

Amateur Radio Products Autumn/Winter 2013

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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**



Accessory	Description	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
Amplifier	ICO-PW1	1 kW Linear Amplifier Power Supply and ATU	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
	ICO-SM-50	Dynamic Stand Mic for HF	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
Level Converter	ICO-CT-17	Transceiver Level Converter, CI-V, RS-232, Remote Jack Cables, Kit	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
	ICO-SP-33	Base Station Speaker	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 controller 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**

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**



Palstar

Genuine Palstar
Accessories Enhance
Your Listening Experience

PAS-SP30HC



PAS-SP30HB



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

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



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.)

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-Y4



HLS-AD-1-Y



HLS-CC-1-XLR-4

HLS-CC-1-XLR-3



HLS-CC-1-IM



HLS-CH-1-IM



HLS-CH-1-IM



HLS-HSTA-PC



HLS-HSTA-IHT



HLS-HTA-VX



HLS-CC-1-XLR-3

HLS-CC-1-XLR-4



HLS-XT-1

HLS-HMCLIP

HLS-WSPPS

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

**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 RS232 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

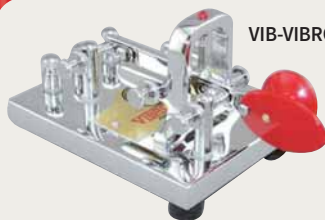


New!

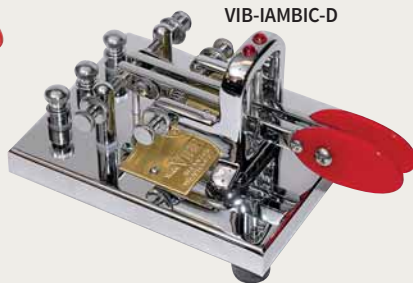
Give RS232 connectivity to your computer. Go from USB to RS232 male OR female with the included adapter. A link to all the drivers you'll need is at DXEngineering.com.

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

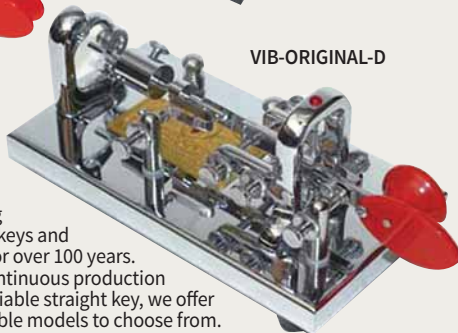


VIB-HK-STD



VIB-IAMBIC-D

VIB-CODEWARR-JR



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

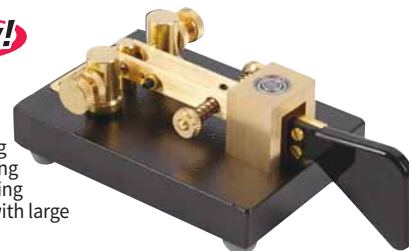
New!

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

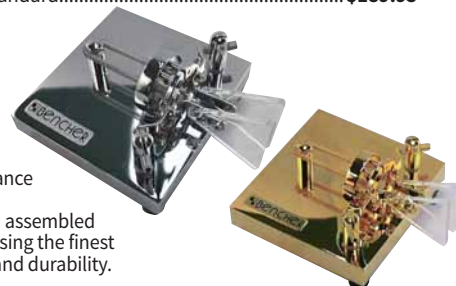
Equip your station with the performance of Bencher keys and accessories. All Bencher products are fabricated and assembled by skilled professionals in the USA, using the finest materials for superior performance and durability.

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.

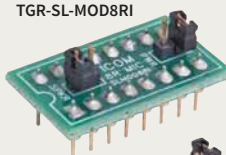
SignalLink Radio Interface Cables

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

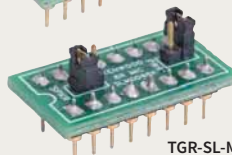
TGR-SL-MOD8RI



TGR-SL-MODKX3



TGR-SL-MOD8RY



TGR-SL-MOD8RK



TGR-SL-CAB13I