters with optional install kit)
- Power output:
 - 600 watts PEP
 - 500 watts CE
- (4) rugged TMOS RF power FETs
- Includes 120/220 Vac 50/60 Hz power supply
- Illuminated cross-needle SWR/wattmeter
- Quiet, low-speed, low-volume fan
- Instant bandswitching, no tuning required
- Rugged linear power supply

AME-ALS-600 Solid State Linear Amplifier\$1,279.95



ALS-600S

Solid State Linear Amplifier

- Coverage: 1.5 to 22 MHz (10-12 meters with optional install kit)
- Power output:
 - 600 watts PEP
 - 500 watts CE
- (4) rugged TMOS RF power FETs
- Includes lightweight switching power supply
- Illuminated cross-needle SWR/wattmeter
- Quiet, low-speed, low-volume fan
- Instant bandswitching, no tuning required
- Lightweight switching power supply

AME-ALS-600S Solid State Linear Amplifier...\$1,399.95



ALS-1300 Solid State HF Amplifier

- Coverage: 1.5 to 22 MHz (10-12 meters with optional install kit)
- Power output:
 - 1,200 watts SSB
- (8) rugged MRF-150 power FETs
- Front panel ALC control
- Illuminated cross-needle SWR/wattmeter
- Operate/Standby switch
- Instant bandswitching, no tuning required
- Lightweight switching power supply

AME-ALS-1300 Solid State Linear Amplifier ...\$2,395.95

QSK-5

High Power Transmit/Receive Switches

- Electronic PIN diode switching for fast QSK operation
- Power handling:
 - 2,500 watts PEP
 - 2,000 watts CW
 - 750 watts RTTY/SSTV/FM
- Sure switching prevent hot switching RF power
- AmpSaver feature shuts off tube current between dots and dashes

AME-QSK-5 Self-Contained QSK-5 High Power T/R Switch, 120 Vac\$369.95

AME-QSK-5X Self-Contained QSK-5 High Power T/R Switch, 220/240 Vac\$349.95

AME-QSK-5PC PC Board Assembly, QSK-5 High Power T/R Switch.....\$279.95



ATP-102 Deluxe Amplifier Tuning Pulser

- Relieves stress on amps, tuners and dummy loads during tuning
- Works with any solid state transceiver or transmitter
- Front panel adjustment controls

AME-ATP-102 Deluxe Amplifier Tuning Pulser\$79.95



ARB-704

Amplifier/Transceiver Interface Buffer

- Protects your expensive radio from damage
- Works with almost any transceiver
- No moving parts, almost instant switching

AME-ARB-704 Interface Buffer\$59.95

AME-ARB-704I2 Interface Buffer with Cable for Icom 7000/760/718\$59.95

ARB-704 Interface Cables

These cables let you connect your specific transceiver to Ameritron's ARB-704 Interface Buffer. These are plug-and-play configurations that let you safely connect virtually any modern transceiver to your ARB-704.

New!

Part Number	Radio	Description	Price
AME-PNP-7DI	Icom	7-Pin DIN	\$17.95
AME-PNP-8DI	Icom	8-Pin DIN	\$17.95
AME-PNP-13D	Icom	13-Pin DIN	\$17.95
AME-PNP-7D	Kenwood	7-Pin DIN	\$17.95
AME-PNP-8MK	Kenwood	8-Pin Mini-DIN	\$17.95
AME-PNP-5M	Yaesu	5-Pin Mini-DIN	\$17.95
AME-PNP-8D	Yaesu	8-Pin DIN	\$17.95
AME-PNP-8M	Yaesu	8-Pin Mini-DIN	\$17.95

New!

Grid Overload Protection Kit

Guard your expensive tubes against dangerous grid current. This kit's fast acting circuit quickly disables the amp if grid current becomes excessive. If you're ordering a new Ameritron Amplifier, this kit can be factory installed, contact us and we'll arrange it. The kit is designed for Ameritron AL-80B, AL-82, AL-811H, AL-572 and AL-1200 amplifiers only.

AME-GOP-100 Grid Overload Protection Kit ...\$39.95





AL-811 Linear Amplifier

- Coverage: all HF bands (user-modifiable to 10/12 meters)
- Power output:
 - 600 watts PEP SSB
 - 500 watts CW
 - 400 watts RTTY, SSTV, FM and AM
- Tube complement: (3) rugged, neutralized 811A transmitting tubes
- Two illuminated cross-needle meters
- Transmit LED
- Operate/Standby switch

AME-AL-811 Linear Amplifier \$729.95

AME-AL-811XCE Linear Amplifier, CE-certified ... \$848.95



AL-811H Linear Amplifier

- Coverage: all HF bands (user-modifiable to 10/12 meters)
- Power output:
 - 800 watts PEP SSB
 - 600 watts CW
 - 400+ watts RTTY, SSTV, FM and AM
- Tube complement: (4) rugged, neutralized 811A transmitting tubes
- Two illuminated cross-needle meters
- Transmit LED
- Operate/Standby switch

AME-AL-811H Linear Amplifier \$879.95

AME-AL-811HXCE Linear Amplifier, CE-certified \$998.95



AL-80B Linear Amplifier

- Coverage: all HF bands (user-modifiable to 10/12 meters)
- Power output:
 - 1,000 watts PEP SSB
 - 800 watts CW
 - 500 watts RTTY, SSTV, FM and AM
- Tube: (1) genuine, warranted 3-500ZG transmitting tube
- Two illuminated cross-needle meters
- In-rush current protection
- Multi-voltage power transformer

AME-AL-80B Linear Amplifier \$1,329.95



AL-800 Linear Amplifier

- Coverage: 160-15 meters (user-modifiable to 10/12 meters)
- Power output:
 - 1,250 watts PEP SSB
 - 850 watts CW
- Tube: (1) 3CX800A7 transmitting tube
- Two illuminated cross-needle meters
- In-rush current protection
- Air cooled with pressurized ventilation
- Multi-voltage power transformer

AME-AL-800 Linear Amplifier \$2,119.95



AL-800H Linear Amplifier

- Coverage: 160-15 meters (user-modifiable to 10/12 meters)
- Power output:
 - 1,500 watts PEP/CW
- Tube complement: (2) 3CX800A7 transmitting tubes
- Two illuminated cross-needle meters
- In-rush current protection
- Air cooled with pressurized ventilation
- Multi-voltage power transformer
- Operate/Standby switch

AME-AL-800H Linear Amplifier \$2,999.95



AL-572 Linear Amplifier

- Coverage: 160-15 meters (user-modifiable to 10/12 meters)
- Power output:
 - 1,300 watts PEP
 - 1,000 watts CW
- Tube complement: (4) 572B transmitting tubes
- Two illuminated cross-needle meters
- In-rush current protection
- Multi-voltage power transformer
- QSK compatible

AME-AL-572 Linear Amplifier \$1,599.95



AL-1200 Linear Amplifier

- Coverage: 1.8, 3.5, 7, 14, 21 MHz and WARC bands (user-modifiable to include 28 MHz)
- Power output:
 - 1,500 watts
 - 2,500+ watts (PEP two tone for 1/2 hour)
- Tube complement: (1) 3CX1200Z7
- Two illuminated, selectable meters
- Forced air cooling system
- Factory-wired for 240 Vac, 50/60 Hz
- Rectifier diodes rated for 200A

AME-AL-1200 Linear Amplifier \$3,389.95



AL-1500 Linear Amplifier

- Coverage: 1.8, 3.5, 7, 14, 21 MHz and WARC bands (user-modifiable to include 28 MHz)
- Power output:
 - 1,500 watts (1/2 hour continuous carrier)
 - 2,500 watts (30 second continuous carrier)
- Tube complement: (1) 3CX1500A7/887 Ceramic
- Two illuminated, selectable meters
- In-rush current protection
- Multi-voltage power transformer
- QSK-compatible

AME-AL-1500 Linear Amplifier \$3,829.95



AL-82 Linear Amplifier

- Coverage: 1.8, 3.5, 7, 14, 21 MHz and WARC bands (user-modifiable to include 28 MHz)
- Power output:
 - 1,800 watts continuous
 - 1,500 watts RTTY, CW (70% plate efficiency)
 - 1,500 watts PEP, SSB, SSTV (low distortion)
- Tube complement: (2) 3-500ZG transmitting tubes
- Two illuminated, selectable meters
- In-rush current protection
- Factory-wired for 240 Vac, 50/60 Hz

AME-AL-82 Linear Amplifier \$2,729.95



Automatic Bandswitching Radio Interface

Connect this between your Ameritron ALS-Series Solid State Amplifier and transceiver, and it will automatically select the right frequency range for your amp based on the band you're using. It works with most Icom, Kenwood and Yaesu transceivers, and there's a full compliment of interface cables available for easy hookup.

AME-ARI-500 Automatic Bandswitching Radio Interface \$119.95



New!

ARI-500 Interface Cables—These cables let you connect your specific transceiver, the ARI-500, to your amplifier.

Part Number	Radio Brand	Description	Price
AME-RJ-7DI	Icom	7-Pin DIN	\$24.95
AME-RJ-13D	Icom	13-Pin DIN	\$24.95
AME-RJ-DB97DK	Kenwood	DB-9 RS-232	\$24.95
AME-RJ-8DY	Yaesu	8-Pin DIN	\$24.95





Mirage Amplifiers—Big Power in a Small Package for Your Base or Mobile Rig!

BD-35 Dual-Band HT Amplifier

- Coverage: 2 meters and 70cm, FM mode
- Power input/output:
 - 4 watts in/45 watts out (2M)
 - 4 watts in/35 watts out (70cm)
- Full duplex: talk and listen at the same time
- D-STAR compatible
- Auto band selection, reverse polarity protection
- Works with HTs to 8 watts
- Auto RF-sensing transmit/receive switch

MIR-BD-35 Dual-Band HT Amplifier **\$189.95**



B-310-G and B-320-G HT Amplifiers

- Coverage: 2 meters
- Power input/output:
 - 3 watts in/100 watts out (B-310-G)
 - 3/50 watts in/200/200 watts out (B-320-G)
- Modes: FM/Digital/SSB/CW
- Low-noise GaAsFET receive preamps offer 15 dB of gain
- Draw 15A at 13.8 Vdc
- Fully SWR and reverse polarity protected
- Include cable, rubber feet and warranty

MIR-B-310-G HT Amplifier **\$239.95**

MIR-B-320-G HT Amplifier **\$459.95**



A-1015-G 6 Meter Amplifier

- Coverage: 6 meters
- Power input/output:
 - 10 watts in/150 watts out
- Low-noise GaAsFET receive preamps offer 20 dB of gain
- Great for mobile or base stations
- Modes: FM/Digital/SSB/CW
- Draws 18-22A at 13.8 Vdc
- Accepts up to 10 watts of input power
- Built-in protection circuits

MIR-A-1015-G 6 Meter Amplifier..... **\$349.95**



B-34 and B-34-G HT Amplifiers

- Coverage: 2 meters
- Power input/output:
 - 2 watts in/35 watts out
- Modes:
 - FM
 - CW/FM/SSB
- Low-noise GaAsFET receive preamp offers 20 dB of gain (B-34-G)
- Heavy-duty heatsink
- Draw 4A at 13.8 Vdc

MIR-B-34 HT Amplifier **\$99.95**

MIR-B-34-G HT Amplifier **\$119.95**



B-1018-G, B-2518-G and B-5018-G 2 Meter Amplifiers

- Coverage: 2 meters
- Power input/output:
 - 10 watts in/160 watts out (B-1018-G)
 - 25 watts in/160 watts out (B-2518-G)
 - 50 watts in/160 watts out (B-5018-G)
- Modes: FM/Digital/SSB/CW
- Low-noise GaAsFET receive preamps offer 20 dB of gain
- Draw 25A at 13.8 Vdc
- Active-Bias for crisp SSB response

MIR-B-1018-G 2 Meter Amplifier..... **\$369.95**

MIR-B-2518-G 2 Meter Amplifier..... **\$339.95**

MIR-B-5018-G 2 Meter Amplifier..... **\$339.95**



RC-1 and RC-2 Remote Control Heads

- RC-1 compatible with most Mirage Amplifiers
- RC-2 specifically for B-2518-G/B-5018-B
- Preamp on/off
- FM/SSB switch
- Cable included

MIR-RC-1 Remote Control Head..... **\$49.95**

MIR-RC-2 Remote Control Head..... **\$49.95**



MIRAGE

A-1015-R 6 Meter Repeater Amplifier

- Coverage: 6 meters
- Power input/output:
 - 5 watts in/98 watts out
- All mode operation
- Cool-running with rackmount heatsink
- Overheating protection/bypass mode
- Works with RC-1 Remote Control Head

MIR-A-1015-R 6 Meter Repeater Amplifier (SO-239 Connector) **\$529.95**

D-1010-NR and D-3010-NR UHF Repeater Amplifiers

- Coverage: 440-450 MHz
- Power input/output:
 - 4 watts in/80 watts out (D-1010-NR)
 - 12 watts in/80 watts out (D-3010-NR)
- All mode operation
- Cool-running with rackmount heatsink
- Overheating protection/bypass mode

MIR-D-1010-NR UHF Repeater Amplifier..... **\$649.95**

MIR-D-3010-NR UHF Repeater Amplifier..... **\$629.95**



In-Shack and Mast-Mounted Preamplifiers

- Ultra low-noise GaAsFETs with switchable gain
- Automatic RF switching
- Handle up to 100 watts bypass
- KP-1 series are single unit inline preamplifiers
- KP-2 series use separate RF Line voltage control and preamp units

MIR-KP-1-10M In-Shack Preamplifier, 10 Meter **\$139.95**

MIR-KP-1-6M In-Shack Preamplifier, 6 Meter **\$139.95**

MIR-KP-1-2M In-Shack Preamplifier, 2 Meter **\$139.95**

MIR-KP-1-220 In-Shack Preamplifier, 220-225 MHz **\$139.95**

MIR-KP-1-440 In-Shack Preamplifier, 430-450 MHz **\$139.95**

MIR-KP-2-10M Mast-Mounted Preamplifier, 10 Meter **\$179.95**

MIR-KP-2-6M Mast-Mounted Preamplifier, 6 Meter **\$179.95**

MIR-KP-2-2M Mast-Mounted Preamplifier, 2 Meter **\$184.95**

MIR-KP-2-220 Mast-Mounted Preamplifier, 220-225 MHz **\$179.95**

MIR-KP-2-440 Mast-Mounted Preamplifier, 430-450 MHz **\$184.95**

AT-1000Proll Automatic Antenna Tuner

- 1,000 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 2,000 memories for each antenna and auto configuration storage
- Tunes 6 to 1,000 Ω loads (16 to 150 Ω on 6M)
- 10 second tuning time, 0.2 second memory tuning
- Bar graph LED display shows SWR and selectable power ranges

LDG-AT1000PROII\$438.95

YT-450 Automatic Antenna Tuner

- Tailored to Yaesu FT-450 and FT-950 radios
- 100 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 2,000 memories, sorted by frequency
- Tunes 4 to 1,000 Ω loads (16 to 150 Ω loads on 6M)
- SO-239 in/out connections for dipoles, verticals, beams, etc
- Powered from Yaesu radio using supplied CAT interface cable

LDG-YT-450\$219.95

AL-100 Automatic Antenna Tuner

- Tailored to the Alinco SR8T radio
- Great for QRP rigs or backpackers
- Handles .1 to 1,000 watts
- 1.8 to 54 MHz frequency range
- 2,000 fast memories
- Tunes 6 to 800 Ω loads
- Powered by Alinco radio using 11 to 18 Vdc

LDG-AL-100\$139.95

AT-897Plus Automatic Antenna Tuner

- Tailored to the Yaesu FT-897 radio
- 100 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 1 to 7 second tuning time
- 2,000 memories, sorted by frequency
- Tunes 6 to 800 Ω loads
- Switched L tuning network
- Requires 11 to 14 Vdc at 300mA

LDG-AT-897PLUS\$174.95

YT-100 Automatic Antenna Tuner

- Tailored to certain Yaesu radios
- 100 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 2,000 memories, sorted by frequency
- Tunes 4 to 800 Ω loads (16 to 150 Ω loads on 6M)
- SO-239 in/out connections for dipoles, verticals, beams, etc.
- Powered from Yaesu radio using supplied CAT interface cable

LDG-YT-100\$169.95

Antenna Tuner Cables

The proper link between your tuner and radio is essential: LDG Electronics makes it easy to create the perfect match with these interface cables. Don't see your radio brand listed? There's a good chance we have it online at DXEngineering.com.

Part Number	Radio	Notes	Price
LDG-IC-PAC	Icom	Works with radios that support AH-3/AH-4 tuner, 14" long	\$9.95
LDG-IC-PAC-6	Icom	6 foot version of IC-PAC Cable	\$11.95
LDG-IC-2000	Icom	Pressing radio's tune button changes mode to CW	\$9.95
LDG-Y-ACC	Yaesu	Pressing radio's tune button changes mode to CW	\$9.95
LDG-IC-KT	Kenwood	Normal tuning cycle is about 15 seconds	\$11.95
LDG-AL-PAC	Alinco	6' long	\$11.95
LDG-DC-PWR-CABLE	LDG	Replacement power cable for any LDG device	\$4.95

KT-100 Automatic Antenna Tuner

- Works with any AT-300 compatible Kenwood radio
- 125 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 0.1 to 6 second tuning time, 0.1 second memory tune
- Tunes 6 to 1,000 Ω loads (6 to 4,000 Ω with 4:1 balun)
- Optional external balun allows random, long wire or ladder line fed antennas
- Powered by Kenwood transceiver via included interface cable

LDG-KT-100.....\$179.95

IT-100 Automatic Antenna Tuner

- Works with any AH-3/AH-4 compatible Icom radio
- 125 watt power handling maximum
- 1.85 to 54 MHz frequency range
- 0.1 to 6 second tuning time, 0.1 second memory tune
- Tunes 4 to 800 Ω loads (4 to 3,600 Ω with 4:1 balun)
- Optional external balun allows random, long wire or ladder line fed antennas
- Powered by Icom transceiver via included cable

LDG-IT-100\$169.95

Z-817 and Z-817H Automatic Antenna Tuners

- Tailored to the Yaesu FT-817 radio
- Excellent for QRP operation
- 20 watts (75 watts on Z-817H) power handling maximum
- 1.8 to 54 MHz frequency range
- 2,000 memories, sorted by frequency
- Tunes 6 to 600 Ω loads
- Operates on 4 AA batteries or by radio with included CAT cable

LDG-Z-817\$114.95

LDG-Z-817H\$139.95

Z-100Plus Automatic Antenna Tuner

- 125 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 0.1 second memory tune
- 2,000 memories, sorted by frequency
- Tunes 6 to 800 Ω loads (16 to 150 Ω on 6M)
- SO-239 in/out connections for dipoles, verticals, beams, etc.
- Requires 7 to 18 Vdc at 100mA maximum

LDG-Z-100PLUS.....\$144.95

LDG Antenna Tuners

It is critically important to ensure that your antenna is properly matched to your transceiver. Not only does improper tuning affect your ability to transmit and receive, a poorly tuned antenna system could damage your gear. These antenna tuners from LDG Electronics are an easy way to get some peace of mind, while maximizing your transceiver's performance.

Find the complete specs on each one of LDG's impressive antenna tuners at DXEngineering.com.



AT-100Proll Automatic Antenna Tuner

- 125 watts power handling maximum
- 1.8 to 54 MHz frequency range
- Two-position switch
- 2,000 memories for each antenna and auto configuration storage
- Tunes 6 to 1,000 Ω loads (16 to 150 Ω on 6M)
- Matches virtually any coax-fed antenna
- Bar graph LED display shows power, SWR, mode and status
- Requires 11 to 16 Vdc at 500mA

LDG-AT-100PROII\$199.95

AT-200Proll Automatic Antenna Tuner

- 250 watts power handling maximum
- 1.85 to 54 MHz frequency range
- 2-position switch with 8 antenna memories
- 0.5 to 6 second tuning time
- Tunes 6 to 800 Ω loads (6 to 3,600 Ω with 4:1 balun)
- 4,000 memories for instantaneous band switching
- Easy-to-read LED display for RF power, SWR and status
- Requires 11 to 16 Vdc at 750mA

LDG-AT-200PROII\$234.95

AT-600Proll Automatic Antenna Tuner

- Tunes 6 to 800 Ω loads
- 600 watts power handling maximum
- 1.85 to 54 MHz frequency range
- Two-position switch with memories for each position
- 0.5 to 6 second tuning time, 0.1 second memory tune
- 4,000 memories for instant band switching
- Bright LED display
- Requires 11 to 16 Vdc at 750mA

LDG-AT-600PROII\$304.95

Optional Remote Meter for AT-600Proll

LDG-M-600\$124.95

Z-11Proll Automatic Antenna Tuner

- 125 watts power handling maximum
- 1.8 to 54 MHz frequency range
- 0.1 to 6 second tuning time, 0.1 second memory tune
- 4,000 memories with automatic storage
- Tunes 6 to 100 Ω loads (16 to 150 Ω on 6M)
- Can operate using four AA batteries with user-installed holder
- Requires 6 to 16 Vdc at 300mA maximum, 25uA standby

LDG-Z-11PROII\$159.95



MFJ-993RC

Dual 300/150 Watt IntelliTuner™ Automatic Antenna Tuner

This tuner lets you rapidly tune any antenna—balanced, unbalanced, or single-wire—automatically. The tuner is a comprehensive automatic antenna tuning center with SWR/wattmeter, antenna switch for two antennas, and a 4:1 current balun for balanced lines. Other features include a highly efficient switching L-network with wide matching capability, 1.8 to 30 MHz coverage, cross-needle power meters, backlight LCD display, a port for an accessory remote control, a radio interface port, and heavy-duty 16 amp/1,000-volt relays. The tuner is rated at 300 watts to match 6 to 1,600 Ω antennas (SWR up to 32:1) or 150 watts to match wider range of 6 to 3,200 Ω (SWR up to 64:1).

MFJ-993B Dual 300/150 Watt IntelliTuner™ \$249.95
MFJ-993RC IntelliTuner Remote Control..... \$39.95

300 Watt Roller Inductor Antenna Tuner

This tuner's AirCore Roller Inductor, gear-driven turns counter, and spinner knob gives you exact inductance control for absolute minimum SWR. You get the widest matching range, ultra-high-Q, the lowest loss, highest efficiency and highest power handling of any roller inductor in ham radio. Other features include a full size lighted cross-needle SWR/wattmeter that reads true peak forward power, QRM-Free PreTune, eight-position antenna switch, built-in 50 Ω dummy load, and a heavy-duty 4:1 balun, all enclosed in a tough, attractive cabinet.

MFJ-969 \$199.95

1,500 Watt Fully Balanced Antenna Tuner

This is a full legal limit, fully-balanced antenna tuner. You get superb balance, very wide matching ranges (12-2,000 Ω) and continuous 1.8 to 30 MHz coverage including all WARC bands! It handles a full 1,500 watts SSB and CW. You can tune any balanced lines including 600 Ω open wire line, 450/300 Ω ladder lines, and 300/72 Ω twin lead—shielded or unshielded. You can also tune random wires and coax-fed antennas.

MFJ-976 \$459.95

1,500 Watt Antenna Tuner with Dummy Load

This roller inductor tuner is a CW antenna tuner rated to the US amateur legal limit of 1,500 watts. It is designed to match 50 Ω output antennas, transmitters, or transceivers to virtually any antenna. Peak and average forward power, reflected power, and SWR are displayed on the illuminated cross-needle meter. The roller inductor "T" matching network continuously tunes all frequencies from 1.8 through 30 MHz. You can match dipoles, inverted-vees, verticals, mobile whips, beams, random wires and many other antenna types. The tuner has rear panel connectors for coaxial, single wire or two wire feedlines. A built-in 4:1 balun allows the use of balanced open wire, twinlead, or twin-axial feedlines.

MFJ-989D \$349.95

300 Watt Antenna Tuner

This 300 watt RF output power antenna tuner will match any transmitter or transceiver to virtually any antenna. Peak or average forward and reflected power plus SWR can be read on the illuminated cross-needle meter. The tuner uses a "T" matching network and covers all bands between 160 and 10 meters. This network will tune dipoles, inverted-vees, verticals, mobile whips, beams, random wires and many other antenna types. The tuner has rear panel connectors for coaxial, single wire or two wire feedlines. A built-in 4:1 balun allows the use of balanced open wire, twinlead, or twin-axial feedlines.

MFJ-949E \$168.95



Front

Back

MFJ

HF 1,500 Watt Antenna Tuner with Wattmeter & Antenna Switch

This tuner handles 1,500 watts PEP SSB amplifier input power (800 watts PEP SSB amplifier output power)—ideal for use with Ameritron's best-selling 800 watt AL-811H or 600 watt AL-811 amplifiers. The ultra-compact (10.75" W x 4" D x 10.875" H) tuner features an aluminum-skirted knob set with a weighted deluxe spinner knob and a scratch-proof, multi-colored Lexan® front panel. Two transmitting tuning capacitors and MFJ's exclusive AirCore roller inductor gives you precise control to get your SWR down to an absolute minimum.

MFJ-962D \$279.95



1.8 to 30 MHz Artificial Ground

This artificial RF ground resonates a random length of wire thrown along the floor and produces a tuned counterpoise. This ground effectively places your rig near actual earth ground potential even if the rig is on the second floor or higher with no earth ground possible. It reduces the electrical length of the ground connection wire to virtually zero by tuning out its reactance. The artificial ground connects between your rig and a random length of wire or a connecting ground wire. It's tuned for maximum ground current using the built-in RF ammeter.

MFJ-931 \$99.95



300 Watt Antenna Tuner/Artificial Ground

This unit combines a versatile antenna tuner with an artificial ground. It turns a random wire into an effective antenna that works. It's great for traveling, emergency use, or as a makeshift antenna. The 300 watt, general purpose antenna tuner covers 1.8 to 30 MHz. It features a two range, lighted cross-needle meter that lets you read SWR, forward, and reflected power all at a glance, and a 4:1 balun for balanced lines. You also get an efficient airwound inductor, a special high-current/voltage 12 position inductor switch, and two 1,000-volt air-variable capacitors. It tunes all types of antennas and feedlines including random wire, coax, and balanced lines.

MFJ-934 \$189.95



2,500 Watt Continuous Carrier Tuner

This high-power antenna tuner operates at power levels up to 2,500 watts SSB or CW. It uses an edge wound roller inductor in a matching "T" network to continuously tune loads between 1.8 and 30 MHz. The tuner also features a true peak or average reading SWR/wattmeter. It will match dipoles, inverted-vees, verticals, mobile whips, beams, random wires, and many other antenna types. There are rear panel connectors for coaxial and single wire or balanced feedlines. The balanced feedlines are isolated from the tuner chassis with a fiberglass panel to reduce capacitive coupling, withstand high voltages, handle high currents. The tuner is designed to match 50 Ω output amplifiers, transmitters or transceivers to virtually any antenna with an impedance ranging from 12.5-2,000 Ω on 3.5-30 MHz. It will match loads ranging from 12.5-800 Ω on 1.8-3.5 MHz. An internal six-position antenna selector switch selects a built-in 50 Ω dummy load, two coaxial line outputs, or a single wire/balanced line output.

MFJ-9982 \$629.95



1,500 Watt IntelliTuner™

This automatic antenna tuning center has an SWR/watt meter and an antenna switch for two antennas. It lets you rapidly tune almost any unbalanced or single-wire antenna automatically. Balanced feedlines may be used with an external 4:1 balun connected to the tuner's antenna output. The tuner features MFJ's exclusive Amplifier Bypass Control™. It fully protects your amplifier during tuning and will even take your amplifier off-line if SWR increases above a user-defined, pre-set limit. The tuner includes a highly-efficient switching L-network with wide matching capability, 1.8 to 30 MHz coverage, cross-needle power meters, backlight LCD display, a radio interface port, and heavy-duty 16 amp/1,000-volt relays. It is rated at 1,500 watts SSB/CW and will match impedances from 12 to 1,600 Ω antennas (SWR up to 32:1).

MFJ-998 \$599.95





HF-AUTO 1,500 Watt Automatic Antenna Tuner

Palstar is taking the low-power auto-tuner to the next level with the HF-AUTO. This unit uses quiet, continuously variable components to create a perfect antenna match, without noisy relays. It can tune with a mere 2 watts of power, yet can handle 1,500 watts. The HF-AUTO covers 1.8 through 54 MHz, SWR within 6 seconds and has a large, backlit LCD for easy readout of RF power, SWR, frequency and more. All the details on this American-made auto-tuner can be found at DXEngineering.com

PAS-HF-AUTO 1,500 Watt Automatic Antenna Tuner.....\$1,445.95



PAS-AT5K-HP 3,500 Watt Antenna Tuner

If you've already got a high quality meter and balun, but still want the high powered tuning ability of the AT5K, than this is the ideal solution. It has the same great specs of the AT5K, but without redundant features. This makes it easier on your wallet. You still get the legendary "Rock Crusher" performance.

PAS-AT5K-HP 3,500 Watt Antenna Tuner\$1,045.95



PAS-AT-500 600 Watt Antenna Tuner

This compact manual tuner covers the 160 through 6 meter bands. Controls are easy-to-use and intuitive. Just like its higher power-rated counterparts, the AT-500 gives you a six-position switch to select from multiple feedlines and an external dummy load. It handles 600 watts PEP and 500 watts CW, with an impedance matching range of 20 to 1,500 Ω . A 4:1 ferrite current balun handles the balance line feeder and a 12 Vdc power connector (with cable) is included.

PAS-AT-500 600 Watt PEP Antenna Tuner\$498.95



PAS-BT-1500A 1,500 Watt Double L Balanced Antenna Tuner

The BT1500A is the ONLY 1,500 watt double-L network antenna tuner on the market today. With two tandem mounted ceramic roller inductors, this tuner offers unparalleled precision. If you're looking for a balanced tuner, this is a great high-power solution. The BT1500A is a highly specialized tuner, so be sure that it suits your application. Find the complete specs at DXEngineering.com.

PAS-BT1500A 1,500 Watt Double L Balanced Antenna Tuner\$725.95



PAS-AT1500HB RF Matching Network

If you do a lot of contesting, then you're changing frequencies often. This RF Matching Network makes things easier, allowing you to rapidly QSY from one band to another or between preset low SWR points in a single band. You can use several of these differential T-type tuners to create a versatile high-band antenna system. The AT1500HB can handle 1,500 watts and features a wide skirt control knob and fan cooling. For the complete specs on this and every Palstar product, visit DXEngineering.com.

PAS-AT1500HB RF Matching Network.....\$429.95



600 Watt IntelliTuner™ Automatic Antenna Tuner

This tuner lets you rapidly tune any antenna—unbalanced, single-wire or balanced (with an external balun)—automatically. The tuner includes a highly efficient switching L-network with wide matching capability, 1.8 to 30 MHz coverage, cross-needle power meters, a port for an accessory remote control, a radio interface port, and heavy-duty 16 amp/1,000-volt relays. It is rated at 600 watts PEP SSB and 300 watts CW.

MFJ-994B 600 Watt IntelliTuner™\$339.95



3 kW Edge Roller Antenna Tuner

This high power antenna tuner has a roller inductor "T" matching network that continuously tunes all frequencies from 1.8 through 30 MHz. It also features a built-in 3 kW peak or average detecting directional power meter. There are rear panel connectors for coaxial and wire feedlines. A heavy-duty, high-voltage insulated, current-type balun allows use with balanced feedlines.

AME-ATR-30 3 kW Edge Roller Antenna Tuner.....\$549.95



AT5K 3,500 Watt Antenna Tuner

Nicknamed the "Rock Crusher," this American-made Palstar AT5K 3,500 Watt Antenna Tuner delivers an impressive 3,500 watts single tone continuous with low losses, and 5,000 watts PEP performance at certain impedance ranges. The AT5K tuner offers a wide impedance tuning range from 1.8 through 22 MHz with limited impedance tuning from 22 to 29.5 MHz.

The AT5K tuner provides balanced output with a high power 5,000 watt PTFE cable balun at the input of the tuner circuit. When the network is properly tuned, a 50 Ω impedance will be presented to the input and output of the balun for maximum efficiency. This tuners is designed to handle both balanced line feeds and unbalanced coax feedlines.

- Fan-cooled for extended 100% duty cycle operation
- Full-performance T-match circuit, impedance matching from 8 to 2,000 Ω
- Custom large value variable capacitors, 600pF at 6 kV
- 10 amp silver plated ceramic body roller inductor handle-driven crank
- 11-gauge aluminum chassis, powdercoated on front and top
- Power connector and cable included

PAS-AT5K 3,500 Watt Antenna Tuner\$1,279.95



AT4K 2,500 Watt Antenna Tuner

The legendary AT4K 2,500 Watt Antenna Tuner built the Palstar reputation for high quality and durability. Updated for the 21st century, the AT4K now has a switchable, dual-movement active peak and peak hold wattmeter. The selection between unbalanced or balanced output is relay-switched with a front panel control on the AT4K.

The AT4K T-matching network uses a 1:1 unbalanced-to-balanced transformer in the input of the network. When the network is properly tuned, an impedance of 50 Ω is presented to the input and output of the balun.

- T-match circuit with impedance matching range from 8 to 2,000 Ω
- Custom large value variable capacitors, 460pF at 6 kV
- 10 Amp silver plated ceramic body roller inductor handle-driven crank
- 11-Gauge aluminum chassis, powdercoated on front and top

PAS-AT4K 2,500 Watt Antenna Tuner\$899.95



AT2KD Differential Antenna Tuner

Palstar's AT2KD Differential Antenna Tuner is American-made, with impedance-matching networks that optimize the performance of your antenna with your transceiver or SWL receiver. It offers 160 through 6 meter band coverage and handle up to 2,000 watts PEP power. Simply put, the AT2KD is the highest quality differential-T antenna tuner on the market!

This tuner has two impedance-matching controls with a 6:1 Vernier reduction drive for capacitor tuning with precision and accuracy. A turns counter-indexed inductor crank handle makes coarse tuning adjustments easy. Using a T-type circuit configuration makes adjustments simple because it reduces the number of knobs and eliminates false peaks. A 12 Vdc power connector and cable are provided for the meter circuit for each tuner.

- Input tuning: 5 kV dual-stator differential capacitor (430pF/13pF/430pF)
- Inductance: 25 uH roller inductor; 12-gauge wire wound on steatite ceramic core, silver plated bar/wheel
- Frequency coverage: 1.8-54 MHz
- Power: 2,000 W PEP SSB, 1,500 W single tone
- Impedance range 20 to 1,500 Ω , 1.8-30 MHz lower power for lower Z range

PAS-AT2KD Differential Antenna Tuner\$539.95



AT2K 2,000 Watt Antenna Tuner

Building upon Palstar's impressive AT1500CV tuner, this AT2K 2,000 Watt Antenna Tuner features a new, smaller roller inductor, allowing the AT2K to tune from 160 meters to 6 meters. It can match dipoles, center fed doublets, Verticals, end-fed wire, delta loops, beams, Windoms, inverted vees, and many more antenna types.

The AT2K features a 6-position antenna selector switch and Peak/Peak Hold metering in two ranges, 300 and 3,000 watts. Standing Wave Ratio measurements are displayed with this illuminated cross-needle meter. Its chassis is made of 11-gauge aluminum with a powdercoated finish on the front and top cover.

- Impedance range 20 to 1,500 Ω from 160 to 6 meters (assuming resistive load)
- Low minimum custom variable capacitors, 15pF to 400pF at 4.5 kV
- 26 uH 5 kV ceramic body roller inductor with turns counter
- Silver plated inductor wheel shaft and contact wheel

PAS-AT2K 2,000 Watt Antenna Tuner\$539.95



MFJ

Remote IntelliTuner™ Automatic Antenna Tuner

Rapidly tune and unbalanced antenna, single wire or aluminum vertical, with an MFJ-927. This tuner has 4 memory banks, each holding 2,500 non-volatile memories. It uses a high efficiency switching L-network with wide matching abilities and is rated at 200 watts SSB/CW.

When you transmit, the tuner automatically adjusts for lowest SWR—it actually learns and remembers your frequency and tuner settings. You'll typically be ready to transmit in less than 5 seconds. This tuner covers 1.8 to 30 MHz, can match antennas from 6 to 1,600 Ω and includes an external bias tee provides power through the coaxial cable for remote control capability. It's also weather protected and suitable for mounting outdoors. See all the features at DXEngineering.com.

MFJ-927.....\$239.95

200 Watt HF Automatic Remote Antenna Tuner

The tuner is housed in a watertight enclosure, so you can put it in practically any environment. It will tune any frequency from 1.8 to 30 MHz. And it's fast, with an initial tune of about two seconds and then tuning from memory in a mere fraction of a second. There are 200 memory channels and the tuner handles 200 watts PEP max with an input minimum of 10 watts. It requires 13.8 Vdc at 1.5A and includes an MFJ-4117 Bias-Tee power switch to power the tuner through the coaxial cable.

MFJ-926B.....\$279.95

200 Watt MightyMite IntelliTuner™

At just 6.5" x 2.15" x 8.25", the MightyMite complements today's compact HF transceivers like the IC-706MKIIG, IC-7000, FT-857D, DX-70TH and TS-50S. It can also be used as a stand-alone automatic antenna tuner for any transceiver that has an output power of 2 to 200 watts SSB/CW from 1.8-30 MHz, with antenna impedances from 6 to 1,600 Ω .

MFJ-925.....\$169.95

200 Watt IntelliTuner™

The IntelliTuner™ lets you rapidly tune any antenna—unbalanced or single-wire—automatically. It is a comprehensive automatic antenna tuning center with a SWR/wattmeter and antenna switch for two antennas. The tuner includes a highly efficient switching L-network with wide matching capability, 1.8 to 30 MHz coverage, a radio interface port, and heavy-duty 10 amp/1,000-volt relays. It is rated at 200 watts SSB/CW.

MFJ-929.....\$199.95

Interface Cables for MFJ Tuners

MFJ-5114I	Icom Rig Interface Cable for MFJ-998/929/928/927/925	\$19.95
MFJ-5114K	Kenwood Rig Interface Cable for MFJ-998/929/928/927/925	\$19.95
MFJ-5114Y	Yaesu Rig Interface Cable for MFJ-998/929/928/927/925	\$19.95
MFJ-5114Y3	Yaesu FT1000MP Rig Interface Cable for MFJ-929/998	\$19.95
MFJ-5114Y4	Yaesu FT2000 Rig Interface Cable for 929/998	\$19.95
MFJ-5124I	AutoTuner Radio Interface Cable for Icom	\$19.95
MFJ-5124K	AutoTuner Radio Interface Cable for Kenwood and compatibles	\$59.95
MFJ-5124Y	AutoTuner Radio Interface Cable for Yaesu and compatibles	\$59.95

New!



300, 600 and 1,500 Watt Remote Autotuners

These automatic tuners are mounted in durable, weather resistant hard-plastic cases for remote outdoor applications. They cover 1.8 to 30 MHz, use heavy-duty 16 amp/1,000-volt relays, and feature a highly efficient L-network. They also include the MFJ-4117 BiasTee Power Injector to send DC down your coax.



MFJ-993BRT handles 300 watts SSB/CW power level and matches 6-1,600 Ω antennas

MFJ-994BRT handles 600 watts SSB/CW power level and matches 12-800 Ω antennas

MFJ-998RT handles 1,500 watts SSB/CW power level and matches 12-1,600 Ω antennas

MFJ remote tuners let you quickly tune any antenna, balanced or unbalanced, automatically. It's a comprehensive automatic antenna tuner ideal for Multiband Verticals like the popular 43 foot models.



MFJ 300 Watt Remote Autotuner

The MFJ-993BRT IntelliTuner™ is a 300 watt remote automatic antenna tuning unit mounted in a durable hard-plastic case. Measuring just 9.25" W x 3" H x 14.25" D, it covers 1.8 to 30 MHz, has heavy-duty 16 amp/1,000-volt relays and is a highly efficient L-network. It also includes the MFJ-4117 BiasTee Power Injector to send DC/RF down your coax.

It's intended to be mounted outside at the feedpoint of your antenna, providing a 50 Ω match to your coaxial cable feedline and eliminating additional feedline loss caused by SWR.

The MFJ-993BRT lets you quickly tune any 6-1,600 Ω antenna, balanced or unbalanced, automatically.

MFJ-993BRT.....\$299.95

MFJ 600 Watt Remote Autotuner

The MFJ-994BRT IntelliTuner™ is a 600 watt remote automatic antenna tuning unit similar in size to the MFJ-993BRT. At 600 watts, it's a perfect match for Ameritron's solid state ALS-600/S solid state amplifier and popular tube-type AL-811/H amplifiers!

You can eliminate extra feedline loss caused by SWR by tuning your antenna outdoors at its feedpoint. This tuner includes the MFJ-4117 BiasTee Power Injector to send DC/RF down your coax.

The MFJ-994BRT lets you quickly tune any 12-1,600 Ω antenna, balanced or unbalanced, automatically.

MFJ-994BRT.....\$379.95

MFJ 1,500 Watt Legal Limit Remote Autotuner

The MFJ-998RT IntelliTuner™ is a comprehensive Full Legal Limit remote automatic antenna tuning unit. It lets you rapidly tune almost any unbalanced or single-wire antenna automatically. Balanced feedlines may be used with an MFJ-912 1.5 kW 4:1 balun connected to the MFJ-998RT antenna output.

MFJ's exclusive InstantRecall™, IntelliTune™ and AdaptiveSearch™ algorithms give you fast automatic tuning with more than 20,000 non-volatile VirtualAntenna™ memories. Each of the two antenna banks has four banks of memory; each memory bank has over 2,500 non-volatile memories for tuner settings. The banks allow you to save settings for several antennas, giving you the flexibility to move your tuner between antennas or to different locations without losing the old settings.

The tuner includes a highly efficient switched-L network with wide matching capability, 1.8 to 30 MHz coverage, backlit LCD display, and heavy-duty 16 amp/1,000-volt relays. It is rated at 1,500 watts SSB/CW and will match impedances from 12 to 1,600 Ω (SWR up to 32:1).

It includes the MFJ-4117 BiasTee Power Injector to send DC/RF down your coax.

MFJ-998RT.....\$739.95

FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details

MFJ

New!



Mobile Tuner

Imagine never having to fiddle with stop-and-go mobile whip adjustments ever again. Made specifically for mobile use, this tuner extends your mobile antenna's bandwidth while covering 1.8 to 60 MHz, including the 6 meter band. It features an integrated cross-needle meter that displays SWR and forward/reflected power. The tuner's compact size and front-mount controls let it fit nicely into your mobile rig. Since it handles 300 watts, it's also handy in your base station.

MFJ-945E..... \$129.95



MFJ

New!

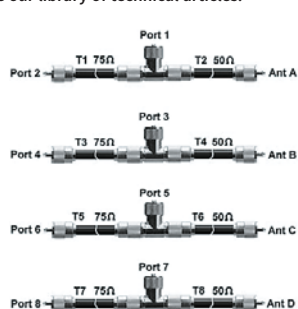
Dual Band VHF Antenna Tuner

This tuner covers the 2M and 1.25M bands and is designed to match a broad impedance range. It is great for mobile and base stations, allowing you to tune a low SWR with practically any antenna. The built-in SWR/wattmeter can display either the 30 or 300 watt PEP power range.

MFJ-921 \$89.95

Tech Support: DXEngineering.com/TechArticles

Looking for guidance on your next project? Need advice to optimize your amateur radio operation? Ask our ham radio experts a tech question, search our huge FAQ archive, or browse our library of technical articles.



Controlling a Stacked Yagi Array using the DXE-RR8B-SD or -HP Remote Antenna Switch
techarticles/antennaconstruction/controlling-a-stacked-yagi-array

Find More Brands, More Products and More Specs at DXEngineering.com

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- Want more info on anything we sell? You'll always find detailed specs there, as well as a comprehensive F.A.Q. section.
- Whenever possible, we post FREE downloadable instruction manuals and stat sheets so you can better research a product.
- There's a wealth of interesting and FREE tech articles and videos available. Maybe you can learn something new?



International Ordering is Easy!

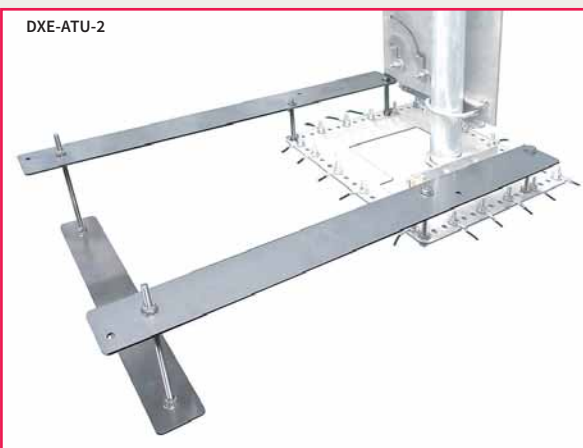
Getting your order shipped is never a problem, no matter what country you're in. Order online 24/7 at DXEngineering.com. Then, use our handy shipping calculator to figure out exactly what the total cost is before you check out, with no surprises on your invoice. We can even ship same-day. For more info on International Shipping, see page 58.

These DX Engineering Remote Tuner Add-On Packages will let you hear and work the weak ones—just install them on your vertical antenna and radial system and start operating!



DXENGINEERING

DXE-ATU-2



ATU-1 and ATU-2 Remote Tuner Mounting Systems

These Remote Tuner Mounting Systems provide an easy way to mount your MFJ remote tuner to your vertical antenna. The DXE-ATU-1 is specifically tailored for mounting the MFJ-927, while the DXE-ATU-2 is designed for the high power MFJ-998RT

Both systems mount to your DX Engineering RADP-3 Radial Plate for a secure connection and feature laser-cut brackets, stainless steel hardware and an insulated stranded copper feedline cable with ring terminals.

The DXE-MBV-ATU-1 and 2 Add-On Packages are available with or without the corresponding tuner. Everything is included, so you can get on the air quickly. Visit DXEngineering.com for more details.

DXE-ATU-1	Remote Tuner Mounting System for MFJ-927	\$74.95
DXE-MBV-ATU-1	Remote Tuner Mounting System with MFJ-927	\$426.05
DXE-ATU-2	Remote Tuner Mounting System for MFJ-998RT.....	\$64.50
DXE-MBV-ATU-2	Remote Tuner Mounting System with MFJ-998RT	\$814.45



DX Engineering Utility Enclosure Package

The Utility Enclosure Package is a high-impact thermoplastic enclosure ideal for outdoor mounting of all types of lightning protectors or other equipment. Its weather-tight design protects the components from rain and direct water spray. It resists degradation from environmental contaminants, chemical fertilizers and insecticide sprays that can ruin metallic housings.

The thermoplastic housing and wire entrance grommet material fire retardant and UV stabilized. The enclosure can be painted with latex or oil base paints if needed to blend it in with its location.

Mounting hardware, aluminum component mounting plate, and four weather tight large feed-through grommets for RG-213 and LMR-400 sized cable are included. Optional feed-through grommets for smaller cables are available.

DXE-UE-2P	Utility Enclosure Package, 13" W x 14" H x 4" D	\$49.95
DXE-CFT-1P	Large Cable Feed-Through Grommets, Pack of 6	\$14.95
DXE-CFT-2P	Small Cable Feed-Through Grommets, Pack of 6	\$14.95

Flange Mounting Brackets

These brackets convert many popular stud-mount lightning protectors, like Alpha Delta's Coaxial Surge Protector, to a flange mount. The conversion makes them easier to mount inside DX Engineering's UE-2P Utility Enclosure. Hardware is included.

DXE-ATT3G-BRKT	Flange Mounting Bracket, Straight	\$4.95
DXE-RCT-BRKT	Flange Mounting Bracket, Right Angle	\$4.95

Broadband Coaxial Lightning Protectors

These 50 Ω , DC-blocked protectors are great for general, single transmitter use in the 1.5 to 700 MHz frequency ranges. Available with either a bulkhead or flange mount, Polyphaser's Lightning Protectors use a gas tube design that has no DC continuity between the center pins. Polyphaser's Multi-Strike products pass all RF frequencies while blocking all DC—offering excellent protection from voltage spikes.

PPR-IS-50UX-C0	UHF Female, Flange, 2,000 W, 1.5-700 MHz	\$61.95
PPR-IS-50NX-C0	N Female, Flange, 2,000 W, 1.5-700 MHz	\$61.95
PPR-IS-B50LN-C0	N Female, Bulkhead, 2,000 W, 1.5-700 MHz	\$65.95
PPR-IS-B50LU-C0	UHF Female, Bulkhead, 2,000 W, 1.5-700 MHz	\$64.95
PPR-IS-B50HU-C0	UHF Female, Bulkhead, 3,000 W, 1.5-700 MHz	\$74.95

Rotor Control Line Protector

This versatile unit protects rotor controllers using up to 8 lines by preventing lightning strike energy from entering the circuit. You can mount it to a tower leg or grounding rod using J1 or J2 clamps. This lightning protector has multi-strike capability and reacts faster than gas tubes.

- +/- 70 Vdc operating voltage
- +/- 82V turn-on voltage
- 2A maximum operating current
- 6.5kA maximum surge current
- 4 nanosecond turn-on time
- 40° to 185° F temperature range

PPR-IS-RCT	Rotor Control Protector	\$133.00
DXE-RCT-BRKT	Flange Mounting Bracket, Right Angle	\$4.95

Surge Protection Products

A power surge can enter your home through any electrical conductor. Whether it's a power grid anomaly or a lightning strike, you can protect your home. Even independent electrical circuits (a telephone line for instance) share ground paths—which opens the door for power spikes to enter every electrical device you've plugged in to your home's AC outlets. To help protect yourself from hazardous voltage spikes, DX Engineering offers several surge protection options.



IX DC Surge Protector

Originally designed for 2-wire (twisted-pair/POTS) telephone landline trunks, this surge protector is well suited for DC control circuits and high-speed digital data (up to 25 Mbps) DC lines. It handles up to 48 Vdc lines with a 400 mA maximum holding current, and has a turn-on voltage of +/- 210 volts.

PPR-IX-1T	DC Surge Protector	\$74.95
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ALF-DELTA-C



ALF-DELTA-CIN



ALF-SEP



Antenna Insulator Kit with Surge Protection

This kit contains one center insulator, antenna connection hardware, one ARC-PLUG static electricity protector, and two end insulators. The antenna hardware is molded of Deltalloy™, an extremely tough and durable plastic specifically blended to withstand sunlight and extreme weather conditions. An SO-239 connector is provided for direct connection to your coaxial cable. A ladder line balanced feedline may be connected directly to the dipole wire ends.

ALF-DELTA-C	Antenna Insulator Kit	\$29.95
ALF-DELTA-CIN	Replacement End Insulator	\$1.95
ALF-SEP	Replacement ARC-PLUG Protector	\$15.95

Lightning Surge Protector

This unique in-line design is impedance matched to 75 Ω and virtually transparent to both analog and bi-directional signals from DC to 1.0 GHz. The patented and proprietary gas tube construction has an integral failshort mechanism for a power-cross condition that shunts both your cable's center conductor and sheath for a common path to ground. The protection element resets after each over-voltage incident.

DXE-RLP-75FF	Lightning Surge Protector, 75 Ω , DC Pass, F Connectors	\$13.95
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LT Coaxial Surge Protector

Don't live in fear of lightning strikes. This unit is designed to protect your delicate and expensive equipment from lightning-induced voltage spikes. It covers frequencies from DC to 30 MHz and handles 200 watts. In-line installation is easy with two SO-239 connectors.

ALF-LT	LT Coaxial Surge Protector	\$29.95
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DIAMOND ANTENNA

Part Number	Description	Price
Lightning Arrestors		
DMN-SP3000	DC-3000 MHz, 200 W Max, Type N Female to Type N Female	\$34.95
DMN-SP3000P	DC-3000 MHz, 400 W Max, Type N Female to Type N Male	\$41.95
DMN-SP3000W	DC-3000 MHz, Waterproof, Type N Female to Type N Female	\$41.95
Lightning Surge Protectors		
DMN-SP1000	DC-1000 MHz, 400 W Max, UHF Female to UHF Female	\$29.95
DMN-SP1000PW	DC-1000 MHz, 400 W Max, UHF Female to UHF Male	\$34.95



Copper Grounding Plate Kit

The DXE-CU-SPGP provides a convenient means to mount multiple lightning protectors and tie them to a common ground. The plate is an 18 x 12 inch painted board with a 15 x 10 x 0.063 inch piece of copper mounted to it. The board should be mounted to wall studs set on 16 inch centers.

DXE-CU-SPGP Copper Grounding Plate Kit\$299.95

Copper Strap to Copper Ground Rod Clamp

This clamp bonds a 5/8 inch ground rod to copper strap. 18-8 stainless steel hardware included.

DXE-58R-112S Strap to Copper Ground Rod Clamp.....\$37.95



Ground Wire to Copper Ground Rods

The PolyPhaser J series clamps are used to connect ground wire to copper ground rods sized from 1/2 inch to 2 1/4 inches. They accept wire ranging from #2 stranded to #10 solid. These clamps are made of cast bronze and include 18-8 stainless steel hardware.

DXE-J-1 Wire to Rod Transition Clamp, 1/2" to 1 1/3"\$14.95

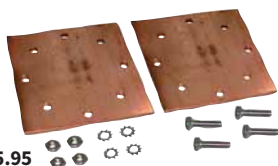
DXE-J-2 Wire to Rod Transition Clamp, 1 1/2" to 2 1/4"\$18.95



Copper Strap to Copper Strap Clamp

The DXE-MSC-3 bonding clamp is ideal for bonding two copper straps together, for extending an existing run or to add drops to equipment. It accepts ground straps from 1.5 to 3 inches and includes 18-8 stainless steel hardware.

DXE-MSC-3 Multi-Strap Clamp\$55.95



Copper Cleaning Kit

Proper preparation of the copper surfaces and application of copper joint compound prior to bonding is essential to maintain the low resistance properties of the strap connection. The copper cleaning kit has everything needed to establish the bond. The kit includes a non-abrasive scrub pad, copper joint compound, and complete instructions.

DXE-CCK Copper Cleaning Kit\$19.95



Never-Seez® and Anti-Seize

- Prevents galling and galvanic corrosion
- Protects metal parts against rust, corrosion and seizure

DXE-NSBT8 Never-Seez, 8 oz. brush top\$13.99

DXE-NMCBT8 Never-Seez, marine grade, 8 oz. brush top.....\$16.95

UMI-81343 Anti-Seize, 1 oz. squeeze tube\$3.29

Hazardous, limited to domestic UPS Ground shipping only.

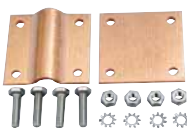


Copper Strap to Copper Wire Clamps

These wire bonding clamps provide a convenient way to bond heavy-gauge copper wire to copper grounding straps. These clamps handle from 6 AWG to 6/0 AWG, depending on the model. 18-8 stainless steel hardware is included.

DXE-1C-112S Copper Wire to Strap Bonding Clamp, 6 to 1 AWG\$36.95

DXE-10C-112S Copper Wire to Strap Bonding Clamp, 1/0 to 6/0 AWG\$35.95



Copper Strap

Use copper strap to achieve a low inductance ground system. Copper strap has a larger surface area and lower inductance per foot than equivalent cross-section wire. Use ground strap to tie equipment back to a common ground point. Copper strap should also be used to make a non-resonant counterpoise for towers mounted on mountaintops or other rocky terrain. All copper strap is 2 inches wide and 0.011 inches thick.

GCL-1120-025 Copper Strap, 2" by 25'\$52.95

GCL-1120-050 Copper Strap, 2" by 50'\$85.95

GCL-1120-100 Copper Strap, 2" by 100'\$154.95



ALPHA DELTA COMMUNICATIONS, INC.



Copper Ground Rod Clamp Kit

An uncompromising grounding kit that helps keep your station safe. Though it is designed to work specifically with your Alpha Delta ATT or TT series surge protectors, this system is also compatible with virtually any stud-type flange-mount coaxial surge protector. You can even connect up to four surge protectors for extra protection against lightning strikes.

Made of solid copper, this clamp kit includes stainless steel hardware for added reliability and years of use at your shack.

ALF-UCGC Copper Ground Rod Clamp Kit.....\$49.95



Transi-Trap Broadband Coaxial Surge Protectors

ALPHA DELTA COMMUNICATIONS, INC.
www.alphadeltacom.com



These gas surge arrestors protect sensitive equipment from the excessive voltage and current caused by static buildup or a lightning strike. The 50 Ω DC voltage pass-through design is perfect if you're using coaxial cable to carry both RF and DC voltage, like in an antenna switch. These protectors use a replaceable Arc-Plug™ cartridge that you can change in the field without tools. They feature a 1/4"-20 mounting stud for easy install.

The Defense Logistics Agency has assigned National Stock Number (NSN) 5920 01 5470278 to the model TT3G50 Coax Surge Protector and NSN 5325 01 5466841 to the 3G50 Arc-Plug cartridge for use in all U.S. Military and NATO applications worldwide.

Part Number	Mount	Connector	Frequency	Power Handling	Price
ALF-ATT3G50	Stud	N-Connector	3 GHz	200 Watts	\$59.95
ALF-ATT3G50HP	Stud	N-Connector	3 GHz	2,000 Watts	\$59.95
ALF-ATT3G50F	Stud	F-Connector	3 GHz	200 Watts	\$59.95
ALF-ATT3G50FHP	Stud	F-Connector	3 GHz	2,000 Watts	\$59.95
ALF-ATT3G50U	Stud	SO-239	500 MHz	200 Watts	\$49.95
ALF-ATT3G50UHP	Stud	SO-239	500 MHz	2,000 Watts	\$49.95
ALF-ATT3G50UBXL	Bulkhead	SO-239	500 MHz	200 Watts	\$54.95
ALF-ATT3G50UBHP	Bulkhead	SO-239	500 MHz	2,000 Watts	\$59.95
ALF-AT3G50UM90	90°	SO-239 & PL-259	500 MHz	200 Watts	\$57.95
ALF-AT3G50UM90HP	90°	SO-239 & PL-259	500 MHz	2,000 Watts	\$57.95
ALF-3G50		Replacement Arc-Plug		200 Watts	\$14.95
ALF-3G50HP		Replacement Arc-Plug		2,000 Watts	\$14.95

PolyPhaser CORPORATION

Coax Shield Ground Kits

These kits provide a low inductance path for proper ground contact between a round member made from copper, brass, aluminum, tin, or steel to corresponding copper, brass, aluminum, tin, or steel grounding material. Examples: grounding the coax shield as the coax leaves the tower or connecting a round tower leg to the ground system. Three kits are available for various combinations of shield material to grounding material, and they fit coax shield or tower leg diameters from 1/4 inch to 2 1/8 inches. These kits include a perforated strap, an adjustable angle, 24 inch long tail strap, weatherproofing kit and all stainless steel brackets and hardware.

PPR-UNI-KIT-2CC Copper to Copper Ground Kit\$99.95

PPR-UNI-KIT-2CT Copper to Aluminum Ground Kit\$99.95

Weatherproofing Kit

Use PolyPhaser's Weatherproofing Kit PPR-WK-1 when mounting lightning protectors or making ground connections outdoors. The kit prevents moisture ingress and easily handles extreme temperatures, the sun's UV rays and salt spray.

PPR-WK-1 Weatherproofing Kit.....\$9.95



DX ENGINEERING**Coaxial Cable Grounding Brackets**

The CGB-Series Coax Grounding Brackets are a versatile solution for additional grounding of coaxial cable shields. The stainless steel bracket is supplied with a stainless steel V-bolt and hardware in your choice of two sizes for a solid connection to the tower leg. Each bracket has holes for use with DXE-363-SST bulkhead connectors, or chassis mount SO-239 connectors, or DXE-1023 for N connectors.

The Grounding Bracket is an ideal junction point for the coax pigtailed that form the rotor loop to connect to the downleads. The bracket can also be used at the base of the tower to provide a solid grounding point before the coax cable is routed away from the grounded tower. The bracket has serrated teeth to bite through paint and corrosion. Additional fasteners are supplied if you wish to extend a ground braid or copper strap for secure grounding.

DXE-CGB-200	Coaxial Cable Grounding Bracket, fits 1" to 2" O.D. tube	\$15.95
DXE-CGB-150	Coaxial Cable Grounding Bracket, fits 1/2" to 1.50" O.D. tube ...	\$15.95

**ECLS-Series Band Clamps with Stud**

The ECLS-Series clamps feature a 3/4 inch long, 10-24 welded stud for easy connection of feed wire, baluns, current chokes, etc. to tubular elements. Stainless steel hardware included.

Band Clamps with Stud

DXE-ECLS-050	0.500" O.D. tube.....	\$9.99
DXE-ECLS-175	1.750" O.D. tube.....	\$11.49
DXE-ECLS-062	0.625" O.D. tube.....	\$9.99
DXE-ECLS-200	2.000" O.D. tube.....	\$11.49
DXE-ECLS-075	0.750" O.D. tube.....	\$9.99
DXE-ECLS-225	2.250" O.D. tube.....	\$11.49
DXE-ECLS-087	0.875" O.D. tube.....	\$10.99
DXE-ECLS-250	2.500" O.D. tube.....	\$11.99
DXE-ECLS-100	1.000" O.D. tube.....	\$10.99
DXE-ECLS-275	2.750" O.D. tube.....	\$11.99
DXE-ECLS-300	3.000" O.D. tube.....	\$11.99
DXE-ECLS-125	1.250" O.D. tube.....	\$11.49
DXE-ECLS-325	3.250" O.D. tube.....	\$11.99
DXE-ECLS-150	1.500" O.D. tube.....	\$11.49

Pack of 2

Copper Strap to Tower

The PolyPhaser TK clamp series has a stainless steel plate to go between the copper strap and galvanized tower leg to prevent corrosion due to dissimilar metals. For use with tower leg diameters from 5/8 inches to 3.25 inches.

PolyPhaser

PPR-TK-1	Strap to Tower Leg Ground Clamp, 5/8" to 1.25"	\$13.95
PPR-TK-2	Strap to Tower Leg Ground Clamp, 1.25" to 2.25"	\$13.95
PPR-TK-3	Strap to Tower Leg Ground Clamp, 2.25" to 3.75"	\$13.95
PPR-TK-4	Strap to Tower Leg Ground Clamp, 3.5" to 5"	\$11.40

**DX ENGINEERING****Exhaust System Grounding Kit**

Many modern vehicles have separate fuel injectors and spark coils for each cylinder. These units can create substantial pulses on the vehicle wiring. Because the exhaust system is bolted directly to the engine and supported by insulated mounts, it can be excited just like an antenna and radiate pulse noise. By using one of our Exhaust Grounding Kits, you may eliminate that last bit of stubborn noise in your mobile installation. The kit includes a stainless steel saddle clamp and stainless steel hardware.



DXE-EGK-200	Grounding Kit for 2" Exhaust Pipe	\$20.95
DXE-EGK-225	Grounding Kit for 2.25" Exhaust Pipe	\$22.95
DXE-EGK-250	Grounding Kit for 2.5" Exhaust Pipe	\$26.95
DXE-EGK-300	Grounding Kit for 3" Exhaust Pipe	\$28.95

Ground Strap

DX Engineering offers quality tinned copper braid in 5 widths for grounding applications. It is sold per foot to accommodate almost any project. Very long per-foot lengths may not be continuous—contact Customer Service to discuss your length needs if continuous length is required. The strap is available in these sizes:

DXE-TCB-038	3/8" wide x 1/32" thick	per foot \$0.45
DXE-TCB-050	1/2" wide x .030" thick	per foot \$0.60
DXE-TCB-063	5/8" wide x .030" thick	per foot \$0.80
DXE-TCB-075	3/4" wide x .040" thick	per foot \$1.10
DXE-TCB-100	1" wide x .045" thick	per foot \$1.25

Ground Braid Assemblies

DX Engineering Ground Strap is available preassembled with lugs for both #10 and 1/4 inch bolt sizes. A grounding strap is ideal for grounding a rig, amp, etc. to a copper strip running behind the desk; the strip becomes the central ground point for the equipment. This central ground can be routed away with heavy copper strap to join any other similarly protected branches for single point grounding (SPG) lightning protection.

Other possible uses include noise reduction by grounding a vehicle exhaust, establishing a connection between a radial plate, balun, and a vertical antenna to keep current off of the feedline, and any grounding application where a reliable connection is needed.

Assemblies with 1/2 Inch Wide Braided Strap

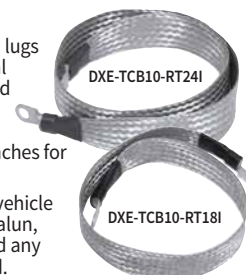
DXE-TCB05-RT01	#10 Ring Lugs, 1'	\$4.75
DXE-TCB05-RT03	#10 Ring Lugs, 3'	\$5.75
DXE-TCB05-RT05	#10 Ring Lugs, 5'	\$6.75
DXE-TCB05-RT10	#10 Ring Lugs, 10'	\$9.75
DXE-TCB05-RT181	1/4" Ring Lugs, 18"	\$5.75
DXE-TCB05-RT241	1/4" Ring Lugs, 2'	\$6.75
DXE-TCB05-RT361	1/4" Ring Lugs, 3'	\$7.75

3/4 Inch Wide Braided Strap

DXE-TCB075-RT181	1/4" Ring Lugs, 18"	\$5.75
DXE-TCB075-RT241	1/4" Ring Lugs, 2'	\$6.45
DXE-TCB075-RT03	1/4" Ring Lugs, 3'	\$7.75

Assemblies with 1 Inch Wide Braided Strap

DXE-TCB10-RT01	1/4" Ring Lugs, 1'	\$5.75
DXE-TCB10-RT181	1/4" Ring Lugs, 18";	\$6.75
DXE-TCB10-RT241	1/4" Ring Lugs, 2'	\$7.75
DXE-TCB10-RT03	1/4" Ring Lugs, 3'	\$8.75
DXE-TCB10-RT05	1/4" Ring Lugs, 5'	\$12.75
DXE-TCB10-RT10	1/4" Ring Lugs, 10';	\$18.75

**DX ENGINEERING****Powerpole® Accessories**

Anderson Powerpole connectors are quickly becoming the industry standard for DC power. They have been adopted by RACES and ARES® for emergency service and installations. DX Engineering carries the connectors, plus a tool that makes crimping them easy and hassle-free.

DXE-PP30	Powerpole Connectors, 12-16 AWG, 30A, 10 Pairs*	\$12.95
DXE-PP45	Powerpole Connectors, 10-14 AWG, 45A, 10 Pairs*	\$17.95
DXE-UT-CRIMP-PWR	Ratcheting Crimp Tool	\$38.95

Powerpole® Retention Clips

Avoid accidentally pulling out your Powerpole connectors by using these clips to lock them securely to your outlet panel.

WMT-58257-1092	Powerpole Retention Clips, Set of 12	\$7.95
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Anderson PowerPole® Connectors & Crimping Tool

Make power cables you can count on with PowerPole connectors. Solder or crimp them with the MFJ-7602 crimping tool. Use the 30 amp connectors with #12-16 AWG wire, the 45 amp connectors with #10-14 AWG wire. Wires smaller than #12 AWG require soldering.

MFJ-11C06	30 Amp Connectors, 6 Pairs*	\$6.95
DXE-PP30	30 Amp Connectors, 10 Pairs*	\$12.95
DXE-PP45	45 Amp Connectors, 10 Pairs*	\$17.95
MFJ-7602	Crimping Tool	\$14.95

*One pair equals (1) red and (1) black.

Power Wire, 2 Conductor Zip Cord

Zip Cord is two-conductor cord which is typically used for low voltage DC power wiring circuits. The red and black colors make it simple to identify polarity for DC applications.

DXE-PW-8	Power Wire, 8-Gauge	per foot \$1.49
DXE-PW-8-SPL	Power Wire, 8-Gauge, 500' Spool	\$739.95
DXE-PW-10	Power Wire, 10-Gauge	per foot \$1.19
DXE-PW-12	Power Wire, 12-Gauge	per foot \$0.89
DXE-PW-14	Power Wire, 14-Gauge	per foot \$0.59

**New!****New!**

MFJ-4035MV 30/35 Amp Regulated Linear DC Power Supply

MFJ

A massive 19.2 pound transformer makes this heavy-duty power supply ideal for powering your entire station, including your 100 watt transceiver and all accessories. It delivers 35 amps maximum/30 amps continuous with load regulation better than 1%. Ripple voltage is less than 30 mV. No RF hash!

The unit has over-voltage, foldback short circuit, and over-temperature protection systems. Cooling fan speed increases as load current increases to keep components cool. It has a front panel voltage adjustment (1 to 14 Vdc) with a convenient detent set at 13.8 Vdc. The front panel meters let you monitor voltage and current. Three sets of output terminals include a pair of heavy-duty, five-way binding posts for HF/VHF rigs. Two pairs of quick-connects for accessories, covered cigarette lighter socket and front panel fuse holder included. Unit plugs into any 110 Vac wall outlet. Dimensions: 9.5" W x 6" H x 9.75" D.

MFJ-4035MV Linear Power Supply, 35 Amp, 13.8 Vdc **\$149.95**


New!

Multiple Outlet Panels

Answering your call for reliable and safe power distribution, these high-current outlet strips let you connect multiple pieces of gear without cluttering up your shack. They use heavy duty fused outputs to protect your equipment and are housed in an easy-to-mount aluminum chassis. Connection to your ground system is as simple as turning the wingnut on the chassis mounted lug. Fuses and 6 feet of stranded 8-gauge power cord are included. The MFJ-1118 and MFJ-1128 also have low current on/off switching capabilities and an integrated voltmeter.

MFJ

Part Number	Description	Max. Current	High Current Connections	Low Current Connections	Price
MFJ-1117	DC Power Outlet Strip	35A	2 Binding Posts	2 Binding Posts	\$64.95
MFJ-1118	Switched Outlet Strip with Meter	35A	2 Binding Posts	6 Binding Posts	\$84.95
MFJ-1124	DC Power Outlet Strip	40A	2 Powerpole®	2 Powerpole®	\$64.95
MFJ-1128	Switched Outlet Strip with Meter	40A	3 Powerpole®	9 Powerpole®	\$104.95


New!
MFJ

AC Line RFI Filter

Squash that annoying RF hash coming from your AC power line. These filters significantly reduce the noise, transients and surges coming from your shack and the environment. This unit also features nanosecond-fast over-voltage protection. It is made for 120 Vac and has four receptacles.

MFJ-1164B AC Line RFI Filter **\$69.95**

Easy International Ordering. DXEngineering.com has a simple shipping calculator that can give you an exact price total before you check out. No matter what country you're in, we can get you the parts and gear you need to get on the air. Same-day shipping means you'll get it quickly, too.

No RF Hash! These power supplies are clean! Your buddies won't hear any RF hash on your signal...and you won't hear any from your receiver either. Some other competing power supplies may generate RF hash in your transmitted and received signal. MightyLite Switching Power Supplies meet all FCC Class B regulations.

MFJ

New!

Heavy-Duty 75 Amp Switching Power Supply

With a whopping 70A continuous/75A peak, this unit can power your mobile HF, VHF/UHF rigs or high-current accessories without breaking a sweat. Voltage output is adjustable from 4 to 16 Vdc using the front panel knob. Dual meters let you monitor voltage and current, and there are indicator LEDs to show power and fault status.

This power supply has short circuit, overload and over-temperature protection. You can hook up your equipment with binding posts, Anderson Powerpoles®, quick connects and a handy cigarette-lighter socket. It uses a whisper-quiet cooling fan.

MFJ-4275MV Heavy-Duty 75 Amp Switching Power Supply **\$259.95**



MFJ-4125 25 Amp Compact Switching Power Supplies

New!

These compact power supplies won't eat up all the room on your desk, yet still provide 22A continuous/25A peak at 13.8 Vdc—enough power for a portable installation or to run a full 100 watt radio temporarily. These supplies have over-voltage and over-current protection, while a whisper-quiet fan keeps things cool. They accept 110 or 220 Vac and hookup is via either binding posts or Powerpole® connectors.

MFJ-4125 Compact Switching Power Supply, Binding Posts **\$84.95**

MFJ-4125P Compact Switching Power Supply, Powerpole® connectors **\$94.95**

MFJ-4225MV MightyLite 25 Amp Switching Power Supply

This unit features a front panel voltage control that allows you to vary output voltage from 9 to 15 Vdc and gives you a highly regulated voltage output, including 12 Vdc and 13.8 Vdc. The front panel also has five-way binding posts for heavy-duty use and a cigarette lighter socket for mobile accessories. Large, brightly illuminated 3" dual meters make it easy to monitor load voltage and current. A whisper-quiet internal fan efficiently cools your power supply.

MFJ-4225MV MightyLite Switching Power Supply, 25 Amp, 13.8 Vdc **\$99.95**



MFJ-4245MV MightyLite 45 Amp Switching Power Supply

It fits in the palm of your hand—and is powerful enough to run your HF or 2M/440 MHz radio and accessories! This 45 amp MightyLite weighs just 5.5 lbs., seven times lighter than an equivalent conventional power supply. That means no more picking up and hauling around heavy, bulky supplies.

MFJ-4245MV MightyLite Switching Power Supply, 45 Amp, 13.8 Vdc ... **\$149.95**



AME-SPS-75MV 75 Amp Switching Power Supply

This power supply provides 75 amps continuous output current—ideal for use with Ameritron's ALS-500M 500 watt solid state amplifier. It has less than 100 mV peak-to-peak ripple under full load. Load regulation is better than 1.5% under full load. Other features include reverse-polarity protection, brownout input protection, over-current/over-temperature protection, and a thermally-controlled quiet fan. Output voltage is variable with metering for both voltage and current.

- Input: 108-132 Vac, 50/60 Hz
- Current Draw: 11 Amps

AME-SPS-75MV 75 Amp Switching Power Supply\$244.95

AMERITRON®



ASTRON CORPORATION

ASR-SL-11R



ASR-SL-11R

New!

SL Series Power Supplies

These low-profile linear supplies are internally adjustable to deliver 11 to 15 Vdc. They're electronically regulated, and feature over-voltage and current limiting protection.

Part Number	Description	Amps Continuous/Peak	Price
ASR-SL-11A	Power Supply with Fused Cord	7A/11A at 13.8 Vdc	\$94.95
ASR-SL-11R	Power Supply	7A/11A at 13.8 Vdc	\$104.95
ASR-SL-11XLR	Power Supply, 4-Pin XLR Port	7A/11A at 13.8 Vdc	\$122.95
ASR-SL-15R	Power Supply	12A/15A at 13.8 Vdc	\$137.95

ASTRON CORPORATION



ASR-VLS-10M

New!

VLS Series Power Supplies

With an adjustable output voltage from 5 to 32 volts, these power supplies can provide DC power to a wide range of shack gear. They feature front-panel adjustable output controls, making them great bench "test" power supplies. These supplies are also great solutions if you have unique voltage requirements.

Part Number	Description	Amps Continuous/Peak	Price
ASR-VLS-10M	Supply with Dual Meters	8A/10A at 28 Vdc	\$172.95
ASR-VLS-25M	Supply with Dual Meters	18A/25A at 28 Vdc	\$336.95
ASR-VLS-35M	Supply with Dual Meters	27A/35A at 28 Vdc	\$392.95



ASR-LS-35A

New!

ASTRON CORPORATION



ASR-LS-35M

LS Power Supplies

Delivering an adjustable 22 to 32 volts of regulated DC power, these Astron linear power supplies feature over-voltage protection, low-ripple and a heavy duty heat sink. Each power supply incorporates fold-back current limiting to protect it from excessive current and accidental shorts.

Part Number	Description	Amps Continuous/Peak	Price
ASR-LS-10A	Power Supply	8A/10A at 28 Vdc	\$135.95
ASR-LS-18A	Power Supply	12A/18A at 28 Vdc	\$209.95
ASR-LS-25A	Power Supply	18A/25A at 28 Vdc	\$291.95
ASR-LS-35A	Power Supply	27A/35A at 28 Vdc	\$321.95
ASR-LS-35M	Supply with Dual Meters	27A/35A at 28 Vdc	\$392.95

Rack Mounted Switching Power Supplies

The supplies use high-efficiency switching technology designed solely for precision communications equipment. For more versatility, they can accept 90 to 130 Vac or 180 to 264 Vac, at 50 or 60 Hz. These fan-cooled supplies deliver a consistent 13.8 Vdc.

Part Number	Description	Amps Continuous/Peak	Price
ASR-SRM-10	Power Supply	7A/10A at 13.8 Vdc	\$89.95
ASR-SRM-12	Power Supply	9A/12A at 13.8 Vdc	\$99.95
ASR-SRM-18	Power Supply	15A/18A at 13.8 Vdc	\$109.95
ASR-SRM-25	Power Supply	20A/25A at 13.8 Vdc	\$129.95
ASR-SRM-25M	Power Supply, Dual Meters	20A/25A at 13.8 Vdc	\$149.95
ASR-SRM-25-2	Dual SRM-25 Power Supplies	20A/25A at 13.8 Vdc	\$249.95
ASR-SRM-25M-2	Dual SRM-25M Power Supplies	20A/25A at 13.8 Vdc	\$289.95
ASR-SRM-30	Power Supply	25A/30A at 13.8 Vdc	\$138.95
ASR-SRM-30M	Power Supply, Dual Meters	25A/30A at 13.8 Vdc	\$189.95
ASR-SRM-30-2	Dual SRM-30 Power Supplies	25A/30A at 13.8 Vdc	\$269.95
ASR-SRM-30M-2	Dual SRM-30M Power Supplies	25A/30A at 13.8 Vdc	\$348.95

DIAMOND ANTENNA

GZV4000 and GZV6000 Switching Mode Power Supplies

The GZV4000 provides a variable voltage output from 5 to 15 Vdc at 40 amps, while its higher-rated counterpart the GZV6000 gives you 1 to 15 Vdc at 60 amps.

These versatile power supplies look great and offer you rock-solid performance. The attractive front panel includes a selectable meter with post, snap-on and cigarette lighter outputs. The voltage control knob has a center 13.5 Vdc detent for precise adjustability. A built-in 8 Watt speaker makes these power supplies a versatile addition to your shack's setup.

DMN-GZV4000 Switching Mode Power Supply 40A\$169.95
DMN-GZV6000 Switching Mode Power Supply 60A\$369.95



MFJ

Compact DC Power Supplies from MFJ

These are the perfect supplies for portable and QRP operation. They are small enough to carry in briefcases or backpacks.

MFJ's 4115 Power Supply weighs a shade over one and a half pounds and easily fits into your suitcase. It can power most VHF/UHF or QRP radios while offering over-voltage and over-current protection. Hookup is via 5-way binding posts. It provides 13.8 Vdc at 17 amps, while accepting 90 to 130 Vac input.

The MFJ-4110 is the answer for the travelling operator. It plugs right in to a 110 Vac outlet with the included adapter and delivers 13.8 Vdc at 2 amps. An LED indicator lets you know it's working.

Though it's tailored for Yaesu's FT-817, the MFJ-4103 switching power supply can work with many other QRP rigs. In addition to over-current, over-temperature and over-voltage protection, the MFJ-4103 accepts 100-240 Vac at 47-63 Hz—which means you can plug it in virtually anywhere. Output is 13.8 Vdc at 2.89 amps, through a 2.1mm plug.

DXEngineering.com has detailed specs for every MFJ power supply.

MFJ-4115 MFJ Basic Switching Power Supply\$59.95
MFJ-4110 MFJ Power Supply\$59.95
MFJ-4103 MFJ Power Supply for FT-817\$46.95

MFJ

Bias-Tee Power Injector

Is your antenna array far from your shack? Here's a great way to ensure you can still get DC power down your coax to operate your remote tuners, rotor, etc. It works on frequencies from 1 to 60 MHz and has a switch to turn your remote equipment on and off. This unit requires a standard 2.1mm, 1A (max.) power adapter.

MFJ-4117 Bias-Tee Power Injector\$29.95

New!


Get Your Gear Faster. If you get your order in by 10 pm ET and the parts are in stock, DX Engineering will ship it immediately. We carry thousands of items, that means you'll get your order as quickly as possible. If you don't like to wait, count on us to get your order out quickly.



Rack Mounted Linear Power Supplies

Get consistent, reliable power using these rack mounted linear power supplies. These adjustable, solid state supplies are electronically regulated to offer less than 5mV peak to peak ripple. They incorporate fold-back current limiting and a heavy duty heat sink to ensure years of solid power delivery. Find full details at DXEngineering.com.

Rack Mounted Power Supply with 2 to 15 Vdc Adjustable Output

Part Number	Description	Amps Continuous/Peak	Price
ASR-VRM-35M-BB	Supply, Dual Meters, Battery Backup	7A/11A at 13.8 Vdc	\$397.95



ASR-RM-50M

Rack Mounted Power Supplies with 11 to 15 Vdc Adjustable Output

Part Number	Description	Amps Continuous/Peak	Price
ASR-RM-12A	Power Supply	9A/12A at 13.8 Vdc	\$126.95
ASR-RM-12A-BB	Power Supply, Battery Backup	9A/12A at 13.8 Vdc	\$159.95
ASR-RM-12M	Power Supply, Dual Meters	9A/12A at 13.8 Vdc	\$167.95
ASR-RM-12M-BB	Supply, Dual Meters, Battery Backup	9A/12A at 13.8 Vdc	\$185.95
ASR-RM-20A	Power Supply	16A/20A at 13.8 Vdc	\$169.95
ASR-RM-20A-BB	Power Supply, Battery Backup	16A/20A at 13.8 Vdc	\$185.95
ASR-RM-20M	Power Supply, Dual Meters	16A/20A at 13.8 Vdc	\$179.95
ASR-RM-20M-BB	Supply, Dual Meters, Battery Backup	16A/20A at 13.8 Vdc	\$217.95
ASR-RM-35A	Power Supply	25A/35A at 13.8 Vdc	\$309.95
ASR-RM-35A-BB	Power Supply, Battery Backup	25A/35A at 13.8 Vdc	\$339.95
ASR-RM-35M	Power Supply, Dual Meters	25A/35A at 13.8 Vdc	\$307.95
ASR-RM-35M-BB	Supply, Dual Meters, Battery Backup	25A/35A at 13.8 Vdc	\$381.95
ASR-RM-50A	Power Supply	37A/50A at 13.8 Vdc	\$352.95
ASR-RM-50A-BB	Power Supply, Battery Backup	37A/50A at 13.8 Vdc	\$409.95
ASR-RM-50M	Power Supply, Dual Meters	37A/50A at 13.8 Vdc	\$381.95
ASR-RM-50M-BB	Supply, Dual Meters, Battery Backup	37A/50A at 13.8 Vdc	\$421.95
ASR-RM-60A	Power Supply	50A/55A at 13.8 Vdc	\$453.95
ASR-RM-60A-BB	Power Supply, Battery Backup	50A/55A at 13.8 Vdc	\$511.95
ASR-RM-60M	Power Supply, Dual Meters	50A/55A at 13.8 Vdc	\$463.95
ASR-RM-60M-BB	Supply, Dual Meters, Battery Backup	50A/55A at 13.8 Vdc	\$561.95

Rack Mounted Power Supplies with 22 to 32 Vdc Adjustable Output

Part Number	Description	Amps Continuous/Peak	Price
ASR-LSRM-18A	Power Supply	12A/18A at 28 Vdc	\$329.95
ASR-LSRM-18A-BB	Power Supply, Battery Backup	12A/18A at 28 Vdc	\$315.95
ASR-LSRM-18M	Power Supply, Dual Meters	12A/18A at 28 Vdc	\$315.95
ASR-LSRM-18M-BB	Supply, Dual Meters, Battery Backup	12A/18A at 28 Vdc	\$335.95
ASR-LSRM-25A	Power Supply	18A/25A at 28 Vdc	\$372.95
ASR-LSRM-25A-BB	Power Supply, Battery Backup	18A/25A at 28 Vdc	\$342.95
ASR-LSRM-25M	Power Supply, Dual Meters	18A/25A at 28 Vdc	\$382.95
ASR-LSRM-25M-BB	Supply, Dual Meters, Battery Backup	18A/25A at 28 Vdc	\$409.95
ASR-LSRM-35A	Power Supply	27A/35A at 28 Vdc	\$404.95
ASR-LSRM-35A-BB	Power Supply, Battery Backup	27A/35A at 28 Vdc	\$445.95
ASR-LSRM-35M	Power Supply, Dual Meters	27A/35A at 28 Vdc	\$529.95
ASR-LSRM-35M-BB	Supply, Dual Meters, Battery Backup	27A/35A at 28 Vdc	\$476.95



ASR-SLSRM-15

SLS Series Switching Power Supplies

Astron's SLS Series supplies are filtered specifically against RF interference, including the HF range. They also include an EMI filter, making them perfect for powering sensitive communications equipment. These supplies provide 28 Vdc, and include current limiting, over-voltage and thermal protection, and a fused input. The SLS Series supplies are also selectable for 115 or 220 Vac input at either 50 or 60 Hz for excellent versatility.

Part Number	Description	Amps Continuous/Peak	Price
ASR-SLSRM-15	Rack Mounted SLS Power Supply	12.5A/15A at 28 Vdc	\$139.95
ASR-SLSRM-15-2	Dual Rack Mounted SLS Supplies	12.5A/15A at 28 Vdc	\$269.95
ASR-SLS-15	Standalone SLS Power Supply	12.5A/15A at 28 Vdc	\$124.95



RS Power Supplies

These rugged, reliable units are electronically regulated to maintain low ripple at low-line input voltage. They provide an adjustable 11 to 15 Vdc and include fold-back current limiting to protect your power supply from excessive current and continuous shorted output. Depending on the model, you get features like crowbar over-voltage protection, heavy-duty heat sinks, and chassis-mounted fuses for extra protection against overheating and shorting.

"BB" in the part number denotes models that have an integrated battery backup and trickle charger. An "M" in the part number indicates that the units have either dual or single volt/amp meters.



ASR-RS-35M



Part Number	Description	Amps Continuous/Peak	Price
ASR-RS-3A	Power Supply	2.5A/3A at 13.8 Vdc	\$53.95
ASR-RS-4A	Power Supply	3A/4A at 13.8 Vdc	\$59.95
ASR-RS-4L	Supply, Cigarette Lighter Port	3A/4A at 13.8 Vdc	\$57.95
ASR-RS-5A	Power Supply	4A/5A at 13.8 Vdc	\$66.95
ASR-RS-7A	Power Supply	5A/7A at 13.8 Vdc	\$72.95
ASR-RS-12A	Power Supply	9A/12A at 13.8 Vdc	\$92.95
ASR-RS-12M	Supply with Switchable Meter	9A/12A at 13.8 Vdc	\$103.95
ASR-RS-12A-BB	Supply with Battery Backup	9A/12A at 13.8 Vdc	\$113.95
ASR-RS-12M-BB	Supply with Meter and Backup	9A/12A at 13.8 Vdc	\$119.95
ASR-RS-20A	Power Supply	16A/20A at 13.8 Vdc	\$114.95
ASR-RS-20M	Supply with Dual Meters	16A/20A at 13.8 Vdc	\$136.95
ASR-RS-20A-BB	Supply with Battery Backup	16A/20A at 13.8 Vdc	\$144.95
ASR-RS-20M-BB	Supply with Meters and Backup	16A/20A at 13.8 Vdc	\$164.95
ASR-RS-35A	Power Supply	25A/35A at 13.8 Vdc	\$175.95
ASR-RS-35M	Supply with Dual Meters	25A/35A at 13.8 Vdc	\$199.95
ASR-RS-50A	Power Supply	37A/50A at 13.8 Vdc	\$281.95
ASR-RS-50M	Supply with Dual Meters	37A/50A at 13.8 Vdc	\$315.95
ASR-RS-70A	Power Supply	57A/70A at 13.8 Vdc	\$361.95
ASR-RS-70M	Supply with Dual Meters	57A/70A at 13.8 Vdc	\$402.95



VS Power Supplies

Astron's VS line of 13.8 Vdc power supplies have the same reliable performance of the RS line. These models also feature front-panel knobs, so you can easily adjust output from 2 to 15 Vdc. They also include separate front-panel volt and amp meters.



ASR-VS-35M

Part Number	Description	Amps Continuous/Peak	Price
ASR-VS-12M	Power Supply	9A/12A at 13.8 Vdc	\$155.95
ASR-VS-20ML	Supply, Cigarette Lighter Port	16A/20A at 13.8 Vdc	\$156.95
ASR-VS-35M	Power Supply	25A/35A at 13.8 Vdc	\$207.95
ASR-VS-50M	Power Supply	37A/50A at 13.8 Vdc	\$322.95
ASR-VS-70M	Power Supply	57A/70A at 13.8 Vdc	\$402.95



SS Series Switching Power Supplies

If you need a power supply that doesn't eat up the space on your desk, Astron offers these low profile options. They deliver a steady 13.8 Vdc and are built to be immune to RFI. These supplies include an EMI filter to resist RFI, even in the HF bands.

The "M" in the part number denotes models that include front panel volt and amp meters.



ASR-SS-25M

Part Number	Description	Amps Continuous/Peak	Price
ASR-SS-10	Power Supply	7A/10A at 13.8 Vdc	\$79.95
ASR-SS-12	Power Supply	10A/12A at 13.8 Vdc	\$88.95
ASR-SS-18	Power Supply	15A/18A at 13.8 Vdc	\$93.95
ASR-SS-25	Power Supply	20A/25A at 13.8 Vdc	\$119.95
ASR-SS-25M	Supply with Dual Meters	20A/25A at 13.8 Vdc	\$139.95
ASR-SS-30	Power Supply	25A/30A at 13.8 Vdc	\$129.95
ASR-SS-30M	Supply with Dual Meters	25A/30A at 13.8 Vdc	\$149.95



SXA-07093



DC/AC Modified Sine Wave Inverters

If you just need reliable DC power for your tools, lights or appliances, then you don't need a full, pure sine converter. Save yourself some money and check out these modified DC/AC converters. They convert 12- or 24-volt DC input voltage into reliable 120-Volt AC. The modified sine design means you still get rock-solid power with a gentler bite on your wallet.

SXA-06204



DC/DC Step-Up Converters

Perfect for atypical or higher voltage DC applications, these negative-ground converters can give you clean DC power along with over-voltage and polarity protection, plus temperature-controlled current limiting. You can find the complete specs on each unit at DXEngineering.com.

SXA-06701



Isolated DC/DC Converters

If you need to convert precise DC voltages, even in positive-ground systems, Samlex offers several proven options. These converters feature over-voltage, reverse polarity and short-circuit protection, plus fold-back current limiting. They're ideal in mobile/portable installations where clean DC power can be scarce.

SXA-06044



Mean Well DC/DC Fully Isolated Converters

If you have a positive-ground system and need a reliable step-down converter to produce noise-free power, Samlex comes to your rescue. These converters are fully isolated, which means they're compatible with both negative- and positive-ground systems. They all also feature automatic short-circuit, overload and over-voltage protection.

DXE Number	Samlex Number	Description	Receptacles	Surge Capability	Price
SXA-07093	PSE-12125A	1,250 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	2 AC	2,500 Watts	\$282.63
SXA-07103	PSE-12175A	1,750 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	2 AC	3,500 Watts	\$339.15
SXA-07113	PSE-12275A	2,750 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	1 AC	4,500 Watts	\$662.15
SXA-07174	PSE-24275A	2,750 Watt Modified Sine DC/AC Inverter, 24 Vdc Input	1 AC	4,500 Watts	\$709.16
SXA-07184	PSE-24175A	1,750 Watt Modified Sine DC/AC Inverter, 24 Vdc Input	2 AC	3,500 Watts	\$356.15
SXA-07806	SAM-100-12	100 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	1 AC 1 USB	200 Watts	\$20.23
SXA-07807	SAM-250-12	250 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	1 AC 1 USB	500 Watts	\$27.29
SXA-07808	SAM-450-12	450 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	2 AC 1 USB	900 Watts	\$38.25
SXA-07828	SAM-450-12E	450 Watt Modified Sine DC/AC Inverter, 12 Vdc	1 AC 1 USB	900 Watts	\$42.21
SXA-07809	SAM-800-12	800 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	2 AC 1 USB	1,600 Watts	\$66.22
SXA-07812	SAM-1000-12	1,000 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	2 AC	2,000 Watts	\$105.83
SXA-07817	SAM-1500-12	1,500 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	2 AC	3,000 Watts	\$196.27
SXA-07827	SAM-2000-12	2,000 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	3 AC	4,000 Watts	\$227.61
SXA-07836	SAM-7836	3,000 Watt Modified Sine DC/AC Inverter, 12 Vdc Input	3 AC	6,000 Watts	\$403.75

DXE Number	Samlex Number	Description	Input Range	Output Range	Price
SXA-06204	VTC305-12-24	DC/DC Step-Up Converter	10.5-28 Vdc	12-27 Amps at 24-27.5 Vdc	\$929.95
SXA-06214	VTC605-12-24	DC/DC Step-Up Converter	10.5-28 Vdc	20-45 Amps at 24-27.5 Vdc	\$1,047.95
SXA-06760	STEP 7	DC/DC Step-Up Converter	9-18 Vdc	7 Amps at 24 Vdc	\$100.89
SXA-06765	STEP 10	DC/DC Step-Up Converter	9-18 Vdc	10 Amps at 24 Vdc	\$140.22

DXE Number	Samlex Number	Description	Input Range	Output Range	Price
SXA-06701	IDC-100A-12	Step-Up Isolated DC/DC Converter	9-18 Vdc	8A at 12.5 Vdc	\$135.09
SXA-06706	IDC-100A-24	Step-Up Isolated DC/DC Converter	9-18 Vdc	4A at 24.5 Vdc	\$135.09
SXA-06708	IDC-100C-24	Isolated DC/DC Converter	30-60 Vdc	4A at 24.5 Vdc	\$135.09
SXA-06720	IDC-200A-12	Isolated DC/DC Converter	9-18 Vdc	16A at 12.5 Vdc	\$164.95
SXA-06721	IDC-200B-12	Isolated DC/DC Converter	20-35 Vdc	16A at 12.5 Vdc	\$160.74
SXA-06722	IDC-200C-12	Isolated DC/DC Converter	30-60 Vdc	16A at 12.5 Vdc	\$158.95
SXA-06723	IDC-200D-12	Isolated DC/DC Converter	60-120 Vdc	16A at 12.5 Vdc	\$160.74
SXA-06726	IDC-200A-24	Isolated DC/DC Converter	9-18 Vdc	8A at 24.5 Vdc	\$160.74
SXA-06728	IDC-200C-24	Isolated DC/DC Converter	30-60 Vdc	8A at 24.5 Vdc	\$160.74
SXA-06730	IDC-360A-12	Isolated DC/DC Converter	9-18 Vdc	30A at 12.5 Vdc	\$300.96

DXE Number	Samlex Number	Description	Input Range	Output Range	Price
SXA-06044	SD-150D-12	Fully Isolated DC/DC Converter	72-144 Vdc	12.5A at 12 Vdc	\$103.14
SXA-06054	SD-150C-12	Fully Isolated DC/DC Converter	36-72 Vdc	12.5A at 12 Vdc	\$103.14
SXA-06064	SD-150C-24	Fully Isolated DC/DC Converter	36-72 Vdc	6.25A at 24 Vdc	\$103.14
SXA-06104	SD-150B-24	Fully Isolated DC/DC Converter	19-36 Vdc	6.25A at 24 Vdc	\$103.14

More Products, Specs and Photos at DXEngineering.com



SXA-14242



SXA-14008



SXA-14002



Mean Well Single Output Switching Power Supplies

For a versatile supply that delivers reliable power levels, check out these offerings from Samlex. You can adjust both input and output voltage, making these power supplies handy tools in your shack or on your bench. They are well-filtered units that give you clean, reliable power without unwanted noise and RFI. They also offer over-voltage, over-current and short-circuit protection to keep your gear safe. DXEngineering.com has more detailed specs on each of these supplies.

DXE Number	Samlex Number	Description	Power Input Range	Power Output Range	Price
SXA-14002	S-25-12	25 Watt Power Supply 2.1A at 12 Vdc	85-260 Vac	10.8-13.2 Vdc	\$31.14
SXA-14003	S-60-12	60 Watt Power Supply 5A at 12 Vdc	85-260 Vac	10.8-13.2 Vdc	\$41.04
SXA-14012	S-100F-12	100 Watt Power Supply 8.5A at 12 Vdc	85-370 Vac	10.8-13.2 Vdc	\$49.77
SXA-14004	S-150-12	150 Watt Power Supply 12.5A at 12 Vdc	85-260 Vac	10.6-13.2 Vdc	\$58.68
SXA-14022	S-320-12	320 Watts Power Supply 25A at 12 Vdc	85-260 Vac	10-13.2 Vdc	\$118.89
SXA-14005	S-25-24	25 Watt Power Supply 1.1A at 24 Vdc	85-260 Vac	21.6-26.4 Vdc	\$31.14
SXA-14009	S-60-24	60 Watt Power Supply 2.5A at 24 Vdc	85-260 Vac	21.6-26.4 Vdc	\$41.04
SXA-14006	S-150-24	150 Watt Power Supply 6.5A at 24 Vdc	85-250 Vac	21-28.4 Vdc	\$58.68
SXA-14008	S-320-24	320 Watt Power Supply 12.5A at 24 Vdc	85-260 Vac	21-28.4 Vdc	\$118.89
SXA-14125	SE-600-48	600 Watt Power Supply 12.5A at 48 Vdc	85-260 Vac	43-56 Vdc	\$185.40
SXA-14242	SE-100-48	1,000 Watt Power Supply 20.8A at 48 Vdc	85-370 Vac	43-56 Vdc	\$342.00



Switching DC/DC Converters

Going from 24 Vdc down to 13.8 Vdc is no problem with these reliable step-down converters. If you have an input voltage of 20-35 Vdc, these converters let your expensive gear sip a steady diet of clean, stable 13.8 Vdc. Designed for negative ground, heavy-duty applications, the converters all offer over-voltage, reverse polarity and short-circuit protection, plus temperature-regulated current limiting.



SXA-06014

DXE Number	Samlex Number	Description	Output	Price
SXA-06014	SDC-15	DC/DC Converter	15A at 13.8 Vdc	\$74.95
SXA-06024	SDC-23	DC/DC Converter	20A at 13.8 Vdc	\$83.95
SXA-06034	SDC-5	DC/DC Converter	5A at 13.8 Vdc	\$40.95
SXA-06036	SDC-12	DC/DC Converter	12A at 13.8 Vdc	\$54.95
SXA-06174	SDC-30	DC/DC Converter	30A at 13.8 Vdc	\$136.95



SXA-03431



SXA-03435

Desktop Switching Power Supplies

Need a rock-solid 13.8 Vdc power supply that doesn't take up half of your shack? Samlex offers compact and reliable Desktop Switching Power Supplies. They're loaded with over-current, over-voltage and short-circuit protection and are well filtered to produce clean, noise-free power.

DXE Number	Samlex Number	Desktop Power Supply Description	Power Output	Price
SXA-03051	SEC-1212	120 Vac	10A at 13.8 Vdc	\$101.75
SXA-03052	SEC-1212CE	230 Vac	10A at 13.8 Vdc	\$107.44
SXA-03061	SEC-1223	120 Vac	23A at 13.8 Vdc	\$125.97
SXA-03062	SEC-3062	230 Vac	23A at 13.8 Vdc	\$132.43
SXA-03431	SEC-1235	120 Vac	30A at 13.8 Vdc	\$133.28
SXA-03435	SEC-1235M	Dual Meters, 120 Vac	30A at 13.8 Vdc	\$143.74
SXA-03064	SEC-03064	Battery Backup, 120 Vac	23A at 13.8 Vdc	\$118.95

Rack Plates

These durable standard-width rack plates are a great way to get your SEC-series power supplies off your desk and into a rack. They have a black powdercoat finish and cutouts for bottom-mounted fans.

SXA-03104	Rack Plate for Single Supply, 3.5" High	\$41.95
SXA-03105	Rack Plate for Dual Supplies, 3.5" High	\$49.95



Rackmount Switching Power Supplies

Do you have a rack in your shack? Here's a great way to get your power supply off of your desk without compromising your power needs. They all produce clean, reliable power and are available in a wide range of DC output levels. These power supplies come mounted on a two rack unit size plate and feature over-current, over-voltage and short-circuit protection to keep your gear safe.



SXA-03111

DXE Number	Samlex Number	Description	Power Output	Price
SXA-03111	SEC-1223R1	Rackmount Power Supply 120 Vac	20A at 13.8 Vdc	\$159.95
SXA-03261	SEC-40BRM	Rackmount Power Supply with Battery Backup and Charger 120 Vac	40A at 13.8 Vdc	\$388.95
SXA-03271	SEC-60BRM	Rackmount Power Supply with Battery Backup and Charger 120 Vac	60A at 13.8 Vdc	\$448.95
SXA-03281	SEC-80BRM	Rackmount Power Supply with Battery Backup and Charger 120 Vac	80A at 13.8 Vdc	\$454.95
SXA-03291	SEC-100BRM	Rackmount Power Supply with Backup, Charger and Meter 120 Vac	100A at 13.8 Vdc	\$549.95
SXA-03312	SEC-40BRM-220	Rackmount Power Supply with Battery Backup and Charger 230 Vac	40A at 13.8 Vdc	\$428.95
SXA-03342	SEC-100BRM-220	Rackmount Power Supply with Battery Backup and Charger	100A at 13.8 Vdc	\$598.95
SXA-03364	SEC-2450BRM	Rackmount Power Supply with Backup, Charger and Meter	50A at 27.6 Vdc	\$528.95



SXA-07323



SXA-07374



samlexamerica®

New!**DC/AC Pure Sine Wave Inverters**

Radios, computers, A/V equipment and virtually any piece of precision electronic gear need the cleanest, most stable power source to function properly. Pure sine wave inverters are the best way to keep your transceiver and shack equipment functioning at their peak.

DXE Number	Samlex Number	Power In/Out	Watts Cont./Surge	Receptacles	Price
SXA-07173	PST-15S-12A	12 Vdc/110 Vac	150/300	1 AC	\$121.81
SXA-07215	PST-600-12	12 Vdc/110 Vac	600/1,200	2 AC	\$225.59
SXA-07313	PST-30S-12E	12 Vdc/230 Vac	300/500	1 Schuko	\$191.52
SXA-07323	PST-60S-12E	12 Vdc/230 Vac	600/1,000	1 Schuko	\$273.60
SXA-07374	SSW-1500-12A	12 Vdc/115 Vac	1,500/3,000	2 AC	\$374.34
SXA-07461	SA-300-112	12 Vsc/110 Vac	300/400	2 AC	\$153.95



samlexamerica®

Battery Backup Module

Connect this module to your power supply and battery to make a battery backup system. When your AC power fails, the unit will instantly switch to your battery. When the AC power is restored, it switches back to charging.

The module works with voltages from below 12 Vdc, up to 28 Vdc and can handle a maximum output current of 100 amps. This float-type battery charger can be an essential backbone for your shack or EMCOMM setup.

SXA-08081 Battery Backup Module **\$128.95**

**New!**

samlexamerica®

Battery Isolating Load Protector

This unit protects your battery and its load by isolating them from a variety of power faults. In the event of excessive load, this device will disconnect the battery automatically. You can program your own fault thresholds and it can handle 40 amps.

SXA-08645 DC Isolating Load Protector **\$73.95**

**New!****Universal Computerized Battery Analyzer**

A complete battery-test lab in a box. The "CBA" carries advanced features you won't see in a standard battery tester. It can test virtually any battery up to 55V, regardless of type, size, or cell number. The analyzer handles a maximum of 40 amps and 150 watts.

Test data is displayed in easy-to-read chart and graph readouts, and there is a slick printout feature that lets you create labels to attach to the battery. That means you'll be able to keep tabs on the status of your battery.

You can also add an optional DC amplifier that amplifies and regulates discharge current so you can test your battery at a high discharge rate. The 58206-1009 is intended for industrial grade use and improper use is hazardous, so make sure this amplifier isn't overkill for your application.

An optional temperature probe lets you limit how hot your batteries get during testing.

WMT-58250-1015 Universal Computerized Battery Analyzer **\$189.95**

WMT-58206-1009 CBA Battery Discharge Amplifier **\$33.95**

WMT-58256-1020 Temperature Probe for CBA **\$12.95**

**New!****MFJ****New!****Super Battery Booster**

Your mobile rig may not always get a stable 13.8 Vdc from your vehicle's battery. To combat the fluctuations in power and keep your radio operating at its fullest potential, install this MFJ Battery Booster. It ensures a steady stream of 13.8 Vdc and can be tailored to specific voltage limits, protecting your battery from over-discharge. An internal 30 amp input fuse prevents excess output and this unit has over-voltage protection. Input voltage and output voltage are adjustable.

MFJ-4416B Super Battery Booster **\$149.95**

**New!****Battery Backup Module**

Add battery backup to your shack. Just connect this unit between your power supply and a wet or SLA standby battery, and it acts as a float charger to keep the battery ready. If your AC power fails, it will automatically switch to the battery in an instant. Fuses protect the circuit during battery charge/discharge, and a front LED indicates the charging status. Maximum battery load is 30A and the unit limits charging at 3.6A. The module works with 12- and 24-volt systems.

ASR-BB-30M Battery Backup Module **\$53.95**

**N2412-12 and N2412-24****DC/DC Converters**

Astron has packed these converters with some impressive features, including over-voltage, over-current and short circuit protection. You can also set up these converters to turn on with your ignition switch for hassle-free operation. They accept 22-33 Vdc input with a 13.8 Vdc output. The N2412-12 delivers 10 amps of continuous current with a 12 amp peak, while the N2412-24 delivers 20 amps continuous with a 24 amp peak.

ASR-N2412-12 DC/DC Converter, 12 Amp Peak **\$59.95**

ASR-N2412-24 DC/DC Converter, 24 Amp Peak **\$89.95**



ASR-N2412-12

ASR-N2412-24

**Step-Down DC/DC Converters**

Offering a high-efficiency DC conversion, these units are great if you've got a specialized DC power source and need it stepped-down to a stable 13.8 Vdc. They have over-voltage, short circuit and reverse polarity protection (on the input side).

The 2412-40 and A4812-12 are designed for negative ground applications, while the ISO4812-24 is fully isolated, ideal for positive ground systems.

**New!**

Part Number	Description	Input Voltage	Max. Output Current	Price
ASR-2412-40	DC/DC Converter	22 to 32 Vdc	32A	\$205.95
ASR-A4812-12	DC/DC Converter	30-56 Vdc	9A	\$49.95
ASR-ISO4812-24	Isolated DC Converter	36 to 72 Vdc	20A	\$149.95

Find More Brands, More Products and More Specs at DXEngineering.com

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- There's a wealth of interesting and FREE tech articles available. Maybe you can learn something new?

**Hit the Air**

Whether it's a long-haul contest or a casual ragchew, the fun of our hobby is being on the air. We only carry products that improve your on-air experience, gear that allows you to hear and be heard. And we're always adding more. Visit DXEngineering.com and see what's new.



samlexamerica®

Three Stage Battery Chargers

Capable of charging flooded, AGM or Gel-Cell batteries, these UL-/ETL-approved chargers are versatile enough for multiple applications. Depending on the model, they can charge several banks of batteries simultaneously, and when sized right, they'll be able to charge a battery even while it is under load. The chargers feature an ammeter, and incorporate short circuit, overload, and reverse polarity protection.

DXE Number	Samlex Number	Description	Voltage/Amperage	Price
SXA-08301	SEC-1215UL	Charger	12 Vdc/15A	\$144.25
SXA-08302	SEC-1230UL	Charger, Handles 3 Battery Banks	12 Vdc/30A	\$218.03
SXA-08305	SEC-2415UL	Charger	24 Vdc/15A	\$218.03
SXA-08306	SEC-2425UL	Charger, Dual Ammeters	24 Vdc/25A	\$352.07

samlexamerica®

Solar Charging Kits

Harness the sun to power your gear. These comprehensive kits include everything but a battery. They are expandable to 500 watts, so they're the perfect starting point for your solar powered system. The kits feature a 30 amp charge controller, a high-efficiency solar panel, solar connecting wires and mounting hardware. You can use these kits in your mobile, EMCOMM, or battery backup systems. See DXEngineering.com for complete system specs.



New!

DXE Number	Samlex Number	Description	Price
SXA-18018	SRV-50-KIT-USA	50 W Charging System, 3.2A Max. Output Current	\$424.95
SXA-18019	SRV-EXP-50-KIT-USA	Solar Panel Expansion Kit for 50 W System	\$384.95
SXA-18014	SRV-90-KIT-USA	90 W Charging System, 5.31A Max. Output Current	\$557.95
SXA-18016	SRV-EXP-90-KIT-USA	Solar Panel Expansion Kit for 90 W System	\$465.95
SXA-18015	SRV-135-KIT-USA	135 W Charging System, 8.1A Max. Output Current	\$594.95
SXA-18017	SRV-EXP-135-KIT-USA	Solar Panel Expansion Kit for 135 W System	\$557.95
SXA-08725	SOLSUM 6.6 F	Solar Charger Controller, 6 Amp Max. Current	\$39.95
SXA-08727	SOLSUM 10.10 F	Solar Charger Controller, 10 Amp Max. Current	\$62.95

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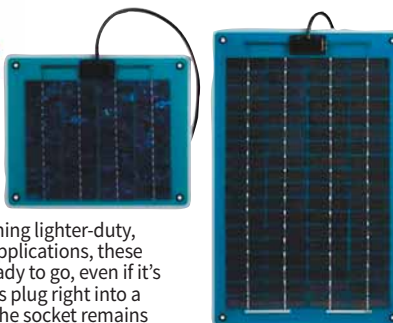
Solar Trickle Chargers

These chargers are designed for maintaining lighter-duty, 12-volt batteries. Well suited to vehicle applications, these trickle chargers will keep your battery ready to go, even if it's been sitting idle for months. The chargers plug right into a cigarette lighter socket—just make sure the socket remains on with the vehicle's key out.

They can be used in permanent or temporary installations, and are perfect solutions if you park your vehicle in a remote garage without AC power.

SXA-17031	Solar Trickle Charger, 4.8 Peak Watts, 0.30A Output	\$85.95
SXA-17032	Solar Trickle Charger, 9.5 Peak watts, 0.56A Output	\$122.95

New!



Battery Tender Systems

If you're running a high-power mobile rig, dual batteries or a battery-powered standalone EMCOMM trailer, it's a good idea to take care of your battery. Deltran offers you several fantastic options in the Battery Tender line. Much better than simple trickle chargers, these units are packed with features to ensure that you'll have plenty of reliable DC on hand when you need it.

Battery Tender Plus

Designed to charge and maintain batteries at the proper storage level, the Battery Tender Plus is the flagship of Deltran's Battery Tender line. Using a three-step charging mode (bulk charge, absorption and float), the Battery Tender Plus keeps your battery charged without the damaging effects of a basic trickle charger. It features a quick-connect harness, reverse polarity protection and auto-switching between charging modes. It even reacts to ambient temperatures, adjusting charging power to ensure that your battery is ready to go, when you need it.

DTN-021-0128 Battery Tender Plus **\$51.87**

Battery Power Tender Plus

The Battery Power Tender Plus can charge and maintain both sealed maintenance-free batteries and traditional lead-acid batteries. Its four-step charging program is microprocessor-controlled to avoid damaging your battery while charging, and it features reverse polarity protection for trouble-free use.

DTN-0220142DLWHB Battery Power Tender Plus..... **\$101.20**

Battery Tender Waterproof 800

Great for the field, the Battery Tender Waterproof 800 Charging System packs 800 mA of charging power into a compact package. It will constantly monitor your battery, making sure that it maintains optimum performance levels. The Waterproof 800 features short circuit and reverse polarity protection and resists the elements for years of trouble-free use.

DTN-022-0150DLWH Battery Tender Waterproof 800 **\$39.33**

Battery Tender Junior

If you're small on space but big on power demands, ensure you have a steady supply of DC with Deltran's Battery Tender Plus Junior. It has many of the powerful features of its big brothers in a small, extremely portable and lightweight package. It's spark-proof, with reverse polarity protection and a two-color LED indicates your battery's charging state.

DTN-021-0123 Battery Tender Junior **\$25.30**



Powermaster Battery Isolator

We've all been there: a busy Field Day or DXpedition. You make plenty of contacts while your gear sips a steady diet of voltage from your car's auxiliary battery. When it's time to leave—your car won't start!

Using an auxiliary battery doesn't always protect your primary battery from draining. Powermaster's Battery Isolator prevents this unwanted drain. It ties your batteries together, allowing them both to charge from your engine's alternator. Since your auxiliary battery is isolated, it won't drain the charge from your primary battery in the event of excess load.

Use Powermaster's Battery Isolator when you're operating off your vehicle's battery power and keep yourself from being stranded.

PWM-903 Powermaster Battery Isolator **\$109.97**



New!



Digital 1200 Battery Charger

A battery charger for the 21st century! This charger can recover deeply discharged batteries and extend battery life. It features an LCD display and intuitive GUI that indicates charging status, plus an integrated work light. The Digital 1200 even includes a USB port to charge your smart phone and other USB-powered devices. It accepts 100 to 120 Vac, has up to 14.9 Vdc output and can be used for flooded and AGM batteries—find all the specs at DXEngineering.com.

ULT-150-34178 Digital 1200 Battery Charger **\$199.99**





WMT-58303-1030



WMT-58307-1037



WMT-58315-1043

RIGrunner DC Outlet Panels

Got a pile of spaghetti where your DC power cables should be? These RIGrunner Outlet Panels will clean up your shack, while giving you some advanced features in the process. Each outlet is fused for protection and ensures you have reliable power distribution for your gear. They provide 40 amps of maximum output current and include Powerpole® connectors and fuses. "U" models have USB ports, handy for charging your smartphone.



WMT-58307-1034

New!

Part Number	Description	Voltage Alarm	Power Cables	Powerpole® Connections	Price
WMT-58301-1028	RIGrunner 8012, 80A Input	Yes	8 AWG, 6'	12	\$159.95
WMT-58303-1030	RIGrunner 4010S, Auto Turn-On	Yes	10 AWG, 6'	10	\$149.95
WMT-58303-1031	RIGrunner 4010S, Auto Turn-On	Yes	Sold Separately	10	\$129.95
WMT-58305-1032	RIGrunner 4012	Yes	10 AWG, 6'	12	\$129.95
WMT-58305-1033	RIGrunner 4012	Yes	Sold Separately	12	\$109.95
WMT-58307-1034	RIGrunner 4008	Yes	10 AWG, 6'	8	\$119.95
WMT-58307-1036	RIGrunner 4008H, Side Connectors	No	10 AWG, 6'	8	\$109.95
WMT-58307-1037	RIGrunner 4008H, Side Connectors	No	Sold Separately	8	\$89.95
WMT-58307-1124	RIGrunner 4008, -48 Vdc Negative	Yes	Sold Separately	8	\$164.95
WMT-58307-1126	RIGrunner 4008, -48 Positive	Yes	Sold Separately	8	\$124.95
WMT-58307-1125	RIGrunner 4008, -24 Positive	Yes	Sold Separately	8	\$124.95
WMT-58312-1038	RIGrunner 4005	No	10 AWG, 6'	5	\$74.95
WMT-58312-1039	RIGrunner 4005	No	Sold Separately	5	\$64.95
WMT-58312-1040	RIGrunner 4005, Side Connectors	No	10 AWG, 6'	5	\$84.95
WMT-58312-1041	RIGrunner 4005, Side Connectors	No	Sold Separately	5	\$69.95
WMT-58315-1042	RIGrunner 4004U, 2 USB Charge Ports	No	10 AWG, 6'	4	\$94.95
WMT-58315-1043	RIGrunner 4004U, 2 USB Charge Ports	No	Sold Separately	4	\$79.95

WMT-58312-1355



WMT-58312-1354

New!



Internet Monitored DC Outlet Panels

Take a RIGrunner 4005. Now, add the ability to check its status over the Internet. The result: the ideal power supply for ECOMM, remote power stations or repeaters. They're also perfectly at home in your shack. They use an RJ-45 or Wi-Fi for hookup and there is a front-panel LCD to show the status, voltage and current draw of each outlet.

But the real magic is through the Internet. Using their integrated web server, you can monitor critical parameters or turn on/off each outlet independently. These are also capable of sending out e-mail alerts for certain alarms.

Part Number	Description	Powerpole® Connections	Price
WMT-58312-1353	RIGrunner 4005i	5	\$259.95
WMT-58312-1354	RIGrunner 4005i, Wi-Fi Enabled	5	\$309.95
WMT-58312-1355	RIGrunner 4005i, Rack-Mount	5	\$429.95

International Shipping is Quick and Easy! See Page 58 for Details



RS-50A

Linear Power Supply

When you've still got 105-125 Vac available, make sure your DC power demands are met with this durable and stable power supply from Astron. It puts out a reliable 13.8 Vdc with 50 amps peak and 37 amps continuous. To help protect your gear against wild electrical swings, this electronically-regulated power supply features over-voltage and current limiting protection.

ASR-RS-50A

Linear Power Supply**\$281.95**

YellowTop

Deep Cycle

12-Volt Battery

Your DC power source needs to be reliable, rugged and ready-to-go at a moment's notice. OPTIMA's YellowTop battery is resistant to the elements, recharges quickly and can recover from deep discharges. This battery is an excellent fit for your sensitive communications equipment and can be safely used indoors. In addition to being spill-proof, YellowTop batteries last longer and are more durable than most other AGM batteries.

ULT-9050-160

YellowTop

Deep Cycle 12V Battery**\$285.97**

Super PWRgate PG40S

The Super PWRgate maintains a steady stream of up to 40A continuous from your power supply or battery and will instantly switch to battery backup if you lose power—you won't even notice the switchover. It also has a built-in battery charger to ensure that your battery is ready when you need it.

WMT-58403-1046 Super PWRgate PG40S**\$139.95**

PWRguard Plus PG40S

If your power supply is rapidly changing, the PWRguard Plus can sense it and shut the system down, preventing expensive damage to your equipment. You can set the voltage trip threshold and the PWRguard has in-rush current protection as an extra precaution against damage. It's rated for a maximum of 40 amps (peak) and indicator LEDs let you know it is working.

WMT-58402-1045 PWRguard Plus PG40S**\$114.95**

Powerpole® Accessories

Anderson Powerpole connectors are quickly becoming the industry standard for DC power. They have been adopted by RACES and ARES® for emergency service and installations. DX Engineering carries the connectors, plus a tool that makes crimping them easy and hassle-free.

DXE-PP30 Powerpole Connectors, 12-16 AWG, 30A, 10 Pairs* ...**\$12.95**DXE-PP45 Powerpole Connectors, 10-14 AWG, 45A, 10 Pairs* ...**\$17.95**DXE-UT-CRIMP-PWR Ratcheting Crimp Tool**\$38.95**
*One pair equals (1) red and (1) black.

Powerpole® Retention Clips

Avoid accidentally pulling out your Powerpole connectors by using these clips to lock them securely to your outlet panel.

WMT-58257-1092 Powerpole Retention Clips, Set of 12**\$7.95**

ICOM



IC-2820H Dual-Band FM Transceiver

Rely on this 2M/70cm mobile transceiver to give you both analog and digital functionality. This transceiver also uses Icom's dualwatch feature, so you can monitor two frequencies at the same time. It packs 50 watts of power on both bands, which really lets your signal travel. You can add D-STAR DV mode and GPS receiver capabilities.

ICO-IC-2820H Dual-Band FM Transceiver...CALL/WEB

MFJ



MFJ-495 Millennium CW Memory Keyer

You need a reliable keyer. MFJ's MFJ-495 lets you key in CW with a paddle or keyboard and store messages in its non-volatile memory. The MFJ-495 also has a built-in speaker with front-panel volume control. It features a user-friendly interface that is straightforward and intuitive. It's easy to set up, so you can get on the air quickly during an emergency.

MFJ-495 Millennium CW Memory Keyer\$169.95

DIAMOND
ANTENNA



SX-600 Dual Power Meter

With two meters in one, the SX-600 lets you monitor either your VHF/UHF or your Low-Band/HF rig. This meter has low insertion loss yet still gives you accurate readings. Well suited for QRP, handheld and even high-power applications, the SX-600 meter is small enough to fit into a backpack. In an emergency situation, you'll want to ensure that your station is working properly. Keep an eye on things with the SX-600.

DMN-SX600 Dual Power Meter\$179.95

GREEN HERON ENGINEERING LLC



RT-21 Universal Digital Rotor Controller

The latest version of Green Heron's ubiquitous rotor controller, the RT-21 is a reliable asset to any installation. It's precise and accurate and gives you variable-speed control. This controller is compatible with a variety of rotators and is well suited to the Hy-Gain HAM and T2X units. The RT-21 can support side-mounted antennas and is fully programmable with easy setup utility software.

GHE-RT-21 Universal Digital Rotor Controller\$559.00

SUMMIT
RACING EQUIPMENT



Battery Box Kit

- Ideal for a trunk-mounted second battery
- Kit includes cables and hardware

SUM-G1200A Battery Box Kit\$99.97
SUM-G1210 Battery Box Only\$14.97

ICOM



IC-7200 HF/50 MHz Transceiver

With the perfect blend of durability, ease of use and features, this portable transceiver is an excellent choice for use in the field. It offers up to 100 watts of RF output (SSB/CW) while giving you VOX and full break-in CW operation. A backlit LCD screen means you can use it in dim light and its digital noise reduction makes it easier to hear weak signals.

ICO-IC-7200 HF/50 MHz ReceiverCALL/WEB

WEST MOUNTAIN
RADIO



RIGrunner 4008

To distribute power through your shack, look to West Mountain's RIGrunners. These durable units are the safest way to power all of your 12 Vdc equipment. Featuring ultra-reliable Powerpole® connectors, RIGrunners use automotive-style fuses to prevent damage and are rated up to 40 amps.

WMT-58307-1035 RIGrunner 4008\$84.95

WEST MOUNTAIN
RADIO



PWRcheck

Put this in-stream between your source and load and you'll be able to closely monitor voltage, current, wattage and amp-hours in real time, in both directions. A large LCD screen displays everything and there's an intuitive USB interface. The PWRcheck also has logging capabilities and the readouts provide millivolt/millilamp precision.

WMT-58430-1286 PWRcheck.....\$179.95

WEST MOUNTAIN
RADIO



ISOprw

Turn your vehicle into a battery charger! The ISOprw lets you connect an additional battery to your vehicle's battery to charge both of them when the alternator is running. When the alternator stops, this unit isolates your main battery to prevent it from draining. It's an essential tool for power-hungry mobile installations like an ARES® or RACES command station.

WMT-58401-1044 ISOprw\$89.95

WEST MOUNTAIN
RADIO



CBA IV

Short for "Computerized Battery Analyzer" the CBA IV is way more advanced than a simple battery tester. It can handle virtually any battery up to 55V, regardless of type, size, or cell number. It is the best way to ensure that a battery is ready for an emergency.

WMT-58250-1014 CBA IV\$149.95

WEST MOUNTAIN
RADIO



DC-to-GO

Combine a durable and weather resistant battery box with one of West Mountain's RIGrunner power distribution centers and you have a portable power station capable of feeding an entire radio setup. Available in multiple sizes and RIGrunner types, these DC-to-GO boxes can be the backbone of your emergency power system.

WMT-58513-1061 DC-to-GO.....\$134.95

Stay Ready—Don't wait until the power is out to make a power backup plan, get prepared with DX Engineering. We've put together a comprehensive list of what you'll need to get on the air during an emergency. Find more detailed information on each of these products at DXEngineering.com.



DX Engineering has the tools and equipment to help you assemble a potent emergency communications unit, just like this one from the Ashtabula County, Ohio Amateur Radio Club, K8CY.

Power-Up with A-iPower

NEW!
A-POWER

Prepare yourself for power outages with the steady power delivery of an A-iPower Portable generator. These 120-/240-volt AC generators feature an air-cooled 4-stroke engine, for quiet and reliable operation. There are several models available, so whether you need to power an ECOMM station or a refrigerator, it's easy to find the perfect generator for the job. See detailed specs at DXEngineering.com.

3,750 Watt Generators

- 4.4 HP engine
- 4 gallon fuel tank with level gauge
- Low oil alert
- Recoil start
- SU4000-CARB E.O. number: U-U-164-0024

AIP-SU4000 3,750 Watt Generator, 49-State Legal.....\$386.97

AIP-SU4000-CARB 3,750 Watt Generator, 50-State Legal.....\$415.97

5,750 Watt Generator

- 7 HP engine
- 7 gallon fuel tank with level gauge
- Low oil alert
- Digital run time gauge
- Recoil and electric start

AIP-SU5750E 5,750 Watt Generator, 49-State Legal\$659.97

7,000 Watt Generator

- 8.1 HP engine
- 7 gallon fuel tank with level gauge
- Low oil alert
- Digital run time gauge
- Recoil and electric start

AIP-SU7500E 7,000 Watt Generator, 49-State Legal\$712.97

8,250 Watt Generators

- 9.7 HP engine
- 7 gallon fuel tank with level gauge
- Low oil alert
- Digital run time gauge
- Recoil and electric start
- SU-8250E-CARB E.O. number: U-U-164-0026

AIP-SU8250E 8,250 Watt Generator, 49-State Legal\$805.97

AIP-SU8250E-CARB 8,250 Watt Generator, 50-State Legal\$832.97



DX Engineering U-Bolt Saddle Clamps

Our U-Bolt Saddle Clamps are ideal for use with round tubing. Unlike common hardware store clamps that are sized to fit pipe, our clamps are designed and sized to fit tubing. The U-Bolt Saddle Clamps come with high strength, 18-8 grade stainless steel U-bolts that are long enough to attach tubing or components to thick mounting plates. The U-bolts are available in 1/4 inch, 5/16 inch and 3/8 inch as listed. Note that the 2 inch, 2.5 inch and 3 inch clamps are available with either 5/16 inch or 3/8 inch U-bolts.

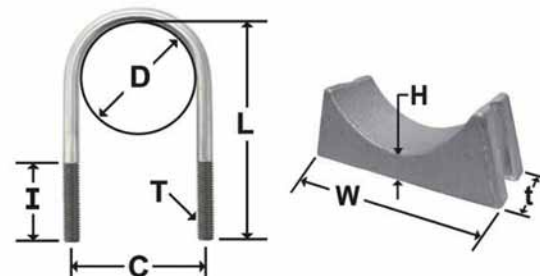
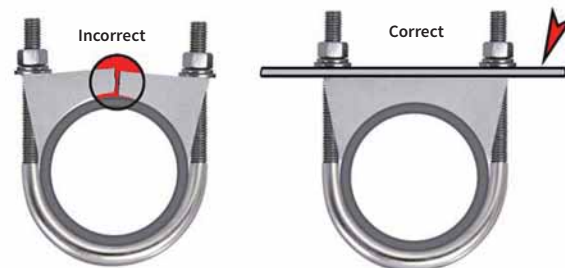
The U-Bolt Saddle Clamp saddles are cast from high strength 535 aluminum, which has superior anti-corrosion properties. Unlike stamped or machined types, the saddles' rippled surface grips tubing closely for a secure fit.

The U-Bolt Saddle Clamps are designed for use with mounting plates, which are available separately. The clamps are sold only as a set with aluminum saddle, stainless steel U-bolts, nuts, flat washers and lock washers.

The use of a lubricant and sealant, such as Never-Seez®, is highly recommended to achieve proper torque and prevent galling. DX Engineering sells replacement U-bolts with hardware kits.

Size	DXE Part Number	D	L	C	I	T	Hole Size	W	H	t	Price Each
0.50	DXE-SAD-050A	0.50	1.35	0.75	0.87	1/4"-20	0.266 "H"	0.90	0.188	0.63	\$5.25
0.75	DXE-SAD-075A	0.75	1.81	1.00	0.87	1/4"-20	0.266 "H"	1.13	0.188	0.75	\$5.65
1.00	DXE-SAD-100A	1.00	2.06	1.25	0.87	1/4"-20	0.266 "H"	1.50	0.250	1.00	\$6.05
1.25	DXE-SAD-125A	1.25	2.37	1.50	0.87	1/4"-20	0.266 "H"	1.75	0.250	1.00	\$6.85
1.50	DXE-SAD-150A	1.50	2.62	1.75	0.87	1/4"-20	0.266 "H"	2.00	0.250	1.00	\$7.75
1.75	DXE-SAD-175A	1.75	3.00	2.00	1.00	1/4"-20	0.266 "H"	2.31	0.250	1.00	\$8.90
2.00	DXE-SAD-200A	2.00	3.43	2.31	1.12	5/16"-18	0.332 "Q"	2.62	0.375	1.00	\$10.05
2.00	DXE-SAD-200B	2.00	4.00	2.37	1.50	3/8"-16	0.397 "X"	2.62	0.375	1.00	\$11.25
2.50	DXE-SAD-250A	2.50	4.18	2.81	1.25	5/16"-18	0.332 "Q"	3.13	0.375	1.13	\$12.05
2.50	DXE-SAD-250B	2.50	4.75	2.87	1.75	3/8"-16	0.397 "X"	3.13	0.375	1.13	\$13.55
3.00	DXE-SAD-300A	3.00	4.68	3.31	1.25	5/16"-18	0.332 "Q"	3.62	0.375	1.25	\$13.60
3.00	DXE-SAD-300B	3.00	5.25	3.37	1.75	3/8"-16	0.397 "X"	3.62	0.375	1.25	\$15.25
4.00	DXE-SAD-400A	4.05	5.56	4.43	1.50	3/8"-18	0.397 "X"	4.80	0.438	1.50	\$34.70
4.50	DXE-SAD-450A	4.55	6.06	4.93	1.50	3/8"-16	0.397 "X"	5.30	0.438	1.50	\$39.95

Suggested Hole Size: 0.266" is letter "H" drill bit, 0.332" is letter "Q" drill bit, and 0.397" is letter "X" drill bit. All U-Bolts are formed from premium 18-8 stainless steel. All Saddles are cast 535 aluminum. All Saddle Clamp Sets are supplied with 18-8 stainless steel nuts and lock washers. Dimensions shown are in inches. Note: These are NOT Automotive Muffler Clamps.



Saddle clamps must be used on a flat surface or customer supplied backing plate. Personal injury and property damage can occur without proper installation. Always use a lubricant such as Never-Seez® or Anti-Seize to prevent the stainless steel hardware from seizing.

DX Engineering Clamps Have Hundreds of Uses!

DX Engineering U-Bolt, V-Bolt, and Band Clamps are very versatile. For example, we've seen the ECLS Studded Band Clamps used to fasten merchandise display signs to upright tubing. Have you used DX Engineering clamps for other, non-antenna projects? We'd love to know about it—drop us a note and send pictures if you have them!

DX Engineering V-Bolt Saddle Clamps

Our V-Bolt Saddle Clamps are sized to fit ranges of tubing. The V-bolts are long enough to attach tubing or components to thick plates and are highly corrosion-resistant.

The V-Bolt Saddle Clamps are intended for use with a backing plate or mounting plate to retain the bolt spacing. The saddles' rippled surface will clamp tubing securely to a flat surface.

Features

- 18-8 stainless steel V-bolts with nuts, flat washers and lock washers
- Cast aluminum saddles with rippled surface
- Available in a number of size ranges

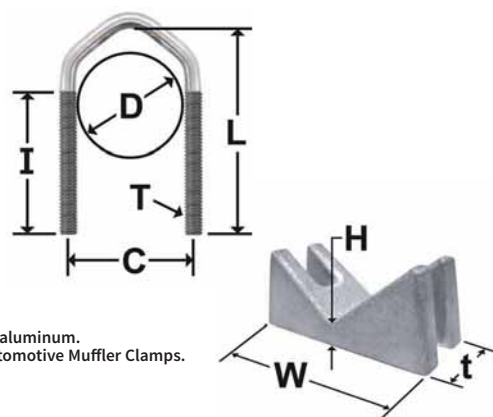
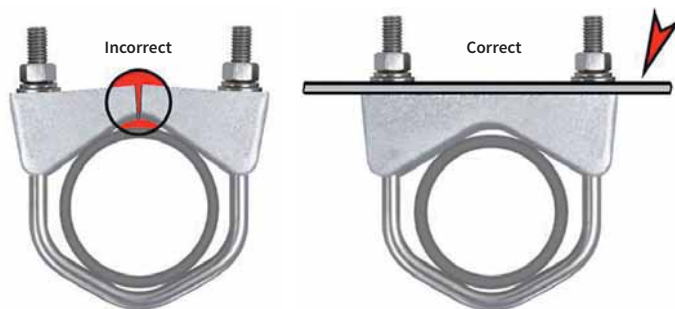
Tubing Recommendations

DXE-CAVS-1P: fits 1/2 inch to 1 3/4 inch O.D. tubing, 1/4"-20 bolt
 DXE-CAVS-11P: fits 1/2 inch to 1 3/4 inch O.D. tubing, 5/16"-18 bolt
 DXE-CAVS-2P: fits 1 inch to 2 inch O.D. tubing, 5/16"-18 bolt
 DXE-CAVS-3P: fits 2 inch to 3 inch O.D. tubing, 3/8"-16 bolt

The clamps are sold only as a set with aluminum saddle, stainless steel V-bolts, nuts, flat washers and lock washers. The use of a lubricant and sealant, such as Never-Seez®, is highly recommended to achieve proper torque and prevent galling. For high torque load applications where the tubing is subjected to twisting motion, we recommend using our U-Bolt Saddle Clamps.

Nominal Size	DXE Part Number	D	L	C	I	T	Hole Size	W	H	t	Price Each
0.50 to 1.75	DXE-CAVS-1P	1.75	3.438	1.968	2.313	1/4"-20	0.266 "H"	2.313	0.250	1	\$10.25
0.50 to 1.75	DXE-CAVS-11P	1.75	3.438	2.063	2.313	5/16"-18	0.332 "Q"	2.313	0.250	1	\$10.75
1 to 2	DXE-CAVS-2P	2.00	3.438	2.313	2.000	5/16"-18	0.332 "Q"	2.835	0.375	1	\$12.25
2 to 3	DXE-CAVS-3P	3.13	4.610	3.500	1.750	3/8"-16	0.397 "X"	4.250	0.500	2	\$15.25

All dimensions are in inches. Note: DXE-CAVS-1/11/2P saddle material is cast 535 aluminum, DXE-CAVS-3P saddle material is cast 319 aluminum. Suggested Hole Size: 0.266" is letter "H" drill bit, 0.332" is letter "Q" drill bit, and 0.397" is letter "X" drill bit. Note: These are NOT Automotive Muffler Clamps.





DX Engineering

Super Duty Saddle Clamps

Our Super Duty Saddle Clamps are designed for applications where maximum clamping ability is needed. Super Duty Saddle Clamp Kits are constructed of two corrosion-resistant A356-T6 cast aluminum saddles with a cast stainless steel reinforcement plate. These clamps are the correct size to fit tubing closely and their rippled surface will grip the aluminum tubing for a secure fit that resists the ravages of weather.

Due to the wide variety of clamping applications where a Super Duty Saddle Clamp would be beneficial, we do not include mounting hardware, but we do offer armor-coated bolt sets separately. Super Duty Saddle Clamps are made to fit 3 sizes of tubing: 2 inch O.D., 2.5 inch O.D. and 3 inch O.D.

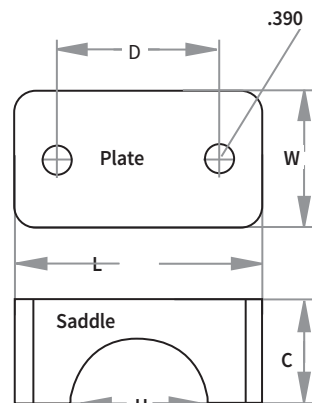
The use of a lubricant and sealant, such as Never-Seez®, is highly recommended to achieve proper torque and prevent galling.

Clamps Part Number	Tube O.D.	L	W	D	H	C	Price Each
DXE-SDS-200P	2	3.640	2.000	2.400	2.000	1.570	\$34.00
DXE-SDS-250P	2.5	4.150	2.250	2.900	2.500	1.820	\$41.00
DXE-SDS-300P	3	4.650	2.500	3.400	3.000	2.060	\$51.00

Bolt and Nut Sets

Armor-Coated Bolt Sets are available in 5 different bolt lengths (4.5 inch, 5 inch, 5.5 inch, 6 inch and 6.5 inch). They include Grade 8 hex head bolts (2), split washers (2), flat washers (2) and nuts (2).

DXE-SDSBOLT-4-5	4.5" Bolts	set	\$5.25
DXE-SDSBOLT-5	5.0" Bolts	set	\$5.50
DXE-SDSBOLT-5-5	5.5" Bolts	set	\$5.75
DXE-SDSBOLT-6	6.0" Bolts	set	\$6.00
DXE-SDSBOLT-6-5	6.5" Bolts	set	\$6.25



DX Engineering Clamps are Specified by Scientific, Military & Government Designers, & Used by Antenna Builders: Both Commercial & Amateur!

Highest Quality—Lasting Performance!

DX Engineering is famous for its Saddle Clamps—the ones with stainless steel U-bolts or V-bolts and matching cast aluminum saddles. The U-bolts are the exact size for inch-sized tubing O.D.; the saddles feature an as-cast roughness that keeps the tube from sliding.

Our Super Duty Saddle Clamps are designed for applications where maximum torque is needed to control large or unbalanced antenna arrays, or for other applications where other torque control products have proven inadequate.

Our Resin Support Blocks are useful for securely mounting tubing to any flat surface while providing electrical insulation.

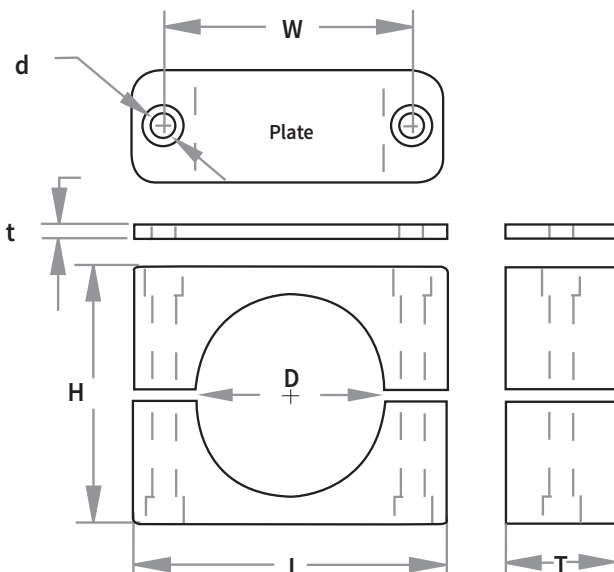
Whether you are building a Yagi from scratch, refurbishing a well-used "old friend," or experimenting with a new antenna project, DX Engineering can supply the best hardware for your application. You can find useful tips and complete dimensions for each clamp and bracket type at DXEngineering.com.

DX Engineering

Resin Support Block Clamps

Our Resin Support Block Clamps are ideal for securing mounting brackets or plates to tubing, while also providing electrical insulation. That makes the clamps a good choice for electronic components. The clamps are sturdy and provide a strong, well-insulated mounting that is easy to construct. They are available in many sizes for most any project you might have—see chart.

The Resin Support Block is shown with an optional stainless steel reinforcement plate. These plates provide additional stiffness and can also be used as sturdy hole-drilling templates.



Support Block Dimensions in Inches

Block Part Number	Tube O.D.	D	H	T	L	W	Reinforcement Plate Required	Price Each
DXE-RSB-102500	1/4	1/4	1.050	1.185	1.350	0.784	DXE-RSB-DP-1	\$2.65
DXE-RSB-103125	5/16	5/16	1.050	1.185	1.350	0.784	DXE-RSB-DP-1	\$2.85
DXE-RSB-103750	3/8	3/8	1.050	1.185	1.350	0.784	DXE-RSB-DP-1	\$2.65
DXE-RSB-105000	1/2	1/2	1.290	1.192	1.595	1.024	DXE-RSB-DP-2	\$2.90
DXE-RSB-106250	5/8	5/8	1.290	1.192	1.595	1.024	DXE-RSB-DP-2	\$2.90
DXE-RSB-103400	3/4	3/4	1.394	1.186	1.910	1.301	DXE-RSB-DP-3	\$3.10
DXE-RSB-110000	1.000	1.000	1.394	1.186	1.910	1.301	DXE-RSB-DP-3	\$3.15
DXE-RSB-111250	1.125	1.125	1.665	1.189	2.258	1.575	DXE-RSB-DP-4	\$4.70
DXE-RSB-112500	1.250	1.250	2.292	1.182	2.760	2.050	DXE-RSB-DP-5	\$4.70
DXE-RSB-111500	1.500	1.500	2.292	1.182	2.760	2.050	DXE-RSB-DP-5	\$4.70
DXE-RSB-113400	1.750	1.750	2.674	1.184	3.394	2.600	DXE-RSB-DP-6	\$7.30
DXE-RSB-120000	2.000	2.000	2.678	1.184	3.394	2.600	DXE-RSB-DP-6	\$7.30
DXE-RSB-122500	2.250	2.250	2.904	1.184	3.394	2.600	DXE-RSB-DP-6	\$7.95

DXE-RSB-111250



Reinforcement Plates Dimensions in Inches

Part Number	d	t	W	Each
DXE-RSB-DP-1	0.275	0.119	0.784	\$3.20
DXE-RSB-DP-2	0.275	0.119	1.024	\$3.55
DXE-RSB-DP-3	0.275	0.119	1.301	\$3.95
DXE-RSB-DP-4	0.275	0.119	1.575	\$4.25
DXE-RSB-DP-5	0.275	0.119	2.050	\$4.90
DXE-RSB-DP-6	0.275	0.119	2.600	\$5.65



Saddle Clamps with Powdercoated Saddles

- Stainless steel flat washers, lock washers, nuts and bolts
- Black powdercoated saddle finish

U-Bolt Style

U-Bolt Part Number	Nominal Size	Thread Bolt Size	Price Each
DXE-PSAD-050A	0.50	1/4"-20	\$10.80
DXE-PSAD-075A	0.75	1/4"-20	\$10.95
DXE-PSAD-100A	1.00	1/4"-20	\$11.05
DXE-PSAD-125A	1.25	1/4"-20	\$11.85
DXE-PSAD-150A	1.50	1/4"-20	\$12.75
DXE-PSAD-175A	1.75	1/4"-20	\$13.90
DXE-PSAD-200A	2.00	5/16"-18	\$15.05
DXE-PSAD-250A	2.50	5/16"-18	\$17.05
DXE-PSAD-300A	3.00	5/16"-18	\$18.60

V-Bolt Style

V-Bolt Part Number	Nominal Size	Thread Bolt Size	Price Each
DXE-PCAVS-1P	0.50 to 1.75	1/4"-20	\$10.90
DXE-PCAVS-2P	1.00 to 2.00	5/16"-18	\$12.95

Dimensions in Inches.

DX Engineering Stainless Steel V-Clamps

Our stainless steel V-clamps are ideal for mounting accessories to steel pipe. The V-saddle has serrations that bite into the tube or pipe surface, providing a strong, secure hold. For this reason, these clamps are not recommended for aluminum tubing or pipe. The bolts supplied are long enough to attach tubing to thick plates and have anti-corrosive properties for long life. Some clamps are available with a tab and 1/4" hardware for adding grounding wires.



V-Clamp Part Number	Pipe Size	Ground Lug	Price Each
DXE-SSVC-1P	1/2" to 3/4"	No	\$6.95
DXE-SSVC-1PG	1/2" to 3/4"	Yes	\$7.95
DXE-SSVC-150P	1" to 1.5"	No	\$9.95
DXE-SSVC-150PG	1" to 1.5"	Yes	\$10.95
DXE-SSVC-2P	1" to 2"	No	\$11.95
DXE-SSVC-3P	2.375" to 3"	No	\$14.95



Cushioned P-Clamps

DX Engineering P-Clamps are ideal for providing strain relief of coaxial cable connections. The rubber insert grips the cable jacket securely without nicking or cutting the jacket, preventing water entry.

DXE-CPC-250	For RG-8X, RG-6, RG-59 Cable, Pack of 10.....	\$14.95
DXE-CPC-375	For RG-213, RG-8, RG-11 Cable, Pack of 10.....	\$14.95

Highest Quality—Lasting Performance! DX Engineering is famous for its Saddle Clamps—the ones with stainless steel U-bolts or V-bolts and matching cast aluminum saddles. The U-bolts are the exact size for inch-sized tubing O.D.; the saddles feature an as-cast roughness that keeps the tube from sliding. Our Super Duty Saddle Clamps are designed for applications where maximum torque is needed to control large or unbalanced antenna arrays, or for other applications where other torque control products have proven inadequate. Our Resin Support Blocks are useful for securely mounting tubing to any flat surface while providing electrical insulation.

DX ENGINEERING

ECLS-Series Band Clamps with Stud

The ECLS-Series clamps are marine grade stainless steel with a 10-24 stud welded to the band. They are ideal for mechanical fastening to round or odd-shaped members. The clamps can be used for electrical connections (including grounding) or for mechanical assembly of components, attachment of signs, etc. Threaded hardware is included.

Band Clamps with Stud

Part Number	O.D. Tube	Price Each
DXE-ECLS-050	0.500" O.D. Tube	\$9.99
DXE-ECLS-175	1.750" O.D. Tube	\$11.49
DXE-ECLS-062	0.625" O.D. Tube	\$9.99
DXE-ECLS-200	2.000" O.D. Tube	\$11.49
DXE-ECLS-075	0.750" O.D. Tube	\$9.99
DXE-ECLS-225	2.250" O.D. Tube	\$11.49
DXE-ECLS-087	0.875" O.D. Tube	\$10.99
DXE-ECLS-250	2.500" O.D. Tube	\$11.99
DXE-ECLS-100	1.000" O.D. Tube	\$10.99
DXE-ECLS-275	2.750" O.D. Tube	\$11.99
DXE-ECLS-300	3.000" O.D. Tube	\$11.99
DXE-ECLS-125	1.250" O.D. Tube	\$11.49
DXE-ECLS-325	3.250" O.D. Tube	\$11.99
DXE-ECLS-150	1.500" O.D. Tube	\$11.49



Stainless Steel Element Clamps

Typical elements are built using 0.058 inch wall tubing, which allows successive sizes to slide together with good contact. These clamps are used to hold the telescoping tubing in place at the length that you have chosen. Our clamps are marine-grade—they are made entirely of stainless steel, unlike the normal hardware store variety. The high nickel alloy stainless steel meets the demands of severe corrosive environments.



DXE-ECL-020	For 0.500" and smaller Tube	\$1.90
DXE-ECL-040	For 0.625" Tube	\$1.90
DXE-ECL-060	For 0.750" and 0.875" Tube	\$1.90
DXE-ECL-10SS	For 1.00" Tube	\$1.90
DXE-ECL-12SS	For 1.250" and 1.125" Tube	\$1.90
DXE-ECL-16SS	For 1.375" and 1.500" Tube	\$1.90
DXE-ECL-20SS	For 1.625" and 1.750" Tube	\$1.90
DXE-ECL-24SS	For 1.875" and 2.000" Tube	\$1.90
DXE-ECL-28SS	For 2.125" and 2.250" Tube	\$1.90
DXE-ECL-32SS	For 2.375" and 2.500" Tube	\$1.90
DXE-ECL-36SS	For 2.625" and 2.750" Tube	\$1.90
DXE-ECL-40SS	For 2.875" and 3.000" Tube	\$1.90
DXE-ECL-44SS	For 3.25" Max. Tube	\$1.95

Ridgid® Tubing Cutter

This high-quality cutter will make clean, smooth edges in tubing sections that require minimal deburring. The tool can cut aluminum, copper, and brass tubing as well as thin-wall conduit.

- Adjustable from 1/4 inch to 1 1/8 inch O.D.
- Telescoping feed screw design
- Enclosed feed screw eliminates clogging
- Grooved rollers for close-to-flare cuts
- Fold-away reamer
- X-CEL knob and pin for quicker cutting
- Spare cutter wheel included



Pipe and Tube Deburring Tools

If you're building a tower, mast or beam antenna, these tools will be worth their weight in gold. They make the tedious deburring process much easier. These tools smooth the rough edges on the inside and outside of your telescoping aluminum, fiberglass, copper, steel or plastic pipe and tubing, assuring a smooth surface when joined with another section.

DXE-UT-2125



DXE-UT-3500

You can purchase each tool separately or together in a kit that includes both deburring tools, a small hand deburring tool, half-round file and a carrying case.

DXE-UT-2125	Deburring Tool, for .375" to 2.125" O.D. Tubing.....	\$24.95
DXE-UT-3500	Deburring Tool, for 1.875" to 3.5" O.D. Tubing.....	\$29.95
DXE-UT-KIT-DBR	Deburring Tool Kit.....	\$69.95

Drill Guide Kit

This easy-to-use drill guide locates exact drilling centers and guides drill bits perfectly perpendicular to the work piece, including round, spherical, and corner edges. It is ideal for making clean, accurate holes in aluminum tubing for mounting hardware. The kit includes 3/16 inch, 1/4 inch, 5/16 inch, 3/8 inch, 7/16 inch, and 1/2 inch drill bushings, a locating pin, and drill bit guide.



DXE-D3206	Drill Guide Kit	\$15.25
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Deburring Tools

Adjustable Length Deburring Tool

DXE-22600	Deburring Tool	\$13.95
DXE-22110	Replacement Blades for Aluminum/Steel, Pack of 10	\$10.75



Slim Grip Deburring Tool

DXE-22166	Slim-Grip Deburring Tool	\$7.55
DXE-22110	Replacement Blades, 10 Pack;	\$10.75



Never-Seez® and Anti-Seize—a Must for Stainless Steel

- Prevents galling and galvanic corrosion
 - Protects metal parts against rust, corrosion and seizure
- | | | |
|------------|---|----------------|
| DXE-NSBT8 | Never-Seez, 8 oz. Brush Top | \$13.99 |
| DXE-NMCBT8 | Never-Seez, Marine Grade, 8 oz. Brush Top | \$16.95 |
| UMI-81343 | Anti-Seize, 1 oz. Squeeze Tube | \$3.29 |
| UMI-81464 | Anti-Seize, 8.5 oz. Aerosol Can | \$9.99 |
- Hazardous, limited to domestic UPS Ground shipping only.

Penetrox A

- Keeps parts from seizing
 - Helps create a substantial electrical connection between metal parts
 - For aluminum-to-aluminum or aluminum-to-copper connections
- | | | |
|---------|-------------------------------------|----------------|
| DXE-P8A | Penetrox A, 8 oz. Squeeze Tube..... | \$13.95 |
|---------|-------------------------------------|----------------|
- Hazardous, limited to domestic UPS Ground shipping only.



Aluminum Tubing **DX ENGINEERING**

Custom-made for DX Engineering, this high strength Type 6063-T832 seamless drawn aluminum tubing is available in 3 and 6 foot lengths—ideal for your antenna projects. Type 6063 alloy provides good resistance to general corrosion, including stress corrosion cracking, and has excellent surface appearance.

Use the 3 foot lengths for fast taper, low-wind resistance applications. The 6 foot slow taper lengths afford the greatest bandwidth. Most sizes are slit on one end for use with DX Engineering Stainless Steel Element Clamps. If unslit ends are required for your application, merely insert the slit end into the next larger size in the stack and use your own attachment method.

The 0.058 inch wall tubing is available in 1/8 inch increments from 3/8 inch to 2 1/8 inch O.D. It is ideal for a free, yet solid telescoping fit from size to size for vertical or Yagi elements. Some larger sizes are available in 0.120 inch wall, 6061-T8 aluminum, which assures maximum strength at very long assembly lengths.

- High strength Type 6063 seamless aluminum tubing—drawn, not extruded
- Ideal for telescoping antenna elements, support masts, and booms
- Available in unslit and pre-slit lengths
- Use DX Engineering Stainless Steel Element Clamps to assemble lengths of slit tubing

DX Engineering Has Stainless Steel Element Clamps for Exact Tubing Sizes. See DXEngineering.com for Specs and Additional Tubing.

Aluminum Tubing, No Slit

Part Number	O.D.	Wall	Length	Each
DXE-AT1240	0.375"	0.058"	3 Foot	\$1.45
DXE-AT1494	0.500"	0.058"	3 Foot	\$2.05
DXE-AT1495	0.625"	0.058"	3 Foot	\$2.35
DXE-AT1496	0.750"	0.058"	3 Foot	\$2.65
DXE-AT1497	0.875"	0.058"	3 Foot	\$2.75
DXE-AT1498	1.000"	0.058"	3 Foot	\$2.95
DXE-AT1499	1.125"	0.058"	3 Foot	\$3.25
DXE-AT1500	1.250"	0.058"	3 Foot	\$4.15
DXE-AT1501	1.375"	0.058"	3 Foot	\$4.45
DXE-AT1502	1.500"	0.058"	3 Foot	\$5.25
DXE-AT1503	1.625"	0.058"	3 Foot	\$6.05
DXE-AT1504	1.750"	0.058"	3 Foot	\$6.85
DXE-AT1505	1.875"	0.058"	3 Foot	\$7.65
DXE-AT1506	2.000"	0.058"	3 Foot	\$8.45
DXE-AT1255	2.000"	0.120"	3 Foot	\$14.85
DXE-AT1507	2.125"	0.058"	3 Foot	\$9.25
DXE-AT1189	0.375"	0.058"	6 Foot	\$2.95
DXE-AT1480	0.500"	0.058"	6 Foot	\$4.15
DXE-AT1481	0.625"	0.058"	6 Foot	\$4.75
DXE-AT1482	0.750"	0.058"	6 Foot	\$5.35
DXE-AT1483	0.875"	0.058"	6 Foot	\$5.65
DXE-AT1484	1.000"	0.058"	6 Foot	\$5.95
DXE-AT1485	1.125"	0.058"	6 Foot	\$6.55
DXE-AT1486	1.250"	0.058"	6 Foot	\$7.75
DXE-AT1487	1.375"	0.058"	6 Foot	\$8.45
DXE-AT1488	1.500"	0.058"	6 Foot	\$8.95
DXE-AT1489	1.625"	0.058"	6 Foot	\$9.75
DXE-AT1490	1.750"	0.058"	6 Foot	\$10.65
DXE-AT1491	1.875"	0.058"	6 Foot	\$11.55
DXE-AT1492	2.000"	0.058"	6 Foot	\$12.45
DXE-AT1493	2.125"	0.058"	6 Foot	\$13.35

Aluminum Tubing Slit 1 End

Part Number	O.D.	Wall	Length	Each
DXE-AT1241	0.500"	0.058"	3 Foot	\$3.75
DXE-AT1242	0.625"	0.058"	3 Foot	\$4.05
DXE-AT1243	0.750"	0.058"	3 Foot	\$4.35
DXE-AT1244	0.875"	0.058"	3 Foot	\$4.45
DXE-AT1245	1.000"	0.058"	3 Foot	\$4.65
DXE-AT1246	1.125"	0.058"	3 Foot	\$4.95
DXE-AT1247	1.250"	0.058"	3 Foot	\$5.85
DXE-AT1248	1.375"	0.058"	3 Foot	\$6.15
DXE-AT1249	1.500"	0.058"	3 Foot	\$6.95
DXE-AT1250	1.625"	0.058"	3 Foot	\$7.75
DXE-AT1251	1.750"	0.058"	3 Foot	\$8.55
DXE-AT1252	1.875"	0.058"	3 Foot	\$9.35
DXE-AT1253	2.000"	0.058"	3 Foot	\$10.15
DXE-AT1254	2.125"	0.058"	3 Foot	\$10.95
DXE-AT1205	0.500"	0.058"	6 Foot	\$6.05
DXE-AT1206	0.625"	0.058"	6 Foot	\$6.65
DXE-AT1207	0.750"	0.058"	6 Foot	\$7.25
DXE-AT1208	0.875"	0.058"	6 Foot	\$7.55
DXE-AT1209	1.000"	0.058"	6 Foot	\$7.85
DXE-AT1210	1.125"	0.058"	6 Foot	\$8.45
DXE-AT1211	1.250"	0.058"	6 Foot	\$9.65
DXE-AT1212	1.375"	0.058"	6 Foot	\$10.35
DXE-AT1213	1.500"	0.058"	6 Foot	\$10.85
DXE-AT1214	1.625"	0.058"	6 Foot	\$11.65
DXE-AT1215	1.750"	0.058"	6 Foot	\$12.55
DXE-AT1216	1.875"	0.058"	6 Foot	\$13.45
DXE-AT1217	2.000"	0.058"	6 Foot	\$14.35
DXE-AT1218	2.125"	0.058"	6 Foot	\$15.25

6061-T8 Aluminum Tubing, Heavy Wall, Unslit—Ideal for Booms and HD Element Designs!

Part Number	O.D.	Wall	Length	Each
DXE-AT1311	1.500"	0.120"	6 Foot	\$23.85
DXE-AT1312	1.750"	0.120"	6 Foot	\$28.20
DXE-AT1313	2.000"	0.120"	6 Foot	\$33.00
DXE-AT1314	2.250"	0.120"	6 Foot	\$37.45
DXE-AT1315	2.500"	0.120"	6 Foot	\$42.50
DXE-AT1316	2.750"	0.120"	6 Foot	\$46.95
DXE-AT1317	3.000"	0.120"	6 Foot	\$51.40
DXE-AT1325	3.000"	0.120"	12 Foot	\$103.95

Guy Rings

You can use DX Engineering's newly engineered Guy Rings to secure your rope guys and stabilize your DX Engineering, Hustler or other aluminum vertical antenna. They're also great for our Telescoping Fiberglass and Aluminum Tubing Kits. These guy rings are super strong, virtually impervious to the elements and fit 0.75", 1.0", 1.25", 1.50" and 2.0" O.D. tubing. For all the specs, please visit DXEngineering.com.

DXE-GR-5P Guy Rings, Set of 5 **\$7.95**

**DX Engineering Fiberglass Tubing**

DX Engineering 1/8" wall extruded fiberglass tubing is available in telescoping lengths. The strong 8 foot lengths are ideal for building your own antenna support, like quad spreaders and insulated UHF stacking frames—even push-up masts.

The optional slit ends are ideal for clamping without drilling (drilling weakens the tubing). Don't forget DX Engineering Stainless Steel Element Clamps for a final, long-lasting assembly or easy-to-assemble portable installation.

Telescoping Fiberglass Unslit Tubing

Part Number	O.D.	Wall	Length	Each
DXE-FT0500-8	0.500"	0.125"	8 Foot	\$6.45
DXE-FT0750-8	0.750"	0.125"	8 Foot	\$8.95
DXE-FT1000-8	1.000"	0.125"	8 Foot	\$9.95
DXE-FT1250-8	1.250"	0.125"	8 Foot	\$11.95
DXE-FT1500-8	1.500"	0.125"	8 Foot	\$18.95
DXE-FT1750-8	1.750"	0.125"	8 Foot	\$20.95
DXE-FT2000-8	2.000"	0.125"	8 Foot	\$25.95
DXE-FT2250-8	2.250"	0.125"	8 Foot	\$34.95
DXE-FT2500-8	2.500"	0.125"	8 Foot	\$38.95
DXE-FT2750-8	2.750"	0.125"	8 Foot	\$44.95

Telescoping Fiberglass Tubing with 1 End Slit

Part Number	O.D.	Wall	Length	Each
DXE-FT0750-8S	0.750"	0.125"	8 Foot	\$13.95
DXE-FT1000-8S	1.000"	0.125"	8 Foot	\$14.95
DXE-FT1250-8S	1.250"	0.125"	8 Foot	\$16.95
DXE-FT1500-8S	1.500"	0.125"	8 Foot	\$23.95
DXE-FT1750-8S	1.750"	0.125"	8 Foot	\$25.95
DXE-FT2000-8S	2.000"	0.125"	8 Foot	\$30.95
DXE-FT2250-8S	2.250"	0.125"	8 Foot	\$39.95
DXE-FT2500-8S	2.500"	0.125"	8 Foot	\$44.95
DXE-FT2750-8S	2.750"	0.125"	8 Foot	\$49.95

Telescopic Aluminum Mast

Perfect for stealth operation, this mast can quickly extend from a mere 4.5 feet to almost 15 feet. It handles antennas up to 22 pounds and features a guy bracket (45 feet of guy line is included) to keep it rock-steady when extended. The mast's top tube is .875" O.D. and the bottom tube is 1.625" O.D., all in portable package that only weighs three pounds.

CMA-CP-45 Telescopic Aluminum Mast..... **\$99.95**

**Aluminum Tripod**

The perfect companion to your Telescopic Aluminum Mast, this portable tripod is an easy way to get on the air for Field Day or EMCOMM. It can handle a guyed mast up to 55 inches long while supporting 22 pounds of antenna load.

CMA-YS-45 Aluminum Tripod..... **\$119.95**

Phillystran® Non-Metallic Tower Guy Line



These insulator-free, non-metallic guys have been protecting the towers of knowledgeable amateur radio operators since 1973. Following their introduction, Phillystran Guy Lines have been installed on more than one thousand commercial broadcast towers worldwide. Electrically transparent Phillystran tower guys are protected by an extruded jacket, providing excellent resistance to weather and abrasion.

- Complete isolation of tower-guy system from the antenna field
- Improved signal coverage, eliminating distortion caused by re-radiated signals
- Quick, easy, maintenance-free tower installations
- A neat tower appearance, free of corroded steel guys and troublesome ceramic insulators (solving arcing white noise issues, too)
- No need to calculate guy lengths to avoid guyline resonance
- No insulators required
- None of the stretching or aging problems associated with conventional synthetic ropes
- Never again be bothered by zapping, snapping and crackling across porcelain insulators

PHI-HPTG-1200I	4mm Dia., 1,200 Lbs. Break Strength	per foot \$0.49
PHI-HPTG-2100I	6mm Dia., 2,100 Lbs. Break Strength	per foot \$0.75
PHI-HPTG-4000I	8mm Dia., 4,000 Lbs. Break Strength	per foot \$0.99
PHI-HPTG-6700I	9mm Dia., 6,700 Lbs. Break Strength	per foot \$1.39
PHI-HPTG-11200I	11mm Dia., 11,200 Lbs. Break Strength	per foot \$2.39

Phillystran® Big Grip Dead-Ends

Phillystran has answered the call for field-installable, nonmetallic tower-guy systems with HPTG-I and PLP Big Grip Dead-Ends. Phillystran Big Grip Dead-Ends have a variety of unique features:

- Grip designed to match rope twist direction (RHL)
- Special-sized wires for ease of application
- Galvanized steel and "C" coat construction
- Color-coded for ease of identification
- Longer length to match Phillystran's high performance Forged steel galvanized wire rope clips are recommended for the small PHI-HPTG-1200I Guy Line

DXE-6990334	3/16" Wire Rope Clip, Use with HPTG-1200I	\$3.29
PHI-PLP-2738	Blue Tag, use with HPTG-2100I Guy Line	\$9.00
PHI-PLP-2739	Yellow Tag, use with HPTG-4000I Guy Line	\$12.00
PHI-PLP-2755	Red Tag, use with HPTG-6700I Guy Line	\$18.00
PHI-PLP-2558	Black Tag, use with HPTG-11200I Guy Line	\$21.00

Galvanized Thimbles Phillystran® Guy Line

Extra heavy-duty, hot-dip galvanized steel for strength and long life.

DXE-1037639	Use with HPTG-1200I Guy Line	\$0.95
DXE-1037675	Use with HPTG-2100I Guy Line	\$1.45
DXE-1037693	Use with HPTG-4000I Guy Line	\$2.45
DXE-1037719	Use with HPTG-6700I/11200I Guy Line	\$3.45

Vinyl End Caps Phillystran® Guy Line

Heavy-duty vinyl to cover and protect cut cable ends. 20 per pack.

DXE-H166	Use with HPTG-1200I Guy Line	\$5.95
DXE-H165	Use with HPTG-2100I Guy Line	\$5.95
DXE-H164	Use with HPTG-4000I Guy Line	\$5.95
DXE-H142	Use with HPTG-6700I Guy Line	\$5.95
DXE-H204	Use with HPTG-11200I Guy Line	\$5.95

Accessory Items for Phillystran® Guy Line

Cable Price Per Foot	Big Grip Price Each	Thimble Price Each	End Cap Price 20 Pack
PHI-HPTG-1200I... \$0.49		DXE-1037639... \$0.95	DXE-H166... \$5.95
PHI-HPTG-2100I... \$0.75	PHI-PLP-2738... \$9.00	DXE-1037675... \$1.45	DXE-H165... \$5.95
PHI-HPTG-4000I... \$0.99	PHI-PLP-2739... \$12.00	DXE-1037693... \$2.45	DXE-H164... \$5.95
PHI-HPTG-6700I... \$1.39	PHI-PLP-2755... \$18.00	DXE-1037719... \$3.45	DXE-H142... \$5.95
PHI-HPTG-11200I... \$2.39	PHI-PLP-2558... \$21.00	DXE-1037719... \$3.45	DXE-H204... \$5.95

DX ENGINEERING

3/16" Wire Rope Clip

Forged steel galvanized wire rope clips are recommended for the small 3/16" Guy Line. Made from extra heavy-duty, galvanized, forged carbon steel, for 3/16" wire rope. A minimum of 2 clips is required.

DXE-6990334	3/16" Wire Rope Clip, Use with HPTG-1200I ...	\$3.29
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DX ENGINEERING

50 Foot Telescoping Fiberglass Tubing Mast Kit

- Custom-made tubing for DX Engineering
- Smoothly telescoping
- Neutral light gray color
- Includes DX Engineering Stainless Steel Element Clamps to assemble slit lengths

DXE-FTK50	Telescoping Tubing Kit	\$138.00
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Telescoping Aluminum Antenna Kit

- Eleven telescoping sections from 2" to 7/8" O.D.
- Stainless steel element clamps

DXE-ATK65	Telescoping Aluminum Antenna Kit	\$194.50
DXE-VE-BASE	Vertical Antenna Fixed Base Assembly	\$99.50
DXE-VA-BASE	Vertical Antenna Heavy-Duty Tilt Base Assembly	\$159.95



Telescoping Masts

Rohn telescoping masts are available in 28', 34', 36' and 43' nominal heights. They are pre-galvanized for corrosion protection and come assembled with hardware. All masts must be guyed or bracketed; installation should be done by experienced professionals. Telescoping masts are not recommended for commercial, CB or beam antenna installations.

ROH-H30	28' Telescoping Mast	\$79.95
ROH-H40	36' Telescoping Mast	\$119.95
ROH-H50	43' Telescoping Mast	\$144.95
ROH-9H50	34' Telescoping Mast, UPS-shippable	\$129.95



Guy Tools

You've got a lot of money invested in your mast and antenna, and you've selected reliable guy line—now the weak link in mast stability could literally be your links! Gripper is an industry leader in wire joiners and tensioners, offering professional-grade products that have been fully vetted in practically every environment on Earth. When it comes time to erect your mast, don't overlook the importance of having the right tools and grips for the job.

Cable Cutters

Cutting steel cables and guy lines is no easy task. Gripper offers the tools to make it manageable. Made with hardened jaws for durability and vinyl grips for comfort, they are designed to be the only cutters you'll ever need. The innovative design multiplies your own strength to make cuts clean and effortless.

The Regular Cable Cutter can handle cutting up to 3/16" O.D. EHS steel cable. The Large Cable Cutter is designed for cutting cable up to 1/4" diameter.

GPL-CUTTER-1-4	Large Cable Cutter	\$95.95
GPL-CUTTERGRIPPL	Regular Cable Cutter	\$35.95

Lockable Guy Line Grip and Key

As an easy way to assemble and re-tension your 1/8" EHS guy line, you can use these grips and keys to terminate cable and keep it secure. The Grip's innovative design uses external pressure to lock the cable in place until you use the key to release it, making them easy to install and adjust. They're tailored to .125" (3mm) guy lines.

The Lockable Release Keys are a must for re-tensioning cables and removing the grips. You just inset the key and push; the internal wedges are released and the grip is free. Choose from the ergonomically designed Logo Key or the high-visibility Flag-Shaped Key.

GPL-LK-1-8-160BB	Lockable Guy Line Grip	\$5.95
GPL-KEY-FLAG	Lockable Release Key, Flag	\$0.95
GPL-KEY-LOGO	Gripper Logo Setting Key	\$3.99



More Products, Specs and Photos at DXEngineering.com

Shipping the Big Stuff

DX Engineering will arrange to ship larger tower sections and masts to you for an additional truck freight fee. The fee depends on the product you've ordered. So even if you've ordered a large item, you can expect it to get to your door quickly.

Heavy-Duty Tripod Roof Mount



This five foot tall, commercial-strength mount is an ideal support for medium size antennas such as the DX Engineering HEXX Beam. The mount is also a good choice for small HF or VHF Yagi or tri-band antennas as well as HF and VHF vertical antennas.

The tall tripod configuration allows peak mounting on a variety of pitched or flat roofs. The 1.5" O.D. steel legs have two 10 inch long mounting feet each. Each mounting foot is secured with five lag bolts. Thirty lag bolts are supplied, along with tar strips for weatherproofing under each foot.

A five foot long, 2" O.D. steel antenna/rotor mounting mast is also furnished for easy mounting of rotors such as the Hy-Gain CD-45II and HAM-series.

RON-1011 Heavy-Duty 5' Tripod Roof Mount...**\$149.95**

Rotor-Ready Heavy-Duty Chimney Roof Mount

Use this ready-to install package for chimney mounting medium size antennas with rotors (such as the DX Engineering HEXX Beam) and small HF or VHF Yagis and tri-banders. The mount is also ideal for HF and VHF vertical antennas with no rotors.

Two sections of 1.5" O.D., 16-gauge steel mast are supplied. The 42" long section is preassembled with chimney corner brackets for fastening to the chimney and antenna/rotor mounting. The 24" long section is for mounting the antenna to the upper bracket of a rotor such as the Hy-Gain CD-45II and HAM-series.

The four chimney corner brackets are 1.5" wide 11-gauge steel. The stainless steel fastening straps are 24 feet long, more than long enough for multiple-flue residential and even commercial chimneys. Shipped partially assembled for quick installation.

RON-3324 Heavy-Duty Chimney Roof Mount...**\$149.95**

Tripod Roof Towers

Feature a universal mast clamp that is capable of mounting masts with up to 1.75 in. diameters and bolt-on swivel feet that adjust to the pitch of almost any roof. Installation is simple and fast with lag screws (not included) in the base feet that securely anchor the towers for long, trouble-free service. Rohn tripod roof towers feature a lower mast support bracket, hot-dip galvanized construction for corrosion protection, and prevailing torque locknuts on the bolt-on feet.

ROH-TRT36 Tripod Roof Tower, 3'**\$49.95**

ROH-TRT60 Tripod Roof Tower, 5'**\$64.95**

Adjustable House Brackets

Perfect for bracing your lightly guyed or self-supporting Rohn 25G series tower, these adjustable brackets let you compensate for eaves and overhangs. They're great solutions if your community requires all self-supported or guyed towers to be bracketed.

Part Number	Wall Clearance	Width	Price
ROH-HB25BG	Adjustable 0-24"	25"	\$135.95
ROH-HB25AG	Adjustable 0-15"	25"	\$99.95
ROH-HB25CG	Adjustable 0-36"	30"	\$144.95



Rohn 55G Products LLC 50' Fold-Over Tower

The top of the 55G can be lowered down to ground level so maintenance and replacements can be performed at a comfortable and safe working level without climbing to dangerous heights. When the work is complete, the tower is easily returned to the upright position and locked into place. You never have to leave the ground!

The Rohn 55FK design is based on 90 mph winds with no ice. 20', 30', 40', and 60' tall towers are also available.

ROH-55FK-50LAB 55G Fold-Over Assembly... **\$7,599.95**
ROH-45GSRB 45GSR Concrete Base, Short 4.29'**\$479.95**

Erection Fixture

You probably call this a Gin Pole, it is a must-have tool to safely raise or repair your tower. The fixture is designed for 25G or 45G towers. It has the correct sheave and clamps to do the job right, you supply the rope and muscle.

ROH-EF2545 Erection Fixture.....**\$899.95**

Work Platform

Don't get your feet stuck in the cross-bracing, install this platform on your 25G Tower and perform your repairs safely. Snaps into place and lets you work without strain.

ROH-WP25G Work Platform**\$139.95**

Telescopic Mast Ground Mount

Built for your Rohn H and 9H (or any other 1.25"-1.5" telescopic mast), simply drive this ground mount into the soil, add your guy lines and get on the air.

ROH-GTMBL Ground Mount.....**\$49.95**

Turnbuckle

Never trust your guy line tension to an average hardware store turnbuckle. Only use genuine Rohn accessories. This turnbuckle has a 1,200 pound working load with an extended/retracted length of 12/18 inches.

ROH-3-8TBE-J Turnbuckle**\$39.95**

Installation Accessories

Part Number	Description	Price
ROH-618	6-Strand 18 AWG Wire, 1,000' Reel	\$95.95
GPL-LK-1-8-160BB	618/620 Wire Gripper	\$5.95
ROH-3-16EHS500	HDG Guy Wire, 3/16" EHS x 500' Coil	\$124.95
ROH-3-16EHS1000	HDG Guy Wire, 3/16" EHS x 1,000' Coil	\$249.95
ROH-1-4EHS500	HDG Guy Wire, 1/4" EHS x 500' Coil	\$182.00
ROH-BG2142	Big Grip, 3/16" with End Sleeve	\$11.95
ROH-BG2144	Big Grip, 1/4" with End Sleeve	\$13.95
ROH-GAC3455TOP	Anchor Rod, 3455, .75" dia. x 7'	\$119.95
ROH-GAR30	Anchor Rod, Eye, Rated to 7,330 lbs.	\$41.95
ROH-GAS604	Screw Anchor	\$64.95
ROH-EP25343	Equalizer Plate Assembly 25, 3-Hole	\$45.95
ROH-EP25345	Equalizer Plate Assembly 25, 5-Hole	\$59.95
ROH-TB3	HD Thrust Bearing for 25G, 45AG, 55AG	\$149.95
ROH-TB4	HD Thrust Bearing for 45AG, 55AG	\$179.95
ROH-25AJBK	25AG Joint Bolt Kit	\$6.95
ROH-45JBK	45G Joint Bolt Kit	\$11.95
ROH-HBUTVRO	Universal HD House Bracket, 18-36" Standoff for 25G, 45G, 55G	\$234.95
ROH-3-4X12PP	Base Pier Pin, 3/4" x 12" - 25G, 45G, 55G	\$22.95

Rohn Commercial Towers DX Engineering is now an Authorized Distributor of Rohn Commercial Tower products and accessories. We have the Rohn products you need to solve your tower structural needs—contact us for technical information and availability.



The World Leader in Towers

Rohn has been the world leader in tower design and manufacturing for more than six decades. Rohn maintains one of the largest manufacturing and staging facilities in the industry—it is committed to supplying the best.

Designed for areas where land cost or availability are not an issue, Rohn GT Series guyed towers provide one of the most cost effective solutions in the industry. Guyed towers install quickly and are often the choice of broadcast communications tower stations and backbone system providers.

All GT Series towers are built with high strength steel tubing that is hot-dip galvanized after fabrication. Rohn's exclusive Zig-Zag® solid rod bracing provides exceptional strength.

All Rohn towers, poles and masts must be installed and dismantled by trained personnel. See the Rohn manuals and drawings for detailed information.

25G Tower and Accessories

The Model 25 originated at Rohn and the original still stands as the benchmark of lightweight guyed tower design quality. The 25G is available in the standard 10' section length and in a special order, UPS-shippable 7' length. The 25G uses double-bolted joints—proven to be the best method of joining tower sections for sturdiness and dependability. The 25G stands 190' tall.

- Completely hot-dip galvanized after fabrication
 - Built on a stable 11.25" equilateral triangle design
 - High strength tubular legs joined by Zig-Zag® crossmembers
 - Each section length is shipped with all required nuts and bolts
 - Continuous solid round steel bracing
- | | | |
|------------|--|-----------------|
| ROH-25G | 25G Standard Section, 10' | \$117.95 |
| ROH-25AG2 | 25G Top Section, accepts 2" O.D. Mast..... | \$189.95 |
| ROH-SB25G5 | 25G Short Base, 5'..... | \$99.95 |
| ROH-SB25G | 25G Short Base, 3.33' | \$72.95 |
| ROH-25GSSB | 25G Self Supporting Base Plate... | \$179.95 |
| ROH-BPH25G | 25G Hinged Base Plate..... | \$279.95 |
| ROH-SBH25G | 25G Short Hinged Base, 3.33' | \$229.95 |
| ROH-SDB25G | Drive-In Base Plate for Temporary Use..... | \$254.95 |
| ROH-AS25G | 25G Top Single Accessory Shelf..... | \$52.95 |
| ROH-GA25GD | 25G Guy Bracket Assembly with Hardware | \$159.95 |
| ROH-UHF25G | 25G Side Arm Mount..... | \$31.95 |
| ROH-BPC25G | Concrete Base Plate for 25G | \$68.95 |

45G Tower and Accessories

The 45G is a true multi-use structure that provides excellent strength for applications up to 300' tall.

- Completely hot-dip galvanized after fabrication
 - Built on a stable 16.75" equilateral triangle design
 - High strength tubular legs joined by Zig-Zag® cross members
 - Continuous solid round steel bracing
 - Each section is shipped with all required nuts and bolts
- | | | |
|------------|---|-----------------|
| ROH-45G | 45G Standard Section, 10' | \$234.95 |
| ROH-45AG | 45G Top Section, 9' | \$299.95 |
| ROH-SB45G | 45G Short Base, 5' | \$119.95 |
| ROH-BPL45G | 45G Top Plate for TB3 & TB4 Bearings | \$219.95 |
| ROH-BPC45G | 45G Concrete Base Plate | \$119.95 |
| ROH-AS45G | 45G & 55G Accessory Shelf | \$112.95 |
| ROH-GA45GD | 45G Guy Bracket Assembly with Hardware..... | \$149.95 |



Insulated Boom-to-Element Brackets

DX Engineering offers insulated boom-to-element brackets to fit 1.75 inch, 2 inch and 3 inch booms. The non-metallic brackets electrically insulate the elements from the boom, which virtually nullifies the shortening effect that the boom and the normal metallic boom-to-element plates have on element length. This means the element lengths determined through the use of commonly available antenna design programs like YO, EZNEC and others will correspond more closely to the actual lengths needed. In most cases, the cost of the boom-to-element brackets will be less than using a metallic plate and the necessary saddle clamps.

DX ENGINEERING



DXE-BEB-1

The DXE-BEB-1 is used to replace KLM or equivalent boom-to-element brackets or for any other application where insulated elements are desired. This patented DX Engineering bracket is made from a much stronger material and has a vastly improved design. It is 5 times as strong as the original brackets and allows use of up to 1.25 inch O.D. element tubing. Use the DXE-ELA-1-2 Element Adapters to use a 1 inch diameter element with the DXE-BEB-1.



The DXE-BEB-1 is designed to use DX Engineering's Gorilla Grip™ stainless steel boom clamps that will end all of your concerns about elements rotating on the boom. DX Engineering offers two hardware kits. The standard kit is a direct KLM hardware replacement with #10 fasteners for the elements. It includes Gorilla Grip™ stainless steel boom clamps, stainless steel bolts with nuts and washers to attach clamps to the DXE-BEB-1 element bracket, and stainless steel bolts with nuts and washers to attach elements or adapters to the element brackets. The nuts have nylon inserts and are vibration-resistant. The heavy-duty kit uses 1/4 inch bolts and hardware, so it is not a direct replacement for KLM brackets, but is similar in all other respects to the standard hardware kit.

DXE-BEB-1	Insulated Boom-to-Element Bracket, 3" Boom	\$49.95
DXE-BEB-1HWK	KLM Direct Replacement Hardware Kit	\$25.95
DXE-BEB-1HWK-2	Hardware Kit with 1/4" Bolts	\$25.95
DXE-ELA-1-2	Element Adapters, 1.25" to 1", for DXE-BEB-1	\$9.95

These brackets are made for 3 inch O.D. booms only. For 2 inch booms, please use DXE-BEB-2.

DXE-BEB-2

The DXE-BEB-2 is made from an extremely strong polymer that is also highly UV-resistant. When bolted to your 2 inch boom with our hardware kit, it will easily support a split 20 meter element without a fiberglass centerpiece. It is a convenient, low-cost method for the insulated attachment of elements when building Yagi, LPDA or other antennas on 2 inch booms.



It accepts up to a 7/8 inch element, which is suitable for antennas built for 6 meters up thru 20 meters with reasonable wind survivability. For larger antennas, please use our DXE-BEB-1 Boom-to-Element Bracket.

The DXE-BEB-2 comes in 2 pieces and bolts together with a DXE-BEB-2HWK Stainless Steel Hardware Clamp Kit that also holds it securely to the boom. The hardware kit includes four stainless steel bolts, washers and lock nuts that securely clamp the element halves together, and a Gorilla Grip™ stainless steel boom clamp with the stainless steel bolts, nuts and washers that attach it to the element bracket. Nuts are vibration-resistant with nylon inserts. DXE-BEB-2HWK Hardware Kit for the DXE-BEB-2 Bracket is sold separately. Larger antennas that experience high winds will require the boom clamp to be pinned to the boom.

DXE-BEB-2	Insulated Boom-to-Element Bracket, 2" Boom	\$16.95
DXE-BEB-2HWK	Hardware Kit for DXE-BEB-2	\$13.95

DXE-BEB-3

Great for 6 meter Yagi antennas! The DXE-BEB-3 Insulated Boom-to-Element Bracket is the convenient, low cost way to mount elements to smaller (1 inch to 1.75 inch) booms. The bracket accepts elements up to 3/4 inches.

Use the DXE-SEI-1 Split Element Insulator for 3/4 inch O.D. aluminum tube used for the driven element. The insulator allows the element to be securely clamped without crushing the tube.

DXE-BEB-3	Insulated Boom-to-Element Bracket, 1" to 1.75" Boom	\$4.49
DXE-SEI-1	Split Element Insulator	\$6.49

DXE-SEI-1

DXE-BEB-3



DXE-BEP-4B

Boom-to-Element Plates

Boom-to-element plates are similar in function to insulated boom-to-element brackets, in that they each attach the elements to the boom. The primary advantage of plates over brackets is that it is a simple mechanical arrangement. The main disadvantage is that the plate does not insulate the element from the boom, which means that the element dimensions that you bring from your antenna design program (YO, AO, EZNEC and others) will be incorrect unless you make some length adjustment for the width of the plate and boom.

DXE-BEP-4B

Fabricated from alloy 6061-T6 aluminum, the DXE-BEP-4B is primarily for the smaller 6 meter, 10-12 meter and 17-15 meter beam. This plate can also be used to mount smaller VHF/UHF antennas to a mast using appropriate clamps. The dimensions of the DXE-BEP-4B are 8 inch L x 3.5 inch W x 0.25 inch T. This plate comes pre-drilled for DX Engineering Saddle Clamps.

- For mounting a 2 inch boom use (2) DXE-SAD-200A Clamps
- For mounting a 1.50 inch boom use (2) DXE-SAD-150A Clamps
- For mounting a 1.25 inch grounded element use (2) DXE-SAD-125A Clamps
- For mounting a 1 inch grounded element use (2) DXE-SAD-100 Clamps
- For mounting a 3/4 inch grounded element use (2) DXE-SAD-075 Clamps

DXE-BEP-5B

Fabricated from alloy 6061-T6 aluminum, the DXE-BEP-5B is for the larger 17-15 meter and 20 meter beams. This plate can also be used to mount smaller VHF/UHF antennas to a mast using appropriate clamps. The dimensions of the DXE-BEP-5B are 8 inch L x 3.5 inch W x 0.25 inch T. The plate comes pre-drilled for DX Engineering saddle clamps.



- For mounting a 3 inch boom use (2) DXE-SAD-300A Clamps
- For mounting a 2 inch boom use (2) DXE-SAD-200A Clamps
- For mounting a 1.50 inch grounded element use (2) DXE-SAD-150A Clamps
- For mounting a 1.25 inch grounded element use (2) DXE-SAD-125A Clamps
- For mounting a 1 inch grounded element use (2) DXE-SAD-100 Clamps

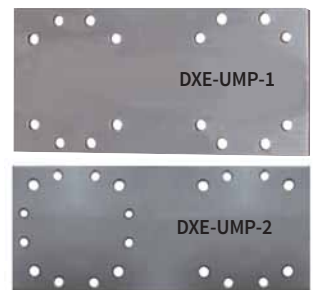
DXE-BEP-4B	Boom-to-Element Plate, 1.5" or 2" booms	\$19.45
DXE-BEP-5B	Boom-to-Element Plate, 2" or 3" booms	\$20.45

Multi-Purpose Mounting Plates

These universal mounting plates can be used for many applications. They are available in aluminum or non-conductive black polymer and come blank or pre-drilled to accept our standard DXE-CAVS-1P V-Saddle Clamps, which can accommodate tubing or pipe from 1/2 inch to 1.75 inch O.D.

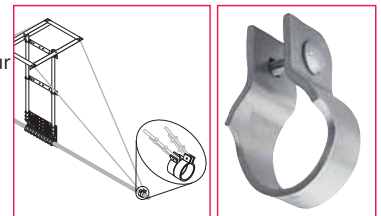
If you are looking for larger sizes, one of our Boom-to-Mast Plates may work. They are available for 1.75 inch, 2 inch, and 3 inch O.D. tubing or pipe. Visit DXEngineering.com for the clamps recommended for use with each specific plate.

DXE-UMP-1	Universal Mounting Plate for 1.75" Saddle Clamp	\$15.00
DXE-UMP-2	Universal Mounting Plate for 2" Saddle Clamp	\$15.00
DXE-MMP-P2	Non-Conductive Blank Polymer Plate, 1/4" x 7.5" x 11.5"	\$7.50
DXE-MMP-P3	Non-Conductive Blank Polymer Plate, 1/4" x 7.5" x 16"	\$9.90



Boom Support Systems

As antennas become larger, booms become longer, or the wind speed becomes higher, our 3 inch Boom Support Systems will keep the boom straight. Your antenna will look better, perform better, and survive storms in better shape. Many of the individual pieces in these systems are available separately so you can design and build your own support systems.



2 Inch Boom Support Components

DXE-ATBB-2	2" Boom Bracket	\$10.75
DXE-TCS-1	Truss Bracket	\$23.50

3 Inch Dual Boom Support System and Components

DXE-ATBB-3	3" Boom Bracket	\$12.75
DXE-TCS-1	Truss Bracket	\$23.50

Turnbuckles

DXE-TRBK-14	Turnbuckle, 5.25" Retracted, 7.375" Extended	\$6.45
DXE-TRBK-15	Turnbuckle, 6.5" Retracted, 9.125" Extended	\$8.85





ROH-WM12S



ROH-WM12S

New!
ROHN™
Products LLC


ROH-WM18S

Wall Mounts

Take advantage of rigid walls, use a Rohn Wall Mount to install your antenna. These mounts include all the clamps and hardware you need, just add your mast and you're ready to go. They handle .875"-2.75" O.D. tubing and hold the mast away from your wall. They're hot-dip galvanized to resist corrosion.

Part Number	Description	Wall Clearance	Brackets Included	Price
ROH-WM4	Double Bracket Wall Mount	3"	2	\$28.95
ROH-WM12S	Extended Wall Mount	12"	1	\$30.95
ROH-WM18S	Extended Wall Mount	18"	1	\$33.95
ROH-WM18D	Double Bracket Extended Wall Mount	18"	2	\$53.95

DX ENGINEERING

Hairpin-Style Driven Element Matching Kits

Most Yagi antennas have a feedpoint impedance of about 25 Ω . Obviously, this will not allow a connection to a 50 Ω feedline without a serious mismatch. There are various ways to match the driven element to the feedline successfully. Gamma, T-Match, and the Hairpin (aka Beta Match) are favorites.

The Gamma match is an unbalanced system that typically distorts the antenna pattern. The T-Match is basically two Gamma match systems on either side of the boom, which corrects the imbalance but is a mechanical nightmare and difficult to tune correctly.

The DX Engineering Hairpin is balanced and easy to tune. It has the correct electrical and mechanical design to allow it to be easily installed and tuned in 10 minutes, and has enough capacity for almost any Yagi design.

For use with BEB-2 Insulated Boom-to-Element Brackets

DXE-HMS-1P 2" Boom **\$39.95**

For use with BEB-3 Insulated Boom-to-Element Brackets and an SEI Split Element Insert

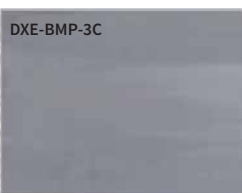
DXE-HMS-2P 1" to 1.75" Boom **\$39.95**

For use with BEB-1 Insulated Boom-to-Element Brackets

DXE-HMS-4P 3" Boom **\$39.95**

Boom Mounting Plates

Use these plates to build, mount or repair your Yagi antenna. These quarter inch-thick aluminum plates are super-strong to prevent twisting and distortion. They also represent an excellent way to mount your boom to the side of your mast or tower. The DXE-BMP-2B plate is pre-drilled to accept DX Engineering's Saddle Clamps. We can help you select the appropriate clamp for your application, visit online or call us.



DXE-BMP-3C

DXE-BMP-1C Plate for 2"-3" Mast, Undrilled, 30" W x 18" L **\$78.50**

DXE-BMP-3C Plate for 2"-3" Mast, Undrilled, 24" W x 18" L **\$58.50**

DXE-BMP-2B Plate for 1.5"-3" Mast, Pre-Drilled, 8" W x 10" L **\$34.75**

Yagi Mechanical® Antenna Design Software

Yagi Mechanical® is a tool for anyone who designs their own antennas or is interested in modeling an antenna they already own. Electrical design is first and foremost in crafting a useful antenna, but the mechanical side of things is also critical. After all, what good is a great performing antenna if the wind is going to break the elements when you put it up on a tower?

DX Engineering's Yagi Mechanical Antenna Design Software enables you to analyze your designs and instantly see where a failure could occur. Whether you use it to find weak points in old designs or to start brand new designs with robust mechanical properties, Yagi Mechanical will provide you with the tools you need to test your elements for wind and ice, to balance weight and torque on the boom, and determine if the materials you have selected are up to the task.

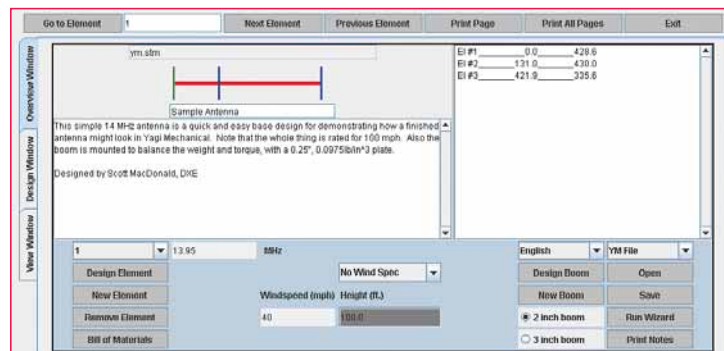
Call it good planning for the kind of stress your antennas are going to see. Call it smart design to prevent regular failures and repairs. Call it peace-of-mind at an affordable price. We call it Yagi Mechanical!

Yagi Mechanical is a Windows® program, so the graphic user interface should be very familiar.

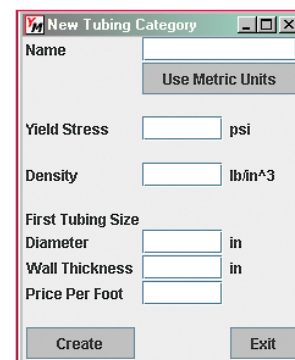
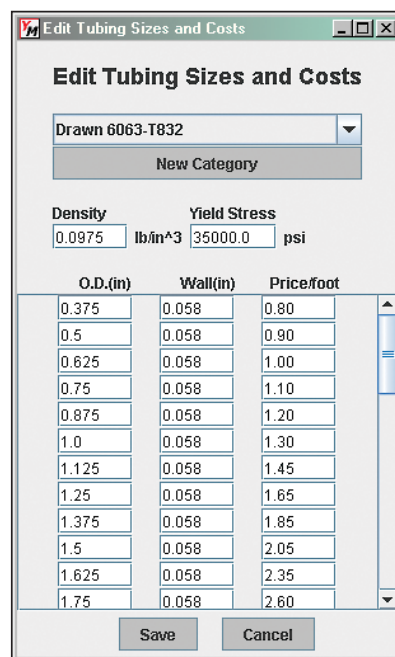
DXE-SOF-YAGIMECH Yagi Mechanical® Antenna Design Software w/Key **\$39.95**

DXE-SOF-YMKEY Yagi Mechanical® Key Code Only **\$39.95**

DXE-SOF-YMDISC Yagi Mechanical® Backup CD Only **\$20.95**



Create and analyze mechanical design parameters.



FREE trial version at DXEngineering.com

If you are interested in Yagi Mechanical, you can download a trial version FREE! The save, print, and update functions are disabled, but the rest of the program is fully functional, allowing you to try everything before you buy.

Black Vinyl Caps

These black vinyl caps are designed to fit over the end of tubing or pipe to keep moisture out. Open vertical tubing serves as a collection point for rain water. By keeping water out of the tube end, you reduce corrosion and prevent any collected water from bursting the tubing when it freezes. They are also perfect for sealing off booms and Yagi antenna elements. Made from a strong UV-rated material, our caps will withstand the abuse of nature and keep your installation safe and looking good for years. Range from 1/8" O.D. Tube to 3" O.D. Tube, visit DXEngineering.com for complete line.



School's In Session. Unless you're a teenager, you don't know everything. This is especially true in Ham radio. Technology is always marching forward and you have to keep up. At DXEngineering.com there's a huge tech library with articles, FAQs, manuals and videos. Plus, if you're dealing with a specific issue, call us and we can help.

International Shipping is Quick and Easy! See Page 58 for Details



Skyhawk Yagi Antenna

For HF DXing and contesting, there may be no better choice than the Bencher Skyhawk Yagi antenna. Using the latest computer modeling, Bencher designed this trap-free Yagi to give you powerful performance with a single-tower setup. This antenna features significant gains on the 20, 15 and 10 meter bands. The Skyhawk Antenna resists high wind, reducing wear on your rotor. The EZ-mount system makes installation a snap and there's no need for tower-top adjustments.

Visit DXEngineering.com for all the specs on the Bencher Skyhawk Yagi Antenna.

BNR-3X10 Skyhawk Yagi Antenna \$1,199.95

BENCHER, INC.



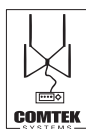
Stack 2 Systems

Designed for tri-band, log periodic or monoband Yagi antennas covering the 40 to 10 meter bands, the Stack 2 Yagi Switch Relay Unit lets you select from two antennas, either individually or simultaneously. This allows you to choose the best vertical radiation angle for the band conditions. It handles 3,000 watts and features reliable Potter and Brumfield relays.

The perfect complement to your Stack 2 Yagi Switch Relay Unit, the Stack 2 Switch Control Console integrates seamlessly with both old and new COMTEK Stack 2 Systems. It runs on 12 Vdc at 1A and includes a power cable.

You can save money by purchasing both components together in a single system. The only other items you'll need to complete your installation are the three-conductor control cable and 2 equal lengths of 50 Ω coax cable.

COM-STACK-2 Stack 2 Yagi Switch Relay Unit.....\$226.95
COM-STK2A Stack 2 Yagi Switch Control Console.....\$125.95
COM-STACK-2-A Stack 2 Yagi Switch System with Console and Relay Unit\$294.95



Stack 3 Systems

Building upon the success of the Stack 2 System, COMTEK offers you even more selectivity, giving you a broader range of signal arrival and transmission angles. The Yagi Array Switch Relay Unit lets you choose from any single (or combination of) three Yagi Beam Antennas. You can also use it to match and switch a 3-monoband Yagi stacked array for any HF band, covering 40, 30, 20, 17, 15, 12 and 10 meters.

To operate the Stack 3 Yagi Array Switch, use a COMTEK Yagi Switch Control Console. This unit helps you select each antenna individually or in any combination of your other two antennas. Indicator lights are intuitive and the controls are user-friendly; the unit works on 110 Vac.

The Switch Unit and Control Console are also available together in an economical package. You just need to add your frequency-specific impedance-matching coax and control cable.

COM-STACK-3 Stack 3 Yagi Switch Relay Unit.....\$299.95
COM-STACK3-1 Stack 3 Yagi Switch Control Console.....\$125.95
COM-STACK-3-1 Stack 3 Yagi Switch System with Console and Relay Unit.....\$399.95



telrex

Log Periodic Antenna

Designed for the serious operator who wants the best antenna available, this professional-grade LPDA antenna is tailored to the 10, 12, 15, 17 and 20 meter bands. If you have exact demands for your antenna, there is simply no better option than the Telrex. It has 16 elements on a 42 foot boom, handles 5,000 watts and weighs 350 pounds. With 7.5 dBi of gain and a bandwidth of 16 MHz at 2:1 SWR, this antenna is an excellent performer—even for commercial and industrial installations. Get complete antenna specifications at DXEngineering.com.

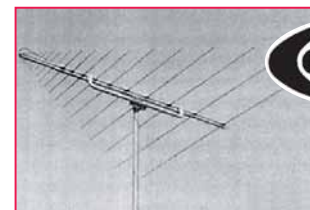
TEL-143042-135 Log Periodic Dipole Array Antenna.....\$8,000.00



FM Broadcast Band Log Periodic Antenna

Are you trying to hear an LPFM station that's just out of range or have spotty FM reception that's causing aggravation? Here is your solution: a commercial-grade broadcast antenna that requires no tuning, will last for decades and covers 88 to 108 MHz. This six-beam antenna has a 3.75 foot boom, can handle 500 watts and uses a female Type N connector. When installed, it gives you a whopping 7.5 dBi of gain—you'll never have to listen to your favorite drum solo through static again.

CAE-CD-95Y FM Broadcast Band Log Periodic Antenna.....\$361.95



CREATE

VHF/UHF Log Periodic Antenna

If you don't have the space (or friendly neighbors) to put up several VHF and UHF antennas, Create offers you an uncompromising single antenna option. Using 21 elements, the wideband directional CLP-5130-1N gets you on the 1.25, 2 and 6 meter bands, plus the 23, 33 and 70cm bands. It handles 500 watts and gives you an average gain of 10 dBi. With a 6.66 foot boom length, it's compact enough to go almost anywhere and at 11 pounds, it's perfect for most rotators. You can also use this antenna for VHF/UHF TV, FM broadcast, aviation and government communication applications.

Create's CLP-5130-2N is similar to the 1N, except it provides 11 dBi of gain and doesn't offer coverage on the 6 meter band.
CAE-CLP-5130-1N VHF/UHF Log Periodic Antenna, 6-Band.....\$469.95
CAE-CLP-5130-2N VHF/UHF Log Periodic Antenna, 5-Band.....\$343.95

hy-gain®

Tri-Band HF Beam Antennas

If you want to get active on the 10, 15 and 20 meter bands, Hy-Gain's TH series antennas are an excellent choice. These durable antennas offer excellent gain in an efficient package. You can select the right-sized antenna for your specific installation, whether it's on a rooftop or a tower. These lightweight, multi-element Yagis also feature aluminum tubing for reduced stress on your rotator. Visit DXEngineering.com for the complete specs.



HGN-TH-7DX

HGN-TH-3JRS	Tri-Band Yagi, 3-Element, 600 W, 8 dBi Gain	\$359.95
HGN-TH-3MK4	Tri-Band Yagi, 3-Element, 1,500 W, 8 dBi Gain	\$469.95
HGN-TH-5MK2	Tri-Band Yagi, 5-Element, 1,500 W, 9 dBi Gain	\$699.95
HGN-TH-7DX	Tri-Band Yagi, 7-Element, 1,500 W, 9.6 dBi Gain	\$799.95

Monoband HF Beam Antennas

Hy-Gain's Long John antennas are factory-tuned for optimum performance on a specific band. Designed to fit a 2" O.D. mast, these 3-element antennas handle 1,500 watts and are made from aluminum tubing with stainless steel hardware. Long John antennas represent the perfect blend of performance and durability, in a lightweight package.

HGN-LJ-103BA	10 Meter Monoband Yagi, 7.5 dBi Gain	\$159.95
HGN-LJ-153BA	15 Meter Monoband Yagi, 7.4 dBi Gain	\$199.95
HGN-LJ-203BA	20 Meter Monoband Yagi, 7.2 dBi Gain	\$319.95

DXE-PS-2B PRO-STACK Broadband Two Antenna Phasing System

The PS-2B PRO-STACK combines two identical Yagi, log periodic, or vertical antennas in a phased arrangement. It is a broadband system that operates from 160 through 10 meters with no need for coaxial delay lines. The PS-2B can be used in applications requiring these four basic antenna feed selections (impedance matching automatically changes when any antenna port is disconnected).

- Both antenna ports in-phase (default)
- Both antenna ports out-of-phase
- Antenna port 1 only
- Antenna port 2 only

Additional Applications

- Scalable Multi-Antenna Systems

The PS-2B easily adapts to larger arrays. For example, four stacked Yagis can be combined by creating two sets of two and using a third PS-2B to combine the first two sets.

- Phased Verticals

The system can feed three vertical antennas in a four-pattern array. In this arrangement, the three antennas are individual quarter-wave resonant antennas. The center #2 passive element must be directly grounded at all times. Elements #1 and #3 are then fed in various phase relationships.

Additional Features

- 50 Ω system—switched by applying 12-15 volts DC to three control wires
- Power handling up to 5 kW
- High-impact RF-shielded cover
- High RF-tolerant, silver-PTFE UHF connectors
- Proven high-performance DX Engineering RF Relays
- Safe 12-volt relay operation
- MOV surge protection on control lines
- RoHS-compliant

DXE-PS-2B	PRO-STACK Two Antenna Phasing Switch	\$499.00
DXE-PS-2B-P	PRO-STACK Two Antenna Phasing Switch/Controller	\$575.00

The Control Console is also available separately

DXE-EC-PS2	PRO-STACK Control Console	\$89.95
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Note: Information on the appropriate separation between stacked Yagi antennas in versatile, high-performance array is discussed fully in the ARRL Antenna Book. Generally, stacked Yagi antennas are separated vertically by greater than 1/2-wavelength free space.



DXE-EC-PS2



5 Bands
\$599.95



HEXAGONAL
DX
ENGINEERING
BEAM

Mark II
Improved



DX Engineering HEXX Antenna Kits and Components

You can build a G3TXQ Broadband Design Hexagonal Beam antenna that covers the 20, 17, 15, 12 and 10 meter bands with these simple and affordable kits. These packages are your ticket to a versatile, small and lightweight directional HF Beam antenna.

DX Engineering's design offers better gain and improved front-to-back performance with a lower SWR, and it uses our patented* stainless/PTFE rigid balanced feedpoint system. The feedpoint system provides balanced, 50 Ω connections to the wire elements, eliminating the need for special waterproofing.

You can select from two complete kits for either single or multi-band operation, or you can purchase each component separately to custom build or retrofit an antenna to your unique specifications. *US Patent D624,060

DXE-HEXX-5TAP-2	20/17/15/12/10M 5-Band Total Antenna Kit, Mark II	\$599.95
DXE-HEXX-1TAP-2	Single Band, Pre-cut for 20M, Total Antenna Kit, Mark II	\$367.95
DXE-HEXX-5FFP	5-Band Rigid Feedpoint System	\$194.95
DXE-HEXX-1HBP	Hub Kit	\$99.95
DXE-HEXX-5WRP-2	5-Band Pre-Cut Wire Element and Guide Kit, Mark II	\$149.95
DXE-HEXX-1WRP-2	Single Band Wire Element and Guide Kit, Mark II	\$75.95
DXE-HEXX-1SCP-2	Spreader and Center Post Kit, Mark II	\$199.95

Flag Pole Buddy Ladder Brackets

Quickly transform your van, RV or trailer into a temporary antenna tower. Great for EMCOMM, Hamfests, vacations or Field Day, these brackets can be secured virtually anywhere for a tall, easily set up antenna installation. Once installed, you can slide your mast into place while standing safely on the ground. At the end of the day, lowering your antenna is just as easy as putting it up. In addition to antenna applications, you can use the Flag Pole Buddy as the name implies: flying flags at the next Hamfest, Field Day or tailgate party.

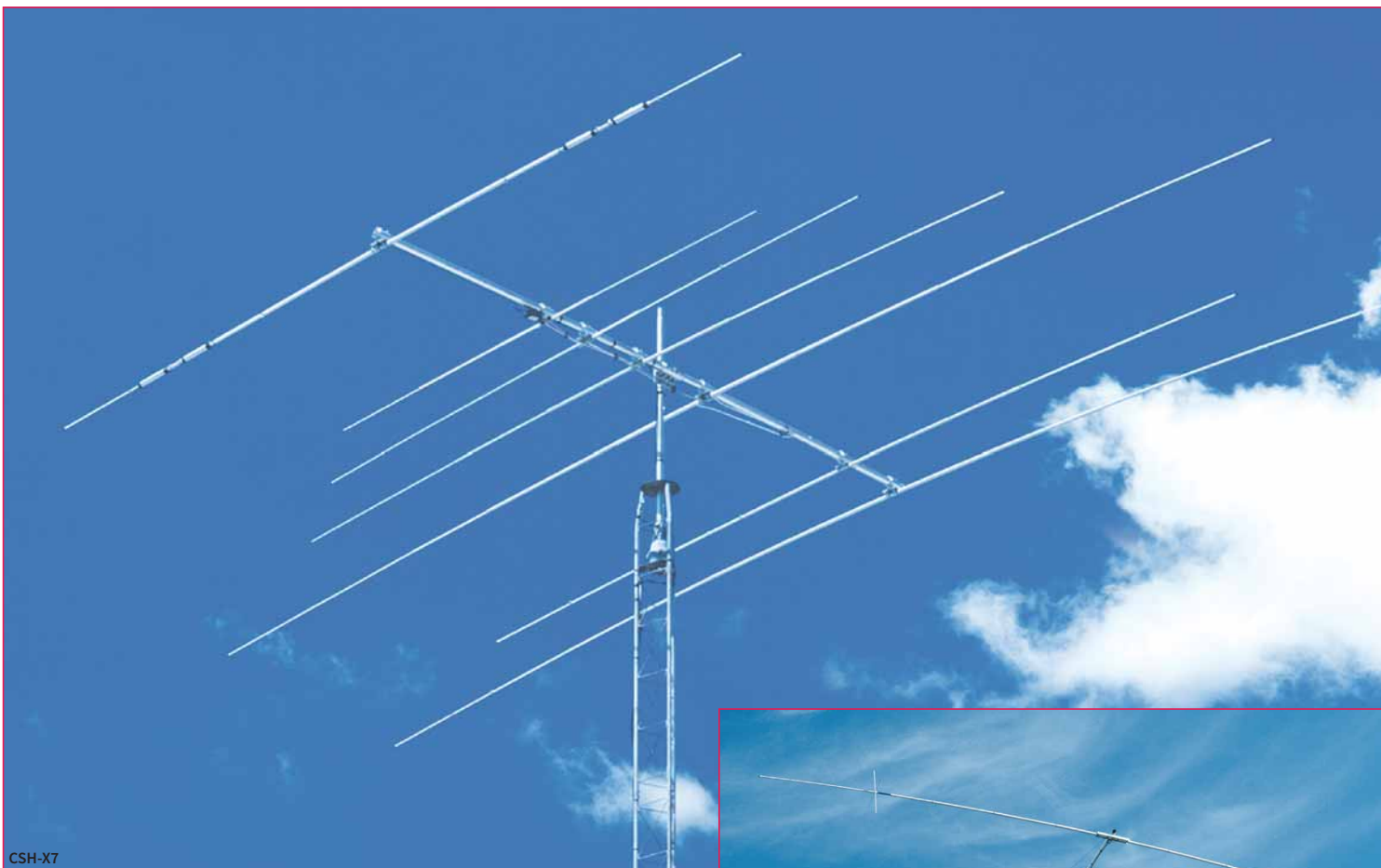
FLB-106105	For 1.5" O.D. Masts	\$49.95
FLB-106201	For 2.0" O.D. Masts	\$54.95



Cushcraft

Amateur Radio Antennas

Cushcraft has a storied history of producing top-notch antennas and antenna accessories. No matter what your demands, chances are Cushcraft makes an antenna to fit your performance needs, space limitations, and budget requirements. The Cushcraft line includes a wide range of HF/VHF/UHF vertical, Yagi, and rotatable dipole antennas. Each antenna style is made with high-quality components and hardware, and is designed to deliver maximum power and efficiency. Proven products, proven performance!



CSH-X7

X7 Big Thunder Triband Yagi Antenna

The X7 Triband Yagi sets new standards in both radiating performance and mechanical reliability. Each mechanical component is designed to survive 100+ mph winds with a 1.25 safety factor. The new 4L Log Cell design eliminates traps from the high current driven elements and reflectors, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high-performance antenna that will easily handle the legal limit.

CSH-X7	7-Element Beam, 12.5/13 dB.....	\$999.95
CSH-X740	40M Add-on Kit for X7.....	\$369.95

XM240 Big Thunder 40M Monoband Antenna

Cushcraft's XM240 monobander utilizes rugged Big Thunder and high strength aluminum tubing that gives the antenna outstanding wind survivability. Phillystran boom trusses provide extra boom stability. The feed system is a 50 Ω direct feed; VSWR is flat across the band. A high-power 1:1 balun is included. Excellent front-to-back ratio and gain makes the XM240 the right choice for both DX and stacking.

CSH-XM240	40M, 2-Element Beam, 6 dB, 22' Boom	\$949.95
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ASL2010 Log Periodic Yagi Antenna

The ASL2010 is the most cost effective high-gain, five-band antenna on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. Stainless steel hardware and a rugged element design provide years of superior antenna performance. Skylog ASL2010 is the smart choice for multiband HF operation.

CSH-ASL2010	20-10M, 8-Element Log Periodic Yagi, 6.4 dB	\$949.95
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CSH-XM240



CSH-ASL2010

World-Class Products Shipped Worldwide

Cushcraft

Amateur Radio Antennas



MA5B Compact Multi-Band HF Antenna

Cushcraft's multi-band HF antenna provides 5-band operation in a package small enough to mount to a tripod. The MA5B does not sacrifice ruggedness, performance and power handling for size and ease of installation.

CSH-MA5B 20-10M 5-Band Mini Beam..... **\$489.95**



VHF/UHF Yagi Antennas

Cushcraft engineers used computer-aided modeling and test range techniques to optimize the performance of these popular VHF and UHF Yagis. That means you get more gain and cleaner patterns with excellent front-to-back ratios. The S-series antennas* have very broad bandwidth so they will not detune in bad weather, and feature stainless steel hardware for a long, trouble-free life.

*S-series antennas are denoted by an 'S' at the end of the part number

CSH-A503S	6M 3-Element Beam, 8 dB, 6' Boom	\$139.95
CSH-A505S	6M 5-Element Beam, 10 dB, 12' Boom	\$189.95
CSH-A506S	6M 6-Element Beam, 11 dB, 20' Boom	\$369.95
CSH-A627013S	6M/2M/70cm 3-Band, 3/5/5-Element Beam, 8.6' Boom;	\$269.95
CSH-A2706S	2M/70cm 3/3-Element Beam, 7.8 dB	\$119.95
CSH-A27010S	2M/70cm 5/5-Element Beam, 10 dB	\$159.95
CSH-A1483S	2M 3-Element Wideband Beam, 7.8 dB	\$66.95
CSH-A14810S	2M 10-Element Wideband Beam, 13.2 dB, 12' Boom	\$129.95
CSH-A14820T	2M 20-Element Twist Beam, 13 dB	\$209.95
CSH-A124WB	2M 4-Element Beam, 10.2 dB, 4' Boom	\$109.95
CSH-A13B2	2M 13-Element Beam, 15.8 dB, 15' Boom	\$239.95
CSH-A26B2	2M Pair of 13B2 Vertical Stacked Beams	\$589.95
CSH-A17B2	2M 17-Element Beam, 18 dB, 31' Boom	\$349.95
CSH-A224WB	220 MHz 4-Element Beam, 10.2 dB, 3' Boom	\$99.95
CSH-A719B	432 MHz 19-Element Beam, 15.5 dB, 13.5' Boom	\$229.95
CSH-A43011S	430 MHz 11-Element Beam, 13 dB, 4.6' Boom	\$99.95
CSH-A4496S	440 MHz 6-Element Beam, 10 dB, 2.9' Boom	\$72.95
CSH-A44911S	440 MHz 11-Element Beam, 13 dB, 4.4' Boom	\$109.95
CSH-PD2	Power Divider for Two VHF or UHF Antennas	\$69.95
CSH-PD4	Power Divider for Four VHF or UHF Antennas	\$89.95



Cushcraft Yagi Antennas

Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make Cushcraft's tribanders the preferred antennas for your HF work. High-gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps, and hardware are stainless steel. Pick the model for the size and performance level that fits your needs. Add 30 or 40 meters with add-on kits.

CSH-A3S	3-Element Triband Beam, 8 dB, 14' Boom	\$599.95
CSH-A3WS	3-Element WARC Beam, 17/12 meter, 8 dB, 14' Boom	\$499.95
CSH-A4S	4-Element Triband Beam, 8.9 dB, 18' Boom	\$699.95
CSH-MA5B	20-10 Meter 5-Band Mini Beam	\$489.95
CSH-X7	7-Element Triband Beam, 12.5/13 dB	\$999.95
CSH-XM240	40 Meter 2-Element Beam, 6 dB, 22' Boom	\$949.95
CSH-TEN3	10 Meter 3-Element Beam, 8 dB, 8' Boom	\$289.95
CSH-A503S	6 Meter 3-Element Beam, 8 dB, 6' Boom	\$139.95
CSH-A505S	6 Meter 5-Element Beam, 10 dB, 12' Boom	\$189.95
CSH-A506S	6 Meter 6-Element Beam, 11 dB, 20' Boom	\$369.95
Add-on Kits		
CSH-A743	40/30 Meter Add-on Kit for CSH-A3 and A3S	\$189.95
CSH-A103	30 Meter Add-on Kit for CSH-A3WS	\$189.95
CSH-A744	40/30 Meter Add-on Kit for CSH-A4 and A4S	\$189.95
CSH-X740	40 Meter Add-on Kit for CSH-X7	\$369.95



Rotatable Dipole Antennas

The World Ranger dipoles provide bi-directional patterns with rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.

CSH-D3	20/15/10M Triband Rotatable Dipole	\$359.95
CSH-D3W	30/17/12M Triband Rotatable Dipole, WARC	\$359.95
CSH-D4	40/20/15/10M Rotatable Dipole	\$399.95
CSH-D40	40M Rotatable Dipole	\$389.95

M2 VHF/UHF Antennas

M2 Antennas gives you the best performance possible, incorporating top-of-the-line features into antennas for every band—and budget. M2 uses computer modeling technology, coupled with weather resistant materials and precise CNC-machined elements, to create antennas that look and last as well as they perform. Here is the complete line of M2 VHF/UHF Antennas; all the details on the specific antenna you're looking for are available at DXEngineering.com.

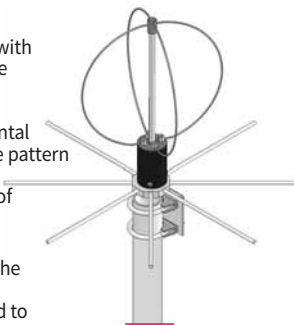


MSQ-23CM22EZA	23cm 22-Element Yagi, 18.2 dBi Gain, 5.83' Boom	\$168.95
MSQ-23CM35	23cm 35-Element Yagi, 20.9 dBi Gain, 10' Boom	\$219.95
MSQ-90217	33cm 17-Element Yagi, 17 dBi Gain, 6.17' Boom	\$135.95
MSQ-9029	33cm 9-Element Yagi, 14.2 dBi Gain, 3' Boom	\$104.95
MSQ-4205011	70cm 11-Element Yagi, 13.4 dBi Gain, 5' Boom	\$124.95
MSQ-43212EME	70cm 12-Element Yagi, 16.4 dBi Gain, 9.67' Boom	\$149.95
MSQ-43213WLA	70cm 38-Element Yagi, 20.5 dBi Gain, 30.33' Boom	\$299.95
MSQ-4329WLV	70cm 28-Element Yagi, 19.4 dBi Gain, 21' Boom	\$199.95
MSQ-436CP30	70cm 30-Element, Circularly Polarized, 15.5 dBi Gain, 9.75' Boom	\$259.95
MSQ-436CP42UG	70cm 42-Element, Circularly Polarized, 18.9 dBi Gain, 18.83' Boom	\$319.95
MSQ-44018	70cm 18-Element Yagi, 16.6 dBi Gain, 11' Boom	\$149.95
MSQ-44021ATV	70cm 21-Element Yagi, 18 dBi Gain, 14.5' Boom	\$169.95
MSQ-4406SS	70cm 6-Element Yagi, 11 dBi Gain, 3' Boom	\$69.95
MSQ-22210EZ	1.25M 10-Element Yagi, 14.1 dBi Gain, 9.75' Boom	\$139.95
MSQ-2225SS	1.25M 5-Element Yagi, 10.3 dBi Gain, 3' Boom	\$79.95
MSQ-2M12	2M 12-Element Yagi, 14.9 dBi Gain, 19.5' Boom	\$219.95
MSQ-2M18XXX	2M 18-Element Yagi, 17.1 dBi Gain, 36.5' Boom	\$319.95
MSQ-2M3SS	2M 3-Element Yagi, 8.3 dBi Gain, 3.1' Boom	\$79.95
MSQ-2M4	2M 4-Element Yagi, 9.6 dBi Gain, 4' Boom	\$114.95
MSQ-2M5WL	2M 17-Element Yagi, 16.8 dBi Gain, 33.08' Boom	\$269.95
MSQ-2M7	2M 7-Element Yagi, 12.3 dBi Gain, 8.83' Boom	\$134.95
MSQ-2M9SSBFM	2M 9-Element Yagi, 14.1 dBi Gain, 14.5' Boom	\$199.95
MSQ-2MCP14	2M 14-Element, Circularly Polarized, 12.3 dBi Gain, 10.5' Boom	\$239.95
MSQ-2MCP22	2M 22-Element, Circularly Polarized, 14.4 dBi Gain, 18.58' Boom	\$319.95
MSQ-2MXP20	2M 20-Element, Dual Polarity, 15.3 dBi Gain, 21.58' Boom	\$249.95
MSQ-2MXP28	2M 28-Element, Dual Polarity, 17.2 dBi Gain, 34.5' Boom	\$369.95
MSQ-2MXP32	2M 32-Element, Dual Polarity, 17.9 dBi Gain, 40.92' Boom	\$409.95
MSQ-6M3	6M 3-Element Yagi, 8.2 dBi Gain, 6.75' Boom	\$164.95
MSQ-6M3SS	6M 3-Element Yagi, 8.1 dBi Gain, 5.42' Boom	\$164.95
MSQ-6M5XHP	6M 5-Element Yagi, 11.5 dBi Gain, 18' Boom	\$309.95
MSQ-6M7JHV	6M 7-Element Yagi, 13 dBi Gain, 34.5' Boom	\$339.95
MSQ-6M9KHW	6M 9-Element Yagi, 14.8 dBi Gain, 49.3' Boom	\$679.95

Eggbeater Satellite Antennas

Shoot for the stars with antennas that let you interact with other Hams using Amateur Satellites and communicate directly with the International Space Station! These antennas are equally effective in your base or mobile station. They produce smooth, omnidirectional horizontal polarity patterns at the horizon. Above the horizon, the pattern transforms to right-hand circular for excellent OSCAR communications. The small physical footprint of these antennas allows many mounting options at a budget-friendly price.

A Satellite Antenna Package is available that includes the 2M and 70cm antennas, a cross boom VHF/UHF kit and mounting hardware—practically everything you'll need to open up a new world of Amateur communications. Visit DXEngineering.com for complete details.



MSQ-EB432RK70CM

MSQ-EB144RK2M	Satellite Eggbeater Antenna, 2 Meter Band	\$199.95
MSQ-EB432RK70CM	Satellite Eggbeater Antenna, 70cm Band	\$169.95
MSQ-SATPACK1	Satellite Antenna Package, 2M and 70cm	\$342.95

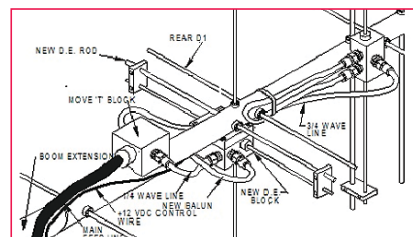


Polarity Switch Kits

Polarity switches modify the performance of your circularly polarized antenna, so you can change between right and left hand circular polarization. These kits are specialized replacement driven elements with built-in relays that work for your M2 Antennas circularly polarized antenna.

The kits include the element, relay, a low-loss coaxial switch and all related hardware. Installation is easy and if you plan to build a new setup, you may want to incorporate a polarity switch right from the beginning.

MSQ-PS2M	Polarity Switch Kit, 2 Meter Band	\$159.95
MSQ-PS70CM	Polarity Switch Kit, 70cm Band	\$159.95



Installation, Upgrade and Antenna Building Hardware

M2 Antennas offers several installation, repair and upgrade parts for your station. Its Cross Booms help you mount multiple Yagi (or eggbeater) antennas, and they're available with heavy duty aluminum and fiberglass construction that won't distort your antenna patterns. You can also get boom insulators, clips and clamps to complete your installation. Find all the pieces available at DXEngineering.com.

MSQ-CBVHF-UHF59	Satellite Antenna Cross Boom	\$44.95
MSQ-FBC60	Satellite Antenna Cross Boom, Heavy Duty	\$188.95
MSQ-BUTTON01	Beam Hardware Button Insulators (Bag of 50)	\$13.95
MSQ-KEEPER01	Beam Hardware Retainer Clips (Bag of 50)	\$13.95
MSQ-UBOLT1-5	Beam Hardware U-Bolt Clamps, 1.5" (Set of 2)	\$9.95
MSQ-UBOLT2	Beam Hardware U-Bolt Clamps, 2" (Set of 2)	\$11.95
MSQ-UBOLT3	Beam Hardware U-Bolt Clamps, 3" (Set of 2)	\$16.95

HO LOOP Antennas

These antennas give you excellent SSB and CW communications with a reach of over 200 miles. Excellent for mobile and base weak-signal stations, these antennas offer omnidirectional coverage without a rotator. HO LOOP Antennas' horizontal polarity means you get upwards of 5 dB of ground gain over a traditional vertical antenna. Plus, the higher you mount your HO LOOP, the more gain you achieve.

There's an available installation hardware kit that allows you to install your HO LOOP antenna on any 1.25 to 2 inch diameter mast. It includes all the brackets, cradels and hardware you'll need. For 6M HO LOOP antennas, be sure to order the additional support bracket.

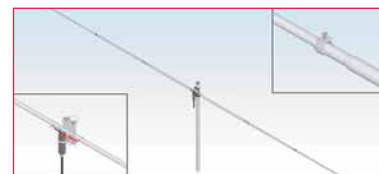
MSQ-70CMHOLoop	432 MHz/70cm HO LOOP, 5 dBd Gain (7.17'')/8.8 dBd Gain (7' and 8.3'')	\$87.00
MSQ-222HOLoop	1.25M HO LOOP, 4.7 dBd Gain (7'')/8.2 dBd Gain (7' and 9.75'')	\$79.95
MSQ-2MHOLoop	2M HO LOOP, 4 dBd Gain (10'')/8 dBd Gain (6.83' and 11'')	\$79.95
MSQ-6MHOLoop	6M HO LOOP, 4.2 dBd Gain (11'')/8.2 dBd Gain (40' and 52'')	\$89.95
MSQ-MASTBRKTKIT	HO LOOP Base Installation Hardware	\$22.95
MSQ-MSTSUPMD6MHO	HO LOOP 6M Installation Support Bracket	\$16.95

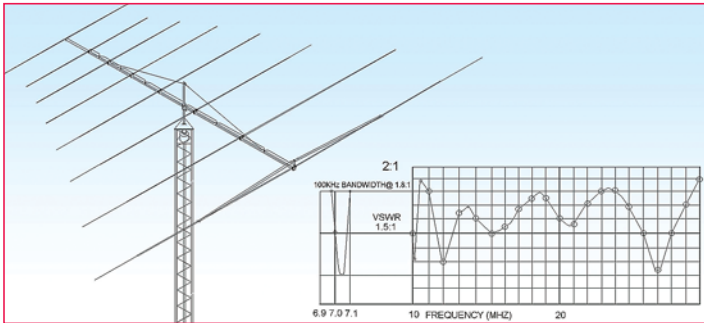
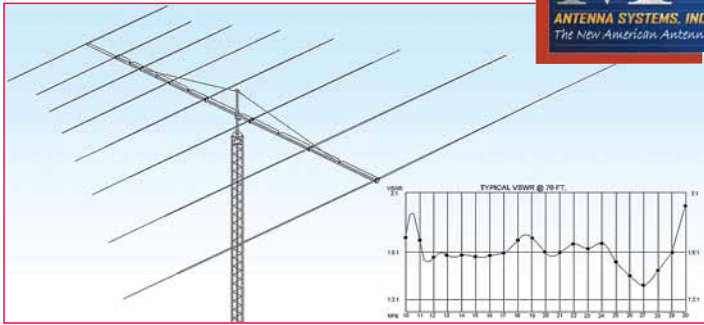
20 to 30 MHz Single Band Rotatable Dipole

An affordable and high quality HF antenna with excellent performance—even if you're tight on space. The MSQ-10-15M1DX is rated at 3,000 watts and weighs just five pounds. This lightweight and compact antenna is perfect for almost any mounting location, whether it's on a tower, mast or hidden in your attic.

You can use this antenna with your light duty rotator and it mounts to any 1.25" to 2" O.D. tubing. It can be configured for the 10, 12 or 15 meter amateur bands, or any other HF frequency between 20 and 30 MHz. This antenna breaks down to just four feet long for portable operation.

MSQ-10-15M1DX	Single Band Rotatable Dipole	\$239.95
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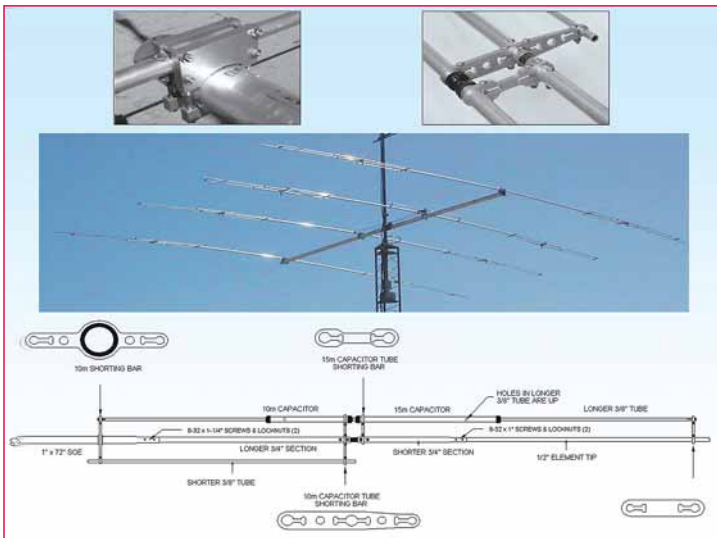


HF Log Periodic Antenna

Get excellent multi-band performance in a single antenna with these LPDA antennas from M2. They'll handle 3,000 watts and include a 4:1 balun. These versatile antennas cover multiple bands without the need for traps and are made to deliver years of reliable service in almost any environment.

The 1030LP8 antenna gets you on the 10, 12, 15, 17, 20 and 30 meter bands with low SWR and an excellent front-to-back ratio with 5.2 dBi of gain. For an antenna that adds 40 meter coverage for a total of seven bands, check out the MSQ-71030LP8. Both antennas have a 29.5 foot boom and a wind surface area of just 13 square feet.

MSQ-1030LP8	Six-Band HF Log Periodic Antenna	\$2,183.00
MSQ-71030LP8	Seven-Band HF Log Periodic Antenna.....	\$2,314.95



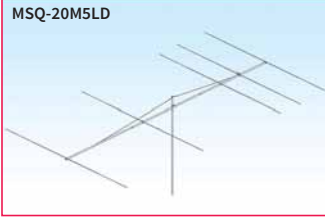
HF Tri-Band Beam Antenna

If you want to get on the 10, 15 and 30 meter HF bands, but don't have the real estate for multiple towers, then these tri-band antennas are your solution. They pack a lot of performance into a versatile and rugged package. They can also handle 3,000 watts, so you get effective coverage on several bands. A balun is included.

MSQ-KT34M2	Tri-Band, 4-Element, 7.5 dBi Gain (10M)	\$1,369.95
MSQ-KT36XA	Tri-Band, 6-Element, 10.5 dBi Gain (10M)	\$1,699.95



MSQ-20M5LD



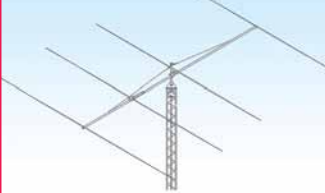
MSQ-15M4DX



MSQ-10M4DX



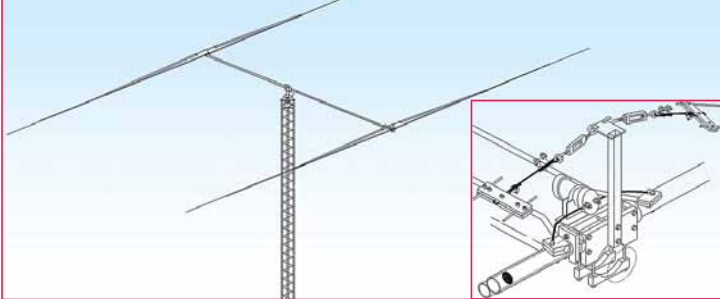
MSQ-20M4DX



MSQ-12M4DX



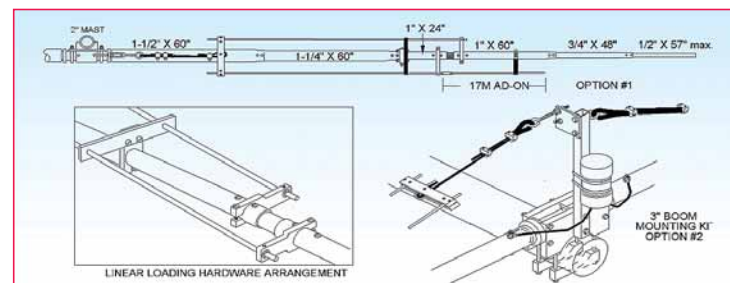
MSQ-40M2L



HF Monoband Beam Antennas

Using the latest computer modeling techniques, M2 Antennas' engineers have developed an effective, yet lightweight and rugged Yagi design. These antennas are excellent performers and the perfect fit for the contester, DXer and casual operator.

MSQ-40M2L	40 Meter, 5.5 dBi Gain, 3,000 Watts	\$1,305.95
MSQ-20M5LD	20 Meter, 10.2 dBi Gain, 3,000 Watts	\$1,377.00
MSQ-20M4DX	20 Meter, 9.7 dBi Gain, 5,000 Watts	\$1,004.00
MSQ-17M3DX	17 Meter, 8.5 dBi Gain, 3,000 Watts	\$639.95
MSQ-15M4DX	15 Meter, 9.7 dBi Gain, 3,000 Watts	\$801.00
MSQ-12M4DX	12 Meter, 10.7 dBi Gain, 3,000 Watts	\$635.95
MSQ-10M4DX	10 Meter, 10.1 dBi Gain, 3,000 Watts	\$590.95



HF Monoband Rotatable Dipole Antenna

This high-efficiency 40 meter antenna represents the strongest shortened HF radiator on the market. This single-element design is packed with performance, delivering 1.75 dBi of gain while handling 3,000 watts. It is also modifiable to cover any frequency between 6.9 to 10 MHz with a 250 KHz bandwidth.

MSQ-40M1L	HF Monoband Rotatable Dipole Antenna	\$549.95
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Universal Digital Rotor Controller

The DX Engineering-supplied GHE-RT-21 adds advanced operating features to your existing rotor setup—no need to climb the tower! It's pre-programmed for Hy-Gain HAM-series and T2X units. Setup for most other rotors is solderless (with jumpers) and field-programmable via the front panel or with the included Setup Utility PC software.

- Master/Slave control for stacked arrays turns multiple rotators together or separately
- Counter Rotation operating mode allows you to install a rotor above a rotating tower
- Position rotors with manual push button controls, point-and-shoot presets, or on your computer using RS-232 and USB connections
- PWM variable speed control with start and stop ramping reduces tower and antenna stresses
- Precision heading accuracy up to 1/10°
- Fully supports side-mounted antennas (soft limits prevent running into tower), and over-travel up to 720°
- Offset control allows center of rotation at any heading, north/south center on same mast, and slipped mast compensation
- Programmable reversal and brake delay, speed min./max., limits, ramps, etc.
- High visibility display with adjustable backlight

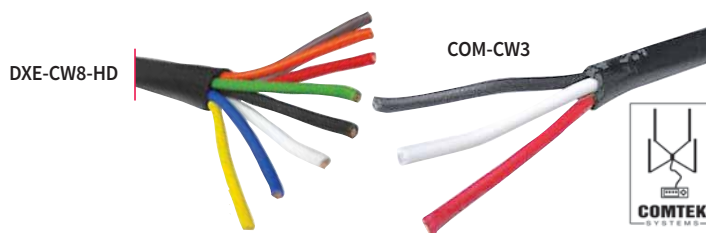
GHE-RT-21 Universal Digital Rotor Controller \$559.00
HGN-T-2XRLC Rotator Unit without Console \$529.95



RT-21D Deluxe Universal Digital Rotor Controller

The RT-21D takes the already excellent RT-21 Rotor Controller and adds an adjustable high-visibility green vacuum fluorescent display. It's housed in a sleek black chassis to make an attractive addition to your shack.

GHE-RT-21D Deluxe Universal Digital Rotor Controller \$699.00



Rotator Accessories

DXE-UBK-HYG-1 Replacement U-Bolt (single) Kit for Hy-Gain HAM-Series/CD-45 \$4.50
DXE-UBK-HYG-2 Replacement U-Bolt (single) Kit for Hy-Gain T2X Rotor \$5.50

Multi-Conductor Control Cable

DXE-CW9 Shielded Control Cable, 9-Conductor per foot \$0.32
DXE-CW9-1K Shielded Control Cable, 9-Conductor, 1,000' Spool \$229.00
DXE-CW9S Shielded Control Cable, 9-Conductor stranded per foot \$0.36
DXE-CW8 Control Cable, 8-Conductor per foot \$0.48
DXE-CW8-HD Control Cable, 8-Conductor, Heavy-Duty per foot \$0.89
DXE-CW8-HD-1000 Control Cable, 8-Conductor, Heavy-Duty, 1,000' Spool \$835.75

Control Cable

This control cable is a perfect match for your HGN-AR-303 and 303X Rotator and Controller combo kits. The cable is well suited for the low voltage used by the rotator.

COM-CW3 Control Cable, Three 20 AWG Wires, Black PVC Jacket per foot \$0.25
COM-CW3-1000 COM-CW3 Control Cable, 1,000' Spool \$197.95
COM-CW4 Cable, 4-Conductor per foot \$0.28

CD-45II

Metered Rotator with Friction Brake and Controller Combo Kit

The CD-45II handles 8.5 square feet when mounted inside a tower, or 5 square feet with a mast adapter.

- Bell rotator design gives complete weather protection
- Low temperature grease good to -30° F
- Dual 24-ball bearing race for load bearing support
- North center scale, dual lighted directional meter indicator
- 8-pin plug/socket on control unit, snap-action control switches, low voltage control
- Handles masts up to 2 1/16" O.D.
- MSLD light duty lower mast support adapter included
- Power requirement: 110V, 60 Hz

HGN-CD-45II Rotator and Console Combo Kit \$429.95



HDR-300A

Heavy Duty Rotator with Digital Readout

The HDR-300A Heavy Duty Rotator is for king-sized antenna arrays with up to 25 square feet wind load area. It features a control cable connector, a hardened stainless steel output shaft, North or South centered calibration, ferrite beads on potentiometer wires to reduce RF susceptibility, and a longer output shaft keyway for added reliability. Heavy duty, self-centering steel mast clamp and hardware included. The digital display is accurate to one degree.

HGN-HDR-300A Rotator and Readout Kit \$1,349.95



T2X Tailtwister Series II Rotator

This is the complete tower-mounted unit of the T2X rotor, with clamps and mounting hardware included. Ideal for replacing an old Hy-Gain HAM-IV rotator or for use with a third-party controller such as the Green Heron RT-21, The T2X is designed for medium communications arrays of up to 20 square feet wind load area.

- Normal operation down to -30° F
- Steel alloy ring gear good to 100,000 PSI for maximum readability
- Indicator potentiometer with ferrite beads on wires to reduce RF susceptibility
- Weatherproof AMP connector plus 8-pin plug at control box
- Control Console #5137701

HGN-T-2X Rotator with Console \$699.95

HGN-T-2XRLC Rotator Unit without Console \$529.95



HAM-IV Rotator

The HAM-IV is the most popular rotator in the world. It is designed for medium-size communications arrays of up to 15 square feet wind load area.

- Normal operation down to -30° F
- Dual 98-ball bearing race for load bearing strength
- Electric locking steel wedge brake
- Ferrite beads on potentiometer wires reduce RF susceptibility
- Cinch plug connector plus 8-pin plug at control box—no screwdriver required
- N or S center of rotations scale on meter
- Low voltage control
- Handles masts up to 2 1/16" O.D.
- Power requirement: 110V, 60 Hz

HGN-HAM-IV Rotator with Console \$599.95



HAM-V Rotator

with DCU-1 Pathfinder Digital Control

The HAM-V is designed for medium-size communications antenna arrays of up to 15 square feet wind load area. The innovative DCU-1 Pathfinder Control Unit is included. The DCU-1 gives you automatic operation of your brake and rotor, features computer control with RS-232 passthrough, and is compatible with many logging and contest programs. It has 6 presets, 1 degree heading accuracy, automatic 8-second brake delay, and 360 degree choice for center of rotation.

- Low temperature grease permits normal operation down to -30° F
- Ferrite beads on potentiometer wires reduce RF susceptibility
- Cinch plug connector plus 8-pin plug at control box—no screwdriver required
- N or S center of rotations scale on meter
- Handles masts up to 2 1/16" O.D.
- Power requirement: 110V, 60 Hz

HGN-HAM-V HAM-V Rotator with Console; \$929.95



AR-303 Series Light Duty Rotator and Controller Combo Kits

These kits are excellent choices to control your small VHF/UHF ham radio beam antenna or your large television antenna. The drive unit rotation is synchronized with the moving dot on the controller through a high-precision motor. The rotator housing is rugged, weatherproof and made from a single piece of cast aluminum. It features precision gears and steel thrust bearings to provide years of service.

The kits contain the rotator, controller, mounting clamps and hardware. You'll need 3-wire control cable to complete your installation. For best results, ensure that your control cable run is shorter than 200 feet.

HGN-AR-303	Light Duty Rotator and Controller Combo Kits, 110 Vac	\$89.95
HGN-AR-303X	Light Duty Rotator and Controller Combo Kits, 220 Vac	\$89.95

hy-gain®



Rotator Connector Parts Pack

If you need to repair your T2X or HAM-V Rotator's connectors, use this genuine Hy-Gain connector parts pack. Includes two receptacles, hardware and replacement pins.

HGN-870598	Rotator Connector Parts Pack	\$34.95
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New!



Lower Mast Support Kit

Designed to fit your HAM-IV, HAM-V and T2X, this kit is perfect if you need to mount your rotator to a mast instead of a flat surface.

HGN-MSHD	Lower Mast Support Kit	\$99.95
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Rotator Hardware

Your tower faces a constant assault from Mother Nature. It's not uncommon for wind gusts to cause bolts to loosen. Avoid catastrophe by making sure your rotator stays in one place. M2 Antennas makes special rotator hardware to upgrade your current setup.

This Safety Wire Kit secures your 4- or 6-bolt rotator installation while preventing the bolts from loosening. The kit includes 3/8"-24 stainless steel mounting bolts, drilled to accommodate the included safety wire.

Upgrade to an M2 Antenna Safety Wire Kit—get years of rotator security and peace-of-mind.

MSQ-SAFETYWIREKT	Rotator Hardware Safety Wire Kit for MSQ-OR2800PX	\$47.95
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Rotor Control Line Protector

The PPR-IS-RCT is a lightning protector for up to 8 line rotor controllers. It protects the controllers by preventing strike energy from entering the premises. Use J1 or J2 clamps to mount the PPR-IS-RCT to tower legs or ground rods.

Features

- Multi-strike capability
- Faster than gas tubes
- Shunt-type device for up to 8 lines

Specifications

- Number of Wires: up to 8
- Maximum Operating Current: 2A
- Operating Voltage: +/- 70 Vdc
- Let-Through Voltage: 230 Vpk
- Maximum Surge Current: 6.5 kA
- Turn-on Time: 4 ns
- Turn-on Voltage: +/- 82V
- Temperature Range: -40° to +85° C

PPR-IS-RCT	Rotor Control Protector	\$133.00
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PolyPhaser
CORPORATION



OR2800PX Rotator Unit

This rotator is designed with you in mind, featuring a high-torque motor and durable construction in a package sized for most common towers and masts. It can handle 1,800 lbs. of vertical load and easily turn large diameter masts with heavy directional antennas. The precision worm drive ensures accuracy, while its sturdy design handles up to 35 square feet of wind load.

The OR2800PX Rotator Unit is the perfect match for M2 Antennas' RC2800PXA Rotator Controllers, or it is an excellent choice for a rotator unit to use with a third party rotator controller.

- Massive toothed, ductile iron mast clamps
- Grade 5, 3/8"-24 steel hardware
- Self-centering mast guide
- Drive plate accepts masts from 1 3/4" to 3 1/8" O.D.
- 6-spline output shaft and hub
- Large 2,000 lb. thrust bearing handles high mast loads with low friction
- Lengthened and hardened output shaft
- Heat-treated, machined steel gear train
- Magnetically actuated pulse circuit for excellent heading and target accuracy
- Standard 3" x 3" four-hole mounting bolt pattern (plus two extra holes)

MSQ-OR2800PX	Rotator Unit	\$1,592.00
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RC2800PXA Rotator Controller

M2 Antennas' RC2800PXA Rotator Controller is a full-function, variable speed azimuth positioning unit with an easy-to-read multi-function digital display. It offers the ultimate control of your directional antenna systems.

Rotator control is smooth and the new PIC microprocessor is easy to program for special functions. The rotator's microprocessor accepts tenths of a degree decimal input, for excellent precision. This controller is packed with new features including Auto-Calibrate, Auto Slow Down and M2's innovative One-Step Programming which saves changes when you exit programming mode. Computer interface to the RC2800PXA is via RS-232 serial port.

Originally developed to control the Orion OR2800PX Rotator unit, this controller is universally modifiable. It is configured at the factory to operate at 32-35 Vdc and input voltage is selectable from 115 to 230 Vac. You can even download custom programs directly from M2 Antennas to set up your controller for your unique application.

MSQ-RC2800PXA	Rotator Controller	\$604.95
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M2 Antennas OR2800PXA Rotator Unit and Controller System

M2 Antennas bundles its acclaimed OR2800PX Rotator Unit together with the RC2800PXA Rotator Controller in a complete system for your mast-mounted directional antennas. This package pairs the pinpoint accuracy of M2's controller with the rock-solid performance of the rotator.

From the high-torque motor of the OR2800PX to the customizable microprocessor of the RC2800PXA, this system can be the perfect complement to your directional antenna setup. For complete package details, visit DXEngineering.com.

MSQ-OR2800PXA	Rotator Unit and Controller System	\$1,774.95
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FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details

How to Order

There are three ways to order from DX Engineering:

- Online at www.DXEngineering.com
- By Phone: 1-800-777-0703
- By Fax: 1-330-572-3279
- International Phone Orders: 1-330-572-3200

Please provide your e-mail address for most efficient correspondence and to receive order confirmation notices.

Hours of Operation

Ordering (via phone)

Monday - Friday, 8:30 am - 4:30 pm Eastern Time

1230 to 2030 UTC (March-October)

1330 to 2130 UTC (November-February)

Ordering (online)

Order at DXEngineering.com 24 hours a day, 7 days a week

Phone Technical Support

Monday - Friday, 8:30 am - 4:30 pm Eastern Time

1230 to 2030 UTC (March-October)

1330 to 2130 UTC (November-February)

Product Warranties

DX Engineering Products

All products manufactured by DX Engineering are warranted to be free from defects in materials and workmanship for a period of one (1) year from date of shipment. DX Engineering's sole obligation under this warranty shall be to issue credit, repair, or replace any item or part thereof which is proved to be other than as warranted. No allowance shall be made for any labor charges of buyer for replacement of parts, adjustments or repairs, or any other work, unless DX Engineering authorizes such charges in advance. Repairs to DX Engineering-produced items are warranted for a period of 90 days against defects in materials and workmanship. Repair or replacement is at DX Engineering's discretion.

Other Manufacturers

Most manufacturers offer their own warranties. All warranties are included with your order. Some manufacturers require their products to be sent directly to them for warranty consideration—before returning any product from another manufacturer, contact us by e-mail or by phone at 1-800-777-0703.

If you want to return any electrical products for warranty consideration, please e-mail us before shipping the items back. We will determine if a warranty claim is valid and where the part needs to be sent. You can also call 1-800-777-0703 to speak to a Customer Service representative. Any item which, in our opinion, shows evidence of being used or installed contrary to manufacturer's instructions, and/or subjected to improper handling, packaging, or shipping by the customer will not be eligible for exchange, refund, or warranty consideration. We reserve the right to charge a restocking fee or refuse any item.

We cannot accept returns on custom-ordered parts. Software or publications cannot be returned for a refund once opened.

Liability Statement

DX Engineering's liability for losses or damages, arising out of any cause whatsoever, is limited to full refund of the purchase price, or at our option, repair or replacement of the part(s). DX Engineering shall not be liable for any consequential or incidental damages. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Prices are subject to change without notice. If you have any further questions, please send us an e-mail or contact us at 1-800-777-0703

Repairs

We can, in most cases, perform repair service on out-of-warranty DX Engineering and COMTEK brand products. The cost of repairs is based on a labor rate of \$60.00 per hour, and the total cost is estimated before repair work is started. Contact DX Engineering Customer Service to discuss the repairs needed and to receive shipping instructions.

About Shipping

Freight, Shipping and Handling Policies

We ship via fast ground service at no additional charge (to the contiguous 48 states). In-stock parts are shipped the same day if you order by 10:00 pm Eastern (0200 March-October, 0300 UTC November-February), Monday through Friday.

Please Note: We verify all credit card orders for your protection. In rare cases, this process may cause a slight delay in shipping.

Shipping and Handling

Domestic and APO/FPO (United States, excluding HI, AK, PR, US Territories)

Shipping and Handling on domestic orders is non-refundable and based on order subtotal:

\$0-\$24.99	\$25-\$49.99	\$50-\$98.99	\$99 and up
\$6.95	\$9.95	\$10.95	FREE

No Shipping or Handling fee on orders over \$99.

HI, AK, PR and US Territories

Shipping and handling is non-refundable and based upon the method selected. Flat rate fees are available, see details below.

International and Canadian

Shipping and handling is non-refundable and based on carrier selection and destination. See details below.

Next Day Shipping

Next Day Shipping is \$25.00 for orders up to the first 18 pounds, and \$25.00 for each additional 18 pound increment, in addition to the standard delivery and handling fees.

Domestic Non-Standard Shipping Charges You May Choose:

Next Day Air: \$25.00 for the first 18 lbs., and \$25.00 for each additional 18 pound increment (i.e.; 19 to 36 pounds, 37 to 54 pounds, etc.)

2-Day Air: \$15.00 for the first 18 lbs., and \$15.00 for each additional 18 pound increment (i.e.; 19 to 36 pounds, 37 to 54 pounds, etc.)

Next Day Air Saturday Delivery (where available): The Next Day Air fee + \$17.00 per box

Non-Standard Shipping Charges (Domestic Orders) You May Incur:

Hazardous Materials: \$25.00 per box

Oversize items: A special handling surcharge of \$8.00-\$55.00 per item applies—ask your sales rep for details.

Truck Freight Fees are charged for products that are too large or too heavy for regular ground service.

Weight	To Carrier's Distribution Center for Pickup*	To Your Home*
0-100 Lbs.	\$89.00	\$99.00
101-300 Lbs.	\$99.00	\$109.00
301-499 Lbs.	\$139.00	\$149.00
500-649 Lbs.	\$169.00	\$179.00
650-900 Lbs.	\$189.00	\$199.00

*These rates do not include lift gate fees.

2-Day Air to Alaska, Hawaii and Puerto Rico is available at a discounted rate using this calculation:

Metro: \$12.00 + \$2.00 per pound

Rural: \$12.00 + \$2.75 per pound

Ordering/Shipping Details

In-stock parts ship the same day via ground and 2-Day Air if ordered by 10:00 pm Eastern, and via Next Day Air if ordered by 7:00 pm Eastern, Monday through Friday. Saturday Delivery guarantees a part ordered between 7:00 pm Eastern Thursday and 7:00 pm Eastern Friday will be delivered by 3:30 pm Saturday. Oversize or heavy items must be shipped via truck freight at a reduced flat rate (listed above), charged at the time of shipment. APO/FPO orders can only ship via U.S. Postal Service and must be pre-paid by a check or credit card. Truck Freight, Hazardous Materials, and some oversize items cannot be shipped to APO/FPO addresses.

International and Canadian orders are classified as those shipping outside of the U.S. or U.S. territories. For more on shipping rates and times, or to obtain quotes for available shipping methods, call 1-800-777-0703.

Order online, or call 1-800-777-0703. Please provide your e-mail address for more efficient correspondence. All international and Canadian orders must be pre-paid and freight charges are based on billable weight (freight on orders with in-stock parts is billed at checkout; some orders with special-order parts may receive a freight estimate and actual cost is billed at time of shipment). In the event of a backorder, your order will be held until ALL items are in stock to save shipping charges. If you choose a Landed Cost Delivery provider (i-parcel for international orders and all major shipping carriers except USPS for Canadian orders), all duties, taxes and clearance fees are included at checkout. Otherwise, duties and taxes will be billed to you by the shipping company at the time of delivery. Ask your sales rep for details.

Backorders

Domestic Customers

All in-stock items are shipped immediately. Most backordered items are shipped as they become available, which may result in multiple shipments for a single order. Customers' credit cards will be charged for in-stock items only when they are shipped. If you are paying by PayPal, all charges are made at the time of the initial order.

International and APO/FPO Customers

You will be charged for the entire order at the time of shipment. Your order will not ship until all items are available. In the event of a backorder, we will hold your entire order until ALL items are in stock. This saves you additional shipping charges. If you wish to have the available items shipped and are willing to pay the additional charges please contact us after you place your order.

Returns

DX Engineering does not have a trial or evaluation period for new equipment. If, within 10 days of receiving your purchase, you're not satisfied, contact our Customer Service department. For new, unopened products, and after our inspection and verification, we will issue a full refund. Opened items will be inspected for missing parts, packaging and item appearance, and may be subject to a restocking or repackaging fee. Send returns postage-paid to the address below with a copy of your receipt and a note explaining the reason for the return. Items without documentation may be returned to you.

DX Engineering, ATTN: Returns Department
1200 Southeast Ave. Tallmadge, OH 44278

No returns on special-order products, items drop-shipped from the manufacturer, books or computer software.

Phone: 800.777.0703

International: 330.572.3200

Fax: 330.572.3279

DoD CAGE Code: 3M3H7

E-Mail: DXEngineering@DXEngineering.com

Web: DXEngineering.com

**Mail: 1200 Southeast Ave.
Tallmadge, OH 44278**

DX[®]

ENGINEERING

Shrinks the Globe.



Faraday did it. So did Hertz. Tesla and Marconi? Absolutely.

Their ideas and breakthroughs brought the world closer together. Now, DX Engineering is helping you do it too. Blaze new trails, work more bands, reach out and make new contacts—innovate and communicate.

We'll make sure you have the gear to make it happen, backed up by the best support in the industry.

And We Can Prove it:

Blazing-fast Shipping. If you get your in-stock order placed before 10 pm ET Monday through Friday, we're putting it on the truck that day. Seriously. That means you'll get your order as quickly as possible. We know what it feels like to be off the air, waiting on a part. That's why we ship faster than anyone else.

International Ordering. No matter what part of the planet you're ordering from, we can make sure your products arrive quickly and correctly. Use our handy international shipping calculator on DXEngineering.com to get accurate shipping quotes before you check out. That way, there are no surprises on your invoice.

Free Standard Shipping for Orders Over \$99*

If your order, before tax, is over 99 bucks, then you won't spend a dime on shipping. (Additional special handling fees may be incurred for Hazardous Materials, Truck Freight, International Orders, Next Day Air, Oversize Shipments, etc.).

Delivering the Big Stuff. Towers are big. Really big. But you don't have to worry about the logistics; we'll handle all the shipping arrangements. Then we'll give you an accurate shipping quote and delivery schedule. DX Engineering has ultra-reliable shipping methods, even if you've ordered huge products.

We're happy to address any shipping questions you have. Contact us:

Phone: 800.777.0703 • International: 330.572.3200 • Fax: 330.572.3279

Mail: 1200 Southeast Ave. • Tallmadge, OH 44278

E-Mail: DXEngineering@DXEngineering.com

Web: DXEngineering.com

DoD CAGE Code: 3M3H7

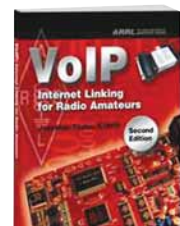
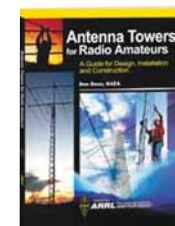
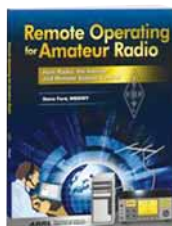
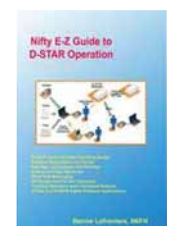
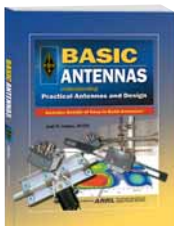
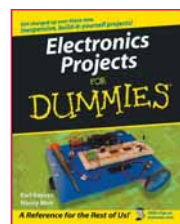
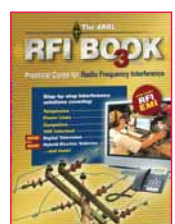
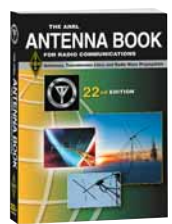
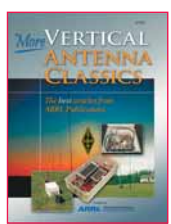
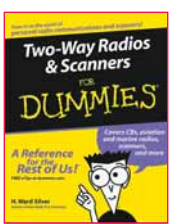
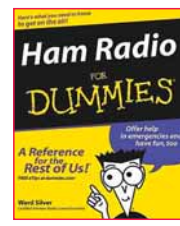
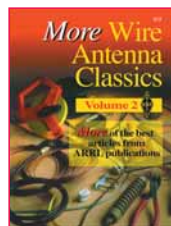
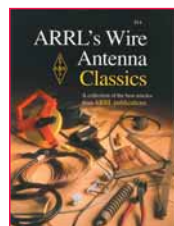
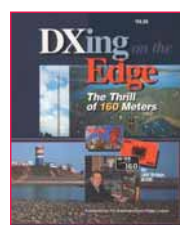
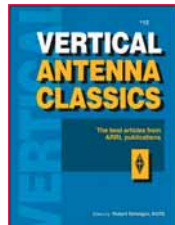
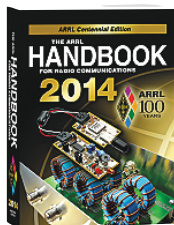
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**ORDER BY 10 PM
SAME-DAY
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10 pm ET M-F

*Find comprehensive shipping information on the adjacent page.





New!



ARRL Literature

ARRL Amateur Radio publications are known and respected worldwide. Each book is constantly reviewed and updated to reflect advances in technology. They are the cornerstone of every Ham's technical library.

ARR-4050	ARRL Handbook, 2014 Edition	\$39.95
ARR-5965	ARRL Operating Manual, 10th Edition	\$27.95
ARR-6016	Get on the Air with HF Digital	\$22.95
ARR-5218	Vertical Antenna Classics	\$12.00
ARR-6354	DXing on the Edge, The Thrill of 160 Meters.....	\$19.95
ARR-7075	ARRL's Wire Antenna Classics	\$13.95
ARR-7709	ARRL's More Wire Antenna Classics, Vol. 2	\$17.95
ARR-8393	ARRL's Small Antennas for Small Spaces.....	\$22.95
ARR-8560	ON4UN's Low Band DXing, 5th Edition.....	\$44.95
ARR-9392	Ham Radio for Dummies.....	\$21.95
ARR-9696	Two-Way Radios & Scanners for Dummies.....	\$21.95
ARR-9795	ARRL's More Vertical Antenna Classics.....	\$17.95
ARR-6948	ARRL Antenna Book, 22nd Edition.....	\$44.95
ARR-0915	ARRL RFI Book, 3rd Edition.....	\$29.95
ARR-9944	Electronics Projects for Dummies	\$24.95
ARR-9994	Basic Antennas, Understanding Practical Antennas and Designs.....	\$29.95
ARR-0125	Nifty E-Z Guide to D-STAR Operation	\$13.95
ARR-0922	Remote Operating for Amateur Radio	\$22.95
ARR-0946	Antenna Towers for Radio Amateurs	\$34.95
ARR-1431	VoIP, Internet Linking for Radio Amateurs.....	\$21.95
ARR-3077	Radios to Go! Getting the Most from Your Handheld Transceiver.....	\$15.95
ARR-3961	Antenna Modeling for Beginners.....	\$34.95
ARR-4845	The Amateur Radio Public Service Handbook.....	\$34.95
ARR-6153	Emergency Power for Radio Communications.....	\$24.95
ARR-6320	The ABCs of Software Defined Radio	\$19.95

DX Engineering T-Shirts

The perfect shirt to wear while building your antenna, DX-ing, or just doing nothing in particular. The 100% cotton shirts feature a full-color DX Engineering logo.



DXE-TMA-10016	Black T-Shirt, Large.....	\$12.95
DXE-TMA-10017	Black T-Shirt, X-Large	\$12.95
DXE-TMA-10018	Black T-Shirt, 2X-Large	\$15.95
DXE-TMA-10019	White T-Shirt, Large	\$12.95
DXE-TMA-10020	White T-Shirt, X-Large	\$12.95
DXE-TMA-10021	White T-Shirt, 2X-Large.....	\$15.95

DX Engineering Ball Cap

You built your antenna with the best, now wear the best! Our black ball cap features a full-color DX Engineering logo on the front, and is adjustable to fit most everyone.



DXE-TMA-10010	Ball Cap with DXE Logo.....	\$9.95
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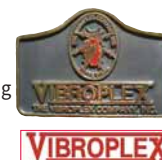
Coffee Mugs

Whether it's a contest all-nighter or early morning DX, these mugs will look great in your kitchen or shack. Be the envy of your club while showing off your Ham pride—sip your coffee from a DX Engineering, Icom or Vibroplex mug.

DXE-COFFEEMUG	DX Engineering Coffee Mug	\$6.00
ICO-COFFEEMUG	Icom Coffee Mug.....	\$6.00
VIB-COFFEEMUG	Vibroplex Coffee Mug	\$8.95

Vibroplex Belt Buckle

Dress your belt with the Vibroplex Bug and celebrate over 100 years of Ham radio. Wearing one of these quality buckles show your passion for Ham radio, especially CW. You love the Bug, you'll love the buckle; dress for operating with Vibroplex belt buckles.

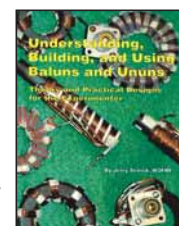


VIB-BUCKLE	Belt Buckle, Vibroplex Logo....	\$25.00
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CQ Magazine Publications

W2FMI Understanding Baluns

W2FMI Jerry Sevick's compilation of balun performance and design criteria. It offers clear explanations to prompt further discussion of theory and applications.



CQM-SEVICKBALUNS	W2FMI Understanding Baluns	\$19.95
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License Manuals

Learn everything you need to pass your next test. These official study materials from the ARRL are the go-to guides for radio clubs all over the planet. They include easy-to-understand lessons and a comprehensive set of sample exam questions. You'll also get an intuitive CD-ROM with additional review material and practice exam software.



ARR-5170	Extra Class License Manual.....	\$29.95
ARR-8119	General Class License Manual	\$29.95
ARR-0977	Tech Class License Manual.....	\$29.95

Orders by 10 pm ET Ship Same Day, See Page 58 for Details

Antenna Analyzer

RigExpert®

Designed for testing, checking, tuning, or repairing antennas and antenna feedlines, this analyzer is a powerful tool for both professionals and hobbyists. At its core, it is an ultra-precise SWR and impedance measuring device. This analyzer is ideal for checking and tuning an antenna, or making and testing coax assemblies. You can also use it to quickly measure the capacitance or inductance of reactive loads.

A large, bright display gives you SWR, impedance, return loss readouts and much more. It connects easily to a PC or laptop to unlock even more diagnostic tools. The unit has internal memory storage and can be powered via USB.

Hookup is via a single SO-239 connector and the analyzer has a .1 to 54 MHz frequency range.

REU-AA-54 Antenna Analyzer **\$349.95**

New!



Packaged Tower Kit

TBX Tower

TBX Tower has done all of your homework for you by providing a complete tower kit in a single convenient package. The kit has everything you'll need to erect a self-supporting, 64 foot tower. It includes an eight foot mast, rotor plate, top plate, top-section steps and hardware. The tower uses offset mounting sections to create a step-down design that ensures a correct installation.

The sections are made from pre-galvanized heavy-gauge steel and riveted X-bracing for strength and corrosion resistance. DXEngineering.com has more kits available, depending on your application.

TBX-TBX64 Packaged Tower Kit **\$1,999.95**



Active Magnetic Loop HF Receiving Antenna

This 38 inch diameter loop antenna is designed for reception of MF and HF signals and includes a very high dynamic-range low-noise preamplifier. It can be mounted to a pole, mast, or any flat surface.

The magnetic loop responds primarily to the magnetic field while ensuring high rejection of nearby electrostatic field noise. Interference reduction is further enhanced by the deep nulls of the antenna's directivity pattern that can be used to null out or reduce interference coming from a specific localized direction. For permanent installation, you can use an inexpensive light duty antenna rotator to maximize the null.

- Very low IMD: works in both strong and weak signal environments
- Up to 30 dB rejection over electrostatic field antennas
- Primary Range: 100 kHz to 30 MHz
- Rejects power line noise
- Rugged construction
- No tuning necessary
- No HOA problems: low profile and works at ground level
- Adjustable output level to optimize output for your radio

PXL-RF-PRO-1B Magnetic Loop Antenna System **\$499.99**

New!



DX ENGINEERING®.com

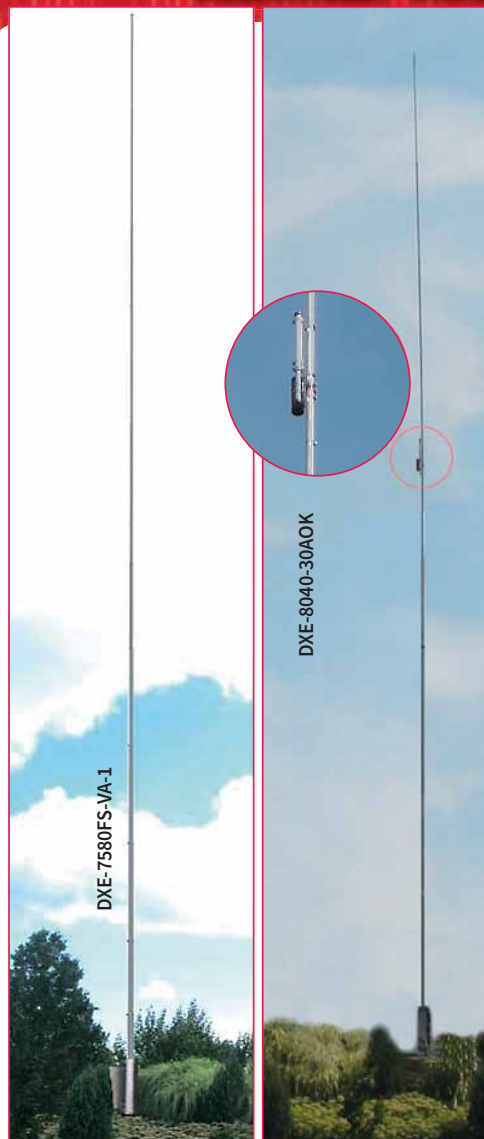
- Find more brands and more gear
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- More specs to compare your choices
- Free instruction sheet/manual downloads
- Order online 24/7
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- Special offers & much more!



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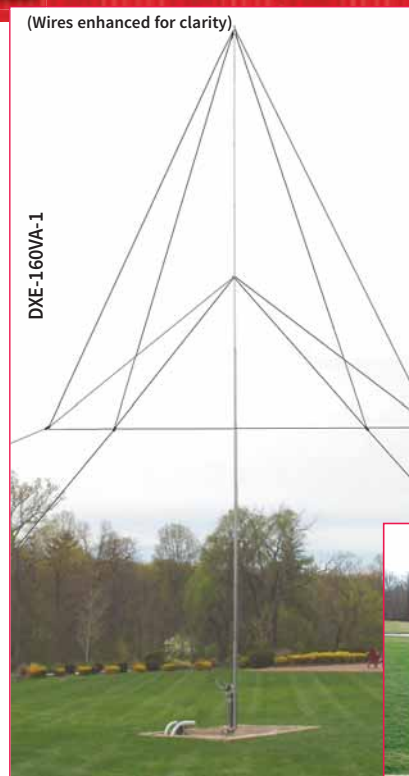
THE INDUSTRY'S MOST POWERFUL WEBSITE
WORLD-CLASS PRODUCTS SHIPPED WORLDWIDE





(Wires enhanced for clarity)

DXE-160VA-1



DX Engineering High-Performance 160 Meter Quarter-Wave Vertical

Now you can have a high-performance vertical antenna specifically for the 160 meter band. Achieve the strongest possible presence at your power level and be really competitive!

This custom-designed capacity hat system integrates with light rope guying, allowing you to get on 160 meters with a BIG signal from a vertical monoband antenna that is only 55 feet tall! Constructed from aircraft-grade aluminum, the massive three inch diameter lower section is secured by a Heavy Duty Plus Stainless Steel Pivot Base, which can be lowered easily with the optional DXE-VRW One Man Manual Winch.

Antenna Features:

- 5 kW SSB and CW rated
- Unparalleled reliability
- A custom designed capacity hat for top performance
- An adjustable matching network for the lowest SWR
- 40 kHz SWR bandwidth - CW+DX Phone
- The lowest takeoff angle reduces domestic QRM signals

DXE-160VA-1	160M Vertical Antenna	\$839.00
DXE-VRW-1	Manual Winch Add-On Kit.....	\$169.99

Standard Monoband High-Performance Vertical Antennas

2 1/8" to 3/8" Fast Taper, 60 Meter

- 43' vertical radiator
- Thick stainless steel tilt base
- Full 60 meter coverage with SWR of 1.5 or less

DXE-60VE-1P	60M Vertical Antenna	\$259.95
	2" to 1/2" Fast Taper, High Performance 40 Meter	

- 33-35' tall vertical element
- Operates over the entire 40 meter band with an SWR of less than 1.5:1

DXE-40VE-1	40M Vertical Antenna	\$178.95
	2" to 1/2" Fast Taper, 40 Meter with Top Hat	

- 25'/15' (40M/30M) vertical element
- Adjustable for 30M
- Low-profile top hat assembly

DXE-40VE-2	40M/30M Vertical Antenna.....	\$219.95
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2" to 1" Fast Taper, High Performance 30 Meter

- 24' tall vertical element
- Operates over the entire 30 meter band with an SWR of less than 1.5:1

DXE-30VE-1	30M Vertical Antenna	\$178.95
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New!

DXE-VRW-1



THUNDERBOLT® Dual Band High-Performance Vertical Antennas

80/40 Meters

- Full band coverage on 40 and 300 kHz on 80 meters with SWR under 2:1—no outboard tuner needed
- Tunable above and below 7 MHz range for MARS and CAP frequencies
- Maximum legal power handling
- Optimum 53' overall height
- Self-supporting design withstands 50 mph wind without guying—easy raising and lowering with optional winch kit

DXE-8040VA-1	80M Vertical Antenna.....	\$875.00
DXE-VRW-1	Manual Winch Kit	\$169.99
DXE-7580-THK	CW Optimizer Capacity Hat.....	\$59.95
DXE-8040-30AOK*	30 Meter Add-On Kit.....	\$129.95
		<i>*\$99.95 if purchased with antenna</i>

40/30 Meters

- Full band coverage on 40 and 30 meters with SWR under 1.5:1—no tuner needed
- 40M bandwidth greater than 750 kHz with SWR under 2:1
- Tunable above and below 7 MHz range for MARS and CAP frequencies
- Maximum legal power handling
- Optimum 30' overall height
- Self-supporting design withstands 60 mph wind without guying

DXE-4030VA-1	40/30M Dual-Band Antenna;	\$275.00
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THUNDERBOLT® Single Band High-Performance Vertical Antennas

80/75 Meters

- 300 kHz bandwidth with SWR under 2:1—no outboard tuner needed
- Tunable for CW or SSB—change base coil tap for segment
- Maximum legal power handling
- Optimum 53' overall height
- Self-supporting design withstands 50 mph wind without guying—easy raising and lowering with optional winch kit

DXE-7580VA-1	80M Vertical Antenna.....	\$825.00
DXE-VRW-1	Manual Winch Kit	\$169.99
DXE-7580-THK	CW Optimizer Capacity Hat.....	\$59.95

80 Meter with Performance-Enhancing Top Hat

- Slow taper, 43' vertical radiator
- 6063 T832 corrosion-resistant aircraft aluminum tubing and stainless steel hardware
- 12' diameter capacity hat—resonant on 3.5-4.0 MHz
- 5 kW continuous/10 kW CW/SSB rating
- Includes impedance matching network

DXE-80VA-3	80M Vertical Antenna.....	\$399.95
DXE-GUY400-KIT	Guying Kit	\$50.95
	60 Meter Full Size	

DXE-60VA-1P	60M Vertical Antenna.....	\$308.95
DXE-GUY400-KIT	Guying Kit	\$50.95

DX Engineering 75/80 Meter Monoband Vertical Antennas

DX Engineering 7580FS Series are full size, quarter-wave high-performance antennas with everything you need in a high-performance vertical. They feature ultra-wide SWR bandwidth and unbeaten gain, and can handle the highest power amplifiers for reliable performance. They're ideally suited for single antenna applications and directional multi-antenna arrays. Visit DXEngineering.com for details.

DXE-7580FS-VA-1 has a 2" O.D. heavy wall base section. Its slim profile means you can hide it easily, even in a small stand of tall trees. Some DXers have painted the antenna to match the bark of the surrounding trees. Because of its slim, full size height, guying is required on this antenna.

DXE-7580FS-VA-1	2" O.D. Full Size Vertical	\$379.50
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DXE-7580FS-VA-2 has a 3" O.D. heavy wall base section and thick-wall 6061 aluminum tubing mid-sections, providing a strong antenna with no guying necessary. The antenna can easily be lowered with the supplied Heavy Duty Plus Stainless Tilt Base and the optional DXE-VRW-1 hand winch.

DXE-7580FS-VA-2	3" O.D. Full Size Vertical.....	\$825.00
DXE-VA-PIVOT-3	Pivot Base for 3" Base Sections...	\$390.00
DXE-VRW-1	Manual Winch Add-On Kit	\$169.99

The massive DXE-7580FS-VA3 features a 4" O.D. heavy wall base section and thick-wall 6061 mid sections, creating a very stout 68 foot vertical antenna with no guying necessary, even in adverse conditions. It can be lowered easily with the supplied Heavy Duty Plus Stainless Tilt Base and the optional DXE-VRW-1 hand winch.

DXE-7580FS-VA-3	4" O.D. Full Size Vertical	\$1,698.95
DXE-VA-PIVOT-4	Pivot Base for 4" Base Sections	\$790.00
DXE-VRW-1	Manual Winch Add-On Kit	\$169.99

More Products, Specs and Photos at DXEngineering.com

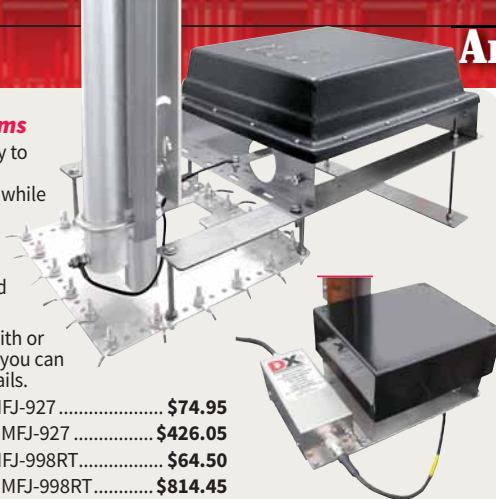
ATU-1 and ATU-2 Remote Tuner Mounting Systems

These Remote Tuner Mounting Systems provide an easy way to mount your MFJ remote tuner to your vertical antenna. The DXE-ATU-1 is specifically tailored for mounting the MFJ-927, while the DXE-ATU-2 is designed for the high power MFJ-998RT.

Both systems mount to your DX Engineering RADP-3 Radial Plate for a secure connection and feature laser-cut brackets, stainless steel hardware and an insulated stranded copper feedline cable with ring terminals.

The DXE-MBV-ATU-1 and 2 Add-On Packages are available with or without the corresponding tuner. Everything is included, so you can get on the air quickly. Visit DXEngineering.com for more details.

DXE-ATU-1	Remote Tuner Mounting System for MFJ-927	\$74.95
DXE-MBV-ATU-1	Remote Tuner Mounting System with MFJ-927	\$426.05
DXE-ATU-2	Remote Tuner Mounting System for MFJ-998RT	\$64.50
DXE-MBV-ATU-2	Remote Tuner Mounting System with MFJ-998RT	\$814.45



DXE-MBVE-1-3ATP

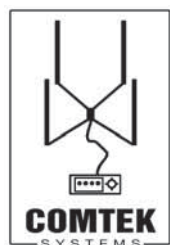
**43 Foot Multi-Band Vertical/Remote Tuner Package**

Includes DXE-MBVE-1 (below) plus:

- MFJ-927 Remote IntelliTuner™—200 watts
- DXE-FCC050-H05-A Feedline Current Choke
- DXE-SSVC-2P Stainless Steel Mounting V-Clamp
- Custom laser-cut stainless steel bracket for tuner and FCC
- Bias tee power injector for 12 Vdc
- RG-8X 2' coaxial cable with PL-259 connectors
- 2 tinned copper braids, 1" wide for connection to your optional radial plate
- Feedline wire—14-gauge insulated stranded copper with ring terminal attached

DXE-MBVE-1-3ATP Antenna/Tuner Package..... **\$649.00**

DXE-MBV-ATU-1 Add-On Tuner Kit Only..... **\$426.05**

**COMTEK SYSTEMS Vertical Antennas and Arrays**

These rugged, affordable quarter-wave antennas are designed to be used in sets to provide top performance with phased vertical array systems like the COMTEK PVS 2-antenna systems or COMTEK and DXE Four-Square array controllers. The COM-20VA antenna can be used on any single band—20, 17, 15, 12 or 10 meters—by adjusting its length.

Constructed from 6063 aircraft-spec aluminum tubing, these antenna taper from a huge base section. High strength, UV-resistant EXTREN® insulators and a heavy aluminum plate mounting base ensure long lasting, reliable performance under adverse conditions. The antennas come with V-saddle clamps for installation to your ground-mounted pipe; 2" O.D. pipe is recommended, but the clamps will accept any size from 1" to 2". Stainless steel hardware included. Light guying is always recommended for phased systems to keep spacing precise and minimize swaying.

20 Meter Vertical Antenna

COM-20VA	20M Vertical Antenna.....	\$148.95
COM-20VA-2P	20M Vertical Antenna, Set of 2	\$277.95
DXE-TB-8P	Tilt Base, Kit	\$87.50
COM-20VA-4P	20M Vertical Antenna, Set of 4	\$519.95

30 Meter Vertical Antenna

COM-30VA	30M Vertical Antenna.....	\$168.95
COM-30VA-2P	30M Vertical Antenna, Set of 2	\$315.95
COM-30VA-4P	30M Vertical Antenna, Set of 4	\$589.95
DXE-TB-7P	Tilt Base, Kit	\$87.50

40 Meter Vertical Antenna

COM-40VA	40M Vertical Antenna.....	\$178.95
COM-40VA-2P	40M Vertical Antenna, Set of 2	\$333.95
COM-40VA-4P	40M Vertical Antenna, Set of 4	\$623.95
DXE-TB-7P	Tilt Base, Kit	\$87.50

See page 62 for Radial Plates and Radial Wire Kits to complete your antenna installation.

**DXE-MBVE-5 Multi-Band High-Performance 43 Foot Vertical Antenna with SAF-T-TILT™ Base (Tuner Required)**

Now you can work DX as you never could before with a low horizontal antenna!

The new DX Engineering MBVE-5 is high performance vertical multi-band (160 through 10 meter) antenna, designed from the ground up for ease of use, reliability and performance. The 43 foot antenna has a rugged 3/8" thick aluminum SAF-T-TILT™ base that allows easy and safe tilt action without the hazard of removing mounting hardware.

The MBVE-5 requires a special DX Engineering UN-43 4:1 UNUN, 150 feet of RG-213 coax feedline, and either your in-shack wide-range tuner or a DX Engineering MBV-ATU-1 automatic tuner at the base of the antenna.

- High strength thermoplastic insulator won't crack, splinter, peel or fail
- Rugged, structural grade 6063-T832 drawn aluminum radiator—the best alloy for long lasting antenna applications
- SAF-T-TILT™ base allows safe raising and lowering of antenna without removing fastening hardware
- Fast taper antenna element provides the lowest wind resistance
- All stainless steel hardware
- Free-standing to 92 mph wind speed

The MBVE-5 requires a good ground radial system—32 radials (each 65 feet long) are recommended. Fewer radials will work, but with diminished results.

The DX Engineering MBVE-5 includes the antenna element, mounting plate with insulator, SAF-T-TILT™ base and stainless steel hardware and clamps.

DXE-MBVE-5	Antenna Package.....	\$198.95
DXE-MBVE-5-4P	Antenna Package with Radial Plate.....	\$272.95
DXE-MBVE-5-4UP	Antenna Package with UN-43 UNUN	\$318.95
DXE-MBVE-5-4UPR	Antenna Package with Radial Plate and UN-43 UNUN.....	\$387.95
DXE-MBVE-5-3ATP	Antenna Package with MBV-ATU-1A Remote Automatic Tuner.....	\$648.95



See video on how these four UNGUYED DX Engineering 80M Verticals easily withstood SuperStorm Sandy at DXEngineering.com!

43 Foot Standard Multi-Band High-Performance Vertical Antennas (Tuner Required)

2 1/8" to 3/8" Fast Taper, 160 to 10 Meters

- 43' optimal length vertical radiator
- Easy tuning design—correct length and taper
- Thick stainless steel tilt base
- No coils or linear loading elements
- Requires DXE-UN-43 UNUN Balun for multi-band use with your wide range tuner

DXE-MBVE-1	Antenna, Basic Package	\$198.95
DXE-MBVE-1-4P	Antenna Package with Radial Plate.....	\$272.95
DXE-MBVE-1-4UP	Antenna Package with UN-43 UNUN	\$318.95
DXE-MBVE-1-4UPR	Antenna Package with Radial Plate and UNUN	\$387.95
DXE-MBVE-1-3ATP	Antenna Package with MBV-ATU-1 Aremote Automatic Tuner ...	\$649.00
DXE-GUY400-KIT	Guying Kit	\$50.95
DXE-MBVA-1UP	Thunderbolt Design.....	\$398.95

2" to 1/2" Fast Taper, 80 to 10 Meters

- 33' vertical radiator
- Thick stainless steel tilt base
- Easy tuning design—correct length and taper
- No coils or linear loading elements
- Requires DXE-UN-43 UNUN Balun for multi-band use with your wide range tuner

DXE-MBVE-2



Radial Plate **DX ENGINEERING**

DX Engineering's patented Radial Plate provides a neat, easy, and effective way to connect essential radial wires and feedline to your quarter-wave vertical antenna. The plate can be attached easily and rigidly to a 4x4 or 6x6 post, steel or aluminum pipe up to 3 inches O.D., a fence post, or whatever is supporting your antenna. Purchase the optional V-Saddle Clamp for mounting the plate to pipe up to 3 inches O.D.

The plate assembly has been drilled for an optional SO-239 panel mount or bulkhead mount connector, available from DX Engineering. This will ground the shield of your feedline to the radial plate before it goes to the antenna, allowing maximum transfer of ground current directly into your radial system.

- Provides attachment for coaxial cable shield
- Square to allow most radial attachment points
- Stainless steel plate won't dissolve like aluminum
- Stainless steel hardware



DXE-RADP-3	Radial Plate, Complete with 20 Stainless Steel Bolt Sets	\$54.50
DXE-RADP-1HWK	Hardware Set, Includes 20 sets of 1/4" Stainless Hardware;	\$7.50
DXE-SSVC-2P	V-Saddle Clamp, 1" to 2" O.D. Applications	\$11.95
DXE-SSVC-3P	V-Saddle Clamp, 2.375" to 3" O.D. Applications	\$14.95
DXE-112-KIT	SO-239, PTFE/Silver, Chassis Mount with Hardware	\$6.45
DXE-363-SST	SO-239, PTFE/Silver, Bulkhead Fitting with Hardware	\$6.95
UMI-81343	Anti-Seize Compound, 1 oz. Squeeze tube	\$3.29
DXE-225RT-20	Ring Terminals, 1/4" Hole, for 14-/16-Gauge Wire, 20 Pack ...	\$4.95
DXE-FP-WIRE-N	Feedpoint Assembly, N-Connector, Use with DXE-1023	\$16.95
DXE-FP-WIRE-P	Feedpoint Assembly, PL-259, Use with DXE-363-SST	\$14.95

Tilt Base

No more climbing ladders or removing a bracket from the support post. One person can easily lift the antenna, tilt it to the side and walk it down. The optional

DXE-AOK-TB1193 Wing Nut Kit makes for a no-tools fastening of the tilt base. Precision-cut from 3/16 inch 304 stainless steel, the Tilt Base is virtually indestructible and conveniently mounts to the same mast that you use for the antenna and radial plate. The Tilt Base is great for installations that need to accommodate CC&R, or for taking down antenna during severe weather.



Use DXE-TB-3P for Hustler BTV models, DXE-TB-4P for Butternut, GAP, Hy-Gain and DX Engineering Verticals, and use DXE-TB-6P for HyGain 14AVQ. The DXE-TB-4P Tilt Base is intended for quarter-wave verticals that have a minimum of 1/2 inch and a maximum of 2 inch O.D. base, weigh up to 20 pounds, and have a height of no more than 28'. Vertical antennas up to 43' must be adequately guyed, and extra precautions should be taken when raising or lowering the antenna to avoid undue lateral stress on the tilt mechanism. If you are mounting your Tilt Base to a ground mounted pipe, you will need two DXE-CAVS-2P V-Bolt Saddle Clamps to complete the installation.

DXE-TB-3P	Tilt Base Kit for Hustler BTV Model Antennas	\$62.50
DXE-TB-4P	Tilt Base Kit for Antennas Other Than Hustler BTV	\$77.50
DXE-TB-6P	Tilt Base Kit for Hy-Gain 14AVQ	\$87.50
DXE-TB-7P	Tilt Base for COMTEK 40VA and 30VA Verticals, Kit	\$87.50
DXE-TB-8P	Tilt Base for COMTEK 20VA Verticals	\$87.50
DXE-AOK-TB1193	Wing Nut No-Tools Kit, Pack of 2	\$7.95
DXE-SSVC-2P	V-Saddle Clamp, 1" to 2" O.D. Applications	\$11.95

DX Engineering Coil Tap Clips

These silver-plated Coil Tap Clips provide adjustable attachment points to uninsulated coils including homebrew, Miniductor™ and Airdux™. They also are useful for making flying connections to uninsulated wire in non-RF applications without soldering or cutting. These clips will accommodate wire sizes from #20 to #10 AWG.

DXE-CLIP-P	Coil Tap Clips, Pack of 5	\$9.95
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Radial Wire Staples

There is no need to bury your radials for performance. DX Engineering Radial Wire Staples are perfect for fastening radials on the ground below the grass to eliminate the risk of damaging your radials during lawn maintenance. The radials disappear into the lawn within weeks.



DXE-STPL-100BD

Radial Wire Metal Staple

The low-cost metal staples now have a biodegradable counterpart! The "BD" suffix indicates a pack of 3 inch biodegradable anchors made from recycled PLA (Polylactide Resin). Depending on weather conditions, they will degrade in a year or two. They are easily installed and will hold radial wires in place until lawn roots overtake them—and then the staples disappear. Ecologically friendly!

DXE-STPL-100BD	Radial Wire Biodegradable Staple, 3", 100 Pack	\$16.00
DXE-STPL-100P	Radial Wire Metal Staple, 6", 100 Pack	\$16.00
DXE-STPL-300P	Radial Wire Metal Staple, 6", 300 Pack	\$44.00

DX Engineering Vertical Antenna Matching Network

Without a means of adjusting feedpoint impedance, achieving the best SWR on 80 meters on some vertical antenna installations with excellent radial systems may be difficult. The Vertical Antenna Matching Network lets you tune a low impedance antenna to the minimum SWR in the user-selected portion of the 80 or 160 meter band without affecting operation on the other, higher frequency bands (if applicable). The Vertical Antenna Matching Network can also be used on 160 meter Inverted-L and Tee-Top wire verticals. The #12 AWG coil wire is tin-nickel plated for high power handling, corrosion resistance, ease of soldering, and long-term reliability.

DXE-VMN-1	Vertical Antenna Matching Network	\$59.95
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Wing Nut No-Tools Kit for DX Engineering Tilt Base

Use these wing nut knobs for tool-less quick release of the DX Engineering DXE-TB Tilt Bases—handy for lowering the antenna for tuning or daily stealth operation. Simply remove the existing hex nuts and thread on the wing nuts. The old hex nuts store on the tilt base for future use. Purchase two sets to allow tightening of the lower mounting hardware without tools and for extended periods of upright installation and use.



DXE-AOK-TB1193	Wing Nut No-Tools Knobs, Pack of 2	\$7.95
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Guying Kits

Many locations experience winds that can be damaging to antennas, even at ground level. These kits provide four ground anchors and plenty of 260 pound, 3/32 inch diameter rope to provide the guying necessary to protect your vertical antenna. The black rope is UV-protected to last for years.



DXE-GUY100-KIT	BTV Guying Kit, 100' of Rope	\$29.95
DXE-GUY200-KIT	BTV Guying Kit, 200' of Rope	\$30.95
DXE-GUY400-KIT	Vertical Guying Kit, 400' of Rope	\$50.95
DXE-GUY1000-KIT	HD Vertical Guying Kit with 1,000' of Rope	\$89.95
DXE-EA15	Earth Anchor	\$5.49

Accessories for Vertical Antennas

DXE-SSVC-2P	V-Saddle Clamp, 1" to 2" O.D.	\$11.95
DXE-AOK-TB1193	Wing Nut Tilt Base Add-On Kit, 2 Per Pack	\$7.95
DXE-AOK-DCF	Direct Coax Feed	\$22.95
DXE-8XDU002	Low Power DCF Jumper Cable, 2'	\$16.95
DXE-400MAXDU003	High Power/Low Loss DCF Jumper Cable, 2'	\$20.95
DXE-VFCC-H05-A	Vertical Feedline Current Choke	\$134.95

Radial Wire Kits

Bulk Radial Wire Kits

You should install as many radials as possible to achieve optimal performance with a ground-mounted vertical. All our radial wire kits use #14 stranded insulated copper wire that is UV-resistant, hard to see, and lays down easily without a preset helix.

DXE-RADW-500K	Radial Kit, 500', Ring Terminals, Wire Staples	\$74.95
DXE-RADW-500KBD	Radial Kit, 500', Ring Terminals, Biodegradable Staples	\$74.95
DXE-RADW-1000K	Radial Kit, 1,000', Ring Terminals, Wire Staples	\$142.95
DXE-RADW-1000KBD	Radial Kit, 1,000', Ring Terminals, Biodegradable Staples	\$142.95
SUM-900031	Wire Stripper/Crimper/Cutter Tool	\$18.97

Pre-Assembled Radial Wires

Packages of twenty pre-cut radial wires include 1/4" ring terminals machine crimped on one end for quick, easy attachment to the radial plate.

DXE-RADW-20RT	20' Radial Wire with 1/4" Ring Terminals, 20 Pack	\$80.95
DXE-RADW-32RT	32' Radial Wire with 1/4" Ring Terminals, 20 Pack	\$107.95
DXE-RADW-65RT	65' Radial Wire with 1/4" Ring Terminals, 20 Pack	\$189.95

Pre-Cut Radial Kits

DX Engineering offers pre-cut radial wire kits for the 10, 15, 20, 40 and 80 meter bands, complete with wire connection hardware for elevated radial installations. Just strip the wire ends, crimp and solder. Each radial is slightly longer than a quarter-wave to allow tuning as necessary.

DXE-RADW-1K	Radial Wire Kit for 10, 15 and 20M	\$26.95
DXE-RADW-40MK	Radial Wire Kit for 40M	\$21.95
DXE-RADW-80MK	Radial Wire Kit for 80M	\$39.95



hy-gain

Vertical Antennas

Patriot Vertical Antennas

Take advantage of the sunspot cycle with the low takeoff angle of Hy-Gain's Patriot Vertical Antennas. These three antennas feature efficient end-loading coils and capacity hats to give you optimum performance on several bands. They handle 1,500 watts, feature automatic bandswitching and each band is individually tunable. Their sleek, radial-less design means a low wind surface area and small footprint, so you can mount them easily on your deck, roof or patio. Discover the complete specs on each antenna at DXEngineering.com.

HGN-AV-620	20, 17, 15, 12, 10 and 6 Meter Vertical, 22.5'	\$349.95
HGN-AV-640	40, 30, 20, 17, 15, 12, 10 and 6 Meter Vertical, 25.8'	\$449.95
HGN-AV-680	80, 40, 30, 20, 17, 15, 12, 10 and 6 Meter Vertical, 26'	\$529.95

DX-77A 7-Band Vertical

The Hy-Gain DX-77A is an omni-directional, self-supporting, automatic-bandswitching vertical radiator. It operates on the 10, 12, 15, 17, 20, 30 and 40 meter Amateur bands. No ground radials are required with the DX-77A. Its design is based on an off-center-fed dipole, sometimes called a "Windom" antenna. High efficiency high-power traps are used to isolate the active sections of the antenna.

The DX-77A uses a heavy-duty, tiltable mast clamp that accepts masts up to 2.125" O.D. The entire antenna can be easily raised and lowered for tuning purposes and for use on recreational vehicles (RVs). The DX-77A's overall length of 29 feet (8.8 meters) contributes to exceptional bandwidths on 40 and 20 meters. Maximum Power: 750 watts average, 1,500 watts PEP.

HGN-DX-77A	7-Band Vertical	\$449.95
AV-18HT Hy-Tower	5-Band, 50 Foot Vertical	

The AV-18HT Hy-Tower is an omni-directional, self-supporting vertical radiator which operates on 10 through 80 meters. 160 meter operation is possible with the addition of a loading coil. The use of stub decoupling systems allows band switching on 10, 15, 20, 40, and 80 meters. The stubs isolate various sections of the vertical antenna so that an electrical 1/4-wavelength (or odd multiple of 1/4-wavelength) exists on all bands. On 20 meters, the 80 meter section acts as a 3/4-wave radiator.

The tilting base of the Hy-Tower allows the antenna to be completely assembled on the ground before it is raised into position. It is light enough for one person to assemble and for two people to erect. The Hy-Tower is supplied with stainless steel hardware. Maximum Power: 1 kW AM, 2 kW PEP. Overall Height: 53 feet.

The Hy-Tower is drop-shipped via motor freight directly from Hy-Gain to you. DX Engineering will e-mail you a shipping quote when you place your order.

HGN-AV-18HT	5-Band Vertical	\$939.95
HGN-MK-160A	160 Meter Add-On Kit for AV-18HT	\$119.95

hy-gain

AV-12AVQ, AV-14AVQ and AV-18AVQII Multi-Band Trap Verticals

The 3 band Hy-Gain AV-12AVQ, 4-band AV-14AVQ and 5-band AV-18AVQII use the same trap design as the famous Hy-Gain Thunderbird beams. Separate air dielectric Hy-Q traps with oversize coils give superb stability and quarter-wave resonance on all bands. Their 18 foot overall length fits well in most urban environments. The 14-AVQ covers the 10, 15, 20 and 40 meter bands while the 18-AVQII adds the 80 meter band to the mix.

All Hy-Gain multi-band vertical antennas are entirely self supporting—no guys required. They offer remarkable DX performance with their extremely low angle of radiation and omnidirectional pattern.

Hy-Gain vertical antennas handle 1,500 watts PEP SSB, have low SWR and automatic bandswitching. Heavy-duty, slotted, tapered swaged aircraft quality aluminum tubing with full circumference compression clamps is used for radiators.

All Hy-Gain verticals feature a two year limited warranty.

HGN-AV-12AVQ	3-Band Trap Vertical	\$139.95
HGN-AV-14AVQ	4-Band Trap Vertical	\$179.95
HGN-AV-18AVQII	5-Band Trap Vertical	\$239.95



HUSTLER

BTV Verticals

The Hustler BTV antenna series delivers good performance, easy assembly, and the best reliability of any multi-band vertical on the market. These antennas offer 2:1 SWR or better at the band edges and up to a 100 kHz bandwidth on 75/80M (5BTV and 6BTV only). Hustler's exclusive trap design offers the lowest loss possible.



DXE-HSR-6BTV-P

Hustler BTV series antennas are a quarter-wave-trapped vertical design. The antenna should be ground-mounted with radials or elevated-mounted with tuned radials. Visit DXEngineering.com for more information about radials for quarter-wave vertical antennas.

The sealed cover on the traps assures stable tuning in all kinds of weather. There is a wide tuning range designed in the antenna to accommodate differing ground plane conditions. All antenna sections use 1.25 inch heavy wall, high strength aluminum. The traps use a solid 1 inch fiberglass form for optimum electrical and mechanical stability. The base uses an extra heavy duty aluminum mounting bracket with low loss, high strength insulators.

The new, economical DX Engineering High Performance BTV packages include a stainless steel tilt base and radial plate, radial wire installation kit, direct coax feed add-on kit, bulkhead coax connector, low loss RG-8/U jumper cable, and stainless steel V-clamps.

Antenna Packages

DXE-HSR-4BTV-P	4BTV High Performance Package with ACC4	\$379.00
DXE-HSR-5BTV-P	5BTV High Performance Package with ACC4	\$419.00
DXE-HSR-6BTV-P	6BTV High Performance Package with ACC4	\$454.00

Antenna Only

HSR-4BTV	BTV-4 Band Antenna Only	\$124.95
HSR-5BTV	BTV-5 Band Antenna Only	\$159.95
HSR-6BTV	BTV-6 Band Antenna Only	\$189.95

DXE-AOK-80M



DXE-AOK-17M



DXE-AOK-12M



DXE-AOK-60M



DXE-AOK-DCF



HSR-30-MTK

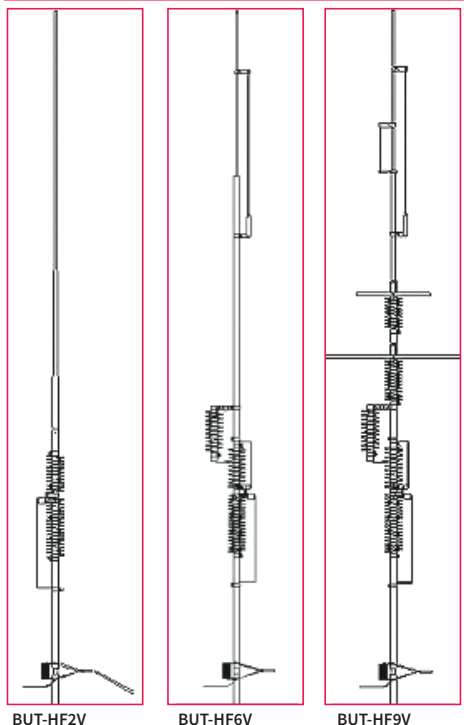


DX Engineering Add-On Kits for Hustler BTV Verticals

DX Engineering offers add-on kits that provide additional frequency band coverage or installation and operating convenience to the popular Hustler BTV vertical antenna family. Simply add the kit, make some minimal tuning adjustments, and you're on the air with an additional band. The stainless steel DXE-AOK-DCF allows simple connection of coaxial cable with a PL-259 connector.

DXE-AOK-12M	12 Meter Add-On Kit for Hustler BTV Verticals	\$59.95
DXE-AOK-17M	17 Meter Add-On Kit for Hustler BTV Verticals	\$74.95
HSR-30-MTK	30 Meter Add-On Kit for Hustler 4BTV and 5BTV Verticals	\$47.95
DXE-AOK-60M	60 Meter Add-On Kit for Hustler BTV Verticals	\$78.95
DXE-AOK-80M	80 Meter Add-On Kit for Hustler 4BTV Verticals	\$59.95
DXE-AOK-DCF	Direct Coax Feed for Hustler BTV Verticals	\$22.95
DXE-8X19-RT	Vertical Antenna Feedpoint Cable	\$16.95

Proven Products, Expert Advice, Same-Day Shipping



Vertical and Yagi Antennas

Butternut antennas have a well-earned reputation for performance and long life. They are easy to erect and tune, and will last many years. No lossy traps are used in these internationally acclaimed antenna designs.

Butternut Verticals

BUT-HF2V	2-Band, 80/40M.....	\$299.95
BUT-HF6V	6-Band, 80/40/30/20/15/10M	\$439.95
BUT-HF9V	9-Band, 80/40/30/20/17/15/12/10/6M	\$499.95
BUT-MPS	Mounting Post Sleeve for HF6V/HF9V.....	\$21.95
BUT-GRK	Ground Radial Kit for HF2V/HF6V/HF9V	\$99.95
BUT-TBR-160S	160 Meter Top Band Kit for HF2V/6V/9V	\$199.95
BUT-CPK	Counterpoise Kit for HF6V/9V	\$199.95
BUT-A-17-12	17/12 Meter Kit for HF6V, 277-10	\$69.95
BUT-A-6	6 Meter Kit for HF6V, 277-12	\$22.95
Butternut Yagis		
BUT-HF5B	5-Band Butterfly Beam, 20/17/15/12/10M	\$599.95
BNR-3X10	Skyhawk Triband Beam, 20/15/10M	\$1,199.95

BUT-GRK

BUT-MPS

New!

Cushcraft

Amateur Radio Antennas

CSH-R6000

CSH-MA160V



Vertical Antennas

CSH-MA160V 160 Meter 36' Vertical Antenna with Radial Kit

This antenna is a compact, efficient vertical designed for working top-band DX from an average-size house lot. A low launch angle and deep overhead null combine to pull in distant stations while rejecting local QRM.

CSH-MA160V 160M Vertical Antenna **\$289.95**

CSH-R6000 20-6 Meter 6-Band, 19' Vertical Antenna

This is a 6 through 20 meter, no-ground radial antenna. No traps are used on 6, 10 and 15 meters for maximum efficiency and power handling.

CSH-R6000 6-Band Vertical Antenna **\$429.95**

CSH-R8 40-6 Meter 8-Band, 28.5' Vertical Antenna

This multi-band design provides 8-band coverage encompassing the 6, 10, 12, 15, 17, 20, 30, and 40 meter bands. The antenna provides 360 degree (omni) coverage on the horizon and a low radiation angle in the vertical plane for a better DX.

CSH-R8 8-Band Vertical Antenna **\$529.95**

CSH-R8GK 3-Point, Non-Conductive Guy System for R8 **\$55.95**

Rotatable Dipole Antennas

CSH-D3 20/15/10 Meter Triband..... **\$359.95**

CSH-D3W 30/17/12 Meter WARC..... **\$359.95**

CSH-D40 40 Meter **\$389.95**

Cushcraft Vertical Antennas

CSH-MA160V 160 Meter with Radial Kit, 36' **\$289.95**

CSH-MA8040V 80/40 Meter Dual-Band, 27' **\$309.95**

CSH-MA5VA 20-10 Meter 5-Band, 14.7' **\$289.95**

CSH-MA6VA 20-6 Meter 6-Band, 14.7' **\$329.95**

CSH-R6000 20-6 Meter 6-Band, 19' **\$429.95**

CSH-R8 40-6 Meter 8-Band, 28.5' **\$529.95**

CSH-R8GK Guying Kit for R8 Antenna **\$55.95**

CSH-AR10 10 Meter Ringo, 3 dB, 17.6' **\$109.95**

CSH-AR6 6 Meter FM Ringo, 3 dB, 10' **\$99.95**

CSH-AR2 2 Meter FM Ringo, 3 dB, 3.9' **\$64.95**

CSH-ARX2 2 Meter Ringo Ranger, 5 dB, 9.3' **\$79.95**

CSH-ARX2B 2 Meter Ringo Ranger II, 7 dB, 14' **\$99.95**

CSH-ARX220B 220 MHz Ringo Ranger II, 7 dB, 9' **\$104.95**

CSH-AR270 2 Meter/440 MHz Ringo, 3/5.5 dB, 3.75' **\$119.95**

CSH-AR270B 2 Meter/440 MHz Ringo, 5.5/7.5 dB, 7.7' **\$179.95**

CSH-AR450 440 MHz FM Ringo, 3 dB, 1.4' **\$47.95**

CSH-ARX450B 440 MHz Ringo Ranger II, 7 dB, 5' **\$99.95**

CSH-R8

hy-gain.

Hy-Gain Super Penetrator 10/12 Meter Vertical Antenna

The legend from the 1970s is back! This fantastic, true full-size 5/8-wave vertical antenna from Hy-Gain is the only antenna of its type to survive the test of time.

With the steady increase in sunspot activity, 10 meters is back! This antenna will allow you to collect more 10-10 numbers, work more DX, and make ham radio more fun.

The SPT-500 is 22 feet, 9.5" tall and is specifically designed to accept AM/FM, SSB, CW, and digital signals with low loss. Handles 1,500 watts.

HGN-SPT-500 10/12M Vertical Antenna **\$149.95**



Hustler

G-Series Vertical Antennas

Serious performance in easy-to-assemble packages. Hustler's G-Series Antennas offer the perfect union of price, coverage and performance. These durable antennas are made from high-quality materials, so they stand up to Mother Nature and give you years of reliable use.

HSR-G7-144 2M Base Vertical Antenna, 7 dBd Gain, 4 MHz Bandwidth, 15.33' **\$199.95**

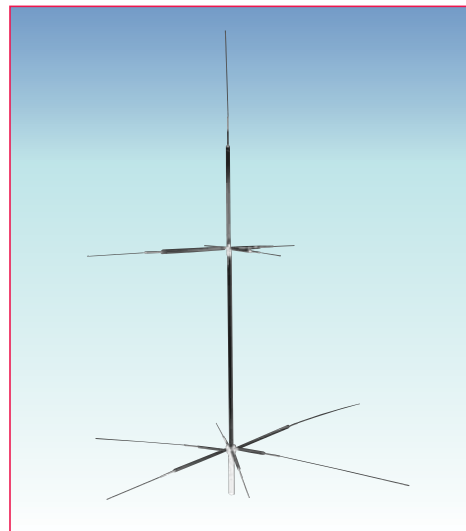
HSR-G6-144B 2M Base Vertical Antenna, 6 dBd Gain, 6 MHz Bandwidth, 9.75' **\$139.95**

HSR-G3-144 2M Base Vertical Antenna, 3 dBd Gain, 4 MHz Bandwidth, 7.42' **\$69.95**

HSR-G7-220 1.25M Base Vertical Antenna, 7 dBd Gain, 5 MHz Bandwidth, 9.75' **\$174.95**

HSR-G6-440 70cm Base Vertical Antenna, 6 dBd Gain, 10 MHz Bandwidth, 7.25' **\$189.95**

HSR-G6-270R 2M/70cm Base Vertical Antenna, 6 dBd Gain, 4 MHz/10 MHz Bandwidth, 7.5' **\$199.95**



HVU-8 Vertical

Base Station Antenna

Maldol

If you're short on space but still want an antenna with multi-band capabilities, Maldol gives you an excellent option. This vertical antenna is specifically designed for your space constraints; it works so well it can be used in a portable antenna application. The ground radials screw into rotatable collars that can be positioned in a variety of directions, for several mounting options. This 8 foot vertical antenna handles 200 watts, and allows you to operate on the 80, 60, 40, 10, 6 and 2 meter bands as well as 70cm.

MLD-HVU-8 Vertical Base Station Antenna **\$339.95**

International Shipping is Quick and Easy! See Page 58 for Details

ACB-4 Phased Array Systems for 2- or 4-Element Vertical Arrays

COMTEK SYSTEMS uses state of the art design and technology to produce the most advanced antenna systems possible. These Phased Array Systems are affordable, simple to install, and easy to use. A phased array consists of two or more elements fed in a phase relationship and power ratio to obtain a directional pattern. COMTEK SYSTEMS' phased array switchboxes can be used with 2- or 4-element horizontal or vertical arrays to provide the greatest directivity.

We offer the ACB-4 for all amateur bands from 10 meters to 160 meters. The ACB-4 is band specific—you cannot use an 80 meter ACB-4 for any band other than 80 meters.

Power Supply/Switch Control

- 12 Vdc operation
- Custom USA-made switch permits 360° rotation in either direction with no stops
- Current limiting resistor protection for each LED
- Chassis and cover custom manufactured to COMTEK SYSTEMS specifications
- Lexan® label for recording favored directions
- Compact size: 2" H x 6.25" W x 5" D

90 Degree Hybrid-Relay Matrix

- 15 amp gold-plated contact relays with dust covers
- Belden PTFE silver stranded wire over 3M Fiberglass tape-wound toroids
- Sprague 5% balanced temperature, frequency, and voltage stable capacitors
- Laboratory analyzed for improved performance
- Double-sided printed circuit board
- 2 kW conservative rating for Amateur Radio Service
- Harris MOVs for lightning surge protection with Sprague RF bypass caps
- Brushed aluminum Z-chassis and cover with riveted seams
- Size: 4" H x 6" W x 8.5" D

COM-ACB-160-A	Hybrid Phased Array Four-Square System, 160M	\$422.95
COM-ACB-80-A	Hybrid Phased Array Four-Square System, 80M	\$412.95
COM-ACB-40-A	Hybrid Phased Array Four-Square System, 40M	\$402.95
COM-ACB-30-A	Hybrid Phased Array Four-Square System, 30M	\$392.95
COM-ACB-20-A	Hybrid Phased Array Four-Square System, 20M	\$392.95
COM-ACB-15-A	Hybrid Phased Array Four-Square System, 15M	\$392.95
COM-ACB-10-A	Hybrid Phased Array Four-Square System, 10M	\$392.95

Stack 2 Systems

Designed for tri-band, log periodic or monoband Yagi antennas covering the 40 to 10 meter bands, the Stack 2 Yagi Switch Relay Unit lets you select from two antennas, either individually or simultaneously. This allows you to choose the best vertical radiation angle for the band conditions. It handles 3,000 watts and features reliable Potter and Brumfield relays.

The perfect complement to your Stack 2 Yagi Switch Relay Unit, the Stack 2 Switch Control Console integrates seamlessly with both old and new COMTEK Stack 2 Systems. It runs on 12 Vdc at 1A and includes a power cable.

You can save money by purchasing both components together in a single system. The only other items you'll need to complete your installation are the three-conductor control cable and 2 equal lengths of 50 Ω coax cable.

COM-STACK-2	Stack 2 Yagi Switch Relay Unit	\$226.95
COM-STK2A	Stack 2 Yagi Switch Control Console	\$125.95
COM-STACK-2-A	Stack 2 Yagi Switch System with Console and Relay Unit....	\$294.95

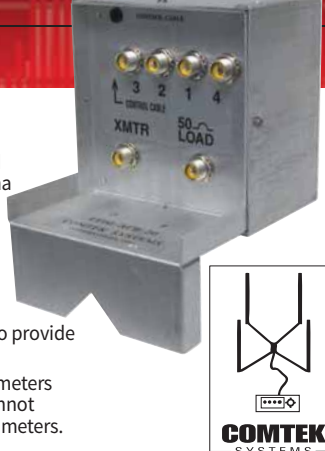
Stack 3 Systems

Building upon the success of the Stack 2 System, COMTEK offers you even more selectivity, giving you a broader range of signal arrival and transmission angles. The Yagi Array Switch Relay Unit lets you choose from any single (or combination of) three Yagi Beam Antennas. You can also use it to match and switch a 3-monoband Yagi stacked array for any HF band, covering 40, 30, 20, 17, 15, 12 and 10 meters.

To operate the Stack 3 Yagi Array Switch, use a COMTEK Yagi Switch Control Console. This unit helps you select each antenna individually or in any combination of your other two antennas. Indicator lights are intuitive and the controls are user-friendly; the unit works on 110 Vac.

The Switch Unit and Control Console are also available together in an economical package. You just need to add your frequency-specific impedance-matching coax and control cable.

COM-STACK-3	Stack 3 Yagi Switch Relay Unit	\$299.95
COM-STACK3-1	Stack 3 Yagi Switch Control Console	\$125.95
COM-STACK-3-1	Stack 3 Yagi Switch System with Console and Relay Unit....	\$399.95



DX Engineering Transmit Four-Square Hybrid Controller— 4 Directions plus Omni

DX Engineering's TFS4 Series Four-Square Controllers combine a high level of engineering excellence with attention to operator convenience and ease of installation. The controllers are available for 160, 80/75, and 40 meters. They allow the operator to receive or transmit with 5.5 dB gain in any one of four directions with 20+ dB front-to-back ratio for interference reduction from unwanted directions. You can also switch to a single omni-directional pattern with the push of a button. This combination permits you to listen "all-around"—unhindered by pattern nulls—and then select the best direction for signal reception and noise rejection.

The TFS4 controllers are designed for use with a four monoband vertical antenna array spaced at the corners of a square that is 1/4-wavelength on a side. The vertical antennas must be ungrounded and resonant in the desired band, and should be directly base-fed by coaxial cable phasing lines from the centrally located controller. DX Engineering has vertical antennas that are well suited for this application. Above all, a properly designed and installed radial system is necessary for top antenna performance, whether using a single vertical or a full array.

DX Engineering strongly recommends our optional QWC Series 1/4-wavelength cables. They are constructed of the highest quality Belden 8213, an RG-11/U foam dielectric cable with a velocity factor of 84% (0.84). These cables are cut to a precise electrical length based on your choice of center operating frequency. They are terminated with hand-soldered Silver-PTFE PL-259 connectors and weather-sealed with shrink tubing. Finally, each cable is tested for high voltage breakdown for maximum reliability and power handling.

If you already have a Four-Square array with a hybrid controller (such as COMTEK SYSTEMS, etc.) and would like to upgrade to improved performance and the Omni feature, the DX Engineering TFS4 Series is a direct transplant. BCD logic switching allows the use of a four-wire control cable to perform the necessary switching functions when powered by the included DXE-CC-4SQR Control Console.

- Classic Hybrid Design—easy to install
- 5 kW CW Power Rating—high reliability
- Hot Switching Lock-Out—disables amplifier while switching
- Drop-In Replacement for COMTEK SYSTEMS—easy upgrade
- Proven DX Engineering RF Relays—high performance
- High-Impact Shielded Weatherproof Housing—unique protection

DXE-TFS4-160B-P	160 Meter Four-Square Controller with Control Console	\$609.00
DXE-TFS4-80B-P	80 Meter Four-Square Controller with Control Console	\$599.00
DXE-TFS4-40B-P	40 Meter Four-Square Controller with Control Console	\$589.00
The Control Console is also available separately		
DXE-CC-4SQR	Transmit Four-Square Control Console	\$199.95

DX Engineering Customer Support personnel will be happy to help you select all the components necessary for a complete installation.



PVS-2 Two-Element Phased Vertical Systems

For those who do not have space for a Four-Square phased vertical array, COMTEK SYSTEMS offers the superior PVS-2 two-element phased vertical system. Quality components are used throughout, yet the system is very affordable.

- Three direction switching includes selectable end-fire and broadside directions
- Typical 18 dB front-to-back rejection and 3 dB gain
- Rated at 3 kW continuous Amateur Service duty
- <.05 dB insertion loss
- Includes MOVs for maximum ESD protection
- Amphenol silver tip SO-239s and Potter & Brumfield relays
- Includes a custom, in-house wound UNUN and a 90 degree toroid
- A 4-conductor control line is required

COM-PVS-160-A	Phased Vertical System, 160M, 2-Element, 12 Vdc	\$343.95
COM-PVS-80-A	Phased Vertical System, 80M, 2-Element, 12 Vdc	\$343.95
COM-PVS-40-A	Phased Vertical System, 40M, 2-Element, 12 Vdc	\$343.95
COM-PVS-30-A	Phased Vertical System, 30M, 2-Element, 12 Vdc	\$343.95
COM-PVS-20-A	Phased Vertical System, 20M, 2-Element, 12 Vdc	\$343.95

Accessories

COM-P213-160-P	RG-213 Phasing Cable, 160M, Set of 2	\$189.95
COM-P213-80-P	RG-213 Phasing Cable, 80M, Set of 2	\$119.95
COM-P213-40-P	RG-213 Phasing Cable, 40M, Set of 2	\$89.95
COM-P213-30-P	RG-213 Phasing Cable, 30M, Set of 2	\$81.95
COM-P213-20-P	RG-213 Phasing Cable, 20M, Set of 2	\$75.95
COM-CW4	4-Conductor Control Cable	per foot \$0.28



Orders by 10 pm ET Ship Same Day, See 58 for Details

Maximum Signal—Minimum Noise!

How often have you heard the old saying "If you can't hear 'em, you can't work 'em?" This is never more true than when you are in the pileup calling that rare contact that you need, wondering "Did he come back to me?"

Single Direction Beverage Feed System

The DXE-BFS-1 is a single-wire Beverage Feed System. This W8JI design is immune to strong signal overload and core saturation common in multi-transmitter contesting environments, and is used by winning contest stations and low-band DXers. The unit uses an isolated-winding, matching transformer system to significantly increase the signal-to-noise ratio in Beverage and other high impedance antennas.

The DXE-BFS-1 works with antenna impedances from 400-500 Ω . Included with the DXE-BFS-1 is a 470 Ω , 2 watt non-inductive resistor that withstands nearby lightning strikes significantly better than hard-to-find carbon composition resistors.

Feedline impedance on the DXE-BFS-1 is designed for 75 Ω , although it will work with 50 Ω coax. The DXE-BFS-1 uses an industry standard CATV type F connector. DX Engineering sells quality 75 Ω coax and type F connectors for outdoor installations.

Benefits

- 100 kHz to 30 MHz operating range
- Spark gaps minimize damage from lightning
- Wing nut terminals eliminate soldering
- Metal housings used for superior shielding and improved life
- Flange-mount holes for easy mounting
- Ground isolated secondary essential for building beverage arrays

DXE-BFS-1	Beverage Feed System.....	\$54.95
DXE-ECM-R470-2	470 Ω , 2 Watt Resistor, Lightning Damage-Resistant, Pack of 10	\$20.00



Reversible Beverage System

The DXE-RBSA-1P allows two Beverage antennas receiving in opposing directions to share the same space. With the DXE-RBSA-1P, you can build a 2-wire reversible Beverage antenna system with superior signal-to-noise ratio, most useful at 40, 80 and 160M bands. The W8JI design consists of a Feedpoint System and Reflection Transformer. You can operate and even confirm the F/R ratio of this antenna at any time from the operating position.

This system is immune to strong signal overload and core saturation common in multi-transmitter contesting environments, and is used by winning contest stations and low-band DXers.

The DXE-RBSA-1P has two antenna ports. The standard configuration of the DXE-RBSA-1P has one port terminated (termination included) so both antennas share a common feedline. Applying 10 to 18 Vdc to the feedline switches between the antenna, and the direction of reception. For simultaneous reception from opposing directions, each of the two feedlines connect to a separate receiver.

While the DXE-RBSA-1P is optimized to use 450 Ω ladder line for the antenna element, the system will work with any 300-600 Ω 2-wire line. 450 Ω ladder line is available from DX Engineering, sold separately. DX Engineering also sells quality 75 Ω coax and Type F connectors for outdoor installations.

Benefits

- Broad operating range, 0.2 to 30 MHz
- Fully isolated grounds used to prevent common-mode noise and unwanted signals
- 75 Ω design enables the use of high quality, low cost cable
- Metal housings used for superior shielding and improved life

DXE-RBSA-1P	Reversible Beverage Feed System	\$209.95
DXE-TB-5P	Tilt Base.....	\$19.95



DX Engineering provides all the tools you need to construct fabulous receiving antennas—the kind that let you work stations that others can't even hear! These W8JI-designed amplifiers and antenna controllers are known worldwide for their unequalled performance. Record-breaking DXpeditions—like VP6DX Ducie Island—know and use DX Engineering receiving equipment. Follow their lead and enjoy hearing those weak stations like you have never heard them before.

Splitter/Combiner

Use this to combine two receiving antennas to form an array or to split the signal from an antenna to feed two receivers. The DXE-RCS-2 also reduces problems and performance shortfalls caused by impedance errors in less-than-perfect antenna systems. This unit has a broad, 0.3 to 30 MHz range and features spark gaps to lessen damage from lightning strikes.

Combining

- Matches the entire antenna system to cable impedance
- Wide bandwidth
- Built-in isolation and balancing
- Very high isolation between ports 1 and 2

Splitting

- Typical signal level reduction just over 3 dB per port
- Provides equal power, voltage, and current to matched loads on ports 1 and 2
- The individual receiver will not seriously affect the signal level of the other

DXE-RSC-2	2-Port Splitter and Combiner.....	\$54.95
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Receive Preamplifier

Optimized for a 0.3-35 MHz operating range, this unit uses a push-pull amplifier design to squash harmonic distortion. Robust components help it handle high signal levels and its dynamic range is better than most receivers. This preamp is well suited for indoor or outdoor use and can be powered via coax feed. When DC power is absent, a relay trips to automatically bypass the amplifier.

Specifications

- RCA type phono jack and type F connector
- Gain: 16 dB, 0.3-35 MHz (+1.5/-1.5 dB over this range)
- Output Third Order Intercept: 43 dBm
- Noise Figure: 3.5 dB
- One dB Compression: +26 dBm (~0.4 W output)
- 500 Hz BW IM3 Dynamic Range: 110 dB or greater
- Requires 10-18 Vdc at 140 mA max.

DXE-RPA-1	Receiver Preamplifier, 0.3-35 MHz	\$123.95
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2-Port Receiving Antenna Switch

Select one of two output ports (generally connected to different receiving antennas) from one feedline using the DXE-RLS-2. Install the DXE-RLS-2 with two DXE-RBS-1P Reversible Beverage Antenna Systems and select four directions using a single main feedline. Install one or more DXE-RLS-2s to expand larger Beverage arrays and share the feedline back to the operating position.

Applying a nominal 12 Vac or DC control voltage through the feedline activates transfer to port 2. Use DX Engineering's DXE-FVC-1 Voltage Coupler to supply the control voltage through the feedline.

Benefits

- Metal housings used for superior shielding and improved life
- High-quality components
- Reliable CATV type F connectors standard
- Broad 0.3 to 30 MHz operating range with 75 Ω systems
- Jumper-selectable—control voltage pass-through to the selected port

DXE-RLS-2	Receiving Antenna Switch	\$79.95
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Find More Brands, More Products and More Specs at DXEngineering.com



RTR-1A Antenna Receive Interface

If you have a standard transceiver without a separate receive input port; but you want to enjoy the advantages of a separate receive antenna, DX Engineering has the perfect solution. Connect an external receive-only antenna to your transceiver with this interface, or add a TX/RX switch to your older gear, insert a receive preamplifier and add interfacing antennas to phasing or noise cancelling systems. The RTR-1A also provides failsafe protection to the unswitched receive antenna port on your expensive transceiver.

This Active Receive Interface handles 200 watts, supports full break-in CW and uses a patented* low-noise receive antenna limiter circuit. It is RoHS-compliant and well suited for use from 1.8 MHz to 30 MHz.

DX Engineering's Active Receive Interface is an invaluable accessory for your shack, allowing you to expand and improve your antenna connection systems. All the details on this innovative unit are at DXEngineering.com.

DXE-RTR-1A Receive Antenna Interface **\$159.95**
 *US Patent 8,175,546



Receive Feedline Current Choke

The Receive Feedline Current Choke (RFCC) is the most effective solution to common-mode noise or unwanted signal ingress in receiving systems available. It provides thousands of ohms isolation between the input and output coaxial shield connections while passing desired signals, including DC or low frequency AC control signals. The RFCC has extremely high isolation impedance, which effectively blocks common-mode noise or unwanted signals, even in the presence of very poor grounding. The RFCC is effective from 300 kHz to 30 MHz. It comes with standard type F female connectors, although it can be used in any 50 to 75 Ω receiving system.

DXE-RFCC-1 Receive Feedline Current Choke, 50/75 Ω, 0.3-30 MHz **\$69.95**



Feedpoint Voltage Coupler

- Inject control voltages onto feedline
- Injects +/- 12 Vdc or 12 Vac
- For use with DXE-RBS-1P Reversible Beverage System or Remote 2-Position Switch DXE-RLS-2
- AC supply included

DXE-FVC-1 Feedpoint Voltage Coupler **\$89.95**



Time Variable Sequence Unit

Protect your active antennas, transmit/receive relays and other equipment with the DX Engineering Sequencer. You have full control of the timing between your rig and amplifier.

This microprocessor-controlled device provides 0-30 milliseconds of delay in 2 millisecond steps to as many as five outputs tied to the key-in line. You can sequence the switching of critical devices such as the transmit/receive relay, amplifier, and exciter.

In addition, the DXE-TVSU-1A has an internal side tone generator for CW. You listen to what you are keying while it is being held in the bucket brigade delay for transmit after the programmed delay. The side tone is adjustable from 300 to 1000 Hz in 50 Hz steps.

Benefits

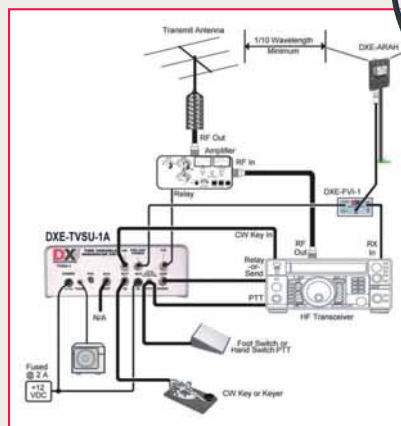
- Control timing on PTT turn-on, hang delay of PTT, hang delay of amplifier, hang delay of antenna relay, and turn-on delay of auxiliary output
- Dip switch settable delays of 0-30 milliseconds in 2 millisecond steps
- Side tone generator that follows input of keyer or hand key, not transmitter
- Side tone can be programmed for 300-1000 Hz in 50 Hz steps, adjustable volume
- Supports CW full break-in
- Allows use of our Active Receive Antennas in close proximity to transmit antennas

DXE-TVSU-1A Time Variable Sequence Unit **\$199.95**

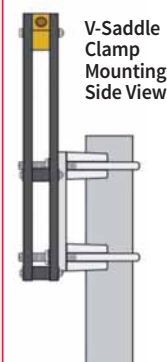


Horizontal Configuration

Vertical Configuration



< ARAH system located between 1/10-wavelength and 1/2-wavelength from the transmitting antenna, connected to a transceiver with a receive input using the DXE-TVSU-1A Time Variable Sequencer Unit for proper switching.



Active Receive Antenna Systems

DX Engineering's Active Receive Antenna Systems offer excellent receiving performance using a 102" whip antenna. The unique design is vastly superior to traditional active antennas in both signal handling and feedline decoupling. You get significantly better weak signal reception.

Available in vertical or horizontal dipole configurations, the systems include a non-conductive mounting plate, clamps, active matching system, and the 102" stainless steel whip elements. The horizontal dipole element uses two 102" whips for an overall length of 210"; the vertical configuration uses a single whip. Whip antennas have excellent wind survival and are very inconspicuous.

When space is limited, use the DXE-ARAV3-1P or DXE-ARAH3-1P in conjunction with the DXE-TVSU-1 to provide for operation within 1/10-wavelength of a transmit antenna. The active antennas have relay protection to prevent overload of the transmit signal. The DXE-TVSU-1A sequencer controls switching times to ensure the receive system is protected before transmit power is applied. Use the DXE-ARAV3-4P, DXE-TVSU-1A and DXE-RFS-2 to provide four-square operation within 1/10-wavelength of a transmit antenna.

The vertical configuration can be used as a single element or in combination with DX Engineering's RFS-2 Receive Four-Square Antenna System to build a broadband directional array that can be switched in four directions to peak the signal or null out noise. Vertical configurations are for suburban or rural locations with low levels of ground wave propagated noise. The dipole configuration makes a very sensitive, horizontally polarized receiving antenna. Horizontal polarization can greatly reduce ground wave propagated noise in congested urban environments. Light weight and low wind resistance reduces support requirements. The output connector is a Type F, allowing use of readily available high performance CATV feedlines and connectors.

Features

- Sensitive—weak signal sensitivity rivaling full size antennas
- Wide bandwidth—100 kHz to 30 MHz
- Excellent strong signal handling—outstanding third order intercept of +30 dBm
- Reduced noise—quiet FET followers and high feedline shield isolation
- Easy mounting and installation—pre-drilled mounting plate and universal clamps

DXE-ARAH3-1P Active Receive Antenna, Horizontal Configuration with Relay **\$349.95**
 DXE-ARAV3-1P Active Receive Antenna, Vertical Configuration with Relay **\$248.95**



DX Engineering Receive 8 Circle Packages

These packages are built around the DX Engineering Receive 8 Circle Array Controller and the EC-RCA8 Receive Eight Circle Control Console. They are designed to be used with eight identical, symmetrically-spaced vertical elements—active or passive—to provide switching for an eight-direction receiving antenna system. (Passive elements will generally provide you with a monoband receiving system).

The Receive 8 Circle system uses time-delay phasing (rather than conventional narrow-band, frequency dependent phasing) to provide eight 45 degree-spaced directional patterns. The time-delay phasing is directivity-optimized to produce wider and deeper rear nulls and a narrower main lobe. The result is greatly reduced noise and undesirable signals for a superior front-to-rear ratio (F/R). Better control of phase and currents provides a cleaner pattern than found on vertical antenna transmit arrays.

The system also offers greater reliability in receiving applications. The RC8 controller uses sealed relays—sized for receiving applications—with oxidation-resistant silver contacts. Most transmitting four-square switches use large open-frame relays with exposed brass contacts, which can lead to contamination, oxidation, and poor conductivity.

The DXE-RCA8B-SYS-2P Controller and Switch Package includes:

- DXE-RC8B-1 Receive 8 Circle Array Controller
- DXE-EC-RCA8 Receive 8 Circle BCD Control Console
- DXE-SSVC-2P Stainless Steel V-Clamp for mounting the RC8B to a 1-2" O.D. post

The DXE-RCA8B-SYS-3P Electronics Package includes everything from DXE-RCA8-SYS-2P, plus:

- Eight DXE-AVA2 Active Voltage Amplifiers with internal disconnect relays
- DXE-RPA-1 Receiver Preamplifier, 0.3-35 MHz
- Custom-made delay line—75 Ω F6 flooded coaxial cable with Snap-N-Seal® connectors installed

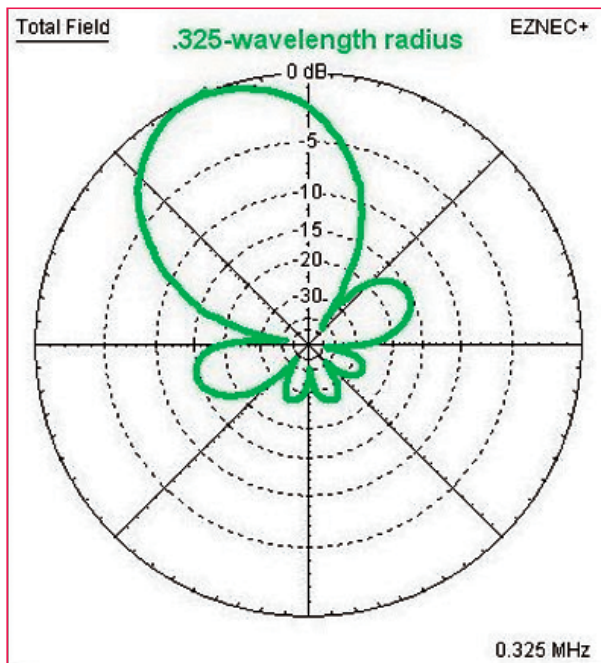
The DXE-RCA8B-SYS-4P Complete Electronics Package includes everything from DXE-RCA8-SYS-2P, plus:

- DXE-ARAV3-8P Active Receive Antenna Array Package (see below)
- Two DXE-F6-1000 F6 flooded coax cable, 75 Ω (1,000' each)
- DXE-CPT-659 Coax Cable Prep Tool
- DXE-SNS-CT1 Snap-N-Seal® crimp tool for 75 Ω coax
- DXE-SNS6-25 Snap-N-Seal® connectors for F6 coax, 25 pieces

DXE-RCA8B-SYS-2P Receive 8 Circle Controller and Switch Package\$498.95

DXE-RCA8B-SYS-3P Receive 8 Circle Electronics Package.....\$1,497.95

DXE-RCA8B-SYS-4P Receive 8 Circle Complete System Package.....\$2,575.00



Receive Four-Square System

- W8JI design
- Excellent directivity in a small space for better signal-to-noise ratio
- Switchable in four 90 degree spaced directions
- Reduced susceptibility to high angle signals compared to EWE, Flag, Pennant, or K9AY arrays
- Operates from 100 kHz to 30 MHz
- Each complete system package includes four active vertical antennas, RFS-2 switch, CC-8A controller, 1,000 feet of F6 flooded cable, connectors and tools
- TVSU-1 Time Variable Sequencer Unit included to protect active antennas installed as close as 1/10-wavelength from transmitting antenna

DXE-RFS-SYS-4P Receive Four-Square System Package\$1,650.00

DXE-RFS-SYS-2P Four-Square Controller and Switch Package.....\$343.95

DXE-RFS-SYS-3P Four-Square 160/80/40M Electronics Package\$799.00

DXE-EC-4 Four-Square Controller, 4-Position BCD Output.....\$89.95

DXE-TVSU-1A Time Variable Sequencer Unit\$199.95

System components also available individually.

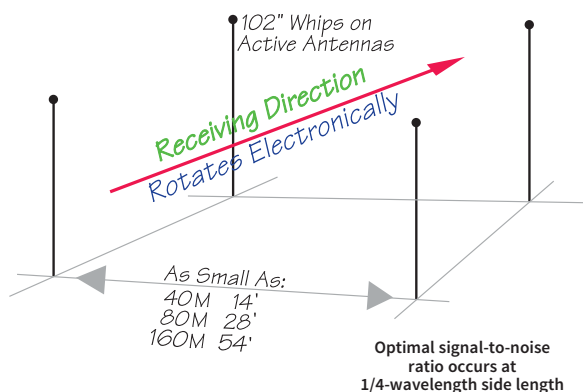
Complete Electronically Steered Receiving System

- More than 5 S-units of front-to-back on optimized systems
- Works best on 160M, 80M and 40M
- Like having a rotatable Beverage antenna
- Fits in YOUR yard!
- Easily installed—no radials required

Want to know what people are saying about this system?

Visit: www.eham.net/reviews/detail/5336

Four-Square Receiving System



DXE-ARAV3-8P Active Receive Antenna Array Package

The DX Engineering Active Receive Antenna Array Package contains eight DXE-ARAV3-1P Active Receive Antennas. They offer excellent receiving performance from 100 kHz to 30 MHz while using only 102" whips as the vertical elements. This results in significantly better weak signal reception due to lower spurious signal interference and reduced noise. The package also includes mounting blocks, wiring, and mounting clamps.

DXE-ARAV3-8P Active Receive Antenna Array Package.....\$1,991.60

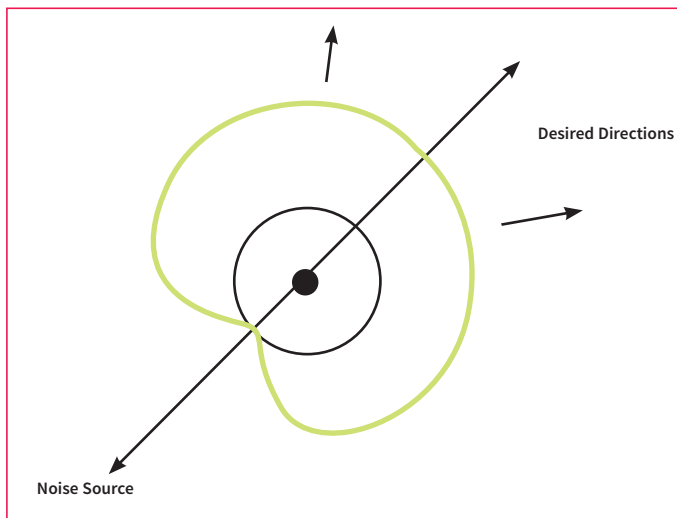
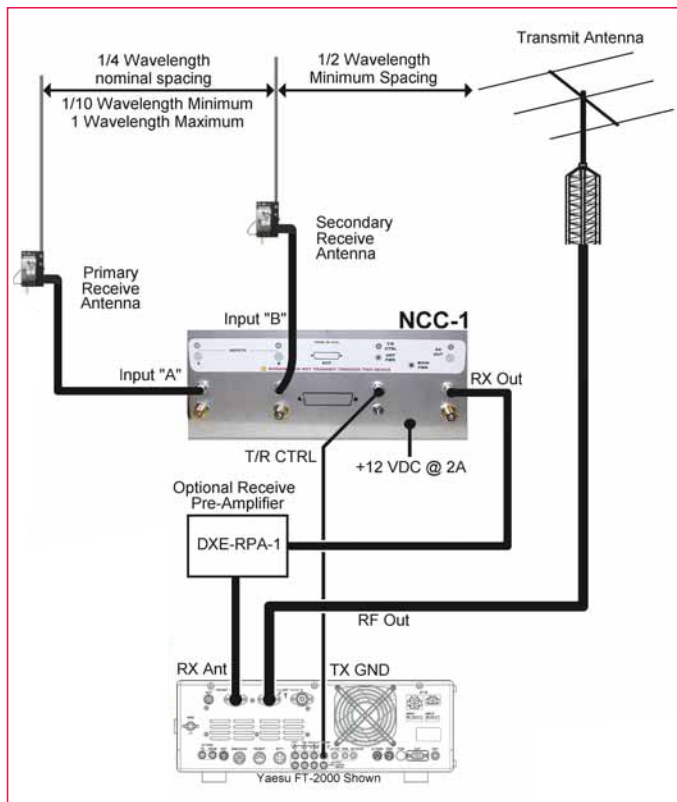


Typical Installation for DX Engineering NCC-1

This diagram shows the DX Engineering NCC-1 in a station with a single transceiver that has a separate receive antenna port. The two active receive antennas are shown deployed in the recommended position. The DX Engineering RPA-1 Preamplifier is normally not needed as most of today's transceivers have built-in preamps to compensate for overall lower signal levels obtained from small receive-only antennas. **What is most important is the NCC-1's ability to improve the overall signal-to-noise ratio and null out interference from other directions.**

The diagram shows the transceiver keying line set up to allow the NCC-1 to shut off the power to the DXE Active Receive Antennas, which have an internal relay which grounds the antenna for protection from TX RF.

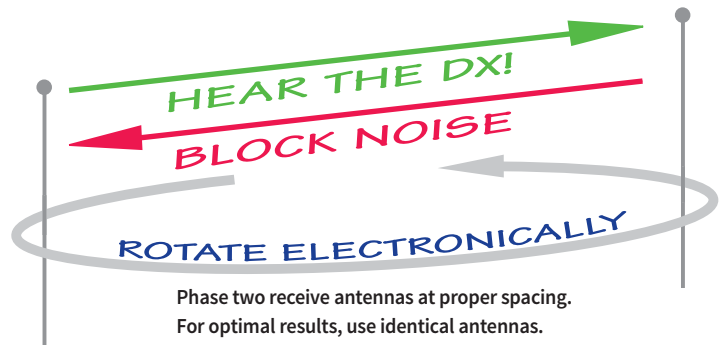
The DX Engineering NCC-1 can be used with many receiving antenna combinations including Single and Reversible Beverages, Receive Four-Square Arrays, K9AY Loops, and more. It will increase the directivity of any properly spaced combination of two similar antennas as long as the signal levels are within the range of the balancing controls.



Receive Antenna Variable Phasing Controller & Noise Canceller

Allows control of signal level and phasing of two receive antennas—see specifications below. It is available separately for those who want to design their own variable receive antenna system.

DXE-NCC-1 Receive Antenna Variable Phasing Controller \$599.95
See NCC-1 specifications below.



Electronically Rotatable Receive Antenna System

Phased receive-only antenna systems are used to create a directional pattern which can peak desired signals and remove interfering signals. Variable phase nulling allows an operator to improve reception by electronically reducing a stronger interfering signal arriving from a different direction. It also can dramatically reduce noise.

This system includes two Active Receiving Vertical Antennas and the DXE-NCC-1 Receive Antenna Variable Phasing Unit. It combines the two verticals to produce a steerable directional array.

The system improves your reception of weak DX by:

- Combining two omni-directional antennas to produce an adjustable directional pattern
- Reducing overload from a strong signal in a different direction
- Reducing interference from distant signals or noise in a different direction
- Nulling directional strong signals to hear weak stations on the same frequency

Features

- Vertical antenna elements only 102" long
- Ideal for Amateur Radio or Shortwave listening
- Antenna elements are grounded when power is turned off
- Use with DXE-TVSU-1A sequencer for best protection before transmitting

NCC-1 Phasing Unit Specifications

- Usable Frequency Range: 300 kHz to 30 MHz
- Optimum Performance Range: 500 kHz to 15 MHz
- Third Order Output Intercept: +32 dBm each input, +38 dBm both inputs combined
- Gain Flatness: +/- 1 dB over complete phase rotation
- Gain: Adjustable from 0 dB to -40 dB
- Available Phase Rotation: >360 degrees between 500 kHz and 15 MHz
- Power: NCC-1 +13 Vdc nominal @ 1A minimum (2A recommended)
- Antenna Port Power: 10-30 Vdc @ 300 mA maximum, TX muting available

DXE-AAPS3-1P Active Antenna Phasing System.....\$1,099.95

MFJ

Noise Cancelling Signal Enhancers

Made to combat strong sources of RFI, either from other stations or unusual noise, these enhancers help boost the signals you want while attenuating the signals you don't. More powerful than a basic noise blanker, the enhancers can negate or cancel all types of noise and interference. They both cover 1.8 to 30 MHz with 290 degrees of phasing; the deluxe version adds an attachable indoor whip. For all the details, visit DXEngineering.com.

MFJ-1025 Noise Cancelling Signal Enhancer \$169.95
MFJ-1026 Deluxe Noise Cancelling Signal Enhancer..... \$189.95



DX Engineering is Now Your Exclusive Hi-Z Dealer

DX Engineering is happy to bring you quality HF Directive Receiving Arrays from Hi-Z Antennas. For over five years, Hi-Z Antennas has been engineering and perfecting antenna designs with one goal in mind: creating superior products. Now, through an exclusive partnership, you get high-quality Hi-Z Antennas with the customer service you expect from DX Engineering. For all of Hi-Z's products, visit DXEngineering.com.

Certain Hi-Z system products are being manufactured and sold as permitted under the terms of a certain License Agreement among PDS Electronics, Inc. dba DX Engineering, as the Licensor, and Hi-Z Antennas and Lee Strahan, as the Licensees.



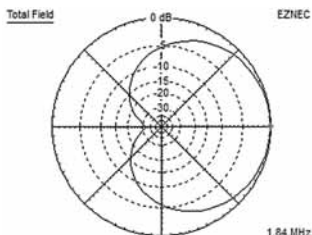
New!



3-Element 4-Direction Systems

This receiving antenna system's L configuration makes it perfect for small lots. It uses three shortened elements that still provide 4-direction switching. A typical 50 foot layout of 20 foot tall elements and Hi-Z amplifiers can provide 30 dB of front to back ratio on 160 meters. This system is well suited for the 160, 80 and 40 meter bands, yet can still receive below the broadcast band to 30 MHz. It requires 13.8 Vdc via a 4-conductor cable: 13.8V, GND, CTRL1 and CTRL2.

HIZ-2-3 3-Element 4-Direction System **\$439.00**



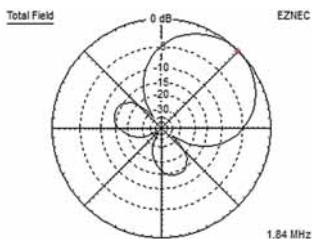
3-Element Triangular Array Systems

These 3-element receive phased vertical arrays offer excellent performance with a small footprint. Their scalable design means you get six switchable directions and you can configure for best RDF or F/B Ratio. Since there's no sequencing, the systems thrive in high-RF fields—ideal for those running QRO nearby. (These are also great contesting setups.)

These systems operate on the 160, 80 and 40 meter bands but can be used from below the broadcast band to over 30MHz. A typical 50 foot triangular layout of 20 foot tall elements and Hi-Z amplifiers can provide 30 dB of front to back ratio on 160 meters. They use 13.8 Vdc and a 6-conductor control cable.

HIZ-3-LV2-40 3-Element, 6-Direction System, 40' Spacing **\$705.00**

HIZ-3-LV2-50 3-Element, 6-Direction System, 50' Spacing **\$705.00**



4-Element Array Systems

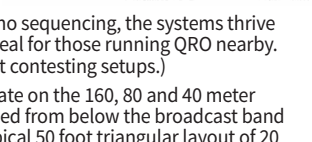
This new and unique circuit configuration uses Tri-Phase combining for extra accurate phasing and amplitude stability. This improves performance while also minimizing these systems' footprints. You configure them for optimal RFD and F/B ratio and select from four possible receive directions. Their unique design makes them great options for high-RF areas.

The systems cover 160, 80 and 40 meters, from below the broadcast band to over 30 MHz. A typical 80 foot square layout of 20 foot tall elements and Hi-Z amplifiers can provide 30 dB of front to back ratio on 160 meters.

They take 13.8 Vdc via 4-conductor cable, and you can easily upgrade to the Hi-Z 4-8 Pro.

HIZ-4-LV2-60 4-Element, 4-Direction System, 60' Spacing **\$809.00**

HIZ-4-LV2-80 4-Element, 4-Direction System, 80' Spacing **\$809.00**

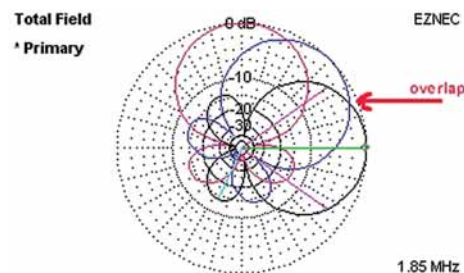


8-Element Array Systems

These ultra high-performance monoband arrays feature excellent performance in a small space. All the elements are active in a circle, to provide stellar receive capabilities in eight directions. The F/B Ratio of the Hi-Z 8-element array outperforms long Beverage and various loop antennas. The Hi-Z 8A has a preamp external (post) phase controller, making any necessary filter insertion easy. The systems use 13.8 Vdc and a 7-conductor control cable.

HIZ-8A-LV2-80-1 8-Element, 8-Direction System, 80M, 100' Spacing **\$1,488.00**

HIZ-8A-LV2-160-2 8-Element, 8-Direction System, 160M, 200' Spacing **\$1,488.00**



4-8PRO 8-Element Tri-Band Array System

Using a new and unique circuit configuration, these antennas are essentially two interleaved Hi-Z 4S systems. They feature Tri-Phase combining to give you super-accurate phasing and amplitude stability, as well as the least attenuation at all eight overlap points.

A typical 113 foot diameter layout of 20-24 foot tall elements and Hi-Z amplifiers can provide 30 dB of front to back ratio with 8 directions. These systems perform well in high-RF fields. They cover 160, 80 and 40 meters, and are powered by 13.8 Vdc through a 5-conductor control cable.

HIZ-4-8P-LV2-85 8-Element 8 Direction System, 85' spacing **\$1,303.00**

HIZ-4-8P-LV2-113 8-Element 8 Direction System, 113' spacing **\$1,303.00**

Vertical Antennas

The perfect addition to your Hi-Z system, these aluminum telescopic vertical antennas are easy to build and install. Each antenna collapses to just six feet tall and is made to withstand the elements. They include an earth mount, jumper wires for amplifier hookup, and a weather resistant cover for your amplifier.

HIZ-AL18 17.5' Vertical Antenna **\$131.00**

HIZ-AL24 23.25' Vertical Antenna **\$137.00**

Antenna Amplifier PLUS-6

This weatherproof and ruggedized amplifier is the same unit found in Hi-Z's receiving arrays and can be used on non-resonant high impedance vertical elements.

It has built-in common-mode isolation and provides 75 Ω matched output impedance. This is the increased gain model, offering Plus-6 dB with a 75 Ω output impedance. The amplifier requires 13.8 Vdc.

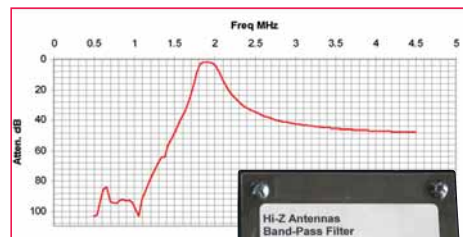
HIZ-PLUS6-AMP High Impedance Amplifier **\$104.00**



75 Ω Inline Preamplifier

This 75 Ω cable amplifier provides a precision termination point for typical antenna array controllers/ combiners. You'll find this same preamp on Hi-Z's 160 and 80 meter receiving antennas. It connects to the output of an array controller and provides 15 dB of voltage amplification. External connection requires +13.8 Vdc at .04 amps.

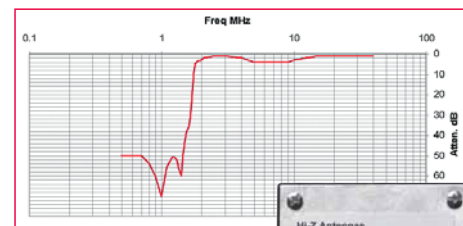
HIZ-PRE-AMP Inline 75 Ω Preamplifier **\$80.00**



Band-Pass Filter

If you have a ton of interference from nearby high-power AM broadcast stations, here's your answer. This 75 Ω band pass filter gives you 35 dB of attenuation at 1600 KHz and much more at lower frequencies with an insertion loss of about 2 dB in the pass band. The band-pass 3 dB corners are at 1.8 MHz and 2.0 MHz.

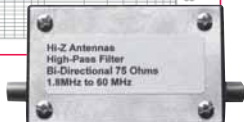
HIZ-BPF Band-Pass Filter, 1.8 to 2.0 MHz **\$48.00**



High-Pass Filter

Protect your preamp or receiver from high level AM broadcast frequency signals. Attenuation is a nominal 30 dB at 1630 KHz and much more at lower frequencies. Insertion loss is an average 2 dB in the pass band. The lower frequency corner is -3 dB at 1.8 MHz.

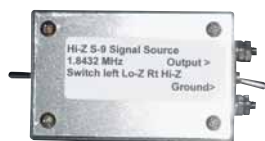
HIZ-HPF High-Pass Filter, 1.8 to 60 MHz **\$48.00**



S-9 Signal Source

Troubleshoot and verify that your complex multiple-element receiving arrays are working correctly. This self-contained oscillator connects directly to 50 or 75 Ω coax or antenna systems. It is useful for measuring controller output to verify all array elements are working. This unit requires a 9V battery, and there's an LED indicator that ensures there's enough battery life to take accurate measurements.

HIZ-SIGNALSOURCE RF Signal Source **\$65.00**



Vertical Feedline Current Choke

When quarter-wave antennas are constructed over a good radial system, they have a feedpoint impedance of about 36 Ω and currents are equal between the vertical section and the radial system. If the radial system is less than ideal—due to short radials, too-few radials or poor soil conductivity—the antenna system will try to use the feedline shield as part of the radial system. This leads to a loss in the efficiency and a higher take-off angle. Often the current introduced on the shield of the feedline causes RFI at the operator position.

Placing a vertical feedline current choke (VFCC) at the base of the quarter-wave antenna forces the currents to equalize between the vertical section and the radial system, even if the radial system is less than ideal. The balanced terminals of the VFCC should be connected directly to the base of the antenna and radial plate with appropriate lengths of low-inductance tinned copper braid.

The DX Engineering VFCC is supplied with an insulated mounting shelf to isolate the feedline shield from ground. Purchase the optional V-Saddle Clamp for mounting the VFCC to pipe up to 2 inches O.D.

- Equalizes vertical and ground currents
- Improves signal efficiency
- Lowers radiation angle

DXE-VFCC-H05-A	Vertical Feedline Current Choke Kit, 2/5 kW, HF.....	\$134.95
DXE-VFCC-H10-A	Vertical Feedline Current Choke Kit, 5/10 kW, HF.....	\$189.95
DXE-SSVC-2P	V-Saddle Clamp, for 1" to 2" O.D. Pipe.....	\$11.95



LDG-RBA-4-1



LDG-RBA-1-1



LDG-ALK-2



RBA Series Baluns

LDG Electronics designed these baluns to let you easily connect ladder line and long wire antennas to LDG's automatic antenna tuners. For more versatility, these baluns can operate without an LDG tuner and may be used with any of your long random or ladder line antenna projects.

LDG-RBA-4-1	4:1 Voltage Balun.....	\$27.95
LDG-RBA-1-1	1:1 Current Balun.....	\$28.95

Accessories

LDG-ALK-2	Audio/Linear/Key 2-Port Switch.....	\$49.95
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Visit DXEngineering.com to learn more about LDG baluns and accessories!

RU Series 4:1 UNUN

If you're using 50 Ω coax to feed your 43 foot vertical antenna, then this UNUN is essential to create a perfect match. Rated at 200 watts, it will easily tame your resonant verticals and will come in handy whenever you need a 4:1 match for an antenna project.

LDG-RU-4-1	RU-4:1 UNUN	\$27.95
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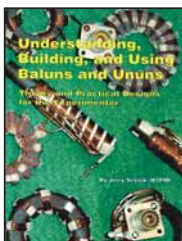
New!

CQ Magazine Publications

W2FMI Understanding Baluns and Ununs

W2FMI Jerry Sevick's compilation of balun performance and design criteria. It offers clear explanations to prompt further discussion of theory and applications.

CQM-SEVICKBALUNS	W2FMI Understanding Baluns and Ununs.....	\$19.95
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B4KC Current Baluns

Palstar B4KC Current Baluns are available in both 1:1 and 4:1 ratios. They're intended for indoor use on Lo-Z antenna applications for center-fed wire antennas with open wire and twin lead transmission lines. B4KC Baluns feature steatite insulators and a large 3.25" ferrite core with Teflon® 12-gauge wire. Rated up to 4,000 watts, these are useful additions to your antenna.

PAS-B4KC-4-1	4:1 Current Balun.....	\$89.95
PAS-B4KC-1-1	1:1 Current Balun.....	\$89.95



hy-gain

Broadband Ferrite Balun

This balun matches your 50 Ω direct coax-fed, hairpin/beta matched or trap tri-band Yagi antenna. It can couple into any 50 Ω balanced system, like dipoles, multiband doublets and beam antennas. The BN-86 Balun handles 800 watts SSB and 1,500 watts CW, while covering the 80 to 10 meter bands. Using stainless steel hardware, this sturdy boom-mounted balun will give you years of reliable service.

HGN-BN-86	Broadband Ferrite Balun	\$79.95
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hy-gain

BN-4000B Broadband Beam Current Balun

This 1:1 balun provides the proper current path between unbalanced coax and your balanced antenna feedpoint. It's compatible with 50 Ω direct coax-fed, hairpin/beta matched and trap tri-band Yagi antennas. Using ferrite beads over a short length of coax, the BN-4000B effectively chokes the flow of RF on the outside of your coax shield. You can use this balun from 160 meters all the way to 6 meters. It handles 2,000 watts of continuous duty.

HGN-BN-4000B	Broadband Beam Current Balun.....	\$109.95
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Permatex® Neutral Cure RTV Sealant

Have you ever sealed a piece of electronic gear with ordinary RTV sealant, only to open it later to find that the component had become corroded? It wasn't moisture that caused the corrosion—it was the RTV. Ordinary RTV gives off acetic acid when it cures (that's the vinegar smell); it's the acid that causes the corrosion. DX Engineering has located a Neutral Cure RTV that is non-corrosive and safe for sealing baluns and other electronic gear that will be out in the weather. Applies just like "normal" RTV, dries in one hour and cures in 24 hours at 70 degrees F.

UMI-82180	Permatex Neutral Cure RTV, 3.35 oz. Tube, Black.....	\$5.99
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Hazardous, limited to domestic UPS Ground shipping only.



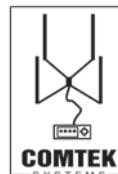
50 and 75 Ω Choke Baluns

Choke baluns ensure that RF does not flow on the outside shield of feedlines, phasing lines, etc. COMTEK SYSTEMS' baluns feature 100 Amidon beads on a length of RG-400 PTFE double-shielded silver coax terminated with Silver PTFE PL-259 UHF connectors. Assembled baluns are covered with 3M heat shrink tubing. RF bead kits are available if you wish to assemble your own chokes.

COM-CFC-50	50 Ω Balun, Assembled	\$93.95
COM-CFC-50K	50 Ω Balun, Kit	\$69.95
COM-CFC-75	75 Ω Balun, Assembled	\$94.95
COM-RFB-160	RF Choke Bead Kit, 160M.....	\$89.95
COM-RFB-80	RF Choke Bead Kit, 80M	\$84.95
COM-RFB-40	RF Choke Bead Kit, 30 and 40M	\$67.95
COM-RFB-20	RF Choke Bead Kit, 10, 15 and 20M.....	\$38.95

Accessories

DXE-RADP-3	Stainless Steel Radial Plate with 20 Bolt Sets.....	\$54.50
DXE-SSVC-2P	V-Saddle Clamp, Fits 1" to 2" Tube.....	\$11.95



FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details

Jerry Sevick W2FMI-inspired COMTEK Baluns



COMTEK Baluns

COMTEK Baluns were inspired by the writings of Jerry Sevick W2FMI, published in his book *Understanding, Building and Using Baluns and Ununs*. COMTEK baluns are value-engineered to provide maximum performance at minimum cost while providing a superb, efficient match between unbalanced coax and balanced antennas.

- Design inspired by Jerry Sevick W2FMI with modern improvements from DX Engineering's in-depth balun R&D
- Unique high voltage compensating capacitors for unequalled SWR bandwidth
- Outstanding ferrite mix coated toroid core with special design to accommodate close coupling without excessive stress
- Exceptionally high and consistent common-mode impedance across the specified band width provides isolation where it is needed most
- Special wire size selection and Teflon®-insulated wire sleeves provide exact impedance matching and superb insulation, unlike common Thermaleze® wire
- Typical insertion loss is less than 0.2 dB
- Power handling from 3 kW continuous to 7 kW intermittent, depending on model May be used to 54 MHz with reduced ratings
- Gasketed SO-239 connectors are silver plated with Teflon® insulation.
- All hardware is Stainless Steel. Studs are 1/4"-20
- COMTEK Baluns are sealed in a weatherproof 4" x 4" x 2" NEMA box which makes an excellent outdoor enclosure

1:1 Dual Wire/Single Core

COM-BAL-11130E	3 kW, 1.8 to 54 MHz, Side Eyebolts.....	\$56.95
COM-BAL-11130ET	3 kW, 1.8 to 54 MHz, Side/Top Eyebolts.....	\$56.95
COM-BAL-11130T	3 kW, 1.8 to 54 MHz, Side Studs.....	\$56.95
COM-BAL-11130S	3 kW, 1.8 to 54 MHz, Top Studs.....	\$56.95

1:1 Coax/Single Core

COM-BAL-11150E	5 kW, 1.8 to 54 MHz, Side Eyebolts.....	\$61.95
COM-BAL-11150ET	5 kW, 1.8 to 54 MHz, Side/Top Eyebolts.....	\$61.95
COM-BAL-11150S	5 kW, 1.8 to 54 MHz, Side Studs.....	\$61.95
COM-BAL-11150T	5 kW, 1.8 to 54 MHz, Top Studs.....	\$61.95

1:1 Dual Wire/Dual Core

COM-BAL-11140T	5 kW, 1.8 to 54 MHz, Top Studs.....	\$78.95
COM-BAL-11140S	5 kW, 1.8 to 54 MHz, Side Studs.....	\$78.95

1:1 Coax/Dual Core

COM-BAL-11150DS	5 kW, 1.8 to 54 MHz, Side Studs.....	\$78.95
COM-BAL-11150DT	5 kW, 1.8 to 54 MHz, Top Studs.....	\$78.95

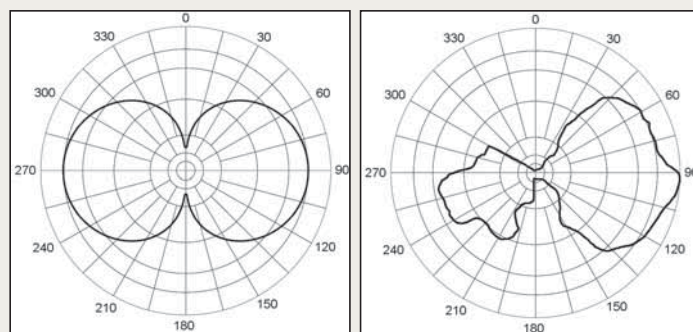
4:1 Dual Wire/Single Core

COM-BAL-41130E	3 kW, 1.8 to 54 MHz, Side Eyebolts.....	\$66.95
COM-BAL-41130ET	3 kW, 1.8 to 54 MHz, Side/Top Eyebolts.....	\$66.95
COM-BAL-41130T	3 kW, 1.8 to 54 MHz, Top Studs.....	\$66.95
COM-BAL-41130S	3 kW, 1.8 to 54 MHz, Side Studs.....	\$66.95

4:1 Dual Wire/Dual Core

COM-BAL-41150T	5 kW, 1.8 to 54 MHz, Top Studs.....	\$93.95
COM-BAL-41150S	5 kW, 1.8 to 54 MHz, Side Studs.....	\$93.95
COM-BAL-41150E	5 kW, 1.8 to 54 MHz, Side Eyebolts.....	\$93.95

Contact DX Engineering Customer Support to discuss your application or for recommendations.



Balanced Current

With No Balun

W2FMI Series Baluns

When properly connected to balanced antenna loads like symmetrical dipoles, unbalanced coaxial feedlines must have exactly equal and opposite currents on the shield and center conductors. COMTEK baluns are value-engineered to provide maximum performance at minimum cost while providing a superb, efficient match between unbalanced coax and balanced antennas.

Balanced current distribution along the halves of the antenna assures correct pattern shape and antenna efficiency. Current baluns add common-mode isolation between the antenna and coaxial feedline.

The expected figure-8 dipole azimuth pattern cannot be achieved unless RF current is flowing equally on both halves of the dipole. The COMTEK current baluns force equal current to flow and prevent high values of common-mode feedline current. This eliminates pattern distortion, unpredictable performance, RFI, and noise pickup from nearby sources like TV sets and computers.

Baluns come in ratios for effective SWR matching between the 50 Ω coaxial transmission line and the antenna feedpoint based on the feedpoint impedance. COMTEK baluns have been designed to provide the lowest possible SWR match across the specified frequency range.

Current baluns isolate or add impedance to unwanted common-mode current paths, reducing or controlling common-mode current. Current baluns are the best choice in almost all situations because they work better in most real-world systems by isolating the input and output connections.

Contrary to some published information, a high common-mode impedance across a wide frequency range is absurd, if not unachievable. The highest impedance values are most useful at lower frequencies, while lesser impedance values are more than adequate at the high end of the HF range. In most cases, baluns are installed as close as possible to a balanced-to-unbalanced transition point.

4:1 High Power UNUN for Non-Resonant Vertical Antennas

Using non-resonant multi-band antennas? This UNUN helps your antenna system operate at maximum efficiency by minimizing transmission line losses caused by SWR. You can add this UNUN to any 43 foot antenna system; it covers 1.8-30 MHz and can handle 2 kW CW/5 kW SSB.

Mounting and feedpoint connection kits are available separately; or you can purchase everything together for a complete installation package.

DXE-UN-43	High Power 4:1 UNUN	\$104.95
DXE-UN-BRKT	UNUN Mounting Kit.....	\$22.95
DXE-TCB-UNFK	UNUN to Vertical Feedpoint Connection Kit.....	\$9.50
DXE-UN-43-R	Complete Package with UNUN, Mounting and Feedpoint Kits.....	\$129.95



Balun Mounting and Installation Solutions

Mounting your balun correctly is critical to maintaining its reliability. Here are several options to ensure your balun is ready to face Mother Nature.

Balun or Choke Mounting Kit

The DXE-VFCC-BRKT is the same bracket kit supplied with our Vertical Feedline Current Chokes. It also works well with several other models. The kit includes the stainless steel bracket and insulated shelf. You can mount it to a standard 4x4 or 6x6 wooden post with basic wood screws. If you're using this kit to mount your balun to 1 to 2 inch O.D. pipe, you'll want to use a durable clamp; we recommend our V-Saddle Clamp.

DXE-VFCC-BRKT	Balun or Choke Mounting Kit	\$19.95
DXE-SSVC-2P	V-Saddle Clamp	\$11.95



Balun Dipole Adapter Bracket

If you're mounting your balun or feedline choke to a wire dipole antenna, the Balun Dipole Adapter Kit is the ideal solution. It suspends your balun with the antenna and includes all necessary mounting hardware. Be sure to use durable rope that can support the added weight; check out the Double-Braided Polyester Rope from Synthetic Textile Industries, found on page 76.

DXE-BDAB-1P	Balun Dipole Adapter Kit	\$24.95
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Balun Mounting Bracket Kits

Select from several mounting options that match your Yagi boom, tower leg or mast's diameter. Each kit contains the appropriate stainless steel clamps and hardware, plus the aluminum bar mounting bracket. They're the perfect mounting method for any DX Engineering balun in a formed aluminum enclosure.

DXE-BMB-1P	Mounting Kit, with .75" to 1.5" Clamps	\$24.95
DXE-BMB-2P	Mounting Kit, with 1.56" to 2.25" Clamps	\$24.95
DXE-BMB-3P	Mounting Kit, with 2.31" to 3" Clamps	\$24.95
DXE-BMB-4P	Mounting Kit, Made for COMTEK Baluns	\$17.95



Cable Strain Relief Brackets

Mounting your balun or choke is only part of the equation—you still need to make sure your coaxial cables are secure and free from the stress of gravity. Our Cable Strain Relief Brackets will help prevent the cable from pulling from your PL-259 connector.

DXE-CSR8X-1	Cable Strain Relief Assembly, for RG-8X Cable.....	\$15.50
DXE-CSR213-1	Cable Strain Relief Assembly, for RG-213/U Cable.....	\$15.50

Find the Full Specs on Every DX Engineering Balun at DXEngineering.com, or Call Us and We'll Find the Perfect Match for Your Application!

Maxi-Core® High Power Transmission Line Transformers and Baluns

Ensure that your antenna system is operating optimally. These units have perfected the unbalanced-to-balanced transition, giving you the strongest signal your antenna is capable of producing in both transmit and receive situations. In addition to increased performance and coverage, these baluns reduce the electrical stress on your expensive equipment.

They cover the 1.8 to 30 MHz frequency range and with increased operating bandwidth compared to other baluns. Depending on the application, the baluns use ceramic insulators, stainless steel hardware and PTFE/silver SO-239 connectors.

Each balun is housed in either a lightweight, formed aluminum enclosure for basic outdoor use or in a cast aluminum gasketed enclosure suitable for extreme environments.



Part Number	Application	Ratio	Power (CW/SSB)	Enclosure	Price
DXE-BAL050-H05-A	Dipole, Yagi	1:1	2/5 kW	Formed Aluminum	\$99.95
DXE-BAL050-H10-A	Dipole, Yagi	1:1	5/10 kW	Formed Aluminum	\$109.95
DXE-BAL050-H11-C	Dipole, Yagi	1:1	10/10+ kW	Cast Aluminum	\$139.95
DXE-BAL100-H11-C	Vertical Loop	2:1	10/10+ kW	Cast Aluminum	\$149.95
DXE-BAL200-H10-A	Yagi, LPDA, Horizontal Loop	4:1	5/10 kW	Formed Aluminum	\$119.95
DXE-BAL200-H11-C	Yagi, LPDA, Horizontal Loop	4:1	10/10+ kW	Cast Aluminum	\$144.95
DXE-BAL300-H10-A	Folded Dipole	6:1	5/10 kW	Formed Aluminum	\$139.95
DXE-BAL450-H10-A	450 Ω Antenna	9:1	5/10 kW	Formed Aluminum	\$139.95
DXE-BAL600-H10-A	Terminated Loop	12:1	5/10 kW	Formed Aluminum	\$139.95

Special Balun Applications for Use with an Antenna Tuner

DXE-BAL050H10AT	Multi-Band Dipole	1:1	5/10 kW	Formed Aluminum	\$119.95
DXE-BAL050H11CT	Multi-Band Dipole	1:1	10/10+ kW	Cast Aluminum	\$144.95
DXE-BAL200H10AT	Multi-Band Vertical, Off Center-Fed Dipole	4:1	5/10 kW	Formed Aluminum	\$129.95
DXE-BAL200H11CT	Multi-Band Vertical, Off Center-Fed Dipole	4:1	10/10+ kW	Cast Aluminum	\$149.95

Maxi-Core® Special Line Transformers

If you need a long low loss feedline for your HF antennas, this pair of transformers may be able to save you some money. Instead of running a length of expensive coax, these transformers let you use 450 Ω ladder line as an affordable alternative. Simply run your ladder line and connect a transformer to each end, then connect your 50 Ω coax to each transformer, linking your antenna to your transceiver. More details on this cost-effective solution can be found at DXEngineering.com.

DXE-BAL450H10-BP	Special Line Transformers, Pair	\$299.95
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Maxi-Core® Feedline Current Choke

Fend off RF Interference and reduce the noise level in your 50 Ω coaxially-fed antenna system. It improves your transceiver's efficiency by maximizing the transmit power going to your antenna. In addition to eliminating RFI, this current choke can also overcome a less-than-optimal ground system.

The DXE-FCC0050-H05-A handles 2 kW and is compatible with vertical, Yagi and log periodic antennas. It offers higher common-mode impedance, higher power handling, and lower loss than other chokes. The Maxi-Core® Feedline Current Choke covers 160 to 6 meters and is an excellent way to combat poor feedline isolation.

DXE-FCC050-H05-A	Feedline Current Choke	\$87.95
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Rugged Construction—Maximum Reliability!**DX ENGINEERING****Universal Wire Antenna Kits**

DX Engineering's three Universal Wire Antenna (UWA) Kits offer the right combination of parts and hardware to create a wide variety of antenna designs.

You can create any type of wire antenna, including single band, multi-band, multi-frequency and folded dipole, doublet and inverted-vee, off-center fed, Windom, Zepp, long wires, rhombic, vee beam, and loop antennas.

The kits feature the new EZ-BUILD™ Center-T insulator and end insulators. The insulators have a unique patented design that features a serpentine wire grip for insulated DX Engineering Antenna Wire and DX Engineering's high strength, high power 300 Ω ladder line. The serpentine wire connection grip is strong enough to support the antenna wires without looping or wrapping the wire ends. This allows fast and easy field adjustments of antenna length without soldering!

The insulators are made of a lightweight, high strength, UV-protected material. The center-T insulator is designed to serve as a feedpoint and strain relief for antennas made with either wire or ladder line, which may be fed with either ladder line or coaxial cable. The center-T insulator can be the main support point for the antenna feedpoint by using the top center hole to attach a support rope. It also serves as the mounting and support point for any DX Engineering Balun.

The DXE-UWA8X-KIT and DXE-UWA213-KIT kits include a new strain relief bracket and P-clamps with neoprene cushions that grip the coaxial cable without deforming it, taking the weight of the hanging cable off of the connector. Each kit also includes crimp-on ring terminals for ladder line and antenna wire, and connection hardware.

DXE-UWA-KIT	Universal Wire Antenna Kit.....	\$19.95
DXE-UWA8X-KIT	Universal Wire Antenna Kit for RG-8X.....	\$39.95
DXE-UWA213-KIT	Universal Wire Antenna Kit for RG-213.....	\$39.95
DXE-UWA-END-KIT	End Insulators, Package of 8.....	\$12.00

**Antenna Support Rope**

Synthetic Textile Industries' double-braided Dacron/Polyester ropes are not weakened by decay or mildew and provide excellent resistance to abrasion. The color-sealed, black polyester yarn used in the braided jacket also protects the cord from damage due to ultra-violet light. It is available in a variety of diameters and lengths.

SYN-DBR-187-100 SYN-DBR-94-100



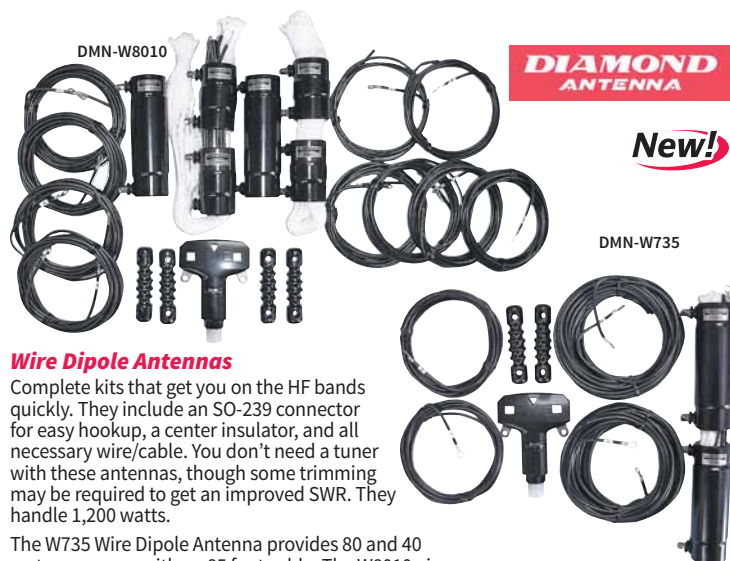
SYN-DBR-94-100	3/32" Diameter Rope, 100' Roll	\$8.95
SYN-DBR-94-1000	3/32" Diameter Rope, 1,000' Roll	\$51.95
SYN-DBR-125-100	1/8" Diameter Rope, 100' Roll	\$11.95
SYN-DBR-125-1000	1/8" Diameter Rope, 1,000' Roll	\$76.95
SYN-DBR-187-100	3/16" Diameter Rope, 100' Roll	\$16.95
SYN-DBR-187-350	3/16" Diameter Rope, 350' Roll	\$44.95
SYN-DBR-187-500	3/16" Diameter Rope, 500' Roll	\$63.95
SYN-DBR-312-100	5/16" Diameter Rope, 100' Roll	\$18.95
SYN-DBR-312-500	5/16" Diameter Rope, 500' Roll	\$91.95
SYN-DBR-437-500	7/16" Diameter Rope, 500' Roll	\$189.95

**Ladder-Line Fed Dipole Antennas**

The DX Engineering multi-band dipoles are rugged yet lightweight. Each model resonates at the low end of the band specified. They are usable to 30 MHz with a wide range tuner and come complete with the wire elements, ladder feedline, center-T support and end insulators.

- Elements: 14 AWG copper, PVC jacket for flexibility and strength
- Feedline: 100 feet, 18 AWG, 300 Ω ladder line, UV-resistant, 0.88 VF
- Hardware: stainless steel
- Center-T support and end insulators: High impact, UV-resistant material, black
- Power Rating: 1,500 W

DXE-WA-260	Antenna, 260' Long for 160M and Up.....	\$59.95
DXE-WA-135	Antenna, 135' Long for 80M and Up.....	\$49.95
DXE-WA-070	Antenna, 70' Long for 40M and Up.....	\$49.95

**Wire Dipole Antennas**

Complete kits that get you on the HF bands quickly. They include an SO-239 connector for easy hookup, a center insulator, and all necessary wire/cable. You don't need a tuner with these antennas, though some trimming may be required to get an improved SWR. They handle 1,200 watts.

The W735 Wire Dipole Antenna provides 80 and 40 meter coverage with an 85 foot cable. The W8010 gives you the 80, 40, 20, 15, and 10 meter bands with a 63 foot cable.

DMN-W735	Dual-Band Wire Dipole Antenna	\$119.95
DMN-W8010	Five-Band Wire Dipole Antenna	\$144.95

Zepp Wire Antennas

MFJ's Zepp Wire Antennas are easy to hang up so you get on the air quickly. They feature custom fiberglass SO-239 mounts, 7-strand/14-gauge copper wire and glazed ceramic insulators. There's no need for soldering or cutting, and these super-durable antennas give you excellent performance on several popular bands.



MFJ-6115	15M End-Fed Zepp Wire Antenna.....	\$32.95
MFJ-6117	17M End-Fed Zepp Wire Antenna.....	\$34.95
MFJ-6120	20M End-Fed Zepp Wire Antenna.....	\$35.95
MFJ-6130	30M End-Fed Zepp Wire Antenna.....	\$39.95
MFJ-6140	40M End-Fed Zepp Wire Antenna.....	\$44.95
MFJ-1748	80M End-Fed Zepp Wire Antenna.....	\$69.95
MFJ-1742	20M Double-Zepp Extended Wire Antenna	\$79.95

Center Insulator for Multi-Band Doublets with SO-239

This weatherproof, lightweight, high strength center insulator is used for connecting coaxial feedline to a doublet-type antenna. The insulator can be hung from a supporting mast. It has an SO-239 connector to attach to coaxial cable with a matching PL-259 connector.

HGN-C-1C	Center Insulator for Multi-Band Doublets.....	\$29.95
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**Alpha Delta Wire Antennas****Multi-Band Dipole Wire Antennas**

These complete resonant antennas include DELTA-C center insulator and end insulators, ISO-RES coils, and separate wires for different bands. All wires are attached to the center insulator. An ARC-PLUG™ static electricity protector is built in. Stainless steel hardware and 12-gauge solid copper wire ensure long life. Antennas are shipped fully assembled. No antenna tuners are necessary, except for 15 meter band with DX-CC.

ALF-DX-CC	80-10 Meter Parallel Dipole.....	\$159.95
ALF-DX-DD	80-40 Meter Single Dipole.....	\$129.95
ALF-DX-EE	40-10 Meter Parallel Dipole.....	\$139.95
ALF-DX-LB	160-80-40 Meter Single Wire Dipole.....	\$159.95
ALF-DX-LBPLUS	160-10 Meter Parallel Dipole.....	\$189.95
ALF-SEP	Replacement ARC-PLUG protector	\$15.95

Multi-Band Sloper Wire Antennas

These antennas provide good DX performance for limited space installations by combining the DX firepower of a quarter-wave sloper with the wide bandwidth of a half-wave dipole antenna. A built-in ARC-PLUG™ static electricity protector is included. Because the installation of sloper antennas depends on your available mounting circumstances, the use of a wide range antenna tuner is recommended for best performance.

ALF-DX-A	Twin Sloper, 160/80/40 Meter.....	\$99.00
ALF-DX-B	Sloper, 160/80/40/30 Meter	\$109.95
ALF-SEP	Replacement ARC-PLUG Protector	\$15.95

SWL Antennas

Fully assembled for fast, easy installation, these antennas are optimized to provide best broadband receiving performance from the AM broadcast band through 30 MHz. The antennas include ISO-RES inductors, solid copper wire elements and the exclusive DELTA-C center insulator with a built-in ARC-PLUG™ static electricity protector. Stainless steel hardware and 12-gauge solid copper wire ensure long life.

ALF-DX-SWL	SWL Sloper Antenna, 60'	\$119.95
ALF-DX-ULTRA	SWL Parallel Dipole, 80'	\$159.95
ALF-SEP	Replacement ARC-PLUG Protector	\$15.95

ALPHA DELTA COMMUNICATIONS, INC.**MFJ Wire Antennas****G5RV All-Band HF Antenna**

The world-famous G5RV antenna is a multi-band center-fed dipole with a 1,500 watt capacity. Designed as a 3/2-wavelength antenna for 14 MHz, it provides reasonable performance on many other bands. The antenna covers all bands from 160 to 10 meters when used with an antenna tuner. At 102 feet long, the G5RV is shorter than an 80 meter dipole. At 52 feet long, the MFJ-1778M Junior G5RV Antenna is half the size of the MFJ-1778 yet still covers 40 through 10 meters with tuner. It also handles 1,500 watts.

MFJ-1778	G5RV All-Band HF Antenna.....	\$44.95
MFJ-1778M	G5RV Junior Antenna	\$39.95

OCFD 40/20/10/6 Meter Dipoles

These antennas are CAD designed and engineered for low SWR, high efficiency, wide bandwidth, and frequency agility on all four of amateur radio's most interesting DX bands. The antennas are cut to length and preassembled—just connect your feedline. They're lightweight and easy to install.

MFJ-2010	OCFD UltraLite Dipole, 300 Watts	\$59.95
MFJ-2012	OCFD PowerLite Dipole, 1.5 kW.....	\$79.95

Collinear Array Wire Antennas

Classic antennas updated for the 21st century. If you can find two nearby trees, you can have a booming signal on many popular bands. These super-durable antennas give you almost 2 dB of gain for worldwide coverage. They are bi-directional, extremely quiet and can handle a whopping 1,500 watts. Just hang these wire antennas anywhere from 1/4- to 3/4-wavelengths above ground and start DXing the world.

MFJ-6215	15M Collinear Array Wire Antenna	\$39.95
MFJ-6217	17M Collinear Array Wire Antenna	\$43.95
MFJ-6220	20M Collinear Array Wire Antenna	\$44.95
MFJ-6230	30M Collinear Array Wire Antenna	\$48.95
MFJ-6240	40M Collinear Array Wire Antenna	\$56.95
MFJ-6415	15M Collinear Array Wire Antenna, 4-Element.....	\$89.95
MFJ-6417	17M Collinear Array Wire Antenna, 4-Element.....	\$91.95
MFJ-6420	20M Collinear Array Wire Antenna, 4-Element.....	\$99.95

Dipole Antennas

Choose a Dipole Antenna from MFJ, and get effective yet reliable coverage in an antenna that's easy to use. Check out MFJ's lineup and select the dipole antenna that best suits your needs, and you can always visit DXEngineering.com for more specs.

MFJ-1776B	6M Folded Dipole Antenna	\$34.95
MFJ-1770B	10M Folded Dipole Antenna	\$34.95
MFJ-1770C	15M Dipole Antenna	\$34.95
MFJ-1771B	17M Dipole Antenna	\$34.95
MFJ-1772B	20M Dipole Antenna	\$34.95
MFJ-1773B	30M Dipole Antenna	\$34.95
MFJ-1774B	40M Dipole Antenna	\$34.95
MFJ-1779A	160M Dipole Antenna, 26 5' Wire.....	\$69.95
MFJ-1779C	20-6M Dipole Antenna, 35' Wire	\$29.95
MFJ-17754	40-20M Dipole Antenna, 42' Wire	\$59.95
MFJ-17758	80-40M Dipole Antenna, 85' Wire	\$89.95
MFJ-1779B	80-40M Dipole Antenna, 135' Wire	\$43.95
MFJ-2010	40/20/10/6M Ultra-Lite Off-Center Fed Dipole Antenna, 66' Wire	\$59.95
MFJ-2012	40/20/10/6M Power-Lite Off-Center Fed Dipole Antenna, 66' Wire	\$79.95
MFJ-2014	75/40M Power-Lite Off-Center Fed Dipole Antenna, 122' Wire	\$89.95
MFJ-2299	20M-FM Broadcast Adjustable Multi-Band Telescopic Dipole Antenna	\$119.95

FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details

MFJ Desktop/Remote 4-Position Antenna Transceiver Switch

A switch that you operate on your desk or from across the hall. It handles 1,500 watts, covers 1 to 60 MHz (lowest SWR from 1 to 30 MHz), and is made for 50 Ω antenna systems. All unused ports are grounded automatically and the switch features an ultra-fast gas tube lightning surge protector to protect your radio. This switch is remotely operated through an RJ-45 cable by the MFJ-4724RC remote (sold separately).

MFJ-4724 Desktop/Remote 4-Position Antenna/Transceiver Switch **\$139.95**

6-Port Antenna Switches

These switches are designed for 1.8 to 30 MHz. They handle 2,000 watts and antenna loads from 50 to 75 Ω . The unused terminals are grounded automatically, allowing for static discharge and lightning/RF protection.

The deluxe switch uses two ceramic rotary switches; one lets you select your antenna, the other your radio. That means you can use the switches independently with their two common ports. The deluxe version is perfect for inputting your antenna tuner, wattmeter or other linear device.

MFJ-1701 6-Port Antenna Switch **\$69.95**
MFJ-1700C Deluxe 6-Port Antenna Switch **\$99.95**

Manual Antenna Switches

MFJ antenna switches have precision-machined, low loss components for reliable service. Mount one of these antenna switches and you will have more than the convenience of instantly selecting any of four antennas or center ground positions. They come complete with replaceable lightning surge protection that helps to protect against distant lightning-induced surges and static. When these antenna switches are in the center position, all connectors are disconnected and grounded. If the switch is turned to an active connector, the other connectors are automatically grounded. The active connector is automatically protected with the replaceable lightning/surge protector. MFJ antenna switches utilize heavy cast metal construction and a ball bearing drive for smooth switching.

Additional features include:

- Handles 2.5 kW PEP
- Extremely low SWR
- Isolation: greater than 60 dB at 30 MHz, greater than 50 dB at 500 MHz
- Negligible insertion loss
- 50 Ω Impedance

MFJ-1702 2-Position Antenna Switch **\$19.95**
MFJ-1702C 2-Position Antenna Switch with Grounding **\$39.95**
MFJ-1704 4-Position Antenna Switch with Grounding **\$79.95**
MFJ-2702 1 GHz/2 kW 2-Position Antenna Switch, SO-239 Connector; **\$32.95**
MFJ-2702N 3 GHz/2 kW 2-Position Antenna Switch, N-Connector **\$40.95**

RigExpert®

Professional Quality Antenna Analyzers

DX Engineering carries powerful antenna analyzers from RigExpert. RigExpert makes exceptional measuring and test equipment for both communications professionals and Amateur Radio enthusiasts. They're designed for testing, checking, tuning, or repairing antennas and antenna feedlines.

These analyzers are packed with features; so if you want to learn more and see detailed specs, please visit DXEngineering.com. Whether you're building, experimenting or repairing your gear, count on an antenna analyzer from RigExpert to give you precise, accurate and reliable data.

New!



New!



Manual Antenna Switches

Perfect for switching one radio between two antennas (or two radios between one antenna), these rugged switches offer excellent isolation and auto-grounding of the unused terminal for extra protection.

Daiwa's CS-2011GI has a frequency range up to 2 GHz, 50 dB of isolation at 1 GHz and an insertion loss below 1.2 dB at 1.2 GHz. Gold plated Type N connectors make for easy installation.

The CS-201A has a frequency range up to 600 MHz, 60 dB of isolation at 600 MHz and an insertion loss under .2 dB. This switch features SO-239 connectors.

DWA-CS-201GI Manual Coax Switch, 2 GHz **\$48.95**
DWA-CS-201A Manual Coax Switch, 600 MHz **\$32.95**



Wideband Coax Switches

Maximum Performance without Compromise!

Diamond Antennas offers an extensive line of station accessories: duplexers/triplexers, switches, dummy loads, and lightning protection. Maximize your installation; Diamond Antennas has the gear to help you do it.



Part Number	Description	Price
DMN-CX210A	Wideband Coax Switch, 1,500 W Max. DC-1000 MHz, SO-239	\$49.95
DMN-CX210N	Wideband Coax Switch, 1,500 W Max. DC-1000 MHz, Type N Connector	\$79.95
DMN-CX310A	Wideband Coax Switch, 3-Position. DC-800 MHz, SO-239	\$89.95



RCS-4 Remote Antenna Switch

The Ameritron RCS-4 is a Four-Position Remote Antenna Switch which is powered through the coax cable. The relay switch box may be tower, mast or wall mounted—the control console is located at your operating position. It features bright LED indicators, a steel enclosure, 50 ms switching time, and SO-239 connectors. It uses three heavy-duty 10 ampere contact relays on a rugged G-10 fiberglass circuit board. The RCS-4 operates from 120 Vac power source, and covers 1.8 to through 30 MHz at 1,500 watts.

AME-RCS-4 1.5 kW Four Position RF Switch **\$149.95**



Manual Antenna Switches

Alpha Delta antenna switches have precision-machined, low loss components for reliable service. Grounded unselected antenna ports and ARC-PLUG™ lightning surge protectors provide the final line of protection.

ALF-DELTA-2B 2-Position Coax Switch, SO-239 Connector **\$59.95**
ALF-DELTA-2B-N 2-Position Coax Switch, N-Connector **\$75.95**
ALF-DELTA-4B 4-Position Coax Switch, SO-239 Connector **\$89.95**
ALF-DELTA-4B-N 4-Position Coax Switch, N-Connector **\$99.95**
ALF-ASC-4B 4-Position Desk Console Switch, SO-239 Connector **\$149.95**
ALF-ASC-4B-N 4-Position Desk Console Switch, N-Connector **\$159.95**
ALF-D4 Replacement ARC-PLUG **\$9.95**

ALF-D4



LIMITED TIME OFFER:
Orders Over \$99 Ship Free

See page 58 for details.

DXE-RR2X8B SO2R RF Antenna Switch

The RR2X8 is a dual-input, 8-port coaxial line switch for use in low- to medium-power RF antenna systems, like those typically used in a single-operator/two-radio (SO2R) environment. It has the same high port-to-port isolation and reliability as DX Engineering's famous RR8-series single-input, 8-port remote antenna switches.

- Dual-input, 8-port, 4 kW key-down
- Excellent port-to-port isolation—greater than 70 dB at 30 MHz worst case
- High RF-tolerant UHF connectors
- Enclosed 16 ampere RF relays
- Safe 12-volt relay operation
- 16 MOVs for surge protection on control lines
- 16 RF bypass capacitors
- High-impact, RF-shielded cover
- Includes one DXE-SSVC-2P Stainless Steel V-Clamp for mounting



The DXE-RR2X8B is designed to interface with a customer-supplied logical switching unit, which should provide protection against hot switching and prevent the master or slave from attempting to select the same output port at the same time.

Manual operation is possible with two separate 1-of-8, control consoles such as the DX Engineering CC-8A or EC-8. In this case, care must be exercised as the master transceiver takes precedence over the slave when attempting to use the same antenna port.

DXE-RR2X8B SO2R RF Antenna Switch **\$595.00**

CC-8A Deluxe Control Console

The CC-8A is a flexible 8-position controller for DX Engineering RR8 Series Antenna Switches or any product that uses a 12/24 Vdc, 1-of-8 or BCD control format. The powdercoated metal housing features an on/off switch, ergonomic selector knob, and eight front-panel LEDs (with adjustable brightness) to indicate switch position. Stainless steel base plate. Operates from 12 Vdc or 24 Vdc source.



DXE-CC-8A Deluxe Control Console..... **\$169.95**

EC-8 Control Console

The EC-8 is a versatile 8-position controller for DX Engineering RR8A Series Antenna Switches, or any other product that uses a 12/24 Vdc, 1-of-8 control format. The powdercoated metal housing features an on/off switch with green power LED and an ergonomic selector knob with scratchpad areas to mark the switch position function. Stainless steel base plate. Operates from a 12 Vdc source.



DXE-EC-8 8-Position Control Console..... **\$89.95**

EC-4 Control Console

The DXE-EC-4 is a flexible, four-position controller used to control the DX Engineering Receive Four-Square series or any other product using a four-position (three wire plus ground) BCD control format. It features a powdercoated housing with an ON/OFF switch and green LEDs with scratchpad areas to mark the switch position function. It requires 12 Vdc for operation.

Additional Features:

- Stainless steel housing
- Non-skid feet
- Four green position-indicating LEDs
- An internal automatic resettable fuse
- Includes a 2.1mm power plug for +12 Vdc power connection



DXE-EC-4 4-Position Control Console..... **\$89.95**

**Multi-Conductor Control Wire**

DXE-CW9	Shielded Control Wire, 9-Conductor	per foot \$0.32
DXE-CW9-1K	Shielded Control Wire, 9-Conductor, 1,000 Foot Spool ...	\$229.00
DXE-CW9S	Shielded Control Wire, 9-Conductor Stranded	per foot \$0.36
DXE-CW8	Control Wire, 8-Conductor	per foot \$0.48
DXE-CW8-HD	Control Wire, 8-Conductor, Heavy-Duty	per foot \$0.89
DXE-CW8-HD-1000	Control Cable, 8-Conductor, Heavy-Duty, 1,000 Foot Spool	\$835.75
COM-CW3	Cable, 3-Conductor	per foot \$0.25
COM-CW4	Cable, 4-Conductor	per foot \$0.28

**DX Engineering's Symmetrical Design—Highest Reliability and Performance!****Remote Antenna Switches**

Installation of these remote antenna switches is hassle-free. There's no need to remove the cover to install the control cable—it plugs in with an external connector. You can use inexpensive CAT-5 cable to connect between the relay switch and the controller at the operator position.

The DX Engineering RF Switch also provides great SWR and superior port-to-port isolation.

DX Engineering RF Switches have a port-to-port isolation of greater than 60 db for ALL ports, not just the best port. This is the finest port isolation of all the coax switches we have tested—and we have tested ALL of the major brands. In fact, one particular major manufacturer's switches tested as low as 30 dB. None of the tested switches have a port-to-port isolation as high as DX Engineering's switches.

This is one component in your station that should be the very best!

Features

- Fully RF-shielded with UV-resistant high-impact cover
- Can select individual or multiple ports for stacking cover, stainless steel mounting bracket and hardware and phased array applications
- Lightning protection standard
- Safe 12-volt relay operation
- Solderless, removeable plug for easy installation of control wire
- Unused antenna ports can be jumpered for open control line with no disassembly or shorted to ground
- Can be wired without disassembly

The DXE-RR8B-HP uses 16 relays (2 per port) in a star arrangement to provide greater than 70 dB of port-to-port isolation. It is designed to switch coaxial lines in RF systems operating up to 5 kW continuous duty. The DXE-RR8B-SD is the largest switch in the RR8B series, designed to switch coaxial lines in high power RF systems up to 10 kW continuous duty.

Specifications

- Port Isolation (Worst Case): 70 dB (RR8B-HP), 60 dB (RR8B-SD)
- Sealed RF Relays: 20 amps (HP), 25 amps (SD)
- Power Rating (<2:1 SWR at 30 MHz): 7 kW ICAS/5 kW CCS (HP), 10 kW ICAS/CCS (SD)
- Control Voltage: 10-14 Vdc/100 mA (HP), 10-14 Vdc/160 mA (SD)
- Loss (HP): <0.03 dB below 60 MHz, <0.25 dB below 150 MHz
- Loss (SD): <0.03 dB below 30 MHz, <0.16 dB below 60 MHz
- Impedance: 50 Ω
- Control Line: 8-wire plus ground, #24 up to 1,000' (DXE-CW9S)

DXE-RR8B-HP
5 kW Key-Down
RF Switch

- Highest isolation
- 5 kW rating
- Usable to 150 MHz

DXE-RR8B-SD
10 kW Key-Down
RF Switch

- 10 kW rating
- Usable to 60 MHz
- Excellent isolation

**Single-Input 8-Port RF Switches and Console Combs**

DXE-RR8B-HP	5 kW Key-Down Switch	\$349.00
DXE-RR8B-HP-P1	5 kW Key-Down Switch with CC-8A Console	\$505.00
DXE-RR8B-HP-P2	5 kW Key-Down Switch with EC-8 Console.....	\$415.00
DXE-RR8B-SD	10 kW Key-Down Switch	\$435.00
DXE-RR8B-SD-P1	10 kW Key-Down Switch with CC-8A Console	\$595.00
DXE-RR8B-SD-P2	10 kW Key-Down Switch with EC-8 Console.....	\$505.00

Accessories

AME-RCS-12C	Ameritron Automatic Antenna Switch Controller	\$239.95
AME-DB-13D	Ameritron Cable, RCS-12C to Icom 706/7000/718	\$22.95
AME-DB-7DI	Ameritron Cable, RCS-12C to Icom ACC2	\$22.95
AME-DB-7DK	Ameritron Cable, RCS-12C to Kenwood TS-2000/570/870;	\$22.95
AME-DB-8MK	Ameritron Cable, RCS-12C to Kenwood TS-480.....	\$22.95
AME-DB-8DY	Ameritron Cable, RCS-12C to Yaesu 8-Pin Band Data	\$22.95
DXE-RLY-HP	SPDT 5 kW Sealed RF Relay, Board-Mount.....	\$9.95
DXE-RLY-SD	SPDT DM/DB 10 kW RF Relay, Board-Mount	\$19.95
DXE-CW9S	Shielded Control Wire, 9-Conductor Stranded	per foot \$0.36



DXE-RR8B-HP-P



DXE-RR8B-SD





Super Hi-Q Loop Antennas

MFJ

If you're short on space, but don't want to compromise on performance, look to MFJ's line of Super Hi-Q Loop Antennas. These compact loops have a 36 inch diameter, which means they'll fit in apartments, attics, small lots and RVs. The Hi-Q Loop Antennas include a controller with auto band selection, and no control cables are necessary.

Included with each antenna is MFJ's "Super Remote," which gives you a built-in cross-needle SWR/wattmeter that lets you quickly tune to your exact frequency. The antennas handle 150 watts and, depending on the model, they cover the WARC bands.

MFJ-1786	Super Hi-Q Loop Antenna with Remote, 30-10M, 120 Vac....	\$419.95
MFJ-1786X	Super Hi-Q Loop Antenna with Remote, 30-10M, 220 Vac....	\$419.95
MFJ-1788	Super Hi-Q Loop Antenna with Remote, 40-15M, 120 Vac....	\$469.95
MFJ-1788X	Super Hi-Q Loop Antenna with Remote, 40-15M, 220 Vac....	\$469.95

MFJ-1786



Auto Tuned Stealth Antenna (ATSA)

Great for EMCOMM—Assemble and Deploy in Minutes!

Do you live in an area where antennas are not allowed? DX Engineering has designed a complete antenna system that allows Amateur Radio operators living under the shadow of HOA-controlled areas to get on the air easily. Even with a short 26 foot wire antenna, you can typically be on the air on all bands 40 meters and up. With only 45 feet of wire you can be on all bands from 80 through 10 meters! That's because the unique ATSA MatchBox™ module lets you use almost any length wire—no more "forbidden" lengths as with other end-fed systems.

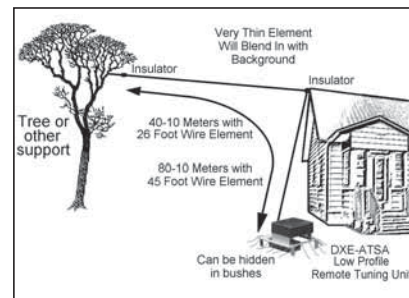
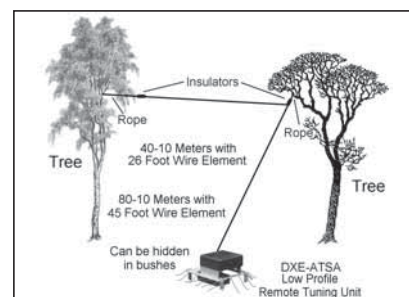
Most small, physically short antennas exhibit narrow bandwidth, limiting your operating frequency range on the lower bands to 50 to 100 kHz with acceptable SWR. The ATSA's integral auto tuner always delivers the lowest possible SWR at any operating frequency with no operator adjustments necessary. Just change bands and the ATSA antenna will follow you!

The very low profile Remote Tuning Unit [RTU] is easily hidden, even in small bushes or shrubs. Just "plant" the RTU with supplied spikes and lay out the minimum length radials. The only thing visible is the wire antenna element, which can be made from small diameter wire for a near-zero visual impact. You can further camouflage the RTU with a plastic boulder or other items available at most landscaping stores.

The DX Engineering ATSA system is completely self-contained; even the required 12 Vdc power is carried by the coax. The ATSA will automatically match your coax to the antenna at any HF frequency within seconds. The complete system includes the RTU, stainless steel radial plate and hardware, radial wire, antennas wire, and two insulators. It's everything you will need to get on the air and operating right under their noses.

- Automatic bandswitching—tunes for lowest SWR
- Handles 200 watts SSB/CW
- Connect 12 Vdc power and RF through single coax feedline

DXE-ATSA-1	ATSA Multi-Band HF Antenna System.....	\$489.00
DXE-SA80-AOK	Stealth Antenna 80M Tuning Coil Add-On Kit	\$49.95



MFJ-57B



Mini-Loop Antenna Kits and Tuners

MFJ

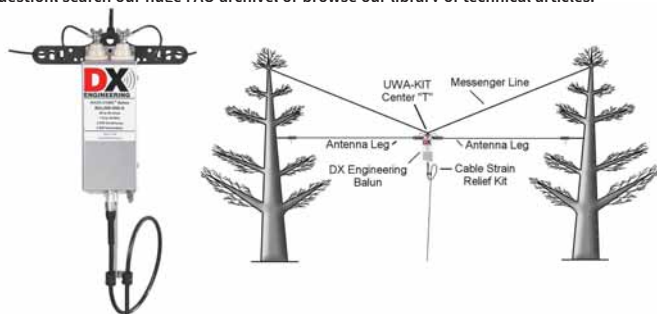
These PVC Cross Loop Antenna kits are the perfect complement to MFJ's 933/935C/936B loop tuners. The 4.5 x 4.5 foot PVC cross mounts break down to fit in a suitcase or duffel bag—making them perfect for portable multi-band operation.

MFJ-57B	Loop Antenna Kit, 20-15 Meters.....	\$29.95
MFJ-58B	Loop Antenna Kit, 60-10 Meters.....	\$49.95
MFJ-933	Loop Tuner, 150 Watts, 5.3-30 MHz.....	\$179.95
MFJ-935B	Loop Tuner, 150 Watts, Current Meter, 5.3-30 MHz	\$199.95
MFJ-936B	Loop Tuner, 150 Watts, Current/SWR/Wattmeter, 5.3-30 MHz	\$249.95

Tech Support: DXEngineering.com/TechArticles

Looking for guidance on your next project?

Need advice to optimize your amateur radio operation? Ask our ham radio experts a tech question. search our huge FAQ archive. or browse our library of technical articles.



The DXE-BAL050-H05-A 1:1 balun is shown installed with the optional DXE-UWA-KIT Universal Wire Antenna Center-T (U.S. Patent No. 7,764,244) insulator





DMN-MX324



DMN-MX3000N



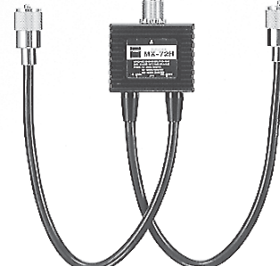
DMN-MX72D



DMN-MX62M



DMN-MX72H



DMN-MX72N



DMN-MX2000



DMN-MX3000



CMA-CF-4160I



CMA-CF-4160J



CMA-CF-4160K



CMA-CF-4160N



Diamond Duplexers

Part Number	Port*	Frequency	FM	PEP	Loss	Isolation	Mix Connector	Port Connector	Price
DMN-MX62M	LPF HPF	1.6-56 MHz 76-470 MHz	200 W 200 W	600 W 600 W	.2 dB .3 dB	50 dB 50 dB	SO-239	PL-259, 12" 5D Cable PL-259, 12" 5D Cable	\$69.95
DMN-MX610	LPF HPF	1.3-30 MHz 49-470 MHz	200 W 200 W	600 W 600 W	.2 dB .25 dB	45 dB 45 dB	SO-239	PL-259, No Cable	\$69.95
DMN-MX72D	LPF	1.6-30 MHz	400 W	1,000 W	.1 dB	60 dB	SO-239	PL-259, No Cable	\$46.95
	HPF	140-150 MHz 400-600 MHz	150 W 100 W	400 W 250 W	.1 dB .2 dB	60 dB 60 dB	SO-239	PL-259, No Cable	
DMN-MX72H	LPF	1.6-30 MHz	400 W	1,000 W	.1 dB	60 dB	SO-239	PL-259, 12" 5D Cable	\$49.95
	HPF	140-150 MHz 400-600 MHz	150 W 100 W	400 W 250 W	.1 dB .2 dB	60 dB 60 dB	SO-239	PL-259, 12" 5D Cable	
DMN-MX37	LPF HPF	1.6-470 MHz 900-1300 MHz	—	100 W 50 W	.25 dB .45 dB	45 dB 45 dB	Type N Female	PL-259, 12" 5D Cable Type N Male, 12" 5D Cable	\$59.95
DMN-MX72N	LPF	1.6-30 MHz	400 W	1,000 W	.1 dB	60 dB	SO-239	PL-259, 12" 5D Cable	\$49.95
	HPF	140-150 MHz 400-460 MHz	150 W 100 W	400 W 250 W	.1 dB .1 dB	60 dB 60 dB	SO-239	Type N Male, 12" 5D Cable	
DMN-MX72A	LPF	1.6-30 MHz	400 W	1,000 W	.1 dB	60 dB	Type N Female	PL-259, 12" 5D Cable	\$54.95
	HPF	140-150 MHz 400-460 MHz	150 W 100 W	400 W 250 W	.1 dB .1 dB	60 dB 60 dB	Type N Female	PL-259, 12" 5D Cable	

Diamond Triplexers

Part Number	Port*	Frequency	FM	PEP	Loss	Isolation	Mix Connector	Port Connector	Price
DMN-MX324	LPF BPF HPF	1.6-150 MHz 220-225 MHz 400-550 MHz	400 W 300 W 250 W	800 W 600 W 500 W	.3 dB .4 dB .4 dB	40 dB 40 dB 40 dB	SO-239	PL-259, 12" 5D Cable PL-259, 12" 5D Cable PL-259, 12" 5D Cable	\$89.95
DMN-MX2000	LPF BPF HPF	1.6-60 MHz 110-170 MHz 300-950 MHz	400 W 400 W 250 W	800 W 800 W 500 W	.15 dB .2 dB .25 dB	60 dB 60 dB 60 dB	SO-239	PL-259, 12" 5D Cable PL-259, 12" 5D Cable PL-259, 12" 5D Cable	\$83.95
DMN-MX2000N	LPF BPF HPF	1.6-60 MHz 110-170 MHz 300-950 MHz	400 W 400 W 250 W	800 W 800 W 500 W	.15 dB .2 dB .25 dB	60 dB 60 dB 60 dB	SO-239	PL-259, 12" 5D Cable PL-259, 12" 5D Cable Type N Male, 12" 5D Cable	\$79.95
DMN-MX3000	LPF BPF HPF	1.6-160 MHz 350-500 MHz 850-1300 MHz	400 W 200 W 100 W	800 W 400 W 200 W	.2 dB .3 dB .4 dB	55 dB 55 dB 55 dB	Type N Female	PL-259, 12" 5D Cable PL-259, 12" 5D Cable Type N Male, 12" 5D Cable	\$79.95
DMN-MX3000N	LPF BPF HPF	1.6-160 MHz 350-500 MHz 850-1300 MHz	400 W 200 W 100 W	800 W 400 W 200 W	.2 dB .3 dB .4 dB	55 dB 55 dB 55 dB	Type N Female	PL-259, 12" 5D Cable Type N Male, 12" 5D Cable Type N Male, 12" 5D Cable	\$85.95

Comet Duplexers



Part Number	Port*	Frequency	PEP	Loss	Isolation	Mix Connector	Port Connector	Price
CMA-CF-4160I	LPF HPF	1.3-170 MHz 350-540 MHz	800 W 500 W	.1 dB .2 dB	60 dB 60 dB	SO-239	UHF Male, PL-259 Type N Male	\$48.95
CMA-CF-4160J	LPF HPF	1.3-170 MHz 350-540 MHz	800 W 500 W	.1 dB .2 dB	60 dB 60 dB	SO-239	UHF Female, SO-239 UHF Female, SO-239	\$53.95
CMA-CF-4160K	LPF HPF	1.3-170 MHz 350-540 MHz	800 W 500 W	.1 dB .2 dB	60 dB 60 dB	SO-239	UHF Male, PL-259 UHF Male, PL-259	\$48.95
CMA-CF-4160N	LPF HPF	1.3-170 MHz 350-540 MHz	800 W 500 W	.1 dB .2 dB	60 dB 60 dB	Type N Female	Type N Female Type N Female	\$58.95
CMA-CF-416A	LPF HPF	1.3-170 MHz 350-540 MHz	800 W 500 W	.1 dB .2 dB	60 dB 60 dB	SO-239	PL-259 PL-259	\$49.95
CMA-CF-416B	LPF HPF	1.3-170 MHz 350-540 MHz	800 W 500 W	.1 dB .2 dB	60 dB 60 dB	SO-239	PL-259 Type N Male	\$49.95

*LPF: Low Pass Filter, BPF: Band Pass Filter, HPF: High Pass Filter

Order Online 24/7 at DXEngineering.com

Mobile Antennas



Comet lets you take your show on the road with a vast selection of effective, reliable and durable mobile antennas. There are options for every common band, plus dual-band and tri-band antennas too. Comet also gives you several different antenna styles to ensure the installation in your vehicle stays clean and unobtrusive.

In addition to use in your vehicle, these mobile antennas are also great for Field Day or EMCOMM. Their rugged durability makes them portable, even in less-than-ideal conditions. Take a look at the chart; it is easy to find one that's perfect for your needs. You can get all the specs at DXEngineering.com.



Tri-Band

Part Number	Description	Height	Band(s)	Gain	Price
CMA-SBB-14	Tri-Band Mobile Antenna Black, Fold-Over, UHF Base	43"	6 Meter 2 Meter 70cm	— 3.5 dBi 6 dBi	\$59.95
CMA-SBB-14NMO	Tri-Band Mobile Antenna Black, Fold-Over, NMO Base	43"	6 Meter 2 Meter 70cm	— 3.5 dBi 6 dBi	\$67.95
CMA-SBB-15	Tri-Band Mobile Antenna Black, Fold-Over, UHF Base	61"	6 Meter 2 Meter 70cm	2.4 dBi 4.5 dBi 7.2 dBi	\$84.95
CMA-SBB-224	Tri-Band Mobile Antenna Black, Fold-Over, UHF Base	36"	2 Meter 1.25 Meter 70cm	2.1 dBi 3.5 dBi 6 dBi	\$79.95
CMA-SBB-224NMO	Tri-Band Mobile Antenna Black, Fold-Over, NMO Base	36"	2 Meter 1.25 Meter 70cm	2.1 dBi 3.5 dBi 6 dBi	\$78.95
CMA-SBB-97	Tri-Band Mobile Antenna Black, Fold-Over, Type N Base	39"	2 Meter 70cm 1.2 GHz	3.0 dBi 6.8 dBi 9.6 dBi	\$79.95

Monoband

Part Number	Description	Height	Band	Gain	Price
CMA-SBB-123	Monoband Mobile Antenna Black, Type N Mount	24"	23cm	7.2 dBi	\$54.95
CMA-R-2000	Monoband Mobile Antenna Chrome, Type N Mount	19.25"	33cm	5.1 dBi	\$42.95
CMA-TA-3	Monoband Mobile Antenna Black, Type N Mount	26"	33cm	6.2 dBi	\$59.95
CMA-SBB-25	Monoband Mobile Antenna Black, UHF Mount	57"	2 Meter	4.1 dBi	\$48.95
CMA-SBB-25NMO	Monoband Mobile Antenna Black, NMO Mount	57"	2 Meter	4.1 dBi	\$48.95

Dual-Band

Part Number	Description	Height	Band(s)	Gain	Price
CMA-B-10	Dual-Band Mobile Antenna Black, UHF Mount	12"	2 Meter 70cm	— 2.1 dBi	\$42.95
CMA-B-10NMO	Dual-Band Mobile Antenna Black, NMO Mount	12"	2 Meter 70cm	— 2.1 dBi	\$42.95
CMA-SBB-1	Dual-Band Mobile Antenna Black, UHF Mount	16"	2 Meter 70cm	1.5 dBi 2.1 dBi	\$42.95
CMA-SBB-1NMO	Dual-Band Mobile Antenna Black, NMO Mount	16"	2 Meter 70cm	1.5 dBi 2.1 dBi	\$42.95
CMA-SBB-2	Dual-Band Mobile Antenna Black, UHF Mount	18"	2 Meter 70cm	2.1 dBi 3.8 dBi	\$42.95
CMA-SBB-2NMO	Dual-Band Mobile Antenna Black, NMO Mount	18"	2 Meter 70cm	2.1 dBi 3.8 dBi	\$42.95
CMA-SS-460SB	Dual-Band Mobile Antenna Black, UHF Spring Mount	18"	2 Meter 70cm	2.1 dBi 3.8 dBi	\$43.95
CMA-SS-460SBNMO	Dual-Band Mobile Antenna Black, NMO Spring Mount	18"	2 Meter 70cm	2.1 dBi 3.8 dBi	\$43.95
CMA-M-24B	Dual-Band Mobile Antenna, Magnet Mount, 12' Coax, PL-259	19.5"	2 Meter 70cm	1.7 dBi 4.1 dBi	\$39.95
CMA-M-24M	Dual-Band Mobile Antenna, Magnet Mount, 12' Coax, Male BNC	19.5"	2 Meter 70cm	1.7 dBi 4.1 dBi	\$39.95
CMA-M-24S	Dual-Band Mobile Antenna, Mag Mount, 12' Coax, Male SMA	19.5"	2 Meter 70cm	1.7 dBi 4.1 dBi	\$39.95
CMA-M-24SJ	Dual-Band Mobile Antenna, Mag Mount, 12' Coax, Female SMA	19.5"	2 Meter 70cm	1.7 dBi 4.1 dBi	\$39.95
CMA-SS-680SB	Dual-Band Mobile Antenna Black, UHF Spring Mount	27"	2 Meter 70cm	2.1 dBi 4.1 dBi	\$46.95
CMA-SS-680SBNMO	Dual-Band Mobile Antenna Black, NMO Spring Mount	27"	2 Meter 70cm	2.1 dBi 4.1 dBi	\$46.95
CMA-HP-32FHN	Dual-Band Mobile Antenna, Fold-Over, UHF Mount	35"	2 Meter 70cm	3 dBi 5.5 dBi	\$89.95
CMA-SBB-5	Dual-Band Mobile Antenna Black, Fold-Over, UHF Mount	38"	2 Meter 70cm	3 dBi 5.5 dBi	\$58.95
CMA-SBB-5NMO	Dual-Band Mobile Antenna Black, Fold-Over, NMO Mount	38"	2 Meter 70cm	3 dBi 5.5 dBi	\$58.95
CMA-CSB-750A	Dual-Band Mobile Antenna, Fold-Over, UHF Mount	42"	2 Meter 70cm	3.6 dBi 6.1 dBi	\$74.95
CMA-CSB-770A	Dual-Band Mobile Antenna, Fold-Over, UHF Mount	50"	2 Meter 70cm	4.4 dBi 6.9 dBi	\$89.95
CMA-SBB-7	Dual-Band Mobile Antenna, Black, Fold-Over, UHF Mount	55"	2 Meter 70cm	4.5 dBi 7.2 dBi	\$79.95
CMA-SBB-7NMO	Dual-Band Mobile Antenna, Black, Fold-Over, NMO Mount	55"	2 Meter 70cm	4.5 dBi 7.2 dBi	\$79.95
CMA-CSB-790A	Dual-Band Mobile Antenna Fold-Over, UHF Mount	62"	2 Meter 70cm	5.1 dBi 7.7 dBi	\$99.95



Mobile Antenna Mounts

You've invested a lot of time and money in your mobile antenna, now make sure it stays put with a genuine Comet Antenna Mount. Comet gives you several mounting options and many require no drilling, so there are no unsightly holes to cover up. Whatever your antenna size may be, there's a quality mount available for it. Some mounts come in kit form, complete with cable assemblies and connectors. Others allow you the freedom to choose how to connect your antenna. Drive safe and operate freely, knowing your antenna is secured right where it's supposed to be, by choosing a Comet Antenna Mount.

CMA-CM-5M



CMA-RS-730



CMA-RS-520



CMA-CK-3M



CMA-CP-5M



Part Number	Description	Base Type	Includes	Price
CMA-3D4M	Standard Mobile Lip-Mount Cable Assembly	UHF (SO-239)	Mount, 13' of Coax, O-Ring, SO-239/PL-259 Cable Connectors	\$27.95
CMA-3D4N	Standard Mobile Lip-Mount Cable Assembly	Type N	Mount, 13' of Coax, O-Ring, SO-239/PL-259 Cable Connectors	\$29.95
CMA-3D5M	Standard Mobile Lip-Mount Cable Assembly	UHF (SO-239)	Mount, 16.5' of Coax, O-Ring, SO-239/PL-259 Cable Connectors	\$29.95
CMA-5D4N	Mobile Mount Cable Assembly	Type N	Mount, 13' of Coax, O-Ring, Type N Cable Connectors	\$34.95
CMA-CK-3-3-8-24	Deluxe Mobile Mount Cable Assembly	3/8"-24 Receptacle	Mount, 16' of Coax, O-Ring, SO-239/PL-259 Cable Connectors	\$42.95
CMA-CK-3M	Deluxe Mobile Mount Cable Assembly	UHF (SO-239)	Mount, 9.75' of Coax, O-Ring, SO-239/PL-259 Cable Connectors	\$35.95
CMA-CK-3M5	Deluxe Mobile Mount Cable Assembly	UHF (SO-239)	Mount, 16' of Coax, O-Ring, SO-239/PL-259 Cable Connectors	\$42.95
CMA-CK-3NMO	Deluxe Mobile Mount Cable Assembly	NMO	Mount, 9.75' of Coax, O-Ring, NMO/PL-259 Cable Connectors	\$42.95
CMA-CK-5N	Deluxe Mobile Mount Cable Assembly (for RS-730)	Type N	Mount, 16' of Coax, O-Ring, Type N Cable Connectors	\$44.95
CMA-CM-5M	Mobile Antenna Magnet Mount	UHF (SO-239)	Magnet Mount, Base, 13' of Coax, PL-259 Connectors, Rubber Boot	\$24.95
CMA-CP-5M	Mobile Antenna Adjustable Lip Mount	UHF (SO-239)	Mount, 16' of Coax, SO-239 and PL-259 Cable Connectors	\$69.95
CMA-CP-5NMO	Mobile Antenna Adjustable Lip Mount	NMO	Mount, 16' of Coax, NMO and PL-259 Cable Connectors	\$69.95
CMA-CR-5M	Standard Cable Assembly	UHF (SO-239)	Mount, 16' of Coax, SO-239 and PL-259 Cable Connectors	\$21.95
CMA-CT-5M	Mobile Antenna Trunk Lid Mount	UHF (SO-239)	Mount, 16' of Coax, Gasket, SO-239/PL-259 Cable Connectors	\$39.95
CMA-HD-5-3-8-24	Mobile Antenna Adjustable Lip Mount	3/8"-24 Receptacle	Mount, 16' of Coax, Rubber Pad, Set Screws, PL-259 Connector	\$69.95
CMA-HD-5M	Mobile Antenna Adjustable Lip Mount	UHF (SO-239)	RS-840 Bracket, CK-3M5 Cable Assembly	\$69.95
CMA-LD-5M	Mobile Antenna Small Adjustable Lip Mount	UHF (SO-239)	Mount, 16' of Coax, Rain Cap, SO-239/PL-259 Cable Connectors	\$55.95
CMA-MG-4N	Mobile Antenna Magnet Mount (2.5 GHz)	Type N	Magnet Mount, 13' of Coax, Rain Cap, Type N Cable Connector	\$54.95
CMA-RS-660U	Mobile Antenna Adjustable Roof Rack Mount	—	Mount (SO-239 Connector Required)	\$37.95
CMA-RS-520	Mobile Antenna Light-Duty Adjustable Lip Mount	—	Mount (SO-239 Connector Required)	\$28.95
CMA-RS-720	Mobile Antenna Med.-Duty Adjustable Lip Mount	—	Mount (SO-239 Connector Required)	\$29.95
CMA-RS-720NMO	Mobile Antenna Med.-Duty Adjustable Lip Mount	—	Mount (NMO Connector Required)	\$29.95
CMA-RS-730	Mobile Antenna Heavy-Duty Adjustable Lip Mount	—	Mount (Connector Required)	\$32.95
CMA-RS-840	Mobile Antenna Heavy-Duty Adjustable Lip Mount	—	Mount (Connector Required)	\$36.95

MFJ

Mobile Antennas

Durable, powerful, mobile. MFJ gives you excellent, high-performance mobile antennas that will stand up to miles of use. Whatever band you choose, MFJ Mobile Antennas are designed with the serious operator in mind. For complete specs for any MFJ mobile antenna visit DXEngineering.com.

Mobile HamTenna Whip, 3/8"-24

MFJ-1606T	6M	\$14.95
MFJ-1610T	10M	\$14.95
MFJ-1615T	15M	\$14.95
MFJ-1617T	17M	\$14.95
MFJ-1620T	20M	\$14.95
MFJ-1640T	40M	\$14.95
MFJ-1675T	75M	\$19.95
MFJ-348T	Trunk/Hatchback Mount for MFJ-1600 Series	\$39.95

2M/70cm Mobile Antenna

MFJ-1722	UltraLite Magnet Mount, BNC, 20"	\$14.95
MFJ-1722S	UltraLite Magnet Mount, SMA, 20"	\$14.95
MFJ-1734	Glass Mount, with Coax, 26"	\$44.95
MFJ-1724B	Magnet Mount, BNC HT Adapter, 26"	\$24.95
MFJ-1729	Magnet Mount, BNC HT Adapter, 27.5"	\$39.95
MFJ-1412	200 Watts, 40"	\$29.95
MFJ-1412B	200 Watts, Black Finish, 40"	\$29.95
MFJ-1414	200 Watts, 58.5"	\$19.95
MFJ-1422	150 Watts, 41.5"	\$34.95
MFJ-1422B	150 Watts, Black Finish, 41.5"	\$32.95
MFJ-1432	150 Watts, 62.5"	\$49.95
MFJ-1432B	150 Watts, 62.5"	\$46.95
MFJ-1402	RuffRider, Short-Style	\$29.95
MFJ-1402B	RuffRider, Short-Style, Black Finish	\$27.95

Mobile Antennas from MFJ

MFJ-1723	1.25M Mobile Antenna, Magnet Mount, SO-239 and BNC, 22.5"	\$37.95
MFJ-1721	2M Mobile Antenna, UltraLite Magnet Mount with Coax, 20"	\$12.95
MFJ-1738	2M Mobile Antenna, Glass Mount, SlimLine Radiator, 27"	\$34.95
MFJ-1728B	2M/6M Mobile Antenna, Magnet Mount, BNC HT Adapter	\$26.95
MFJ-1434	2M/1.25M/70cm Mobile Antenna, RuffRider Triple Threat, 38"	\$64.95
MFJ-1436	6M/2M/70cm Mobile Antenna, RuffRider Triple Threat, 59"	\$59.95
MFJ-1438	10M/6M/2M/70cm Mobile Antenna, 150 Watts, 52"	\$89.95
MFJ-1456	HF/6M/2M/70cm Mobile Antenna, Fold-Over Design	\$129.95

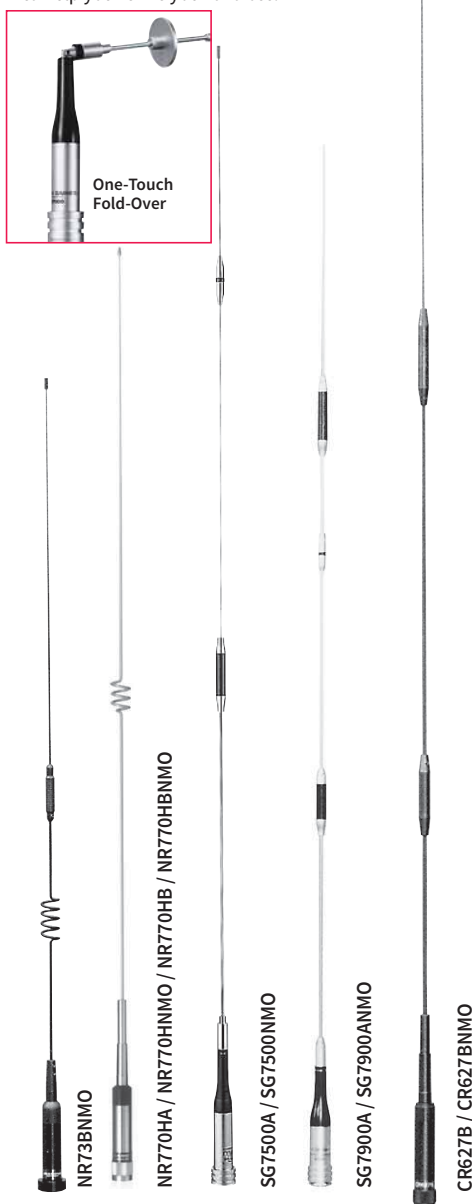
More HF Mobile Antennas from MFJ

MFJ-2620T	20M Mobile Base-Loaded HF Whip, Adjusts from 22" to 54"	\$28.95
MFJ-2640T	40M Mobile HF Antenna, Low-Profile, Adjusts from 22" to 54"	\$28.95
MFJ-1624	40M-6M Mobile Antenna, Variable HF, Adjusts from 2.5" to 5.5"	\$89.95

DIAMOND
 ANTENNA

Mobile Antennas

Diamond offers you an extensive line of mobile antennas, so you can easily find one suited for your exact demands. These antennas are the ideal fusion of price, quality and versatility. Whether your priority is based on gain, height, power or aesthetics, there's a Diamond Antenna that's perfect for you. Check out the chart, DXEngineering.com has additional specs to help you refine your choices.


Supergainer Antennas

If you want an effective mobile wideband antenna that offers great performance without a lot of tuning and adjustment headaches, then Diamond's Supergainer series is perfect. These wideband antennas feature 24K gold plated connector pins for excellent continuity, and the fold-over design is invaluable if you face low overhead obstructions like garages or parking decks.

DMN-SG7000A	2M/70cm Wideband Antenna, UHF, 18.5"	\$69.95
DMN-SG7500A	2M/70cm Wideband Antenna, Radial-less, UHF, 40.6"	\$69.95
DMN-SG7500NMO	2M/70cm Wideband Antenna, Radial-less, NMO, 41"	\$72.95
DMN-SG7900A	2M/70cm Wideband Antenna, Radial-less, UHF, 62.2"	\$99.95
DMN-AZ507RSP	2M/70cm SlimGainer, Radial-less, UHF, 27.5"	\$46.95

Part Number	Description	Height	Band(s)	Gain	Price
Monoband					
DMN-HF6FX	Mobile Antenna, UHF Mount	44"	6 Meter	2.1 dBi	\$69.95
DMN-M685S	Mobile Antenna, UHF Mount	52.4"	6 Meter	2.1 dBi	\$31.95
DMN-M685SNMO	Mobile Antenna, NMO Mount	52.4"	6 Meter	2.1 dBi	\$31.95
DMN-HF6CL	Mobile Antenna Fold-Over, UHF Mount	86.6"	6 Meter	2.15 dBi	\$59.95
DMN-M285S	Mobile Antenna Trim-to-Tune, UHF Mount	50"	2 Meter	3.4 dBi	\$31.95
DMN-M285SNMO	Mobile Antenna Trim-to-Tune, NMO Mount	50"	2 Meter	3.4 dBi	\$31.95
DMN-NR22L	Mobile Antenna Fold-Over, UHF Mount	96.8"	2 Meter	6.5 dBi	\$64.95
DMN-NR140BNMO	Mobile Antenna Fold-Over, NMO Mount	36.2"	1.25 Meter	3.8 dBi	\$46.95
DMN-NR124NMO	Mobile Antenna Fold-Over, NMO Mount	25"	23cm	8.4 dBi	\$54.95
DMN-NR124N	Mobile Antenna Fold-Over, Type N Mount	25"	23cm	8.4 dBi	\$49.95
Dual-Band					
DMN-AZ504FXH	Mobile Antenna UHF Mount	15.5"	2 Meter 70cm	— 2.1 dBi	\$39.95
DMN-AZ504SP	Mobile Antenna Spring Base, UHF Mount	15.5"	2 Meter 70cm	— 2.1 dBi	\$39.95
DMN-CR270A	Mobile Antenna UHF Mount	17"	2 Meter 70cm	2.1 dBi 3.4 dBi	\$42.95
DMN-NR72BNMO	Mobile Antenna NMO Mount	13.8"	2 Meter 70cm	2.1 dBi	\$39.95
DMN-MR73SJ	Mobile Antenna with Mini Mag-Mount, Coax, SMA Male	19.5"	2 Meter 70cm	2.1 dBi 3.4 dBi	\$26.95
DMN-MR73SMA	Mobile Antenna with Mini Mag-Mount, Coax, SMA Female	19.5"	2 Meter 70cm	2.1 dBi 3.4 dBi	\$26.95
DMN-MR75SJ	Mobile Antenna with Mini Mag-Mount, Coax, SMA Male	20"	2 Meter 70cm	2.5 dBi 3.4 dBi	\$36.95
DMN-MR75S	Mobile Antenna with Mini Mag-Mount, Coax, SMA Female	20"	2 Meter 70cm	2.5 dBi 3.4 dBi	\$36.95
DMN-MR77	Mobile Antenna with Mini Mag-Mount, Coax, UHF Male	20"	2 Meter 70cm	2.1 dBi 3.4 dBi	\$37.95
DMN-MR77SJ	Mobile Antenna with Mini Mag-Mount, Coax, SMA Female	20"	2 Meter 70cm	2.1 dBi 3.4 dBi	\$37.95
DMN-MR77SMA	Mobile Antenna with Mini Mag-Mount, Coax, SMA Male	20"	2 Meter 70cm	2.1 dBi 3.4 dBi	\$37.95
DMN-NR73BNMO	Mobile Antenna Radial-less, NMO Mount	33.5"	2 Meter 70cm	2.1 dBi 5.3 dBi	\$54.95
DMN-NR770HNMO	Chrome Mobile Antenna Radial-less, NMO Mount	38.2"	2 Meter 70cm	3 dBi 5.5 dBi	\$53.95
DMN-NR770HBNMO	Black Mobile Antenna Radial-less, NMO Mount	38.2"	2 Meter 70cm	3 dBi 5.5 dBi	\$53.95
DMN-NR770HA	Chrome Mobile Antenna Radial-less, UHF Mount	40.2"	2 Meter 70cm	3 dBi 5.5 dBi	\$48.95
DMN-NR770HB	Black Mobile Antenna Radial-less, UHF Mount	40.2"	2 Meter 70cm	3 dBi 5.5 dBi	\$53.95
DMN-NR770HRKS	Mobile Antenna w/Coax Adhesive-Mount, SMA/UHF Adapter	40.2"	2 Meter 70cm	3 dBi 5.5 dBi	\$109.95
DMN-NR7900A	Mobile Antenna Fold-Over, UHF Mount	57"	2 Meter 70cm	3.7 dBi 6.4 dBi	\$84.75
DMN-SG7900ANMO	Mobile Antenna Fold-Over, NMO Mount	62"	2 Meter 70cm	5 dBi 7.6 dBi	\$114.95
Tri-Band					
DMN-CR320A	Mobile Antenna Fold-Over, UHF Mount	37.4"	2 Meter 1.25 Meter 70cm	2.1 dBi 3.8 dBi 5.5 dBi	\$79.95
DMN-CR320BNMO	Mobile Antenna Fold-Over, NMO Mount	37.4"	2 Meter 1.25 Meter 70cm	2.1 dBi 3.8 dBi 5.5 dBi	\$79.95
DMN-CR627B	Mobile Antenna Fold-Over, UHF Mount	60"	6 Meter 2 Meter 70cm	2.1 dBi 4.5 dBi 7.2 dBi	\$94.95
DMN-CR627BNMO	Mobile Antenna Fold-Over, NMO Mount	60"	6 Meter 2 Meter 70cm	2.1 dBi 4.5 dBi 7.2 dBi	\$94.95
DMN-NR2000NA	Mobile Antenna Fold-Over, Type N Mount	39"	2 Meter 70cm 23cm	3.1 dBi 6.3 dBi 9.7 dBi	\$84.95
New! Quad-Band					
DMN-CR8900A	Mobile Antenna, for Yaesu FT-8900/8900R, SO-239, Not Recommended for Magnet Mounts	50"	10 Meter 6 Meter 2 Meter 70cm	2.1 dB 2.1 dB 2.1 dB 5.5 dB	\$99.95

Get Your Gear Faster. If you get your order in by 10 pm ET and the parts are in stock, DX Engineering will ship it immediately. We carry thousands of items, that means you'll get your order as quickly as possible. If you don't like to wait, count on us to get your order out quickly.

Order Online 24/7 at DXEngineering.com

Screwdriver Antenna Controllers**AMERITRON®**

Perfect for adjusting your motorized screwdriver antenna, these units connect between your mobile transceiver and antenna. You can program and store your settings, allowing you to quickly change setups.

These interfaces have an intuitive display, a stall protector to avoid burning out your motor and a Dead-OnSTOP function to eliminate overshoot. There's even a nifty AutoPark feature that bottoms-out your antenna so it doesn't bash into low overhangs and garages.

A sensor is required for the counter and automatic operation.

AME-SDC-102	Universal Controller	\$129.95
AME-SDC-103	Controller for Icom Radios with CIV Interface.....	\$149.95

K400 Series Trunk and Hatchback Mounts

The K400 Series features deluxe heavy-duty mounts that are ideal for large VHF/UHF and medium-sized HF antennas—including many popular screwdriver antennas. These strong mounts are adjustable, so you can install them vertically or horizontally without drilling any holes in your vehicle's body.

DMN-K400	Trunk/Hatchback Mount.....	\$39.95
DMN-K400-3-8C	K400 Mount, 6.5' Coax, 3/8"-24 Base/Mini UHF Cable Connector	\$73.95
DMN-K400C	K400 Mount, 6.5' Coax, SO-239 Base/Mini UHF Cable Connector.....	\$73.95
DMN-K400CNMO	K400 Mount, 6.5' Coax, NMO Base/Mini UHF Cable Connector	\$73.95
DMN-K400S	K400 Mount, 13.6' Coax, SO-239 Base/SMA Male Cable Connector	\$79.95
DMN-K400SNMO	K400 Mount, 13.6' Coax, NMO Base/SMA Male Cable Connector	\$79.95

K412 Series Trunk and Hatchback Mounts

These mounts are similar to Diamond's K400 series, but are tailored for medium-duty applications. K412 Series Trunk and Hatchback mounts are perfect for medium-sized HF antennas under 45 inches.

DMN-K412C	K412 Mount, 6.6' Coax, SO-239 Base/Mini UHF Cable Connector.....	\$59.95
DMN-K412CNMO	K412 Mount, 6.6' Coax, NMO Base/Mini UHF Cable Connector	\$59.95
DMN-K412S	K412 Mount, 13.6' Coax, SO-239 Base/SMA Male Cable Connector	\$69.95
DMN-K412SNMO	K412 Mount, 13.6' Coax, NMO Base/SMA Male Cable Connector	\$69.95

Weather Cap

Keep your exposed SO-239 connector free of corrosion and debris, and ensure that your antenna mount is always ready when you need it. It's great to use when you remove your antenna before going through a car wash.

DMN-31005	Weather Cap	\$3.35
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New!**Hole Mount Cable Assemblies**

Whether used as stand-alone antenna mounts or cable extensions, these assemblies will help you create a clean installation. They feature slim 1/8 inch diameter PTFE coax and mini UHF connectors, allowing you to easily thread these mounts through holes, between panels and around corners.

DMN-C101	6.5' Coax, SO-239 Base/Mini UHF Cable Connector	\$37.95
DMN-C10138CKIT	6.5' Coax, 3/8"-24 Base/Mini UHF Cable Connector	\$44.95
DMN-C101NMO	6.5' Coax, NMO/Mini UHF Cable Connector	\$37.95
DMN-C211	6.5' Coax, SO-239/Mini UHF Cable Connector, C110 Ext. Cable.....	\$49.95
DMN-C213SMA	13.6' Coax, SO-239/SMA Male Cable Connector	\$44.95
DMN-C213SNMO	13.6' Coax, NMO/SMA Male Cable Connector	\$44.95

K9000 Series Mobile Motor Drive Mounts

Raise and lower your dual-band mobile antenna with the touch of a button. A 12V cigarette lighter plug-powered manual switch allows you to tilt your antenna up and down—perfect for garages or low overpasses. A 20 foot long DC power cord is included to complete your setup. These mounts are compatible with antennas that are under 45 inches tall, and don't require a ground. They are designed to mount securely to your luggage rack/tubing or trunk/hatch lip.

DMN-K9000LRM	Mobile Drive Mount for Small, Tubular Luggage Rack.....	\$104.95
DMN-K9000LRMO	Mobile Drive Mount for Large, Oversize Luggage Rack	\$104.95
DMN-K9000TM	Mobile Drive Mount for Trunk Lid or Hatchback	\$104.95

HRKS Adhesive Backed Antenna Mount

If you don't want to drill a hole or put a mag-mount on your car, Diamond offers an adhesive backed antenna mount that securely adheres to glass, steel, fiberglass—virtually any smooth, flat surface. When it's time to remove the mount, just use some fishing line to "saw" it off without a trace. This two-piece adjustable mount has an SO-239 antenna base, 13.6 feet of coax ending in an SMA male connector and an SMA female to PL-259 adapter.

DMN-HRKS	Adhesive Backed Antenna Mount	\$69.95
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Magnet Mounts

A magnet mount that stays put! These deluxe mounts feature powerful magnets housed in a heavy four to six inch diameter base. The deluxe model can even hold antennas up to 50 inches tall. If you need a magnet mount that you can set-and-forget, Diamond gives you plenty of choices.

DMN-DPK4NM-N	Magnet Mount, 13' Coax, Type N, for 45" Antenna Max.....	\$52.95
DMN-K702M	Magnet Mount, Deluxe Low-Profile, PL-259, for 50" Antenna Max.....	\$49.95
DMN-SPM35	Magnet Mount, 13' Coax, PL-259, for 45" Antenna Max.....	\$44.95
DMN-SPMNMO	Magnet Mount, 13' Coax, NMO, for 45" Antenna Max.....	\$49.95

Heavy-Duty Trunk Mounts

If you're running a high-gain VHF/UHF mobile antenna, Diamond's Heavy Duty Trunk Mounts are perfect for your setup. With an adjustable range of 0-9 degrees, a super strong screw-type installation and weatherproof construction, these are versatile, worry-free mounts. The aerodynamic styling will look great on your trunk, too.

DMN-K600M	Trunk Mount, 10' Coax, SO-239 Base/PL-259 Cable Connector.....	\$59.95
DMN-K600S	Trunk Mount, 10' Coax, SO-239 Base/SMA Male Cable Connector.....	\$62.95

K515, K540 and K550 Series Luggage Rack Mounts

Ideal for your vehicle's luggage rack, these mounts clamp securely for a stable connection. The K540 Series can even clamp to your long mirror arm or any 1/2 to 7/8 inch tubing. Every model includes a handy fold-down feature, so you can lower your antenna for garages and parking decks. All three series are well suited for lightweight and medium-sized antennas. Diamond's K515 Series is recommended for antennas under 50 inches tall, and the K550 Series is great for antennas under 45 inches.

DMN-K515S	K515 Mount, 13.6' Coax, SO-239 Base/SMA Male Cable Connector.....	\$69.95
DMN-K515SNMO	K515 Mount, 13.6' Coax, NMO Base/SMA Male Cable Connector	\$69.95
DMN-K540	Luggage Rack Mount.....	\$35.95
DMN-K540KM	K540 Mount, 13' Coax, SO-239 Base/PL-259 Cable Connector	\$59.95
DMN-K550	Luggage Rack Mount.....	\$44.95
DMN-K550KM	K550 Mount, 13' Coax, SO-239 Base/PL-259 Cable Connector	\$69.95

DIAMOND ANTENNA

DMN-K9000LRM



DMN-K9000LRMO



DMN-SPM35



DMN-K702M



DMN-K515SNMO



DMN-K550KM



DMN-K540

Hot Rodz® Capacity Hat for Hustler Mobile Antennas

This fully adjustable system attaches directly to your Hustler HF antenna. Hot Rodz improves efficiency, allowing the use of a smaller loading coil for a given frequency band. Other benefits include wider bandwidth and the ability to use a single coil on multiple bands. The Hot Rodz Capacity Hat comes with a precision-machined 6061-T6 aluminum hub with stainless steel set screws and six each of 6 inch, 12 inch, and 24 inch stainless steel rods.

DXE-HR-1P Hot Rodz Capacity Hat for Hustler Mobile Antennas **\$79.95**

Hot Rodz® Capacity Hat for Screwdriver Antennas

This fully adjustable system attaches directly to any screwdriver antenna. Hot Rodz allows you to remove the long whip from your antenna while increasing efficiency, so you can use less coil for any given frequency. The Hot Rodz Capacity Hat comes with a 22 inch tall mast, and six each of the 6 inch, 12 inch and 24 inch stainless steel rods.

DXE-HR-2P Hot Rodz Capacity Hat for Screwdriver Antennas **\$99.95**

Hot Rodz® Capacity Hat Components

Increase the efficiency of your own shortened antenna by building your own Hot Rodz Capacity Hat system. Visit DXEngineering.com for complete details.

DXE-HRHUB-1P	Hot Rodz Hub, Smooth Bore with Set Screws	\$27.50
DXE-HRHUB-2P	Hot Rodz Hub, Threaded Bore	\$29.95
DXE-RODZ-48P	Hot Rodz 48" Stainless Steel Rods.....	\$29.95
DXE-RODZ-36P	Hot Rodz 36" Stainless Steel Rods.....	\$23.75
DXE-RODZ-60P	Hot Rodz 60" Stainless Steel Rods.....	\$31.25
DXE-RODZ-72P	Hot Rodz 72" Stainless Steel Rods.....	\$34.95

Dual Impedance Antenna Transformer

This unbalanced to unbalanced (UNUN) impedance transformer matches a 50 Ω to 25 Ω or 12.5 Ω connection. Use it to get a better match between a feedline and a typical mobile antenna. It works well with Hot Rodz® Capacity Hat-equipped antennas.

DXE-MM-1 Dual Impedance Antenna Transformer **\$109.95**

RFI Suppression Beads

DX Engineering has selected the best RFI suppression beads for reducing cable-conducted ignition, fuel injector, or other electrical noise in your mobile HF installation. We have observed a 3 S-unit improvement in many cases using these beads. The beads snap around wire or cable, and are useful in your home installation as well. The combo pack has four of the 0.275 inch diameter beads and two each of the 0.525 inch and 0.750 inch diameter beads.

DXE-CSB-COMBO	RFI Suppression Beads Combo Pack	\$35.95
DXE-CSB-275P	0.275" RFI Suppression Beads, Pack of 10	\$23.25
DXE-CSB-525P	0.525" RFI Suppression Beads, Pack of 5	\$22.25
DXE-CSB-750P	0.750" RFI Suppression Beads, Pack of 5	\$25.80



NCG Antenna Mount Adapters

Stretch your mobile antenna budget by using NCG Antenna Mount Adapters. Instead of buying a new mount for your new antenna, You can repurpose your existing mount using these adapters. Made from top quality materials, these no-compromise mounts will speed up new antenna installs.

NCG-AD-10N	Antenna Mount Adapter, Type N Female to NMO	\$17.95
NCG-AD-15M	Antenna Mount Adapter, NMO to SO-239	\$17.95
NCG-AD-25M	Antenna Mount Adapter, Converts SO-239 Mount to NMO ...	\$14.95
NCG-AD-35M	Antenna Mount Adapter, SO-239 to 3/8"-24	\$17.95

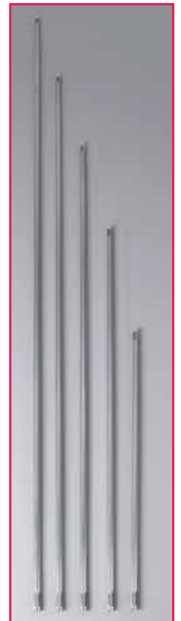
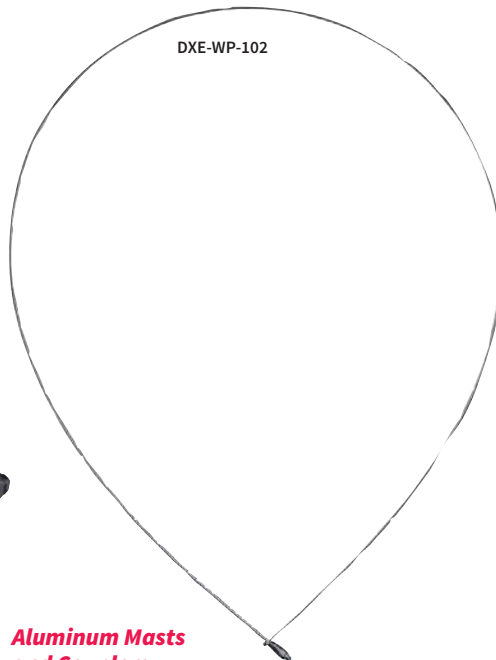


Hustler Standard and Super Resonators and Parts

Individual Hustler Resonators are available for 10, 12, 15, 17, 20, 30, 40, 75, and 80 meters. The standard resonators can handle 400 watts Peak Envelope Power (PEP). The Super Resonators can handle 1 kW PEP and have slightly more bandwidth. They are available for 40 and 80 meters.

Use these resonators with Hustler's mounts, mobile masts, and other accessories to build a custom mobile antenna. Use DX Engineering Hot Rodz® capacity hats and other accessories with these resonators to improve antenna efficiency.

HSR-RM-10	10 Meter Hustler HF Resonator, 150-250 kHz.....	\$18.95
HSR-RM-12	12 Meter Hustler HF Resonator, 100-150 kHz.....	\$18.95
HSR-RM-15	15 Meter Hustler HF Resonator, 100-150 kHz.....	\$18.95
HSR-RM-17	17 Meter Hustler HF Resonator, 120-150 kHz.....	\$25.95
HSR-RM-20	20 Meter Hustler HF Resonator, 80-100 kHz.....	\$25.95
HSR-RM-30	30 Meter Hustler HF Resonator, 50-60 kHz.....	\$28.95
HSR-RM-40	40 Meter Hustler HF Resonator, 40-50 kHz.....	\$29.95
HSR-RM-40S	40 Meter Super HF Resonator, 50-80 kHz.....	\$41.95
HSR-RM-75	75 Meter Hustler HF Resonator, 50-60 kHz.....	\$32.95
HSR-RM-75S	75 Meter Super HF Resonator, 50-60 kHz.....	\$57.95
HSR-RM-80	80 Meter Hustler HF Resonator, 25-30 kHz.....	\$32.95
HSR-RM-80S	80 Meter Super HF Resonator, 50-60 kHz.....	\$57.95
HSR-3774-1	Replacement Ferrules for Hustler Resonators.....	\$0.95
HSR-49-04-40S	Whip Replacement for DXE-RM-40S Super Resonator	\$5.75
HSR-49-04-80S	Replacement Whip/Corona Ball for 75 and 80 Meter Super Resonators.....	\$8.35



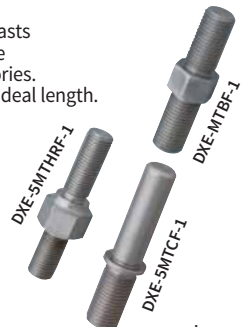
Aluminum Masts and Couplers

DX Engineering 1/2 inch O.D., 0.084 inch wall aluminum masts are available in lengths from 24 to 72 inches. Both ends are tapped to standard 3/8"-24 threads to fit common accessories. Couple two masts together with our fittings to make your ideal length.

Fittings are available to add resonators or a Hot Rodz® Capacity Hat to the top of the antenna.

DXE-MT-24	24" Aluminum Mast	\$19.95
DXE-MT-36	36" Aluminum Mast	\$23.95
DXE-MT-48	48" Aluminum Mast	\$27.95
DXE-MT-54	54" Aluminum Mast	\$28.95
DXE-MT-60	60" Aluminum Mast	\$31.95
DXE-MT-72	72" Aluminum Mast	\$35.95
DXE-5MTCF-1	Coupler, 3/8"-24 at Both Ends, Hex Center	\$5.95
DXE-MTBF-1	Coupler, 3/8"-24 at Both Ends, Hex Center with Shoulder	\$6.95
DXE-5MTFR-1	Coupler, 3/8"-24 End and Smooth End.....	\$4.95
DXE-WP-102	Mobile Whip Antenna, 102", 3/8"-24 Mount	\$24.99
HSR-QD-2	Hustler Stainless Steel Quick Disconnect, 3/8"-24	\$24.95
HSR-MO-2	Hustler 54" Folding Mast for Fender/Bumper Mount	\$36.95
HSR-MO-4	Hustler Non-Folding Mast, 22" Total Length	\$24.95

Use the HSR-QD-2 Quick Disconnect to quickly disconnect one mast from another. The HSR-MO-2 Folding Mast allows quick change of Hustler resonators.



HSR-SSM-2

New!

HSR-QD-2

**Mobile Antenna Mounts**

HSR-SSM-2	Heavy-Duty Stainless Steel Ball Mount, 2" Diameter	\$32.95
HSR-SSM-3	Stainless Steel Spring, 3"	\$29.95
HSR-L-14-144	12' RG-58/PL-259 to Lugs, Coax to Ball Mount.....	\$9.95
HSR-VP-1	Tri-Band Adapter for HF Mobile Antenna	\$8.95
HSR-QD-2	Stainless Steel Quick Disconnect, 3/8"-24	\$24.95
HSR-RSS-2	Stainless Steel "Resonator" Impact Spring.....	\$14.95
HSR-MBM	Super Magnetic Mount, 16' coax, 3/8"-24 Antenna	\$24.95

**Recreational Vehicle Mount**

This mount is designed for a vertical side panel or roof installation, ideal for larger vehicles. It swivels 180 degrees and will accept most flexible antennas up to 55 inches long with 3/8"-24 bases. The mount includes a grommet for panel pass-through and 17 feet of RG58/U with a PL-259 connector.

HSR-RVM Recreational Vehicle Mount.....\$23.95

Replacement Trap Caps

Use these genuine Hustler parts as trap caps on your BTV Series HF antenna.

HSR-TRAPCVR-P Replacement Trap Caps, Set of 4\$13.95

HUSTLER**New!****Discone Base Station Scanner Antenna**

Match this antenna to your scanner and get excellent reception on public service, aircraft, mobile and telephone frequencies. It's vertically polarized, covers 40 to 950 MHz and doesn't need adjusting. The antenna is 54 inches high with an 18 inch diameter. A 50 foot cable with a BNC male connector is included.

HSR-DCL-B Discone Base Station Antenna\$39.95

New!**Extreme Duty 2 Meter Base Antenna**

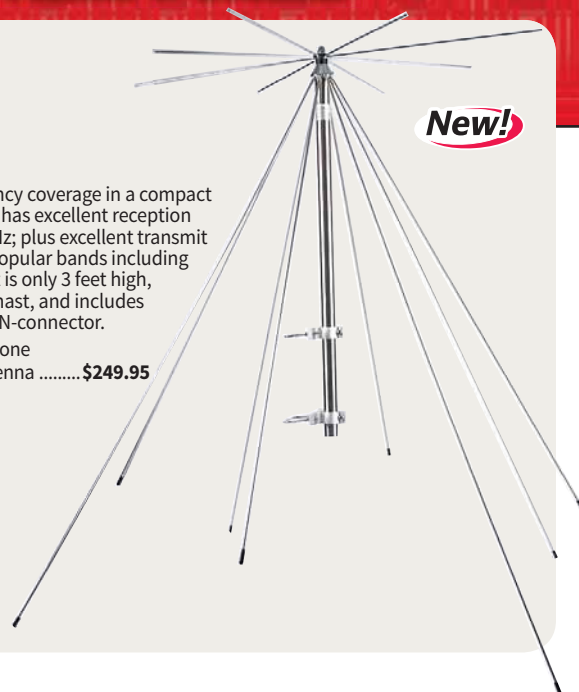
The ultimate 2 meter antenna, perfect for serious operators and club stations. This antenna can handle 600 watts and provides 8.1 dBi of gain with 4 MHz of Bandwidth. The heavy duty, 19.5 foot fiberglass radome will withstand wind gusts up to 140 mph.

HSR-HX6-14448 Extreme Duty 2M Base Antenna.....\$999.95

**ICOM****New!****Discone Antenna**

Get super-wide frequency coverage in a compact package. This antenna has excellent reception from 100 MHz to 2.3 GHz; plus excellent transmit capabilities on many popular bands including 2M, 70cm, and 23cm. It is only 3 feet high, mounts to any 2 inch mast, and includes 49 feet of coax with an N-connector.

ICO-AH-8000 Discone Antenna\$249.95

**HUSTLER****VHF/UHF Monitor Mobile Antenna**

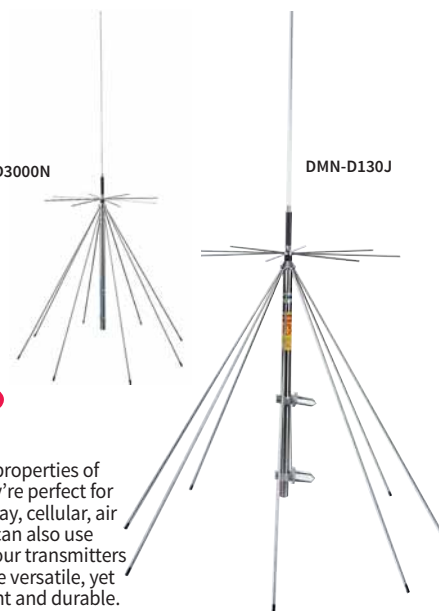
Look to Hustler's rugged mobile antenna if you're listening on the 30-50 MHz, 148-174 MHz, 430-450 MHz and 800-950 MHz frequencies. This 39 inch antenna has a low profile mount design and requires a 3/4" hole on a flat surface for mounting. It includes 12 feet of RG58/U coax with a BNC connector.

HSR-MOR-B Mobile Monitor Antenna\$24.95

DIAMOND ANTENNA

DMN-D3000N

DMN-D130J

**New!****Mobile/Base Discone Antennas**

Take advantages of the wideband properties of Diamond's Discone Antennas. They're perfect for Amateur Radio, commercial two-way, cellular, air traffic and utility frequencies. You can also use these as "shop" antennas to test your transmitters with one run of coaxial cable. These versatile, yet compact antennas are rust-resistant and durable.

Part Number	Description	Height	TX Frequency	RX Frequency	Price
DMN-D130J	Super Discone, SO-239, Base	66.9"	50-1300 MHz	25-1300 MHz	\$104.95
DMN-D130NJ	Super Discone, Type N, Base	66.9"	50-1300 MHz	25-1300 MHz	\$104.95
DMN-D3000N	Super Discone, Type N, Base	66.9"	50-1200 MHz	25-3000 MHz	\$129.95
DMN-D220	Mobile* Discone, SO-239, Scanner	35.5"	144-1300 MHz	100-1300 MHz	\$109.95

*Designed for Diamond's K400S, K400C, K600M, and K600S Mobile Mounts

International Shipping is Quick and Easy! See Page 58 for Details

Vertical VHF/UHF Antennas



Reach out further and get maximum performance with Comet Antennas. These antennas all feature durable construction, so they are ideal for rough-weather environments. There are fiberglass and aluminum options for many applications and every antenna comes with Comet's superior quality, coverage and gain. The complete specs on every Comet Antenna can be found at DXEngineering.com.

CMA-GP-21	23cm UHF Base Vertical, 14.9 dBi Gain, 8'	\$159.95
CMA-KP-20	33cm UHF Base Vertical, 9.2 dBi Gain, 8'	\$119.95
CMA-CA-712EF	70cm Base Vertical, 9 dBi Gain, 10.5'	\$109.95
CMA-CA-F72GF	70cm Base Vertical, 5.5 dBi Gain, 3.5'	\$109.95
CMA-CA-F72GFL	70cm Base Vertical, Tunable, 5.5 dBi Gain, 3.5'	\$105.95
CMA-CA-SUPER22	1.75M Base Vertical, 6.6 dBi Gain, 8'	\$159.95
CMA-CA-F22GF	2M Base Vertical, SO-239, 5.5 dBi Gain, 8.9'	\$149.95
CMA-CA-F22GFN	2M Vertical Antenna, Type N, 5.5 dBi Gain, 8.9'	\$149.95
CMA-CFM-95SL	Tunable LPFM Broadcast Antenna, 3.4 dBi Gain, 7.7'	\$112.95
CMA-GP-1	2M/70cm Base Vertical, 3/6 dBi Gain, 4'	\$74.95
CMA-GP-3	2M/70cm Base Vertical, 4.5/7.2 dBi Gain, 5.9'	\$99.95
CMA-GP-6	2M/70cm Base Vertical, 6.5/9 dBi Gain, 10.1'	\$149.95
CMA-GP-9	2M/70cm Base Vertical, SO-239, 8.5/11.9 dBi Gain, 18.5'	\$199.95
CMA-CX-333	2M/1.75M/70cm Base Vertical, 6.5/7.8/9 dBi Gain, 10.4'	\$179.95
CMA-GP-95	2M/70cm/23cm Base Vertical, 6/8.6/12.8 dBi Gain, 8'	\$169.95
CMA-GP-98	2M/70cm/23cm Base Vertical, 6.5/9/13.5 dBi Gain, 9.7'	\$189.95
CMA-GP-15	6M/2M/70cm Base Vertical, 3/6.2/8.6 dBi Gain, 7.9'	\$169.95

CMA-GP-3



HF/VHF Vertical Antenna

If you have too little space or too much regulation in your neighborhood, Comet comes through with a powerful and compact all-in-one antenna. It is easy to set up, with no need for radials, tuning or adjustments. Yet, this antenna gives you a VSWR under 1.6:1 from 3.5 MHz to 57 MHz! Its under 24 feet tall too, which will keep the neighbors happy.

CMA-CHA-250B HF/VHF Vertical Antenna **\$399.95**

DS-150S Discone Base Antenna

If you're living in an apartment where space is limited or in a community where larger antennas are frowned upon, then this compact antenna will let you stay in the game. It is less than five feet high and three feet wide, but covers 25 to 1300 MHz (receive). Transmitting is possible on the 6M, 2M, 70cm and 33cm bands, plus 1.2 GHz without a tuner. This antenna could be the perfect solution for your scanner or VHF/UHF transceiver.

CMA-DS-150S Discone Base Antenna **\$95.95**

VHF/UHF Beam Antennas

Comet offers you two stellar Yagi antennas, one for the 6M band and one for the 23cm band. They're compact and lightweight, and have stainless steel hardware so they're rugged enough to last for years. Installation is easy, and the CYA-1216E comes pre-assembled.

CMA-CYA-1216E	23cm Beam Antenna, 5.25' Boom, 16-Element, 16.6 dBi Gain	\$139.95
CMA-CA-52HB4	6M Wideband Beam Antenna, 10.5' Boom, 4-Element, 10.5 dBi Gain	\$129.95

Wi-Fi Antennas

For exceptional performance at 2.4 GHz, Comet offers three exceptional options. Full details on coverage and dimensions are at DXEngineering.com.

Comet's GP-24R High Gain Wi-Fi Access Point Antenna delivers a whopping a 12 dBi of gain in a narrow elevation pattern. It provides excellent coverage because it reaches out directly towards the horizon.

Designed to meet strict coverage requirements, the GP-24-3R and GP-24SR antennas are well suited for Wi-Fi, MESH, Base or repeater installations. They have a heavy-duty fiberglass radome, with stainless steel clamps.

CMA-GP-24R	High Gain Wi-Fi Access Point Antenna	\$149.95
CMA-GP-24-3R	Omnidirectional 2.4 GHz Base Antenna, 70" Tall	\$159.95
CMA-GP-24SR	Omnidirectional 2.4 GHz Base Antenna, 39" Tall	\$99.95

CMA-GP-24R



LDG-S9V18

S9V Series Vertical Antennas

New!



Tough, yet lightweight non-resonant verticals, these multi-band antennas will quickly get you on several popular bands. They handle 1,500 watts and use wire pigtail connections.

Installation is easy: simply slide the bottom antenna tube over a properly sized and mounted pipe. You can also roof-mount these antennas with a basic tripod setup. They're ideal for both permanent and temporary stations.

For peak performance, you'll need a proper radial setup for these antennas. Depending on the application, a 1:1 choke or a 4:1 balun is recommended. DXEngineering.com can tell you all the details.

Part Number	Band Coverage	Height	Mounting Pipe Size	Price
LDG-S9V18	20 to 6 Meters	18'	1" O.D.	\$49.95
LDG-S9V31	40 to 6 Meters	31'	1.625" O.D.	\$99.95
LDG-S9V43	80 to 6 Meters	43'	1.9" O.D.	\$199.95

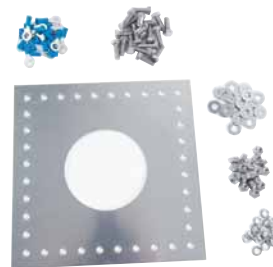
Aluminum Radial Plate

New!

Get your HF vertical performing at it's fullest potential with this radial plate. It creates the grounding point for your radials and contributes to proper antenna counterpoise. You can also use it to ground your remote tuner, balun or length of coax.

The plate is an 8" x 8" square and includes 20 stainless steel bolt sets.

LDG-S9RP Aluminum Radial Plate..... **\$39.95**



MESH 2.4 GHz Base Vertical Antenna



As activity on the 13cm band continues to grow, Comet Antennas offers you an antenna that lets you get in on the action. This antenna is less than two feet long, yet gives you 7.4 dBi of gain and over 100 MHz of bandwidth at 2:1 SWR. Whether you're developing your Wi-Fi network, working the 13cm band or just experimenting, this antenna is exactly what you need to get started.

CMA-SF-245R MESH 2.4 GHz Base Vertical Antenna..... **\$59.95**

HF Dipole Antennas

Comet understands that you may not have acres of land for your antenna installation. With that in mind, Comet offers offer you two powerful dipole antennas.

The CHV-5X is a multi-band dipole that allows you to tune each band independently. These compact, lightweight antennas can be arranged in a horizontal V-shape or a ground-plane setup. This is also a great antenna for portable/emergency operations.

The H-422 is a broadband antenna made from aluminum tubing with stainless steel hardware for added durability. A 2.5 kW Balun is included to make setup easy. It is tailored to the 40M, 20M, 15M and 10M bands. The 40M band can be tuned independently.

CMA-CHV-5X	Rotatable Dipole Antenna	\$319.95
CMA-H-422	Rotatable Trapped Dipole Antenna	\$349.95

CA-2X4SR

Mobile Vertical Antennas

These antennas are built to assist search and rescue volunteers who need voice communications on the Ham, land mobile and FRS frequency ranges. With these 40" antennas you get remarkable coverage, with 3.8 dBi gain on 2M and 6.2 dBi gain on 70cm. Plus, you'll be able to transmit and receive in both bands. Made for the field, these are the ideal mobile antennas for EMCOMM.

CMA-CA-2X4SR	2M/70cm Broadband Mobile Antenna, UHF Base	\$69.95
CMA-CA-2X4SRNMO	2M/70cm Broadband Mobile Antenna, NMO Base	\$69.95

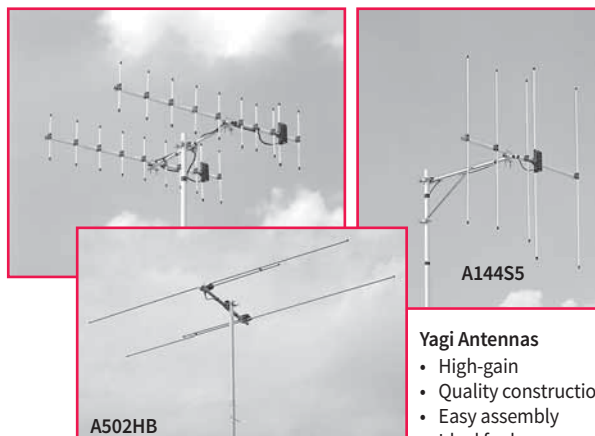
2.4 GHz Mobile Vertical Antenna

You can use this antenna on the 13cm Amateur band, or in MESH or Wi-Fi applications. With 7.4 dBi of gain, you'll get great mobile coverage and, since it is the same antenna used by the Marine Corps, you know it will stand up to the strain of high-speed and high-vibration mobile use. The 18 inch monoband antenna can handle up to 50 watts of power.

CMA-SF-245SPR-R 2.4 GHz Mobile Vertical Antenna..... **\$59.95**

CMA-CA-2X4SR

DIAMOND ANTENNA



Yagi Antennas

- High-gain
- Quality construction
- Easy assembly
- Ideal for base or portable use
- Factory adjusted—no tuning required

Yagi Beam Base Antennas

Part Number	Band	Elements	Boom Length	Power Rating	Gain	Price
DMN-A502HB	6 Meter	2	2.5'	400 Watts	6.3 dBi	\$89.95
DMN-A144S5	2 Meter	5	3.1'	100 Watts	9.1 dBi	\$59.95
DMN-A430S10	70cm	10	3.9'	100 Watts	13.1 dBi	\$69.95
DMN-A430S15	70cm	15	7.4'	100 Watts	14.8 dBi	\$89.95

Ruggedized Base/Repeater Antennas

X510HDM

This is Diamond Antenna's best base station repeater antenna. It is pre-tuned to achieve maximum gain in both the 2 meter and 70 centimeter amateur bands and has a wide frequency bandwidth. Features include a heavy-duty fiberglass radome, overlapping outer shells for added strength, stainless steel mounting hardware and radials, and waterproof joint couplings.

- Band: 2 meter/70 centimeter
- Gain (dB): 8.3/2 meter, 11.7/70 centimeter
- Watts: 330 (2 meters)/250 (70 centimeter)
- Connector: UHF
- Weight: 5 lbs.
- Length 17.2 feet
- Max Wind Rating: 90 mph

DMN-X510HDM **\$179.95**

X50NA

An excellent choice where ruggedness is required in a medium-gain, dual-band, base/repeater application. Features include a wide frequency bandwidth, heavy-duty fiberglass radome, stainless steel mounting hardware and radials, and a Type N cable connection. Compact 5.6 foot height for easy mounting and installation.

- Frequency: 144-148 MHz/2 meter, 440-450 MHz/70 centimeter
- Gain: 4.5 dB/2 meter, 7.2 dB/70 centimeter
- Power Rating: 200 watts maximum
- Wind Rating: 135 mph (no ice)

DMN-X50NA **\$94.95**

X30A

The X30A works well in areas where height and/or antenna restrictions are an issue. Features include a wide frequency bandwidth, heavy-duty fiberglass radome, stainless steel mounting hardware, and a UHF cable connection. Compact 4.5 foot height for easy installation.

- Frequency: 144-148 MHz/2 meter, 440-450 MHz/70 centimeter
- Gain: 3.0 dB/2 meter, 5.5 dB/70 centimeter
- Power Rating: 150 watts maximum
- Wind Rating: 135 mph (no ice)

DMN-X30A **\$69.95**



BB7V Multi-Band HF Vertical Antenna

This lightweight (4.5 lb.) antenna provides coverage from 2 MHz to 30 MHz without radials. The BB7V has six telescoping sections that nest in each other—collapsed length is 5 feet, extends to 22 feet when fully deployed. The sections are self locking (no hardware to lose) and can be raised or lowered in less than a minute. For permanent use, each section can be locked in place with a single screw. Ideal for users with antenna restrictions or travelers wanting a quick and easy wideband antenna solution.

DMN-BB7V Multi-Band HF Vertical Antenna **\$399.95**

More Diamond Base/Repeater Antennas— Find Complete Specs at DXEngineering.com

Multi-Band Resonant Vertical Antennas

(1.4" to 2.4" O.D. Mast Required)

Part Number	Bands	Height	Power Rating	Price
DMN-BB7V	10/12/15/17/20/30/40/60/80M	22'	250 Watts	\$399.95
DMN-CP725H	6/10/15/40M	11.8'	Up to 500 Watts	\$359.95
DMN-CP5H	6/10/15/20/40M	11.7'	500 Watts	\$379.95
DMN-CP6AR	6/10/15/20/40/80M	15.1'	200 Watts	\$419.95

Monoband Base/Repeater Antennas

(1.25" to 2.4" O.D. Mast Required)

Part Number	Band	Height	Power Rating	Gain	Price
DMN-CP62	6 Meter	22.0'	200 Watts	5.5 dBi	\$54.95
DMN-CP22E	2 Meter	8.9'	200 Watts	6.5 dBi	\$54.95
DMN-F22A	2 Meter	10.5'	200 Watts	6.71 dBi	\$94.95
DMN-F23H	2 Meter	15'	350 Watts	7.8 dBi	\$139.95
DMN-F718A	70cm	15'	250 Watts	11.5 dBi	\$199.95
DMN-F1230AI	23cm	11.5'	100 Watts	13.8 dBi	\$169.95
DMN-G200	2.4-2.5 GHz (Wi-Fi)	4.83'	10 Watts	11 dBi	\$204.95

Dual-Band Base/Repeater Antennas

(1.25" to 2.4" O.D. Mast Required)

Part Number	Bands (Connector)	Height	Power Rating	Gain	Price
DMN-X30A	2M/70cm (SO-239)	4.5'	150 Watts	3 dBi (2M) 5.5 dBi (70cm)	\$69.95
DMN-X50A	2M/70cm (SO-239)	5.6'	200 W (2M) 250 W (70cm)	4.5 dBi (2M) 7.2 dBi (70cm)	\$94.95
DMN-X50NA	2M/70cm (Type N)	5.6'	200 W (2M) 250 W (70cm)	4.5 dBi (2M) 7.2 dBi (70cm)	\$94.95
DMN-X200A	2M/70cm (SO-239)	8.3'	200 Watts	6 dBi (2M) 8 dBi (70cm)	\$124.95
DMN-X300A	2M/70cm (SO-239)	10'	200 Watts	6.5 dBi (2M) 9 dBi (70cm)	\$139.95
DMN-X300NA	2M/70cm (Type N)	10'	200 Watts	6.5 dBi (2M) 9 dBi (70cm)	\$139.95
DMN-X510HDM	2M/70cm (SO-239)	17.2'	330 W (2M) 250 W (70cm)	8.3 dBi (2M) 11.7 dBi (70cm)	\$179.95

Tri-Band Base/Repeater Antennas

(1.25" to 2.4" O.D. Mast Required)

Part Number	Bands	Height	Power Rating	Gain	Price
DMN-V2000A	6M/2M/70cm	8.3'	150 Watts	2.1 dBi (6M) 6.2 dBi (2M) 8.4 dBi (70cm)	\$159.95
DMN-X3200A	2M/1.25M/70cm	10.5'	100 W (2M) 100 W (1.25M) 200 W (70cm)	6 dBi (2M) 7.8 dBi (1.25M) 8 dBi (70cm)	\$179.95
DMN-X6000A	2M/70cm/23cm	10.5'	100 W (2M) 100 W (1.25M) 60 W (23cm)	6.5 dBi (2M) 9 dBi (70cm) 10 dBi (23cm)	\$174.95

A144S5 Base Station Yagi Beam Antennas

These are terrific Yagi beam antennas for the 2 and 6 meter bands. They're lightweight, easy to install and give you excellent performance. These high-gain Yagi antennas are ideal for both base and portable installations. Plus, they're factory-adjusted, so you don't need to worry about tuning.

DMN-A144S5 2 Meter, 5-Element Base Station Yagi Beam Antenna **\$59.95**
DMN-A502HB 6 Meter, 2-Element Base Station Yagi Beam Antenna **\$89.95**

FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details

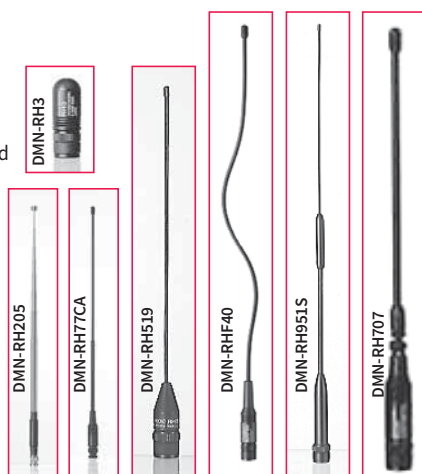
Improve the Reach of Your HT with a Gain-Increasing Antenna!

DIAMOND
ANTENNA

HT Antennas

The rubber duckie antenna packaged with your HT may be keeping your handheld from operating at its full potential. Knowing this, Diamond Antenna brings you single, dual and triple band antennas that offer better performance. As proof, Diamond rates its antennas against the original HT manufacturer's antenna to show you a relative gain improvement over your HT's (or scanner's) stock performance.

Whether you want a simple replacement for a broken HT antenna or you are looking for significantly improved reception, Diamond Antennas has a solution.



Part Number	Description	Length	Gain	Price
DMN-RH205	Monoband, Telescopic, BNC Male, 10 W Power Rating	52.8"	9 dB	\$26.95
DMN-RH3	Dual-Band, Stubby, BNC Male, 10 W Power Rating	1.7"	—	\$26.95
DMN-RH519	Dual-Band, Flexible, BNC Male, 10 W Power Rating	7.75"	3 dB	\$24.95
DMN-RH707	Dual-Band, Flexible, BNC Male, 10 W Power Rating	8.25"	3 dB	\$29.95
DMN-RH77CA	Dual-Band, Flexible, BNC Male, 10 W, Extended Receive to 900 MHz	15"	6 dB	\$22.95
DMN-RHF10	Dual-Band, Flexible Stubby, BNC Male, 6W Power Rating, 118-900 MHz Receive	2.75"	—	\$21.95
DMN-RHF40	Dual-Band, Flexible, BNC Male, 10 W, Extended Receive to 900 MHz	16"	6 dB	\$27.95
DMN-RH519	Dual-Band, Flexible, SMA Male	7.75"	3 dB	\$26.95
DMN-SRH77CA	Dual-Band, Flexible, SMA Male, 10 W, High Gain & Extended Receive to 900 MHz	15"	6 dB	\$22.95
DMN-SRJ77CA	Dual-Band, Flexible, SMA Female, 10 W, Extended Receive to 900 MHz	15"	6 dB	\$24.95
DMN-SRHF10	Dual-Band, Super-Flexible Stubby SMA Male, 6 W Power Rating	2.75"	—	\$21.95
DMN-SRHF40	Dual-Band, Super-Flexible, SMA Male, 10 W, Extended Receive to 900 MHz	16"	6 dB	\$26.95
DMN-RH951S	Tri-Band, Flexible, BNC Male, 10 W Power Rating	14"	6 dB	\$44.95
DMN-SRH320A	Tri-Band, Flexible, SMA Male, 10 W Power Rating	13.75"	4 dB	\$46.95
DMN-SRH805	Tri-Band, Stubby, SMA Male, 6 W Power Rating	1.75"	—	\$26.95
DMN-SRH815	Tri-Band, Flexible, SMA Male, 6 W Power Rating	6"	3 dB	\$31.95
DMN-SRH940	Tri-Band, Flexible, SMA Male, 10 W Power Rating	18"	2.1 dB	\$39.95
DMN-SRH999	Quad-Band, Flexible, SMA Male, 10 W Power Rating	19.5"	4 dB	\$54.95
DMN-RH789	Dual-Band, Scanner Antenna, Telescopic BNC Male, 10 W, 85-300 MHz and 300-1100 MHz	31.7"	—	\$32.95
DMN-SRH789	Dual-Band, Scanner Antenna, Telescopic SMA Male, 10 W, 85-300 MHz and 300-1100 MHz	31.7"	—	\$32.95



HT Antennas

Maximize your HT or scanner performance. Comet's HT antennas offer significant gain improvements over your original antenna and are super-rugged, making them perfect for use in the field. Many have extended receive capabilities—visit DXEngineering.com for all of the specs.

Available in multiple connector types, sizes and band coverage, Comet Antennas are excellent replacement antennas for your scanner or HT.



Part Number	Description	Length	Gain	Price
CMA-BNC-24	Dual-Band, Flexible, BNC Male, 20 W Power Rating	17"	2.1 dBi (2M) 3.5 dBi (70cm)	\$24.95
CMA-CH-32	Dual-Band, Stubby, BNC Male, 10 W Extended Receive Ranges	1.75"	3.2 dBi (70cm)	\$29.95
CMA-CH-75	Dual-Band, Flexible, BNC Male, 20 W Extended Receive Ranges	15"	3.2 (70cm)	\$25.95
CMA-SH-55	Dual-Band, Flexible, BNC Male, 10 W Power Rating	15"	1.5 dBi (2M) 3.2 dBi (70cm)	\$33.95
CMA-SMA-209J	Dual-Band, Stubby, SMA Female, 5 W Power Rating	3"	—	\$21.95
CMA-SMA-24	Dual-Band, Flexible, SMA Male, 20 W Power Rating	15.75"	2.1 dBi (2M) 3.5 dBi (70cm)	\$24.95
CMA-SMA-24J	Dual-Band, Flexible, SMA Female, 20 W Power Rating	17"	2.1 dBi (2M) 3.5 dBi (70cm)	\$24.95
CMA-SMA-501	Dual-Band, Stubby, SMA Male, 10 W Extended Receive Ranges	1.75"	—	\$29.95
CMA-SMA-503	Dual-Band, Flexible, SMA Male, 10 W Extended Receive Ranges	8.5"	—	\$29.95
CMA-SMA-503J	Dual-Band, Flexible, SMA Female, 10 W Extended Receive Ranges	6.75"	—	\$29.95
CMA-HT-224	Tri-Band, Flexible, SMA Male, 10 W, Extended Receive Ranges	11"	1.3 dBi (2M) 1.4 dBi (1.25M) 1.8 dBi (70cm)	\$47.95
CMA-SH-95	Tri-Band, Flexible, BNC Male, 10 W, Extended Receive 100-1200 MHz	14.5"	1.5 dBi (2M) 2.1 dBi (70cm) 5.5 dBi (23cm)	\$34.95
CMA-SMA-3	Tri-Band, Flexible, SMA Male, 10 W, Extended Receive Ranges	9.75"	1.2 dBi (2M) 1.7 dBi (70cm) 3.4 dBi (33cm)	\$39.95
CMA-SMA-703	Tri-Band, Flexible, SMA Male, 10 W, Extended Receive Ranges	6.5"	3.4 dBi (23cm)	\$31.95
CMA-BNC-W100RX	Scanner Antenna, Telescopic, 8" Collapsed Height, BNC Male	40"	—	\$32.95
CMA-SMA-W100RX	Scanner Antenna, Telescopic, 8" Collapsed Height, SMA Male	40"	—	\$28.95
Maldol				
MLD-NS-146	2M HT Antenna, BNC Male Connector,	4"	—	\$11.95
MLD-MH-209	2M/70cm HT Antenna, BNC Male Connector,	3"	—	\$23.95
MLD-MH-209SMA	2M/70cm HT Antenna, SMA Male Connector,	3"	—	\$23.95



Orders by 10 pm ET Ship Same Day, See Page 58 for Details

MIRAGE



Mirage In-Shack and Mast-Mounted Preamplifiers

These preamplifiers are designed to enhance your antenna system's receive performance. They're available as single unit in-shack components, or as two-piece mast-mounted units with RF Line voltage control—ideal for high-performance installations.

Quick Specs

- Ultra low-noise GaAsFETs with switchable gain
- Automatic RF switching
- Handle up to 100 watts bypass
- KP-1 series are single unit inline preamplifiers
- KP-2 series use separate RF Line voltage control and preamp units

MIR-KP-1-10M	In-Shack Preamplifier, 10 Meter	\$139.95
MIR-KP-1-6M	In-Shack Preamplifier, 6 Meter	\$139.95
MIR-KP-1-2M	In-Shack Preamplifier, 2 Meter	\$139.95
MIR-KP-1-220	In-Shack Preamplifier, 220-225 MHz	\$139.95
MIR-KP-1-440	In-Shack Preamplifier, 430-450 MHz	\$139.95
MIR-KP-2-10M	Mast-Mounted Preamplifier, 10 Meter	\$179.95
MIR-KP-2-6M	Mast-Mounted Preamplifier, 6 Meter	\$179.95
MIR-KP-2-2M	Mast-Mounted Preamplifier, 2 Meter	\$184.95
MIR-KP-2-220	Mast-Mounted Preamplifier, 220-225 MHz	\$179.95
MIR-KP-2-440	Mast-Mounted Preamplifier, 430-450 MHz	\$184.95

ICOM AH-4 Antenna Tuner

Icom's AH-4 antenna tuner lets you automatically tune a 23 foot or longer wire antenna for portable or mobile HF/50 MHz use. The PTT tune function makes changing bands easy, too.

ICO-AH-4	Antenna Tuner.....	\$289.95
ICO-OPC-136	AH-4 Control Cable, 16.4'	\$32.95



DXE-RPA-1 Receive Preamplifier

This is the best HF low-noise amplifier available. The DXE-RPA-1 is optimized for a 0.3-35 MHz operating range. The push-pull amplifier design and robust components enable it to withstand high signal levels and operate when you need it most. The dynamic range of the DXE-RPA-1 is better than most receivers.

The DXE-RPA-1 is suitable for indoor or outdoor installation, with the option of being powered through the coaxial feed. The metal housing provides shielding and improved lifespan. The unit uses an RCA type phono jack and a Type F connector for the input and output connections, and has a relay that automatically bypasses the amplifier when DC power is removed.

Benefits

- Push-pull operation eliminates harmonic distortion
- High quiescent current increases ability to handle signals without distortion or overload
- Meticulous craftsmanship and durable components provide superior dynamic range
- RCA phono jack and type F connector ease installation
- Simplified switching—automatic bypass relay eliminates gain when DC power is off
- 10-18 Vdc power through coaxial feed or separate supply jack
- 10-18 Vdc through coax enables remote operation at antenna

Specifications

- Gain: 16 dB, 0.3-35 MHz (+1.5/-1.5 dB over this range)
- Output Third Order Intercept: 43 dBm
- Noise Figure: 3.5 dB
- One dB Compression: +26 dBm (~0.4 W output)
- 500 Hz BW IM3 Dynamic Range: 110 dB or greater
- Power Requirement: 10-18 Vdc @ 140 mA maximum
- Dimensions: 5.75" W x 3.875" D x 1.375" H

DXE-RPA-1	Receiver Preamplifier, 0.3-35 MHz	\$123.95
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MFJ HT Antennas

By upgrading your HT's original-equipment antenna, you can get significant coverage gains. MFJ offers some great options to increase the gain of your handheld. These durable antennas are well suited to field conditions.

MFJ

Part Number	Description	Length	Price
MFJ-1710	Monoband, Pocket Linear, Telescopic, Pen-Sized, 3/8-Wave on 2 Meter, 5.25" Collapsed	24.5"	\$9.95
MFJ-1714	Monoband, Telescopic, 1/2-Wave on 2 Meter, BNC	40"	\$16.95
MFJ-1714S	Monoband, Telescopic, 1/2-Wave on 2 Meter, SMA	40"	\$15.95
MFJ-1712	Dual-Band, Telescopic, 1/4-Wave on 2 Meter, 5/8-Wave on 70cm, 7.25" Collapsed, BNC	19"	\$14.95
MFJ-1712S	Dual-Band, Telescopic, 1/4-Wave on 2 Meter, 5/8-Wave on 70cm, 7.25" Collapsed, SMA	19"	\$14.95
MFJ-1713	Dual-Band, Thin Whip, BNC, 1/4-Wave on 2 Meter and 70cm	5.5"	\$16.95
MFJ-1713S	Dual-Band, Thin Whip, SMA, 1/4-Wave on 2 Meter and 70cm	5.5"	\$16.95
MFJ-1715	Dual-Band, Superflex, Long Thin Whip, 1/4-Wave on 2 Meter, 1/2-Wave on 70cm, BNC	12.5"	\$19.95
MFJ-1715S	Dual-Band, Superflex, Long Thin Whip, 1/4-Wave on 2 Meter, 1/2-Wave on 70cm, SMA	12.5"	\$19.95
MFJ-1716	Dual-Band, Flexible, Loaded 1/4-Wave on 2 Meter, 1/4-Wave on 70cm, BNC	7.5"	\$14.95
MFJ-1716S	Dual-Band, Flexible, Loaded 1/4-Wave on 2 Meter, 1/4-Wave on 70cm, SMA	7.5"	\$14.95
MFJ-1717	Dual-Band, Flexible, 1/4-Wave on 2 Meter, 1/2-Wave on 70cm, BNC	15.75"	\$18.95
MFJ-1717S	Dual-Band, Flexible, 1/4-Wave on 2 Meter, 1/2-Wave on 70cm, SMA Male	15.75"	\$18.95
MFJ-1717SF	Dual-Band, Flexible, 1/4-Wave on 2 Meter, 1/2-Wave on 70cm, SMA Female	15.75"	\$17.95
MFJ-1718S	Tri-Band, Flexible, SMA, 2M/1.25M/70cm	17"	\$23.95
MFJ-1719	Tri-Band, Midget Duck, BNC, 2M/70cm/33cm	1"	\$14.95
MFJ-1719S	Tri-Band, Midget Duck, SMA, 2M/70cm/33cm	1"	\$14.95
MFJ-1719SF	Tri-Band, Midget Duck, SMA, Female 2M/70cm/33cm	1"	\$14.95
MFJ-1720S	Tri-Band, Flexible, SMA 1/4-Wave on 6M, 1/4-Wave on 2M, 5/8-Wave on 70cm	19"	\$29.95



MFJ-1713

DIAMOND ANTENNA

New!

SMA to BNC Antenna Adapter

Designed for your HT, this mount is a great way to unlock more antenna choices for your BNC-equipped handheld. It has a female SMA connector on one end and a male BNC connector on the other.

DMN-BNCJ-SMAP	SMA to BNC Adapter.....	\$9.95
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International Shipping is Quick and Easy! See Page 58 for Details



Wi-Fi Antennas

Minimize interference and maximize your Wi-Fi network coverage with these gain-increasing antennas—even if you live in a concrete building. These antennas increase the range of your Wi-Fi devices and are great tools to take advantage of free Wi-Fi hotspots.

Eliminate the frustration of spotty Wi-Fi coverage by upgrading your antenna—visit DXEngineering.com for complete specs.

MFJ-1800	Wi-Fi Antenna, Type N Connector, 15 dBi Gain	\$29.95
MFJ-1801	Wi-Fi Antenna, with Housing, Indoor/Outdoor, 15 dBi Gain	\$61.95
MFJ-1802	Wi-Fi Antenna, Wide Area, 150 Degree Beamwidth, 8 dBi Gain	\$43.95
MFJ-1804	Wi-Fi Antenna, Bi-Quad, 45 degree Beamwidth, 12 dBi Gain	\$52.95

Short Wave

Listening Active Antennas

Open your ears to the world with these tunable active antennas. MFJ's SWL antenna designs set the standard by which other antennas are judged. You will get the best possible performance from an antenna that will last for decades.

The MFJ-1020C covers 300 kHz-40 MHz, including VLF, AM Broadcast, shortwave and all amateur bands. It requires 9 Vdc (battery or AC adapter) and includes a telescopic whip.

MFJ's 1022 has a frequency range of 300 kHz to 200 MHz, including low and medium shortwave bands, plus VHF. It requires 9 Vdc (battery or AC adapter) and includes a telescopic whip.

For an excellent outdoor antenna, look to the MFJ-1024. It covers 50 kHz to 30 MHz with excellent dynamic range and low noise floor. It includes the control unit and has convenient mounting holes for easy installation.

MFJ-1020C	Indoor SWL Active Antenna.....	\$91.95
MFJ-1022	Indoor SWL Active Antenna.....	\$69.95
MFJ-1024	Outdoor SWL Active Antenna.....	\$149.95



Apartment Antennas

Renters need DX, too. MFJ comes to your rescue with powerful, compact and easy to install/uninstall antennas.

The MFJ-1622 lets you work 40 through 10 meters on HF, plus 6 and 2 meters on VHF—all using a single antenna. The universal mounting clamp attaches easily to window frames and outside railings, or inside clamped to a table or bookshelf. The radiator collapses to just 2.5 feet for easy storage. An RF choke balun, coax feed line, counterpoise wire and safety rope are included.

MFJ's 1795 is the perfect HF antenna if you don't have the room (or a neighborhood friendly enough) for a full size vertical. Adjustable from seven to ten feet, this antenna features a low angle of radiation and can handle 1,500 watts PEP. You can mount it on the ground (with a suitable ground) or any flat surface, including your roof.



MFJ-1621

The MFJ-1795W is a similar to the 1795, but covers the WARC Bands (12/17/30/60 meters).

MFJ-1621	Apartment Antenna, HF	\$99.95
MFJ-1622	Apartment Antenna, 40M-2M	\$99.95
MFJ-1795	Apartment Antenna, Vertical, HF	\$169.95
MFJ-1795W	Apartment Antenna, Vertical, WARC	\$149.95

Antenna Whips and Kit

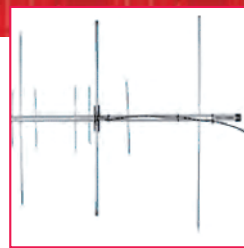
Great for screwdriver antennas, these stainless steel whips hold up in the harshest environments. Every whip features a 3/8"-24 connector for easy installation.

The MFJ-1964K Antenna Kit combines all of the critical pieces to make an excellent portable antenna for the 10 through 60 meter band. It includes an MFJ-1954 10 foot telescopic whip antenna, an MFJ-404-0008 coil, six silver plated tap clips and a chassis mount SO-239 connector.

MFJ-1964K	Portable Antenna Kit.....	\$49.95
MFJ-1964	Antenna Whip, 6'	\$26.95
MFJ-1966	Antenna Whip, 9'	\$25.95



MFJ-1763



MFJ-1760



MFJ-1764

Yagi/Beam Antennas and Accessories

MFJ gives you several Yagi antenna options that offer impressive gain while being lightweight and durable, eliminating the need for big, unsightly installations. Please visit DXEngineering.com for more detailed specs on each Yagi antenna and accessory.



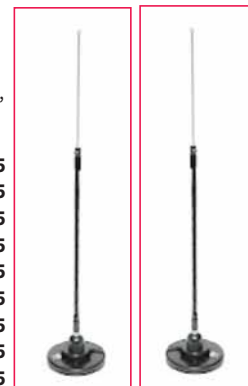
MFJ-1768

MFJ-1763	2M 3-Element Portable Yagi Antenna, 1 dBi Gain, 33" Boom	\$54.95
MFJ-1761	6M Add-On for Most Yagi/Dipole Antennas	\$27.95
MFJ-1762	6M Yagi Antenna, 72" Boom	\$99.95
MFJ-1764	6M/2M Super Gain Beam Antenna, 23" Boom	\$59.95
MFJ-1766	6M/2M Double Gain Beam (Two MFJ-1764 Antennas).....	\$109.95
MFJ-1760	2M/70cm 3-/4-Element Yagi Antenna, 8 dBi/6 dBi Gain, 45" Boom	\$79.95
MFJ-1768	2M/70cm Yagi Antenna, 8 dBi/6 dBi Gain	\$99.95

HF Mini-Stick Antennas

You can use these mighty antennas in your mobile or base rig to get on the HF bands. They all feature a standard 3/8"-24 mounting point and base. Their small, unobtrusive size coupled with an integrated magnet mounts open up a world of installation possibilities.

MFJ-2306T	6M HF Mini-Stick with Whip	\$19.95
MFJ-2310T	10M HF Mini-Stick with Whip	\$19.95
MFJ-2312T	12M HF Mini-Stick with Whip	\$19.95
MFJ-2315T	15M HF Mini-Stick with Whip	\$19.95
MFJ-2317T	17M HF Mini-Stick with Whip	\$19.95
MFJ-2320T	20M HF Mini-Stick with Whip	\$19.95
MFJ-2340T	40M HF Mini-Stick with Whip	\$19.95
MFJ-2360T	60M HF Mini-Stick with Whip	\$19.95
MFJ-2375T	75M HF Mini-Stick with Whip	\$19.95



School's In Session

Unless you're a teenager, you don't know everything. This is especially true in Ham radio. Technology is always marching forward and you have to keep up. At DXEngineering.com there's a huge tech library with articles, FAQs, manuals and videos. Plus, if you're dealing with a specific issue, call us and we can help.

Pulsar VHF/UHF Antennas

Send a powerful signal and listen in distant stations with MFJ Pulsar VHF/UHF Antennas.

Well suited for base or repeater use, these antennas feature MFJ's exclusive PulsePEAK. That means you get a super-low angle of radiation pointed directly at the horizon, which results in maximum gain and excellent long-range performance. These antennas feature fiberglass radomes, stainless steel hardware and waterproof joints for years of dependable service.

MFJ-1516	2M Base/Repeater Antenna, 7.8 dB Gain, 15'	\$99.95
MFJ-1522	2M/70cm Base Antenna, 4.5/7.2 dB Gain, 5.5'	\$79.95
MFJ-1524	2M/70cm Base Antenna, 6.5/9 dB Gain, 10'	\$104.95
MFJ-1526	2M/70cm Base Antenna, 8.3/11.7 dB Gain, SO-239, 17'	\$139.95
MFJ-1526N	2M/70cm Base Antenna, 8.3/11.7 dB Gain, Type N, 17'	\$139.95
MFJ-1532N	2M/70cm/1.2 GHz Base Antenna, 4.5/8.3/11.7 dB Gain, 5.5'	\$84.95
MFJ-1536	6M/2M/70cm Base Antenna, 2/6/8 dB Gain, 8.2'	\$119.95
MFJ-1538	6M/2M/1.25M/70cm Base Antenna, 2.15/6.2/7.2/8.4 dB Gain	\$119.95



MFJ-1516

Manual Screwdriver Antennas

These adjustable and durable antennas are an excellent choice for mobile, portable or base installations.

MFJ-1661	40-2M (10' Whip), 20-6M (4.5' Whip) Manual Screwdriver Antenna	\$139.95
MFJ-1662	40-2M (4.5' Mobile/10' Fixed Whip) Manual Screwdriver Antenna	\$149.95
MFJ-1664	80-6M (10' Whip), 40-6M (4.5' Whip) Manual Screwdriver Antenna	\$169.95
MFJ-1668	(4.5' Mobile/10' Fixed Whip) Manual Screwdriver Antenna;	\$159.95

MFJ-1664

Ground Plane Antennas

Work plenty of DX, even with low power. These antennas use a ground-isolated radial system that eliminates common mode current paths while reducing feedline radiation. They're made of strong yet lightweight aluminum that resists the elements to provide years of service.

MFJ-1740	1/4 Ground Plane Antenna, 2M/1.25M/70cm	\$29.95
MFJ-1750	5/8 Ground Plane Antenna, 2M.	\$34.95
MFJ-1752	5/8 Ground Plane Antenna, 2M/1.25M	\$34.95
MFJ-1754	Ground Plane Antenna, 2M/70cm	\$39.95
MFJ-1756	Ground Plane Antenna, Omni, 6M	\$89.95



MFJ-1740

Vertical Antennas

All MFJ Vertical Antennas give you the perfect blend of reliability, reach and durability. Regardless what model you choose, you know that once erected, your MFJ Vertical Antenna will give you years of trouble-free service.

MFJ-1792	80/40M Super Vertical Antenna, 33', 1,500 Watts PEP	\$189.95
MFJ-1793	80/40/20M Super Vertical Antenna, 5.5', 1,500 Watts PEP	\$199.95
MFJ-1796	2/6/10/15/20/40M Vertical Antenna, 12', 1,500 Watts PEP	\$219.95
MFJ-1796W	12/17/30/60M WARC Band Vertical Antenna, 12', 1,500 Watts PEP	\$199.95
MFJ-1798	80-2M 10-Band Vertical Antenna, 20', 1,500 Watts PEP	\$329.95



MFJ-1792

Box Fan Portable Loop Antennas

Here's an ingenious design that gives you the ultimate portable antenna! No bigger than a typical household box fan, these antennas are protected from the elements and feature external handles, so you can carry one practically anywhere. They cover 14-30 MHz and you have excellent control over the tuning capabilities.

MFJ-1780	Box Fan Portable Loop Antenna	\$299.95
MFJ-1780X	Box Fan Portable Loop Antenna, 240 Vac	\$259.95



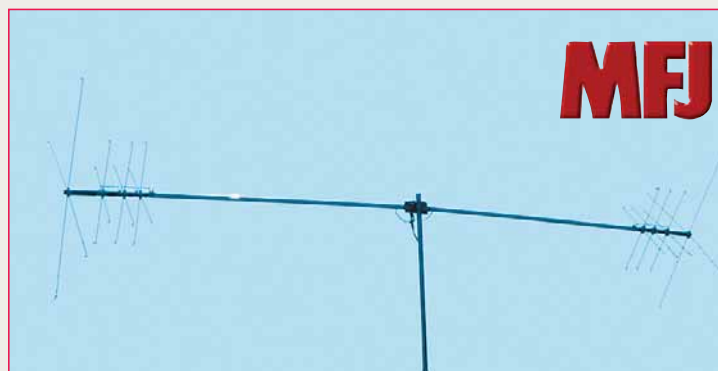
MFJ-1780

Extra-Long Telescopic Antennas

If you're building a dipole, screwdriver, base or mobile antenna, MFJ offers you a great starting point. Made from stainless steel with standard 3/8"-24 mounts, these antennas are also perfect for travelling, DXpeditions, vacations and Field Day.

MFJ-1954	Telescopic Antenna, 10'	\$29.95
MFJ-1977	Telescopic Antenna, 12'	\$44.95
MFJ-1979	Telescopic Antenna, 17'	\$59.95

MFJ-1977



MFJ

Rotatable Dipole Antennas

These inconspicuous antennas aren't much bigger than a traditional TV antenna, yet they give you incredible coverage. MFJ builds these antennas to withstand the full fury of Mother Nature, with aircraft-strength aluminum and solid fiberglass insulators. They are fully rotatable so you can focus your signal and really work some DX.

For great coverage on the 20, 15, 10 and 6 meter bands, look to MFJ's 1769 Rotatable Dipole.

The MFJ-1775 lets you operate on the 40, 20, 15, 10, 6 and 2 meter bands, and you can run the full 1,500 watts SSB/CCW on all HF bands. The 1775W lets you operate on the WARC bands: 12, 17, 30 and 60 meter.

Take advantage of great propagation during the low sunspot cycle with the MFJ-1785. This low-profile antenna gets you on the 80, 40 and 20 meter bands.

MFJ-1769	Rotatable Dipole Antenna, 4-Band	\$249.95
MFJ-1775	Rotatable Dipole Antenna, 6-Band	\$239.95
MFJ-1775W	Rotatable Dipole Antenna, WARC	\$219.95
MFJ-1785	Rotatable Dipole Antenna, 3-Band	\$369.95

Mini-Dipole Antennas

When you need a lightweight, isolated dipole antenna that won't break the bank, look to MFJ's versatile Mini-Dipoles. Perfect for temporary installations or when space is limited, you can focus the antenna's orientation to get the best signal. Two HF sticks are included, along with the MFJ-347 Mini-Dipole mount.

MFJ-2206	6M Mini-Dipole Antenna	\$42.95
MFJ-2210	10M Mini-Dipole Antenna	\$42.95
MFJ-2215	15M Mini-Dipole Antenna	\$42.95
MFJ-2217	17M Mini-Dipole Antenna	\$42.95
MFJ-2220	20M Mini-Dipole Antenna	\$42.95
MFJ-2230	30M Mini-Dipole Antenna	\$42.95
MFJ-2240	40M Mini-Dipole Antenna	\$42.95
MFJ-2275	75M Mini-Dipole Antenna	\$49.95



MFJ-2206

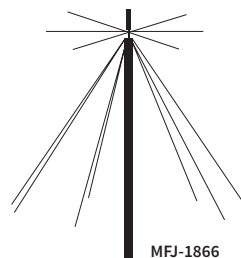
MFJ

VHF Discone Antennas

MFJ's ultra wide-band Discone Antennas are designed for scanners, but you can use them to test several transmitters. The 1868 covers a receive range of 25-1300 MHz with a transmit range of 50-1300 MHz—making them ideal for 2, 4 and 6 meter operation. It includes an SO-239 connector, 50 feet of coax, stainless steel elements, and mounting hardware.

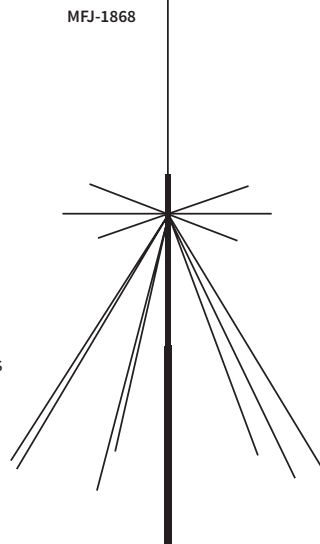
The 1866 model is similar to the MFJ-1868, except that it transmits from 144 to 1290 MHz and does not include the coax or hardware.

MFJ-1866	VHF Discone Antenna	\$49.95
MFJ-1868	VHF Discone Antenna, Installation Kit	\$64.95



MFJ-1866

MFJ-1868



MFJ**HF/VHF
Antenna Analyzer**

This compact, battery-powered RF impedance analyzer combines four basic circuits: a 1.8-170 MHz variable frequency oscillator, a frequency counter, a 50 Ω RF bridge, and an eight-bit microcontroller. The analyzer makes a wide variety of useful antenna or impedance measurements, including coaxial cable loss and distance to an open or short.

Primarily designed for analyzing 50 Ω antenna and transmission line systems, the unit also measures RF impedances between a few ohms and several hundred ohms. It also functions as a signal source and frequency counter. The frequency range is 1.8 to 170 MHz in six overlapping bands. Requires 10 AA batteries for portable operation (not included).

MFJ-259B HF/VHF Antenna Analyzer **\$239.95**
 MFJ-98 Accessory Pack—Includes:
 Dip Meter Coil (MFJ-66),
 AC adapter (MFJ1312D), and
 Carrying Pouch (MFJ-39C) **\$59.95**

**COMET****CAA-500
Antenna Analyzer**

Comet Antennas' CAA-500 Antenna Analyzer offers impressive frequency coverage, dual analog meters with precision needles and two antenna connection jacks. It can scan your specified frequency range in seconds, allowing for quick SWR adjustments. SWR and impedance are displayed simultaneously, so you can easily determine resonant frequency. Powered by six AA cells (not included), this antenna analyzer provides up to 14 hours of operation—perfect for your next Field Day!

CMA-CAA-500 Antenna Analyzer **\$388.95**

**Power Line Noise Finder**

Quickly pinpoint electrical noise caused by power lines, leaky insulators, corroded ground lines, arcing transformers and industrial machinery. The noise finder is also handy for sniffing out common household noise sources like dimmer switches, TVs and power tools. It's sensitive down to 1 μ V and the finder's 100 kHz wideband IF gives you excellent noise sampling. Plug in your headphones and quickly troubleshoot aggravating RFI.

MFJ-856 Power Line Noise Finder **\$159.95**

MFJ**HF/VHF/UHF
Antenna Analyzer**

This analyzer gives you all the basic RF diagnostic functions and measurements like capacitance, inductance, field strength and frequency. It also displays SWR, complex impedance, and impedance magnitude simultaneously. You can also generate test signals, analyze coax, test baluns and transformers.

Using this analyzer is easy and intuitive. Detailed instructions are included and the 10:1 vernier drive makes fine-tuning a breeze. The dial lock keeps you from accidentally detuning in the middle of a measurement. This analyzer incorporates several diagnostic tools into one piece of equipment, so it's a great tool for the shack and the field.

MFJ-266B HF/VHF/UHF Antenna Analyzer **\$299.95**

**Accessories for your
HF/VHF/UHF MFJ Antenna Analyzer**

Part Number	Description	Price
MFJ-1312D	AC Adapter 12 Vdc Output at 500mA	\$15.95
MFJ-66	Dip Meter Coil	\$24.95
MFJ-731	Tunable RFI Filter	\$99.95
MFJ-917	Balanced Line Adapter	\$29.95
MFJ-29C	Carrying Pouch for MFJ-209/249/259B	\$24.95
MFJ-39C	Carrying Pouch for MFJ-269/269PRO	\$24.95

MFJ**HF/VHF/UHF Analyzers**

These compact RF impedance analyzers combine six basic circuits: a variable oscillator, frequency counter, frequency multiplier, 50 Ω RF bridge, a twelve-bit A-D converter, and microcontroller. They perform a wide variety of useful antenna and RF impedance measurements, including coaxial cable loss and electrical distance to an open or short.

Primarily designed for analyzing 50 Ω antenna and transmission line systems, these units also measure RF impedances between a few ohms and several hundred ohms. An easily accessed, user-controlled Z_0 setting in the function menu allows changing SWR and other SWR functions (return loss, reflection coefficient, match efficiency, etc.) to any normalized impedance value between 5 and 600 Ω .

The analyzer also functions as a non-precision signal source and frequency counter. The operating frequency range extends from 1.8 to 170 MHz in six overlapping bands, and includes SWR measurements on 415-470 MHz. Requires 10 AA batteries for portable operation (not included).

The operating range for the Pro RF Analyzer is 1.8 to 170 MHz in six overlapping bands, with SWR measurements from 430 to 520 MHz.

MFJ-269 HF/VHF/UHF Analyzer **\$319.95**
 MFJ-269PRO Pro RF Analyzer **\$349.95**
 MFJ-98 Accessory Pack with
 Dip-Meter Coil, AC Adapter,
 and Carrying Pouch **\$59.95**

**Step Attenuator**

Useful in several receiving or testing situations, this unit can reduce RF signals in 1 dB increments up to a total of 81 dB of attenuation. You can reduce out-of-band signals and cross-modulation. And if you like to Fox Hunt, use it to reduce signal and calibrate your S-meter. It's a handy calibration device for a range of test equipment, with BNC female connectors and includes SO-239 adapters. It's rated at 0 to 170 MHz, and is usable to 500 MHz.

MFJ-762 Step Attenuator **\$89.95**

New!**Precision Antenna
Phase Meter**

Using low power, high-speed, dual comparator circuits, this unit measures phase on any frequency from 1 to 50 MHz. With a 1-volt peak-to-peak RF signal from your antenna analyzer/signal generator, you can read a precision phase measurement from +/- 180 degrees without guessing polarity.

MFJ-222 Precision Antenna Phase Meter **\$149.95**

**Low Pass TVI/RFI Filter**

This filter suppresses TVI, RFI, and other interference, squashing unwanted harmonics. Your HF signal will pass through with a .5 dB insertion loss. This filter will handle a full 1,500 watts, and it covers 1.8 to 30 MHz with an SWR below 1.3:1 into 50 Ω cable.

MFJ-704 Low Pass TVI/RFI Filter **\$59.95**

Palstar**ZM30 Antenna Analyzer**

Palstar's ZM30 Antenna Analyzer measures the SWR of an antenna system across a range of frequencies. This advanced analyzer can be set to sweep across a range of frequencies, or it can provide stable output on any single frequency from 1 MHz through 30 MHz, making the ZM30 an advanced antenna system measurement tool.

This analyzer also serves as an L/C meter, measuring the values of capacitors and inductors within their reactance range of plus or minus 600 Ω impedance. Plus, the ZM30 can be used as a high-resolution signal generator or VFO with frequency steps down to 10 Hz and an output of 2V peak-to-peak. More information is available at DXEngineering.com.

Frequency Generation & Control

- 1 to 30 MHz
- Source Impedance: 50 Ω
- Stability: +/- 50 ppm
- Spectral Purity: Harmonics down >35 dB beyond 30 MHz
- Step Size: User-configurable increments of 10 Hz, 100 Hz, 1 kHz, 10 kHz, and 100 kHz

Usable Measurement Range

- SWR: 1.0 to 9.9
- Impedance: approx. 5 to 600 Ω
- RF Output: 2 Volts p-p (typical)
- Power Supply: External: 9 to 16 Vdc
Internal: Eight AA cells, alkaline or Ni-MH

PAS-ZM30 Antenna Analyzer **\$379.95**



Make Sure You're Ready for Field Day!

SUM-530517

SUM-530502

Work Gloves

Protect your hands during set-up and teardown with these durable and comfortable gloves. Made from synthetic leather, these gloves feature a rubber-reinforced palm to withstand harsh wear. More colors and sizes available, visit DXEngineering.com for the complete lineup.

SUM-530501	Work Gloves, Black, Medium, Pair	\$10.97
SUM-530517	Work Gloves, Black, Medium, Textured Grip, Pair	\$15.97
SUM-530502	Work Gloves, Black, Large, Pair	\$10.97
SUM-530518	Work Gloves, Black, Large, Textured Grip, Pair	\$15.97

New!



Solar Trickle Chargers

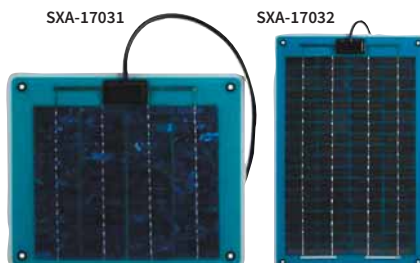
Keep batteries ready to go at a moment's notice. The chargers are ideal for cars, boats, RVs, or any 12-volt battery that sits unused for extended period of time. They plug right into a cigarette lighter socket—just make sure the socket remains on with the vehicle's key out. They're small and portable, so you can carry them into the field or install them in a remote shed or outbuilding that may not have an AC line.

These are the perfect way to keep your Field Day or EMCOMM battery charged during the offseason.

SXA-17031	Solar Trickle Charger, 4.8 Peak Watts, 0.30A Output	\$85.95
SXA-17032	Solar Trickle Charger, 9.5 Peak watts, 0.56A Output	\$122.95

SXA-17031

SXA-17032



New!

Accessories not included.

Portable Organizers

Here's a great way to keep your connectors, terminals, adapters and hardware neat and organized—whether in your shack or in the field. These portable organizers have clear windows to make it easy to see your inventory, with rugged latches to keep things secure. Both organizers have removable dividers to make perfectly sized compartments for your gear.

In addition to being portable, the WMR-W54018 can be mounted to the wall of your shack or trailer.

WMR-W54018	Organizer with 30 Drawers	\$17.97
WMR-W54037	See-Through Organizer with 26 Compartments	\$10.55

Portable Organizers with Removable Bins

These innovative toolboxes let you store your important small accessories in bins that pull out—a handy feature when you're working at your bench and need quick access to parts. Whether you're using nuts, bolts, LEDs, caps, resistors, or any small component, these boxes can help your workspace stay uncluttered. They're also stackable, so you'll be able to stow them away to maximize space in your shack.

HMS-HA0112238	Organizer with 22 Removable Bins, 2.375" Deep	\$10.97
HMS-HA01112425	Organizer with 12 Removable Bins, 4.250" Deep	\$16.97



New!



Folding Canopies

Ideal for Field Day, Hamfests or Portable Operations

Shield yourself—and your equipment—from the wrath of Mother Nature. Set-up is a breeze: these canopies unfold in seconds, with no tools or loose parts. Everything is self-contained and portable with the included storage/carrying case. The frame is made to resist rust with a powdercoat finish and the polyester fabric canopy will combat both rain and sun. The canopy measures 10' x 10' and is 10' high.

OTE-200005	Folding Canopy, Blue	\$159.97
OTE-200006	Folding Canopy, Red	\$159.97
OTE-200007	Folding Canopy, White	\$159.97

New!

DX Engineering Folding Chair

Made from water-resistant poly-canvas, this durable chair is designed for heavy-duty use. This folding chair supports 350 lbs. and is big enough to be comfortable! It is made with super-strong and water-resistant 600 denier poly-canvas and has an H.T. or beverage holder in one arm (Brown 807s, anyone?)

It's perfect for extra seating on the deck or in the yard. When you're looking for a new camp-type folding chair, remember this rugged, large DX Engineering Folding Chair, exclusively from DX Engineering!

DXE-FC-1BK	DX Engineering Folding Chair with Carry Case	\$19.97
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New!



New!

Folding Cart

Haul your Field Day equipment with ease in this handy cart. It's 16 inches tall, 18 inches wide and 15 inches deep, yet folds down small enough to stuff in your trunk. It unfolds in seconds, has an extendable handle and smooth-rolling rubber tires. This cart can also be used to transport your Hamfest treasures!

WMR-W54001	Folding Cart	\$21.97
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New!

Digital 1200 Battery Charger

A battery charger for the 21st century! This charger can recover deeply discharged batteries and extend battery life. It features an LCD display and intuitive GUI that indicates charging status, plus an integrated work light. The Digital 1200 even includes a USB port to charge your smart phone and other USB-powered devices. It accepts 100 to 120 Vac, has up to 14.9 Vdc output and can be used for flooded and AGM batteries—find all the specs at DXEngineering.com.

ULT-150-34178	Digital 1200 Battery Charger	\$199.99
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FREE Standard SHIPPING for Orders Over \$99, See Page 58 for Details



EZ-HZSSK1



EZ-HZ22

Wire Antenna Hanging Tools

No more ladders, no more climbing trees—these durable wire antenna launching tools make it easy for you to hang your antenna from the safety of terra firma. In addition to heavy lead weights, they use tennis ball weights; so you won't damage anything if your aim is a bit off.

The Square Shot has a 300 foot spool of 10-pound-test line, an EZ winder with 500 feet of 155-pound-test line, and an easy hang custom band set. The Hyper Shot takes everything included with the Square Shot, and dials up enough power to clear trees up to 100 feet high!

Make sure to check local laws regarding slingshots before you pull back the band on an EZ Hang kit.

EZH-EZHSSK1 Square Shot Kit\$89.95
EZH-HEZ21 Hyper Shot Kit\$104.95



Stainless Steel Digital Caliper

The only way to make precise outside, inside, step and depth measurements, this ultra-accurate caliper is made to provide years of service. A large LCD screen makes it easy to use. The caliper also features SAE-to-metric conversion, an on/off switch, locking thumb wheel and an instant zero setting.

SUM-900001 Stainless Steel Digital Caliper.....\$24.97



200 Series 15-Piece Rotary Tool Kit

Cut metal, drill holes, sand surfaces, deburr tubing, bevel edges—much has been said about how useful a Dremel Tool can be. This kit is the ideal way to get started. It includes a Dremel tool and accessory organizer. You also get mandrels, sanding drums, grinding stones, polishing tip, felt wheel and a fiberglass-reinforced cut-off wheel. The tool has two speeds and uses a motor with replaceable brushes for an extended life. This kit will show you why the Dremel has become a ubiquitous fixture in workshops across the planet.

DRE-F0130200AE 200 Series 15-Piece Rotary Tool Kit\$49.97



Vaper Electric Heat Gun

Ditch the old "cigarette lighter" method and seal your heat shrink tubing the safe and correct way. You can use it for heat shrink tubing, plastic welding and even paint stripping. This durable gun has two speed settings and two temperature settings to ensure your connections will be sealed right—so you can stop burning your fingertips.

TTN-22400 Vaper Electric Heat Gun.....\$17.97

Battery Disconnect Switch

This switch gives you a quick way to positively shut off power from your battery. This combats unwanted drain, while helping to ensure that your battery remains charged until you need it. Rated for 20 amps continuous, it will also handle short duration surge loads of 125 amps.

SUM-G1432 Battery Disconnect Switch.....\$20.97

Analog Voltmeter Gauges

Keep a close eye on your 12-volt DC power with these precise gauges. With a 10- to 18-volt sweep, these 2.625" diameter backlit gauges will work great in your car, shack or portable rig.

SUM-G2939 Analog Voltmeter Gauge, White Face\$18.97

SUM-G29119 Analog Voltmeter Gauge, Black Face\$25.97



Infrared Digital Laser Pyrometer

Ensure that your expensive equipment is operating at a safe temperature. Just point this pyrometer at the area you'd like to measure, pull the trigger and you instantly get a readout accurate within 3 percent! It has a backlit LCD display and can measure temperatures from 0 to 500 degrees F.

SUM-G1054 Infrared Digital Laser Pyrometer.....\$53.97



Rubber Grommet Assortment Kits

A must-have if you're routing wires and cable through sheet metal; these kits are great for panels, firewalls, enclosures and equipment cases. They contain grommets in assorted sizes and include a handy storage case to keep things organized.

SUM-890091 Grommet Kit, 82 Pieces, from .125" to .688" I.D.\$18.97
SUM-890090 Grommet Kit, 48 Pieces, from .5" to 1" I.D.\$15.97



Solderless Nylon Terminal Kit

A great kit to have in your shack, this kit includes connectors that are tougher, better insulated and more corrosion-resistant than ordinary store-bought ones. You get 180 connectors for 22- to 18- and 12- to 10-gauge wire ranges, all packaged in a neat storage case.

SUM-890093 Solderless Nylon Terminal Kit\$26.97



Shrink Sleeve Assortment

Way better than standard vinyl heat-shrink tubing (which can crack and tear), this tubing is made with professional-grade polyolefin. That helps it better withstand both time and the elements. This kit includes over sixty 6 inch tubes ranging from 1/8" to 3/4" I.D., all housed in a compartmentalized case, so everything stays neat and tidy.

SUM-890092 Shrink Sleeve Assortment.....\$19.97



Step-Drill Bits

These high-speed bits are perfect for adding precise holes to your equipment's chassis, enclosure or cabinet. Made to cut cleanly through sheet metal, these bits are driven more smoothly than traditional bits and automatically deburr the hole as it is drilled.

SUM-900029 Drill Bit, 11 Steps from 3/4" to 1 3/8" Diameter, 1/2" Drive\$29.97
SUM-900025 Drill Bit, 7 Steps from 1/8" to 1/2" Diameter, 3/8" Drive\$15.97



DX ENGINEERING



Zip Ties

Quite possibly the most versatile tools in your shack, you can use these ties for cable management, field repairs, securing gear and more. They are made in UV-resistant black and come in several sizes. Sold in packs of 100.

DXE-1860-100 Zip Ties, 4"\$4.95
DXE-1861-100 Zip Ties, 8"\$5.95
DXE-1862-100 Zip Ties, 11"\$8.95
DXE-1863-100 Zip Ties, 14"\$9.95

Coax Cable Strippers for 50 Ω Cable

These DX Engineering strippers prepare 50 Ω coax cable for installation of a PL-259 connector.

- Work on foam or solid dielectric cable
- Precision, two-step operation
- No nicks or scratches to conductor
- Premium, long-lasting cutter blades

DXE-UT-8213	Coax Cable Stripper for RG-8, RG-213, 9913, LMR400, and Similar Size Cable.....	\$42.95
DXE-UT-808X	Coax Cable Stripper for RG-8X and Belden 9258 Cable	\$42.95
DXE-UT-RB-HD*	Heavy-Duty Replacement Blades, 2 Per Pack	\$18.95

*Also fits Cablematic UT-8000

Connector Assembly Tools

These assembly tools allow simple threading of connector sleeves onto the vinyl jacket of RG-8/U, RG-213/U, LMR-400 and other similar size cables. The DXE-UT-80P assembly tool is for PL-259 connectors, and the DXE-UT-80N assembly is for two-piece Type N connectors. Assembly is simple. Strip the cable with the DXE-UT-8213 Cable Stripping Tool, then use the appropriate connector assembly tool and thread the connector body onto the stripped cable end. A visual guide at the end of the tools allows easy viewing of the cable center conductor for proper depth. You get a perfect and easy connector installation every time!

DXE-UT-80P	Connector Assembly Tool for PL-259 Connectors	\$22.95
DXE-UT-80N	Connector Assembly Tool for 2-piece Type N Connectors.....	\$22.95



SO-239 Mounting Bracket and Connector

If you're building (or repairing) your own gear, then you've probably needed to improvise several SO-239 connector mounting solutions. Here is a 90 degree bracket that you can use to install an SO-239 practically anywhere. It's the perfect match for the DX Engineering Chassis-Mount SO-239 connector. The connector also works well in any hole-mount/chassis mount location.

DXE-SO239BKT-1	SO-239 Mounting Bracket	\$4.95
DXE-SO239D-1	Chassis Mount SO-239 Connector	\$5.50



SO-239 Connector Installation Tool Kit

This versatile tool kit will help you install chassis or bulkhead mount SO-239 coax connectors. It includes a special stainless steel wrench. One end has a 3/4 inch semi-box wrench with a pass-through for coaxial cable—perfect for tightening the large nut used to mount bulkhead connectors. The other end is a 3/16 inch box wrench for tightening mounting nuts with SO-239 hardware. Also included is a multi-purpose 6-in-1 screwdriver/nutdriver tool with the following bits:

- 1/4 inch nutdriver
- 5/16 inch nutdriver
- 1/4 inch flathead
- #1 Phillips
- 3/16 inch flathead
- #2 Phillips

DXE-T001	SO-239 Connector Installation Tool Kit	\$9.95
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More Soldering Irons Online

You'll find a huge range of American Beauty soldering irons available at DXEngineering.com. Visit DXEngineering.com and you'll be able to select the perfect iron for your bench.

Heavy Duty Soldering Irons

Well suited for assembly line electronic production, these irons can handle constant use. They feature an innovative compression-wound heating element that maintains a constant temperature.

AMB-3138-100	Heavy Duty Iron, 100 Watts.....	\$107.95
AMB-3138-150	Heavy Duty Iron, 150 Watts.....	\$107.95
AMB-3158-200	Heavy Duty Iron, 200 Watts.....	\$149.95

Pencil-Style Soldering Irons

Professional quality irons, priced for the hobbyist. You can rely on them to provide consistent temperatures for all of your projects. They're comfortable and maneuverable, ideal for tight chassis and precise solder joints.

AMB-3108-20	Pencil-Style Iron, 20 Watts	\$58.95
AMB-3110-30	Pencil-Style Iron, 30 Watts	\$54.95
AMB-3112-60	Pencil-Style Iron, 60 Watts	\$55.95

Alligator Heat Sinks

AMB-HS-B	Alligator Heat Sink with Comfortable Pinch Pads	\$9.95
AMB-HS-A	Alligator Heat Sink, Micro Size for Delicate Parts.....	\$9.95
AMB-HS-C	Alligator Heat Sink, with 4mm Banana Plug Socket	\$9.95

Paragon Lead-Free Soldering Tips

If you need a precise point for a PCB or high heat transfer for a chassis tab, American Beauty has tips that are reliable and provide excellent heat transfer. These lead-free tips can handle the higher temperatures required for lead-free solder. They feature a solid copper core and are RoHS-compliant. Can't find the one you need? There's a good chance it's at DXEngineering.com.

Part Number	Tip Style	Fits Iron Series	Price
AMB-43C	Chisel	3138, 3138X	\$13.95
AMB-43CU	Chisel	3138, 3138X	\$13.95
AMB-43D	Diamond	3138, 3138X	\$13.95
AMB-43S	Screwdriver	3138, 3138X	\$13.95
AMB-43SBC	Blunt Chisel	3138, 3138X	\$13.95
AMB-43TC	Turned-Down Chisel	3138, 3138X	\$13.95
AMB-44C	Chisel	3158, 3158X	\$25.95
AMB-44D	Diamond	3158, 3158X	\$25.95
AMB-44S	Screwdriver	3158, 3158X	\$25.95

Soldering Supplies and Accessories

AMB-480	Solid Tip Cleaner, Vertical Sponge	\$12.95
AMB-481	Solid Tip Cleaner, Sponge Well Dip	\$14.95
AMB-573	Soldering Iron Cradle, for Ergo-Iron	\$12.95
AMB-SS-8	Solder Sucker Bulb	\$9.75
AMB-CS-ABKIT	Maintenance Kit for All Irons	\$35.95
AMB-9273-150	150 W Heating Element for 3138 Series.....	\$40.95
AMB-CS-38KIT	Maintenance Kit for 3/8" Irons.....	\$24.95
AMB-CS-58KIT	Maintenance Kit for 5/8" Irons.....	\$29.95

New!



American Beauty

PANAVISE®

New!



PVP-201

PVP-209

PVP-301

Vises

PanaVise Vises are ideal for electronic technicians and hobbyists. Several styles are available and there are accessories to expand your vise for specialized uses.

Each PanaVise Vise uses a patented split-ball design, so you can move the vise head in practically any position. You'll be able to manipulate your project to the easiest approach angle, which helps avoid accidental "whacks" with your soldering iron.

PVP-301	Original PanaVise, Nylon Jaws, 2.25" Jaw Width, Standard Base	\$49.49
PVP-381	Original PanaVise, Nylon Jaws, 2.25" Jaw Width, Vacuum Base	\$67.49
PVP-396	PanaVise, Wide Opening Head, 6" Jaw Width, Neoprene Jaws.....	\$62.99
PVP-201	PanaVise Jr. Mini-Vise, 2.875" Jaw Width, Standard Base	\$26.99
PVP-209	PanaVise Jr. Mini-Vise, 2.875" Jaw Width, Vacuum Base	\$31.49

Vise Buddy Jr.

Quickly transform your standard bench vise into a precision vise. The Vise Buddy slips into your bench vise and lets you work with precision components without damaging them. Made from thermal, reinforced plastic, the jaws open to 2.875 inches and are controlled by a single plastic knob.

PVP-207	Vise Buddy Jr.	\$20.99
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PVP-324

PVP-350

Work Centers

These modular PanaVise Work Centers are all-in-one solutions for your workbench.

The Electronics Work Center includes the 315 Circuit Board Holder, 300 Standard Base, 312 Parts Tray Base Mount, and a 371 Solder Station. The Base is compatible with all 300 series vise heads.

Designed for holding bigger, heavier projects, the Multipurpose Work Center has extra-wide jaws that open a full 9 inches. It also features a large base that keeps the vise head steady.

PVP-324	Electronics Work Center	\$89.99
PVP-350	Multipurpose Work Center.....	\$89.99

Vise Accessories and Replacement Parts

PVP-333	Rapid Assembly Circuit Board Holder, 10" Jaw Width	\$87.99
PVP-352	High-Heat Jaw Pads (Pair), Handle 500° F.....	\$11.49
PVP-376	Vise Head with Oversized (9" Wide) Jaws.....	\$53.99

Installation Inspiration.

So, your landlord (or significant other) doesn't want you poking a bunch of holes in your walls to install that new antenna? Here is your answer: Use your windows or vents as passages to complete your connections—without turning your walls into Swiss cheese. These accessories are also ideal for temporary installations. Find more installation solutions at DXEngineering.com.

**Window Feed-Thru Jumper****COMET**

This 16 inch long feed-through lets you slip a flexible cable underneath your window sash. It handles 100 W (PEP), has an SWR under 1.3:1 (below 500 MHz) and uses two SO-239 connectors.

With a nominal loss of .5 dB up to 500 MHz, it's a solution that will please everyone.

CMA-CTC-50M Feed-Thru Jumper.....\$54.95

DIAMOND ANTENNA**Through Window/Door Cable Set**

Pass this set through the narrow openings of a window, door, or even a vent. This 20 inch cable has an SO-239 connector at each end to make installation easy. It can handle up to 150 watts with a VSWR less than 1.2:1 at up to 500 MHz and an insertion loss lower than 1.7 dB.

DMN-MGC50 Through Window/Door Cable Set\$53.95

**Universal Window Feedthrough Panel**

Excellent for multiple connections, this panel fits between your sash and window sill. From there, use the bulkhead-style connectors to run cable into your station. It's 48 inches wide and has four SO-239 connectors, an N-connector, balanced line terminal, random wire terminal, an F-connector and a power terminal.

MFJ-4603 Universal Window Feedthrough Panels\$89.95

MFJ**Precision Shear Side Cutters**

These DX Engineering Precision Shear Side Cutters are the perfect tool for trimming loose strands of copper braid, trimming individual strands of the center conductor.

- Low-profile, general purpose cutter
- Superior blade bypass shear cutting action
- Better cuts with half the effort
- Greatly reduced mechanical shock delivered to the work
- Flush cuts soft wire up to 20 AWG (0.8mm)

DXE-170M Precision Shear Side Cutters.....\$7.95

**300 and 450 Ω Ladder Line**

DX Engineering's 300 and 450 Ω Ladder Line is rated for full legal transmit power. The 300 Ω ladder line is constructed of 18-gauge conductors with 19 strands of copper clad steel wire, resulting in a velocity factor of 0.88. It is ideal for use with multi-band dipoles or other multi-band antennas.

The 450 Ω ladder line is constructed of 16-gauge conductors with 19 strands of copper clad steel wire. It is ideal for use with our Reversible Beverage Antenna system DXE-RBS-1P. The wire makes the line strong enough for long horizontal runs between supports. Actual impedance is a nominal 400 Ω with a nominal velocity factor of 91%.

300 Ω Ladder Line

DXE-LL300-1C	Ladder Line, 100'	\$41.00
DXE-LL300-2C	Ladder Line, 200'	\$75.00
DXE-LL300-3C	Ladder Line, 300'	\$115.00
DXE-LL300-4C	Ladder Line, 400'	\$147.00
DXE-LL300-5C	Ladder Line, 500'	\$169.00

450 Ω Ladder Line

DXE-LL450-5C	Ladder Line, 500' Spool.....	\$245.00
DXE-LL450-CTL	Ladder Line.....	per foot \$0.45
DXE-LL450-1K	Ladder Line, 1,000' Spool.....	\$449.99
DXE-LL-INS	Ladder Line Supports for 450 Ω line, 25 Per Pack	\$9.75
DXE-LLC-1P	Ladder Line Coupler for 450 and 300 Ω Ladder Line	\$4.95

**75 Ω F6 Style, Direct-Bury Coax**

We recommend using a high quality 75 Ω "flooded" F6 type coax. Flooded style cables have the distinct advantage of automatically sealing small accidental cuts or lacerations of the jacket. Flooding also prevents shield contamination and allows the cable to be direct-buried. This low-loss cable features dual shields and an 85% velocity factor.

We recommend using Snap-N-Seal® connectors to ensure a high quality, weather resistant feedline connection. The proper tools must be used to install these connectors.

DXE-F6-CTL	F-6 Style Direct-Bury Coax.....	per foot \$0.19
DXE-F6-1000	F-6 Style Direct-Bury Coax, 1,000' Spool.....	\$149.95
DXE-SNS-CT1	Snap-N-Seal Compression Tool.....	\$52.00
DXE-CPT-659	Coax Cable Stripper for F-6 Cable	\$24.30

Custom Cable Assemblies with connectors available—call for details.

**Coaxial Cable Strippers**

These strippers are simple to use and they deliver a professional, repeatable prep job every time. They feature an adjustable blade that is easy to replace. No special cartridge necessary.

DXE-15030	Stripper for CATV and RG-58/59/62/66	\$13.95
DXE-15035	Stripper for RG-8, RG-213 and 400MAX	\$19.95

**RG-8X BNC Jumper Cable Assemblies**

These male BNC jumper cables feature secure, crimped connectors and tube-shrink seals, which make them impervious to the elements. They are Hi-Pot tested. In addition to 50 Ω assemblies, there are 75 Ω assemblies available as well.

DXE-8XDB002	RG-8X BNC Jumper Cable, 2'	\$14.25
DXE-8XDB003	RG-8X BNC Jumper Cable, 3'	\$14.75
DXE-8XDB006	RG-8X BNC Jumper Cable, 6'	\$15.75
DXE-8XDB012	RG-8X BNC Jumper Cable, 12'	\$17.75
DXE-8XDB025	RG-8X BNC Jumper Cable, 25'	\$21.75
DXE-8XDB050	RG-8X BNC Jumper Cable, 50'	\$32.75

KLEIN TOOLS, INC.**Klein-Kurve Wire Stripper/Cutter**

The Klein-Kurve wire strippers are ideal for stripping solid (10-18 AWG) and stranded (12-20 AWG) wire cleanly and easily. The 7 1/8 inch strippers also have precise shear-type blades to neatly cut copper wire, easy-to-read markings on both sides, and extra-soft grips and curved handles for comfort.

KLE-11055 Klein-Kurve Wire Stripper/Cutter\$17.16

3/4 Inch Crimping/Cutting Tool

This Klein crimping and cutting tool crimps insulated and non-insulated connectors. The crimping die is marked for insulated and non-insulated solderless terminals and connectors, and accommodates 10-22 AWG wires. The tool has a specially hardened wire cutter in the nose, a tapered nose design for working in confined spaces, a hot-riveted joint for smooth action, and plastic-dipped, cushioned handles for comfort.

KLE-1005 Crimping/Cutting Tool.....\$26.02

Automatic Wire Stripper/Crimper/Cutter

This DXE-Approved Wire Stripper uses a spring-loaded design to make quick work of wires ranging from 24- to 10-gauge. Just insert the wire, squeeze the handle, and listen for the click. That's the sound of another perfect wire stripping job performed in about 2 seconds—a fraction of the time it takes your pocket knife to do the same job. An adjustable wire length guide helps you make uniform strips, and the built-in wire cutter and crimper help you complete your wiring job.

SUM-900031 Automatic Wire Stripper/Crimper/Cutter\$18.97

DIAMOND ANTENNA**New!****Antenna Adapter Cable**

Make quick, in-shack hookups easier. This 4 foot cable has a male SMA connector on one end and a SO-239 connector on the other. This cable is perfect for hooking up a scanner or your HT.

DMN-C104SMA Adapter Cable.....\$16.95



Order your in-stock parts by 10 pm ET and they'll ship today!

CHANNELLOCK Coax Cable Cutters

These high-quality CHANNELLOCK cable cutters have blades designed to cut coaxial cable cleanly. They will not crush the cable like diagonal side cutters—the cut end of the cable is cleanly cut, ready for stripping and connector assembly. The cutters are made from polished, high carbon drop forged steel and are carefully balanced with broader handles for better leverage and extra comfort. The cutters can handle aluminum up to 4/0-gauge and soft copper cable up to 2/0-gauge.

CNL-911 CHANNELLOCK
Coax Cable Cutters\$18.97

Coax Cable Prep Kits

These kits package the most commonly used coax cable prep tools together. The rugged cases have foam inserts pre-cut for the tools plus extra compartments for other tools, connectors, etc. The case is also available separately.

Basic Prep Kit

- Stripping tool for RG-213 cable
- Coaxial cable shears • Case
- Assembly tool for PL-259 connectors

DXE-UT-KIT1-D Basic Prep Kit\$99.95

Complete Prep Kit

- Stripping tool for RG-213 cable
- Stripping tool for RG-8X cable
- Assembly tool for PL-259 connectors
- Assembly tool for 2-piece N connectors
- Coaxial cable shears
- Precision braid trimmers
- Case

DXE-UT-KIT2-D Complete Prep Kit.....\$174.95

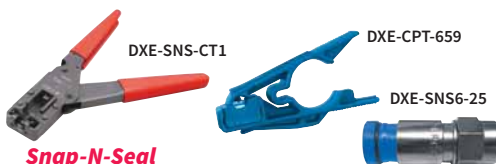
DXE-UT-CASE Case Only for Coax Tools.....\$22.95

Utility Tool Cases

If you want a universal case, these Utility Models have low-density convoluted foam that conforms to the contents. They have snap latches and can be padlocked for extra security.

DXE-SW-CASE Tool Case, 13" x 9.6" x 3"\$13.95

DXE-SW2-CASE Tool Case, 15" x 12" x 3.5"\$11.95



Snap-N-Seal Watertight Connectors

Snap-N-Seal is an environmentally sealed Type F coax connector system. Designed for harsh environments, the connectors have a unique, 360 degree radial compression system that offers the signal leakage protection required for high performance receive systems.

The quad-sealed system prevents moisture from migrating into the connection, and 360 degree radial compression provides superior RF integrity (-95dB typical, 60% bonded foil cable).

- Easy cable preparation
- Connector to cable retention: 40 lbs. minimum
- Superb impedance match to 1 GHz
- Manufactured of high quality 360 brass, cadmium plated with iridescent clear chromate coating for maximum corrosion resistance
- UV-resistant plastic and O-rings provide a reliable environmentally sealed connector

Normal crimping tools or pliers will not work on Snap-N-Seal connectors—an installation tool like DX Engineering's DXE-SNS-CT1 is required.

DXE-SNS6-25 Snap-N-Seal Connector for F6 cable, 25 pieces\$25.50

DXE-SNS-CT1 Compression Tool for Snap-N-Seal Connectors\$52.00

DXE-CPT-659 Coax Cable Stripper for RG-6 and RG-59\$24.30

DX ENGINEERING®

A Complete Crimping Solution.
For Coaxial Cable and Powerpole® Connectors.

Ultra-Crimp



New!

Ultra-Crimp Tool Connector Kit

Made precisely for coaxial and Powerpole® connectors, this kit is filled with the exact prep tools and dies you'll need to make full-ferrule connections. The kit comes with the Ultra-Crimp Tool, shears, braid trimmer, Allen wrench and case. It also includes crimp dies for RG-8U, RG-8X, LMR-400, and LMR-240 cable, plus a crimp die for Powerpole 15A, 30A and 45A connectors.

The Ultra-Crimp Tool, interchangeable dies and specialized carrying case are also available separately.

DXE-UT-KIT-CRIMP Ultra-Crimp Connector Kit\$113.95

DXE-UT-CRIMP Ultra-Crimp Tool with RG-8U Die Set.....\$38.95

DXE-UT-CRIMP-PWR Ultra-Crimp Tool with Powerpole® Die Set.....\$38.95

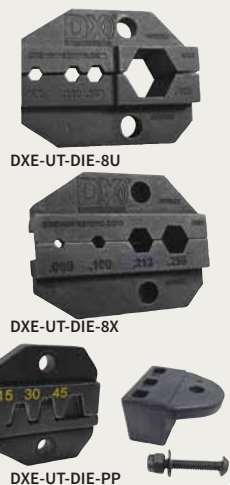
DXE-UT-CRIMP-8X Ultra-Crimp Tool with RG-8X Die Set.....\$38.95

DXE-UT-DIE-8U Crimp Tool Die, for RG-8U Sized Cable.....\$14.49

DXE-UT-DIE-8X Crimp Tool Die, for RG-8X and RG-58U Sized Cable.....\$14.49

DXE-UT-DIE-PP Crimp Tool Die, for Powerpole® 15A, 30A, 45A Contacts.....\$14.49

DXE-CRIMP-CASE Crimp Connector Tool Case\$22.95



F-Connector 75 Ω Cable Prep Tool Kit

- Stripping tool for F6 cable
- Snap-N-Seal® watertight F-Connectors (25 total)
- SNS connector compression tool
- Coaxial cable shears
- F-Connector tightening tool
- Case

DXE-UT-KITF Prep Kit for F6 Cable\$149.95

DXE-F6-CASE Case Only.....\$22.95



DX Engineering F-Connector Tightening Tool

This tool installs and removes F connectors in high density and hard to reach locations. It helps ensure proper connections to reduce the possibility of loose connector related problems. It is the only tool that works with bent coax. Only finger force is required.

DXE-CIT-1 F-Connector Tightening Tool.....\$9.99



3M™

Scotch® Super 33+ Vinyl Electrical Tape

Scotch Super 33+ is highly conformable and stretchable, suitable for all weather applications. The tape combines a PVC backing with excellent electrical insulating properties to provide primary electrical insulation for splices (up to 600V) as well as protective jacketing. It is recommended as a protective overwrap for 3M Temflex™ Rubber Splicing Tape when used for RF connector weatherproofing.

TRM-06132 Scotch Super 33+ Vinyl Electrical Tape.....\$6.97



3M Temflex™ 2155 Rubber Splicing Tape

3M Temflex 2155 Rubber Splicing Tape is a conformable, self-fusing rubber electrical insulating tape. Designed for low voltage electrical insulating and moisture sealing applications, the rubber-based tape is capable of operating in temperatures up to 80 degrees C. It is compatible with synthetic cable and wire insulations and is not corrosive to aluminum or copper conductors. For outdoor use, the tape should be protected from UV deterioration with an overwrap of Scotch Super 33+ Vinyl Electrical Tape.

DXE-3M2155 3M Temflex 2155 Rubber Splicing Tape\$5.95





Adapter Cables

Get your gear up and running quickly. These RG-188 adapter cables let you connect various types of equipment and antennas without significant insertion loss. Find more adapters at DXEngineering.com.

Part Number	Connector 1	Connector 2	Length	Price
CMA-HB-05	SMA Male	BNC Female	18"	\$14.95
CMA-HM-05	BNC Male	SO-239	18"	\$14.95
CMA-HM-05JSJ	SMA Female	SO-239	18"	\$15.95
CMA-HS-05	SMA Male	SO-239	18"	\$11.95
CMA-HS-10	SMA Male	SO-239	39"	\$17.95

Premium Copper Antenna Wire

Use DX Engineering antenna wire to achieve top performance and long-life, trouble-free operation. This insulated copper wire is UV-resistant and lays out easily, unlike the wire that is commonly available at the "big box" stores which coils and kinks. It will last much longer in contact with the environment than bare wire. It is available in pre-cut lengths for easy dipole assembly, or in bulk lengths of 500 and 1,000 feet.

- Heavy #14 AWG stranded copper antenna wire
- UV-resistant insulation
- Reduces precipitation static
- Long, reliable life

DXE-ANTW-75	#14 Insulated Antenna Wire, 40M & Up, 75'	\$11.45
DXE-ANTW-150	#14 Insulated Antenna Wire, 80M & Up, 150'	\$20.95
DXE-ANTW-300	#14 Insulated Antenna Wire, 160M & Up, 300'	\$39.95
DXE-ANTW-500	#14 Insulated Antenna Wire, Multiple Antennas, 500'	\$74.95
DXE-ANTW-1000	#14 Insulated Antenna Wire, Multiple Antennas, 1,000'	\$142.95



DXE-Q75-10-4P



Hybrid Array Cables

DXE-Q75-160-4P	Hybrid Array Cable, 160M, DXE-11U, PL-259 Connectors	\$446.95
DXE-Q75-80-4P	Hybrid Array Cable, 80M, DXE-11U, PL-259 Connectors	\$259.95
DXE-Q75-40-4P	Hybrid Array Cable, 40M, DXE-11U, PL-259 Connectors	\$169.95
DXE-Q75-30-4P	Hybrid Array Cable, 30M, DXE-11U, PL-259 Connectors	\$152.95
DXE-Q75-20-4P	Hybrid Array Cable, 20M, DXE-11U, PL-259 Connectors	\$142.95
DXE-Q75-15-4P	Hybrid Array Cable, 15M, DXE-11U, PL-259 Connectors	\$133.95
DXE-Q75-10-4P	Hybrid Array Cable, 10M, DXE-11U, PL-259 Connectors	\$131.95

Accessories

COM-CW4	4-Conductor Control Cable	per foot \$0.28
COM-VFA-1	Vertical Feedpoint Assembly	\$15.95
COM-VFA-4	Vertical Feedpoint Assembly, Set of 4	\$49.95
DXE-RADP-3	Stainless Steel Radial Plate with 20 Bolt Sets	\$54.50
DXE-SSVC-2P	V-Saddle Clamp, Fits 1" to 2" Tube	\$11.95

Rotator Accessories

DXE-UBK-HYG-1	Replacement U-Bolt (single) Kit for Hy-Gain HAM-Series/CD-45	\$4.50
DXE-UBK-HYG-2	Replacement U-Bolt (single) Kit for Hy-Gain T2X Rotor	\$5.50

Multi-Conductor Control Wire

DXE-CW9	Shielded Control Wire, 9-Conductor	per foot \$0.32
DXE-CW9-1K	Shielded Control Wire, 9-Conductor, 1,000' Spool	\$229.00
DXE-CW9S	Shielded Control Wire, 9-Conductor Stranded	per foot \$0.36
DXE-CW8	Control Wire, 8-Conductor	per foot \$0.48
DXE-CW8-HD	Control Wire, 8-Conductor, Heavy-Duty	per foot \$0.89
DXE-CW8-HD-1000	Control Cable, 8-Conductor, Heavy-Duty, 1,000' Spool	\$835.75
COM-CW3	Cable, 3-Conductor	per foot \$0.25
COM-CW4	Cable, 4-Conductor	per foot \$0.25

You'll find the Rotators & Controllers on pages 56-57.

Amphenol® Connex

New!



AMP-112116



AMP-112533



AMP-172100



AMP-182130-10



AMP-172102



AMP-172135



AMP-182100



AMP-182102



AMP-182115-10

Crimp Connectors

All your precision Ham gear doesn't mean much if you're not using the proper coaxial cable connections. DX Engineering carries Amphenol Connex crimp connectors to ensure your gear is operating at its full potential. Depending on the type, these crimp connectors feature nickel or silver plated bodies, gold or silver plated center pins and PTFE insulators. Find even more details and options, along with the proper crimping/stripping tools, at DXEngineering.com.

Part Number	Connector	For Cable Type	Price
AMP-112116	BNC Male	RG-58/LMR-195	\$1.59
AMP-112533	BNC Male	RG-8X/LMR-240	\$1.78
AMP-172100	Type N Male	RG-58/LMR-195	\$4.01
AMP-172102	Type N Male	RG-8/RG-213/RG-393	\$4.35
AMP-172102H243	Type N Male	DXE-8U/DXE-400MAX/LMR-400	\$3.91
AMP-172135	Type N Male	RG-8X/LMR-240	\$4.38
AMP-182100	PL-259	RG-58/LMR-240	\$4.14
AMP-182102	PL-259	RG-8/RG-213/RG-393	\$3.95
AMP-182115-10	PL-259	RG-8X/LMR-240	\$4.50
AMP-182130-10	PL-259	DXE-8U/DXE-400MAX/LMR-400	\$4.50

75 Ω F6 Style, Direct-Bury Coax

We recommend using a high quality 75 Ω "flooded" F6 type coax. Flooded style cables have the distinct advantage of automatically sealing small accidental cuts or lacerations of the jacket. Flooding also prevents shield contamination and allows the cable to be direct-buried. This low-loss cable features dual shields and an 85% velocity factor.

We recommend using Snap-N-Seal® connectors to ensure a high quality, weather resistant feedline connection. The proper tools must be used to install these connectors.

DXE-F6-CTL	F-6 Style Direct-Bury Coax	per foot \$0.19
DXE-F6-1000	F-6 Style Direct-Bury Coax, 1,000' Spool	\$149.95
DXE-SNS-CT1	Snap-N-Seal Compression Tool	\$52.00
DXE-UCS-659	Coax Cable Stripper for F-6 Cable	\$24.30

Custom Cable Assemblies with connectors available—call for details.

Always the Best Cable at the Lowest Price

Made to DX Engineering's Rigid Specifications. Available in full spools or cut to your custom length.

Bulk Cable	Impedance	Length	Price
Low-Loss Mini-8 Cable			
DXE-8X	50 Ω	per foot	\$0.31
DXE-8X-1000	50 Ω	1,000'	\$259.99
Low-Loss Cable			
DXE-213U	50 Ω	per foot	\$0.89
DXE-213U-500	50 Ω	500'	\$409.99
DXE-11U	75 Ω	per foot	\$0.52
Premium Low-Loss Cable			
DXE-400MAX	50 Ω	per foot	\$0.82
DXE-400MAX-500	50 Ω	500'	\$364.99
Low-Loss Foam Cable			
DXE-8U	50 Ω	per foot	\$0.79
DXE-8U-500	50 Ω	500'	\$359.99
Highly Flexible Cable			
DXE-58AU	50 Ω	per foot	\$0.29
Flooded Jacket Cable			
DXE-F6-CTL	75 Ω	per foot	\$0.19
DXE-F6-1000	75 Ω	1,000'	\$149.95



Order your in-stock parts by 10 pm ET and they'll ship today!



Low-Loss Long Line Transformer Kit

At last—an ultra-low loss, cost effective, long line feedline system for 50 Ω HF antennas! This transmission line alternative is designed to be used over long runs where coaxial cable losses and cost become prohibitive. The kit consists of a pair of special high power 450 Ω balanced to 50 Ω unbalanced line transformers that can be used at each end of any length of 450 Ω parallel wire transmission line. This allows you to create a cost-effective, low-loss, very long feedline to connect a 50 Ω HF transmitter or transceiver to a distant matched 50 Ω HF antenna system.

Typical system loss over 1,000 feet is 1 dB or less at 10 MHz!

The special Maxi-Core™ high-power matching transformers include internal current chokes. They provide exceptional common-mode current isolation

between their 450 Ω balanced line terminals and their unbalanced 50 Ω coaxial cable connections over a wide frequency range. High common-mode isolation from internal chokes, along with the carefully balanced matching transformers, significantly reduces stray signal reception and feedline radiation when compared to other less-sophisticated matching methods.

- 1.8 MHz through 30 MHz—broadband for the widest range of applications
- 5 kW continuous/10 kW intermittent power rating for maximum dependability
- Top quality Teflon® SO-239 connectors
- Ceramic insulators with stainless steel connection hardware for the 450 Ω ladder line
- Transmission line available separately



DXE-BAL450H10-BP	Special Line Transformer, Pair	\$299.95
DXE-LL450-5C	450 Ω Ladder Line, 500' Spool.....	\$245.00
DXE-LL450-1K	450 Ω Ladder Line, 1,000' Spool	\$449.99
DXE-LL-INS	Ladder Line Supports, 25 Per Pack.....	\$9.75
DXE-LLC-1P	Ladder Line Coupler.....	\$4.95

Coaxial Connector Adapters

DX Engineering has a selection of assorted adapters for connecting cables with different type connectors.

UHF Right Angle Adapter

DXE-532\$5.95

UHF Tee Adapter

DXE-533\$7.95

UHF Female Barrel Adapter

DXE-536\$2.95

UHF Double Male Adapter

DXE-538\$4.95

N Tee Adapter, All Female

DXE-1011-1.....\$11.95

N Right Angle Adapter

DXE-1012-1.....\$10.95

N Double Female Barrel Adapter

DXE-1013-1.....\$7.95

N Male to UHF Female Adapter

DXE-1035-1.....\$7.95

N Female to UHF Male Adapter

DXE-1036-1.....\$5.95

N Male to BNC Female Adapter

DXE-1037-1.....\$6.95

N Double Female Bulkhead Adapter

DXE-1023\$7.95

BNC Double Female Barrel Adapter

DXE-1134\$2.95

BNC Female to F Male Adapter

DXE-1144\$4.95

BNC Male to UHF Female Adapter

DXE-1136\$5.95

BNC Female to UHF Male Adapter

DXE-1137\$5.95

BNC Male to F Female Adapter

DXE-1155\$3.95

F Double Female Bulkhead Adapter

DXE-1477\$1.95

N Female to BNC Male Adapter

DXE-1038-1.....\$7.95



Silver/PTFE

Coax Connectors

This superior PL-259 connector uses silver plated outer and inner conductors and a PTFE insulator. The connector has very low loss and high electrical breakdown. It fits directly on RG-8, RG-213, LMR-400, 9913 and other cables with a nominal .400 inch O.D. jacket size.

Use a DXE-UG175 reducer with this connector to fit RG-58A/U and/or LMR195 coax, and a DXE-UG176S reducer to fit RG-8X coax.

DXE-PL-259	PL-259 Connector	\$2.75
DXE-N1001-S	N Male Connector, 2-Piece.....	\$6.95
DXE-UG176S	RG-8X Reducer for PL-259, Silver Plated.....	\$0.75
DXE-UG175S	RG-58 Reducer for PL-259, Silver Plated.....	\$0.75



Chassis Mount

SO-239 Connectors

DX Engineering offers Amphenol and non-Amphenol brand SO-239 chassis mount connectors. The connectors come with the correct bolts, flat washers, star washers and Nylok locking nuts. These will fit the DX Engineering Radial Plate perfectly.

DXE-112-KIT	SO-239 with Silver Plating and PTFE Insulation	\$6.45
DXE-83-798-KIT	Amphenol SO-239 with PTFE Insulation	\$8.95
DXE-83-1R-KIT	Amphenol SO-239 with PBT Insulation	\$7.95
DXE-VC-0612	Black Vinyl Cap for SO-239, Pack of 20	\$5.75
DXE-T001	Installation Tool Kit for SO-239/Bulkhead Connectors.....	\$9.95



Female Bulkhead Connector

This high-quality bulkhead connector uses silver plated outer and inner conductors and a PTFE insulator. The connector has very low-loss and high electrical breakdown. It comes with two nuts to secure the connector to our Radial Plate or other flat surface. The connector ensures the radial ground system, the antenna ground, and the feedline shield are common. It can also be used for joining two pieces of coax with male PL-259s together.

DXE-363-SST	Bulkhead Connector with SO-239 Socket	\$6.95
DXE-T001	Installation Tool Kit for SO-239/Bulkhead Connectors.....	\$9.95



About RF Connectors

Many different types of coaxial RF connectors are used in laboratory and radio-communications applications. The connectors listed here are the most common types used by Amateur Radio operators:

Type N—This cable connector is found in many UHF and higher applications up to about 10 GHz. It is designed to present constant impedance from end-to-end of a length of transmission line. Most transmit and receive communications applications use the 50 Ω version to match the impedance of commonly

used RF coaxial cables and equipment. The Type N has a threaded outer coupling to ensure it mates positively and securely.

UHF—One of the first coaxial connectors, this is also known as a PL-259 (a carry-over from an old military designation). The UHF designation has been applied since the days when 30 MHz was considered UHF. The connector has an SO-239 socket and a threaded outer coupling to ensure that it mates positively and securely.

The perceived drawback of the UHF connector is that it is not a true 50 Ω connector, allowing a non-constant impedance connection. While this limits its use to frequencies up to about 300 MHz, the UHF connector is an ideal, low-cost solution for HF applications. Because the basic junction is simple, many low-cost, low-quality versions are available.

DX Engineering has selected the best silver plated, PTFE insulated connectors to assure the best performance for your HF, VHF and UHF applications.

Find it Fast.

As you flip through these pages, you've probably noticed that we've added dozens of new products to help equip your shack and installations. But all of these new products and pages add up quickly. To help you navigate through it all, we've created this handy index. Plus, if you want to just see everything that's new to this catalog, check out the back cover. There's another index there that only includes the newest products.

New!

We've added so much new gear that we couldn't cram it all in here—the catalog would be so huge that it couldn't fit in your mailbox! Visit DXEngineering.com to see everything we carry, including all the products that were too new to make it in by our catalog deadline. We're always adding new products, tools and gear to improve your on-air experience, so check back often to see the latest.

If there's something you need from a manufacturer we carry, but it's not listed here or online, call us: 1-800-777-0703. Special ordering anything from our manufacturers is hassle-free.



Part	Page(s)
A	
Amplifiers:	21-24
Antenna Analyzers:	94
Antenna Hardware:	48, 49, 54, 64, 86
Antenna Switches:	78, 79
Antenna Tuners:	5, 10, 25-29, 91
Antennas: Directional:	50-55, 88, 89, 92, 93
Antennas: Discone:	87, 88, 93
Antennas: Handheld:	90-91
Antennas: Loop:	54, 80, 93
Antennas: Mobile:	82-84, 86, 88, 92, 93
Antennas: Mobile Mounts:	83-87
Antennas: Phased Arrays:	51, 67
Antennas: Receiving:	68-72
Antennas: Satellite:	54
Antennas: Stealth:	80
Antennas: Vertical:	62-66, 88, 89, 92, 93
Antennas: Wi-Fi:	92
Antennas: Wire:	76, 77
Apparel:	60
Audio Accessories:	12-14
B	
Baluns:	73, 74, 75
Battery Accessories:	38-41, 95
Books:	60, 73
Brackets:	97
C	
Cables:	9, 14, 15, 17, 22, 23, 25, 28, 32, 56, 67, 79, 85, 98, 100, 103
Chokes:	69, 73
Clamps:	32, 42-44
Clocks:	19
Connectors:	32, 40, 99-101
D	
Digital Modes:	15
Digital Signal Processing:	10, 12, 71
Dummy Loads:	18
Duplexers:	81
F	
Field Day:	95
E	
EMCOMM	41
G	
Generators:	41
Grounding:	30-32

Part	Page(s)
H	
Headsets:	12
K	
Keys:	10, 15-17, 41
Keys:	16
L	
Lightning Protection:	30, 31, 32, 57
M	
Meters:	18, 41, 94
Microphones:	13
Mobile Radio Mounts:	11
P	
Power Accessories:	33, 34, 36-41, 95
Power Supplies:	33-37
Preamplifiers:	13, 24, 68, 91
R	
Radial Plates:	64, 88
Radials:	64
Receivers:	8
Rotor Controllers:	41, 56, 57
Rotors:	56, 57
S	
Shack Accessories:	9, 16, 17, 22, 60, 95
Shortwave Listening:	10, 77, 92
Software:	8, 9, 49
Solar Charging Systems:	39, 95
Soldering Irons:	97
Speakers:	10
T	
Tools:	2, 32, 40, 44, 46, 96-99
Tower Mounting:	45-47, 48, 49, 51, 64, 76
Towers:	46, 47
Transceivers- Accessories:	4-8
Transceivers- Base:	3
Transceivers- Handheld:	7
Transceivers- Mobile:	4, 5, 41
Triplexers:	81
Tubing:	44-46
U	
UNUNs:	73, 75, 86
V	
Vices:	97
W	
Warranty:	58
Weather Stations:	20, 21

Manufacturer	Page(s)
3M	99
A-iPower	41
Alpha Delta	30, 31, 75, 78
American Beauty	97
Ameritron	18, 19, 22, 23, 34, 78, 79, 85
Amphenol Connex	100
ARRL	60
Astron	34, 35, 38, 40
Benchner	16, 50
Butternut	66
Channellock	99
Comet	18, 45, 79, 82, 83, 88, 90, 92, 94, 98, 100
COMTEK SYSTEMS	50, 63, 67, 73, 74, 100
CQ Magazine	60, 73
Create Antennas	50
Cushcraft	52, 53, 66
Daiwa	19, 78
Davis Instruments	21
Deltran (Battery Tender)	39
Diamond	18, 30, 34, 41, 76, 78, 81, 84, 85, 87, 87, 89, 89, 90, 91, 98
Dremel	96
DX Engineering	2, 9, 29, 30, 31, 32, 40, 42, 43, 44, 45, 46, 48, 49, 51, 56, 60, 62, 63, 64, 65, 67, 68, 69, 70, 71, 73, 74, 75, 76, 79, 80, 86, 91, 95, 96, 97, 98, 99, 100, 101, 103
EZ Hang	96
Flag Pole Buddy	51
Georgia Copper	31
Green Heron	41, 56
Gripple	46, 47
Heil Sound	12, 13, 14
Hi-Z	72
Homak	95
Hustler	65, 66, 86, 87
Hy-Gain	51, 56, 57, 65, 66, 73, 76
Icom	3, 4, 5, 6, 7, 8, 41, 60, 87, 91
Kent Keys	16
Klein Tools	98
La Crosse Technology	19, 20
LDG Electronics	13, 18, 25, 73, 88
Lido	11
M2 Antennas	21, 54, 55, 57
Maldol	66, 86, 90
MFJ	10, 12, 13, 16, 17, 18, 19, 26, 27, 28, 29, 33, 34, 38, 41, 71, 76, 77, 78, 80, 83, 91, 92, 93, 94
Mirage	24, 91
NCG Company	86
On the Edge Marketing	95
Optima Batteries	39, 40, 95
Palstar	10, 17, 18, 27, 73, 94
PanaVise	97
Performance Tool	95
Phillystran	46
Pixel Technologies	61
PolyPhaser	30, 31, 32, 57
Powermaster	39
RigExpert	61, 78
Rohn	46, 47, 49
Ronard	47
RT Systems	9
Samlex	36, 37, 38, 39, 95
Summit Racing Equipment	41, 95, 96, 98
Synthetic Textile Industries	76
TBX Towers	61
Telrex	50
Tigertronics	17
Vectronics	18
Vibroplex	16, 60
West Mountain Radio	10, 15, 32, 38, 40, 41

Order your in-stock parts by 10 pm ET and they'll ship today!

DX Engineering

#1 Rated High Performance Cable and Assemblies

All DX Engineering cable assemblies use high-quality coaxial cable. Each assembly is 100% Hi-Pot/high voltage-tested to guarantee a quality cable you can count on in the most severe operating environments.

DXE-8U cable has a PVC jacket and is normally recommended for indoor applications or protected areas where ultraviolet contamination is unlikely to occur. DXE-RG-8U is no longer a government MIL-spec cable, which means cable construction can vary by manufacturer. When in doubt, use DXE-213U cable.

DXE-213U has a non-contaminating PVC jacket and solid PE dielectric for long life in most outdoor applications.

DXE-8X (sometimes called Mini-8) is a low-loss foam dielectric cable somewhat smaller than DXE-RG-8U. It is suitable for most HF applications where less than maximum power is used. Its high flexibility makes it ideal for short, in-shack jumper cables.

DX Engineering's special DXE-400MAX cable has a low-loss, gas-injected foam polyethylene dielectric, a bonded tape foil covered by a braided copper shield, and a special low density polyethylene jacket for outdoor use and direct-burial.



DXE -400MAX Low -Loss Cable
<p>UV-Resistant, Black PE Jacket</p>

Gas-Injected Foam Won't Absorb Water

- Low-loss, gas-injected foam polyethylene dielectric bonded foil covered by a braided copper shield
- .405" low-density polyethylene jacket is UV resistant, ideal for outdoor use
- Direct-bury

Attenuation/ 100 ft.	Power Rating	Efficiency %
0.3 dB @ 5 MHz	6.9 kW	93 %
0.5 dB @ 10 MHz	4.8 kW	90 %
0.8 dB @ 30 MHz	2.8 kW	83 %
1.1 dB @ 50 MHz	2.1 kW	79 %
1.8 dB @ 150 MHz	1.2 kW	65 %
3.3 dB @ 450 MHz	0.7 kW	47 %

Velocity Factor: 84% (0.84)
Minimum Bend Radius: 6" Repeated Bends 2.5" Fixed Install

DXE -8U Low -Loss Foam Dielectric Cable
<p>Black PVC Jacket</p>

Gas-Injected Foam Won't Absorb Water

- Low-loss, gas-injected foam polyethylene dielectric
- .405" high-flex PVC jacket
- Low-loss foam dielectric
- Braided copper shield

Attenuation/ 100 ft.	Power Rating	Efficiency %
0.3 dB @ 5 MHz	5.4 kW	93 %
0.5 dB @ 10 MHz	4.1 kW	90 %
0.9 dB @ 30 MHz	2.2 kW	81 %
1.2 dB @ 50 MHz	1.8 kW	77 %
2.2 dB @ 150 MHz	1.0 kW	60 %

Velocity Factor: 81% (0.81)
Minimum Bend Radius: 6" Repeated Bends 2.5" Fixed Install

DXE -8X Low -Loss Foam Dielectric Cable (also known as RG-8X or Mini-8)
<p>UV-Resistant, Non-Contaminating, Black PVC Jacket</p>

Gas-Injected Foam Won't Absorb Water

- Low-loss, gas-injected foam polyethylene dielectric
- Very flexible; ideal for short, in-shack jumper cables
- .242 Type II jacket, non-contaminating and UV-resistant, for outdoor use
- Direct-bury

Attenuation/ 100 ft.	Power Rating	Efficiency %
0.6 dB @ 5 MHz	3.0 kW	86 %
0.9 dB @ 10 MHz	2.2 kW	81 %
1.4 dB @ 30 MHz	1.2 kW	69 %
2.0 dB @ 50 MHz	0.9 kW	62 %
3.8 dB @ 150 MHz	0.4 kW	42 %

Velocity Factor: 82% (0.82)
Minimum Bend Radius: 2.4"

DXE -213U MIL -Spec Cable
<p>UV-Resistant, Non-Contaminating, Black PVC Jacket</p>

Solid Dielectric Won't Absorb Water

- Solid Polyethylene Dielectric
- .405 Type II-A jacket is non-contaminating and UV-resistant, suitable for outdoor use
- Direct-bury
- Braided copper shield

Attenuation/ 100 ft.	Power Rating	Efficiency %
0.4 dB @ 5 MHz	4.9 kW	90 %
0.6 dB @ 10 MHz	3.4 kW	87 %
1.0 dB @ 30 MHz	2.0 kW	79 %
1.3 dB @ 50 MHz	1.5 kW	73 %
2.4 dB @ 150 MHz	0.9 kW	57 %

Velocity Factor: 66% (0.66)
Minimum Bend Radius: 5"

DXE-400MAX Low-Loss		
DXE-400MAXDU003	3 Feet	\$20.95
DXE-400MAXDU006	6 Feet	\$23.95
DXE-400MAXDU009	9 Feet	\$26.95
DXE-400MAXDU012	12 Feet	\$28.95
DXE-400MAXDU018	18 Feet	\$30.95
DXE-400MAXDU025	25 Feet	\$43.95
DXE-400MAXDU050	50 Feet	\$68.95
DXE-400MAXDU075	75 Feet	\$96.95
DXE-400MAXDU100	100 Feet	\$118.95
DXE-400MAXDU125	125 Feet	\$147.95
DXE-400MAXDU150	150 Feet	\$178.95
DXE-400MAXDU175	175 Feet	\$206.95
DXE-400MAXDU200	200 Feet	\$236.95
DXE-400MAX	Per Foot	\$0.82
DXE-400MAX-500	500' Spool	\$364.99

DXE-8U Low-Loss Foam Dielectric		
DXE-8UDU002	2 Feet	\$18.95
DXE-8UDU003	3 Feet	\$19.45
DXE-8UDU006	6 Feet	\$22.45
DXE-8UDU009	9 Feet	\$24.95
DXE-8UDU012	12 Feet	\$27.45
DXE-8UDU018	18 Feet	\$29.45
DXE-8UDU025	25 Feet	\$42.45
DXE-8UDU050	50 Feet	\$67.45
DXE-8UDU075	75 Feet	\$95.45
DXE-8UDU100	100 Feet	\$117.45
DXE-8UDU125	125 Feet	\$146.45
DXE-8UDU150	150 Feet	\$176.45
DXE-8UDU175	175 Feet	\$204.45
DXE-8UDU200	200 Feet	\$233.45
DXE-8U	Per Foot	\$0.79
DXE-8U-500	500' Spool	\$359.99

DXE-8X, Low-Loss Foam Dielectric		
DXE-8XDU1-5	1.5 Feet	\$15.95
DXE-8XDU002	2 Feet	\$16.95
DXE-8XDU003	3 Feet	\$17.95
DXE-8XDU006	6 Feet	\$18.95
DXE-8XDU012	12 Feet	\$23.95
DXE-8XDU015	15 Feet	\$24.95
DXE-8XDU018	18 Feet	\$25.95
DXE-8XDU025	25 Feet	\$28.95
DXE-8XDU050	50 Feet	\$36.95
DXE-8XDU075	75 Feet	\$43.95
DXE-8XDU100	100 Feet	\$53.95
DXE-8XDU150	150 Feet	\$78.95
DXE-8X	Per Foot	\$0.31
DXE-8X-1000	1,000' Spool	\$259.99

DXE-213U MIL-Spec		
DXE-213UDU003	3 Feet	\$19.95
DXE-213UDU006	6 Feet	\$22.95
DXE-213UDU012	12 Feet	\$27.95
DXE-213UDU018	18 Feet	\$29.95
DXE-213UDU025	25 Feet	\$42.95
DXE-213UDU050	50 Feet	\$67.95
DXE-213UDU075	75 Feet	\$95.95
DXE-213UDU100	100 Feet	\$117.95
DXE-213UDU125	125 Feet	\$146.95
DXE-213UDU150	150 Feet	\$172.95
DXE-213UDU175	175 Feet	\$205.95
DXE-213UDU200	200 Feet	\$233.95
DXE-213U	Per Foot	\$0.89
DXE-213U-500	500' Spool	\$409.99



Call for special requirements, phasing cables, etc. Whether you're addressing a simple compatibility issue or a tricky technical problem, we'll help you work through it. We're here from 8:30 am to 4:30 pm ET Monday through Friday, ready to offer advice. Log on to DXEngineering.com for more specs to compare your choices.

The Amateur Radio universe is expanding faster than ever with the advent of digital modes. DX Engineering is growing with it, adding products from new manufacturers to keep your station on the leading edge of technology.

New!

To help you see what's new, we've included this handy index that only includes our NEW products. We're always growing and our catalog can't always keep up, so visit DXEngineering.com to see the latest.



New Product Index

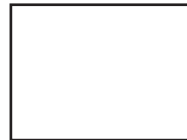
Category Page

New!

Amplifiers	22, 23
Antenna Analyzers	61, 78, 94
Antenna Hardware	49
Antenna Switches	78
Antenna Tuners	24, 25, 27, 28
Antennas: Discone	87
Antennas: Loop	61
Antennas: Mobile & Mounts	85, 86, 87
Antennas: Receiving	72
Antennas: Vertical	62, 88
Antennas: Wire	76
Apparel & Gear	95
Audio Accessories	12, 13, 14
Baluns, UNUNs & Chokes	73
Books	60
Clocks	19
Cable & Connectors	91, 98, 100
CW & Digital Modes	15, 16
DC Power	32, 33, 34, 35, 36, 37, 40, 41, 95
Duplexers & Triplexers	81
Grounding & Lightning Protection	30
Meters	18, 19
Rotators & Controllers	57
Tools	2, 97, 99
Towers	61
Transceivers: Base	4
Transceivers: Handheld	8
Transceivers: Mobile	5
Weather Stations	20, 21

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