#### Calling CQ DX!

You've watched as our Amateur Radio hobby has grown and developed in the 21st century. Ham operators have become more efficient, stations are reaching further and digital modes have changed the way we communicate. We can help you adapt.

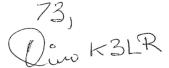
When you order from DX Engineering you'll get the fastest, most convenient shipping in the Amateur Radio universe. Most orders over 99 dollars ship for free. Our fees are straightforward and, whether you're ordering a tower section or a microphone, we can arrange a hassle-free delivery. If you're ordering from outside the United States, you can use our online shipping calculator to get accurate shipping costs before placing your order. That means you won't have any surprises.

We've also listened to your feedback, adding the new parts, tools and accessories that you've asked for. You'll also find exclusive features at DXEngineering.com, like our new Mast Load Estimator. You can use it to help plan your next antenna project.

Rely on us to help answer your questions and provide solutions for your station. I'm proud that nearly every member of our DX Engineering team is an FCC licensed active operator with a wealth of knowledge in Amateur Radio.

DX Engineering is dedicated to bringing you products that are on the cutting edge of Amateur Radio technology. There's no time to sit still, advancements in technology are pushing us forward at a blistering pace. And we can't wait for what's next.

Hope to hear you on the air!





Chief Marketing Officer and General Manager

BBB.

ACCREDITED BUSINESS

**Colossians 3:12-14 -** "Put on then, as God's chosen ones, holy and beloved, compassionate hearts, kindness, humility, meekness, and patience, bearing with one another and, if one has a complaint against another, forgiving each other; as the Lord has forgiven you, so you also must forgive. And above all these put on love, which binds everything together in perfect harmony."

## New! Earn Rewards from Your Purchases!

DX Bucks are like gift certificates to use on future orders from DX Engineering. Keep an eye out for the DX Bucks feature items scattered throughout this catalog and at DXEngineering.com. When you're awarded DX Bucks, you'll get a numbered certificate in the mail about two weeks after we ship your order.

**Redeem By Phone:** Just give us your certificate number when ordering.

**Redeem By Mail:** Include the certificate number with your order. **Redeem Online:** When checking out, you'll see a box to enter in your certificate number. Just type that number in the space and your total will change to reflect your rewards.



Brand	Description	DX Bucks	Page
Comet	Antenna Analyzer	25	99
Cushcraft	Yagis	30	57
DX Engineering	HF Vertical Packages	35	67
DX Engineering	Antenna Switches	35	83
DX Engineering	Ultra-Grip Crimp Tool Kit	10	103
DX Engineering	Coax Cable Tool Kits	10	104
Hy-Gain	Vertical Antennas	15	69
Hy-Gain	Hy-Tower HF Vertical	90	69
Hy-Gain	Verticals	30	69
MFJ	Antenna Analyzer	25	99
M2 Antennas	VHF Amplifiers	75	24
RigExpert	Antenna Analyzer	30	99

DX Bucks are not redeemable for cash, can't be used to purchase gift cards, and have no value after the expiration date. If you've earned DX Bucks with a purchase and return the qualifying product for credit, then you forfeit the DX Bucks reward. If you exchange one qualifying item for another qualifying item, you only get one DX Bucks reward. DX Engineering reserves the right to cancel or reject DX Bucks certificates obtained fraudulently.



#### The 2014 FT5ZM Amsterdam Island DXpedition

On January 15th, 2014, the MV Braveheart Remote Expedition Support Vessel left Freemantle, Australia carrying Ham Radio enthusiasts from all around the globe. The destination was Amsterdam Island, a small speck of rock in the middle of the Indian Ocean. Nine days later, the ship arrived and the crew wasted no time getting on the air.

For the next 18 days, the FT5ZM team made over 170,000 QSOs, almost 3,600 of those on 160 meters. Operating CW, SSB and RTTY on 160-10 meters, they worked contacts from all over the planet. Amsterdam Island's locals, primarily fur seals and penguins, provided a unique audience for the stations. At night, the team worked under a dazzling array of stars.

DX Engineering provided several key pieces of gear, including a complete Receive Four-Square Array Package.

"The DX Engineering 4-Square Receive System was amazing on 160," declared Nodir Tursun-Zade EY8MM, an FT5ZM member. "With the push of a button I could make Europe dominant or Japan dominant and weak signals from North America were suddenly in the clear."

EY8MM went on to describe propagation conditions. "160 meters would open for us about 1 hour before our sunset. It would remain open until one hour after our sunrise. This, along with the DX Engineering receive antenna systems gave us a phenomenal 160 meter experience."

COMTEK, a DX Engineering company, supplied verticals to get FT5ZM operating on 40, 30 and 20 meters. Because the antennas offered the perfect combination of easy setup and rugged reliability, they were ideal for a DXpedition like FT5ZM. For guying, the team used STI synthetic rope, which will resist the high wind and unique weather on the island.

The DXpedition team also used DX Engineering Beverage antenna components to build a comprehensive receive antenna array. This allowed the team to work through the inevitable pileups and hear stations from the furthest reaches of the globe. Everyone wanted a chance to work the island, and DX Engineering was happy to help make it possible.



## IC-7200 HF/50 MHz ICOM 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.

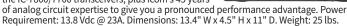
- · Covers 160-6 meter transmit bands and 0.03-60 MHz receive bands
- 2-100 watt output on SSB, CW, RTTY (1-40 watt on AM)
- IF DSP filtering (51 passband widths)
- · Hand mic, DC power cable and spare fuses
- Water intrusion protection similar to Icom Marine radios
- Digital IF filter, twin passband 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
- ICO-IC-7200

- · Manual notch filter • ±0.5 ppm frequency stability
- USB port for PC control

Portable HF/6M Transceiver.....CALL/WEB

#### **IC-7600 High Performance** ICOM HF/50 MHZ All **Mode Transceiver**

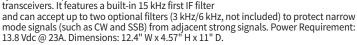
This unit has the latest DSP technologies used in the IC-7800/7700 transceivers, plus Icom's 45 years



- · 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 High Performance Transceiver......CALL/WEB

# O IC-7410 HF/50 MHz ICOM 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



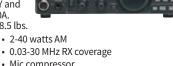
- 32-bit floating point DSP unit provides high dynamic range and superior S/N ratio
- Double conversion super-heterodyne system reduces signal distortion, improves in-band IMD characteristics
- · +30 dBm third-order intercept point (in 14 MHz band)
- Operates in all modes (SSB/CW/RTTY/AM/FM) ±0.5 ppm frequency stability
- Optional RS-BA1 unit for IP remote control Built-in automatic antenna tuner ICO-IC-7410 HF/50MHz Base Station Transceiver......CALL/WEB

## IC-718 ICOM HF Base Station Transceiver

The most practical DSP rig you'll ever own! It 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 ICO-IC-718

HF Transceiver/SW Receiver.....CALL/WEB



- · 2-40 watts AM
- · Mic compressor
- · Auto-notch filter
- Digital S/RF meter
- · Optional filter selection
- · Hand mic included

## IC-7700 HF/50 MHz ICOM 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  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

IC-9100 ICOM HF/VHF/UHF Transceiver

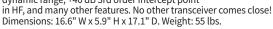


- Covers HF/50, 144, 430/440 amateur bands in SSB, CW, AM, and FM modes
- Built-in voice synthesizer announces operating frequency, mode and S-meter level
- · Voice Squelch Control (VSC) function
- · AFC function (FM/DV mode)
- Five scanning modes: program, memory, select memory, mode select,  $\Delta f$  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 DTCS 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 .... \$689.95

### IC-7800 Deluxe ICOM 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



- 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



## O IC-7100 ICOM 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'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 DSQL that opens the squelch only when your call sign is received and CSQL 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 CSQL and DSQL 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



New!

D-STAR ready



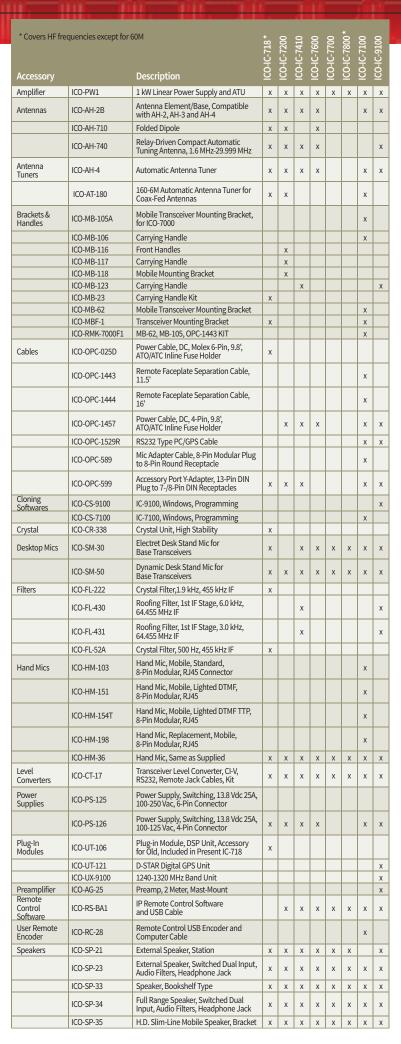


#### Icom's New ID-5100A Transceiver is Here

Icom has just revealed it's cutting-edge ID-5100A Digital Transceiver. This radio has launched a new generation of Icom radio design, and features a large touchscreen LCD, optional Bluetooth connectivity and second station control through an Android device.

The ID-5100A is a 50 watt D-STAR 2M/70cm mobile radio with a built-in GPS device, along with a CTCSS/DTCS encoder and decoder. The radio uses Icom's Dualwatch technology, and includes independent VHF/UHF band units, a built-in GPS engine and 1,000 memory channels.

 $\label{thm:compact} \textbf{Full details on this ground breaking radio are available at DXEngineering.com.}$ 



# O IC-V8000 ICOM 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 Transceiver ......CALL/WEB ICO-CS-V8000 Cloning Software for IC-V8000......\$39.95



### ID-880H ICOM 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
- ±2.5 ppm frequency stability
- Data and 9600/1200 bps packet jacks on the rear panel
- 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

VHF and UHF Digital Transceiver ...... CALL/WEB ICO-ID-880H

#### **Included Accessories**

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

· Remote controller bracket

## 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



#### **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	\$69.95
ICO-OPC-1156	Remote Separation Cable, 11.5'	IC-2820H IC-2720H IC-R1500 IC-R2500	\$18.95
ICO-UT-122	Digital Module to Add P25 Digital Receive Capability	IC-R2500 IC-R9500	\$209.95

### IC-2300H **ICOM 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 DTCS 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 ...... \$79.95

			2M		Dual-Band with D-STAR and GPS	Digital Transceivers	
Accessory		Description	IC-2300H	IC-V8000	IC-2820H	ID-880H	ID-1
Brackets	ICO-MB-28H	Mobile Mounting Bracket	х				Х
	ICO-MBF-1	Transceiver Mounting Bracket			Х		
	ICO-V8000-MMB	Standard Mounting Bracket		х			
Cables	ICO-OPC-1132	Power Cable, DC, T-Style, 2-Pin, 9.8'	х	х	Х	х	х
	ICO-OPC-1154A	Separation Cable 11.2' (Same as Supplied)				х	
	ICO-OPC-1529R	RS232 type PC/GPS Cable			Х	х	
	ICO-OPC-1663	Separation Cable 11.2' (Same as Supplied)			Х		
	ICO-OPC-1712	Controller Cable 3.9' (Same as Supplied)			Х		
	ICO-OPC-346	DC Power Cable 9.8' (Same as Supplied)		х			
	ICO-OPC-347	Power Cable, DC, T-Style, 2-Pin, 23', ATO/ATC Inline Fuse Holder	х	х	Х	х	х
	ICO-OPC-440	Mic Extension Cables	х	х	Х	х	х
	ICO-OPC-441	Speaker Extension Cable	х	х	Х	х	х
	ICO-OPC-474	Radio to Radio Cloning Cable	х	х	Х	х	
	ICO-OPC-478	PC to Radio Programming Cable, RS232, Stereo 3.5mm Male Plug	х	х	Х	х	
	ICO-OPC-478UC	PC to Radio Programming Cable, USB	х	х	Х	х	
	ICO-OPC-589	Mic Adapter Cable, 8-Pin Modular Plug to 8-Pin Round Receptacle	х	х	Х	х	
Cloning Software	ICO-CS-2300H	Cloning Software	х				
	ICO-CS-2820	Windows Programming Software			Х		
	ICO-CS-V8000	Cloning Software		х			
Control Software	ICO-RS-ID1	ID-1 Control Software					х
Hand Mics	ICO-HM-103	Lightweight Hand Mic				х	
	ICO-HM-133	Remote Control Mic (Same as Supplied)			Х	х	
	ICO-HM-133V	Mic, Hand type, Single Element, PTT, RJ45	х	х			
Plug-in Modules	ICO-UT-108	Plug-In Module, DTMF Decoder Unit		х			
	ICO-UT-123	D-STAR Digital/GPS Unit with GPS Antenna			Х		
Speakers	ICO-SP-22	External Speaker, Mobile, Bracket	х	х	Х	Х	х
	ICO-SP-34	External Speaker, Base, Switched Dual Input, Audio Filters	х	х		х	х
	ICO-SP-35	External Speaker, Mobile, Bracket	х	х	Х	х	х
Speaker Mics	ICO-HM-154	Speaker Mic	х	х	Х	х	х
	ICO-HM-154T	Mic, Hand type, Single Element, PTT, RJ45		х	X		Х

			2 Meters Dual-Band & Tri-Band			70cm				
Accessory		Description	IC-V80-	IC-V80	ID E1A	IC-T70A-	IC-T70A	IC 90AD	IC-92AD	ID 214
Accessory		Description	HD	SPORT	ID-51A	HD	SPORT	IC-80AD	IC-92AD	ID-31A
Adapter	ICO-AD-92SMA ICO-BC-123SA-51	Antenna Connector Adapter (SMA Male to BNC Female)	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	Х	Х	Х	Х	Х	X
		110V AC Adapter for BC-191/BC-193 Rapid Desktop Chargers, US plug 220V AC Adapter for BC-191/BC-193 Rapid Desktop Chargers,	Х	Х	Х	Х	Х			Х
	ICO-BC-123SE-52	Round Tip Euro Plug	Х	Х	Х	Х	Х			Х
Antenna	ICO-FAB-2E ICO-FAS-270C	VHF Antenna, Flexible, BNC Male  VHF/UHF HT and Scanner Antenna, Flexible, SMA Male	Х	Х	V	V	V	V	v	v
Charger	ICO-PAS-270C	Rapid Charger			Х	Х	Х	X	Х	Х
	ICO-BC-147SA-14	110V Adapter for Trickle Chargers	х	х		Х	Х			
	ICO-BC-147SE-15	220V Adapter for Trickle Chargers, Round Tip Euro Plug	х	Х		Х	х			
	ICO-BC-167ND ICO-BC-167SA	Wall Charger for BP-271 Wall Charger for BP-271 110 Vac, US Plug			X X			X	X X	X
	ICO-BC-167SD	Wall Charger for BP-271 220 Vac, Round Tip Euro Plug			X			X	X	X
	ICO-BC-177-02	Rapid Charger							х	
	ICO-BC-191-12 ICO-BC-192-12	Rapid Desktop Charger for BP-264 Ni-MH  Regular Charger for BP-264 Ni-MH	X	X X		X X	X X			
	ICO-BC-192-12	Rapid Desktop Charger for BP-265 Li-lon	X	X		X	X			
	ICO-BC-202-02	Rapid Desktop Charger for BP-271, BP-272			Х					х
Battery Pack	ICO-BP-217	Li-lon Battery Pack 7.4V/1,300mAh						Х		
	ICO-BP-256 ICO-BP-264	Li-Ion Battery Pack Ni-MH 7.2V/1,400mAh	X	X		х	Х		Х	
	ICO-BP-265	Li-lon 7.4V/1,900mAh (Minimum), 2,000mAh (Typical)	X	X		X	X			
	ICO-BP-271	7.4V 1,150mAh Li-Ion Battery			х					х
D-#- C	ICO-BP-272	7.4V 1,880mAh Li-lon Battery			Х					Х
Battery Case	ICO-BP-216 ICO-BP-257	Alkaline Battery Case (Holds 2 AA Batteries)  Alkaline Battery Case (Holds 2 AA Batteries)						Х	X	
	ICO-BP-263	Alkaline Battery Case (Holds 2 AA Batteries)	х	Х		Х	х		^	
	ICO-BP-273	Alkaline Battery Case (Holds 3 AA Batteries)			х					х
Cables	ICO-CP-12L	Cigarette Lighter Cable with Noise Filter (to Charge Radio)			Х	Х	Х	Х	Х	Х
	ICO-CP-17L	Cigarette Lighter Cable for Charger, for Use with BC-191 or BC-193  Cigarette Lighter Cable to Charge Radio While in Use	Х	Х		Х	Х			
	ICO-CP-19R	(DC/DC Converter Built-In)			Х	Х	х	Х	х	Х
	ICO-OPC-1529R	PC to Radio Control Programming Cable, RS232, Stereo 3.5mm Male Plug Y-Adapter for HM-75A, HM-131, HM-153, HM-166, HS-85,						Х		
	ICO-OPC-1797	OPC-474 or SP-13							х	
	ICO-OPC-2004 ICO-OPC-2006	Cable for Use with HS-94, HS-95 and HS-97  Cable for Use with HS-94, HS-95 and HS-97	X	Х		х	х			
	ICO-OPC-2006LS	Plug Adapter Cable, for Use with HS-94, HS-95 and HS-97			х	X	Χ			х
	ICO-OPC-2144	Slim L-Type Plug Adapter Cable for Speaker Mic and Headphone			Х					х
	ICO-OPC-2218LU	Cloning/Data Cable (USB)			Х					Х
	ICO-OPC-254L ICO-OPC-474	DC Power Cable, for Transceiver with External Power Supply  Radio to Radio Cloning Cable	X	X	Х	X X	X X	X	X X	Х
	ICO-OPC-478	PC to Radio Programming Cable, RS232 to Stereo 3.5mm Male	х	Х				Х		
	ICO-OPC-478UC	PC to Radio Programming Cable, USB to Stereo 3.5mm Male	Х	Х		Х	Х	Х		
Level Converter	ICO-OPC-515L ICO-CT-17	DC Power Cable, for Use with BC-191, BC-192 or BC-193  Transceiver Level Converter, CI-V, RS232, Remote Jack Cables, Kit	Х	Х	V	Х	Х			v
Speaker Mics	ICO-HM-128	Lightweight Earphone			Х			X	Х	X
	ICO-HM-131	Speaker Mic with Earphone Jack and Revolving Clip				Х	х	х	х	
	ICO-HM-153	Durable Earphone Mic				Х	х	Х	Х	
	ICO-HM-153L ICO-HM-153LS	Durable Earphone Mic  Compact Speaker Mic with Slim L-Type Connector	Х	Х	Х					X
	ICO-HM-158L-LG	Speaker Mic with Metal Clip and Screw Down L-Shaped Connector	х	Х						Α
	ICO-HM-159L-LG	Full Size Durable Speaker Mic	х	х						
	ICO-HM-166LS	Lighweight Earphone Mic with Slim L-Type Connector			Х			Х	X	Х
	ICO-HM-174 ICO-HM-186LS	Waterproof Speaker Mic  Compact Speaker Mic with Slim L-Type Connector			Х				Х	Х
	ICO-HM-189GPS	GPS Speaker Mic						х		
	ICO-HM-75A	Speaker Mic						Х	х	
Headsets	ICO-HM-75LS ICO-HS-85	Remote Control Speaker Mic with Slim L-Type Connector  Headset with VOX, PTT			Х			X	Х	Х
i icauscis	ICO-HS-94	LM Earpiece Type Headset (See Note 1)	Х	X	X	Х	Х	^	^	X
	ICO-HS-95	Headset with Boom Mic (See Note 1)	х	х	х	X	х			X
C C	ICO-HS-97	Earphone with Throat Mic (See Note 1)	Х	Х	Х	Х	Х			Х
Carrying Cases	ICO-LC-168 ICO-LC-174	Carrying Case Carrying Case				х	Х		Х	
	ICO-LC-174	Leather Carrying Case					X			х
	ICO-LC-179	Carrying Case			х					
	ICO-SJ-1	Silicone Jacket Case			Х			V		
Belt Clips	ICO-MB-107 ICO-MB-111	Belt Clip Belt Clip						Х	х	
	ICO-MB-124	Alligator Style Clip	Х	х		Х	х			
	ICO-MB-127	Belt Clip			х					х
	ICO-MB-130 ICO-MB-86	Vehicle Charger Bracket Swivel Belt Clip	Х	Х		Х	Х	V		
Earphones	ICO-MB-86	Earphone			Х			X	х	Х
	ICO-SP-27	Acoustic Tube Earphone with Clothing Clip				Х	Х			

## IC-T70A ICOM Dual-Band FM Transceivers

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-adapter cable. CTCSS and DTCS tone codes provide quiet stand-by and allow you to use tone-access repeaters.

The IC-T70A-HD features a BP-265 Li-lon battery pack and charger, offering over 19 hours of power on a single charge. The IC-T70ASPORT includes a 6 AA battery pack.

- · 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
- Auto power off
- · 16 DTMF autodial memories
- LCD backlight

#### **Included Accessories**

Antenna
 Belt clip
 Hand strap

ICO-IC-T70A-HD Dual-Band FM Transceiver, Li-Ion Battery, Charger...... CALL/WEB ICO-IC-T70ASPORT Dual-Band FM Transceiver, 6 AA Battery Pack ...... CALL/WEB

### IC-92AD ICOM 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

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

## **Desk Stands**

If you're afraid of accidentally skidding your portable radio off of your desk and onto the floor,





these stands offer some peace-of-mind. They're designed to sit your radio upright, within arm's reach. The HT stand's shelf is adjustable to fit most handhelds with a belt clip and the KX3 stand is specifically suited to your Elecraft KX3 mobile rig. Each stand has a nice heavy steel base.

NIF-HT-STAND NIF-KX3-STAND

HT Radio Desk Stand ......\$33.95 Stand for Elecraft KX3 ......\$24.95



## DV Dongle

#### **D-STAR PC Access Donale**

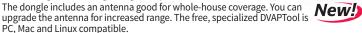
Get D-STAR accessibility anywhere using the Internet. The innovative D-STAR PC Dongle essentially turns you computer into a D-STAR transceiver. That means you'll be able to enjoy worldwide VHF/UHF communications, even if there are no D-STAR repeaters nearby.

Setup is easy, and the dongle plugs right in to your computer's USB port. It

is PC/Mac compatible, high-speed Internet access required. INL-DV-DONGLE 

#### **D-STAR Digital Voice Access Point Dongles**

Create your own D-STAR hotspot, even if there aren't any repeaters around. Plug the D-STAR Digital Voice Access Point Dongle into your computer to transform it into a D-STAR gateway. Then use your own D-STAR-equipped radio to begin connecting with gateways and reflectors across the planet.



D-STAR Digital Voice Access Point Dongle, 2 Meter ...... \$249.95 INL-DV-AP-2M

INL-DV-AP-70CM D-STAR Digital Voice Access Point Dongle, 70cm......\$269.95

# ICOM 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

- 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
- Antenna

D-STAR ready

- Cloning software (CS-51)
- ICO-ID-51A VHF/UHF Dual-Band Transceiver......CALL/WEB



## ID-31A ICOM 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

# O IC-V80 ICOM VHF FM Transceivers

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. The IC-V80-HD features a BP-265 Li-Ion battery pack and charger, offering over 19 hours of power on a single charge. The IC-TV80SPORT includes a 6 AA battery pack.

- · 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**

 Belt clip • BNC flexible antenna

ICO-IC-V80-HD FM Transceiver, Li-Ion Battery, Charger...CALL/WEB ICO-IC-V80-SPORT FM Transceiver, 6 AA Battery Pack ............CALL/WEB



RT SYSTEMS RADIO PROGRAMMING SOFTWARE KITS



#### **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	\$48.95
RTP-WCS-80-DATA	Icom IC-80	USB-RTS05	\$48.95
RTP-WCS-91	Icom IC-91 A/D	USB-29A	\$48.95
RTP-WCS-9100	Icom IC-9100	USB-RTS01	\$48.95
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	\$48.95
RTP-WCS-R2	Icom IC-R2	USB-29A	\$48.95
RTP-WCS-R10	Icom IC-R10	USB-29A	\$48.95
RTP-WCS-T2	Icom IC-T2	USB-29A	\$48.95
RTP-WCS-T7	Icom IC-T7	USB-29A	\$48.95
RTP-WCS-T70	Icom TC-T70	USB-29A	\$48.95
RTP-WCS-T8	Icom IC-T8	USB-29A	\$48.95
RTP-WCS-T81	Icom IC-T81	USB-29A	\$44.95
RTP-WCS-U82	Icom IC-U82	USB-29A	\$48.95
RTP-WCS-V8	Icom IC-V8	USB-29A	\$48.95
RTP-WCS-V80	Icom IC-V80	USB-29A	\$48.95
RTP-WCS-V8000	Icom IC-V8000	USB-29A	\$48.95
RTP-WCS-V82	Icom IC-V82	USB-29A	\$48.95
RTP-WCS-V85	Icom IC-V85	USB-29A	\$48.95
RTP-WCS-W32	Icom IC-W32	USB-29A	\$44.95
RTP-WCS-D31	Icom ID-31	USB-RTS05	\$48.95
RTP-WCS-D51	Icom ID-51	USB-RTS05	\$48.95
RTP-WCS-D880DATA	Icom ID-880	USB-RTS05	\$48.95
RTP-KRS-D7G	Kenwood TH-D7G	USB-K5D	\$48.95
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	\$44.95



#### **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



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!



#### **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 electronic devices, from Ham and satellite radios to cel 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 prioritation. horizontal or vertical orientation.

LDO-LM-600 LoBoy Mount .......\$14.95

#### **Suction Cup Gooseneck Mount**

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

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

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

#### **Floor Mount**

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

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

#### **Friction Base**

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

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

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

### Vehicle mounting solutions for many popular radio models and styles.













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

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

#### **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 Ŭ-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.

Side Grip Adapter.....\$14.95 LDO-LM-H 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 Discs for LM-400EXP and LM-500 Mounts ......\$4.95 LDO-KIT2 Adhesive Discs for LM-600/700/ 900 Series Mounts......\$5.95



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

#### **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? Vents are often the perfect location, placing your radio within arm's reach and easy eyeshot. For security, you can remove these mounts easily and keep your radio away

The LM-100 Mount uses a four-hole AMPS mounting plate and can be used for a remote head display mount or a handy mic mount. The LM-100H Mount includes the side grip holder for extra holding security. We can supply you with your radio's specific mounting attachment just call DX Engineering to get started.

LDO-LM-100 Vent Mount ......\$14.95 LDO-LM-100H Side Grip Vent Mount.....\$24.95

## IC-R9500 ICOM 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
- ±0.05ppm 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 DTCS tone squelch

ICO-IC-R9500 



# ICOM 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 ......\$59.95

Model	Description	Volts	Current (mAh)	Fit Radio (s)	Trickle Charger	Rapid Charger
ICO-BP-216	Alkaline Battery Case (2 AA Batteries)	#		IC-80AD		
ICO-BP-217	Li-Ion Battery Pack, 7.4V/1,300mAh (Same as Supplied)	7.4	1,300	IC-80AD	ICO-BC-167SA	ICO-BC-139-02
ICO-BP-256	Li-Ion Battery Pack	7.4	1,620	IC-92AD	ICO-BC-167SA	ICO-BC-177-02
ICO-BP-257	Alkaline Battery Case (2 AA Batteries)	#		IC-92AD		
ICO-BP-263	Alkaline Battery Case (6 AA Batteries)	#		IC-T70A IC-V80		
ICO-BP-264	Ni-MH 7.2V/1,400mAh (Same as Supplied)	7.2	1,400	IC-T70A IC-V80		ICO-BC-191-12^
ICO-BP-265	Li-Ion Battery Pack, 7.4V/1,900mAh (Minimum), 2,000mAh (Typical)	7.4	1,900	IC-T70A IC-V80		ICO-BC-193-12^
ICO-BP-271	Li-lon Battery Pack, 7.4V 1,150mAh (Same as Supplied)	7.4	1,150	ID-31A ID-51A	ICO-BC-167SA	ICO-BC-202-02
ICO-BP-272	Li-Ion Battery Pack, 7.4V 1,880mAh	7.4	1,880	ID-31A ID-51A	ICO-BC-167SA	ICO-BC-202-02
ICO-BP-273	AA Alkaline Battery Case (3 AA Batteries)	#		ID-31A ID-51A		

# Uses AA Batteries, Not Included \* Requires ICO-BC-1475 AC Adapter ^ Requires ICO-BC-1235 AC Adapter \*\*Requires ICO-AD-101 Charger Adapter

# IC-R6-SPORT 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

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
- ±1.0ppm high frequency stability at 25°C
- · Ferrite bar antenna for AM broadcast
- · 150 mW loud audio with internal speaker
- DTCS 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**

Battery Case • Antenna

ICO-IC-R6-SPORT 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.



### 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

New!

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  $\Omega$ . Dimensions: 3.75" H x 3" W x 2.25" D.

ClearTone Communications Speaker.....\$14.29

WEST MOUNTAIN

WMT-58407-948



#### **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 ......\$39.95

## **PWRspkr Amplified Speaker**

WEST MOUNTAIN

Packing 15 watts of amplification, this speaker is great for noisy shacks, loud mobile installations, or radios with weak audio output. The PWRspkr is tailored to the 300-3200 Hz range for the human voice sweet spot. It features a 4.25" speaker, requires 13.8 Vdc, and includes a 6' audio cable and mounting bracket.

WMT-58406-947

PWRspkr 15 Watt Amplified Speaker......\$75.95



PAS-SP30HC

PAS-SP30HB



**Genuine Palstar** Accessories Enhance Your Listening Experience





Part Number	Description	Price
PAS-SP30B-B	SW Radio Speaker, tonally-matched to the R30A Receiver Compact design, offers excellent audio reproduction, black finish	\$99.95
PAS-SP30B-C	SW Radio Speaker, tonally-matched to the R30A Receiver Compact design, offers excellent audio reproduction, cherry finish	\$99.95
PAS-SP30HB	Ultimate Communications Speaker, handles up to 25 watts 6.5" speaker, optimized for voice audio reproduction, black finish	\$195.95
PAS-SP30HC	Ultimate Communications Speaker, handles up to 25 watts 6.5" speaker, optimized for voice audio reproduction, cherry finish	\$195.95

#### ATS-505P **World-Band Portable Radio**

With the perfect fusion of performance and value, this radio lets you keep an ear on the world. It covers the traditional AM/FM broadcast bands, plus longwave (153-279 kHz) and shortwave (1711-29999 kHz). Better yet, this radio will even receive single sideband and CW. That means you can listen to code, plus two-way aircraft, maritime, utility and military communications.

SANGEAN

The ATS-505P is packed with features, including an alarm clock, headphone jack, 45 memory slots and fine-tuning adjustment. It comes with an antenna and AC adapter.

SGN-ATS-505P World Band Portable Radio......\$109.95



## SANGEAN

#### ATS-909XBK **World-Band Portable Radio**

As the flagship of Sangean's line of portable radios, the ATS-909XBK has all the elements found in its other models, with extra-cool features like a world clock. enhanced display, over 400 memory channels and an RF-gain control. The radio's expansive coverage range includes broadcast, longwave, mediumwave and shortwave bands. Even with all these features, it is still easy to use.

SGN-ATS-909XBK World Band Portable Radio......\$259.95



## SANGEAN

### LB-100 Lunchbox Portable Radio

Combine a feature-laden radio with anvil-like reliability, and you get the LB-100. Its rugged case is perfectly suited to jobsites, Field Day or a family picnic. It packs enough power for outdoor use. The radio covers the AM/FM broadcast bands and is powered by the included AC cord or four C batteries (not included). It is water-resistant and comes with a flexible antenna.

SGN-LB-100

Lunchbox Portable Radio ......\$69.95

## SANGEAN

## **WFR-28**

Wi-Fi Internet Radio

Use your home or office Wi-Fi network to receive hundreds of stations—News, Jazz, Rock, Talk, Pop (you can probably even find an all-polka station out there). Plus, this radio has a built-in FM radio for local station reception. There's a handy USB port that can play music loaded onto your flash drive and an AUX, port to connect an MP3 or CD player. The WFR-28 also has a rapid-charge mode that will charge your NiMH batteries, too.

SGN-WFR-28 Wi-Fi Internet Radio ......\$149.95



#### New! DT-200X Pocket Radio

You don't accept compromises in your Ham gear, and you shouldn't accept them in your broadcast radios either.

Sangean's Pocket Radio gives you FM/AM broadcast bands with 19 presets and a built-in speaker and clock. The auto turn-off feature will conserve its two AA batteries (not included) and the removable belt clip means this radio doesn't necessarily have to live in your pocket.

SGN-DT-200X Pocket Radio.....



## 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.

HLS-PS-6

HLS-PSE-6

#### **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

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 <b>\$78.95</b>

#### 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.

#### Pro Set iC Headset

If you've got an older Icom radio, 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 ......\$149.95

#### 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.

HI S-PSM Pro Set Media Pro Headset ......\$119.95

#### 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-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  $\Omega$  at 1 kHz. Sensitivity: 102 dB/mW.

Communications Headphones ......



#### **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

#### 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" phone 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

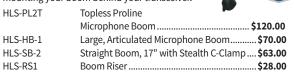
#### SM-1/PRSM Microphone Shock Mounts

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.





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-PL2CLAMPR** 

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

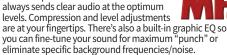
our boom und m	sep your valuable interophone sure.	
HLS-FL-2	Flange Mount	\$28.00
HLS-DT1	Desktop Flush Mount	\$35.00
HLS-WM1	Vertical Surface Mount	\$22.00
ILS-PL2CLAMPR	Replacement Mount for PL2T/SB-2/HB-1	\$22.00

HLS-SB-2

HLS-RS1

#### **Ham Station Console Desktop** Microphone

Incorporating several key features in a single console, this microphone



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 Desktop Microphone.....

#### Console to Radio Connection Cables

These cables allow you to connect your radio to the MFJ-297/299, while retaining full audio and PTT capability. Visit DXEngineering.com for full compatibility details.

Part #	For Radio(s)	For Console	Price
MFJ-5397K	Kenwood & Elecraft	MFJ-297/299	\$17.95
MFJ-5397I	Icom	MFJ-297/299	\$17.95
MFJ-5397MX	Yaesu	MFJ-297/299	\$17.95
MFJ-5397MY	Yaesu	MFJ-297	\$17.95
MFJ-5397Y	Yaseu	MFJ-297	\$17.95
MFJ-5399Y	Yaesu	MFJ-299	\$17.95
MFJ-5399Y2	Yaesu FT-847	MFJ-299	\$17.95

#### Universal Microphone **Converter**

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..... .....\$26.95



### **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





#### 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

#### 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

#### 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.

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.

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

### **Handi Mic Microphones**

HLS-HM-PRO

These mics are the answer HLS-HM-IC 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





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 windscreen. 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, these dynamic cardioid microphones feature 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 Mic, Black Screen <b>\$169.95</b>
HLS-PR781GOLD	PR 781 Mic, Gold Screen \$218.95

#### 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 vou 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 compliment for your rig.

HLS-PR30 

#### PR 22 Microphone

A mic that's equally suited to the stage or shack. This microphone has exceptionally low handling noise and is extremely rugged, which means it can double as a PA mic for your next club meeting. The PR 22 delivers rich, broad and crisp audio. The utility series comes with

a stainless mesh screen, mic stand clip, foam windscreen and zippered pouch.

HLS-PR22-UT PR 22 Microphone, Utility Series...... \$117.00



Handi Mic Pro.....\$88.95

## **Audio: Accessories**

#### 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

		ou some o
Part Number	Description	Price
Icom	2 2 2 2 1 1 2 2 1	4
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	3	
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-CH1-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 RJ45 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		
11F2-C11-T-11AI	XLR4 to Modular Mic Coil Cable	\$25.95
HLS-AD-100	Yaesu 8-Pin Round to 6-Pin Modular Adapter	
	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter	\$25.95
HLS-AD-100	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45	\$25.95 \$21.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45 Traveler Headset Adapter,	\$25.95 \$21.95 \$28.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6 HLS-HTA-VX	Yaesu 8-Pin Round to 6-Pin Modular Adapter  Yaesu 8-Pin Mic to FT-817 Modular Adapter  Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45  Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45  Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Traveler Headset Adapter, Computer, Data/SP/Mic Plugs	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6 HLS-HTA-VX Miscellaneous	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Traveler Headset Adapter, Computer, Data/SP/Mic Plugs Microphone Adapter, Ten-Tec, XLR4 to 4-Pin	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6 HLS-HTA-VX Miscellaneous HLS-HSTA-PC	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Microphone Adapter, Ten-Tec, XLR4 to 4-Pin Headset Adapter, Collins/Drake, 3/16" Plug, 1/4" Jack	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6 HLS-HTA-VX Miscellaneous HLS-HSTA-PC HLS-CC-1-T HLS-AD-1-C HLS-AD-1-T	Yaesu 8-Pin Round to 6-Pin Modular Adapter Yaesu 8-Pin Mic to FT-817 Modular Adapter Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45 Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Traveler Headset Adapter, Computer, Data/SP/Mic Plugs Microphone Adapter, Ten-Tec, XLR4 to 4-Pin Headset Adapter, Collins/Drake, 3/16" Plug, 1/4" Jack Headset Adapter, Ten-Tec, 4-Pin, 1/4" Jack	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6 HLS-HTA-VX Miscellaneous HLS-HSTA-PC HLS-CC-1-T HLS-AD-1-C HLS-AD-1-T HLS-CC-1-C	Yaesu 8-Pin Round to 6-Pin Modular Adapter  Yaesu 8-Pin Mic to FT-817 Modular Adapter  Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45  Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45  Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Traveler Headset Adapter, Computer, Data/SP/Mic Plugs  Microphone Adapter, Ten-Tec, XLR4 to 4-Pin  Headset Adapter, Collins/Drake, 3/16" Plug, 1/4" Jack  Headset Adapter, Ten-Tec, 4-Pin, 1/4" Jack  Microphone Adapter, Collins/Drake, 4-Pin to XLR4	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95 \$29.95 \$22.95 \$47.95
HLS-AD-100 HLS-ADMY-817 HLS-HSTA-YM HLS-HSTA-YM6 HLS-HTA-VX Miscellaneous HLS-HSTA-PC HLS-CC-1-T HLS-AD-1-C HLS-AD-1-T	Yaesu 8-Pin Round to 6-Pin Modular Adapter  Yaesu 8-Pin Mic to FT-817 Modular Adapter  Traveler Headset Adapter, Yaesu 8-Pin Modular, RJ45  Traveler Headset Adapter, Yaesu 6-Pin Modular, RJ45  Traveler Headset Adapter, Yaesu 1/8" 4-Conductor Plug  Traveler Headset Adapter, Computer, Data/SP/Mic Plugs Microphone Adapter, Ten-Tec, XLR4 to 4-Pin  Headset Adapter, Collins/Drake, 3/16" Plug, 1/4" Jack  Headset Adapter, Ten-Tec, 4-Pin, 1/4" Jack  Microphone Adapter, Collins/Drake,	\$25.95 \$21.95 \$28.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95 \$25.95 \$29.95



#### Microphone Element New! **Upgrade Kit**

Bring your old microphone into the 21st century! This is a great solution for repairing or retrofitting a modern dynamic element into an old microphone. The kit uses Heil's HC-5.1 dynamic element that provides crisp, clear response. If you want to keep your rig's vintage look but ditch its vintage sound, then upgrade your mic using this clever kit.

HLS-HC51RETROKIT Mic Element Upgrade Kit... \$49.95



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-HBA	Bluetooth Adapter	\$117.95
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-EP-BM-BLACK	Ear Pads for BM Series (Pair)	\$5.95
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 Trav- eler 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 Imped- ance 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 Microphone Cable, 10 Feet...... \$10.95 HLS-HW-20 Microphone Cable, 20 Feet...... \$21.95



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.

#### **RIGblaster Cables and Accessories**

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

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	\$24.95
WMT-58136-1000	4-/8-Pin to RJ-45 Conversion Kit	\$24.95
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**



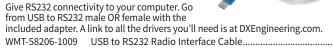
These cables connect your RIGblaster to your radio. There are cables available for many specific models and digital modes. There are even cables that can actually key your CW jack on your radio for true FSK/RTTY transceiver inputs.



Part Number	Description	Price
WMT-58112-976	8-Pin Mic to Sound Card, 36"	\$19.95
WMT-58112-977	8-Pin Mic to Sound Card, 72"	\$19.95
WMT-58112-978	4-Pin Mic to Sound Card	\$19.95
WMT-58115-979	RJ45 Modular, 36"	\$9.95
WMT-58115-980	RJ45 Modular, 72"	\$14.95
WMT-58118-982	RJ11 Modular	\$18.95
WMT-58119-1374	3-Plug Cable for Wouxun-KWD, Set-Up Connector	\$39.95
WMT-58119-1431	3.5mm TRRS Cable for Elecraft K3	\$19.95
WMT-58119-1432	RS232, 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"	\$19.95
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	\$19.95
WMT-58131-996	RCA to Stereo 3.5mm	\$18.95
WMT-58131-997	6-Pin Mini-DIN	\$19.95
WMT-58131-998	4-Pin DIN, for RTTY	\$19.95
WMT-58131-999	13-Pin DIN, for Kenwood FSK Input	\$21.95

More cables are available at DXEngineering.com.

#### USB to RS232 **Radio Interface Cable**



#### SignaLink™ PC/Radio **Sound Card Interface**

The all-new SignaLink USB combines the legendary performance of the original SignaLink 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 SignaLink
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.



SignaLink

The SignaLink 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 SignaLink USB is fully isolated and is compatible with all radio Mic, Data and Accessory ports. The SignaLink 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
- TGR-SL-USB SignaLink USB unit.....\$92.50
- · Works with all radios
- Powered through USB cable • Easy hookup to Macintosh or PC
- Comprehensive, easy-to-follow instructions

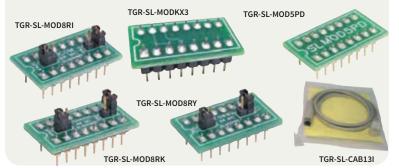
Any cable only \$14.95 when ordered with TGR-SL-USB. Order one cable for each radio.

#### SignaLink Radio Interface Cables

You need the right cable for your SignaLink. 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 SignaLink USB and the radio. You can avoid this issue by attaching the SignaLink to your radio's Data or Accessory port.

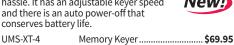
Part Number	Description	Price
TGR-SL-CAB4R	4-Pin Round Mic Connector Interface Cable	\$19.95
TGR-SL-CAB8R	8-Pin Round Mic Connector Interface Cable	\$19.95
TGR-SL-CABRJ1	RJ11 Mic Connector Interface Cable	\$19.95
TGR-SL-CABRJ4	RJ45 Mic Connector Interface Cable	\$19.95
TGR-SL-CAB5PD	5-Pin Ten-Tec/Yaesu DIN Interface Cable	\$19.95
TGR-SL-CAB8PD	8-Pin DIN Interface Cable	\$19.95
TGR-SL-CAB13I	13-Pin DIN Icom Interface Cable	\$19.95
TGR-SL-CAB13K	13-Pin DIN Kenwood Interface Cable	\$19.95
TGR-SL-CAB6PM	6-Pin Mini-DIN Interface Cable	\$19.95
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-SLHEAD	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-MOD5PD	Jumper Module, Ten-Tec/Yaesu 5-Pin DIN 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



## Unified Microsystems

#### XT-4 Memory Keyer

The perfect keyer for Field Day, vacations, EMCOMM or portable operation. Both small and light, this iambicstyle keyer is powered by a single 9-volt battery. The XT-4 has four memory channels that can hold 110 Morse characters apiece. Programming is easy and straightforward and it includes a handy reverse function that eliminates the re-wiring hassle. It has an adjustable keyer speed and there is an auto power-off that



XT-4 and VK-64 Keyers ...... \$9.95

CW Cable Set for



UMS-KC-4



#### 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
- Operating current: 10-50 mA, depending on sidetone level

PAS-CW50A Palstar Electronic Keyer..... \$179.95



## **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 pormal to Espanya the serial numbers. 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-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, and single or dual paddle.

MFJ-407D Curtis Deluxe



### VK-64 Voice Keyer

Save space in your shack with a voice keyer and memory keyer in one. This unit can be operated via the front panel controls, or remotely via a PC. The voice keyer section supports four 15-section messages. The CW portion features a memory keyer that can store four messages, each containing over 300 morse-code characters. This keyer also includes a built-in LPT CW interface and is compatible with most popular logging software.

Setup is easy, and the keyer has several adjustable parameters. If you're a busy contester, this keyer is a great way to maximize your efficiency and save some desk space.

UMS-VK-64 Voice Keyer ...... \$219.95 UMS-VKC-8 Microphone Cable and Connectors for VK-64 ......\$24.95 CW Cable Set for XT-4 UMS-KC-4





and VK-64 Keyers ......\$9.95

#### MFJ-495 Millennium CW Memory Keyer

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



#### 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.

Speech Intelligibility MFJ-616

Enhancer......\$179.95





#### MFJ-418

#### **Pocket Size Morse Code Tutor**

Got some downtime on a lunch break, layover or lazy Sunday afternoon? Instead of the mundane letter-byletter 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-461 Pocket Size

## Morse Code/CW Reader

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-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





### 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





#### 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	\$174 <b>.</b> 95
KMK-SK-1	Straight Key, Steel Base	\$154 <b>.</b> 95



#### 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 <b>.</b> 95

VIB-VIBROCUBE-D



#### 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 <b>.</b> 95
VIB-VIBROCUBE-SU	Vibrocube Standard Upgraded	\$219.95
VIB-VIBROCUBE-S	Vibrocube Standard	\$189.95



## ■BENCHER.INC.



#### **Keys and Accessories**

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

Keys
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BNR-RJ-1	Hand Key, Black Base	\$139.95
BNR-RJ-2	Hand Key, Chrome Base	
BNR-BY-1	Iambic Paddle, Black Base/Chrome Parts	
BNR-BY-2	Iambic Paddle, Chrome Base/Chrome Parts	\$154.95
BNR-170-82	Mercury Paddles, Chrome Base/Chrome Parts	\$469.95
BNR-ST-1	Single Lever Paddle, Black Base/Chrome Parts	\$129.95
BNR-ST-2	Single Lever Paddle, Chrome Base/Chrome Parts	\$154.95
Accessories		
BNR-EZ-1	4" Hook-up Cable, 1/8" and 1/4" Plugs	\$12.95
VIB-DC-BY	Cover for BY-Series Paddles	\$34.95

#### **Keyer Cables**

Use these to connect your MFJ Keyer to your radio. The cables have an RCA phono plug on one and a 3.5mm (with included 1/4" adapter) plug on the other.

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MFJ-5164	Keyer Cable, 6'	\$11.95
MFJ-5166	Keyer Cable, 3'	\$11.95



## 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.

KMK-SP-1

neys		
VIB-BLRACER-STD	Blue Racer	\$206.95
VIB-CODEWARR-JR	Black Code Warrior Jr	\$103.95
VIB-IAMBIC-S	Iambic Paddle Standard	\$149.95
VIB-IAMBIC-D	Iambic Paddle Deluxe	\$189.95
VIB-IAMBIC-P	Iambic Paddle Presentation	\$279.95
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	\$249.95
VIB-ORIGINAL-P	Original Bug Presentation	\$339.95
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	\$34.95
VIB-DC-ORIG	Dust Cover for Original Bug	\$35.95
VIB-DC-RACER	Dust Cover for Racer	\$29.95
VIB-DC-BY	Dust Cover for Bencher BY Series	\$34.95
VIB-405-CCS	Contact Cleaner Abrasive Strip	\$5.95
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)	
VIB-CP-3-3-5MM	3-Conductor Cable 3.5mm Plug (Paddles)	\$9.95
VIB-COFFEMUG	Vibroplex Coffee Mug	



VIB-DC-VIBRO







VIB-CP-2

#### CW TOUCHkeyer

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. The keyer responds to your lightest touch without error.

Programming is easy; it uses less that 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



