2019 Ham Catalog

...the World Leader in Amateur Radio Accessories!

MFJ-1234...Remotely operate your transceiver from anywhere in the world!

$299.95

Remote operate using any web browser on phones, tablet, laptop, even a Kindle!

Use nearly any transceiver with CAT control, old or new, no computer or computer knowledge needed.

Operate all modes SSB, CW, FM, digital -- any transceiver mode.

Control from anywhere via the internet using any browser -- radio, rotor, CW keying, VoIP, digital modes, logging, spot monitoring, callbook lookups, more.

Here's what else you can do:

Operate digital modes including FT8 and RTTY. WSJT-X, Fldigi are installed.

Look-up calls using included FCC database or optional QRZ XML subscription.

Specify DX spots, watch for unworked or unconfirmed calls. Design, maintain multiple logs. Upload ADIF logs to ARRL LoTW server.

Send CW from a mobile device, keyboard or paddle. 32 programmable macros gives great control flexibility. Single-click updating.

Includes email, word processing, spreadsheet programs. Thousands of Linux programs, including many for ham radio.

Modify and program RigPi Station Server features using a text editor.

Multi-Operators, Multi-Radios

Use any internet browser on Windows, Mac, Chromebook, Android, iOS, Linux computers, laptops, tablets and phones. You can open as many web pages as you like on one or more devices (iphone, tablets, laptops, etc.).

One browser can control a radio while a second can control another radio, etc. Two or more hams from different places can operate different radios at the same time using one MFJ-1234.

In addition to using a browser, you can use these apps: CommCat Mobile for iOS and CommCat for Windows.

What is the RSS?

RigPi™ Station Server (RSS)

RigPi Station Server (RSS) is a computer system that controls your station and handles on-the-air activities. It’s a radical new way of station control using a server. It allows multiple users and radios to interact simultaneously using any internet browser.

HARDWARE

RSS is a Raspberry Pi™ computer running Linux and RigPi Keyer and RigPi Audio boards. RigPi Keyer board uses the K1EL WinKeyer3 integrated circuit for keyboard or paddle input. RigPi Audio board is used for VoIP for remote operations, digital modes and I/Q spectral display (Panadapter).

RADIO/ROTOR SOFTWARE

RSS radio/rotor control uses Hamlib, a library of over 200 radios and 30 rotors. Update as new ones are added.

OPTIONS

MFJ-1234MB, $159.95. RigPi box with OS firmware installed.

MFJ-1234MA, $239.95. RigPi box with OS Firmware and audio board.

MFJ-1234KB, $69.95. K1EL WinKeyer3 board only.

MFJ-1234AB, $69.95. Audio board only.

MFJ-1234SD, $39.95. SD Card only.

MFJ-1305RP, $17.95. 5V, 3A Power Supply for MFJ-1234.

MFJ-5168, $14.95. Keyer to rig cable.

MFJ-5262, $9.95. CAT-5 Cable, 7 foot.

MFJ-5431, $5.95. USB to Micro USB.

MFJ-5429, $29.95. Serial-USB adapter.

MFJ-564/B, $99.95. Iambic CW paddles.

Radio interface cables available. Pg. 52.

TECH HELP

• RigPi forum is https://rigpi.groups.io

• RigPi website is https://rigpi.net

1. Tuner: RigPi Tuner window with KX3 tuned to 14.025.000 CW.


3. Log: RigPi Log shows worked QSOs.

4. Spots: RigPi Spots using the K1TTT Telnet site as a source. Graphic Bandspotter is on the right.

5. RigPi Web: Data about W1AW from QRZ XML subscription service. Rig-Pi also has onboard FCC database.

For your nearest dealer or to order, call 800-647-1800

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Starkville, MS 38059

Phone: (662) 323-5869; 8-4:30 CST, Monday-Friday.
Fax: (662) 323-6551
E-mail: mfjcustserv@mfjenterprises.com
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- **For additional information, see . . . www.mfjenterprises.com.
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Address: _________________________________________
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Email Address: ____________________________________
Phone (home): ____________________________________
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Ship to:
Name: ___________________________________________
Address: _________________________________________
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Payment: ( ) Visa  ( ) MC  ( ) Am Exp  ( ) Disc  ( ) Other__
Card No: _________________________________________
Exp. Date: ___________ Security Code: _________________

Qty | Company | Model No. / Part No. | Description | Price | Total
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Sub Total
Shipping & Handling
Order Total

Sales tax where applicable (MS, OH, FL must be added)

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Credit Cards: Mastercard, Visa, American Express and Discover, government and debit cards. Write your CC#, expiration date, CVV2 code on your card and other info clearly or call 1-800-647-1800; advise if billing address is different than shipping address. C.O.D. Fee: Additional $14.50, above shipping charges. Overseas orders are by Bank Transfer: Wire transfers directed to: Regions Bank, Birmingham, Alabama, ABA: 062000019, SWIFT: UPNBUS44; For further credit to: Regions Bank, Starkville, Mississippi; For Account of: MFJ Enterprises, Inc., Account Number: 0080558542. Add bank fee of $25.00 for any wire transfer amount. Sales Tax: Mississippi, Florida and Ohio must add sales tax from county they reside in. Prices and specifications subject to change without notice or obligation. MFJ will not be held responsible for printing errors.

NO RISK ORDERING

NO RISK ORDERING: Order any product “directly” from MFJ Enterprises, Inc., Starkville, MS and try it for 30 days. If not satisfied, we’ll cheerfully refund your purchase price (less shipping). No books or software.

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WARRANTY INFORMATION: All MFJ products (except as noted) come with MFJ’s famous No Matter What™ one year limited warranty. The warranty does not include kits, books or software. MFJ will repair or replace (at our option) your MFJ product No Matter What™ for one complete year. Customer MUST retain dated proof-of-purchase.

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*Code F/G items cannot be sent by USPS/mail. Foreign orders must call for quote.

All packages 1 lb. and under will be shipped by US MAIL for $13.00 minimum charge unless otherwise specified.

Shipping Charges: We ship via best ground method at a flat rate shown above. For faster service, call for quote. We ship Federal Express, Priority or standard mail service. 1-800-647-1800.

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Full 1500 watts SSB/CW... Digital & Analog SWR/Wattmeter... All features of MFJ IntelliTuners™— Ultra-fast, Safe Automatic Tuning... Wide Tuning Range (12-1600 Ohms from 1.8 to 30 MHz)... Radio Interfaces... Built-in Antenna Switch for two coax/long wire... Automatic Bypass protects your amplifier... Field Upgradeable Software... Compact!

MFJ-998 $699.95
Ship Code D

MFJ-998 Full Legal Limit 1.5kW IntelliTuner™ takes you to the final level in automatic antenna tuners. With a capability of 1500 watts SSB and CW, coupled with automatic tuning, your high-power station can now operate essentially hands-free even when frequency and band changes are made.

Fast Automatic Tuning

MFJ-998 instantly matches impedances from 12-1600 Ohms using MFJ’s exclusive IntelliTune™, Adaptive-Search™ and InstantRecall™ algorithms with over 20,000 VirtualAntenna™ Memories. When you key your transmitter, MFJ’s InstantRecall™ checks to see if that frequency has been used before. If so, tuning is instantaneous. If not, MFJ’s IntelliTune™ algorithm (based on MFJ’s efficient SWR Analyzer) measures the impedance, snaps the necessary components in place, and then fine-tunes the SWR. If the antenna impedance is outside the tuner’s measurement range, MFJ’s Adaptive Search™ algorithm measures the frequency and determines only relevant component values—which are then searched for fast tuning.

Safe Automatic Tuning and Amplifier Protection

The MFJ-998 includes MFJ’s Amplifier Bypass Control™—an MFJ exclusive feature! When used with a transceiver interface cable, tuning is safe and “stupid-proof”! When a tuning cycle is initiated, the MFJ-998 first bypasses any in-line amplifier. Next, the MFJ-998 initiates a low-power CW tuning carrier from your transceiver. When tuning is complete, the MFJ-998 reverts your transceiver to its prior power and mode, and re-enables the amplifier. This entire cycle typically takes less than a second! Finally, if the MFJ-998 cannot find a match better than a preset amplifier SWR trip-point, the amplifier stays bypassed to provide automatic SWR protection for your amplifier—another outstanding MFJ exclusive!

Analog SWR/Wattmeter

A large super-bright LED lighted analog Cross-Needle SWR/Wattmeter displays selectable 300/60 watt or 3000/600 watt forward/reflected full-scale ranges. You can even select automatic power ranging—best power range automatically selected for you.

Digital LCD SWR/Wattmeter

A two-line, 16-character backlit LCD meter displays SWR, forward/reflected power, frequency, antenna selected, an auto-ranging bargraph power indication, and more. You can even read the final matching inductor and capacitor values should you want to build your own fixed matching network. Simple menus determine displayed information—no complex button combos to remember!

MFJ VirtualAntenna™ Memory

MFJ new VirtualAntenna™ Memory system gives you 4 antenna memory banks for each of 2 switchable antenna connectors. Select up to 4 antennas on each antenna connector. Each antenna has 2500 memories, 20,000 total. Has two coax connectors and a binding post for end-fed long wire antennas.

Download, Upgrade Remotely

Field upgradeable firmware via serial port—download and upgrade your MFJ-998 as new features are introduced! Plus Much More!

Built-in radio interface provides control of most amateur transceivers.

Automatic bypassing when excessive tuning power is in excess of 1500 watts is applied.

Use balanced line antennas with external SWR protection for your amplifier—another outstanding MFJ exclusive!

MFJ ATU PC Board for Elecraft K-3 Rig

MFJ-950K3 is a super clone of the KAT3 optional tuning board for the superb Elecraft K3 transceiver. MFJ-950K3 is a direct plug-in PC board for the Elecraft K3 10 Watt or 100 Watt model. Covers 1.8 to 54 MHz. This automatic cableenna tuner PC board features an L-Match design and can match SWR up to 10:1. It handles 100 Watts. The ATU PC board has a second antenna port, and a sub-rx SMA port. All antenna ports are protected with gas discharge tubes. Super sensitive relay allows excellent low current drain. MFJ-950K3 is 4Wx3.5H x1/4D inches and easily slides right into the K3’s tuning board slot. Weighs less than 1/2 pound.

Pick up this great accessory for your K3 today and save $$$!
MFJ IntelliTuner™ Automatic Tuner

Automatically tunes unbalanced/balanced antennas . . . Ultra fast . . . New 20,000 memories . . .
Antenna Switch . . . Efficient L-network . . . Select 300 Watts (6-1600 Ohms) or 150 Watts (6-
3200 Ohms) . . . 1.8-30 MHz . . . 4:1 current balun . . . LED Lighted Cross-Needle plus Digital

**World's First dual power level 300/150 Watts SSB/CW Tuner**

Select 300 Watt SSB/CW power level and match 6-1600 Ohm antennas
Or . . . select 150 Watt SSB/CW power level and match extra-wide range 6-3200 Ohms!

The MFJ-993B IntelliTuner™ lets you tune any antenna automatically balanced or unbalanced -- ultra fast.

It's a comprehensive automatic antenna tuning center complete with SWR/Wattmeter, antenna switch and 4:1 current balun for balanced lines.

**Exclusive IntelliTuner™, Adaptive Search™ and InstantRecall™ algorithms** give you ultra fast automatic tuning with over 20,000 VirtualAntenna™ Memories.

You get a highly efficient L-network, 6-1600 ohm matching at 300 Watts SSB/CW or extra-wide 6-3200 Ohm matching at 150 Watts SSB/CW, 1.8-30 MHz coverage, Cross-Needle digital meters, audio SWR meter, backlit LCD, remote control port, radio interface, heavy-duty 16 amp/1000V relays.

**It learns while you’re having fun**

As you're ragchewing, contesting or DXing, your MFJ-993B is learning!

When you transmit, MFJ automatically tunes for minimum SWR and remembers your frequency and tuner settings. The next time you operate on that frequency and antenna, these tuner settings are instantly restored and you're ready to operate in milliseconds!

MFJ new VirtualAntenna™ Memory system gives 4 antenna memory banks for each of 2 connectors. Select up to 4 antennas on each connector. Each has 2500 memories, 20,000 total.

**Intelligent ultra fast tuning**

MFJ's InstantRecall™ first checks its memory to see if you have used this frequency before. If so, tuning is instantaneous and you're ready to operate.

If not, MFJ’s IntelliTuner™ algorithm - based on MFJ's famous SWR Analyzer technology - kicks in. It measures the complex impedance of your antenna. Next, it calculates the components it needs and instantly snaps them in. Then, it fine tunes to

**LED Lighted Cross Needle plus Digital SWR/Wattmeters**

LED lighted Cross-Needle and digital meters let you accurately read SWR, forward, reflected power at a glance.

Audio SWR lets you hear the tuned SWR when you can't see/read meters.

**Highly visible, instant response SWR LCD bargraph when you need it.**

**Backlit LCD Display**

An easy-to-read backlit LCD displays SWR, forward/reflected power, frequency, antenna 1 or 2, LED tuner values, on/off indicators and other information.

MFJ-993B is a compact 10Wx2¾ Hx9D inches. Use 12 – 15 VDC/1 amp or 110 VAC with Hx9D inches.

**Tune any Antenna**

Tune any antenna — dipoles, verticals, beams, phased arrays, inverted vees, quads, random wires, mobile antennas and limited space antennas.

A 4:1 true current balun lets you tune any balanced antenna - - horizontal loops, vertical loops, multi-band doubles, quads, folded dipoles, Zepps.

**Remote Control**

Plug in the MFJ-993RC, $44.95, remote control and use your tuner elsewhere remotely.

**Pre-wired Interface Cables**

Allows automatic tuning of your MFJ-991B/993B/994B IntelliTuner™ with your radio and these interface cables.


MFJ-5124B, $64.95, ALINCO.

Supports DX-70, DX-77 and others.

MFJ-5124K, $64.95, KENWOOD.


MFJ-5124Y, $64.95, YAESU.

Supports FT-100D, FT-450, FT-857D, FT-897, FT-950, FT-DX-300, others.

MFJ-5124R, $21.95, Supports YAESU FT-1000MP and compatibles.

MFJ-5124YA, $21.95, Yaesu FT2000, FTDX-5000, others.

MFJ-5124YL, $21.95, Yaesu Y split cable for MFJ tuner, ALS-1306.

**Dual 300/150 Watt Automatic Tuner**

World's only dual power Tuner --

**Select 300 Watt SSB/CW**

Antennas Or . . . select 150 Watt SSB/CW and match extra-wide range 6-3200 Ohms.

10,000 VirtualAntenna™ Memories. Like MFJ-993B, less digital SWR/Wattmeter/ LCD display, audio SWR meter/audio feedback, antenna switch or 4:1 current balun.

http://www.mfjenterprises.com
MFJ Compact 200 Watt IntelliTuners™

MFJ-929 IntelliTuner-Compact™ lets you automatically tune any coax fed or random wire antennas 1.8-30 MHz from 2 Watts QRP to full 200 Watts SSB/CW. Matches 6-1600 Ohms (SWR up to 32:1) -- that’s a 50% wider matching range at a higher power level than lesser competing products.

Get a digital SWR/Wattmeter with a backlit LCD, antenna switch for 2 antennas, built-in radio interface and internal BiasTee for remote tuner operation.

Exclusive IntelliTune™, Adaptive Search™ and InstantRecall™ algorithms give you ultra-fast automatic tuning with over 20,000 VirtualAntenna™ Memories. MFJ new VirtualAntenna™ Memory system gives you 4 antenna memory banks for each of 2 antenna connectors. Select up to 4 antennas on each connector. Each has 2500 memories.

4 Times the Solutions!

MFJ-929 gives you 256 values each of capacitance and inductances for

MFJ-929

2-Year No Matter What™ Warranty
MFJ-939I/K/Y/A $159.95
Ship Code A

Highly intelligent, ultra-fast tuning!
Don’t be fooled by competitors claiming fast searching -- if you have ¼ of the matching solutions, of course it takes less time but it’s not faster.

MFJ’s faster speed comes from advanced technology and software algorithms not from fewer solutions. MFJ’s IntelliTuner-Compact™ actually measures complex impedance (R/X) of your antenna, computes the L-network values needed and snaps in the correct L/C values in the instant match.

If the load is out of measurement range, AdaptiveSearch™ determines the smaller subset from all solutions that can match as a set and then searches only that subset -- others search through far more solutions.

Digital LCD SWR/Wattmeter
An easy-to-read, two-line, 16-character backlit LCD displays SWR, peak or average forward/reflected power, frequency, antenna 1 or 2, L/C tuner values, on/off indicators and other info. They are selected from easy-to-understand menus -- not complex combinations of buttons you can’t remember.

A fast-response, high-resolution bargraph gives you an auto-ranging 20/200 Watt power meter. You get 60 segments each for forward and reflected power and 36 segments for SWR -- try that with an 8 segment bargraph that makes you change power ranges and doesn’t even give you reflected power!

Read inductance and capacitance directly in uH and pF. Makes you an expert L-network designer! Match your load, read the resulting L/C values, then use them to build your fixed L-network. Or, knowing the L/C values you can determine R and X of load impedance.

StickyTune™ mode gives you one-hand handling by locking TUNE button -- transmit to tune regardless of SWR.

Has audio SWR meter and audio feed back. Competing products don’t.

Built-in 50 MHz frequency counter.

Built-in radio interface lets you use a simple cable to compatible rigs. Others require a cable with expensive circuits.

Binding post random wire. Self-test.

Highly efficient L-network. 10A, 1000V relays. RF duty silver mica capacitors. 1/4 wave, 7/8th, 21/24, 2 1/2, 10 watts VDC/1Amp or 110 VAC, MFJ-1316, $24.95.

Pre-wired Rig Interface Cables

for MFJ-929 series

These cables work with the following MFJ Automatic tuners: MFJ-929, MFJ-928, MFJ-925, and the MFJ-998.

MFJ-5114K, $21.95. MFJ-928 details.

MFJ-5114Y, $21.95. MFJ-928 details.

MFJ-5114Y3, $21.95. MFJ-928 details.

MFJ-5114Y4, $21.95. MFJ-928 details.

MFJ-925, $21.95. MFJ-928 details.

MFJ-928, $21.95. MFJ-928 details.

MFJ-929, $21.95. MFJ-928 details.

MFJ-998, $21.95. MFJ-928 details.

MFJ-929 is learning your antenna and the way you operate and DXing, the MFJ-939 is learning your antenna and the way you operate and storing all this in its 20,000 memories. The more you use it, the more it learns.

Get MFJ-939 and you can build your own custom L-network values needed and snaps in the correct L/C values in the instant match. MFJ-939 uniquely measures antenna’s complex impedance (R, X), computes the L-network and snaps in need-

8

MFJ . . . The World Leader in Ham Radio Accessories!
Tune your antenna AT your antenna!
Get greatly reduced losses and high efficiencies with long coax runs and high SWR antennas with this new MFJ-998RT 1.5 kW Remote Antenna Tuner.

Weather-Sealed
A tough, durable weather-sealed ABS cabinet with over-lapping lips, sealing gasket and stainless steel chassis protects the MFJ-998RT from all kinds of weather.

No Power Cable Needed!
No power cable needed -- remotely powered through coax. Includes MFJ-4117 Bias-Tee with on/off switch for station end of coax. Has 12 VDC jack for power cable, if desired.

Fully Protected
MFJ exclusive algorithms protect your tuner, radio and RF power amplifier from damage.

Automatic inductor and capacitor limiting prevents tuning extreme loads which can destroy your tuner.

Your tuner will not tune if more than 75 Watts with SWR greater than 3:1 is applied or if more than 125 Watts is applied.

Tuner output is static electricity and lightning induced surge protected.

Very high SWR can fold back transmitter power and prevent tuning caused by extreme differences in loads (example: changing bands and other conditions).

But MFJ exclusive StickyTune™ always tunes when power folds back -- prevents arcing from high SWR.

Tunes Coax fed and Wire Antennas
Tunes both coax fed and wire antennas. Has ceramic feed-through insulator for wire antennas. 2 kV Teflon® insulated SO-239 -- prevents arcing from high SWR.

High Power, Highly Efficient
MFJ-998RT Learns as you Operate
As you operate, the MFJ-998RT automatically tunes for minimum SWR and remembers your frequency and tuner settings. The next time you operate on that frequency and antenna, its tuner solution is restored in milliseconds and you’re ready to operate!

Highly Intelligent, Ultra-fast Tuning
MFJ InstantRecall™ recalls stored tuning solutions from 10,000 memories. For new frequencies, MFJ Intelli-Tune™ measures your antenna impedance and instantly determines the correct matching components. If antenna impedances cannot be measured, MFJ AdaptiveSearch™ searches only the relevant components that can match your antenna giving you ultra-fast tuning.

Field upgradable firmware. Requires 12-15 VDC at 1.4 Amps maximum or 110 VAC with optional MFJ-1316, $24.95.

Weighs 9.5 lbs. 13 1/4Wx6 3/4Hx17 1/2D inches.
MFJ-989D 1500W legal limit Antenna Tuner

The World’s most popular legal limit antenna tuner is the best -- You get better efficiency, lower losses, and a new true peak-reading meter. Full 1500 Watts SSB/CW, 1.8 to 30 MHz.

MFJ-989D
$439.95

Ship Code D

See dials make tuning super precise.

MFJ AirCore™ Roller Inductor
MFJ's AirCore™ Roller Inductor gives you lower losses, higher Q and handles more power with no self-resonances. It gives you cool, efficient and smooth tuning on all bands and it's air core can’t burn up! Large, self-cleaning wiping contact gives excellent low-resistance connection without contact arcing or burning. Fast-tune crank knob lets you reset your roller inductor quickly, smoothly and accurately. A precision gear driven 3-digit turns counter lets you accurately reset your roller inductor for quick band changing.

TrueActive™ Peak Reading Cross-Needle SWR/Wattmeter

New TrueActive™ peak reading SWR/Wattmeter lets you read true peak or average power on all modes. Large, easy-to-read super-bright LED lighted Cross-Needle meter lets you read SWR and forward/reflected (3000/300 Watt ranges) power at a single glance. Use 9-V battery and/or 12 VDC or 110 VAC with MFJ-1312D, $17.95.

MFJ High Voltage Current Balun

High voltage current balun lets you tune high and low impedance balanced lines without core saturation or voltage breakdown. It’s constructed with two giant 3/8 inch toriod cores and wound with high voltage wire connected to two variable capacitors.High Voltage Current Balun gives precise inductance control.

Super Antenna Switch

MFJ-989D’s super heavy duty antenna switch is made of two individual ceramic wafers wired in parallel. Extra wide spaced, heavy duty contacts handle extreme voltages and currents. We’ve never burned one up! Select two coax antennas (directly or through tuner), balanced line/random wire, or built-in dummy load. A full-size 300 Watt non-inductive 50 Ohm dummy load is built-in. It’s handy for transmitting tuning, testing/repairing rigs, setting power level, adjusting mic gain & more.

Roomy cabinet helps maintain components’ high Q. Vent holes keep components cool. Super construction -- non-stripping PEM nuts, wing-nut ground post, fire-retardant epoxy glass PC board, and heavy gauge wire throughout. 12"wx6"hxl/4"D inches.

The MFJ-989D has a nearly indestructable multi-color Lexan front panel. Its detailed logging scales and legends will be legible for a lifetime of DXing. TrueActive™ Peak Reading lets you read true peak or average power on all modes.

Wide Range T-Network

The MFJ-989D uses the time-tested wide range T-Matching Network. It gives you the widest matching range and is the easiest to use of all matching networks. With MFJ’s new high value 500 pF air variable capacitors and new low loss roller inductor, it easily handles high power efficiently.

MFJ KW Differential-T™ Antenna Tuner

MFJ’s innovative Differential-T™ tuner has a differential capacitor that makes tuning easier than ever. Gives minimum SWR at only one setting. Broadband design ends constant retuning. MFJ-986 is a rugged roller inductor antenna tuner that handles 3 KW PEP SSB amplifier input power (1500 Watts PEP SSB output). Tunes 1.8-30 MHz continuously, including MARS/WARC.

MFJ’s exclusive AirCore™ Roller Inductor gives absolute minimum SWR – something tapped inductors just can’t do. 3-digit turns counter plus a spinner knob gives precise inductance control.

6-position antenna switch lets you select two coax lines and/or random wires (direct or through tuner), balanced line and external dummy load.

MFJ’s TrueCurrentBalun™ for balanced lines minimizes feedline radiation that causes field pattern distortion, TVI and RF in your shack. Ceramic feedthroughs for balanced lines withstand high voltages and temperatures. Replacing two variable capacitors with a single differential capacitor gives wide range T-network tuning with just two controls – a capacitor and inductor.

Simple 2-knob tuning makes it easier than ever. Get minimum SWR at only one setting and a broadband response that ends constant retuning. 10 1/8"x4 1/4"x15 inches. Wide-spaced tuning capacitor plates let you run high power without arcing or overheating.

New TrueActive™ peak reading SWR/Wattmeter lets you read true peak or average power on all modes. Large, easy-to-read super-bright LED Cross-Needle SWR/Wattmeter lets you read SWR and forward/reflected (2000/200W ranges) power at a single glance. Use 9-V battery and/or 12 VDC or 110 VAC with MFJ-1312D, $17.95. Lamp on/off switch.
MFJ Compact Tuner for Amplifiers

MFJ AirCore™ Roller Inductor, Compact Size, Lexan scratch-proof front panel . . .

. . . handles Ameritron AL-811H!

Why settle for a mere 300 Watt antenna tuner when a few extra dollars lets you add real power when you’re ready? The MFJ-962D lets you use your barefoot rig now, when you’re ready . . .

When you’re ready . . . you can add a powerhouse linear amplifier at no additional cost.

MFJ-962D handles 1500 Watts PEP SSB amplifier output power). For Ameritron’s best selling AL-811H or 600 Watt AL-811 amplifiers.

Features MFJ’s AirCore™ Roller Inductor, new aluminum-skirted knob set including a weighted deluxe spinner knob, compact size (10½ x 4 x 10½ inches) and scratch-proof nearly indestructible multi-colored Lexan front panel.

Two transmitting tuning capacitors and MFJ’s exclusive AirCore™ roller inductor gives precise control to get your SWR down to an absolute minimum. Get extremely wide matching range from 1.8 to 30 MHz continuously, including MARS/WARC bands.

MFJ’s AirCore™ roller inductor has an air core that can’t burn up. You get ultra high-Q, low loss and MFJ’s exclusive Self-Resonance Killer™ that eliminates damaging self-resonances.

MFJ-962D now has the True-Active™ peak-reading SWR/Watts LED Meter! Lets you read true peak or average power on all modes. A super-bright LED lighted peak and average reading Cross-Needle SWR/Wattmeter makes tuning quick and easy.

One glance reads SWR, forward and reflected power in two power ranges. Meter LED uses 12 VDC or 110 VAC with MFJ-1312D, $17.95.

A 6-position ceramic antenna switch lets you select 2 coax lines (direct or through tuner), random wire and balanced lines.

You get a heavy duty MFJ TrueCurrentBalun™ for balanced lines. High-voltage ceramic feedthru insulators let you operate high power into balanced feedlines.

MFJ 300W Roller Inductor Tuner

World’s only 300 Watt AirCore™ Roller Inductor Antenna Tuner gives you absolute minimum SWR . . . Covers 6 Meters thru 160 Meters . . .

MFJ-969 gives you MFJ’s superb AirCore™ Roller Inductor and full 6 Meters through 160 Meters coverage! You get everything you’ve ever wanted including . . . 300 Watts PEP SSB full featured antenna tuner, widest matching range, full-size lighted Cross-Needle SWR/Wattmeter reads true peak forward power, QRM-Free PreTune™, 8 position antenna switch, built-in 50 Ohm dummy load, heavy duty 4:1 balun – all in a tough, attractive cabinet. MFJ’s famous one year No Matter What™ limited warranty.

MFJ-969’s AirCore™ Roller Inductor, gear-driven turns counter and spinner knob gives you exact inductance control for minimum SWR.

MFJ’s exclusive AirCore™ Roller Inductor has an air core that can’t burn up! You get ultra high-Q, the lowest loss, highest efficiency and highest power handling of any roller inductor in ham radio.

MFJ’s exclusive Self-Resonance Killer™ keeps potentially damaging self-resonances away from your frequency. Huge self-cleaning wiping contact gives excellent low-resistance connection without contact arcing or burning. Solid 1/4 inch brass shaft, self-align bearings – smooth non-binding operation. The MFJ-969 covers all frequencies from 160 Meters thru 6 Meters, including the “magic band” – the widest matching range of any full featured antenna tuner.

4 Foot Ground Rod

Durable 4-foot copper bonded steel earth ground rod is a tough 3/8” diameter that lasts. Pointed end makes it easy to drive into ground. Tie your equipment to a single earth ground to help bleed off static and RFI and prevent RF hot spots. Use several to form a good RF ground for random, long wire and vertical antennas.

www.mfjenterprises.com • Toll-free 1-800-647-1800
Ham Radio’s Most Popular 300 Watt Tuner
More hams use MFJ-949s than any other antenna tuner in the world!

More hams use MFJ-949E antenna tuners than any other antenna tuner in the world! . . . Why?
Because the world’s leading tuner has earned a worldwide reputation for matching just about anything.

Full 1.8-30 MHz Operation
Custom designed inductor switch, 1000 volt tuning capacitors, Teflon® insulating washers and proper L/C ratio gives you arc-free no worries operation with up to 300 Watts 1.8 to 30 MHz.

Tunes any antenna
Tunes out SWR on dipoles, verticals, inverted vees, random wires, beams, mobiles . . . nearly anything! Use coax, random wire or balanced coax and balanced lines.

Successful, time-proven, exceptional tuning . . . more!
MFJ-949 Tuner
MFJ-948, $179.95. Has all the features of the MFJ-949E except for a built-in dummy load.

Pre-made Premium Coax Patch Cables

- Weather resistant
- 50-Ohm coax patch cables
- Pre-soldered PL-259 connectors.
- Select length and choose from RG-58, RG-8X or RG-213 type.
- Made in U.S.A.

N-models are terminated with the N-type connectors.

<table>
<thead>
<tr>
<th>Length</th>
<th>RG-58</th>
<th>Price</th>
<th>RG-8X</th>
<th>Price</th>
<th>RG-213 (H)</th>
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<tr>
<td>3 ft.</td>
<td>MFJ-5803</td>
<td>$7.95</td>
<td>MFJ-5803X</td>
<td>$10.95</td>
<td>MFJ-5803H</td>
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<td>6 ft.</td>
<td>MFJ-5806</td>
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<td>MFJ-5806X</td>
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<td>9 ft.</td>
<td>MFJ-5809</td>
<td>$12.95</td>
<td>MFJ-5809X</td>
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<td>MFJ-5809H</td>
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<td>12 ft.</td>
<td>MFJ-5812</td>
<td>$13.95</td>
<td>MFJ-5812X</td>
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<td>MFJ-5818X</td>
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<td>MFJ-5818H</td>
<td>$22.95</td>
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<td>25 ft.</td>
<td>MFJ-5825</td>
<td>$19.95</td>
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<td>$26.95</td>
<td>MFJ-5850X</td>
<td>$31.95</td>
<td>MFJ-5850H</td>
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<td>100 ft.</td>
<td>MFJ-58100</td>
<td>$41.95</td>
<td>MFJ-58100X</td>
<td>$52.95</td>
<td>MFJ-58100H</td>
<td>$55.95</td>
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Coax Cutter/Stripper tools
MFJ-7402, $21.95. 9”. Cuts cable without crushing it. Aluminum up to 4/0 gauge, copper up to 2/0 gauge stranded. Carbon steel, hardened blade oxide finish.

MFJ-7404, $21.95, 2-Blades Coaxial Cable Stripper makes it easy to strip coax perfectly every time. Strips outer jacket and inside insulation at same time. Adjustable blades. For RG8, RG11, RG213 cable.

MFJ Artificial RF Ground

MFJ Artificial RF Ground

<table>
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<th>Model</th>
<th>Price</th>
<th>Ship Code B</th>
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<tr>
<td>MFJ-934</td>
<td>$229.95</td>
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</tr>
<tr>
<td>MFJ-931</td>
<td>$119.95</td>
<td>B</td>
</tr>
</tbody>
</table>

Create an artificial ground with this MFJ-931! It effectively places your rig near actual earth ground potential even if your rig is on the second floor or higher with no earth ground possible! It electrically places a far away RF ground at your rig.

How’s your RF ground? Do you have RF “hot spots” that “bite” you when you transmit? Do you have RF feedback that causes your rig to quit working on some bands? Do you have TVRF that makes your neighbors hard to live with? Do you get weak signal reports because of extreme ground losses or radiation pattern distortion?

These problems could be caused by poor RF grounding, especially if your rig is on a second floor with no ground at all. Even if you have a good ground, a long connection wire can ruin its effectiveness by isolating true RF ground from your rig. Continued right...
MFJ Compact Mobile HF Antenna Tuner

Covers HF and 6 Meters, Handles 300 watts, Has Antenna Bypass Switch

MFJ-945E mobile antenna tuner covers 6 Meters and HF (1.8-60 MHz), handles 300 PEP watts, and tunes coaxial cable-fed antennas, plus random wires.

Don’t leave home without this mobile tuner, and have a better trip as it extends antenna bandwidth and eliminates the need to stop, go outside, and readjust your mobile antenna.

The frustratingly narrow bandwidth of mobile antennas can be greatly broadened with this tuner.

Of course, this diminutive tuner can be used to tune coax-fed home station antennas of all kinds, too, as well as random wires.

The cross needle meter shows SWR, forward, and reflected power -- at a glance. It reads forward/reflected power in 300/60 and 30/6 watt ranges. The ON/OFF lamp is handy for changing light conditions in your vehicle; the meter lamp is 12 VDC powered with optional MFJ-1312D, $17.95. Large, conveniently-placed controls make tuning fast and easy.

The bypass switch lets you bypass the tuner (connecting your antenna and transmitter directly) while still using its SWR/wattmeter.

The back panel has SO-239 coaxial connectors for your transmitter and antenna feedline and a wing nut post for your ground.

For all-home use with a random wire a standard banana plug fits neatly into the antenna jack.

An efficient airwound inductor gives you lower losses for more watts output. The small, 8Wx2HxD inch black aluminum cabinet takes up little space. A mobile mounting bracket, MFJ-20, is $7.95. Add $2.00 shipping for the bracket if ordered separately.

Has MFJ’s One Year No Matter What™ limited warranty.

Portable Tuner for QRP to Full-bore Transceiver

The MFJ-971 is a tiny, inexpensive portable 200 watt PEP antenna tuner that’s a perfect match for today’s ultra-compact HF transceivers while offering features especially designed for the QRP operator.

Covering 1.8 to 30 MHz, this T-match tuner matches coax-fed antennas, balanced feedlines, and random wires. Built-in 4:1 toroid balun for balanced lines.

From the factory, the MFJ-971 offers forward power readings of 30 watts maximum or 300 watts, on its cross needle meter. You can monitor forward power, reflected power, and SWR simultaneously.

For dedicated QRP operation, swapping of a jumper plug internally converts the maximum forward reading on your meter to 6 watts. Great for use with MFJ’s 90/94 series of CW and SSB individual band transceivers.

MFJ 300-Watt Super Value Versa Tuner Covers 160-10 Meters

It’s not just a tuner, it’s an 8-position antenna switch.

The photo tells the story: select two coaxial-fed antennas, a balanced line (4:1 toroid balun included) or random wire or an external dummy load, and for each you can select “direct” (bypassing the tuner) or “tuned.”

This tuner is rated at 300 watts and can match dipoles, vees, random wires, and balanced and coax feedlines, from 1.8 to 30 MHz. You get a lighted cross needle SWR/wattmeter with on/off switch (lamp uses 12 VDC or 110 VAC with MFJ-1312D, $17.95).

The meter shows SWR, and forward and reflected power in 300/60 and 30/6 watt ranges selected at the front panel. An efficient 12 position airwound inductor gives low losses for more power out. Uses 1000 Volt capacitors. Aluminum cabinet has a durable scratch-proof multi-color Lexan front panel. 10½Wx2½Hx7D inches.

MFJ-941EK Antenna Tuner Kit

Ever wish to build your own? But then you realize the time and effort to put one together and find out it is just not worth it. MFJ has now made it fun and economical to build and test your very own MFJ antenna tuner. You get the popular MFJ-941E, all of its guts totally apart so you can build it yourself. The finished kit features 1.8-30 MHz coverage, 300 Watts power handling, 1.5 inch Cross-needle SWR/Wattmeter, 1000 Volt capacitors. Lexan front panel decal, all aluminum chassis and cover. All knobs, hardware, components and switches are here to build your very own MFJ tuner!!! You don’t have to punch a clock, but you don’t get an MFJ paycheck either, just the joy and pride of building your own.
MFJ 2500 Watts **ContinuousCarrier™ Tuner**


Get 2500 Watts continuous carrier output on all modes and all HF bands into most unbalanced antennas -- even on 160 Meters where even the best antenna tuners fail! MFJ-9982 gives you every feature you'll ever want in a high power tuner -- wide matching range, 1.8 to 30 MHz coverage, 6-position antenna switch, 4-core balun, dummy load, true peak/average lighted SWR/Wattmeter, 6:1 reduction drive, 3-digit turns counter, extra large knobs and more!

**New Technologies**

The Heart and Soul of the MFJ-9982 is its roller inductor and variable capacitors. MFJ's high power, high-Q continuous current AirCore™ roller inductor is not ordinary! It's edge wound from thick .06” silver-plated solid copper strap. It can carry huge circulating RF currents and withstand extreme heat that'll burn up ordinary roller inductors.

Self-insulating construction reduces stray capacitance -- keeps self-resonant frequencies high and out-of-the-way. Dual, silver-plated compression wheels give ultra low-resistance contacts. New fast-tune crank knob. High-current, high-capacitance 1000 pF and 500 pF air variable capacitors have low minimum capacitance and are self-insulating.

These newly developed capacitors and MFJ's patent-pending innovation gives you very high efficiency on 160/80 Meters and extremely wide matching range on 10/12/15 Meters at 1500 Watts SSB/CW.

MFJ 1500 Watt **Fully Balanced Antenna Tuner**

Fully balanced MFJ-976 handles 1500 Watts legal limit . . . Extra-wide 12-2000 Ohms matching range . . . continuous 1.8 to 30 MHz coverage including all WARC bands . . . Four separate 500 pF in two gangs gives you a total of 2000 pF capacitance . . . Heavy duty 1:1 current balun . . . more!

Cross-Needle SWR/Wattmeter lets you read SWR, true peak or average forward and reflected power all at a glance on 300/ 3000 Watt ranges.

Super-bright LED meter light. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95. Robust all metal cabinet is 12Wx6Hx15½D inches.

An inside view of the MFJ-976
MFJ Balanced Line Antenna Tuners

Superb balance... Extremely wide matching range... Covers 1.8-54 MHz... . Cross-Needle SWR Wattmeter... Handles 300 Watts... Compact size...

MFJ-974HB is a fully balanced true balanced line antenna tuner. It gives you superb current balance throughout its very wide matching range.

Johnson Matchbox

For decades, the Johnson Matchbox has been the standard of comparison for balanced line tuners. But, it had a severely limited matching range and covered only 80, 40, 20, 15 and 10 Meters. MFJ-974HB is its successor. It meets today’s needs and even surpasses the Johnson Matchbox’ outstanding matching performance.

**Everything You Need**

MFJ-974HB gives excellent current balance, very wide matching range (12-2000 Ohms) and covers 1.8-54 MHz continuously including WARC bands, 160 Meters, 6 and new 60-Meters. 300 Watts SSB PEP and 150 Watts CW.

**Tuning**

Fast and easy - - just 3 controls. Adjust for highly efficient broadband low-Q operation or use higher Q when you see extreme loads.

MFJ Small, high efficiency Loop Tuners™

Turns any wire loop into small, high efficiency multi-band transmitting loop antenna

**Drape a wire around a bookcase or window and attach both ends to this new MFJ Small Loop Tuner™. It instantly turns into a small, high efficiency multi-band transmitting loop antenna!** You can operate 5.3 to 30 MHz with a full 150 Watts. No ground, radials or counterpoises needed.

The excellent performance of a high-efficiency small loop antenna is legendary and well proven by users all over the world. You’ll radiate a low angle DX signal that literally rivals full size dipoles and work incredible DX!

Wire Loops and Mounts

MFJ-974HB

$244.95

Ship Code C

MFJ-936B

$289.95

Ship Code C

**MFJ-936B, $289.95.** Home/portable stations. Relative RF antenna current meter with sensitivity and 30/300W selectable range, Cross-Needle SWR/Wattmeter. Carry handle for portable. 9'/Wx5'/Hx9'/D in.

**MFJ-935B, $229.95.** Portable/home stations. Smaller, lighter. Relative RF current meter with sensitivity control.

**MFJ-933, $209.95.**Same as MFJ-935B less RF current meter.

**MFJ-9232, $64.95.** QRPocket™ Loop Antenna

**QRPocket™ Loop Antenna**

Portable loop antenna that makes portable operation truly portable and fun! No ground needed! High-efficiency loop covers 40-10M with included flexible wire loop. 25 Watts. BNC Connector for transmitter, wing nut posts for loop wires. Durable, plastic cabinet, 2'/Wx4'/Hx2'/D inches.

**MFJ-9234, $64.95.** Right. Like MFJ-9232 but connects directly to your favorite QRP rig with built-in PL-259-to-PL-259.

MFJ . . . the World Leader in Amateur Radio Accessories!
**MFJ tiny Travel Tuners**

MFJ brings you the world’s smallest full power 150 Watt 80-6 Meter Antenna Tuner. Extra wide matching range lets you tune nearly any antenna.

*It’s no toy, its got guts!* Built with real air variable capacitors (600 Volt, 0.022 pF) and three stacked powder iron toroids to handle real power -- not just QRP. Bypass switch lets you bypass tuner when you don’t need it. You can use any transceiver with full power with nearly any coax fed or random wire antenna for portable, home or mobile operation. It’s perfect for compact rigs like Icom IC-706MKIIIG, Yaesu FT-100D, Kenwood TS-50, QRP rigs and others with a built-in SWR meter.

Operate anywhere, anytime with a quick easy set-up! Tune out SWR on your mobile whip from inside your car. No need to operate in your apartment with a wall-wheeze or other device -- switch in antenna tuner, linear amplifier, preamp or any other device to your transceiver.

### 6-Meter Antenna Tuners

**MFJ-906, $109.95.** Low SWR with most any 6-Meter coax fed antenna. Get more power out of your transceiver and into your antenna for more DX. Lighted Cross-Needle SWR/Wattmeter shows SWR, forward, reflected power, 300/60, 300/90 Watts. MFJ-1312D, $17.95 for meter lamp. Built-in bypass, handles 100 Watts FM, 200W SSB PEP.

Works with solid state and tube rigs, 50-60 Watts. MFJ-903, $74.95. Like MFJ-906. Less meter/bypass. 5Wx21/2Hx3D”.

**RF Bypass Switches**

**MFJ-1705, $21.95**

Connect your antenna and transceiver with the MFJ RF Bypass Switch and you can switch in or bypass your antenna tuner, linear amplifier, preamp, wattmeter or other device -- switch in and bypass any coax fed device with PL-259 UHF connectors. DC to 60 MHz. SO-239 connectors. 50-75 Ohms. 300 Watt and 1500 Watt models. 3Wx11/2Hx1D inches.

**MFJ-1705H, $34.95**

Connect your antenna and transceiver with the MFJ RF Bypass Switch and you can switch in or bypass your antenna tuner, linear amplifier, preamp, wattmeter or other device -- switch in and bypass any coax fed device with PL-259 UHF connectors. DC to 60 MHz. SO-239 connectors. 50-75 Ohms. 300 Watt and 1500 Watt models. 3Wx11/2Hx1D inches.

**Mobile Antenna Matcher**

**MFJ-910, $19.95**

Matches HF mobile antennas (ham sticks, screwdrivers, etc.) 10-80 Meters by adding C (capacitance) at the antenna feedpoint to ground to form L-network with antenna. 11 values of switchable capacitance 30 pF-2000 pF. Handles 600 Watts. SO-239 connectors. 3Wx3Hx11/2D inches.

**MFJ-914, $49.95**

This RF Sampler allows you to safely and accurately monitor output signals from transmitters and other high-power RF generators. Sampled output port is DC isolated from the RF source, attenuated by -50 dB and fed to a 50 Ohm BNC output. Handles 600 Watts. SO-239s for input/output.

**AutoTuner Extender**

**MFJ-906, $64.95**

Does your rig’s automatic tuner have limited matching range? MFJ-914 transforms your antenna impedance as much as 10 times! Puts nearly any antenna into the range of your automatic or manual tuner. Covers 180-10 Meters, handles 300 Watts, has bypass position. Measures a compact 6Wx4Hx21/2D inches.

**Mobile Ant. C-Matcher**

**MFJ-908, $34.95**

Matches HF mobile antennas (ham sticks, screwdrivers, etc.) 10-80 Meters by adding C (capacitance) at the antenna feedpoint to ground to form L-network with antenna. 11 values of switchable inductance, .2 uH-12 uH. Handles 200 Watts. SO-239 connectors. Compact 4Wx3Hx11/2D inches.

**AutoTuner Extender**

**MFJ-914, $49.95**

This RF Sampler allows you to safely and accurately monitor output signals from transmitters and other high-power RF generators. Sampled output port is DC isolated from the RF source, attenuated by -50 dB and fed to a 50 Ohm BNC output. Handles 600 Watts. SO-239s for input/output.

**Tiny Tuner with Cross-Needle SWR/Wattmeter and 4:1 balun**

**MFJ-904H, $159.95.** Like MFJ-902 but has a large 1.5 inch Cross-Needle SWR/Wattmeter and 4:1 balun for tuning balanced lines. 7/4x21/2x1/2D in.

**MFJ-904, $139.95.** Has Cross-Needle SWR/Wattmeter, but no balun. 7/4x21/2x1/2D inches.

**Dual Band 144/440 Toner**

**MFJ-923, $219.95.** Covers the complete 144 MHz and 440 MHz frequency ranges. Built-in Cross-Needle SWR/Wattmeter measures SWR, forward and reflected power in two ranges: 300/30 Watts. Meter is usable for both bands. Handles 200 Watts. Matches a wide range of impedances for both mobile and base operation. Single input/output SO-239s. Wing nut post for ground, black aluminum cabinet, compact at 9Wx4Hx21/2D inches.
**MFJ-259C 530 KHz to 230 MHz SWR Analyzer™**

**Reads complex impedance . . . Super easy-to-use**

Reads SWR . . . Complex RF Impedance: Resistance (R) and Reactance (X) or Magnitude (Z) and Phase (degrees). . . Coax cable loss (dB) . . . Coax cable length and Distance to fault . . . Return Loss . . . Reflection Coefficient . . . Inductance . . . Capacitance . . . Battery Voltage. LCD digital readout . . . covers 530 KHz-230 MHz . . . frequency counter . . . side-by-side meters . . . Ni-Cad/Ni-MH charg-er circuit . . . battery saver . . . low battery warning . . . smooth reduction drive tuning . . . more!

**All-in-one ham radio test set**

**Includes** frequency counter, RF Generator, SWR Analyzer™, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance/Inductance Meter... and more!

**Large** easy-to-read two line LCD screen and side-by-side meters clearly display your information.

**Here’s what you can do . . .**

Find your antenna’s true resonant frequency. Trim dipoles, verticals for lowest SWR at your favorite frequency.

Adjust your Yagi, quad, loop and other antennas, change antenna spacing and height. Watch SWR, resistance and reactance change instantly. You’ll know exactly what to do by simply watching the displays.

Perfectly tune critical HF mobile antennas in seconds for super DX -- without subjecting your rig to high SWR.

**Measure** your antenna’s 2:1 SWR bandwidth and analyze multiband performance! Check SWR outside ham bands without transmitting and violating FCC rules. Adjust your antenna tuner for a perfect 1:1 without creating QRM.

**Take** the guesswork out of building and adjusting matching networks and baluns and antennas.

**Accurately** measure distance-to-short or open in failed coax. Measure coax length in feet, loss in dB, velocity factor and impedance.

**Measure** inductance, capacitance. Troubleshoot resonant frequency. Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns.

**Built-in** Ni-MH/Ni-CD charger circuit, battery saver, low battery warning and smooth reduction drive tuning.

**Use** 10 AA or Ni-MH batteries (not included) or 110-240 Vac with optional MFJ-1312D, $74.95. Carry pouch, dip coil adapters, MFJ power supply.

**MFJ-99C, $49.95.** MFJ-1312D, 110/220 Vac supply, 10 Ni-MH batteries. MFJ-29DABC, $109.95. Deluxe Accessory Pack has 10 Ni-MH batteries, MFJ-1312D power supply, MFJ Carrying pouch, dip coils. **Save $1**!

**MFJ-92AA10, $34.95.** 10-pack MFJ NiMH AA rechargeable batteries. MFJ-1312D, $74.95. MFJ-S510C, $12.95. 12VDC cigarette lighter adapter -- use your SWR Analyzer on-the-road to make quick adjustments to HF/VHF/UFH mobile antennas! 18 inch retracted curl cord, 60” full stretch. Easily fits in glove compartment.

**Adapters for your MFJ-259C**

MFJ-7737, $6.95. PL-259 to SMA Female Adapter.

**MFJ-249C SWR Analyzer™**

**Save a few bucks!**

MFJ-249C is like MFJ-259C, but less analog meters. Reads SWR, true impedance magnitude and frequency on LCD module. Has ncid/nimh charging circuit, can use MFJ-259C accessories.

**MFJ Analyzer Dip Coils**

**1:1 Current balun lets you use your MFJ Antenna Analyzer on balanced line antennas and other loads.** 1.8-30 MHz. 2Wx3"/x1/2D in. SO-239 for analyzer input. MFJ-7702, $4.95. PL-259 to PL-259 barrel connector.
530 KHz-230 MHz plus 415-470 MHz
HF/VHF/UHF SWR Analyzer

Covers 530 KHz-230 MHz and 415-470 MHz . . . SWR . . . Complex RF Impedance: Resistance(R) and Reactance(X) or Magnitude(Z) and Phase(degrees) . . . Coax cable loss(dB) . . . Coax cable length and Distance to fault . . . Return Loss . . . Reflection Coefficient . . . Inductance . . . Capacitance . . . Battery Voltage . LCD digital readout . . . frequency counter . . . side-by-side meters . . . Ni-MH/ Ni-Cad charger circuit . . . battery saver . . . low battery warning . . . smooth reduction drive . . .

MFJ-269C covers 530 KHz to 230 MHz and 415 to 470 MHz -- an MFJ-269C exclusive!
Includes all the features of MFJ-259C, the world's most popular SWR Analyzer plus much more!

Large easy-to-read 2-line LCD display and side-by-side meters clearly display your information. Built-in Ni-Cad/Ni-MH charger circuit, battery saver, low battery warning, smooth reduction drive tuning, signal presence for testing/alignment. Built-in CoaxCalculator™ -- calculates coax line length in feet given coax length in electrical degrees and vice versa for any frequency, any velocity factor (great for building matching sections and phasing lines) -- an MFJ-269C exclusive!

12-bit A/D converter gives much better accuracy and resolution than common 8-bit A/Ds -- an MFJ-269C exclusive!

Super easy to use! Set the bandswitch and tune the dial -- just like on your rig! 530 KHz to 230 MHz Range Features

MFJ-269C gives you a complete picture of your antenna. Read antenna SWR and Complex Imped-ance 530 KHz to 230 MHz. Built-in frequency counter. Read Complex Impedance as series equivalent resistance and reactance (Rs+jXs) or as magnitude (Z) and phase (degrees). Also reads parallel equivalent resistance and reactance (Rp+jXp) -- an MFJ-269C exclusive!

Determine velocity factor, coax loss in dB, length of coax and distance to short/open in feet, read SWR, return loss and reflection coefficient at any frequency simultaneously at a single glance. Also reads match efficiency. Also read inductance in uH and capacitance in pF at RF frequencies. Measure SWR and loss of coax with any characteristic impedance, 10 to over 600 Ohms, including 50, 51, 52, 53, 73, 75, 93, 95, 300, 450 Ohms -- an MFJ-269C exclusive!

415 to 470 MHz Range features

Just plug in your UHF antenna coax, set the frequency and read SWR, return loss and reflection coefficient simultaneously. You can read coax cable loss in dB and match efficiency. You can adjust UHF dipoles, verticals, yagis, quads and other antennas and determine their SWR, resonant frequency and bandwidth. You can test and tune stubs and coax lines. You can manually determine velocity factor and impedances of transmission lines. Adjust and test RF matching networks and RF amplifiers without applying power. Easy-to-read LCD logarithmic SWR bargraph/meter for quick tuning. take it anywhere

Fully portable, take it on remote sites, up towers, on DX-peditions. Built-in "N" connector. Includes Free N-to-SO- 239 adaptor. Use 10 AA Ni-MH or Ni-Cd or alkalines (not included -- alkalines cannot be charged internally) or 110- 240 VAC with MFJ-1312D, $17.95.

Compact 4Wx2Dx63/4H inches. Maritime and 600 Meter Coverage

MFJ-269CM, $399.95. Like MFJ-269C except the bottom band covers 470-940 KHz for Maritime and 600 Meter bands.

MFJ High Capacity 3000mAh AA & 800mAh AAA Ni-MH SuperCell™ Batteries

MFJ-92AA01, $3.95 each.
MFJ-92AA04, 4-Pack, $7.95 each.

SuperCells™ for your MFJ-259C and MFJ-269C SWR Analyzers!

MFJ-269CPro, $429.95. Like MFJ-269C, but has its UHF range coverage 430 to 520 MHz and an extended commercial-style cabinet for lab work (helps protect knobs and connectors from damage.

MFJ-269C Pro, $429.95. Like MFJ-269C, but has its UHF range coverage 430 to 520 MHz and an extended commercial-style cabinet for lab work (helps protect knobs and connectors from damage.

MFJ-269C SWR Analyzer Accessories

MFJ-39D, $34.95. Tote your MFJ-269C anywhere with this genuine MFJ-custom carrying case. Back pocket with security cover for carrying dip coils, adaptors and accessories. A special foam-filled fabric cushions blows, deflects scrapes, and protects knobs, meters and displays from harm. Wear it around your waist, over your shoulder, or clip it onto the tower while you work -- the fully-adjustable webbed-fabric carrying strap has snap hooks on both ends. Has clear protective window for frequency display and cutouts for knob connectors -- use your MFJ Analyzer™ inside the pouch.

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Antenna Expert™

MFJ VNA Antenna Analyzer covers 1 to 230 MHz, 1 Hz resolution.
- Frequency sweep plots: SWR, Impedance, Resistance, Reactance, Phase Angle, Complex Return Loss, Smith Chart
- Sign of reactance
- Amazing accuracy with OSL (Open-Short-Load) calibration.

Here’s a few Screen Shots

Main Menu

- Selects these modes: Single Frequency, Swept Frequency, Calibration Screen (manages OSL calibrations), Settings Screen (basic analyzer setup) and PC Mode (dumps data in computer).

Single Frequency Mode

- First screen shows SWR in BIG 3/4 inch digits and the Frequency reading in a single glance.

Swept Impedance plots (Z) displays impedance magnitude and phase angle at any frequency.

Reactance Plot

- Shows reactive curve, but also provides R and X values numerically at the selected frequency.

Phase plot also presents RL data and phase angle, but the plot depicts the Phase Shift across the selected frequency span.

Smith Chart plot

- Moveable cross-hair tracks plot over any frequency span. Displays S11 magnitude, phase angle at any frequency.

OSL (open/short/load) calibration for super accuracy and true reactance, including its sign from 1-230 MHz with 1-Hz frequency resolution!

Incredibly Powerful

MFJ-226 is the first and only low-cost handheld VNA (Vector Network Analyzer) to feature OSL (open/short/load) calibration for super accuracy and sign of reactance to positively identify inductive or capacitive reactance.

These two features, normally only found on lab instruments, place incredible diagnostic power in the palm of your hand.

With it, you’ll measure impedance plus many other critical load parameters directly, through feedline or test cable with exceptional accuracy, correcting for line loss and phase angle.

Swept-Frequency Mode

- Presents an unusually wide range of load information including . . . SWR, Frequency, Impedance Magnitude, Series and Parallel Impedance (R±jX), S11 (Rectangular and Polar), Capacitance and Inductance

32 Memories

- 32 memories let you capture screens made in the field for download into your PC via mini USB port for later storage and use.

Store OSL Calibrations

- You can run OSL calibrations through your test cable or feedline or at different frequencies and store them for future use.

Fits Your Hand Perfectly

- Better doesn’t mean bigger! The MFJ-226’s compact and virtually indestructible molded case fits your hand perfectly with real backlit keys that depress to give you tactile feedback.

Easy-to-read Backlit LCD

- Bright 2 1/2 inch LCD backlit screen is easy-to-read, even in direct sunlight.

Use two AA batteries

- Use disposable Alkaline or rechargeable NiMH AA batteries (not included).

Firmware upgradeable via USB port.

- Available NiMH AA batteries (not included).

In N, SO-239, BNC connectors.

- Select B (BNC), N (N-type) or U (PL-259).

www.mfjenterprises.com • Toll-Free 800-647-1800
The World Leader in Amateur Radio Accessories!

**MFJ-225 HF/VHF Two-Port Graphic Antenna Analyzer**

Take RF testing to the next level with the new MFJ-225! All the basic analyzer functions you’ve come to depend on plus a host of advanced features like built-in LCD graphics, two-port VNA measurement, PC-Interface using IG-miniVNA freeware, precise DDS frequency control, self-calibrating . . . easy-to-use!

**Two Analyzers in One**

Out in the field, MFJ-225 is a compact completely self-contained handheld analyzer. On the bench it becomes a full-fledged two-port (S21) desktop machine when teamed up with your PC. Using powerful IG-miniVNA freeware, you’ll run detailed data analysis and then print out stunning color-graphic plots to document your work!

**Seeing is Believing**

Get a big picture every time with Master 225’s built-in back-lit 3-inch LCD graphic display. Make fine circuit adjustments using full-screen easy-to-view SWR bar graph, capture vivid sweep displays for SWR, impedance, return loss, phase angle, more! Operation is simple, you can adjust the center frequency, tuning step, and sweep width instantly while viewing your plot, literally shaping it before your eyes.

**Powerful Clean Signal Source**

MFJ-225 DDS stimulus generator also gives you a leveled -5dBm signal source for driving mixers, low-power amplifiers, filters, networks, diplexers, and antennas on the test range. And, your test signal is always clean, with over -50 dBc of harmonic and spur suppression. That’s better than many precision lab generators costing thousands of dollars! Connect an external step attenuator, and it becomes a high-quality signal generator for peaking sensitive receivers and preamplifiers.

**Ergonomic Operation**

MFJ-225 simultaneously compiles and displays all important parameters on a single screen, giving you a wider range of results at-a-glance. You’ll work faster and smarter without the inconvenience of scrolling through menus or making conversions to get your data.

**What the MFJ-225 Measures:**

- SWR (1:1 to 9.9:1)
- Complex Impedance (R+iX)
- Impedance Magnitude (Z)
- Return Loss (RL, -30dB)
- Phase (0-180°)
- Capacitance (0-9999pF)
- Inductance (1uH-80uH)
- Cable Length (0.5-45m)
- Cable Loss (0-30dB)

**Two-Port Flexibility**

In addition to traditional single-port power measurements, essential for optimizing filters, diplexers, matching networks, etc. It bridges the gap between a simple scalar analyzer and true vector-analysis performance.

**Specifications**

- MFJ-225 requires 4 NiMH AAA cells or optional power adapter MFJ-1312D, $17.95. PC interface requires a USB Type-B cable.
- MFJ-225 includes all of the above accessories.
- MFJ-7719, $5.95. SMA Male to SO-239 adaptor for VNA port.
- MFJ-225 requires 4 Ni-Mh rechargeable batteries. MFJ-7719, $5.95. SMA Male to SO-239 adaptor for VNA port.
- MFJ-92AAA04, $7.95. 4-Pack of Ni-MH rechargeable batteries.

**Easy To Power**

MFJ-225 can be powered by four AAA alkaline batteries or four AAA NiMH rechargeable batteries (batteries not incl.). Optional MFJ-1312D, $17.95 or any external 12 VDC power is required for the built-in recharge circuit with charge indicator LED. LED will light while charging and turn off when cycle is completed. On the bench, power it through the USB power port using any USB power source. Optional USB cable, MFJ-5430, $4.95.

**Self-Calibrating**

In order to maintain out-of-the-box accuracy, all analyzers require periodic calibration -- a potentially time-consuming operation that may require special RF loads and unique procedures. MFJ-225 uses built-in firmware to perform its entire calibration routine in less than a second! Simply initiate the "calibrate" command and you’re done!

In addition to traditional single-port...
MFJ-223 1-60 MHz Color Graphic VNA Analyzer
Pocket-Size, Incredible Performance! Truly accurate SWR, R, X and Z!

This pocket-sized wonder breaks the mold for analyzer design with user-friendly convenience, top notch accuracy, and a vivid TFT multi-color display. Don’t let the size fool you, MFJ-223 is packed with all the VNA features and performance you need!

For example, get data for SWR, resistance (R), reactance (X), and impedance magnitude (Z) delivered on a color-coded high-resolution bargraph display or sharply defined swept-frequency plots.

Continuous DDS frequency coverage with 100-Hz resolution. Full selection of tuning steps, sweeps. Movable marker calls up alphanumeric data for any point on any plot – memory captures current data when you turn the analyzer off. Get other useful features too, like a built in help menu and a field-strength indicator warns when powerful interference is present.

Best of all, juggling batteries is a thing of the past -- a long-running lithium-polymer power source is built right in. Recharge via any USB port.

Check out these specifications:
• Single-frequency and swept-frequency operating modes
• Truly accurate SWR, R, X, Z measurements
• Seamless DDS coverage with 100-Hz resolution from 1-60 MHz
• Smooth "skip-free" encoder tunes

MFJ-223 is packed with all the VNA features, convenience, top-notch accuracy, and a vivid TFT multi-color display.

MFJ-204B, $109.95. This HF SWR Analyzer helps you build the antennas you need for quality DX work. Plug in your coax to measure the SWR of any HF antenna from 160 through 10 Meters. Has jack for external frequency counter. Use with 9VDC battery or 110VAC with MFJ-1312D, $17.95. Handheld size 7"x5"x2"/WxHxD".

MFJ-208C, $209.95. HF/VHF Analyzer reads SWR from 530 KHz to 230 MHz quickly on a single analog meter. Tunes knob, frequency control make quick, easy tests. Use 10 AA cells or 110VAC with MFJ-1312D, $17.95. 4x2'/x6'/x1'/D". Check capacitance, inductance, field strength, frequency, generate test signals. Fine tune stubs, analyze coax, test baluns and RF transformers, and perform many other important RF-related tasks around the shack or on the road!

MFJ-201, $159.95. In the vacuum tube days the grid dip meter was owned by every ham. This version is smaller, lighter, and vastly more versatile than its ancestor. Use as dip meter, field-strength meter, or field strength meter. Covers 1.5-250 MHz -- a must-have for testing VHF rigs. Compact 7"/Hx2'/Wx2'//D". Use 9 Volt battery or 110VAC with optional MFJ-1312D, $17.95.

MFJ-202B, $84.95. Adjust any antenna for max performance, 1-100 MHz. Lengthen/shorten antenna for minimum SWR. Measure resonant frequency, feedpoint resistance, reactance. Resistance scale, expanded capacitance range, built-in range extender. 4'/Wx2'/Hx4'/D". Use 9V battery.

Economical Dip Meter covers 1.5-250 MHz couple to an antenna/coax to get electrical length, or use it as an absorption wavemeter for measuring transmitter output, neutralizing tank circuits, or field strength meter. Covers 1.5-250 MHz in 6 bands, thumb wheel tuning, color readout, 6 coils, earphone jack and battery check. Use 9V battery. 2Wx2'/Dx7'/H" including coils.

www.mfjenterprises.com • Toll-free 1-800-647-1800
**MFJ RF Design Box Variable Inductor/Capacitor Tester**

This compact device places a wide range of patchable L and C values in your hands to solve virtually any HF tuning and matching problem you come across.

After all, inductors and capacitors are fundamental building blocks for RF design. Build and test virtually any popular HF configuration in minutes without ever turning a soldering iron on or lifting it!

No need for modeled predictions when you can connect a few patch leads and find optimized values for absolute peak performance. Even try different network configurations to see which one is the best!

Here are just a few of the circuits you can assemble: • L-networks, T-networks, Pi-networks • Band-pass filters, Band-stop filters • Traps and reject Filters • Loading inductors • Shunt-L/C shunt-matching elements • Load Converters • Power Reducers • Q-meter • Antenna-analyzer pre-selector • Selective field-strength meter • Antenna Tuners • more!

**MFJ Inductance/Capacitance Multimeter**

No more guesswork identifying unmarked or faulty inductors and capacitors. Let the MFJ-200A Handheld LC-Meter do it for you! Measures capacitance down to 0.01 pF and inductance to 0.01 mH.

MFJ-200A delivers laboratory performance at an unbeatable price using a sophisticated high-speed micro-controller to compute unknown capacitance/inductance.

Highly accurate, compact, rugged, self-calibrated, and super easy-to-use. Simply turn on, select function, press zero-calibrate button, and connect your component. Result appears instantly on the easy-to-read LCD with 4-digit numerical resolution.

Store calibration data in memory. MFJ gives you four selectable ranges: 0.01 pF - 10 uF; 1 uF - 100 uF; 0.001 uH - 100 mH; 0.01 mH - 100 H.

Accuracy is typically 1% for most values. During any given test, press the Function button to read the exact frequency used for the measurement. Use four AA batteries (not included), 5.5 VDC AC adapter, or any USB power source with a mini-USB plug.

Should you forget and leave power on, a shutdown feature turns it off. Just push power switch to resume testing.

No test bench is complete without a good digital L/C meter. Enjoy hand-held convenience plus all the benefits of twenty-first century technology. Handheld, 3.5"wx6"hx1"d inches.

MFJ-200ASC, $11.95

This surface mount component clip lets you measure any SMT inductors and capacitors. Use with your MFJ-200A. Durable hard plastic tool with spring handles.

**MFJ White Noise Generator**

MFJ-5014, $49.95.

Check IF/HF sensitivity, tune/ adjust filters/networks and more. Combine with directional coupler to measure return loss. Requires 9V battery. BNC/SO239s.

**Variable Resistance/Capacitance Sub Box**

MFJ-5904, $159.95.

Reliable portability, compact molded case and high-quality jacks and controls.

Two capacitor banks are continuously adjustable 12 pF to 912 pF plus a stepped inductor that is adjustable 0.1 to 11.2 uH. Controls are RF-isolated from the aluminum front panel for your safety.

Packed with loads of information and data to erase the "black magic" associated with RF design. This tremendous training tool will help you develop a true hands-on feel for how RF tuned circuits work.

Why spend hours soldering and lashing prototype circuitry together? Let the MFJ RF-Design Box do it all for you in a matter of minutes.

Compact 7Wx3Hx5½"d inches, super lightweight construction.

**MFJ Doppler Direction Finder**

Quickly find hidden transmitters on a fox hunt or just trying to find transmissions from 100 to 1000 MHz.

MFJ-5005 is a very economical but very sophisticated Doppler Direction Finder with GPS. Connect a PC or laptop to position and draw plots on GoogleEarth™ display window accompanied with Navi 2020 plotting program.

The large LED display shows the signal in numerical degrees and also on the 36-LED circular ring.

Set-up is super easy! Connect it to the cigarette lighter and an HT with the supplied cables. Connect the antenna control cable, put the antennas on top of your vehicle roof and you’re ready to roll!

Completely assembled. Package includes mobile mounting bracket, four magnet mount bases with BNC connector, GPS antenna, cigarette lighter power cable, audio cable and software.

Receiver size is 7¼wx2¼hx5½"d.
MFJ Giant Cross-Needle Peak-Reading SWR/Wattmeters

Large 3½ inch meter . . . Read forward/reflected power and SWR at a glance . . . Individual Meter scales for each power range . . . LED backlighting . . . 3-color scale . . . True directional coupler . . . Low bias Schottky Diode detectors for increased linearity low to high power . . .

MFJ Giant SWR/Wattmeter series have large 3½ inch Cross-Needle SWR/Wattmeters that have a three-color scale for improved readability. These wattmeters simultaneously display forward/reflected power and SWR all at a glance! They each have individual meter scales for each power range that increase reading accuracy.

A True™ Active peak-reading circuit is included for SSB operation (MFJ-891 only). LED backlighting provides smooth and even illumination for easy night viewing.

Low bias Schottky diode detectors increase linearity from low power to high power readings.

True directional coupler for increased accuracy gives solid readings over the entire frequency range. HF to UHF. DC grounded antenna connectors prevent electrostatic build up.

SWR less than 1.2:1. Meter accuracy is +/- 10% of full scale or better. Has lighted meter on/off switch.

These wattmeters are extra sturdy with large rubber feet and a rugged metal and a designer-styled plastic injection molded front panel. Handsome black speckled finish and gray molded front panel aesthetically complements today’s modern transceivers. Has super quality input/output SO-239s. 7 1/8Wx4 1/8Hx1 1/8D inches.

Select from the following models:

- MFJ-891, $119.95.  
  HF model covers 1.6 to 60 MHz. Handles 2 kW in three power ranges: 20/200/2000 Watts. MFJ-891 has the precision TrueActive™ PEP Circuit for SSB operation. You get true PEP readings when in SSB mode.

- MFJ-892, $119.95.  
  HF/VHF model covers 1.6 to 200 MHz. Handles 200 Watts in three power ranges: 2/20/200 Watts.

- MFJ-893, $119.95.  
  VHF/UHF model covers 125-525 MHz. Handles 200 Watts in three power ranges: 2/20/200 Watts.

- MFJ-894, $139.95.  
  HF/VHF/UHF model has two input sensors. Covers 1.6-60 and 125-525 MHz. Use two RF sensors for HF or VHF/UHF operation. Handles 200 Watts in three ranges: 2/20/200 Watts.

www.mfjenterprises.com • Toll-free 1-800-647-1800
**MFJ Compact HF, VHF, UHF SWR/Wattmeters**

- True Active Peak Reading Circuit
- Large 3” Cross-Needle Meter
- LED Backlighted lamp
- Large 3” Cross-Needle Meter
- True Active Peak Reading Circuit

**MFJ GrandMaster™ SWR/Wattmeter Series**

GrandMaster™ SWR/Power Meters are the Cadillacs of ham radio! If you will not settle for less than the best accuracy and precision then these are for you.

**You get a large 3/4x1/4 inch precision illuminated meter for easy wide angle viewing.** Highly visible black and red meter scale on a white background makes it easy to read SWR, forward or reflected power. Meter lamp requires 13.8 VDC or 110 VAC operation.

**Functional**, simple front panel layout lets you select power ranges, bands or make SWR readings intuitively.

**GrandMaster™ series feature an SWR scale that extends the full meter.** 3:1 SWR is centered at mid-scale to give precision, wide-range measurements.

**GrandMasters™ feature peak, average, forward and reflected power readings and have selectable power ranges.** Each is housed in an all metal cabinet with rubber feet and protected by durable speckled black paint. Designer injection molded gray front panel matches any transceiver. 7 1/2Wx3 1/8Hx4 1/4D”.

**MFJ Digital SWR/Wattmeters**

- **FWD, REF, SWR at a Single Glance!**

**MFJ-815D and MFJ-817C read true-peak** or average power on a large illuminated three-inch Cross-Needle Meter.

**TrueActive™ peak reading circuit gives an incredibly accurate SSB/CW readings over wide frequency range.**

**Cross-Needle Meter** reads SWR and true peak average, forward and reflected power simultaneously – a single glance! 1.8 to 60 MHz. MFJ-817C covers 144/220/440 MHz. Mechanical adjustment for accurately zeroing the meter.

**Push button selects range, meter lamp on/off and peak for SSB or average for CW operation. Quality SO-239 Connectors for input/output.**

**Continued from left . . .**

**MFJ-815D** has 3000 and 300 Watts forward and 6000 Watts reflected power ranges. MFJ-817C has 2 power ranges: 300/30 and 60/6 Watts. Read SWR from 1:1 to 8:1. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95.

**TrueActive™ Peak Reading Circuit can use 9 Volt battery. Metal all-black aluminum cabinet measures a compact 6Wx3 1/2Hx4 1/4D inches.**

**MFJ-845** covers 1.6-60 MHz and 144/220 MHz. Reads forward and reflected power in two ranges – 30 or 300 Watts.

**Super compact 4Wx3 1/2Hx3D inches.**

**MFJ-862, $74.95, similar to MFJ-864 but covers 144/220/440 MHz. 30/300 Watts forward, 6/60 Watts reflected ranges. 51/2x2 1/2x 1/4 inches. Has one sensor for all 3 bands.**

**MFJ-860, $64.95, similar to MFJ-864 but for 1.8-60 MHz only. Push button selects 30/300 Watts forward, 6/60 Watts reflected. Tiny 4 1/2x2 1/2x 3 inches.**

**MFJ-874, $119.95.** H/V/HF, 1.8-525 MHz. 5, 20, 200W power ranges.

**Choose from four MFJ Models:**

- **MFJ-870, $84.95.** HF, 1.6 to 60 MHz. 30, 300, 3000 Watt power ranges.
- **MFJ-872, $84.95.** HF/VHF, 1.8 to 200 MHz. 5, 20, 200W power ranges.
- **MFJ-873, $84.95.** VHF/UHF, 125-525 MHz. 5, 20, 200W power ranges.
- **MFJ-874, $119.95.** H/V/HF, 1.8-525 MHz. 5, 20, 200W power ranges.

**MFJ-818** covers 125-525 MHz. Has a built-in field strength meter. Covers 2 Meters and 220 MHz. Reads forward and reflected power in two ranges -- 30 or 300 Watts.

**Reads SWR from 114 MHz through 220 MHz. Also reads relative field strength from 1 to 220 MHz. Has binding post for field strength antenna. Black, 4 1/2x2 1/2x 3D inches.**

**Econo HF SWR Wattmeter**

- **HF SWR Wattmeter plus Field Strength**

**MFJ-812B** is the world’s most popular -- and most affordable -- VHF SWR/Wattmeter. Has air dielectric SO-239 connectors with gold plated center pins gives superb performance to beyond 525 MHz.

**Air dielectric SO-239 connectors with gold plated center pins gives superb performance to beyond 525 MHz.**

**Functional**, simple front panel layout lets you select power ranges, bands or make SWR readings intuitively.

**GrandMaster™ series feature an SWR scale that extends the full meter.** 3:1 SWR is centered at mid-scale to give precision, wide-range measurements.

**GrandMasters™ feature peak, average, forward and reflected power readings and have selectable power ranges.** Each is housed in an all metal cabinet with rubber feet and protected by durable speckled black paint. Designer injection molded gray front panel matches any transceiver. 7 1/2Wx3 1/8Hx4 1/4D”.

**MFJ Digital SWR/Wattmeters display Forward, Reflected Power, SWR and Battery life all in a single glance!**

**Large 1/2” forward power digits and 5/8 Reflected and SWR digits! LCD screen is 2.25 inches diagonally. Power on/off, backlight on/off switches.**

**Power** with triple AAA battery or micro USB port. SO-239 Connectors.

**MFJ-845 covers 1.6-60 MHz and handles 0-200 Watts.**

**MFJ-847 covers 125-525 MHz, handles 0-120 Watts.**

**Super compact 4Wx3 1/2Hx3D inches.**

**MFJ-860, $64.95, similar to MFJ-864 but for 1.8-60 MHz only. Push button selects 30/300 Watts forward, 6/60 Watts reflected. Tiny 4 1/2x2 1/2x 3 inches.**

**24**

MFJ...the world leader in ham radio accessories
High-accuracy MFJ Digital SWR/Wattmeter, 1.8-54 MHz, 1500 Watts

MFJ’s high-accuracy digital SWR/Wattmeter/Frequency Counter measures up to 1500 Watts. Get three high-resolution ranges with accuracy in each range, 1.8 to 54 MHz! True peak or average forward/reflected Watts, SWR, frequency can be displayed.

Select auto-ranging bargraph modes to display forward and reflected power or forward power and SWR twin bargraphs or SWR only bargraph. Frequency, SWR and forward power are all displayed numerically. Digital-analog displays make it visually easy to tune tuners, amplifiers and rigs.

Has 3 high-resolution forward/reflected power ranges that are automatically selected: a true QRP range (25 Watt full scale), a mid-range (250W full scale) and a high-range (1500W full scale). Each has excellent resolution.

TrueActive™ peak reading circuit gives true peak or average power on all modes. PeakHold™ feature freezes the highest forward power displayed bar segment for one second.

Built-in frequency counter gives any transmitter digital frequency readout in continuous carrier mode. Perfect for QRP rigs.

All information is displayed on a big 2-line, 16-character, high-contrast backlit LCD display. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95. Black metal cabinet, 6½Wx2¼Hx6D inches.

Digital and Cross-Needle SWR/Wattmeters

MFJ-828 has ALL of the features of the MFJ-826B 1.8-60 MHz, 1500 Watts high-accuracy digital SWR/Wattmeter/Frequency Counter . . . PLUS . . . it has a large, three inch lighted Cross-Needle SWR/Wattmeter and Amplifier Bypass Control™ (protects amplifier during high SWR events), and a Control Relay with normally open and closed connections that toggles when SWR is above a pre-set limit. Field-upgradeable firmware on MFJ website.

Compact Cross-Needle SWR/Wattmeters

Cross-needle meter. Reads forward/reflected power and SWR simultaneously.

Perfect for mobile or portable operation. Two selectable power ranges, built-in meter light (+12 VDC), SO-239 connectors. ¾Wx¾Hx¾D inches.

MFJ-822 covers 1.8-200 MHz, 30 or 300 Watts. MFJ-842 covers 144-525 MHz, 16 or 200 Watts.

MFJ's flat, compact SWR/Wattmeter is plenty rugged to take the abuse of brutal mobile or portable operation. Easily mounts on dash for easy viewing. Flat mount on wall/shelf in shack for best view angle. Meter is fully enclosed in a strong aluminum case with just the scales exposed. Two small switches slightly protrude so there's little to break.

Simultaneously read SWR/forward/reflected power on this full size 3-inch lighted Cross-Needle Meter. 0/300 Watt ranges, 1.8-30 MHz, SO-239. Use 12 VDC for meter lamp or plug into cigarette lighter. MFJ-5510, $12.95. Tiny all-metal cabinet, 5Wx3Hx2D inches.

MFJ 3-inch Cross-Needle SWR/Wattmeters

3-inch precision illuminated Cross-Needle meter has easy wide-angle viewing. Read SWR, forward power and reflected power simultaneously in a single glance! Three-color scale gives improved readability. LED backlight gives excellent night vision. Requires 13.8 VDC or 110VAC operation. Precisely factory calibrated for super accuracy. Air-Dielectric SO-239s are gold plated center pins for performance beyond 525 MHz.

Functional, simple front panel layout lets you select power ranges, bands, or make SWR readings intuitively. Housed in all-metal cabinet with rubber feet and protected by a durable spackled black paint. Designer injection molded gray panel enhances any rig. Super compact 5¼Wx3¼Hx5D inches.

Four models to choose from . . .


www.mfjenterprises.com • Toll-Free 800-647-1800
**MFJ in-line Calibrated RF Ammeters**

...for tuning your antenna tuner/xmtr/amp for maximum radiated power, for determining antenna feedpoint impedance, for comparing antennas and tuners, for trouble shooting, checking for changes...

**MFJ-834 Coax In-Line Calibrated RF Ammeter**

Coax In-Line RF Ammeter connects between antenna and tuner/amplifier and measures feedline current in 3 calibrated ranges. **Use it . . . for tuning your antenna/amp for maximum radiated power . . . for determining antenna feedpoint impedance . . . for comparing antennas and tuners . . . for trouble shooting . . . and checking for changes.**

Tuning for maximum feedline current for any given antenna always gives maximum radiated power! Any adjustment -- transceiver or amplifier tuning/loading controls, antenna tuner settings, whatever -- increases feedpoint impedance! Higher feedpoint impedance means maximum radiated power. Tuner/amplifier tuning/loading controls, antennas, tuning for maximum radiated power... for any given antenna... for comparing antennas and tuners... for trouble shooting... and checking for changes.

Any adjustment -- transceiver or amplifier tuning/loading controls, antenna tuner settings, whatever -- increases feedpoint impedance! Higher feedpoint impedance means maximum radiated power. Tuner/amplifier tuning/loading controls, antennas, tuning for maximum radiated power... for any given antenna... for comparing antennas and tuners... for trouble shooting... and checking for changes.

**MFJ-836 all-in-one RF Ammeter/SWR/Wattmeter**

An all-in-one RF Ammeter/SWR/Wattmeter! Quickly determine feedpoint impedance, monitor antenna for changes under power.

Read RF current, 3 calibrated ranges -- 1/3/10 Amperes. 3-inch lighted easy-to-read Cross-Needle meter reads SWR, forward (300/3000W) and reflected power (60/600W) simultaneously.

Exclusive TrueActive™ circuit gives you true peak/average power readings. SO-239 connectors. Use 9 Volt battery and/or 12 VDC or 110 VAC with MFJ-1312D, $17.95. 6Wx3½Hx4½D inches. MFJ-836H, $159.95. Like MFJ-836 but 3, 10, 30 Amps high current ranges.

How do you detect imbalance in open-wire or ladder line? By measuring and comparing each feedline wire current -- your feedline is balanced if the currents are equal.

BalancedLine RF Ammeter™ is two identical calibrated RF ammeters using an MFJ Cross-Needle meter.

Feedline currents are simultaneously displayed on separate calibrated scales in three ranges (3, 1, 3 Amperes).

Balance is clearly revealed on MFJ's exclusive BalancedBar™. When currents are balanced, the needles cross in center -- no matter actual current. If the needles cross within the vertical BalancedBar™ the balance is within 10%. If not, you know which line is unbalanced and by how much.

Equal currents in feeder wires minimize feedline radiation, reduces pattern distortion, RFI, TVI and wasted power.

You could lose up to 10% of power.

Imbalance is due to feedline not being perpendicular to antenna, runs close to metal or is closer to ground.

Solve all your unbalanced problems.

Heavy-duty 5-way binding posts for balanced feedlines. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95. 6Wx3½Hx4½D inches.

Continued from left

Antennas change when you apply power. Insulators break down, traps heat up, capacitors leak, and feedpoint impedance may be drastically different from SWR Analyzer measurements.

MFJ RF ammeters read accurately from 1-30 MHz in 3 linear ranges: 3, 1, 3A. **Large 3-inch lighted meter. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95. SO-239s.** 6Wx3½Hx4½D inches.

MFJ-836H, $94.95. Like MFJ-834, but had 3, 10, 30 Amps high current ranges.

**Calibrated mini Clamp-On RF Ammeter**

Clamp-On RF Ammeter quickly snaps over wires and cables to measure RF currents flowing in antenna elements, radials, ground wires and outside of coax.

Tune counterpoises, radials and ground systems. Balance your radials. Study/compare your antennas for peak performance. Find current peaks on antennas/feedselines. Plot current profile, measure and tweak current flow at each antenna element in phased arrays.

Determine antenna feedpoint impedance, radiated power, losses and efficiency. Track down RFI-causing currents on coax, rotator, guy, telephone/television cables.

Five calibrated ranges to 3 Ampers including suppressed the problem. Easy-to-use. Clamp current transformer over suspected cable or wire (up to 1/8 in. dia.) to detect RFI causing common mode currents. **Only 2½Wx4¼Hx1D inches fits in your shirt pocket.** Use 9 Volt battery. Usable from LF to VHF. Gain is adjustable over 50 dB range.
Find Power Line Noise Fast!

MFJ Rhinos™ 2, 3, 4 Position Antenna Switches

Built tough, built to last and built to work for a long lifespan!

MFJ Field Strength Meters

Determine radiation pattern; make changes to your antenna and see if it radiates better or worse. Adjust ground lead, artificial ground, counterpoise or turn transmitter or antenna tuner for maximum field strength. Check for floating RF: 100 KH-500 MHz.

Choose the highly directional 3 element Yagi (MFJ-856, $169.95) or pin-point accuracy of the compact telescoping dipole (MFJ-852, $129.95) for quick noise finds. Walk or drive around with these handheld power line noise meters to search out leaky insulators, loose hardware and corroded ground lines quickly. Track noise right to the pole transformer or insulator, or other source.

Operates in the 135 MHz region where activity is a minimum and radiation from corridors is far more localized. 0.3 uV sensitivity.

and wide-range AGC for noise level meter ~ over 70 dB!

Plug in headphones, hear noise you’re tracking or use a tape recorder. 2Wx4Hx1.5D.

Ultra-sensitive pocket-sized RFI Detector tracks down RFI caused by radiating wires. It’ll tell exactly the wire radiating RFI so you can eliminate it with a toroid or clamp-on filter.

Find RFI generated by consumer devices, computers and office equipment. Eliminate the RFI source and hash, birdies, whistles and transient noises completely.

MFJ-1767, $84.95. Add this 3-element beam to MFJ-852, and turn it into an RFI finder.

Telescoping Whip Field Strength Meter

Take quick field-strength readings from 100 Khz to 500 MHz with this compact telescoping whip field strength meter. 1.75 inch meter. Sensitivity control. 20 inches (extended) monopole. Finger contact on side increases sensitivity when needed. 2½x9x1 inch.

MFJ Rhinos™ Series Antenna Switch Specifications

www.mfjenterprises.com • Toll-Free 800-647-1800
Lightning Protected Heavy Duty Coax Switches

MFJ gives you a center ground position, automatic grounding of unused positions, handles 2.5 kW PEP and works to over 500 MHz!

MFJ-1704
$99.95
Ship Code A

Mount this 4-position SO-239 switch on your operating desk and you’ll have more than the convenience of being able to instantly select any of four antennas, tuners, amplifier, or other electronic equipment - you’ll also get the replaceable lightning surge protection device that helps protect against distant lightning induced surges and static. Handles a full 2.5 kW PEP. Extremely low SWR. Isolation is over 50 dB at 500 MHz, negligible insertion loss, 50 Ohms. MFJ-1704N, $104.95. Like MFJ-1704, with "N" type connectors.

MFJ-1702
$21.95
Ship Code A

MFJ-1702C
$44.95
Ship Code A

MFJ-1702N, $104.95. MFJ-1702C has a new lightning surge protection device that helps protect against distant lightning induced surges and static.

MFJ 12-Position Coax Patch Panel

Coax Patch Panel connects devices with virtually no loss, feed-through or cross-talk... Provides 100% isolation between devices. High performance and versatile military/professional use. Covers HF, VHF and UHF. MFJ-4116, $34.95; MFJ-4117, $44.95; MFJ-4119N, $44.95; and MFJ-4120, $44.95.

MFJ-4116
$34.95
Ship Code A
MFJ-4117
$44.95
Ship Code A
MFJ-4119N
$44.95
Ship Code A
MFJ-4120
$44.95
Ship Code A

6 Position HF Antenna Switch

Select one of six antennas. Covers 1.8-30 MHz. Unused terminals are automatically grounded. Quality SO-239 connectors for hook-up to your antennas. 2 kW PEP SSB, 1 kW CW, 50-75 Ohm loads. MFJ-1701, $89.95; MFJ-1702, $21.95. Like MFJ-1702C, less surge protection, center ground.

MFJ Biasteer with built-in Transmit/Receive Switch

MFJ-4113TR has an on/off position to switch between transmit or receive for different T/R antennas. SWR is less than 1.5:1 below 150 MHz and 1.16:1 below 230 MHz. MFJ-4113TR lets you power an active antenna with an amplifier at the antenna; power a remote tuner on one port and switch to another antenna on the other port: switch between a receive antenna like MFJ-1886 low noise loop and a transmit antenna (beam or vertical). Power to DC-Pass port is grounded through a 100 Ohm resistor.

MFJ-4113TR
$99.95
Ship Code A

MFJ-1886
$149.95
Ship Code A

Lightning Surge Protection

MFJ-1704 and MFJ-1702C are lightning protected and have an exclusive center ground position - connects antennas to ground, disconnects radio.

MFJ-4704
$74.95
Ship Code A

MFJ Six Position Antenna/Transceiver and Antenna Switches

MFJ-4706
$84.95
Ship Code A
MFJ-4704
$74.95
Ship Code A
MFJ-4706N, $104.95.

MFJ-1702C
$44.95
Ship Code A

MFJ-1702
$21.95
Ship Code A

Lightning Protected Heavy Duty Coax Switches

MFJ gives you a center ground position, automatic grounding of unused positions, handles 2.5 kW PEP and works to over 500 MHz!
**MFJ SDR T/R Protection Switches**

*Turn your SDR into a panadapter to see entire bands on frequency/waterfall displays...* An inexpensive wide-band SDR dongle receiver lets you see entire bands on frequency/waterfall computer displays!

**MFJ-1708B-SDR**

M-Series SDR - $109.95

Ship Code A

**New B series improvements...**

The original MFJ-1708 series used one relay and wires to connect the SO-239. The new B-series uses four relays and connectors on a single board. This gives you > 50 dB isolation at 300 MHz and > 68 dB at 50 MHz. SWR < 1.16:1 at 50 MHz and < 1.75:1 at 450 MHz at the transmit port. Mute output is a selectable short or open to ground. Use "boat anchors" or modern relays or key to a linear amplifier. Receiver input protection prevents overload from nearby high power signals and from receive to transmit. A hybrid splitter on SDR models reduces loading effect and gives > 15 dB isolation between the SDR REC and XCVR ports to reduce interference. The original MFJ-1708 series is still available.

**MFJ RF Sense Transmit/Receive Switch**

Switches your antenna from receiver to transmitter using a relay. Shorts your receiver to ground during transmit. Use RF sensing with adjustable delay or PTT line. Has selectable open/short mute.

**MFJ Transceiver/Antenna RF Safety Switch**

Keeps your expensive transceivers safe from transmit arching into absolutely nothing! No more burning up your radio because you forgot to change your antenna switch! 1.8 to 54 MHz. Your transceiver is always hooked up to one of two antennas! Connect two rigs and two antennas and switch to different combinations. Handles 300 watts PEP SSB, handles 150 watts CW. Handy mounting tabs for use with MFJ-1707B. Stainless 11/4" tall bracket with U-bolt fits any mast up to 1 1/2" O.D. Inside Box fully enclosed, weather protected. SO-239s for XCVR, antennas.

**MFJ-1703B**

$109.95

Original model for HF/VHF. With BNCs.

**MFJ-8504AN**

$29.95. Add an AM notch filter to your MFJ-8504.

**MFJ-8504LP**

$19.95. Low pass 30 MHz.

**MFJ-8504HP1**

$19.95. High pass, 30 MHz.

**MFJ-1708S-SDR**

$115.95. SMA connector for SDR. Original model for HF/VHF.

**MFJ-1708D-SDR**

$89.95. Model for HF/HV.

**MFJ-1708D-SD-S**

$119.95. SMA connector for SDR. Mon-itor multiple bands with multiple SDRs and a multi-coupler.

**New! MFJ Dual Antenna Quad Radio Multi-coupler**

**MFJ-8504NB**

$159.95. With BNCs.

**MFJ-8504S**

$139.95. Like MFJ-8504NS, but without AM notch filter.

**MFJ-8504AN**

$29.95. Add an AM notch filter to your MFJ-8504S.

**MFJ-8504LP**

$19.95. Low pass 30 MHz.

**MFJ-8504HP1**

$19.95. High pass, 30 MHz.

**MFJ-1703B-SDR**

$109.95. Mono-itor SDRs for HF/VHF.

**2-position remote antenna switch**

Uses these optional dual filters.

**MFJ-8504AN**

$29.95. Add an AM notch filter to your MFJ-8504.

**MFJ-8504LP**

$19.95. Low pass 30 MHz.

**MFJ-8504HP1**

$19.95. High pass, 30 MHz.

**MFJ-5262**

$9.95. 7-foot CAT-5 cable with connectors.

**MFJ-5265**

$25.95. 25-foot CAT-5 cable with connectors.

**MFJ-1703B-SD-S**

$119.95. SMA connector for SDR.

**MFJ-1708S-SD-S**

$115.95. SMA connector for SDR. Mon-itor multiple bands with multiple SDRs and a multi-coupler.

**MFJ-1708D-SD-S**

$89.95. Model for HF/HV.

**MFJ-1708D-SD-S-S**

$119.95. SMA connector for SDR. Mon-itor multiple bands with multiple SDRs and a multi-coupler.

**Auto switch XCVR between 2 antennas**

Automatically switches separate transmit and receive antennas on transceivers with only one antenna port. Example: Efficient 75M dipole for XMIT and low noise MFJ loop for receive -- no static crashes!

**MFJ Transceiver/Antenna Switch**

30dB IP3

**MFJ-5262**

$9.95. 7-foot CAT-5 cable with connectors.

**MFJ-5265**

$25.95. 25-foot CAT-5 cable with connectors.

**MFJ-8504LP**

$19.95. Low pass 30 MHz.

**MFJ-8504HP1**

$19.95. High pass, 30 MHz.

**MFJ-8504HP2**

$19.95. High pass, 1.7 MHz.

**MFJ-1708S-SD-R**

$115.95. SMA connector for SDR. Mon-itor multiple bands with multiple SDRs and a multi-coupler.

**MFJ-1708D-SD-R**

$89.95. Model for HF/HV.

**MFJ-1708D-SD-R-S**

$119.95. SMA connector for SDR. Mon-itor multiple bands with multiple SDRs and a multi-coupler.

**MFJ-1708D-SD-R-S-S**

$119.95. SMA connector for SDR. Mon-itor multiple bands with multiple SDRs and a multi-coupler.

**Desktop/Remote 6 & 4 position Antenna/Transceiver Switches**

*Select 2 of 6 antennas and 1 of 6 transceivers in any combination.* Plug in antenna tuner, SWR/Watt-meter or other into common ports, so it's always connected to the antenna and radio. Unused inputs are grounded. In OFF position, all inputs are grounded or control is by remote. Lightning surge protector protects transceivers and shunts surges to ground. SO-239s, 1500 Watts into 50-75 Ohm load 1-60 MHz. Useable to 150 MHz. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95. For indoors, not weather protected. 8Wx8Hx4"/"D.

**MFJ-4724**

$64.95. Remote Control for MFJ-4724RC.

**MFJ-4726**

$169.95. Remote Control for MFJ-4726RC.

**MFJ-5262**

$9.95. 7-foot CAT-5 cable with connectors.

**MFJ-5265**

$25.95. 25-foot CAT-5 cable with connectors.

**MFJ-5265**

$25.95. 25-foot CAT-5 cable with connectors.

**MFJ-5262**

$9.95. 7-foot CAT-5 cable with connectors.

**MFJ-5265**

$25.95. 25-foot CAT-5 cable with connectors.

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29
MFJ Dry Dummy Load with Precision SWR/Wattmeter

World’s most versatile 1.5 kW dummy load has a built-in true peak reading SWR/Wattmeter. C use independently! You’ll find tons of uses!

Tune up your transceiver, linear amplifier or antenna tuner into a safe 50 Ohm dummy load at full power. Instantly switch to your antenna and read SWR, forward, reflected power.

Use for testing/tuning transmitters, transceivers, amplifiers, tuners, baluns, transformers, filters, matching networks, coax, stubs, and antennas. 1500Watt Dry Dummy Load 50-Ohm dry dummy load works DC to 60 MHz. SWR is below 1.3:1 at 30 MHz. Can handle 100 Watts for ten minutes or 1500 Watts for ten seconds. Comes with power derating curve.

MFJ “Handy” Loads . . . 3 GHz or 500 MHz

3 GHz, 200W Dry Load

The heart of these 50 Ohm dry dummy loads are the resistor inside. Made with copper flanges and BeO ceramic for an incredibly low thermal resistance and capacitance. DC to 3 GHz on MFJ-2628N with an SWR of less than 1.2:1. DC to 1 GHz with SO-239 connectors. Handles up to 200 Watts for 5 seconds and 35 Watts continuously. Black finned aluminum construction. \( \frac{1}{4} \times \frac{1}{2} \times \frac{1}{2} \) inches.

500 MHz, 100W Dry Load

Connects directly to your rig or test equipment with a PL-259. Use with MFJ-259B SWR Analyzer or MFJ-261N for MFJ-269. No patch cable used, reduces SWR. Finned aluminum, air-cooled heatsink. Handles 100 Watts peak, 15 Watts average. 50 Ohms. DC to 500 MHz with less than 1.15:1 SWR. \( \frac{1}{4} \) round by 3” long. MFJ-261N, $44.95 Like MFJ-261, but has N-male connector.

MFJ Analyzer Precision Calibration Load set

Calibrate your analyzer with these MFJ Precision Calibration loads. MFJ-252s are non-inductive. Useable for 10 seconds and it will handle 125 Watts continuously, making it an excellent dummy load for transceiver and other gear testing.

A high-quality Teflon insulated low-loss N-type connector is used to insure the absolute minimum SWR possible. The MFJ-263 has a custom heavy-duty finned heatsink that spans the entire length of the cabinet and keeps operation safe and cool.

Strong, lightweight, all-aluminum construction is super-durable and will give years of continuous service.

Derating curve is permanently silk-screened into the bottom chassis for quick, easy reference. See below right. Measured 150 Watts at 30 MHz, 80 Watts at 100 MHz. WiFi and other gear testing.

MFJ wide-band 3GHz, 300 Watt Dry Dummy Load

MFJ-263 wideband dry dummy load uses a specially designed metal-film non-inductive terminating resistor which allows it to cover a very wide frequency range from DC to 3 GHz. Also produces incredibly low and flat SWR across entire frequency spectrum.

MFJ-263 will handle a full 300 Watts for 10 seconds and it will handle 125 Watts continuously, making it an excellent dummy load for transceiver and other gear testing.

A high-quality Teflon insulated low-loss N-type connector is used to insure the absolute minimum SWR possible. The MFJ-263 has a custom heavy-duty finned heatsink that spans the entire length of the cabinet and keeps operation safe and cool.

Strong, lightweight, all-aluminum construction is super-durable and will give years of continuous service.

Derating curve is permanently silk-screened into the bottom chassis for quick, easy reference. See below right. Measured 150 Watts at 30 MHz, 80 Watts at 100 MHz. WiFi and other gear testing.

MFJ famous one year No Matter What™ warranty. We’ll repair or replace (at our option) your dummy load for one full year from your receipt purchase date.
MFJ-250X, $54.95  
Ship Code A

**MFJ VersaLoad™ KW Dummy Load**

**MFJ-250X**

VersaLoad™ KW dummy load runs 1KW CW or 2 KW PEP for 10 minutes. 1/2 KW CW or 1 KW PEP, 20 minutes. Continuous duty: 200W CW or 400W PEP. Derating curve. 50-ohm non-inductive resistor. **Use** transformer oil (not included). Low VSWR to 400 MHz Under 1.2:1, 30 MHz; 1.5:1, 30-300 MHz; 2:1, 300-400 MHz. SO-239, vent/cap, carry handle. 12Wx31/2Hx2D”.

**MFJ-250C, $44.95**  
Ship Code A

**Industrial Grade Transformer Oil**

MFJ-21, $31.95. 1 gallon of transformer oil, (no PCB). Ship Code D.

**AC Digital Line Voltage Meters**

**Handy digital meters let you monitor voltage on your AC outlets on a large 1.5Wx.75H inch cool blue LED backlit display. Voltage digits are a huge 3/4”. Plugs into your wall outlet, consumes less than 1 Watt every kw hour. Accuracy +/- 1.5%.**

**MFJ-DM55-1U measures AC 80 to 200 Volts. Has U.S. 2-prong 110V plug.**

**MFJ-DM55-1E measures AC 130 to 300V. Has Euro plug 220V.**

**MFJ-7780, $10.95. Euro to NEMA 6-20P adaptor.**

**MFJ-7782, $10.95. Euro/US 2-prong to NEMA 6-15P.**

**MFJ AC Line RFI Filter**

Filters and reduces AC power line RFI, hash, noise, transients, surges generated by computers, motors, RF transmitters, static/lightning by 30 db and up to 60-80 dB with a earth ground. Fast, nano-second over-voltage protection. Provides inductive isolation, capacitive decoupling, RFI rejection, overvoltage protection of common mode, differential signals. Rejects/shunts undesired signals to ground. Four 3-wire, 15 Amp, 120 VAC outlets spaced for large adapters. 25A/3000W maximum. Fuse, 5/16” cord, nut ground. Mount holes. 12Wx31/2Hx2D”.

**Transceiver Surge Protector**

**MFJ-1163, $74.95. Protects expensive rig/equipment from damaging surges. Capacitive decoupling, ultra-fast 120 VAC 125/3000W MOVs protect. (4) 3-prong grounded AC outlets.**

**MFJ UHF/VHF/HF Dummy Loads**

**Dry 1.5 kW UHF/VHF/HF Load**

Ham radio’s most versatile 50 ohm dummy load works with all radios 160 Meters to 650 MHz and from QRP to the full 1500 watt legal limit. **SWR below 1.3 to 650 MHz and below 1.1 at 30 MHz. Handles 100 Watts for 10 minutes, 1500 Watts for 10 seconds.**

**Strong lightweight aluminum construction. 3Wx3H x3D inches.**

Has MFJ’s famous No Matter What™ one year limited warranty. MFJ-264N, $94.95. Similar to MFJ-264 but with type “N” connector.

**Dry 300 Watt VHF/HF Dummy Load**

Air cooled, non-inductive resistor is housed in a perforated metal housing. SO-239 connector. Full load for 30 seconds. Silk-screened derating curve to 5 minutes. **Handles 300 Watts. SWR 1.1:1 to 30 MHz, 1.5:1 from 30 to 650 MHz. 2”x2”x7”.**

**MFJ-260CN, $54.95. Similar to MFJ-260C but with type “N” connector.**

**Coax Patch Cables**

**MFJ-5803, $7.95. 3-foot RG-58 coaxial line with PL-259 connectors.**

**MFJ-5806, $10.95. 6-foot RG-58.**

**MFJ-5809, $12.95. 9-foot RG-58.**

**MFJ-5812, $13.95. 14-foot RG-58.**

**MFJ Emergency PowerReady™ Toolbox**

Great for charging batteries and taking your rig on the go! MFJ’s PowerReady™ Toolbox is ready for random travel trips, Emcomm service, or when all else fails! Dual power pole 35A contacts, binding posts, low voltage cigarette lighter, 5V 2.1A USB port, green LED digital voltage meter. Use group 24-30 size batteries. Carrying strap.

**MFJ Ultrasonic Receiver with parabolic reflector pinpoint parabolic line noise**

**HF and VHF operation can be affected by noise which makes it hard to hear weaker stations and adds to your fatigue.**

**Often, noise is coming outside the door from power lines. Power companies are very willing to help out with noise issues, but not all companies have the necessary equipment or trained personnel to properly locate nearby sources.**

**MFJ-5008 helps in locating the noises generated by corona discharge and arcing components. An acoustic receiver is tuned to ultrasonic range of 40 KHz -- hear ultrasonic noises generated by arcing connections and corona discharge.**

**18-inch diameter plastic dish gives a narrow beamwidth to pinpoint noise sources less than 12 inches at 50 feet. A short focal point makes the overall front-to-back depth just 7”. The handle is mounted close so the center of gravity reduces fatigue on the hand from the weight pulling down in front.**

**Ultrasonic transducer mounted in a sturdy metal support reduces dish bending/warping. Target holes in dish are aligned with the beam helps pinpoint noise sources on pole.**

**Receive electronics are mounted on the handle for convenient operation. Use 9-Volt battery (not incl.). Receive noise generated by power lines from several hundred feet away. 3.5 mm jack for stereo/mono headphones. 20Wx19/4Hx7D inches. Weighs 2.5 pounds.**

**MFJ-392B, $34.95. MFJ’s Communication Headphones are a perfect companion for MFJ-5008. Works in stereo mode with 3.5 mm plug. Works mono with 1/4 inch adapter.**

**Not only can you use the MFJ-5008 to find power line noises, you can also listen to a wide range of nature! In ultrasonic range bats, birds, and insects can be heard. Sit in your backyard and enjoy nature.**

www.mfjenterprises.com • Toll-Free 800-647-1800
Reduce Harmonics, Avoid TVI with MFJ Filters

Low Pass TVI Filter Handles Full Legal Power

MFJ-704
$99.95
Ship Code A

MFJ-704 suppresses TVI, RFI, telephone and other interference by reducing unwanted harmonics going to your antenna. At the same time your HF signal passes on through with low loss so you can snag that rare and exciting DX! If harmonics are causing TVI problems, MFJ-704 can keep your neighbors happy while having fun with radio!

MFJ 2500 Watts Low Pass TVI Filter

Suppress TV interference at the source with the MFJ-705 Low Pass Filter. Use between Transmitter and Antenna or Tuner. Reduces TV interference (TVI) radiated by transmitters operating below 30 MHz. Suppresses harmonics appearing in the TV bands. Additional attenuation to TV IF frequencies above 40 MHz. Low loss to 30 MHz. Nine-pole inverse Chebyshev.

SPECIFICATIONS:
- Bandpass: 0-30 MHz. Cutoff freq: 35 MHz.
- Attenuation: 52.25 MHz (Channel 2 Video), -0.25 dB, Worst case at 65 MHz, -60 dB.
- Power Capacity: 2500 W Key Down.
- -50% Duty. Impedance: 50 Ohms.
- Insertion Loss: 0.25 dB @ 30 MHz.
- Size: 91/2W x 41/4H x 21/8D inches.

MFJ RFI Free Choke Kit for RFI Suppression

It's easy to eliminate common RFI problems. Simply wind offending cable around an RFI suppressing toroid. Four square ferrite toroids are formulated especially for eliminating RFI 0.5 to 200 MHz. Wind on all kinds of cable, computer ribbon, TV coax, power, telephone, etc.

Ferrite RFI Suppression Chokes

RFI snap-on chokes selected for RFI suppression. Install on DC power line to keep ignition noise from your mobile rig and amplifier. Remove RF on cables and wires to your station. Isolate RFI on feedlines to your station. 2-piece design, snap and lock securely around cable. Install end-to-end along rigid cable or loop multiple turns with smaller soft cable. Select four sizes: .25 inch ID to .75 inch ID.

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The World Leader in Amateur Radio Accessories!
Pocket-size Frequency Counter

MFJ-886B covers 1 Hz to 2.8 GHz with 1 Hz resolution and four selectable gate speeds. Super handheld unit in handy 2½"x3½"x1½". Truly pocket-sized MFJ-886B has a large easy-to-read 2Wx1½H 10-digit backlight LCD and 11-segment RF Signal Strength Bargraph. Low power consumption. Internal lithium battery (800 mAh). Has low battery indicator. Run for about 12 hours on a single charge! Auto-sleep mode.

Includes built-in lithium battery, 12 VDC, 1A power adaptor/charger for 110 VAC and telescoping BNC antenna.

Because of its 50-Ohm amplifier for 1 MHz to 3 GHz operation and a 1M Ohm amplifier for 10 Hz to 50 MHz, 45 degree flip stand makes for easier viewing. Has highly sensitive input with a time base at < 10 PPM.

Hold button locks the MFJ-886B display and will continually display the last frequency received. There is also an automatic hold mode for locking in on special frequencies.

Pocket-size Function Generator

This unique unit is an easy-to-use, compact, battery-operated function generator designed for travel or bench use. Based on an XR-2206 integrated circuit, it provides square, triangular, and sine waves continuously from 1 Hz to well over 150 KHz in 3 ranges. 4½x3Wx1½H inches. Frequency range switch, external power jack, 5-way binding posts. Use 9V battery.

81 dB Step Attenuator

This will be your most useful ham shack accessory! Usable to 500 MHz. 250mW maximum input. BNCs. Shielded stages. Connect between receiver and antenna. Use as an S-meter as a precision calibrated field strength meter. 50 ohms. Prevent receiver blocking, cross-modulation. Determine gain/loss. Ideal for fox hunting. Evaluate linearity. Measure input/output level differences. Isolate circuits. Extend range of sensitive equipment. 6½"x2½"x1½". D".

2-Meter FM Signal Analyzer

Two Meter FM Signal Analyzer lets you measure signal strength with over 60 dB dynamic range and measure actual feedline loss in dB. Plug in any scope and your MFJ-224 becomes a service monitor! Lets you visually analyze modulation wave forms, audio distortion, noise and instantaneous peak deviation. Tune in any signal between 143.5 - 148.5 MHz. Built-in discriminator-meter function makes accurate tuning simple and easy. 4Wx2½"xDx1½H inches. Use 9V battery.

Professional Function Generator

Gives precision sine, square and triangular wave forms from 1 Hz to 1 MHz in six decade ranges. Amplitude is adjustable 0-12 volts peak-to-peak. DC offset is also adjustable -6 to +6 VDC. Output is short circuit protected with an output impedance of 400 Ohms. Sturdy black all metal cabinet. Use 110 VAC or 12 VDC with MFJ-1312D, $17.95.

1-50 MHz Precision Antenna Phase Meter

Use low power, high-speed dual comparator circuit to allow precision phase measurements 1-50 MHz. A circuit indicates if unknown phase lags or leads the reference signal. Signals used for measurement can come from an analyzer or other generator that will supply at least 1V peak output into load. Built-in switchable 50-Ohm load (250 mW max). No need for an external load or BNC TEE -- not needed in most tests. MFJ-222 will read the frequency of the signal so generators with only a coarse or no frequency readout can even be used. Simple set-up. Plug in the signal generator to IN, connect the Reference OUT to input of network and output of network to UNKOWN IN. Turn on and read the phase shift and frequency. A bright 2-line LCD allows precision readout of the phase from -180 to +180 degrees without interpreting an analog meter or guessing at the phase polarity.

With low power components, it will operate many hours on a single 9V battery or with optional AC adapter MFJ-1312D, $17.95. Compact 4Wx4¾x2D inches.

Tune-Up Matchmaker™

Adjust your antenna tuner for 1:1 SWR without transmitting! Avoids overheating/arcing caused by high SWR, long tune-ups.

Inserts between rig and tuner. Simply tune your transceiver to your desired frequency, then power-up the MatchMaker™. Adjust your tuner for a null in the pulsing "white noise" from your receiver.

Automatic T/R switch bypasses MFJ-212 to prevent damage. Handles 300 Watts. Works with all radios, 160 through 6 meters. Measures a compact 3½x1¼x1¼". Use MFJ-1312D, $17.95.

www.mfjenterprises.com • Toll-Free 800-647-1800
MFJ High Current DC Multi-Outlet Strips

Choose super heavy-duty 5-way binding posts AND/OR Anderson PowerPole® connectors

Provide multiple high current DC outlets for transceivers and accessories from your transceiver’s main DC power supply — keeps you neat, organized and safe. Prevents fire hazards. Keeps wires from tangling up and shorting out. Outlets are fused/switched/RF bypassed.

**MFJ DC Multi-Outlets with versatile 5-way binding posts**

Each Anderson PowerPole® outlet carries up to 40 amps. Fuse each outlet as needed to protect accessories or transceiver. The main fuse is 40 amps. Standard color coded fuses simply plug in from outside. They are widely available ATC/ATO automobile fuses and used for 6, 12, 24 VDC systems. Heavy duty DC input cable is built-in — you don’t have to pay extra to use it! It’s a high-current carrying capacity eight gauge, flexible, stranded, six foot (can be shorten) cable with 5/16 ring terminals. Color coded Red and Black. Extra PowerPoles® and fuses are included at no extra cost — unlike competitive products.

A massive 0.062 inch thick double sided plated through PC board with wide traces is used. The current path has an equivalent current carrying capacity of an enormous 4 ounce trace. RF-tight aluminum cabinet has mounting ears and wing nut ground.

**MFJ DC Multi-Outlets with Anderson PowerPole® connectors**

Genderless, polarized and color coded connectors conform to ARES & RACES emergency 12V connector standard.

**MFJ 6-Way Desk-Top DC Power Distribution Unit**

**MFJ-1106**

$49.95

Compact; low profile DC distribution box is designed for your operating desk. Anderson PowerPoles™ are connected in parallel, permitting 1 DC input to be shared by 6 DC outputs. 7 sets mating connectors included. Connectors may be used as an input or output. Total current capability is 30-amps. 2/1Wx1/4Hx3/4D.

**Four Connector PowerPole™ Splitter**

PowerPole™ splitter takes 1 input and 3 outputs. Handles 30 Amps total. Input (30A) and each output is fused (25, 10, 5A). Has open fuse indicator. 2/1Wx3/4Hx1/2D.

**MFJ DC Distribution Box**

**MFJ-1107**

$54.95

This new power distribution box has 40 Amp binding post inputs to four (40A total). PowerPoles™ outlets plus two 2.1 mm center positive power jacks. PowerPoles™ individually fused. 4Wx2/Hx2/D inches.

**MFJ Cat P34_2019.qxd  4/15/2019  3:57 PM  Page 1**
**MFJ-4416C Super Battery Booster**

Keeps your transceiver operating at full efficiency and performance by eliminating low or marginal voltages in the mobile environment . . .

**MFJ-4416C**

Volts down to 12V after a short time. Coupled with voltage drops in cables and you have a problem.

Eliminates low voltage problems by boosting input as low as 9 Volts to 13.8 volts at up to 30A peak with a typical efficiency of close to 90%.

Includes PowerPoles™ and high-current 5-way posts for both the DC input and regulated output. An internal 30-amp input fuse protects the unit from excess output current demands.

Selectable limits on the minimum voltage that the unit will accept: 9V, 10V, and 11-volts. Protects from over-discharging a battery and damaging it. Includes output over-voltage crow-bar protection should regulation be lost.

External boost enable input allows remote enabling of MFJ-4416C. Either ground a line or connect the line to the 4-15 Volts. You can also use an amp key line or ignition source to enable.

Second efficiency enhancement feature is a user-adjustable output voltage control which lets you set output voltage between 12- and 13.8-volts. When setting output at 12-volts, input voltages greater will pass through, but efficiency of the regulator is higher. And lower input voltage means your transceiver will run cooler!

Typically save over 30W in heat dissipation during transmit, and even 3-4 watts during receive. So it can actually be good to let the voltage sag to 12V, then MFJ-4116B protects from lower voltages. 7.4VxHx2xH/2", 1.3 lbs.

Battery Booster Remote Control

**MFJ-4416BRC.** $84.95.

Monitor output, turn on/off, low battery alert on/off, boost control toggle, power and peak power. Power-Poles™, backlight LCD display. 3.25Wx1.75H inches.

**New! Deluxe Super Battery Booster**

Like MFJ-4416C but has an on-board microprocessor to give more intelligent features and protection. Power switch allows load to be isolated from input, protecting from over current/voltage greater than 15V from boost supply or improper input. MFJ-4403 transceiver input and output voltage transient condition. Auto operates without keying connections to the radio.

Programmable electronic fuse allows protection in 1A steps. Use fast blow 100 mS or slow blow 100-700 mS. Ignition HoldOff™ timer allows MFJ-4418 to continue to supply output power for a programmable period even if ignition is off. Settings are software-driven via the USB port.

**MFJ-4418**

$189.95

Ship Code A

Protects against instant destruction and alerts you to not power correctly, lose memory channels and corrupt service. Costly memory channels and corrupt service. Costly

**MFJ Mobile Transceiver Protector**

Connect in-line to monitor voltage/current of mobile radio or accessories. Displays volt- age and current simultaneously with .01 to .1V resolution. Dual .28" red/ blue LED digits. Buildings in current shunt, input/output PowerPoles™. Handles to 30A. Reverse polarity protection. 3WxHx2xD. MFJ-4421, $11.95. Snap-in Volt Panel Meter. 0-30 VDC. 56 digits. 1.9Wx1.1H. 87D. Precision Wattmeter/Powery Power Analyzer

**MFJ-4422**

Connect in-line to monitor voltage/current of mobile radio or accessories. Displays voltage and current simultaneously with .01 to .1V resolution. Dual .28" red/blue LED digits. Buildings in current shunt, input/output PowerPoles™. Handles to 30A. Reverse polarity protection. 3WxHx2xD. MFJ-4421, $11.95. Snap-in Volt Panel Meter. 0-30 VDC. 56 digits. 1.9Wx1.1H. 87D. Precision Wattmeter/Powery Power Analyzer

**MFJ Mobile Digital DC Voltage Monitors**

Is the car battery providing proper voltages to power mobile rigs? Can you see when the car is off, how much battery voltage is available, continuously from 4.6-60V. Measures voltage, current and power. Power-Poles™, backlight LCD display. 3.25Wx1.75H inches.

**MFJ-4424**

$99.95

Ship Code A
MightyLite™ 30A Meter Switching Power Supplies
Super-Compact 5Wx2½/Hx6D™ with meter, adjustable voltage . . .

MightyLite™ 28 Amp Switching Power Supply

Amps or Volts as you wish to read them. Excellent 75% efficiency and extra low ripple and noise, <100 mV. Fan cools by convection and forced air.

Normal air-flow around power supply is continuous and a sensor increases the fan speed when the temperature rises above 70 degrees celsius.

Features over-voltage and over-current protection systems and has a quiet internal cooling fan with "fan on" LED. Selectable AC input voltage 85-135 VAC or from 170-260 VAC.

MFJ Portable Variable Power Supply
Portable size fits in any toolbox, 3WxHx1D™. Light, so carry it anywhere. Fixed 5 VDC output with a variable 1.5-12 VDC output. Total is 500 mA. Output terminals/ground are 5-way binding posts. Voltage setting, input 110 VAC.

MFJ-4230MVP, $104.95
Like MFJ-4230MVP but with PowerPoles™ installed on the front panel, binding posts on back.

MFJ-4230MV, $94.95
Ship Code B
World’s smallest switching supply is an incredible value! Has an Amp/Volt meter and adjustable voltage.

Just 5Wx2½/Hx6D™, it weighs only 3 lbs. — the perfect pack-n-go power supply for field day, DXpeditions, camping, hiking, business or vacation.

Gives 25 Amps continuously or 30A surge at 13.8 VDC. Voltage is front-panel push-button selectable. 120/240 VAC @47-63 Hz. Simple front-panel push-button switch lets you choose either Ampmeter or Voltmeter — allows you to select

MFJ-5510M, $16.95
Like MFJ-5510M, but adds a pair of PowerPoles™ on back of the unit. Convenient five-way binding posts are on the front.

MFJ-5530, $29.95
Like MFJ-5530 but with PowerPole™ connector for rig. Built-in 20A fuse, 3 feet.

MFJ-5542, $17.95
Like MFJ-5542 but with PowerPole™ adapter. Fits standard ¼" post spacing. 30A, 3 feet.

MFJ-5543, $11.95
PowerPole™ cable with pre-tined wires. 35A, 3 feet.

MFJ-4230DMP, $149.95.
Like MFJ-4230DMP but with bright orange digital LCD display that shows Amps and Voltage simultaneously on a backlit screen. Binding posts on front, PowerPoles™ on back of unit.

MFJ-4230MVP, $104.95
With PowerPoles™ Ship Code B

MFJ-4230MV, $94.95
Ship Code B

MFJ-5530MV
$94.95

MFJ-5530MVP, $104.95
With PowerPoles™ Ship Code B

MFJ-5530MV, $94.95

MFJ-5530, $29.95
Like MFJ-5530 but with PowerPole™ connector for rig. Built-in 20A fuse, 3 feet.

MFJ-5542, $17.95
Like MFJ-5542 but with PowerPole™ adapter. Fits standard ¼" post spacing. 30A, 3 feet.

MFJ-5543, $11.95
PowerPole™ cable with pre-tined wires. 35A, 3 feet.
MFJ Switching Power Supplies

Power your HF transceiver, 2-Meter/440 MHz mobile/base & accessories with these 25 or 45 Amp MFJ MightyLite™ Switching Power Supplies! No RF hash, Super lightweight, Volt/Amp Meters . . .

MFJ-4225MV
25 Amp, LED lit

$104.95
Ship Code B

MFJ-4245MV
45 Amp, LED lit

$159.95
Ship Code C

NO RF HASH!

Worldwide Versatility

MightyLites™ can be used anywhere in the world! Switchable AC input voltages. Work from 85 to 135 VAC or 170 to 260 VAC. Replaceable fuse.

MightyLites™ . . . . Mighty Features

Front-panel voltage control 9-15 Volts DC. Highly regulated voltage output.

Easy access from front-panel, 5-way binding posts for heavy duty use and lighter sockets for accessories. MFJ-4245MV has 2 sets quick-connects on rear.

Large 3-inch dual meters are illuminated to make it easy to monitor load voltage/current. Whisper quiet internal fan cools your power supply for long life.

New models with PowerPoles®

MFJ-4225MVP, $119.95
MFJ-4245MVP, $174.95

About MFJ-4225MV, QST (Jan 2000) said, "its external control for varying the voltage is very handy for the test bench," and "overall, noise generated by this supply is very low."

Super Compact MightyLite™ 25 Amp Switching Power Supply

The smallest and lightest power supply in ham radio! Tiny 5 3/4 Wx3Hx5 3/4 D" fits anywhere . . .

MFJ-4125, similar to the popular MFJ-4225MV but is smaller and doesn’t have meters, cigarette socket. 5-way binding posts for high current radio connects and a pair of speaker terminals for low current accessories.

Super protection modes include Over Voltage and Over Current protection circuits.

MFJ-4218MV has adjustable output from 0 to 24 VDC. You can power more than your HF or VHF radio.

Adjustable low output allows you to run low power accessories — 1.5V, 3V, 5V, 9V or any voltage 0-24 VDC.

24 VDC output setting lets you power your marine radio and accessories. Voltage adjustment control can easily set voltage at 13.8 VDC.

Large lighted dual meters continue monitoring over output voltage and current.

Exclusive HashSQUASH™ Filtering System makes MFJ switching power supplies the quietest in the industry. MFJ-4218MV, $104.95

0-24 VDC
Ship Code B

MFJ-4115

$74.95
Ship Code A

Ultra-Compact 15 Amp
Switching Power Supply

Super-compact, perfect for traveling on vacations, camping or business trips — weighs 1.5 lbs. 5 1/2 Wx2 1/2 Hx5 3/4 D. Tiny supply will fit in your briefcase or suitcase and power most VHF/UHF or QRP radios. This supply and your rig will add fun to your boring hotel room!

MFJ’s Exclusive HashSQUASH™ Filtering System eliminates RF hash that plagues other manufacturer’s switching power supplies.

Over-voltage and over-current protection systems and works with AC input from 90 to 130 Volts.

Output is 13.8 VDC, 17 Amps surge and 15 Amps continuous.

Features

• one set of 5-way binding post and transmit and power LEDs.

MFJ-4115 is super clean, has a quiet fan and 4-position regulation. Has load fault indicator and automatic shut-down.

Website: www.mfjenterprises.com • Toll-Free 800-647-1800
**MFJ 75 Amp Switching Power Supply**

Power your HF Mobile Amplifier or your HF and VHF/UHF transceivers from one power source! Features MFJ’s exclusive HashSQUELCH™ RF Filtering System -- eliminates RF hash that plagues other manufacturer’s switching power supplies. Lightweight (just 10.5 lbs)...

**MightyLite™ 35 Amp Switching Power Supply**

MFJ-4235MV can power your HF or VHF/UHF mobile or base transceivers with an output of 30 Amps continuous and 35A surge. You can vary the voltage from 4.0 to 16 Volts with 1% voltage regulation. MFJ-4235MV features less than 1 MV.

MFJ’s Exclusive Hash-SQUELCH™ Filtering system eliminates RF hash that plagues other manufacturer’s switching power supplies. MFJ-4235MV has Short-Circuit, Overload and Over-Temperature protection systems. Also has an auto restart after a fault. Has power on and Fault LED indicators. Front panel adjustable voltage 4.0-16 VDC. Front-panel meters with backlight monitor voltage/current simultaneously. Attractive front panel features several options for connecting your gear: 1 pair of 5-way binding posts, 2 pairs of Anderson PowerPoles™, 1 pair of high-current 5-way binding posts, a cigarette socket for mobile accessories, and two pairs of quick connect terminals.

**MFJ 30/35 Amp Regulated DC Power Supply**

Massive 19.2 lb. transformer makes MFJ-4235MV weigh just 4 lbs., so you won’t break your back carrying it to field day, DXpeditions, to a buddy’s house, camping or business trips. Whisper-quiet cooling fan keeps your components cool and safe for operating. MFJ-4235MV weighs just 4 lbs., so you won’t break your back carrying it to field day, DXpeditions, to a buddy’s house, camping or business trips.

**AC and DC Adaptors for MFJ Accessories**

All MFJ adaptors have an output cord with a 2.1 mm center positive coaxial DC power plug, except as noted. “X” models have an open-end 2-conductor wire for connecting an AC input plug.

**MFJ . . . The World Leader in Ham Radio Accessories**
MFJ and Curtis is a winning CW combo!

Best of all CW worlds -- a MFJ-Curtis keyer® in a compact package that fits on the Bencher iambic paddle! Buy the combination or just the keyer for your Bencher or MFJ paddle.

MFJ’s most popular keyer is small but big in features! You get adjustable weight and tone and has front panel volume and speed controls (5-65 wpm). Has built-in dot-dash memories, speaker, sidetone and auto or semi-auto/tune modes.

Keys solid state or tube transmitters. Fully shielded, RF

MFJ Curtis Iambic Keyer has Dot, Dash Memory

Everything you need to send great CW from this MFJ Curtis Keyer™ -- easy access front panel controls, all keyer modes, dot-dash memories, jam-proof spacing, weight control, sidetone, built-in speaker and more. Speed, weight, tone and volume controls, and tune, semi-auto and on/off switches are on the front panel.

A dual paddle key lets you use the iambic mode. In this mode, you can insert a dot before a dash finishes or insert a dash before a dot finishes. Also, squeezing both paddles generates alternating dots and dashes. Lets you send characters such as C, K, and R with a single squeeze. Turns an "straight key" mode to generate dots and dashes manually. Or use a "straight key" and manually generate your own dots and dashes.

You get dot-dash memory, self-completing dots and dashes, jam-proof spacing and instant start keying.

MFJ Nano-size Keyer/Paddle Combination

Ham radio’s tiniest electronic keyer has a built-in iambic paddle! It’s just 2x3x1", weighs 3/8 oz! Fully-enclosed paddle has a "bug" feel for smooth CW.

Precision formed, resilient phosphorous bronze. It’s easy-to-use. Just set one button. Send one letter to change keyer settings -- speed 5-65 WPM, weight 25%-75%, iambic mode A/B, normal/"bug" mode, reverse.

Screwdriver adjustment for easy speed change. Tune mode for tuning antenna transmitter or tuner. RF proof. 4 ft. cord with 3.5 mm plug. Direct output keys solid state rigs.

No on/off switch -- keyer turns off between dits! Battery lasts nearly shelf life.

CWMorse Micro Telegraph Keys

MFJ-566M is a Red/Black Micro Morse Code Key with an aluminum base. It has liquid smooth and shielded steel ball bearings, a hardened steel pin rotation and stainless steel screws. It has solder connections and solid brass contacts. Includes 3/6" thick aluminum base and micro-grip feet.

MFJ-566P is all black, like MFJ-566M but on a black plastic base with micro-grip feet.

Pocket Travel Keyer has Built-in Paddle

MFJ-566M
$31.95
Black with Metal Base
Ship Code A

MFJ-566P
$24.95
Black plastic
Ship Code A

New!

MFJ Miniature Iambic Paddle

This miniature, lightweight iambic paddle is just 1/3Wx1/3Dx1/3H inches and weighs just 2½ ounces. Tiny enough to fit in an Altoids® tin (cord and all!) for protection. It’s perfect for traveling or for home use with QRP or “big” rigs. Perfect companion for MFJ or other keyers. Great for any QRP or QRO rig! The paddle is precision formed from special phosphorous bronze spring material with an A150 temper. Gives you an excellent feel so you can send smooth CW. Mounted on rugged metal base with non-skid rubber feet. Has 4 foot cord and 3.5 mm plug -- ready to plug into keyer or rig!

MFJ-561K
$21.95. Build your own!

MFJ iambic paddle kit with instructions, cord, hardware needed to build your paddle.

Pre-Wired Keyer to Rig Cables

MFJ-5164, $14.95. Keyer to radio keying cable. Phono on keyer end fits MFJ keyers and 3.5 mm with 1/4" phone adaptor fits most transceivers.

MFJ-422EX: MFJ-422E/422EX: MFJ-407E except weight and tone are adjusted internally, doesn’t have tune switch. Use 9 volt battery or 110 VAC with MFJ-1312D, $17.95. Black cabinet, 5/4x1/4x4/4 inches.

Build Your Own Keyer with this Curtis Chip

Revolutionary Curtis Chip, Choluse 28 pin skinny DIP or SMT SOIC package. Build your own!

Full-featured CW keyer has a built-in iambic paddle. Ultra-compact 3/4Wx13/4Dx3/4H inches and 21/2 ounces. Tiny enough to fit in a paddles to use with MFJ-564/B.

www.mfjenterprises.com • Toll-free 1-800-647-1800
MFJ Millenium™ CW Memory Keyer

MFJ-495 combines latest millennium microprocessor capabilities with non-volatile EEPROM memory for a full-featured, low cost, high reliability design. Send CW or load messages with paddle, keyboard or serial port. 

**Easy-to-use menus and LCD let you set all keyer functions with easy push buttons.** Keyer functions also are changed from paddle, keyboard or serial port. LCD shows messages as it’s sent from memory or live from your paddle, keyboard or computer.

32-message memories of 256 characters each. Repeat messages continuously, insert timed pauses within messages, insert embedded commands to change speed, weight, automatically.

**Features include:**
- Iambic keyer with dot/dash memories; auto, semi or handkey mode.
- Keyboard uses any AT keyboard for type ahead buffer. All commands and memories are keyboard controlled.
- Message editing capability.
- Input queue stores multiple messages.
- Auto-incrementing contest serial numbering from 001 to 9999.
- Digital/analog speed control from 5 to 99 wpm (3.1 to 20.1 speed range)

**Menu Memory Keyer/Benchtop Paddle**

MFJ Menu Driven Memory Keyers™ are the easiest to operate. No keypad, no complex sequence, nothing to remember. Select a menu by pressing a button. LED lights indicate what is active. Menu is clearly printed on top panel. Save and play messages, decrement serials, set speed, weight, sidetone, iambic, semi-auto, handkey, message queue, paddle command modes, turn sidetone on/off, transmitter tune, and set keying output on/off. Iambic/A/B, reverse, Morse trainer, and store serial number for contests. Bypass function, tells status in CW. Adjust speed, 5-100 wpm. Farnsworth-worthy or normal mode.

**Contest serial numbering (0-9999) with auto-increment,**

**Super Menu Driven Memory Keyer**

Sidetone, speaker, volume control, adjust 300-2000 Hz tone. Auto, semi-auto, bug or handkey modes, reverse dot/dash paddles, weight 5-95%, compensates radio distortion, key direct or grid-block. MARS operational.

**Memory Keyer™** has 192 character (8K) memories divided into 4 soft sectors. 9V battery (not included) or 110 VAC with MFJ-1312D, $17.95. Memories backed up by lithium battery.

MFJ-490E, $264.95. Memory Keyer/Iambic paddle combination, 8KX5K. MFJ-490EX, $169.95, is the keyer only.

MFJ-490R, $119.95, stand alone keyer, 8KX2KX6½ inches. MFJ-492X, $134.95. MFJ-492 with 8K memory installed.

MFJ-80, $21.95. (8K additional memory for MFJ-492 only).

MFJ-76, $34.95. Full function wired remote control.

**MFJ Deluxe Code Practice Oscillator & key**

**Micro CW Telegraph Keys**

**World’s finest code practice oscillator** is for demanding classroom use. Gives a true pure sinewave sidetone with no trace of harsh keyclicks. Hear the clearest, sweetest sounding CW you have ever heard. Delivers 1W into built-in 3 speaker -- fills entire room. Low distortion -- < .2% total harmonic distortion from its BTL (Bridge-Tied-Load) amplifier. Volume control, 400-1000 Hz tone, on/off switch, power LED, ½ key jack, 3.5 mm speaker jack, use 12 VDC, 4½x1½x½ in.


Farnsworth, speed from 10 to 99 wpm/ Ultra speed messages up to 990 wpm

Adjustable weight 25% to 75%

Adjustable sidetone from 300-1000 Hz

Keying output delay up to 20 ms

Push-to-talk (PTT) hang time 0-5 sec.

Direct (pos.) or grid-block (neg.) keying

Tuned for XMR adjustment

Tuned pauses, messages loops

Internal speaker, adjustable volume

Supports Qwertry/Dvorak keyboards

190 characters type-ahead keyboard buffer with low buffer warning

Dual user mode. 6/1Wx2½xHx6½"D., 12 VDC or 110 VAC. MFJ-1312D, $17.95.

RFI-Suppressed Keyboard

MFJ-495L, $39.95. RFI suppressed keyboard. Remote Control Unit

MFJ-70, $34.95. Full function wired remote control for MFJ-495.

**Deluxe Wood Telegraph**

Deluxe Wood Base Telegraph features a Morse Code straight key on a non-skid, beautifully stained wood base. A Steel under-plate makes it stay put on your table, doesn’t move around while sending! Designed by KA5MAN, this key lets you send code at home, work, riding in your car -- practically anywhere. Pre-wired 3’ cable with 3.5 mm plug. Hook-up the key to your rig and go on-the-air sounding like you were born for CW. A handsome addition to any shack.

**Classroom Morse Code Tutor**

For VECs, Elmers, teachers, ham clubs, schools and hams who want the best. Has everything in the famous MFJ-418 Pocket Size Morse Code Tutor™ plus . . . Hear powerful classroom audio from its built-in speaker/ amplifier with true sinewave sidetone and no harsh keyclicks. Down/upload custom practice groups from PC with serial port . . . Store 16 FCC exams for VECs . . . Print correct answers using printer port . . . Record quality code tapes with tape output . . . Send on-the-air CW practice with HF/VHF radio.

MFJ...the world leader in ham radio accessories
Is your CW rusty?
Relax and place this pocket sized MFJ Morse Code Reader near your receiver's speaker. Then watch CW turn into solid text messages as they scroll across an easy-to-read LCD display.

Use as backup in case you miss-copy characters -- - it makes working high speed CW a breeze -- - even if you're rusty.

Practice by copying along with the MFJ-461. It'll help you learn the code and increase your speed as you instantly see if you're right or wrong.

Eavesdrop on Morse QSOs from all over the world. It's a universal language that's understood the world over.

Automatic Speed Tracking: AutoTrak automatically locks on, tracks, displays CW speed to 99 WPM.
Simply place your MFJ-461 close to your receiver speaker until the lock LED flashes in time with the CW.

Four Display Modes:
1. Bottom line scrolls and fills with text, then entire line is displayed on top until bottom refills -- makes reading text easy! Auto displays speed in WPM.
2. Same as 1, without speed display -- gives you maximum text display.
3. Top line scrolls, bottom line displays speed in Words-Per-Minute.
4. Both top and bottom lines scroll.

140 characters can be instantly replayed. Re-read or check copy if you're rusty.

Learn small fixed sets of characters. Learned sets are combined with new sets to refresh all you have learned.

Practice copying, then instantly replay to check copy on the LCD.

Custom Character Sets
Having trouble with certain characters? Build and save 3 custom sets of 16 characters for practice -- exclusive.

Practice copying realistic on-the-air style plain English QSOs. Get ready to pass your FCC test and upgrade. Also builds confidence that first real contact.

MFJ Word Recognition Mode:
MFJ's Word Recognition Mode gives hundreds of common used words in ham radio. Practice recognizing entire words instead of individual letters.
Select letter, number, punctuation, prosign or FCC character sets (has only letters, numbers, prosigns, random call signs, words, QSOs or combo sets -- you'll never run out of study material!)

InteractiveMode lets you decide when to copy the next or previous group and how many -- for beginners!
Select normal/Farnsworth spacing.

MFJ Pocket size Morse Code Reader™
 MFJ-461
$99.95
Ship Code A

MFJ Morse Code Reader near your receiver's speaker

High-Contrast LCD Display
2-line LCD display shows 32 1/4 inch high-contrast characters.

High Performance Modem
Consistently get solid copy from MFJ's high performance PLL (phase-lock loop) modem. Digs out weak signals. Even tracks slightly drifting signals.

Of course, nothing can clean up and copy a sloppy fist, especially weak signals with lots of QRM/QRN.

Computer Interface
Serial port lets you display CW text full screen on a computer monitor -- use computer port, terminal program.

More Features
When it's too noisy for its mic pickup, connect it to your radio with a cable.

Battery saving feature puts MFJ-461 to sleep during inactivity. It wakes up, connect it to your radio with a cable.

Uses 9 Volt battery (not included).

MFJ Pocket Size Morse Code Tutor
 MFJ-418
$99.95
Ship Code A

Learn small fixed sets of characters. Learned sets are combined with new sets to refresh all you have learned.

Practice copying, then instantly replay to check copy on the LCD.

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Having trouble with certain characters? Build and save 3 custom sets of 16 characters for practice -- exclusive.

Practice copying realistic on-the-air style plain English QSOs. Get ready to pass your FCC test and upgrade. Also builds confidence that first real contact.

MFJ Word Recognition Mode:
MFJ's Word Recognition Mode gives hundreds of common used words in ham radio. Practice recognizing entire words instead of individual letters.
Select letter, number, punctuation, prosign or FCC character sets (has only letters, numbers, prosigns, random call signs, words, QSOs or combo sets -- you'll never run out of study material!)

InteractiveMode lets you decide when to copy the next or previous group and how many -- for beginners!
Select normal/Farnsworth spacing.

MFJ Morse Code Reader near your receiver's speaker

High-Contrast LCD Display
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Computer Interface
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More Features
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Battery saving feature puts MFJ-461 to sleep during inactivity. It wakes up, connect it to your radio with a cable.

Uses 9 Volt battery (not included).

www.mfjenterprises.com • Toll-Free 800-647-1800
Morse Code Reader has Built-in Memory Keyer

Is your CW rusty? Relax... Use this MFJ Morse Code Reader and built-in keyer. Watch CW turn into solid text messages as they scroll across an easy-to-read LCD. Working at high speed CW is a breeze. Type-ahead buffer, message memories, adjustable speed get you ready to compete with the best hi-speed CW ops -- they'll never know you didn't pass a code test!

MFJ-464 gives everything you need for an ultimate CW Station: sends and reads 5-99 WPM... Auto speed tracking... Large 2-line LCD shows send/receive messages... single or iambic paddle or keyboard operation... speed, volume controls... 4 message memories... type-ahead buffer... read again buffer... adjustable weight & sidetone... RFI proof... much more!

Reader has Auto Speed Track
MFJ AutoTrak™ auto locks on, tracks and displays CW to 99 wpm. Simply plug in MFJ-464 to your receiver speaker until lock LED flashes in time with the CW.

Consistently get solid copy from a high performance PLL (phase-lock loop) modern. Digs out weak signals. Even tracks slightly drifting signals. Nothing can clean up a sloppy fist, especially in weak signals with lots of QRM/QRN.

Built-in keyer features
MFJ-464 combines latest millennium microprocessor technology with non-volatile EEPROM memory for a full featured, low cost, high reliability design. Send CW, load messages using a paddle, keyboard or computer serial port.

Easy-to-use menus and LCD display let you set all keyer functions merely by push buttons. Keyer functions can also be changed from keyboard or computer.

The LCD also shows the message as it's being sent from memory or live from your paddle, keyboard or computer.

It has 4 message memories of 256 characters each. Repeat messages continuously, insert timed pauses within messages, insert an auto-incrementing serial number, have messages call other messages or embed commands to change speed, weight, automatically.

Sinewave Sidetone... More!
Supports Direct keying output. Has

PTT output, built-in speaker, sinewave sidetone, morse! Iambic keyer with dot/dash memories; auto, semi or hand-key mode. Input queue lets you store multiple messages. Auto-incrementing contest serial numbering from 001 to 9999.

Adjustable Speed 5-99 WPM
Digital linear speed control 5-99 wpm Farnsworth Mode, speed 10-99 wpm.
Ultra speed sets up to 990 wpm.
Adjustable weight 25% to 75%.
Adjustable sidetone from 300-1000 Hz.
Keying output delay to 20 milliseconds.
Push-to-talk hang time to 5 seconds.
Timed tune function for XMTTR adjust.
Timed pauses in messages.
Internal speaker, adjustable volume.
Qwerty & Dvorak keyboards.

Type-Ahead Buffer
190 character type-ahead keyboard buffer with low buffer warning.
Keyboard Input Use any AT keyboard to program functions & memories.
Compact metal case, 6 1/2wx2 1/2xh6 1/4. D". 12VDC/110VAC, MFJ-1312D, 1595.

MFJ Deluxe Iambic Paddles

Super CW Keyboard -- No Computer Required!

Super CW Keyboard lets you send effortless CW as soon as you turn it on -- no computer boot, no program to load -- just start typing.

Standalone MFJ CW Keyboard includes an RFI suppressed keyboard, a two line 16 character LCD display, eight 250 character non-volatile message memories, a 150 character type-ahead buffer, iambic keyer, plus a powerful Morse Code trainer, more!

Variable speed from 5 to 100 WPM, adjustable weight from 5 to 95%, sidetone from 300 to 3000 Hz and serial number from 0 to 9999. Has buffer and memory full audible indicators. Keys solid state and tube rigs.

AT101 compatible keyboard plugs into compact 3/4x2"x3 1/4 inch interface. Use 12 VDC or 110 VAC with MFJ-1312D, 1795.

MFJ-452X, No keyboard.
See MFJ-5164, $14.95, keyer to rig keying cable.

MFJ Dedicated CW Keyboard
MFJ-451, like MFJ-452 but without LCD display and has two 100 character memories.

MFJ CW KEYER/READER
MFJ-464

MFJ-464 Accessories

MFJ-5161, $17.95. MFJ-464 to computer serial port cable (DB-9).
MFJ-5162, $9.95. Connects MFJ-464 to radio's external speaker 3.5 mm jack.
MFJ-5163, $14.95. Connects MFJ-464 and another accessory to your radio speaker.
MFJ-5164, $14.95. Keyer to radio keying cable. Has phono plug on keyer end to fit MFJ keyers and 3.5 mm plug with 1/4" phono plug adapter to fit most transceivers.

MFJ-551, $29.95. RFI suppressed keyboard, a must for ham operators to avoid RFI problems in the shack when operating high speed CW keyboard mode.

MFJ Deluxe Iambic Paddles

MFJ-564/B
$99.95 Ship Code B

MFJ-564 Chrome

Type-Ahead Memory

MFJ-564B Black

Super CW Keyboard

MFJ-5166, $14.95. Iambic Paddle to keyer cable. Has pre-wired solder lugs on paddle end and 3.5 mm plug with 1/4" phone adapter to fit MFJ keyer.

MFJ-5564, $39.95 MFJ-451
$119.95 Ship Code B

The World Leader in Amateur Radio Accessories!
Save Your Voice with the MFJ Contest Voice Keyer

Use 8-pin modular or 8-pin round microphone plug!

MFJ Contest Voice Keyer™ calls CQ, send calls and makes contest exchanges for you in your natural voice! Store frequently used phrases like “CQ Contest this is AA6MT, You’re 59...” “QTH is Mississippi”. Contest pressing buttons, save your voice.

Record and play back five natural messages in 75 seconds. EEPROM technology keeps them stored for up to 100 years – no battery backup needed.

Repeat messages continuously, vary repeat delay 3-500 seconds. It’s a great voice beacon and calling CQ is so easy. Receive audio jack for record and play back off-the-air signals -- great help if you didn’t get it right the first time!

It’s easy to install: Icom, Yaesu, Kenwood, Yaesu, Alinco or others. Use station-builtin mic for recording. Built-in speaker lets you monitor stored messages. 3.5 mm speaker. Headphone jack. Use 9V battery, 9-15 VDC or 110 VAC with MFJ-1312D, $17.95. 6 1/4" Wx3 3/8" Hx6 1/4” D inches.

MFJ-73, $39.95. Remote Control Head with cable for MFJ-434B lets you set the MFJ-434B out of the way.

MFJ Desk Mic/Ham Station Console

For HF, VHF & UHF Radios

High-sensitivity ceramic mic element (10.5" with FlexNeck™) bends and stretches to your a comfortable operating position. Fine mesh metal grill helps to eliminate background noise.

High quality compressor amplifier with high, medium, and low selection switches. It always sends out a consistent level and optimum level without distortion, regardless of audio input level.

Equipped with built-in graphic equalizer with center frequencies of 270, 540, 1000, 2000 Hz. Best audio for FM mode and maximum efficiency for SSB.

On-Air indicator, volume control. Blinks on/off when receiving and will light up continuously when transmitting.

Equipped PTT momentary/lock switches: allow switching between long winded and fast two-sided QSOs.

Frequency up/down switches let you operate your rig at your microphone. 4 function keys (CALL, VFO, MR, PF) not applicable for all radios.

Output meter adjusts output level, NOT to exceed 0 dB.

Triple radio socket makes it easy to install: Icom, Yaesu, Kenwood, etc. See chart below.

Battery check circuit shows level with power voltage.

MFJ Professional Boom-Mic Headphones

For Icom, Yaesu and Kenwood! Professional grade Boom-Mic Headphone set for contesting, DXing, traffic nets. Comfort designed leatherette padding lets you operate for hours at the rig.

Superb ¾ inch padding on each ear and head. Superb sound, you won’t even know they’re there!

Headband adjusts for perfect fit to keep out external noise. Frequency response enhanced to bring out speech fidelity you never knew existed. Signals never sounded so clear!

Flexible mic boom lets you position it comfortably, optimum distance minimizes sibilant sounds. Frequency tailored mic element busts through noise and QRM! Six foot cable.

Casual operators will appreciate the superbly crafted Boom-Mic head-phones for hands-free operating and DXing at an incredibly low MFJ price.

MFJ-393 I/K/Y, $64.95. With pre-wired adapter cable. MFJ-393I for 8-pin round Icom, MFJ-393Y for Yaesu 8-pin round, MFJ-393K for Kenwood 8-pin round. MFJ-393MI Icom modular, MFJ-393MY Yaesu, MFJ-393MK Kenwood. MFJ-393, $34.95. Headphones only MFJ PTT Foot Operated Switch

Keeps your hands free for logging, computer operation and tuning. Reduces fatigue and improves efficiency – the difference between winning or losing contests. Normally open switch. 2-Wx3 3/8” Dx1 1/4”. Non-skid pad. 1/4 in phone. 10 ft cord.

www.mfjenterprises.com • Toll-free 1-800-647-1800
Switch any two Mics to any two Rigs

MFJ-1263 Microphone Control Center lets you mix and match any two microphones to any two radios. Mics or rigs can have 8-pin round or 8-pin modular connectors. You don't have to change connectors or rewire -- just push buttons.

Your microphones will never become obsolete. You can use your favorite microphone with your present or new rig by pushing a button. Instantly switch from hi-fi raechewing mic to hard-hitting DX mic when needed. Plug in PTT foot switch (MFJ-1709, $19.95) or let your computer or voice keyer (MFJ-434B, $19.95) control the PTT line for contesting/DXing. Plug in a boom mic/headset to save the day during noisy field day or multi-operator contesting. Plug in your headphones or external speaker.

Headphone volume control eliminates need to readjust your rig's volume when you switch the speaker on.

MFJ Equalizer/Conditioner

MFJ-655B All-in-one audio console gives ProAudio processing to make your audio transparent, no one will detect it. All they hear is your outstanding audio that brings unsolicited compliments.

Gives all the capabilities you'll ever need . . . 8-Band Equalizer, Downward Expansion noise gate, clean Compressor, smooth limiter, low noise preamp, universal microphone interfacing, impedance matching, level control, and RF/audio isolation.

Its processing is so smooth and its face, but now have an 8 pin round rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have! Internal jumpers set any microphone to match any transceiver. Supplied with one 8-pin round and one 8-pin modular output cable to transceiver.

MFJ-1261 2-Radio Headphone Selector/Mixer

- 6Wx1½Hx5D inches, includes one MFJ-5398 and one MFJ-5397MX radio cable included.

2-Radio Headphone Selector/Mixer

Example: Use your Yaesu FT-2000 8-pin round microphone with an Icom rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have!

Microphone Converter

- Convert any 8-pin round or modular microphone for use with any 8-pin round or modular radio.

Example: Use your Yaesu FT-2000 8-pin round microphone with an Icom rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have!

MFJ Speaker/Condenser

- Transmits audio to your radio -- your mics never become obsolete! 6Wx1½Hx5D inches. Includes one MFJ-5398 and one MFJ-5397MX radio cables.

MFJ-1251 Universal Microphone Converter

- Converts any 8-pin round or modular microphone for use with any 8-pin round or modular radio.

Example: Use your Yaesu FT-2000 8-pin round microphone with an Icom rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have!

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2-Radio Headphone Selector/Mixer

- Example: Use your Yaesu FT-2000 8-pin round microphone with an Icom rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have!

MFJ-1263 Microphone Control Center

- Like MFJ-1261 but intended for high performance audio Microphone Converter.

Example: Use your Yaesu FT-2000 8-pin round microphone with an Icom rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have!

MFJ Microphone Balance Controller

- Transmits audio Conditioner.

Example: Use your Yaesu FT-2000 8-pin round microphone with an Icom rig. Or you got a modular soundcard interface, but now have an 8 pin round rig. Don't buy a new mic or accessory! Save money by using what you already have!
MFJ Speech Intelligibility Enhancer

...makes barely understandable speech highly understandable!

Boost/cut each nearly 20 dB.
Balance control and separate 2¼ Watt amplifiers equalize perceived loudness to each ear -- both ears help. By boosting high and cutting low frequencies and adjusting the balanced control, barely understood speech becomes highly understandable!

If you don’t have high frequency hearing loss, you’ll still improve your ability to understand speech. QST for April, 2001 said “expected subtle effect at best, but astonishingly results were clean, understandable speech without hissing, ringing, other strange effects...”

If you have a hearing loss, high frequency speech has a special problem. Most people have a hearing loss, especially older people. As you age, high frequencies are the first to go...and conversely, older people generally use more high frequencies. (You can often detect this when you are talking to older or deaf people.)

As we get older, high frequency hearing loss reduces our ability to understand speech. Here’s why...

Research shows nearly half speech intelligibility is in 1000-4000 Hz, but contains a miniscule 4% of speech energy. However, low frequencies, 125-500 Hz have most speech energy 55% but contribute little to intelligibility, 4%.

To dramatically improve your ability to understand speech, you must:

First, drastically increase the speech energy above 500 Hz, where 83% of the speech intelligibility is concentrated.

Second, drastically reduce speech energy below 500 Hz where only 4% of speech intelligibility lies.

MFJ splits the audio band into 4

dual channels. MFJ-383 has the features of MFJ-616 and gives you separately adjustable frequency channels for left and right ears. You can compensate for deficiencies in hearing that may be different for each ear. By equalizing the frequency response of both ears, you vastly improve speech intelligibility.

Sound-Field Expansion™ adds a 3-dimensional spatial presence that can dramatically improve your ability to understand speech.

As you get older, high frequency energy below 500 Hz where only 4% of speech intelligibility is concentrated. But . . . can’t always understand?

“What did you say?” Can you hear but . . . can’t always understand?

MFJ Amplified Mobile Speaker

MFJ-383 is perfect for the rigorous mobile environment.

You get great clarity and clear tones on CW and SSB.

MFJ-383 has an excellent swivel mounting bracket! It also has a fused plug for a cigarette lighter socket on the base power supply.

Large 2¼” speaker has a 3-inch fine metal mesh grill that helps reduce undesirable noise, static, and hum.

You get 6 Watts output, 8 Ohms impedance. 8’ cord, 3.5 mm mono jack with 15’ cord, on/off power, gain control.

Requires 12 VDC at 2A for max volume, max 1W audio source. Compact 4¼/Wx3½/Hx1½/D inches.

MFJ Amplified ClearTone™ Speaker

This MFJ ClearTone™ communication speaker is an excellent 1-watt amplified base station or mobile speaker. It has great clarity and clear tones on CW and SSB.

MFJ-383 gives a superb, loud and powerful ClearTone™ audio.

The speaker baffle is a whopping three inches in diameter. Great for classroom use!

The volume is adjustable from barely audible to high classroom booming volume. It is mounted in a sturdy, compact metal cabinet with no-skid rubber feet. Compact 3¼/x1½/x4¼ inches fits anywhere.

Use 9V battery or 110 VAC with optional MFJ-1312D, $17.95.

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$219.50 MFJ-383

$11.95 MFJ-388

$11.95 MFJ-389

$13.95 MFJ-381
MFJ Noise-Canceling Filters Wipe Out Interference

Eliminate all types of noise -- severe power line noise from arcing transformers and insulators, fluorescent lamps, dimmers, touch controlled lamps, communicators, TV birdies, lightning, electric drills, motors, industrial processes. Use any rig. 2W speaker. Inputs band frequencies 40 Hz to flat. Notch depth to deep bands. Tune both 300-3000 Hz. Vary high pass signals to eliminate heterodynes, notch low to 2100 Hz -- from super-tight CW modes to wideband AM, FM, 3400 Hz, vary the bandwidth from 30 to 570 Hz. Create custom filters that you can customize.  Instantly set filters and 10 programmable pre-set filters.

MFJ Tunable, Programmable Brick Wall DSP Filter

Tunable super DSP filter automatically eliminates heterodynes, reduces noise, interference simultaneously -- SSB, AM, CW, packet, Amtor, PACTOR, RTTY, SSTV, WeFAX, FAX, weak signal VHF, EME, satellite. MFJ's tunable FIR linear phase filter minimizes ringing, prevents data errors and has "brick wall" filter response with up to 70 dB attenuation 75 Hz away. You get 5 tunable DSP filters. Tune each lowpass, highpass, notch, and bandpass filter including optimized SSB/CW filters. Vary the bandwidth to pinpoint and eliminate interference. Only MFJ gives you 5 factory pre-set filters and 10 programmable pre-set filters that you can customize. Instantly remove QRM with a turn of a switch! MFJ's auto notch filter searches for and eliminates multiple heterodynes. Advanced adaptive noise reduction silences background noise and QRM so that SSB signals sound like FM. The automatic notch and adaptive noise reduction can be used with all relevant tunable pre-set filters. Automatic gain control (AGC) keeps audio level constant during signal fade. Tunable bandpass filters narrow band signals like CW & RTTY jump out of QRM when you switch in tunable FIR bandpass filters. Tune center frequency from 300 Hz to 3400 Hz, vary the bandwidth from 30 Hz to 2100 Hz -- from super-tight CW filters to wide razor-sharp Data filters. Use two tunable filters together. For example, tune one to mark, one to space and set bandwidth tight for a super sharp RTTY filter. Tune lower cutoff frequency 200-2200 Hz and upper cutoff frequency 1400-3400 Hz. Create custom filters for voice, data and other modes. Signals just 75 Hz away literally disappear -- they are reduced 57 dB! Automatic notch filter
Auto notch filter searches for and eliminates multiple heterodynes in milliseconds. It's fast! Even interfering CW and RTTY signals can be eliminated. Selectively remove unwanted tones using two manually tunable notch filters -- MFJ exclusive. Knock out unwanted CW stations while you're on CW. Adaptive Noise Reduction Noise reduction works in all filter modes and on all random noise -- white noise, static, impulse, ignition noise, power line thunders, hiss. LMS algorithm gives you up to 20 dB of noise reduction. Noise reduction is adjustable to prevent signal distortion. Select pre-set filters, or customize Select 15 pre-set filters. Use on SSB, AM, CW, packet, Amtor, Pactor, RTTY, SSTV, WeFAX, FAX, any mode. If you don't like our pre-set filters, program your own -- an MFJ exclusive! Save center frequency/bandwidth, lowpass/highpass cutoffs, auto/manual notch, noise reduction -- all settings -- in 10 programmable filters.

More MFJ DSP Filter Features
Tunable Spotting Tone TM accurately tunes narrowest CW. Adaptive Tuning TM -- tuning rate automatically is finer as you narrow bandwidth -- makes narrow filters super easy-to-use. Exclusive FilterTalk TM sends precise settings in Morse code. Automatic notch, variable aggressiveness, quiet 2/1W audio amplifier, speaker switch keeps phones active. Manual/auto notch can be used together. Noise reduction, auto notch & custom filter is saved in memory. Accurate easy-to-use input level indicator, improved manual notch in CW, adjustable line level, more Space frequencies, baud rates for data filters and auto bypass during transmit for monitoring CW sidetone, voice/data. Push-button bypasses your filter -- hear entire unfiltered signal. 1W amplifier, volume control, level control, speaker jack, PTT sense line, line level output. Compact 9 1/2"x2"x6 inches. Plugs between Xcvr or receiver and external speaker/headphones. 12 VDC or 110 VAC w/MFJ-1312D, $17.95. Measures 6"x1"x6½ inches. MFJ-1025, $179.95. MFJ-1026 is like MFJ-1026 but less built-in active antenna, use external antenna. Same size, power requirements.

MFJ’s SSB/CW Audio Filters

MFJ-752D, $129.95. All mode dual tunable filter zeroes in, pulls out stations and notches out interference at the same time. Two independently tunable filters peak and notch low/high pass signals to eliminate heterodynes and interference even on crowded bands. Tune both 300-3000 Hz. Vary bandwidth 40 Hz to flat. Notch depth to 70 dB. Use any rig. 2W speaker. Inputs for 2 rigs. Switchable limiter for impulse noise through clipper removes background. OFF bypasses, 9-18 VDC or 110VAC, MFJ-1312D, $17.95. 10x2W$. MFJ-751B, $99.95. Zero in SSB/CW with tunable peak and notch filters. Tune 300-3000 with a 50 dB notch. Compact 4"/Wx1½"/Hx5D". MFJ-722B, $109.95. "Optimizer" switch selectable SSB/CW filter has razor sharp filtering with selectable bandwidths (80, 110, 50, 180 Hz centered on 750 Hz), steep-skooped SSB filtering. 300-3000 Hz, tunable 70 dB notch filter. Plug into phone jack. Speaker,2W amp, phone jack. Use 9-18 VDC or 110 VAC, MFJ-1312D, $17.95.
**Multireader™ Taps Into Secret Signals**

**Ever wonder** what those mysterious chirps, whistles, and buzzing sounds are on the shortwave bands? It is RTTY, ASCII, CW and AMTOR (FEC) signals passing commercial, military, diplomatic, weather, aeronautical, maritime, amateur and other traffic.

**Tap into these “secret” signals**
Plug into your shortwave receiver’s earphone jack. Watch mysterious signals turn into exciting text as it scrolls across an easy-to-read LCD. No computer, interface, cables needed. Eavesdrop on the latest breaking news as press agencies from all over the world relay them on RTTY -- it’s like a private wire service! Copy RTTY the world relay them on RTTY -- it’s like news as press agencies from all over the computer, interface, cables needed.

**Superb padded headband** and cushions makes listening comfortable.

**Superb padded headband and cushions** makes listening comfortable.

**MFJ Shortwave Regenerative Receiver Kit**

**MFJ-392B** is perfect for amateur radio and shortwave radio listening. All modes -- SSB, FM, AM, data and CW. Each earphone has volume control. Superb padded headband and ear cushions makes listening comfortable. You’ll forget they’re even on as you listen to stations all over the world!

**MFJ LW/MW/SW Preselector/Tuner**

**MFJ-956** boosts your favorite listening stations while rejecting images, intermod and phantom signals.

**Greatly improves your reception** from 0.15 to 30 MHz, especially below 2 MHz.

**Super easy to operate**, select bandsband and tune! Has Tuner Bypass and Ground Receiver positions.

**All black aluminum cabinet** is a super compact 2x3x4 inches with stay-put rubber feet.

**Input and Output** are SO-239 connectors.

**MFJ Receiver Antenna Tuner/Preamp**

**Don’t miss** rare DX due to signal power loss between your receiver and antenna. The MFJ-959C provides proper impedance matching to transfer maximum signal from antenna to receiver. Covers 1.6 to 30 MHz. 20 dB preamp with gain control boosts weak stations. 20 dB attenuator prevents overload. Select from 2 antennas and 2 receivers. Measures 9x2x6 inches. Use 9-18 VDC or 110 VAC with optional adapter, MFJ-1312D, $17.95.

**www.mfjenterprises.com • Toll-Free 800-647-1800**

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**MFJ-462B**

**Available in March**

**Up to 90 dB gain!**

**MFJ-8100K**

**All Bands!**

**High-performance** driver unit reproduces enhanced sound. Signals never sounded so clear! Free 1/4 inch phono adapter. Gold plated plug, 9’ cord.

**Weights just 8 ounces. MFJ-392B handles 450 mW and has a frequency response of 20-20,000 Hz. Impedance is 32 ohms, sensitivity is 100 dB/mW. Works in stereo mode with 3.5 mm plug. Works in mono mode with 1/4 inch phone adapter.

**MFJ-462B** series covers all or part of 75/80, 49, 40, 30, 31, 20, 25, 22, 19, 17, 16, 15, 13 Meters in five bands.

**Range A** covers: 3.51-4.31 MHz, Range B: 5.95-7.40 MHz, Range C: 9.56-12.05 MHz, Range D: 13.21-16.4 MHz, and Range E: 17.6-22 MHz.

**Vernier reduction drive** bandswitch, volume/gain controls, use 9V battery. 2 earphone jacks let you and your grandchild listen together with earphones or speakers. 7Wx6Hx2”/2”.

**MFJ-8100K, $84.95.** Shortwave regenerative receiver kit. You stuff the components, solder and assemble! MFJ-8100W, $119.95. Receiver wired and tested, ready-to-operate!

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**Easy to use, tune and read**

**Select modes and features** from a menu. Precision tuning indicator makes tuning quick and easy.

**2-line 16 character LCD** has contrast adjustment. One line comes in at speed of signal, second line is delayed to catch every exciting word!

**Copy** most standard shifts and speeds in all modes. AutoTrack Morse helps MFJ-462B to track and decode high speed CW.

**MultiReader™ Accessories**

Use 12 VDC or use 110 VAC with MFJ-1312D AC adapter, $17.95. MFJ-462B measures 6”/WX2”/HX7/4”.

**MFJ-5162, $9.95.** Receiver cable connects MFJ MultiReader™ to your radio’s external speaker (3.5mm jack).

**MFJ-5163, $14.95.** Speaker “Y”.

**MFJ-5300, $9.95.** 3”, 3.5 mm stereo extension with volume control. Use for mono radio output to set audio level to externals. Pocket clip for portable use.

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**www.mfjenterprises.com • Toll-Free 800-647-1800**
Indoor Tuned Active SWL Antenna Covers 0.3 to 40 MHz

**MFJ invented the tunable active antenna!** New technology uses cascode FET/bipolar transistor and a gigahertz bandwidth buffer to improve noise and selectivity.

**With the MFJ-1020C tunable indoor active antenna you’ll rival reception of outside wire antennas hundreds of feet long and pick up signals loud and clear all over the world.**

**World Radio TV Handbook** says MFJ-1020 is a “fine value . . . fair price . . . best offering to date . . . performs very well indeed.” MFJ’s unique tuned circuitry minimizes intermod, improves selectivity and reduces noise outside the tuned band. You can also use it as a tuned preselector with an external antenna.

**Covers 0.3 to 40 MHz including VLF, AM broadcast, all shortwave and all amateur radio bands.**

**Has** Tune, Band, Gain, On/off/Bypass controls and SO-239 coax connectors. Use 9 volt battery, or 12 VDC or 110 VAC with MFJ-1312D, $17.95. 6Wx2Hx5D inches. Includes telescoping whip.

Compact 0.3 to 200 MHz antenna

Your ham band only antenna does great on the ham bands . . . but this all band active antenna will help you hear strong signals from all over the world from 300 KHz to 200 MHz -- including low, medium, shortwave and VHF bands.

**Enjoy** shortwave newscasts, ship-to-shore, airline, commercial RTTY, others.

**Improves** weak noisy scanner radio reception from high to low band VHF -- hear signals you couldn’t hear before.

**J-310** FET handles strong signals and noiseless feedback circuit gives excellent low noise reception. 4.5 GHZ MRF-901 transistor receives weak signals well into VHF.

**On/off** switch, power on LED, SO-239 coax connector and detachable 20-inch telescoping antenna. Use 9 Volt battery or 110 VAC with optional MFJ-1312D, $17.95. Measurces a compact 3Wx1’/Hx4D inches.

High Dynamic Range Passive Preselector Can’t Overload

**MFJ’s new Passive Preselector has extremely high dynamic range!** Improves performance of any transceiver. Vastly improves most expensive receivers. Especially helpful to broadband front-ends prone to overload.

**Protects** sensitive receivers from damage from very strong signals: multi-transmitter, multi-band ops -- contests, field-day, hams, CBers, TV/FM/AM.

**Eliminates** phantom signals by suppressing out-of-band signals causing intermod, blocking, cross modulation.

**Eliminates** 2nd order intermod.

**MFJ’s unique Hi-Q series tunable circuit gives you superb performance.**

**Tunable** series tuned circuit works into a very low impedance formed by broadband toroid transformers.

**Narrow** bandwidth, excellent stop band attenuation, very low loss, constant bandwidth, gain over each band.

**Excellent** attenuation in adjacent bands. Entire 1.6 to 33 MHz HF band is covered in five overlapping bands.

**An** air variable tuning capacitor, 1.8 to 1 tuning range and a vernier reduces tuning drive gives you precision tuning.

**Measures** a compact 7’/x2’/x3’/ inches.

**Preselector with T/R Relay**

Like MFJ-1046 but adds RF sense transmit, receive switch with adjustable time delay to auto bypass your MFJ-1048 when you transmit.

**Also** adds PTT line Transmit and Receive switching. MFJ-1048 connects between antenna and transceiver.

**Measures** 7’/x2’/x3’/ inches.

**Use** 12 VDC or 110 VAC with optional adapter, MFJ-1312D, $17.95.

All-Band Transceiver Preselector

**Copy** weak, barely readable signals.

Rejects out-of-band signals, images. 1.8 to 54 MHz. Get up to 20 dB gain. Also has **Gain control**. Uses a cascode FET/bipolar transistor for low noise, high gain with a 20 dB attenuator.

You can connect 2 antennas and 2 receivers with SO-239 connectors. You can automatically bypass the MFJ-1040C when you are transmitting to 125 watts. Delay control. Has jack for push-to-talk. Compact 6Wx2’/Hx4D inches. Use 9-18 VDC or optional 110 VAC, 300 mA adapter MFJ-1312D, $17.95.

All-Band Receiver Preselector

**MFJ-1045C, $94.95.**

is similar to the MFJ-1040C, but it does not have the attenuator, transceiver auto bypass, delay, or PTT that the MFJ-1040C does. Compact 6Wx2’/Hx6’/D inches.

**$149.95**

Like MFJ-1046 but adds RF sense transmit, receive switch with adjustable time delay to auto bypass your MFJ-1048 when you transmit.

**Also** adds PTT line Transmit and Receive switching. MFJ-1048 connects between antenna and transceiver.

**Measures** 7’/x2’/x3’/ inches.

**Use** 12 VDC or 110 VAC with optional adapter, MFJ-1312D, $17.95.

**3-inch** speaker handles 8 Watts. 8 Ohms impedance, has six feet of cord terminated with a 3.5 mm mono plug. Tiny, compact 3/’x3/’x3/’ inches, but has a powerful booming sound!
MFJ-90 DX Beacon Monitor

Get up-to-the-minute worldwide DX band conditions in minutes on 14, 18, 21, 24, 28 MHz using the International Beacon Network of 18 transmitters around the world! MFJ’s DX Beacon Monitor shows which beacon you’re hearing on your transceiver – an LED lights on a world map to show you the beacon location and where to point your antenna.

It’s fascinating to hear and watch each beacon location light up as they activate across the world. For DXers, contesters, ragchewers and SWLers. International Beacon Network provides a reliable source for determining HF propagation 24 hours a day.

Consists of 18 beacons around the world. Each transmits on 14.1, 18.11, 21.15, 24.93 and 28.2 MHz. Transmit sequence moves westward New York to 21.150, 24.93 and 28.2 MHz. Transmit conditions in minutes on 14, 18, 21, 24, 28 MHz.

Tiny Micro ATV Transmitter* lets you transmit a high quality Amateur Television video signal on 433.97 MHz (cable channel 58, 59, or 60). Just plug in an antenna and a video source -- camcorder, camera, VCR or other.

With an antenna and a TV set (or down converter) tuned to cable channel 58, 59, or 60, you’ll have a complete ATV video station. MFJ-8708 puts out a solid 50-100 mW signal, capable of transmitting up to 1.8 miles with a 3-element beam. Using a suitable UHF power amplifier and high-gain antenna, you can enjoy two way ATV communications over many miles with fellow ATV hams.

To transmit video simply connect video to the RCA phono connector and antenna to the BNC and connect a 9 volt battery or other VDC source. Use any standard NTSC or PAL composite video (1V p-p) source. Micro ATV Transmitter* can only be operated by a Technician class or higher licensed Radio Amateur. All transmissions must be directed to at least one other licensed Radio Amateur.

MFJ Micro ATV Transmitter

Transmits Live Pictures on Cable TV Channels

MFJ-8704

$129.95

Tiny Micro ATV Transmitter* lets you transmit a high quality Amateur Television video signal on 433.97 MHz (cable channel 58, 59, or 60). Just plug in an antenna and a video source -- camcorder, camera, VCR or other.

With an antenna and a TV set (or down converter) TV tuned to cable channel 58, 59, or 60, you’ll have a complete ATV video station. MFJ-8708 puts out a solid 50-100 mW signal, capable of transmitting up to 1.8 miles with a 3-element beam. Using a suitable UHF power amplifier and high-gain antenna, you can enjoy two way ATV communications over many miles with fellow ATV hams.

To transmit video simply connect video to the RCA phono connector and antenna to the BNC and connect a 9 volt battery or other 9 VDC source. Use any standard NTSC or PAL composite video (1V p-p) source. Micro ATV Transmitter* can only be operated by a Technician class or higher licensed Radio Amateur. All transmissions must be directed to at least one other licensed Radio Amateur.

MFJ-4.5 Watts ATV Transmitter

Amazingly compact 2.35Wx2.8Dx.75H inches, but super powerful!

Frequency control is provided by means of a digital integer-N, phase locked loop. Dual PLLs provide a frequency locked video carrier and an audio sub-carrier. Transmit frequency is selected via a four position dip switch. Four standard US ATV frequencies 426.25, 427.25, 434.00, and 439.25 MHz on channels 58, 59 and 60.

Video modulation accomplished by a 12-bit digitally controlled DAC-digital to analog controller. Specially embedded software controls the modulation depth and pre-distortion level to deliver an ultra-clean signal to the final RF amp. High power transmitting over 0.5 Watt output requires an external heatsink. With an external heatsink, it can be used for extended key down operation. Reverse polarity protected.

RF power output: 4.5W Max, 50 Ohm
Audio Subcarrier: 4.5 MHz
Spurious Outputs: Better than -40dBc
Phase Noise: -75 dBc/hz @ 500 KHz
DC power in: 12-13.5V Max, +/-100mV
Current Draw: 2.2 Amps @max output
Frequency control: XTAL ref. 4 MHz
Frequency stability: +/-0.2 PPM
Video In: Composite NTSC 1V P-P
Audio In: Line level 200-250 mV RMS
Operating Temp: -20 to +85 Celsius
Size: 2.35Wx2.8Dx.75H inches
MFJ 5-watt CW Transceivers

New improved ultra-hot receiver...enjoy DXing or ragchewing wherever you go...brush up on CW and upgrade...no-compromise performance...at a terrific price!

**Easy Operation:** User-friendly radio sets up in seconds – no micro-processor mumbo jumbo. 

**Great Sensitivity:** New hotter-than-ever superhet receiver brings weakest signals in at full volume (super-quiet FET post amp stage in the IF filter makes this the best CW receiver going).

**Excellent Selectivity:** Tight CW bandwidth crystal ladder filter fights unwanted QRMs, noise to the max.

**Smooth, Stable VFO:** Wide-spaced reduction drive VFO capacitor glides slowly across the easy-to-read dial.

**True RIT:** RIT control has center-detent – makes listening or calling off-frequency a snap!

**Easy on your Ears:** Smooth AGC tracks only signals you want to hear – it never locks onto strong signals outside the audio bandpass. **Instant Recovery AGC™** snaps the receiver back at full gain after transmitting.

**Built-in 3" speaker:** driven by 100 mW of audio for great volume.

**Rugged Transmitter:** Motorola power amplifier transis-
tor delivers full QRP, tolerates opens, accidental shorts without damage.

**Sinewave Sidetone:** Pure 700 Hz CW sidetone makes sending as much fun as receiving!

**Semi-QSK:** Adjustable hold transmit/receive switch for normal sending speed or set or full QSK for contests.

**Power:** Uses little power – only 50 mA average receive and 1.2 amp peak on transmit. Perfect for battery operation in remote locations!

**Rugged:** MFJ CW radios are built on G-10 double-sided plate-through PC boards. All-metal, brushed stainless steel front panel.

**Frequency Coverage:** Choose your favorite band! 40 & 10 Meter models cover all your favorite band segments – makes a perfect “first radio” for new upgrades.

**Integrated CW Station**

**Radio, tuner, power pack fasten together to form a tiny 6x6.5x4.5-in. integrated CW station.**

Specify band in “XX” of model number.

**MFJ-93XX** $109.95

**MFJ QRP-Cub™** rigs use SMT to achieve big performance. The kit version has all SMT parts mounted and soldered. You just insert and solder the “through-hole” parts like connectors, inductors and trimmer caps. Designed by QRP-ARCI hall-of-famer K1BQT for real world low-power operating conditions. Buy all or choose 80, 40, 30, 20, 17, or 15 Meters.

**Portable and QRP Power Supplies and Accessories**

**MFJ-4110, $64.95.** Portable AC power supply connects to MFJ rigs. LED shows when power is applied. Output is 13.8 VDC at 1.2 amps.

**MFJ-416, $54.95.** CW option kit for your MFJ-9406 six meter and your MFJ-9402 two meter adventure transceivers. **MFJ-726, $59.95.** Narrow audio filter built for MFJ CW transceivers.

**MFJ 50 watt CW Transceivers**

Great SSB/CW Accessories for your 90 Series MFJ Transceivers

**MFJ-902B, $119.95**. Tiny Travel Tuner, 4½x2½x1⅜ inches, fits in the palm of your hand! Handles a full 150 Watts, covers 80-6 Meters, has tuner bypass switch, tunes nearly anything! Perfect for backpacking, traveling, camping, etc. Great for rigs like IC-706MKIII, Yaesu FT-100D, Kenwood TS-50.

**MFJ-971, $139.95.** 200 Watt PEP Antenna Tuner also has 6 Watt range setting for QRP. Covers 1.8-30 MHz. 4:1 Toroid Balun is built in for balanced lines. Stackable with your MFJ-90 Series Transceivers.

**MFJ-561, $29.95.** Miniature lightweight iambic paddle is just ⅛''x⅝''x⅜'' inches and weighs just ⅛ ounce -- tiny enough to fit in an Altoids® tin (cord and all!) -- great for traveling with QRP or “big” rigs!

**MFJ-402, $74.95.** Ham radio’s tiniest electronic keyer with built-in iambic paddle! It’s a nano-size 2x3x1 inches and weighs just 3/16 ounces! Speed adjusts 5-65 WPM, weight 25-75%, has iambic mode A or B, normal or “bug” mode and reverse.

**Folded Dipole Portable Antennas**

**Single band, light-weight, folded dipoles are perfect for MFJ QRP rigs. Low SWR, direct coax feed, 200 Watts.**

**MFJ-1770B (10M); MFJ-1770C (15M); MFJ-1770D (20M); MFJ-1770E (30M); MFJ-1770F (40M); MFJ-1770G (60M); MFJ-1770H (80M); MFJ-1770I (100M); MFJ-1770J (110M); MFJ-1770K (120M); MFJ-1770L (130M); MFJ-1770M (140M); MFJ-1770N (150M); MFJ-1770O (160M); MFJ-1770P (170M); MFJ-1770Q (180M); MFJ-1770R (190M); MFJ-1770S (200M).**
HF SSB Travel Radios™ are Feature-Packed

...the most powerful 12 watt radios you’ll ever own... hot receiver... potent speech processing... rugged transmitter... proven on-air design... real analog S-meter... powerful audio

Weak stations roll in with surprising clarity, faithfully reproduced by a single conversion receiver. On transmit, MFJ’s exclusive ConstantCurrent™ speech processor cuts thru noise and QRM like a far more complex radio.

Take this performance along on your next vacation or business trip -- transmitter, mic, power supply, and antenna easily fit in a briefcase or carry-on bag.

Simple operation: No microprocessor mumbo-jumbo -- on air in minutes!

Great sensitivity: Quiet double balanced mixer front-end, single conversion clarity and plenty of gain. If a signal is there, you’ll get it loud & clear!

A real calibrated S-meter: A real calibrated S-meter -- not a useless bargraph -- that makes adjusting an antenna tuner or finding the best beam heading clear-cut.

Excellent Selectivity: 8 poles of tight IF filtering cuts chatter and focuses power where needed.

Smooth VFO: No synthesizer jump or obscure keypad commands! Effortless tuning, custom reduction-drive ball-bearing capacitor.

Powerful audio: even in noisy locations from a special Signetics audio chip and rugged 3” speaker. One Watt audio output at 10% THD.

Low Current Requirements: No heavy supply for this radio.

Rugged Transmitter: Output transistor runs cool, tolerates 3:1 VSWR and feedline shorts or opens.

Built to last: Plate-through PC board, tough metal case. 50-100 mA receive, 1.2A peak on transmit @13.8 VDC. 2”x6”x6 in.

MFJ-9417 covers 18.08-18.17.
MFJ-9440 covers 7.150-7.300.
MFJ-9475 covers 3.750-4.000.
MFJ-415B, $54.95. CW module for MFJ-9420/9440. Provides semi-QSK break-in and sidetone, a must for DX.

MFJ Adventure Radios

. . . take on mountain tops, down cool streams, overseas, on your bicycle trip, etc. . . .

MFJ-9402, $329.95

($349.95 with MFJ-290 mic)
Ship Code B

Choose 2/6/10/12 Meters!

MFJ-9406 for 6 Meters -- the magic band -- can economically open the exciting propagation at 50 MHz, not to mention local ragchews. . . . And you can take this little set anywhere, on top of mountains, down cool streams, overseas, on bicycle trips, campgrounds, etc.

MFJ Adventure Radios can combine with your other outdoors hobby for an even more enjoyable experience!

You get full coverage of 50.0 to 50.3 MHz with power output of 10 Watts PEP.

MFJ-9402, 2 Meters operates SSB, (optional) CW with 7W output, 144.0-144.3 MHz.
MFJ-9410, 10 Meters packs 20 Watts SSB PEP. Be amazed with the clarity of its receiver. 28.3-28.6 MHz.
MFJ-9412, Adventure for 12 Meters. 20 Watts SSB and CW PEP output and covers 24.920-24.990 MHz.

Adventure radios are easy, just turn on and go!

They all sport MFJ’s exclusive ConstantCurrent™ syllabic speech processing for an added 4 to 6 dB of punch.

MFJ-9406/9410/9412

$299.95

($309.95 with MFJ-290 mic)
Ship Code B

All four feature single-conversion superhet receivers with a low-noise front end and double-balanced mixer to fight intermod, dig deep, and a 2.3 kHz crystal ladder filter.

All Adventure radios include a built-in low pass filter to help avoid TVI.

Real analog S-Meters double as speech processing level monitors, analog tuning with no unexpected rate shifts or stair-stepping, powerful one-half watt audio from their 3½ inch top-mount speakers, and a solid-state FET switch to key an external amplifier.

Energy efficient, operating from a 2A AC supply (3A for 9410) or from a 12V battery. MFJ-412, $54.95. CW optional module for Adventure radios.

Built-to-last conservative design, premium quality, plate-through PC boards, quality components, handsomely silkscreened aluminum faceplate and tough cabinets.

Fit an Adventure Radio just about anywhere: each is just 2.5X6.5X6 inches.

MFJ-1762, $109.95. 3-element 6 Meter yagi quadrupoles effective radiated power over a 1/2 wave dipole. 6’, 2 lbs. Use TV rotator/mast. 300W PEP SSB.

Mount vertical/horizontal. Balun decouples feedline.

Moxon 6-Meter, $74.95.

MFJ-1896, $74.95.

6-Meter pattern superhet receivers focus power where needed.

Selectivity: 8 poles of tight IF filtering cuts chatter and focuses power where needed.

Excellent VFO: No synthesizer jump or obscure keypad commands! Effortless tuning, custom reduction-drive ball-bearing capacitor.

Powerful audio: even in noisy locations from a special Signetics audio chip and rugged 3” speaker. One Watt audio output at 10% THD.

Low Current Requirements: No heavy supply for this radio.

Rugged Transmitter: Output transistor runs cool, tolerates 3:1 VSWR and feedline shorts or opens.

Built to last: Plate-through PC board, tough metal case. 50-100 mA receive, 1.2A peak on transmit @13.8 VDC. 2”x6”x6 in.

MFJ-9417 covers 18.08-18.17.
MFJ-9440 covers 7.150-7.300.
MFJ-9475 covers 3.750-4.000.
MFJ-415B, $54.95. CW module for MFJ-9420/9440. Provides semi-QSK break-in and sidetone, a must for DX.

MFJ Adventure Accessories

MFJ-1736, $34.95. Hang a 6M J-pole in the clear. Omni-directional full-size 1/2 wave with low angle radiation beats 1/4-waves.

MFJ-1776B, $44.95. Low SWR 6-Meter folded dipole. MFJ-1770B, $44.95. (10 Meters).

MFJ-906, $109.95. 6M tuner with lighted cross-needle meter (MFJ-1312D, $19.75).
100 Watts FM, 200W SSB PEP.
MFJ-903, $74.95. Like MFJ-906, less meter.

Mirage A-1015-G, $419.95. 150 watt output 6-meter amplifier has built-in 20 dB GaAs FET receiver preamp. All modes: FM/SSB/CW. 1.15 Watts input power.

MFJ-290 dynamic handheld mic for all MFJ SSB Adventure Rigs™, $34.95 ordered separately.

MFJ-4110, $64.95. Portable AC power supply 13.8 VDC@ 1.2A.

MFJ-4114, $84.95. Rechargeable AC Power Supply with battery pack uses Nickel Cad D or alkaline D (not included). Selectable AC/batteries. 13.8VDC, 1.2A.

www.mfjenterprises.com • Toll-Free 800-647-1800
Plug & Play! This sound card interface between your rig and computer and operate all digital modes. Provides fully automatic operation with audio and push-to-talk control. Matches sound card audio, eliminates ground loops and provides mic override. Operate PSK-31, packet, APRS, AMTOR, RTTY, SSTV, CW, high-speed CW Meteor Scatter and others. Use as Contest Voice or CW Memory Keyer. Just select a cable configured for your radio, plug it in, and go. The signal path between the radio and computer is completely isolated against ground loops and common-mode noise. MFJ Sound Card-to-Rig Interface

MFJ USB-to-Radio Multimode Interface

Plug this sound card interface between your rig and computer and operate all digital modes. Provides fully automatic operation with audio and push-to-talk control. Matches sound card audio, eliminates ground loops and provides mic override. Operate PSK-31, packet, APRS, AMTOR, RTTY, SSTV, CW, high-speed CW Meteor Scatter and others. Use as Contest Voice and CW Memory Keyer. For radios with 8-pin round (MFJ-1275/1279), 8-pin modular (MFJ-1275M/1279M) 4-pin md (MFJ-1275T/1279T). Audio isolation transformers and relays eliminate ground loops, audio hum, noise, distortion, RF suppression, line isolation eliminates RF problems. Transmit mic audio at any time by pressing PTT to override digital modes. MFJ-1279 Super Soundcard Interface adds:

- Auxiliary Input Jack
- Direct CW/FSK Keying Jack
- Headphone Jack
- Footswitch jack

Interface adds:

- Footswitch jack
- Headphone jack
- Direct CW/FSK Keying jack
- Auxiliary Input jack

MFJ Sound Card-to-Rig Interface

MFJ Sound Card-to-Rig Interface

MFJ RS232 to USB Adapter and others

MFJ-1204 wicable, $99.95 Add'l Cable p/n $19.95 Description

- MFJ-1204UT 4-pin Round Mic Connector
- MFJ-1204UT 8-pin DIN Data / Accessory Port Connector
- MFJ-1204UT Kenwood Mike and Phones jack
- MFJ-1204UT For Elecraft KX3's rear panel Audio In/Out & PTT jacks
- MFJ-1204UT For Elecraft KX3's Mic and Phones jacks

Plug & Play!

Plug & Play!

Plug & Play!

Plug & Play!
**TNC-X -- An Inexpensive TNC for VHF Packet and APRS!**

Low-cost, low power TNC currently deployed in thousands of locations all over the world. Just connect your FM radio and your computer and the world of digital packet radio is yours to enjoy. TNC-X is a self-contained TNC, not a TNC with an outboard serial to USB converter added to it. As a result, when you plug it into a USB port on your computer, it derives its power from the USB port. No need to provide a separate power connection. For those who want to use it with older computers, it also supports a separate conventional serial port. Switch back and forth between USB and serial if you like. USB port works with all major computer operating systems including Windows (all versions after 95, including 64-bit), Mac OS X (as well as Mac OS 8 and 9), and Linux.

TNC-X beats the competition in decoding packets from poorly adjusted transmitters. You get a built-in active audio filter in front of the TNC's modem to clean up analog signals before they are digitized, substantially improving demodulation performance. TNC-X also supports true software DCD. You can leave the squelch of the radio connected to TNC-X open for very fast transmit/receive turnaround times.

TNC-X is a natural for emergency communications and is being used in this application across the country and around the world. It is fully compatible with Winlink 2000 both on the server side and on the client side. Just specify KISS mode in the world. It is fully compatible with Winlink 2000 both on the server side and on the client side. Just specify KISS mode in the

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**Pre-Wired Radio-to-TNC Cables**

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<th>TNC to Radio</th>
<th>Prefab Cables</th>
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<td>MFJ-1270X</td>
<td>$139.95</td>
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**Plug and play...**

- **MFJ-1270DG**, $34.95. X-Digi is an inexpensive board that plugs into TNC-X's expansion header and makes it into a stand-alone full-featured digipeter. Supports WIDE in N paradigm for APRS, or can act as a general purpose digipeter.
- **When operating as an APRS digipeter, X-Digi has the capability to trap and eliminate duplicate position reports, substantially reducing congestion on APRS frequencies. It has the capability of sending up to 4 different beacons, each with its own text, and each at its own transmission interval.**

**Together TNC-X and X-Digi consume very little power (less than 25 mA). In a pinch, you can power TNC-X and X-Digi all day long on a 9-Volt battery.**

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**MFJ Computer Printer, Serial & USB Cables**

- **MFJ-3412**, $12.95. Printer Cable, 26-pin Centronics to DB-25 male, 6 feet
- **MFJ-3413**, $12.95. Serial cable, DB-25 male to DB-25 female, 6 feet
- **MFJ-3409**, $12.95. Serial cable, DB-9 male to DB-25 female, 6 feet
- **MFJ-3408**, $12.95. Serial cable, DB-9 male to DB-9 female, 6 feet
- **MFJ-3419**, $12.95. Serial cable, DB-9 female to DB-9 male, 6 inches
- **MFJ-3430**, $4.95. USB A male to USB B male, 6 foot cable, beige

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**MFJ Cigarette Lighter Cable**

**Plug** in your favorite MFJ accessories or others and operate them off of your automobile’s 12 VDC cigarette lighter socket with a 3 Amp fuse. Has a 2.1 mm center positive DC coaxial plug.

**Or operate direct from your power supply in the ham shack! Provides power to your MFJ analyzer, keyer, meter or tuner lamp, etc.**

**Make quick adjustments to HF/VHF/UHF mobile antennas with your analyzer in hand! 18” retracted curly cord, 60” fully stretched.**

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**Open End Cables with Radio Connectors**

- **MFJ-5082**, $19.95. 8 pin round mic.
- **MFJ-5224**, $9.95. IC/Ya/A-LRS Hts.

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**Super compact 5 1/8Wx1 1/2Hx3 1/4D inches.**

- **Super compact 5 1/8Wx1 1/2H3 1/4D inches.**
- **4. does not include IC-W100H, IC-2700H
- **6. YV for KP9612 1200 baud port
- **7. YH models for KP9612
- **5. YV for KAM VHF port, YH for KAM HF
- **8 pin DIN. Acc. Port.
- **MFJ TNC/MMC**
- **PK-232**
- **MFJ Computer Printer, Serial & USB Cables**
- **MFJ TNC2 2400 Baud Modem**

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MFJ 24/12 Hour Clocks

**DXer's 24Hr. Wall Clocks**

- **MFJ-115, $29.95.** Set this 24 hour Quartz clock to UTC/ GMT and you'll determine time in any time zone of the world at any time of the day. Premier world cities encircle its colorful world map face to 12” face. Seconds. 12 hour Quartz movement. 12 inch black face with large white numerals let you read it from across the room. Attractive clean, white face is highly visible. Handsome black trim. MFJ-131RC, $44.95. Read 24/12 hour time at a single glance on the map to display a QTH in any time zone. Daylight saving time feature. Attractive grey. MFJ-112B, $34.95. This DXers World Map Clock shows you the time at any QTH throughout the world on an attractive LCD world map. Also shows day of week, month, date and year. Time displays hour/minute/second. Choose 12/24 Hour. Easy push buttons move you east and west on the map to display a QTH in any time zone. Daylight saving time feature. Attractive grey. Cool blue backlight for night viewing. Great for gift or use as logging clock. 4\(\frac{3}{4}\)Wx3\(\frac{1}{2}\)H”. MFJ-117, $27.96. 12/24 hour with HUGE 1.8” red LEDs. Absolutely brightest LEDs of any clock we have ever seen! Giant 2.5” super bright LEDs are the width of a 2-Meter HT – see them from across the street, day/night! Perfect for decreasing eye strain. MFJ-137RC, $34.95. Huge 14” twelve (12) hour clock is a monster! It’s why many are used in hospitals and schools across the USA! MFJ-137RC automatically sets itself and is accurate to the second! DST mode can be disabled. Handsome black with white face is great in a ham shack, office, hospital, etc. AA battery, not included. Can also manually set.

**Hi-Contrast LCDs**

- **MFJ-108B, $24.95.** dual clock has separate 24 hour and 12 hour displays. Lets you read both UTC and local time simultaneously. Features huge high-contrast 5/8 inch LCD numerals that make it easy to read from across the room. Mounted in an attractive solid brushed aluminum frame with a sloped face for easy viewing. Synchronized to UTC for split-second timing. Quartz controlled for excellent accuracy. Long life button batteries included. Desk top 4\(\frac{1}{2}\)Wx1Dx2H inches. MFJ 1 year limited NoMatterWhat™ warranty.

**14” Atomic Wall Clock**

- **MFJ-158RC, $35.95.** True 24/12 hour with huge high-contrast 5/8 inch LCD numerals. 2\(\frac{1}{4}\)Wx1\(\frac{1}{2}\)H”. Synchronizable to UTC for split-second timing. MFJ-117, $27.96. Dual displays: 24 and 12 Hour Clock

**Wireless Projection 24/12 Atomic Alarm Clock – indoor temp, moon phase**

- **MFJ-158RC, $54.95.** Wireless Projection Alarm Clock features 24/12 hour radio-controlled time, date, and indoor temperature on a colorful display with 1\(\frac{1}{4}\)” digits. Backlight is momentary when operating under battery power or constant when using the included AC adapter. Time and Indoor Temperature alternately project in easy-to-read red digits onto the ceiling or wall of a darkened room. Includes alarm with snooze function and even updates for daylight savings time and leap year!

**Features:**

- Hour and minute display
- Weekday and date display
- Indoor temperature (°F or °C)
- Daily time alarm with Snooze
- Low battery indicator for receiver
- Current moon phase (8 phases)
- USB charge port, mobile devices
- Free standing

**Time zones:**

- Atlantic, Eastern, Central, Mountain, Pacific, Alaskan, Hawaiian.

MFJ . . . The World Leader in Ham Radio Accessories
MFJ ATOMIC 24/12 HOUR CLOCKS

- Automatically receive WWVB radio signal from National Institute of Standards and Technology in Ft. Collins, Colorado for millisecond accuracy
- Choose 24/12 Hour time format or simultaneous dual times
- Choose from huge selection, wall or desktop mounts

**JUMBO 4” digits solar-powered Atomic clock**

TrueUTC™, plus 7 other time zones...Thermometer/Hygrometer...

Jumbo LCD clock boasts giant 4” digits. MFJ exclusive TrueUTC™ time!
Display is 151/4Wx101/4Hx3/4D inches. Place it on a desk with its convenient flip stand or hang on your wall.
MFJ-139RC is solar powered so you’ll never need any batteries.
Use 24 or 12 hour time format and you get TrueUTC™ time zone plus 7 other time zones including Hawaii and Puerto Rico. A push button lets you select GMT or other time zone on the time zone map. Daylight savings time can also be turned on or off.
Indoor thermometer and hygrometer tell you indoor temperature/humidity.
Displays month, date and day of week. Everything is displayed in one simultaneous look at this clock.

**MFJ Atomic Alarm Clock – SUPER DEAL!**

Unbelievable features at such a low price! HUGE 1-inch high digits, auto-controlled for pin-point accuracy, 24/12 hour selectable, DST on/off, dual alarms, 5-min. ID (snooze), fabulous blue backlight, month/date display, indoor thermometer (32-122 degrees F), moon-phase, uses just two AAA 1.5V batteries (not included) 31/8Wx4Hx1/16D in.

**MFJ Dual Time Display Travel Atomic Clock**

MFJ-133RC LCD travel clock shows 2 time zones at once. Show UTC, local or other dual time format! 24/12 hour. Atomic-controlled for pin-point accuracy! HUGE 11/8” high-contrast numerals easily read 6 feet away . . . but super compact 4Wx3Hx1/8”D. Attractive silver clock folds up and slides in your shirt pocket for great travelability.

**Solar Atomic Clock never needs batteries**

Solar-powered 24/12 Hour atomic clock never needs batteries, large LCD (time digits 11/2”) and gives precision accurate time from WWVB. Handsome desktop size. Alarm. Compact 3Wx4/1Hx1/8”D inches.

**Large Display Wall Mount Atomic 24/12 Hour Clocks**

24/12 Time/Calendar Temp Atomic Clock

MFJ-130BRC is a 24/12 hour wall/desk mount atomic clock. It has HUGE 11/2” digits that can be seen across your room. Handsome silver and black base with a bright green LCD looks great in any shack or any other part of the house for that matter.
MFJ-130BRC has a running seconds display and also displays the month, date, and day. Indoor temperatures are also displayed and all is simultaneous. You get all the info you need to carry on a ragchew QSO with your buddies.

Dual Time Atomic Clock with UTC Zone

See in the Dark! MFJ-121B

Read both UTC and local time at-a-single-glance. Dual atomic clock 24/12 hour time, independently set. Auto backlight every day at preset time for 8 hours. Mounted in a handsome silver-metallic, hard-plastic frame. HUGE, 11/2Wx2H” LCD numerals, exclusive UTC zone, running seconds display, 11/2W x7/8Hx1D”. Wall or desk mount. Daylight savings can be disabled in each clock. 4 AA batteries.

Solar Powered Eternity Atomic Clock

Clock™ works for an “eternity”! No need for batteries or to set time! Receives WWVB. Whopping 31/2Hx6W” with huge 2” time digits. 24 or 12 hours, indoor temp, running seconds, month/day and day-of-week displays. 91/2Wx6”x1D”. Attractive silver metallic. Power on/off switch when not in use.

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MFJ Radio-Controlled 24/12 Hour Dual clock

The World Leader in Ham Radio Accessories

Radio-Controlled Wrist Watch

Global World Time Atomic Wristwatch

MFJ-199B

This is the full-featured atomic wristwatch you have been waiting for! Dual time ring for 24/12 hour formats, US and world time zone settings. Highly sensitive radio receiver receives signals from Germany, continental USA, UK and Japan (60 KHz only) according to chosen time zone. Set time zone to UTC 0 on top of universal time no matter where you are. Individually set wristwatch to any major city in the world. In Russia, set the time to Moscow zone, it searches for the signal and keeps you on time. When in Japan, set to Tokyo. Super bright LED is at the 12 O’clock position. Black leather band, reception success/failure indication. Now you will know when your wristwatch is keeping you on time or not and not show up to a meeting an hour late.

Full-color Atomic wireless weather stations

MFJ-154RC/MFJ-156RC

LaCrosse Wireless Color Weather Stations give you precision Atomic time and real-time indoor and outdoor weather data straight from your home location. These weather stations feature dynamic color forecast icons that change based on weather conditions.

With a wireless remote sensor easily monitor forecast/temperature trends, indoor/outdoor temps, high/low temperature alerts and other data -- on an easy-to-read large 7½" diaanalog color display. Station unit powers with included AC adaptor or 2 AA batteries. Remote sensor uses three AAA batteries. Batteries are not included. Each station includes one outdoor sensor.

MFJ-154RC is 4½"Wx6½"H x2½"D.

MFJ-156RC is 6¼"Wx4¾"H x2½"D.

MFJ-199B

MFJ-148RC

MFJ-155RC

MFJ-156RC

24/12 Atomic Wall Clock with In/Out Temp sensors

This Atomic clock features a 3.5" LCD display with LED backlighting. Features include Atomic clock with AM/FM Radio receiver (WWVB, WWVB, GPS). Temperature (°F or °C) and humidity. 12 or 24 hour format. Clock can be set to any time zone. Digital clock is 3.5"Wx3.5"Hx¾"D. Requires one AA battery.

MFJ-188BRC

MFJ-154RC

MFJ-155RC

MFJ-156RC

Full-color Atomic wireless weather stations

Check out these features...

• 12/24 Hour Atomic Time and Date
• Daylight Savings Time On/Off
• Animated Color Forecast Icons
• Indoor/Outdoor Temperatures (F/C) and Trend
• Indoor/Outdoor Humidity, Trend
• Minimum/Maximum Temperatures, Humidity Records
• Moon Phase (154RC)
• Mold Risk Indicator (156RC)
• Heat Index, Dew Point (156RC)
• Alarm/Snooze Icons
• Signal Strength for Sensor
• Adjustable Back Light
• Low Battery Icon for Indoor/Outdoor Sensors
• Desk Top or Wall Mount
• MFJ No Matter What™ warranty.

MFJ Cat P56 5/8/19 9:49 AM Page 1
**MFJ Speaker Mics for Yaesu, Icom, Kenwood and Wouxun HTs!**

**MFJ-295**  
(Y, I, K.)  
Fits Yaesu, Icom, Kenwood Wouxun and compatibles.  
**$19.95**  
Ship Code A  
**Top quality handheld speaker mic fits snugly in your hand! It’s perfect for new Yaesu, Icom, Radio Shack, Kenwood, Alinco, ADI and compatible HTs.**  
**Gives booming receive audio so you can monitor stations while mic is attached.**

**MFJ-296**  
(L, K, Y)  
**$24.95**  
Ship Code A  
This **deluxe** speaker microphone has a volume control knob that allows you to set it for a super quiet room or noisy environment like a hamfest or banquet.

**Replacement HF Radio Handheld Microphones**

**MFJ-290K/Y/I/T/E**  
MFJ-290K/MUMY  
MFJ-290K/Y/I/T/E  
**$29.95**  
Ship Code A  
Dynamic HF replacement handheld microphones are for HF base and mobile transceivers.  
**Replace** your old, beat-up Icom, Kenwood, Yaesu, Alinco, or TenTec antiquated mics.  
**Gives** PTT and quality mic audio. Heavy-duty construction, extra long, spiral flexible cord.  
**Specify** MFJ-290K/Y/I/T/E for 8-pin round, K is Kenwood, Y is Yaesu, I is Icom, T is Tentec, E is Elecraft.  
**Select** MFJ-290MI for Icom modular, MFJ-290MK for Kenwood modular and MFJ-290MY for Yaesu modular.  
**Choose** MFJ-290K4/Y4/I4/T4 for 4-pin round pin mic connector.

**MFJ-295K**  
Fits Yaesu VX-7R series only  
**$21.95**  
Ship Code A  
**to your lapel -- no more holding the speaker up to your ear! Compact 2Wx3Hx11/4 inches.**  
**MFJ’s high-quality non-directional electret condenser microphone gives your handheld crystal clear transmit audio.**  
**The** MFJ-295 Microphone has -53 dB sensitivity and 1K Ohm impedance.  
**Excellent top quality speaker produces 83 dB of crystal clear and loud, booming receive audio. MFJ-295 is 8 Ohm impedance.**

**Includes** a built-in 3.5 mm headphone jack lets you continuously monitor receive audio and it lets you hear your radio in a loud, noisy environment (see MFJ-301, $79 or MFJ-302, $10.95).

**Wouxun/Baofeng Accessories from MFJ**

A. MFJ-1717SF, $21.95.  
15/4”, 1/2 Wave on 440 MHz, 2.15 dBi gain. Full-size 1/4 wave antenna on 2-Meters. Factory low SWR. High-Q, rugged! SMA female screws into HT.

B. MFJ-1717SFZ, $24.95.  
Like MFJ-1717SF but “bendable”.

C. MFJ-293K, $29.95.  
Secure, comfortable tiny earbud boom mic with rubber flex earloop. 5 inch flex boom, PTT, 6 ft. cord.

D. MFJ-295K, $19.95.  
HT mic fits snugly in hand! Booming transmit/receive audio. 3.5 mm earbud jack. PTT sw., lapel clip, 3/4 ft. cord.

E. MFJ-1719SF, $15.95.  
Small-Wonder™ HT antenna, 1” tall. Transmit 144/440 MHz, receive 1200 Mhz. Great for monitoring 2-M activity.

**MFJ Deluxe Speaker/Mic has Volume control**

MFJ-296 has a 360 degree rotating lapel clip, a first-rate electret microphone element and a full-size speaker that gives you superb booming receive audio. It also gives you excellent transmitting audio -- no more muffled sounding audio or scratchy voice transmissions -- your contacts will hear you loud and clear and vise versa.  
**Also has 3.5 mm headphone jack (see below right).**  
A top quality PTT thumb switch with an eight-position swivel lapel clip rotates 360 degrees. 3/4 feet of durable, stretchable cord. Made of high-impact plastic. Water resistant with protective rubber at all of the bending points, it won’t break easily.

**Choose your model . . .**

- **MFJ-295Y, $19.95** is for Yaesu, VX5R and Icom single pins like Q7A.  
- **MFJ-295K, $19.95** is for Kenwood, Wouxun, Alinco and other compatibles.  
- **MFJ-295R, $21.95** fits new Yaesu VX-7R handheld radios.

**MFJ HandyPal™ HT Mic Earphones**

This MFJ earpiece is the perfect companion for your MFJ or other speaker-microphone.  
**Continuously monitor your HT in a noisy environment without bothering anybody else.**  
Comfortable foam fits securely in your ear and doesn’t hurt. Super lightweight. Fits 3.5 mm jack.

**MFJ-301/MFJ-302 right**, for monitoring with a momentary PTT switch, and a retractable cord.  
**MFJ-296I, $24.95**, fits Icom, Radio Shack, older Yaesus, other compatibles.  
**MFJ-296R, $29.95**, fits Yaesu VX7R handheld series only.

**MFJ HandyPal™ HT Mic Earphones**

**MFJ-301**  
Ship Code A  
**$7.95**  
**Super lightweight.**  
**MFJ-302**  
**$10.95**  
**Ship Code A**  
**Also has more comfort and security. 3.5 mm jack and long cord.**

**Identify your MFJ speaker/microphone model**

MFJ uses the letters I, K, Y and R to denote what connector is on the speaker mic. I is for Icom, some Yaesu, Radio Shack and most Alinco. K is for most Kenwood and Wouxun. Y is for Yaesu VX5R series and Icom Q7A. R is for the new Yaesu VX7R series.

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MFJ Deluxe Headset Microphone™ adds professionalism

This deluxe headset microphone gives hams the professional look they deserve -- great for public service.

Deluxe Headset Microphone™ lets you carry on a private QSO in a noisy environment. Microphone can pick up your voice, whether booming or at a quiet whisper when placed appropriately near your mouth. The earphone gives superb tonal quality so even distant stations will come in loud and clear. Made of sturdy black plastic and strong metal sliders, one size fits all. Superb speaker and mic foaming makes it super comfortable for long ragchews. Small PTT switch attaches to your shirt or pants pocket. Six foot cord.

MFJ-288I fits Icom, Radio Shack, older Yaesu, ADI, Alinco, other compatible HTs.
MFJ-288K fits Kenwood, Wouxun and compatible handheld radios.
MFJ-288Y fits VX-5R series, IC-70A & compatibles.
MFJ-288-R fits new Yaesu VX-7R series handheld transceivers.

MFJ Featherweight earbud Boom Microphone™

Rubber flex earloop design -- security and comfort and 5-inch boom mic.

Background Noise FREE!
The speaker and microphone are both integrated into the earpiece -- it picks up the vibration of your earbone and translates it into a signal through your HT.

MFJ-283I doesn't make sound like a robot like some other models do. This mic sounds like your natural voice. Super Audio Quality! It only transmits the vibrations from your ear -- no background noise! It's perfect for high-ambient environments like hamfests, traveling through airports, on the bus, riding motorcycles, ATVs, etc. It's totally amazing!

MFJ Featherweight Vibration earbud Microphone™

Picks up the vibration of your earbone and translates it into a signal through your HT.

Older competitive versions of earbud vibration mics sounded terrible -- there was background noise and transmissions were like a robot was on the other end. MFJ-283 avoids this and only your natural-sounding voice is transmitted.

MFJ-283I, K, Y, R

Super Audio Quality! It only transmits the vibrations from your ear -- no background noise! It's perfect for monitoring your audio when you are in a loud environment. MFJ-293's special rubber flex earloop design adjusts to fit the right or left ear (big or small) very securely and comfortably. You can involve yourself in other conversations and still hear (monitor) what is going on on your favorite 2-Meter repeater.

Made of a sturdy black polyurethane and comfortable rubber earloop, it'll give years of dependable use. Tiny thumb-sized PTT switch is built right into the 6 feet of cord.

MFJ-293I fits Icom, older Yaesu, Radio Shack, ADI, Alinco and other compatible Handheld transceivers.

MFJ BoomMic/FM Scan

MFJ-284, $39.95. Like MFJ-293, but adds an FM broadcast scan radio inside the tiny PTT switch. Lets you catch up on the news or listen to music or sports while monitoring a 2-Meter operating frequency! Auto switches from FM to HT audio when monitoring frequency is detected. Batteries included. Order MFJ-284I for Icom, Alinco, ADI and older Yaesu transceivers. MFJ-284Y for Yaesu, VX50R, VX55R HTs, MFJ-284R for Yaesu VX-7R series.

MFJ Neckset Microphone doesn't mess up your hair!

MFJ-282, $29.95.
Don't mess up your hair and you can still wear your cap!
MFJ-282 stays naturally hidden behind your neck.
Super audio, lightweight and comfortable!
MFJ-282I fits Icom and older Yaesus.
MFJ-2882K fits Kenwood, Wouxun and compatibles.
MFJ-282Y fits Yaesu FT50R, VX5R series, Icom Q7A.
MFJ-282R fits VX7R series.

MFJ Featherweight Earbud Speaker Microphone

Tiny earphone and thumbsize microphone/PTT switch is built right into the cord! It's barely noticeable and so lightweight, you won't know it's there! It's barely noticeable and so lightweight, you won't know it's there -- people will think you are a detective or airport security, a government spy or just a quiet whisper when placed appropriately near your mouth. The earphone gives superb tonal quality so even distant stations will come in loud and clear. Made of sturdy black plastic and strong metal sliders, one size fits all. Superb speaker and mic foaming makes it super comfortable for long ragchews. Small PTT switch attaches to your shirt or pants pocket. Six foot cord.

MFJ-282I fits Icom, Radio Shack, older Yaesu, ADI, Alinco, other compatible HTs.
MFJ-288K fits Kenwood, Wouxun and compatible handheld radios.
MFJ-288Y fits VX-5R series, IC-70A & compatibles.
MFJ-288-R fits new Yaesu VX-7R series handheld transceivers.

K4SDBKG

MFJ Deluxe Headset Microphone™

MFJ-288 (K, L, Y, R)

$29.95
Ship Code A

MFJ Featherweight Earbud Speaker Microphone

MFJ-282I

$19.95
Ship Code A

MFJ BoomMic/FM Scan

MFJ-284

MFJ Neckset Microphone

MFJ-282

$29.95

MFJ-293I

$29.95
Ship Code A
MFJ HT Rubber Duck & telescopic antennas

**MFJ Telescopic Handheld Antenna Range Extenders**

A. MFJ-1714, $17.95.
For really long range
ended 1/2 wave 2-M
is hard to beat! Out-
performs 5/8 wave
because the 5/8 wave
needs a ground plane.
10.5” collapsed, it’s
just a duck. 40” extended gives you a
LongRanger™ MFJ-
1714S, $17.95. Like
above, is SMA male.
MFJ-1714SF, $17.95.
for Baofeng/Wouxun
HTs, has SMA female.

B. MFJ-1712, $16.95.
This telescopic Dual
Band (144/440 MHz)
is a 1/4 wave on 2M,
5/8 wave with gain on
440 MHz. 4-1/2” col-
lapsed. Rubber duck.
16” ext. for superior
performance. MFJ-
1712S, $16.95. Like
MFJ-1712, but has
SMA male.
MFJ-1712SF, $16.95.
Baofeng/Wou-
xun HTs, SMA female.

C. MFJ-1717, $21.95.
PocketLinear™ is a
pen-sized 3/4 wave
for 2M! Carry this
antenna in your shirt
pocket like a pen with a
clip. When your rub-
bery duck just won’t
receive well, pull it
out, extend to 24”
and carry on your QSO.
BNC. 5-1/2” collapsed.
Like MFJ-1717S, $11.95.
Like MFJ-1710 but
with SMA male.

**SmallWonder™ Flexi-Antenna**

MFJ-1739S, $19.95.
This dual band
144/440 MHz Flexi-Duck antenna
is just 2-1/2 inches tall. You can also
receive the Airband, 800 and 900
MHz for more listening fun! 1/4
Wave, handles 6 W. SMA male.

MFJ-1719S/23, $15.95.
Truly amazing for its size! Less than
1/2” tall, it’s great for traveling and
monitoring calls. It doesn’t get in your
way! Receives and transmits on
2 Meter/440 MHz. Also receives great
signals at 1200 MHz. MFJ-1719 has
BNC, MFJ-1719S has SMA male.
MFJ-1719SF has SMA female con-
nector, fits Wouxun Handhelds.

**MFJ 2-Meter Pocket Roll-up**

MFJ-1730, $34.95.
Roll up this 1/2
wave 2M antenna
and stick it in your
pocket. Vacations,
camping, etc. Get
home station per-
formance on-the-go!
75” long. Hang in a
tree, plug into your
HT and enjoy some great QSOs. Omni-
directional, significant gain over a 1/4
wave. Doesn’t need a ground plane so
it’s convenient for indoors. 200 Watts.
MFJ-1731, $34.95.
440 MHz pocket
roll-up antenna, 1/2 wave.
51” roll-up J-pole for 440 MHz like MFJ-1730.

MFJ Scanner/Receiver Antenna

MFJ-1811, $11.95. Designed
to your Scanner or Receiver
antenna. Has telescopic and fold-
erover features in a one antenna.
Extends to improve range plus it
folds over to get out of the way.
MFJ-1812 is just 6” collapsed
and 16” extended. High Q
low loss construction. Super dura-
ble for years of use.

MFJ Compact Magnet Mounts

Put your flexible duck
on the roof of your car!
Tiny but powerful
magnet is 2/4” dia. —
strong! MFJ-332S, $15.95.
SMA female. 12 feet of tough, flexible
RG-58AU coax with SMA male end.
MFJ-332A, $15.95.
Like MFJ-332S but
BNC female with BNC male coax.

**MFJ Super Flex ThinDucks™**

A. MFJ-1715, $21.95.
Tie it in a
knot... when you use it, it'll
bounce back in shape -- no break it!
Takes all the bending, twisting, flex-
ing and tugging you can dish out,
pops right back! MFJ-1715 12”
SupaFlex™ radiator is a 1/4 wave
on 440 MHz -- hearty 2.15 dBi gain.
On 2M it’s a full size 1/4 wave anten-
a. Safety tip, durable synthetic rub-
ber. “S” for SMA male. “SF” for
SMA female. Baofeng/Wouxun.

B. MFJ-1713S, $17.95.
Like MFJ-1715 except no gain. 1/4
on 440 MHz and 2M. “S” for SMA,
“SF” for Baofeng/Wouxun, female.

**MFJ Triple Band FlexiDucks™**

A. MFJ-1720S, $34.95.
MFJ’s Tri-band 2M/6M/440
HT FlexiDuck™ antenna
is 19" -- 5/8 Wave on 440 MHz
to for hearty 3.2 dBi gain. On
2 Meters you get a 1/4 Wave anten-
na with 2.15 dBi gain.
On 6 Meters you get an efficient full size 1/4
Wave antenna for full-size perform-
ance. Precision-tuned at the factory
for low SWR. High-Q, low loss
canvases you maximum radiated power. $10W.

B. MFJ-1718S, $29.95.
MFJ Triple Band 2M/220/440
MHz HT FlexiDuck™ T. SMA male.
C. MFJ-1718S, $29.95. SMA Female.
Foldover Telescopic HT antenna

MFJ-1812, $21.95. 144/440
MHz HT antenna combines
telescopic and foldover fea-
tures in a one antenna. Extends to
improve range plus it
folds over to get out of the way.
MFJ-1812 is just 6” collapsed
and 16” extended. High Q
low loss construction. Super dura-
ble for years of use.

www.mfjenterprises.com • Toll-free 1-800-647-1800

99
**Work DX walking about!**

This MFJ Walkabout antenna is designed for the FT-817, KX3 and other QRP rigs. Covers all bands 80 Meters through 6 Meters including WARC Bands. MFJ-1899T has ten sections, telescoping whip is 52 inches fully extended and is 7 inches when collapsed. The whip unscrews from the 12 inch base loading coil. It is ultra-compact for easy traveling. Handles 25 Watts.

You change bands by plugging the “wander lead” into the appropriate band socket on the base coil antenna. Fine tuning is done by adjusting the telescoping whip up and down. Has BNC connector. Use MFJ adapter for SO-239, won’t harm your radio connector.

**Pocket™4:1 Balun**

MFJ-9211, $24.95. When using a balanced line antenna, don’t forget your 4:1 current balun. It has five way binding posts for your balanced line connection and a BNC output to your rig. Tiny 2Wx3Hx1D”.

**Pocket™Ground**

MFJ-9231, $64.95. Place your rig near actual earth ground potential no matter where you are operating. Electrically places a far away RF ground at the rig. Hook rig ground, adjust counterpoise, tune for max current and operate safely 1.8-30 MHz.

**QRPPocket™ Antenna Tuner**

MFJ-9201, $54.95. 80-10 Meters, 25 Watts. Custom 12-pos. inductor switch, tune/ bypass switch, antenna, transmitter capacitors, BNC feedpoints for antenna/transmitter. Tiny 4Wx2½/H x1½/D” so it, your rig and antennas easily fit into a backpack or briefcase to go with you to field day, a DX pedition, vacation or business.

**QRPPocket™ SWR/Wattmeter**

MFJ-9213, $44.95. Read forward and reflected power in 3 ranges: 5, 30, 100 Watts on a calibrated meter scale. Read SWR, relative power from 0-5 Watts. Bruneau-style bridge circuit detects both RF current/RF voltage, insures uniform accuracy 1.8-50 MHz, BNC in/out. 4½”Wx2½/Hx1½/D” inches.

**Tiny 10 oz. Switching Power Supply for Yaesu FT-817 and QRP Rigs.**

MFJ-4103 Miniature Switching Power Supply can deliver up to 40 Watts (13.8 VDC at 2.89 Amps) of reliable power anywhere in the world. Incredibly tiny -- 4½”x1½” and weighs just 100 oz., including power cord, connector. Output DC cable, standard coaxial DC power connector (2.1 mm ID, 5.5 mm OD). Sturdy adapter cable included for Yaesu radios.

MFJ-4103 has excellent specs and outperforms all other power supplies made for the FT-817. Perfect for QRP rigs up to 2.89 Amps. Works for input voltages 100-240 VAC and power line frequencies 47-63 HZ.

Use the MFJ-4103 almost anywhere in the world by plugging in an AC power cord with an appropriate wall plug for that country (Not included. Laptop computer AC cord recommended).

Overvoltage, overcurrent and overtemp protected. Excellent 1% line and 5% load regulation and 1% peak to peak ripple/noise. Op temperature is 0-40°C.

Mean time between failure is 100,000 hours at full load at 25°C ambient. Meets FCC part 15 class B, UL 1950 and CSA 22.2.

**MFJ Radio Voice Mail**

Leave and retrieve messages with your friends and family. Program custom access codes and security codes so you decide who uses your Radio voice mail -- private, portable repeater.

Provides emergency communications when repeaters are down. Test your own signal quality by repeating your transmission through another radio. Auto repeat recorded message continuously for foxhunting and public service.

Non-volatile memory -- up to 2 full minutes of voice messages. Keypad can be used for remote operation with Morse code verification of functions.

Use 9V battery or 9-15 VDC or 110 VAC with MFJ-1312D, $17.95. 4Wx3½/Dx1½/H”. Use radio with PTT or mic closure sensing.

**MFJ QRP SWR/Wattmeter**

New! MFJ-9218, $54.95. This new MFJ QRPPocket™ SWR/Wattmeter has 5, 30 or 100 Watt power ranges on a calibrated meter scale. Tune/Bypass switch, BNC input and output connectors. Covers 1.8 to 50 MHz. Measures a super compact 4½”Wx2½/Hx2½/D” inches.

**QRPPocket™ Loop Antenna**

MFJ-9232, $64.95. Tiny QRPPocket™ Loop Antenna makes portable operation truly portable and fun! No ground needed! This high-efficiency loop covers 40-10 Meters with included flexible wire loop. Handles 25 Watts. Has BNC connector for transmitter, two wing nut posts for loop wire connections, tuning/matching capacitors. Durable hard plastic cabinet is a tiny 2½”Wx4½/Hx2½/D” inches.

**Tiny 10 oz. Switching Power Supply for Yaesu FT-817 and QRP Rigs.**

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Use the MFJ-4103 almost anywhere in the world by plugging in an AC power cord with an appropriate wall plug for that country (Not included. Laptop computer AC cord recommended).

Overvoltage, overcurrent and overtemp protected. Excellent 1% line and 5% load regulation and 1% peak to peak ripple/noise. Op temperature is 0-40°C.

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**Tiny 10 oz. Switching Power Supply for Yaesu FT-817 and QRP Rigs.**

MFJ-4103 Miniature Switching Power Supply can deliver up to 40 Watts (13.8 VDC at 2.89 Amps) of reliable power anywhere in the world. Incredibly tiny -- 4½”x1½” and weighs just 100 oz., including power cord, connector. Output DC cable, standard coaxial DC power connector (2.1 mm ID, 5.5 mm OD). Sturdy adapter cable included for Yaesu radios.

MFJ-4103 has excellent specs and outperforms all other power supplies made for the FT-817. Perfect for QRP rigs up to 2.89 Amps. Works for input voltages 100-240 VAC and power line frequencies 47-63 HZ.

Use the MFJ-4103 almost anywhere in the world by plugging in an AC power cord with an appropriate wall plug for that country (Not included. Laptop computer AC cord recommended).

Overvoltage, overcurrent and overtemp protected. Excellent 1% line and 5% load regulation and 1% peak to peak ripple/noise. Op temperature is 0-40°C.

Mean time between failure is 100,000 hours at full load at 25°C ambient. Meets FCC part 15 class B, UL 1950 and CSA 22.2.
**MFJ VHF/UHF MAGNET MOUNT MOBILE ANTENNAS**

**Magnet Mount Dual Band 144/440 MHz Mobile**

**MFJ-1724B**

$29.95

Ship Code B

MFJ’s powerful 3/4 inch magnet base holds your antenna firmly even at highway speeds. The base has a scratch resistant rubber guard to protect your car. The MFJ-1724B black stainless steel whip looks like an attractive cellular antenna. Only 19 inches tall, you can park in your garage without knocking it over. Low SWR across both bands keeps your transceiver safe from overheating. Get excellent gain on 440 MHz band and 2 Meters. 300 Watts PEP. 12 feet coax, PL-259.

**MFJ 5/8 Wave 2/6 Meter Magnet Mount Mobile**

**MFJ-1728B**

$29.95

Ship Code B

MFJ’s 5/8 wave on 2M gives maximum possible theoretical gain of any single element antenna, no matter how much cost. On 6M, it’s a high performance full 1/4 wave. It’s an excellent companion for MFJ-3406 or other 6 Meter mobile or HT. Gives great “magic band” signals used mobile or base. Perfect for mobile or HT. Free BNC adapter, 300 Watts PEP. Low SWR lets your transceiver deliver full power safely. Heavy duty magnet mount holds your antenna tight at highway speeds. 12 ft. of coax. Stainless steel radiator will endure years of harsh mobile use. Handy Allen wrench included.

**Order the popular MFJ-1728B without a magnet mount and set it on your existing mount.**


**MFJ UltraLite™ Mag Mounts**

**MFJ-1721,** (left) is an UltraLite™ Mobile magnet mount antenna. 12 inch. Coax,1/4 wave 2-M. Less than 2 oz. 1/8" rare earth magnet. Thin 20" flexible whip, BNC.

**MFJ-1722,** (right) is similar to MFJ-1721, but dual Band UltraLite™. 5/8 Wave on 440 MHz. 1/4 Wave on 2 Meters. MFJ-1722S, similar to MFJ-1722 but has SMA.

**MFJ Mobile Antenna Ground Plane Kit**

Converts most mobile antennas into a ground plane base station antenna. 200 W. Accepts VHF/UHF antennas with PL-259 connector. Includes stainless steel mounting hardware, two U-bolts, allen wrench, and four 20.5 inch radials. Easy installation: 6"/4" tall bracket fits on any 1.5-inch pipe with clamps or mounting holes.

**MFJ Classic HamGear™ Apparel**

**MFJ-16**, $15.95.

Durable HT pocket, elastic cord and velcro closure fits on belt -- keeps radio secure.

**MFJ-18,** $34.95.

This MFJ Radio chest harness holds your handheld radio or cell phone snugly for no worries, hands-free operation. Great for rugged action use like DXpeditions, field day, hiking, hamfests, search & rescue, etc. Accessory pockets. One size fits all.

**MFJ V-9, $21.95.** This MFJ waistpack is the perfect hamfest, DXpedition or field day hands-free carry-all. It has an amazing 9 spots to put your ham radio gear, tools, accessories, refreshments, etc.

**MFJ Glass Mount Dual Band 144/440 Mobiles**

**MFJ-1729**

$44.95

Ship Code B

MFJ’s Power*Gain™ is ham radio’s most powerful dual band magnet mount mobile antenna! Outstanding gain on 440 MHz and 2 Meters. Low SWR lets your rig deliver full power safely. Whopping 2.6 dB on 2-Meters and 6.3 dB gain on 440 MHz. Perfect for dual band mobiles or HTs. Free BNC adapter, 300 Watts PEP. Exclusive 27½ inch stainless steel SlimLine Radiator™ minimizes wind vibration for less SWR flutter giving you longer range and better readability. Includes 12 feet of coax with PL-259 Connector. MFJ-1723, $44.95. Similar to MFJ-1729, covers 220 MHz, 2.6dB gain. 22.5 inch radiator.

**MFJ Handheld Antenna Window Mount**

**MFJ-310S/M/T**

$21.95

**A. MFJ-5612S, $16.95.** SMA Male to SO-239 adapter.

**B. MFJ-5612SF, $16.95.** SMA Female to SO-239 adapter for Wouxun/Baofeng.

**C. MFJ-5612B, $16.95.** BNC Male-SO-239 adapter.

**Release strain on your HT’s antenna connector! Choose SMA or BNC. Flexible, mini coax, 3 foot.**

**SMA/BNC Cables and Adaptors**

**A. MFJ-5612S, $16.95.** SMA Male to SO-239 adapter.

**B. MFJ-5612SF, $16.95.** SMA Female to SO-239 adapter for Wouxun/Baofeng.

**C. MFJ-5612B, $16.95.** BNC Male-SO-239 adapter.

**Release strain on your HT’s antenna connector! Choose SMA or BNC. Flexible, mini coax, 3 foot.**

**MFJ Coffee Mug**

**MFJ-9-102, $4.95.** Porcelain Coffee Mug, MFJ, Ameritron, Cushcraft, Mirage and Vectronics on one side. Great with your favorite hot or cold beverage, but clean it first. Warranty does not apply.

**MFJ Gift Certificates**

MFJ can make that special day for your lovable ham even more special! MFJ Gift certificates are available at any time - Christmas, Valentines Day, Birthdays, just for the heck of it, whenever.

Call 1-800-647-1800.

Any gift amount can be purchased for your ham loved one or buddy. Use your credit card, paypal account or simply send personal check or money order.

www.mfjenterprises.com • Toll-Free 800-647-1800
**Compact HF Mobile SWR/Wattmeters**

- **MFJ-819**
  - **Price**: $169.95
  - **Ship Code A**
  - Just 1¾" thick — easily mounts on dashboard for easy viewing. Flat mount on wall or shelf in ham shack for best viewing angle.
  - Remote sensor with 25' thin, flexible cable lets you place sensor and coax out-of-the-way. Full 1500 Watts, 1.8-60 MHz LED lighted Cross-Needle meter. Active electronics let you read true peak or average power in two power ranges. "High SWR" LED. Flat-mount SWR/Wattmeter is 5Wx3½, Hx1½"D; remote sensor is a tiny 3½Wx2½,H x2½D". Use 9V battery or 12 VDC.

**Ruggedized flat Mobile/portable SWR/Wattmeter**

- **MFJ-818**
  - **Price**: $89.95
  - **Ship Code A**
  - MFJ's flat, compact SWR/Wattmeter is plenty rugged to take the abuse of brutal mobile or portable operation. Easily mounts on dash for easy viewing. Flat mount on wall/shelf in shack for best view angle. Fully enclosed in all metal case with just the scales exposed. Only two small switches slightly protrude so there's little to break. Simultaneously read SWR/forward/reflected power on this 3" lighted Cross-Needle Meter. 30/300 Watt ranges, 1.8-30 MHz, SO-239, 12 VDC for meter lamp or plug into cigarette plug with MFJ-5510, $12.95. Rubber feet, 5Wx3½x2½"D inches.

**Compact Cross-Needle SWR/Wattmeters**

- **MFJ-822 or MFJ-842**
  - **Price**: $64.95
  - **Ship Code A**
  - Compact HFA/HF and VHF/UHF SWR/Wattmeter. Has huge 3" Cross-needle meter. Read forward/reflected power and SWR simultaneously. Perfect for mobile or portable operation. Two selectable power ranges, built-in meter light (+12 VDC), SO-239 connectors. Measures a super compact 3½Wx3½,Hx3¼D inches. MFJ-822 covers 1.8-200 MHz, 30 or 300 Watt ranges, MFJ-842 covers 140-525 MHz, 15 or 150 Watt ranges.

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**MFJ Duplexers and Triplexers, HF to 1.2 GHz**

- **MFJ-916B HF/VHF/UHF Duplexer**
  - **Price**: MFJ-916B $29.95
  - **Ship Code A**
  - Handles 200W 50 Ohms SWR/Power. Use HF or 2-Meter/440 MHz antennas with separate HF or 2-Meter and 440 MHz rigs without a built-in duplexer.
  - Use 2 dual band antennas with a dual band rig with only one RF output. Heavy-duty diecast enclosure houses low pass networks that separate/combine 144/440 MHz signals. Low loss SO-239, 50 Ohm ports, 200W PEP. MFJ-916BN, $34.95. Like MFJ-916B but has type N connectors for low loss.

- **MFJ-916BC HF/VHF/UHF Duplexer**
  - **Price**: $54.95
  - **Ship Code A**
  - Use an HF, 2 Meter, 6 Meter or 440 MHz antenna with a separate HF, 2 Meter, 6 Meter or 440 MHz transceiver without a built-in duplexer.
  - Use two dual band antennas with a single dual band transceiver with only one RF output. Heavy duty diecast enclosure houses low pass networks that separate or combine HF/6M/144/440 MHz signals. Ports are 50 Ohms, 600 Watts PEP.

- **MFJ-4956S, $39.95**
  - SO-239 connectors, handle 500 watts HF/6M, 300 Watts on 144/440 MHz.

**Mast Mount Duplexer**

- **MFJ-916BM, $64.95**
  - Like MFJ-916B but for outdoors. Save coax, reduce losses. Tower leg or mast mount near your antennas. Heavy-duty weather protected PVC, mounting bracket. U-bolt fits up to 1½" diameter mast or pipe. Measures 3½Wx3Hx2D inches. MFJ-916BMN, $74.95, 8 connectors.

- **MFJ-916BN duplexer**
  - **Price**: MFJ-916BN $29.95
  - **Ship Code A**
  - Use HF, and handle 500 watts HF/6M, 300 Watts on 144/440 MHz.

**Flat Mobile SWR/Wattmeters**

- **MFJ-915S**
  - **Price**: $24.95
  - **Ship Code A**
  - Flat mount near your antennas. Easy viewing. Flat mount on wall/shelf or in dash for easy viewing. Three separate/combine HF/6M, 144/440 MHz signals.

**HF/VHF/UHF/1.2 GHz**

- **200/500/800 Watt Triplexers**
  - **Price**: MFJ-4926S/N $64.95
  - **Ship Code A**
  - Use HF, 6M, 2M, 440 MHz and 1.2 GHz antennas with rigs without a built-in triplexer. Or use 3 different radios with one HF/VHF/UHF/1.2 GHz antenna. Heavy-duty diecast, low pass networks separate/combine HF/6M, 144/440 MHz and 1.2 GHz signals. Ports are 50 Ohms, 200, 500 and 800 Watts PEP.

**MFJ-4926N, N-type.**

**MFJ-4926C 12" coax PL-259 pigtailed.**

**MFJ-4936S, SO-239, 500 Watts.**

**MFJ-4936N, N-type.**

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The World Leader in Amateur Radio Accessories!
MFJ RuffRider™ High Gain Mobile Antennas

Most RuffRiders™ come with MFJ’s 90 degree “fold-over” feature – lets you pull into your garage without knocking your antenna over!

MFJ’s RuffRider™ High Gain multi-banded antenna series is for serious mobile hams demanding highest quality at low prices.

Featuring the finest quality construction using precision machined components. They battle the elements, handle rugged rides and the day-to-day highway abuse.

Each has a PL-259 base mount for quick installation to a heavy duty SO-239 magnet, trunk/hatch, gutter or mirror mount. Free NMO adapter is included for use with an NMO mount. MFJ’s tri-magnet mount recommended for big antennas.

Choose from several different length and gain antennas . . .

MFJ-1402 $34.95
Ship Code A
A VHF/UHF RuffRiderJunior™ Premium, short 1/2’/1/2” antenna fits in any garage on any auto. 1/2 Wave on 2 Meters, 1/2 Wave, 3 dB gain on 440 MHz.100 Watts. No fold-over feature for MFJ-1402/B.

B. MFJ-1402B $34.95, Black.
C. VHF/UHF RuffRider High Gain™. Just 40” long handles full 200 Watts. Great for high mobile power amp. 1/2 Wave, 3 dB gain on 2 Meters, 1/2 Wave, 5.5 dB gain on 440 MHz. MFJ-1412B, $34.95, Black.
D. VHF/UHF RuffRider Hyper Gain™. This 62” brute gives a whopping 5 dB gain on 1/2 Wave, Premium, short 1/2’/1/2” antenna fits in any garage on any auto. 1/2 Wave, 3 dB gain on 440 MHz. MFJ-1422B, $39.95. Black.

E. Tri-Band VHF/220/UFH RuffRider Triple Threat™. Slim 38”, similar to MFJ-1343B, but 2.15 dB gain on 2-Meters, 3.5 dB on 220 MHz, and dB gain on 440 MHz. MFJ-1434B, $64.95, Black. Tri-Band VHF/UFH/6M
F. RuffRider Triple Threat™ $48.95 59” of stacked elements with high-Q phasing coils give a whopping 7.2 dB gain on 440 MHz, 4.5 dB on 2M, 2.15 dB on 6M. MFJ-1436B, $84.95, Black.

MFJ-1414 $219.5 Ship Code A
HT SWR/Power Meters

MFJ-349 $21.95 Ship Code A
Mount this 5Wx5Dx1H” by .120 thick aluminum triangle bracket in any corner of your truck bed and get a super-strong HF or VHF/UHF antenna mounting. Used with 3/8-24, SO-239 and NMO connectors. Couple it with an MFJ-341S (SO-239), MFJ-341M (NMO) or MFJ-343 to complete. MFJ-341S/M has 17 feet coax.

MFJ Truck Bed Mount SO-239, NMO, 3/8-24

MFJ-1401 $21.95 Ship Code A
Mount this 5Wx5Dx1H” by .120 thick aluminum triangle bracket in any corner of your truck bed and get a super-strong HF or VHF/UHF antenna mounting. Used with 3/8-24, SO-239 and NMO connectors. Couple it with an MFJ-341S (SO-239), MFJ-341M (NMO) or MFJ-343 to complete. MFJ-341S/M has 17 feet coax.

MFJ Heavy Duty Balcony Antenna Mount

MFJ-1901 $44.95 Ship Code A
Safely, securely mount an antenna to your balcony in your apartment or condo. Go portable, on your car or from a tree limb in the woods. Use hamsicks, lightweight verticals, small screwdrivers and lightweight dipoles. High-strength .1” aircraft aluminum. Extends 14” out away from guttering or metal roofs. Mount vertically or horizontally. Use HF style 3/8-24 threaded connector or VHF/UHF (SO-239 connector). 1/2” U-bolts are included.

3/8-24 HF Antenna Adaptors

MFJ HT SWR/Power Meters

MFJ-1728S/M/T $299.5 Ship Code B
MFJ’s 5/8 wave on 2 M gives maximum theoretical gain of any mobile antenna, no matter how much they might cost.

MFJ-1728 S/M/T is a whopping 53” for a super-radiating performance. Built tough—you’ll get years of dependable service.

On 6 Meters, it is a high performance full quarter wave antenna that gives great “magic band” signals used mobile or as a base station antenna.

300 Watts PEP. Low SWR lets your transceiver deliver full power safely. Pick your style:
A. MFJ-1728M, for NMO
B. MFJ-1728S for SO-239.

MFJ-1728S $29.95 Ship Code B

3/8-24 Mount 2M/440 MHz Dual Band Whip Antenna

MFJ-1414 $24.95 Ship Code C
MFJ’s 5/8 wave on 2 M gives maximum theoretical gain of any mobile antenna, no matter how much they might cost.

MFJ-1414 is a tall 581/2 inches. It’s a 3/8-24 Stud-Mount Dual Band Whip antenna with 2.15 dB gain on 2-Meters (1/2 wave) and 3.5 dB gain on 440 MHz. Handles 200 Watts. Sleek, stainless steel, heavy duty construction (no plastic coils to break). Lets you use just one mount for all of your HF/VHF/UHF antennas.

MFJ Vise-Grip Antenna Mount

MFJ-351T $11.95 Ship Code C

www.mfjenterprises.com • Toll-Free 800-647-1800
**MFJ HamSticks!**

**600W MFJ Hamsticks**

*New!*

This is what you have been waiting for! A high power mobile hamstick that handles 600 Watts!

**Your Choice:**

- MFJ-2610T - 10 Meters
- MFJ-2615T - 15 Meters
- MFJ-2617T - 17 Meters
  
  **$44.95 each**

- MFJ-2620T - 20 Meters
- MFJ-2640T - 40 Meters
  
  **$54.95 each**

- MFJ-2675T - 75 Meters
  
  **$64.95 each**

All are Ship Code C

*Black* anti-static jacket protects the loading coil and blends in with your vehicle. Its sleek, low profile construction has low wind loading and its semi-rigid fiberglass eliminates the need for springs or guys.

*The* stainless steel whip is highly flexible but super strong with chrome plated brass fittings that will give you years of service. Whip is adjustable for lowest SWR. 3/8-24 threaded base and whip make it fast and easy to remove from the car and change bands.

*Includes* allen wrench and complete tuning and matching instructions. Collapsible to 53” for storage.

**250W MFJ Hamsticks**

*Each* is ruggedly constructed. A heavy duty 4½ inch diameter fiberglass rod; a nearly indestructible .125 inch diameter PH-17-7 stainless steel whip and chrome plated brass fittings will give you years of dependable service.

*It’s* sleek, low profile construction has low wind loading and its semi-rigid fiberglass eliminates the need for springs or guys while mobile.

*Black* anti-static jacket protects the loading coil and blends with any vehicle. Stainless steel whip is adjustable for lowest SWR. Pull it down to park in the garage or fully extend it for maximum efficiency during mobile operation.

*Includes* allen wrench and complete tuning and matching instructions. MFJ-16XXT Hamtenna™ Whips handle 250 Watts PEP. Stainless whips are about 7 feet fully extended, and collapse to about 4 feet for easy storage.

*Simply* screws into any 3/8 x 24 female mount for quick band-changing. Check out MFJ magnet mounts, lip mounts.

**Short Mobile HF whips**

*Only 37-85”!

- **$21.95** Each
  
  MFJ “Short” HF whips let you mount an HF antenna with just a 5” magnet mount going mobile.
  
  **No need to drill holes or make special hard mounts on your car to get on HF! Get a magnet or trunk lip mount and you are ready to go!**

  *These* are super low profile and makes it easy to go in and out of your garage. No more replacing hamsticks because you ran under a low bridge or hit a tree limb that wasn’t going to give. Made like MFJ’s 250W hamsticks but some stand only 36” tall. Most collapse to 25 inches for easy storage.

  *Thin*, lightweight with low wind resistance. Uses 3/8-24 connector on a 5-inch magnetic trunk lip mount. Adjustable stainless-steel whip for minimum SWR.

  Short, mobile HF whips are tiny but powerful enough to handle 250 Watts PEP.

**Your Choice:**

- MFJ-2375T - 75 Meters
- MFJ-2360T - 60 Meters
- MFJ-2340T - 40 Meters
- MFJ-2330T - 30 Meters
- MFJ-2320T - 20 Meters
- MFJ-2317T - 17 Meters
- MFJ-2315T - 15 Meters
- MFJ-2312T - 12 Meters
- MFJ-2310T - 10 Meters
- MFJ-2306T - 6 Meters
  
  **$17.95 Each**

- MFJ-336T, $37.95.

- MFJ-335BT, $16.95.

- MFJ-345T, $44.95

- MFJ-348T, $49.95.

*Other style MFJ mounts available in this catalog.*

**4'1/2 Foot Extender Mast**

MFJ-1600T, $21.95.

This 4½ foot long, 3/8 inch diameter fiberglass/copper conductor with 3/8x24 male and female mounts on ends gets your hamstick way up in the air. Black anti-static jacket. Convert base loaded antennas to highly efficient center loaded antennas.

*Use* MFJ ham sticks, Bug Catcher, MFJ-2620/2640T, MFJ manual screwdriver antenna, Hustler or any loading coil with 3/8x24 threads.

*Extend* ham sticks for highly efficient fixed station antennas. Get the extra height you need at home to put your call on the map!

*Replacement* for broken or bent Hustler bottom mast section. Add telescoping whip for multi-band vertical. See MFJ telescopics in this catalog.
### MFJ Magnet, Mirror & Trunk Lip Mobile Antenna Mounts

#### MFJ 5” Magnet w/Coax

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Ship Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJ-335BS</td>
<td>SO-239</td>
<td></td>
<td>$16.95</td>
</tr>
<tr>
<td>MFJ-335BM</td>
<td>NMO</td>
<td></td>
<td>$16.95</td>
</tr>
<tr>
<td>MFJ-335BT</td>
<td>3/8-24</td>
<td></td>
<td>$16.95</td>
</tr>
</tbody>
</table>

5” super strong magnet mounts have 17 feet of coaxial line terminated with PL-259 connector. Choose SO-239 (BS) or NMO (BM) for your VHF/UHF antennas or 3/8-24 threaded (BT) for your HF antennas or other type antenna with a 3/8-24 connector. All MFJ magnet mounts are jet-black in color.

#### MFJ Deluxe Lip Mounts

- **Deluxe Trunk/Hatchback Lip Mounts**
  - Heavy-duty -- each has a wide 3.3” lip and reinforcing tabs on each side to safely distribute antenna load. MFJ-348 series have a 360 degree rotation and a 180 degree left-to-right flexibility. A convenient thumb/finger lay-over knob lets you lay down your antenna to clear garages and low overhangs -- several position detents in either direction. Scratch-proof rubber guard protects your vehicles. Each includes 10 feet of low loss coaxial line terminated with a quality PL-259 connector. MFJ-348 will secure large VHF/UHF antennas and medium size HF antennas including HTs. Allen wrenches included. Weather caps for SO-239 models also.
  - MFJ-348M, $49.95. Has HF style 3/8x24 threaded connector.
  - MFJ-348TM, $49.95. Has HF style 3/8x24 threaded connector.

- **Mini Trunk Lip Mounts**
  - NMO or 3/8-24 mini lip mounts are stainless, include 17’ coax terminated with PL-259 connector. Rubber cushion protects surface from scratches. Order MFJ-346M (NMO) or MFJ-346T (3/8-24).
  - MFJ-346M, $29.95.
  - MFJ-346T, $29.95.

- **GumDrop™ 3/8-24 Mount**
  - MFJ-344, $19.95.

#### MFJ Triple Magnet Mount

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Ship Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJ-333BS</td>
<td>SO-239</td>
<td></td>
<td>$12.95</td>
</tr>
<tr>
<td>MFJ-333BM</td>
<td>NMO</td>
<td></td>
<td>$12.95</td>
</tr>
</tbody>
</table>

3” black magnet mounts have 17’ coax with PL-259. SO-239 (BS) or NMO (BM). Lightweight antennas.

#### 2¼” HT Antenna Mag Mounts

- **HT Antenna Magnets**, SMA each end. 4’ flex RG-58AU coax. MFJ-332M, $15.95. Like above but has BNC.

- **Connectors**
  - A. MFJ-7720, $1.95. Screw-on SO-239 brass chrome plate.
  - B. MFJ-7706, $2.95. Screw-on NMO, PVC, black.
  - C. MFJ-7758, $1.04. Push-on SO-239, black PVC retaining strap.

#### Mirror/Rack/ Pipe Mounts

- **D. MFJ-342T, $44.95.** Is a 3/8-24 threaded HF antenna pipe/mirror mount that holds MFJ’s HF mobile HamTennas™ or any 3/8” style whips steady on your auto’s mirror, luggage rack or other. Hard aluminum clamps can mount up to a 1” pipe. SO-239 connector. Screw-on N/SO-239, includes 17’ coax. MFJ-332T, $18.95. M. MFJ-344, $11.95. Is like 342T, but has SO-239, includes 17’ coax with PL-259. Mount up to a 1” pipe.

- **Screw Driver**
  - A. MFJ-7706, $2.95. Screw-on SO-239 or NMO, PVC, black.

- **Weather Protective Caps**
  - A. MFJ-348S, SO-239, $47.95.
  - B. MFJ-348M, SO-239, $49.95.
  - C. MFJ-348T, $49.95.
  - D. MFJ-348T, $49.95. With lock washer feeds coaxial line underneath 3/8” connector. Coax not included.

#### Mirror/Trunk Lip Mounts

- **Goliath™ Tri-Magnet Mount**
  - Each
  - MFJ-345T, $44.95.
  - MFJ-345S, $39.95.
  - MFJ-345M, $34.95.
  - MFJ-345BM, $34.95.
  - MFJ-345M (NMO), $44.95.
  - MFJ-345BT, $39.95.

- **Secures**
  - Large VHF/UHF and medium size HF antennas. Each includes 10 feet of coaxial line terminated with a quality PL-259 connector. MFJ-345 will secure large VHF/UHF antennas and medium size HF antennas including HTs. Allen wrenches included. Weather caps for SO-239 models also.

- **Mag Mounts**
  - A. MFJ-342T, $44.95. Is a vertical mount for 3/8-24 threaded HF antennas. Mount up to a 1” pipe.

- **Push-on N/SO-239, black**
  - MFJ-348S, $1.04. 5-pack, push-on SO-239 models.

- **C. MFJ-7758, $1.04.** Push-on SO-239, black PVC retaining strap.

- **D. MFJ-7720, $1.95.** Screw-on SO-239 brass chrome plate.

- **Screw-on SO-239, black PVC retaining strap**
  - MFJ-7758, $1.04.

- **B. MFJ-7706, $2.95.** Screw-on NMO, PVC, black.

- **Weather caps for SO-239 model**
  - MFJ-348S, $47.95.

### General Information

- **GumDrop™ 3/8-24 Mount**
  - MFJ-344, $19.95.

- **Deluxe Mirror/Pipe Mount**
  - MFJ-340S/M, SO-239, $37.95.
  - MFJ-340S, SO-239, $37.95.

- **Mag Mounts**
  - MFJ-332BS, SO-239, $21.95.

- **Magnet, Mirror & Trunk Lip Mobile Antenna Mounts**
  - MFJ-332BT, SO-239, $21.95.

- **Plastic, rubber seal protects vehicle. Drill small hole for SO-239 bottom.**

- **Screw-on N/SO-239, black**
  - MFJ-348S, $47.95.

- **Screw-on SO-239, black PVC retaining strap**
  - MFJ-7758, $1.04.

- **Push-on SO-239, black**
  - MFJ-348S, $1.04.
Ultra-Strong Stainless Steel Telescopic Antennas

5 models . . . 17, 12, 10, 8 or 4.5 ft. Extended

The tough, rigid base makes the difference, extra durable! 7/8" Diameter x 2 ½" long base
Solid Chrome-plated brass with 3/8-24 threaded stubs

MFJ’s premium stainless steel telescopic whips are the perfect choice for building collapsible multi-band dipoles, mobiles, portable and base antennas. They are great for traveling, mini DXpeditions, vacations, etc. They can also be used to replace your current automatic screwdriver whip for a more highly efficient fixed mobile operation.

MFJ’s new Manually Tuned Screwdriver Antennas let you operate all bands between 80 and 6 Meters continuously including all WARC bands and the new 60 Meter bands (*depends on model). It far outperforms other HF compact antennas!

The World Leader in Amateur Radio Accessories!
**Tarheel Antennas**

*Without a doubt...the best built, best looking, best performing screwdriver antennas in the world!*

**TH-100A-HP...3.4-28 MHz...1.5 KW PEP...Pittman 12V Commercial Motor...**

**MFJ-1927 K.I.Y.**

**$179.95**

Ship Code A

For Kenwood, Icom or Yaesu rig equipped with CI/V interface. Plug controller to rig and the MFJ-1927 receives frequency data and will automatically tune your screwdriver. All features of MFJ-1924. Includes radio interface cable. 3/8x3/4x1/4 D."**

**Automatic Screwdriver Controller**

For Kenwood, Icom or Yaesu rig equipped with CI/V interface. Plug controller to rig and the MFJ-1927 receives frequency data and will automatically tune your screwdriver. All features of MFJ-1924. Includes radio interface cable. 3/8x3/4x1/4 D."**

**Automated Screwdriver Controller**

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**Traditional Screwdriver Controller**

For Kenwood, Icom or Yaesu rig equipped with CI/V interface. Plug controller to rig and the MFJ-1927 receives frequency data and will automatically tune your screwdriver. All features of MFJ-1924. Includes radio interface cable. 3/8x3/4x1/4 D."**

**Rig Interface Cables Available...**

**RJ-DB9KY, $27.95.** Kenwood, Yaesu rigs with DB9 serial port, com port.

**RJ-8MM, $27.95.** For Yaesu 8-pin mini Din rigs with a Cat/Linear port.

**CB-35, $5.95.** Icom rigs, 3.5 mm remote.

**Tarheel Antennas and Controllers**

**TH-100A-HP...3.4-28 MHz...1.5 KW PEP...Pittman 12V Commercial Motor...**

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**CB-35, $5.95.** Icom rigs, 3.5 mm remote.
**MFJ 10-band HF/VHF Mobile Antenna**

**MFJ-1699S**

Operate 80, 40, 30, 20, 17, 15, 12, 10 Meters HF mobile and 6 and 2 Meters VHF with just one amazing antenna! MFJ-1699 features low SWR and 200 Watts power handling for a super-performing mobile HF/VHF antenna.

Changing bands is super-easy — just change the tap on the “wander-lead” and the next band you want to explore. Maximum height is 49.5”.


20/40M 4½” base-loaded Telescopic Mobile whips

Efficient, base-loaded 4½ foot HF Whip Antenna is thin, sleek, and low profile with very low wind resistance. Lightweight. A 3/8x24 trunk lip or 5-inch magnet mount holds it tight and secure. Handles 125 Watts. Enjoy your road trip on HF! Whip collapses to 22 inches for easy parking or trunk storage. Easy-on, easy-off 3/8x24 stud. Use as a center loaded antenna with a bottom mast to improve efficiency.

**MFJ-1654**

Free NMO Adapter!

**MFJ HF Hi-efficiency Mobile**

**Continuous Wide Band Coverage: 40-2 or 20-2 Meters**

Operate 80, 40, 30, 20, 17, 15, 12, 10 Meters HF mobile and 6 and 2 Meters VHF with just one amazing antenna! MFJ-1699 features low SWR and 200 Watts power handling for a super-performing mobile HF/VHF antenna.

Changing bands is super-easy — just change the tap on the “wander-lead” to the next band you want to explore. Maximum height is 49.5”.


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**MFJ-1654**

Free NMO Adapter!

**MFJ HF mini-Bugcatcher**

Become an “HF Mobileer” almost instantly with almost no effort! Have tons of fun rag-chewing and DXing on the HF bands. Turn boring drives into fun-filled action-packed ham radio adventures!

It only takes minutes to attach a trunk lip mount (MFJ-345T, $44.95), mirror or luggage mount (MFJ-342T, $11.95) or tri-magnet mount (MFJ-336T, $37.95).

Screw in your MFJ-1624 mini bugcatcher HF mobile antenna and get on the road to grab those rare QSOs with folks all around the world.

Throw your rig into your car, plug it in the cigarette lighter and turn the power down to 20 Watts or so (to avoid overloading your cigarette lighter; antenna handles 300 Watts PEP).

Operate HF mobile and enjoy DXing!

Bugcatcher design uses large highly-efficient air-wound inductor — it will far out perform other compact HF mobile antennas.


A high impedance matching automatic tuner can do wonders! Check out MFJ-939 YKI series, 200 Watts, 1.8-30 MHz, 20,000 virtual antenna memories, 2-year warranty. It’s the perfect travel companion for your mini bugcatcher!
MFJ 5/8 Wave 2M Ground Plane

For an incredible $39.95, you get a 300 Watt 5/8 Wave ground plane 2 Meter home station antenna. Other 5/8 wave ground planes can’t work any better -- no matter how much they cost . . .

You get a 300 Watt 5/8 wave ground plane base antenna for 2 Meters that gives you the maximum possible calculated gain of any single element antenna. Other 5/8 waves can’t work any better -- no matter how much they cost.

Shunt-fed matching network gives lowest possible SWR over entire 2M band. It also bleeds off unwanted static.

You get MFJ’s RapidTuneRadiator™ for quick accurate tuning.

Ceramic insulator gives low RF loss. Result? Maximum power is achieved. Easy installation to any 1 1/2” mast, (not included) with a single U-bolt (included).

You get strong lightweight aluminum construction protected by MFJ’s No MatterWhat™ limited warranty.

You get MFJ’s famous No MatterWhat™ one year limited warranty. Just $39.95 gets you the most incredible value in a 5/8 wave base station ground plane. Remember, other 5/8 wave ground planes can’t work any better.

MFJ-1750, $39.95. 2-Meter 5/8 Wave. MFJ-1752, $39.95. Like MFJ-1750 but covers 220 MHz, 1/4 Wave.

Dual Band 144/440 Ground Plane

Dual band 144/440 ground plane antenna is small, lightweight and super easy to mount to any 1 to 1 1/2” mast, (not included) with a single included U-bolt -- you’ll have it up and operating anywhere in just minutes. Great for backpacking, Mount inside to get on-the-air quickly. Extra long range on 440 MHz with high gain halfwave over quarter wave antenna and solid 1/4 wave performance on 2M. Ground plane is sloped to give low SWR across both bands and to minimize feedline radiation. This gives you more useful radiated power, reduced TVI and noise pickup by the coax shield.

Has 17 dB front-to-back ratio on 2-Meters and 10 dB on 440 MHz. Handles 500 Watts. Has SO-239 feedpoint. Requires only one feedline connection. Shunt-fed matching prevents pattern skewing-- gives low SWR. 1/4” diameter driver elements give wide bandwidth. National Bureau of Standards design is optimized for maximum gain, high front-to-back, clean symmetrical pattern. Mounts vertically for FM/Packet or horizontally for SSB. Includes U-bolt -- you’ll have it up and operating anywhere in just minutes.

MFJ Dual Band 144/440 MHz Yagi

A whopping 8 dB gain on 2-Meters and 6 dB gain on 440 MHz. 3-elements on 2M and 5-elements on 440 MHz. Requires only one feedline connection. Balanced feed with Ferrite Choke™ 1/4” diameter driver elements give wide bandwidth. National Bureau of Standards design is optimized for maximum gain, high front-to-back, clean symmetrical pattern. Mounts vertically for FM/Packet or horizontally for SSB. Includes single included U-bolt -- you’ll have it up and operating anywhere in just minutes.

MFJ 7 element 144/440 MHz Yagi

Get 7 elements on 440 MHz and 4 elements on 2 Meters. Exclusive dual band balanced feed with Ferrite Choke™ 1/4” diameter driver elements give wide bandwidth. National Bureau of Standards design is optimized for maximum gain, high front-to-back, clean symmetrical pattern. Mounts vertically for FM/Packet or horizontally for SSB with single included U-bolt on 1-1 1/2” mast or tower. Includes 5, 1 1/2” diameter element, 2 pounds. Elements are electrically isolated from boom.

Portable 3-element 2-Meter beam

Unique design lets you set it up or take it down in seconds! Elements simply screw into the boom. Easy to store and sturdy enough to use as your base. Center mount to use vertically on FM or horizontally for SSB. By rotating it you can minimize QRM. Also mounts vertically or horizontally on the leg of a tower . . . great for Packet and Packet-Cluster™. Compact 2¾” boom gives calculated gain within 1 dB of a four element Yagi with a boom nearly twice as long. Extra thick elements maintain high gain and directivity over virtually the whole 2-Meter band. Ferrite choke balun gives excellent feedline decoupling. Coax coupling is further reduced by mounting the SO-239 connector behind reflector. 2 lbs. 30”x1”x1”x1¼” boom. Mounts easily to mast or tower with single included U-bolt. Mast not included.

Stacked 2-Meter 5/8 Wave

Stacked 5/8 wave radiators give you more than twice the omni-directional gain of a single 5/8 wave radiator! Wide 10 MHz 2:1 SWR bandwidth . . . excellent ferrite choke balun feedline decoupling . . . shunt choke for bleeding off unwanted static . . . strong lightweight aluminum. Excellent 6 Meter full half-wave centered antenna. Mounts vertically for FM/packet or horizontally for SSB. U-bolt (included) to any 1 1/2” mast or tower leg.

MFJ-1766, $134.95. Gives you four times the gain of a single 5/8 wave. Two MFJ-1764 antennas, phasing cables. Get double the gain on 6 Meters.

MFJ-1765, $44.95. Includes phasing cables for 2 MFJ-1764s.

Stacked 5/8 wave radiators give you more than twice the omni-directional gain of a single 5/8 wave radiator! Wide 10 MHz 2:1 SWR bandwidth . . . excellent ferrite choke balun feedline decoupling . . . shunt choke for bleeding off unwanted static . . . strong lightweight aluminum. Excellent 6 Meter full half-wave centered antenna. Mounts vertically for FM/packet or horizontally for SSB. U-bolt (included) to any 1 1/2” mast or tower leg.

MFJ-1766, $134.95. Gives you four times the gain of a single 5/8 wave. Two MFJ-1764 antennas, phasing cables. Get double the gain on 6 Meters.

MFJ-1765, $44.95. Includes phasing cables for 2 MFJ-1764s.
MFJ Pulsar™ 6M/VHF/UHF/1.2 GHz Base Antennas

MFJ’s Pulsar™ Base/Repeater Antennas are built to last! Heavy-duty fiberglass radomes and overlapping shells add strength and stability. Stainless steel hardware and waterproof joints eliminate moisture pollution. Super high wind loading.

MFJ-1526 - $159.95, Pulsar ULTRA MightyGain™. Dual Band 144/440 MHz Base/Repeater Antenna. It’s our highest gain Pulsar™. 8.3 dB on 2-Meters and 11.7 dB on 440 MHz. 17 ft., 3 sections. SO-239 pigtail feedpoint. It’s a perfect match for your van or home. When you want it all, you want it Pulsar! Same as MFJ-1526, has “N” connector.

MFJ-1524 - $129.95, Pulsar Hyper MightyGain™. Dual Band 144/440 MHz Base/Repeater Antenna. You get high gain with little weight. Just 10 feet tall. Features 6.5 dB gain on 2 Meters and 9 dB gain on 440 MHz. Shipped in two sections. SO-239 connector, handles 200 Watts. All ship code C.

MFJ-1521, $64.95. Pulsar Mini is a limited space VHF/UHF Antenna. 4.5 feet tall but gives BIG gain, 30dB on 2M, 5.5dB on 440 MHz. Perfect for balconies, attics, limited spaces.

MFJ-1522 - $74.95. Pulsar Economy Priced Dual Bander™ Base/Repeater Antenna. 5.5 ft. tall. 4.5 dB gain on 2 Meters, 7.2 dB on 440 MHz. Great for antenna restricted households and apartments. Easy to hide on Balcony or backyard. SO-239 Connector. Handles 200 Watts.

MFJ-1516 - $109.95. Pulsar VHF Base Station™. The ultimate 2 Meter Base/Repeater Station Antenna! 7.8 dB gain is perfect for dedicated repeater or home use. 15 ft.

MFJ 6-Meter Antennas

MFJ-1890 Moxon Ant

MFJ-1890 6-Meter Moxon for limited space has low SWR and broad cardioid pattern with 5.5-dBi forward gain, high front-to-back ratio. Element span is 7 feet on a 34’ boom with turning radius of under 4’. Winter-storm tough but extremely lightweight, 5 lbs. SO-239 pigtail feedpoint. It’s a perfect choice for getting on the magic band as soon as you can. It’s a per- sonal favorite of Leg-endary band openings return. It’s your best choice to take on those exciting mountain-topping and rover adventures!

MFJ-1890 - $89.95

MFJ-1895 Moxon for limited space has low SWR and broad cardioid pattern with 5.5-dBi forward gain, high front-to-back ratio. Element span is 7 feet on a 34’ boom with turning radius of under 4’. Winter-storm tough but extremely lightweight, 5 lbs. SO-239 pigtail feedpoint. It’s a perfect choice for getting on the magic band as soon as you can. It’s a per- sonal favorite of Leg-endary band openings return. It’s your best choice to take on those exciting mountain-topping and rover adventures!

MFJ-1895 - $111.95

MFJ 6-Meter Yagi

Super lightweight 6 Meter Yagi will quadruple your effective radiated power over a 1/2 wave dipole. 6-foot boom, 3-elements. Just 2 lbs. Handles 300 Watts PEP SSB. Mounts vertically or horizontally. Gives a great front-to-back ratio. It’s the perfect match for your MFJ-9406 6-Meter Adventure Radio™.

Super lightweight 6 Meter Yagi - $109.95

MFJ 10-15 Meter Antennas

Work the World from your Backyard, this 10M Vertical is all you need!

Extreme lightweight for portable use... Low- Angle Radiation for outstanding DX Vertical/Horizontal Mounting Bracket...

10-Meters is Wide Open! 11-ft. vertical lets you work all the DX you can handle! Features lightweight 11-foot radiator and two 6’ radials both made of aluminum. Weighs less than 3 lbs., easy to put up/take down for DXpeditions or stealth. MFJ-1790 has a super low angle of radiation to focus your signal where you want it -- reduces QRM/Noise and gives great DX! Included mast bracket can be turned horizontal or vertical -- attach it to an existing mast or pole with ease! MFJ-1790 covers entire 10-meter band (28.0-29.7 MHz), 300W PEP SSB.

MFJ-1790 - $74.95
NEW! MFJ-897 for
Yaesu FT-897D Rig!!

MFJ-706/7000/897 are Emergency Communications (EmComm) boxes that turn your ICOM IC-706, IC-7000 or Yaesu FT-897D into an instant and foolproof portable/mobile emergency communications center. Cover HF, VHF and UHF on the IC-706/7000/FT-897D popular transceivers.

It is literally a complete “grab-and-go” communications center that can provide a full 100 Watts SSB/CW signal simply by plugging into any available vehicle cigarette lighter socket or light-duty 10 to 15 Amp 12 VDC power supply.

Exclusive PeakPowerBoost™ circuit delivers instantaneous SSB/CW power peaks using several Farads of super capacitance.

Built-in, full range automatic antenna tuner turns any random wire or other antenna into a highly effective antenna. Simple foolproof automatic tuning is done with a single push of a button.

3/8-24 antenna mount gives you the IC-706™ Presentation Stand

MFJ-1925/I2

$89.95
Ship Code A


 Whip Tuner/Artificial Ground gives instant 80-10M, 150 Watt Antenna

MFJ-1644

$139.95
Ship Code A

Ultra low capacitance fiberglass antenna/counterpoise insulator minimizes shunting current to ground for maximum radiated power. 3/8x24 female connector for whip antennas and wing-nut for counterpoise. SO-239, 7/8x2"/4x2". MFJ-63, $44.95. High-efficiency air-wound 80/40M loading coil with 3/8x24 male/female.

New! MFJ-1642, $139.95.

Like MFJ-1644, less RF Current Meter.

Decouples radiating elements.

Tune for maximum current on RF Meter to give maximum radiated power and minimum SWR. Sensitivity control lets you QR P to 150W QRO.

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Collinear Array and End-Fed Zepp Antennas

Two and Four Element Arrays

Single band two half-wave element collinear array gives you nearly 2 dB gain -- about 150% power gain -- twice the receiving capture area of a half-wave dipole. They have direct coax feed and low SWR across the entire band.

The MFJ-64XX four half-wave element collinear array gives you a whopping 4.5 dB gain -- about 300% power gain. You get four times the receiving capture area of a half-wave dipole -- you'll hear DX you've never heard before! They require a balanced line tuner or a tuner with balun.

*Hang and Play!* when you receive them. No cutting, soldering, tuning, or trimming needed. Follow easy set-up instructions and you're on the air!

They are completely assembled and include super strong custom fiberglass center insulators, authentic glazed ceramic end insulators, heavy-duty 7-strand, 14-gage hard copper element wire and an extremely strong, solderless, crimped construction.

With larger capture area and power gain, you'll hear & work more DX than ever before! A pair of these at right angles can provide worldwide coverage. These arrays radiate bi-directional perpendicularly to the wire and handle full 1500 Watts and reduce noise up to three S-units below verticals.

Feedline and stub simply hangs from antenna and is bent at the bottom or pulled away at an angle to make it convenient.

12 Wave End-Fed Zepp

When an end-fed is desirable or when a center-fed is not possible or convenient, *hang and play* end-fed Zepp provide excellent no-compromise performance. The Zepp is a completely assembled single band half-wave antenna. Designed for direct coax feed and handles a full 1500 Watts with low SWR. Just follow easy installation instructions -- no cutting, soldering, tuning, or trimming. They radiate in a wide broadside pattern. Feedline/stub can be "bent" at bottom, pulled away at an angle. Super-strong fiberglass feed point insulator, glazed ceramic insulator, heavy-duty 7-strand, 14-gage hard copper wire, strong solderless crimped construction. Super-strong custom fiberglass SO-239 mount provides stress-relief for ladder line.

**2-Ele. Collinear Array, 4 models**

- MFJ-6215, $49.95. 15M, 46' hor., 10' vert.
- MFJ-6217, $54.95. 17M, 54' hor., 12' vert.
- MFJ-6220, $59.95. 20M, 70' hor., 16' vert.
- MFJ-6230, $59.95. 30M, 100' hor., 22' vert.

**4-Ele. Collinear Array, 3 models**

- MFJ-6415, $109.95. 15M, 92' hor., 10' vert.
- MFJ-6420, $124.95. 20M, 140' hor., 16' vert.

Each includes 100 feet of 450 Ohm ladder line for connection to your tuner. All are Ship Code B.

**1/2 Wave End-Fed Zepp, 5 models**

- MFJ-6115, $39.95. 15M, 25' hor., 10' vert.
- MFJ-6117, $44.95. 17M, 27' hor., 12' vert.
- MFJ-6120, $44.95. 20M, 35' hor., 16' vert.
- MFJ-6130, $49.95. 30M, 48' hor., 22' vert.
- MFJ-6140, $59.95. 40M, 68' hor., 30' vert.

**Single Band Half-wave Zepp**

- MFJ-2910H, $44.95. 15M, 25' hor., 10' vert.
- MFJ-2911H, $44.95. 17M, 27' hor., 12' vert.
- MFJ-2912H, $44.95. 20M, 35' hor., 16' vert.
- MFJ-2915H, $49.95. 30M, 48' hor., 22' vert.
- MFJ-2916H, $59.95. 40M, 68' hor., 30' vert.

Ship Code B.

**True 4:1 Current Balun/Unun**

True 4:1 current balun/unun transforms 200 ohm balanced and unbalanced loads to 50 ohms. True transmission line transformer gives an amazingly flat response 1.8-130 MHz. Transforms 200/50 ohm balanced or unbalanced loads to 50 ohms. Ground point 300 Watts. 21/2Wx41/8Hx11/4 inches.

Coax feedline not included. Ship code B.

**MFJ W9INN Balun Box**

Converts unbalanced coax to balanced ladder transmission line. Giant 2-core 4:1 balun wound with Teflon® wire. 3/8x2/1x7". Heavy-duty ceramic feed-thrus. 1500W full legal limit. SO-239. Ground post, mount holes.

**Switchable 1:1 or 4:1 Current Balun/Unun**

Switchable 1:1 or 4:1 current balun/unun. Transmission line transformer uses low-permeability ferrite cores to give an amazingly flat response 1.8-30 MHz. Transforms 200/50 ohm balanced or unbalanced loads to 50 ohms. Ground point. 300 Watts. 21/2Wx41/8Hx11/4 inches.

**MatchMaker™ Feed Network**

Raise your HF dipoles high above ground for better DX without losing that perfect 1:1 match! This center block transforms 75 Ohm loads down to 50 Ohms. Has a superbly effective 1:1 current balun for transition from balanced element to coaxial line. 1.5kW PEP SSB/CW. 4Wx1/2"x21/4D".

**MFJ-2975H, $44.95.** Transform 100 Ohms to 50 Ohms. MFJ-2975H has the same features as the MFJ-2975H.

**Yagi Boom-Mounted Balun**

1:1 current balun mounts on the boom of your HF or 6-Meter Yagi to transition from unbalanced (coax) to the balanced driven element. Prevents unwanted pattern distortion from imbalance, radiation from outer surface of coax, element de-tuning. RFI to consumer electronics and noise transfer to the rig’s receiver. Toroid style transmission line choke rated for maximum power. SSB/CW delivers an impressive 35 dB of thru-transmission (S21) common-mode isolation. Molded case, SO-239 connector. 51/4Wx2x3H in.

**MFJ Wall-Mounted Balun**

Mounts on 1/4" Schedule 40 pipe. 4Wx1/2"x21/4D. Prevents electrical noise generated in your location from migrating up to the feedpoint and raising your radio’s noise floor. Toroid-style transmission-line choke is rated for maximum legal power on SSB/CW. Delivers an impressive 30+dB of thru-transmission (S21) common-mode isolation on 80-10M. Disconnect point for lightning protection. Stainless hardware, rugged components. SO-239. 4Wx1/2"x21/4D".
MFJ UltraLite™ and PowerLite™ OCFD Wire Antennas
Delivers Amateur Radio’s most-interesting DX bands -- 40, 20, 10 & 6 Meters -- to your fingertips!

MFJ-2010 Ultra-Lite™ for 40/20/10/6M, 300 Watts PEP.
Perfect for low-profile portable and QRP operation. Weighs less than two pounds and pulls high in the air with lightweight cord.
Virtually invisible 66-foot jacketed wire element delivers up to 6-dBi gain on 40 Meters, 9-dBi on 20 Meters, and a whopping 11.5-dBi gain on 10 and 6 Meters! Long leg is 44.6 feet and short is 22.3 feet.
Day or night, there's DX on these bands. If you hear it, you'll work it -- even QRP!

MFJ-2012 Power-Lite™ for 40/20/10/6M, 1500 Watts PEP CW/SSB. Long leg is 44.6 feet, short leg is 22.5 feet. Robust high-power version of the MFJ-2010 with 14-gauge stranded-copper wire and porcelain end insulators. Pull-tested to 200 pounds.

MFJ-2014 Power-Lite™ for 75/40M, 1.5 kW PEP CW/SSB. Replace your old 75-M dipole and add 40M coverage with up to 9-dBi of powerhouse gain! Rugged 122’ long. Great for foreign broadcast and 7-MHz! Long leg is 90” 6”, short leg (coil) is 30”.

New! MFJ QuikStik™ Spike Mount -- Push into ground, screw on an antenna!
For hams on-the-go to their next adventure or for those at home needing something QUICK and easy-to-hide!
MFJ’s QuikStik™ Antenna system consists of a durable 4 ft. 3/8” diameter copper bonded steel earth ground rod, 3/8-24 threaded HF antenna pipe mount with SO-239 for your coax run, and twenty-five feet of counterpoise wire for coupling to the ground rod.
It’s super efficient and a very QUICK set-up. Just set the mount, push the rod into the ground, add your antenna, counterpoise, coax and operate!!! Use hamsticks, telescopic 20-6 Meter whips, solid whips, screwdrivers, even motorized screwdriver antennas if you wish.
The copper ground rod is tough and will last for years of superior service. A pointed end makes it easy to push into the ground and helps bleed off static and RFI and prevent RF hot spots. A wire coupler is built onto the ground rod, just unscrew and screw back for QUICK wire adjustment.
The mount is tough aircraft quality aluminum and will hold up to a 1” pipe. SO-239 gold-plated connector has lock washer under the 3/8-24 connector.
MFJ includes your 25 ft. coated wire for your counterpoise. All you need to do is add your antenna and coax!!!

Add an Antenna
MFJ-1936TW, $94.95. Saves $10! QuikStik™ antenna system with MFJ-1979 17 foot telescopic whip antenna.
MFJ-1936TW, $144.95. Saves $10! QuikStik™ antenna system with MFJ-1979 17 foot telescopic whip antenna and a 40-6 Meter MFJ-67 loading coil.

MFJ Apartment Antennas . . . Mount indoor or outdoor, windows, balconies . . .
Operate 40-10M on HF, 6/2M VHF with a single antenna and 300 Watts! Universal mount/ clamp attaches to windows, balconies and railings. Indoors mounted to a table or bookshelf. It’s not a 5-element yagi, but you’ll work your share of exciting DX! HIGHLY efficient air wound “bug catcher” coil, telescoping 5/8” radiator gets out! Radiator collapses to 2½ ft. for easy storage. Includes coax, choke balun, counterpoise wire and safety rope. Operating frequency adjusted by moving the “wander lead” on the coil and adjusting the counterpoise for best SWR.

MFJ-1623, $189.95. Like MFJ-1625, but covers 6-30 Meters. MFJ-63, $44.95. High-efficiency air wound 80/40M loading coil with 3/8x24 male and female connectors. For whips, verticals.

MFJ-1625, $219.95
Ship Code C

MFJ-1626, $219.95
Ship Code C

MFJ-1647, $49.95
Ship Code B

MFJ-1648, $49.95
Ship Code B

MFJ-1623K, $199.95
Ship Code B

MFJ-1626K, $219.95
Ship Code C

MFJ-1964K, $59.95
Ship Code B

Mention AD5X when you order for a pleasant surprise.

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**MFJ 4-Band Octopus Antenna**

Choose any 4 bands: HF/VHF/UHF

**Octopus antenna hub turns your hamsticks into four fully balanced dipole antennas in minutes!**

Mix and match any four HF/VHF/UHF bands. Example: screw-in 80, 40, 20 Meter hamsticks and a dual band 2M/440 MHz whip (two on each band) on opposite sides. Now you have an automatic bandswitching 5-band dipole! Rotate it for maximum signal and minimum QRM and noise with a small rotator like Hy-Gain AR-500, $159.95.

**Works** at any height, low for local NVIS and high for DX. At a fixed height, (say 20-30 feet) use 80-Meters for NVIS and 20-Meters for low-angle DX.

**Mounts** on masts up to 1-inch diameter. Just use a fiberglass pole on a tripod and you're on the air! Perfect for casual portable operation, limited space, HOAs, field day, camping, ARES during disasters.

**Single coax feed, built-in balun.**

**Interaction between bands is minimized because the ends are spaced apart at a large angle.**

**You don't need an antenna tuner if you carefully tune each dipole.** An easier way is to just set each dipole approximately on frequency and use an awesome automatic antenna tuner like the MFJ-993B to tune each dipole. An easier way is to just set each dipole approximately on frequency and use an awesome automatic antenna tuner like the MFJ-993B to operate and to widen the bandwidth.

**Lightweight, 14-foot diameter.** Hamsticks break down to about four feet for easy storage.

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**80-10M End-Fed Half-waves**

Cover all HF bands with one single wire and no tuner!

- **Full HF coverage**, no tuner needed on most frequencies.
- **No long counterpoise**, radials or feedline required.
- **Rugged weather-resistant 50-Ohm matching network**
- **Fast setup and takedown**
- **Easy storage/transport**
- **Stainless hardware**, UV resistant materials throughout

**End-Fed Horizontal Wires (EFHW)** cover multiple bands without traps, slubs, or resonators.

**End-fed radiators** have the unique quality of resonating on the 1/2-wave fundamental frequency plus odd/even harmonics above!

**Broad-band matching transformer** at feed point lets the entire HF spectrum be yours! SWR is so low you may never need a tuner.

**Get on the air** Just one high center or end support -- installation is fast for home, road, emergencies.

**EFHWs install virtually anywhere in minutes!**

**MFJ-1982MP** $74.95

Comes with a rugged insulated-wire radiator that prevents detuning when contacting limbs/branches. "No-snap" end insulator slides over branches and through foliage without hang-ups.

**Toss your EFHW over a limb for maximum coverage** over a wide range of operating conditions. Effective gain -- the EFHW makes a great emergency back-up for your regular antenna.

**Power ratings** are in Watts PEP for SSB/CW modes, with 50% or less transmit time (ICAS). Each network designed and tested to ensure great performance in a wide range of operating conditions.

**End-fed horizontal wire**, an EFHW, offers the perfect solution for a wide range of ham activities.

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**Super Octopus Deals**

**MFJ-2104** $269.95, Octopus Hub and 75/40/20/15 Meter (2 each) 250W sticks. Saves $20! **MFJ-2104H** $529.95. Hub with 75/40/20/15 Meter (2 each) 600W hamsticks. Saves $20!

**MFJ-1984LP** $44.95. 40-10 Meters. 66 feet.

**MFJ-1984MP** $64.95. Restricted space, 80-10M, 132 ft.

**MFJ-1984HP** $84.95. 800W, high power, 40-10 Meters. 66 feet.

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**New!**

**Tough Octopus Hub**

Eight 3/8-24 threaded connectors for hamsticks. Super strong fiberglass filled ABS base insulator. Your Octopus hub will give you years of trouble-free service!

**Super Octopus Hub**

**MFJ-2100** $109.95

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**80-10M End-Fed Half-waves**

Cover all HF bands with one single wire and no tuner!
MFJ All-Band G5RV Antennas

Operate all bands through 10 Meters, even 160 Meters, with a single wire antenna!

MFJ’s famous G5RV antenna is the most popular ham radio antenna in the world! Strong signals from G5RVs day or night, 24/7. And it’s no wonder... it’s an efficient, all band antenna that’s only 102 feet long -- shorter than 80 Meter dipole. 32.5 ft. ladder line matching section ends in an SO-239 for your coax feedline.

Folded Dipole Portable Antennas

Single band, light-weight, portable folded dipoles. Low SWR, direct coax feed, 200 W. Perfect for MFJ Rigs! MFJ-1774B (40M); MFJ-1773B (30M); MFJ-1772B (20M); MFJ-1771B (15M); MFJ-1770B (10M); MFJ-1767B (6M).

MFJ BASIC Dipole Antenna Kit

80-10M

MFJ-2772K is like MFJ-2772K plus 3 multi-purpose center insulators, 100’ of 1/8” nylon rope, 2 PL259s, 2 RG-58 reducers, SO-239, stainless steel screws/nuts, 6 ceramic insulators. Make G5RV, doublet or dipole. Center plates have pre-punched holes to secure and relieve stress of your feedline weight. Can use with 450 Ohm ladder line or coax feedline. Pre-punched holes for SO-239 connector.

Optional feedlines available below. MFJ-18H050, $24.95. 50’ 450 Ohms. MFJ-18H100, $39.95. 100’ 450 Ohms. MFJ-5850, $26.95. 50’ RG-58, PL259. MFJ-58100, $41.95. 100’ RG58, PL259.

Dipole Center Insulators

A. MFJ-16D01, $7.95. Super strong custom fiberglass stress relieving center insulator for 450 Ohm ladder line. . . Continued right

MFJ Single Band Dipole Antennas

Use as Inverted Vee or Sloper, and it’s even more compact and needs just one support.

With an antenna tuner operate all bands 80 Meters through 10 Meters and even 160 Meters with an antenna tuner and a ground. MFJ’s fully assembled G5RV handles 1500 Watts. Hang and Play™— add coax, some rope to hang and you’re on the air! MFJ-1770M, $49.95. Half-size, 52 foot G5RV JUNIOR covers 40-10 Meters with tuner. Handles 1500 Watts.

MFJ Compression Ceramic Insulators

Model   Cable dia.  Hole dia.  Height  Dim.  Force lbs  Price
17A01  1/4” 21/32” 1.31” 21/32” 2.00  $9.95
17B01  5/8” 3/16” 1.60” 3/16” 2.25  $9.95
17C01  5/8” 3/16” 1.87” 3/16” 2.87  $9.95

MFJ Compression Ceramic Insulators

Model   Cable dia.  Hole dia.  Height  Dim.  Force lbs  Price
17A01  1/4” 21/32” 1.31” 21/32” 2.00  $9.95
17B01  5/8” 3/16” 1.60” 3/16” 2.25  $9.95
17C01  5/8” 3/16” 1.87” 3/16” 2.87  $9.95

Aluminum or Fiberglass Mast Guy Rings

Fits standard aluminum, fiberglass tubing from 3/4”-1 1/2” dia. OD. Strong aircraft grade aluminum is 1/8” thick and 2 1/2” OD. fiberglass are 1/8” thick FR4. Five 3/8” holes punched for 3 or 4 point guy lines. Holes are chamfered which provides for a smooth surface for guy line connection. Buy aluminum-type, MFJ-2830A, B or C, $2.95 each or a set-of-three, MFJ-2830X, $7.95. Buy fiberglass-type, MFJ-2840A, B or C, $3.95 each or a set-of-three, MFJ-2840X, $8.95.

Model   Price   Description
MFJ-2830A  $2.95  2” OD alumi. Guy ring for 3/4” tube
MFJ-2830B  $2.95  2” OD aluminum Guy ring for 1” tube
MFJ-2830C  $2.95  2” OD aluminum Guy ring for 1 1/2” tube
MFJ-2830X  $7.95  Set of 3 aluminum guy rings, has all 3 above
MFJ-2840A  $3.95  2” OD fiberglass Guy ring, 3/4” tube
MFJ-2840B  $3.95  2” OD fiberglass Guy ring, 1” tube
MFJ-2840C  $3.95  2” OD fiberglass Guy ring, 1 1/2” tube
MFJ-2840X  $8.95  Set of 3 fiber guy rings, has all 3 above

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The secret lies in the incredibly strong and weather-resistant stainless-steel telescopic whips -- a 34' span, twice the length of other portables. Add a robust 45-degree center block and our unique Hi-Q matching system, and you have a 'pair of ears' that digs out the weak ones. Does it all with fewer assembly parts and a much faster tune-up. In fact, you'll be on-the-air with rock-bottom SWR while your buddies are still reading their instruction manuals!

MFJ-2289 is truly a 'general coverage' antenna because you can tune it up with exceptionally low SWR on any frequency between 7.0 and 55 MHz. With 34' of signal-radiation available, you won't be handicapped by poorly-robbing losses of loading coils. Get consistent performance and max RFI protection because our lab-rated Guanella Balun is built right into the feed assembly. Proven to be highly effective across the full tuning range.

**Heavy-duty** components keep it up. 1kW PEP power. Sturdy aluminum and stainless-steel. Includes U-bolt for up to 1½" mast.

MFJ-1919EX, $169.95. Tripod with 18' telescopic fiberglass mast.

MFJ-1918EX, $99.95. Tripod with 9.5' telescopic fiberglass mast.

**34' of Radiating Elements!**

7.0 - 55.0 MHz!!

**Big Stick 8-Band Portable Multiband Telescopic Dipole Antenna**

MFJ-2289 is a rugged continuously adjustable stainless-steel dipole that covers FM broadcast band thru 20M. Sets up quickly and makes a great temporary antenna for apartments, motels, RVs, mountain topping, and boating. Great for field day!

**Full-size** 1/2 Wave element delivers high-efficiency you need to work QRP, DX or monitor distant shortwave broadcasts from any location. Frequency coverage is continuous. Optimized length may deviate slightly depending upon factors such as height above ground, proximity to nearby objects, etc. Simply adjust for lowest SWR.

MFJ-2299 includes MFJ-347 dipole mast and two 17' MFJ-1979 stainless-steel telescopic whips with 3/8" studs, collapsible to 27 inches. Super quick and easy to put together. Just screw the bracket onto your mounting pole, screw in the whips and add your coax! Save $10! Purchase complete kit instead of parts.

**MFJ "HF Stick" Mini-Dipole Mount**

Build your own 80-6M mini-dipole using two HF mobile whips! Mast mount to 1½" OD. Super heavy-duty solid aluminum construction. Exclusive, isolated dipole elements let you insert balun or coil up coax to isolate feedline. True balanced dipole prevents RF on coaxial shield, eliminates pattern distortion, reduces noise pickup and RFI radiation from coax and provides deep dipole end-nulls for nulling out interference.

**Single-band Rotatable Mini-dipoles**

Use these inexpensive, lightweight, isolated mini-dipoles when space is limited for temporary or permanent installations. Rotate to null QRM/noise and to focus your signal. Includes two HF sticks of your choice and mini-dipole mount.

**Portable Tripods**

MFJ-1918EX, $169.95 w/18' ext. mast

MFJ-1919, $99.95 w/15' ext. mast

**Big Stick 8-Band Vertical Antenna**

For Top Portable Performance, Carry a "Big Stick"! Like our BigEar™, this portable monopole is a rugged 17' stainless-steel whip paired with an adjustable high-Q air-wound coil.

**Efficiency** matters, so it's not surprising this winning combination stands head and shoulders above shorter backpack antennas.

**Consider these features:**

True Backpack Portability: Antenna is 18' long fully extended, but breaks down quickly to 28" in seconds. Fits most any size packs!

**Light Weight:** Just over 2 lbs., you'll hardly know your packing!!!

**Versatile:** Has MFJ-342T pipe mount -- quickly and easily mounts to a 1/4 or 1/2" pipe or mast. SO-239 with lock washer feeds coax underneath the 3/8-24 connector.

**General Coverage:** Tapped loading coil covers 7.0-55.0 MHz without gaps. Great for Ham Bands and outstanding for image-free shortwave broadcast!

**Rugged Construction:** All aluminum, stainless steel construction ensures years of excellent performance, 1 Kilowatt rated.

**Counterpoise kit included:** Ensures low SWR, high efficiency, maximum site safety.

**Big Stick™** is for Ham radio operators on the go and hungry for the great QSO anywhere, anytime! middle band (10-11 MHz), 12-13 MHz, 15-16 MHz, 17-18 MHz, 20-21 MHz, 30-31 MHz, 40-41 MHz, 60-61 MHz, 75-76 MHz.

**BigStick™, carry bag and 25 feet coax.**
You’ll hardly see this mini 14’ rotatable dipole!  
Tiny 7’ turning radius fits on smallest roofs – perfect for apartments and condos.  
MFJ-1775 is inconspicuous and low profile – not much bigger than a TV antenna and easily turned by a lightweight TV rotator.  
It’s no Wimp! Directivity reduces QR/Noise, lets you focus your signal in the directions you want – work some real DX!  
Operate 40/20/15/10/6 and 2 Meters – and run a full 1500 Watts SSB/CW on all HF bands!  
Features automatic band switching and uses highly efficient end-loading with its entire length radiating.  
Each HF band uses a separate, efficient end-loading coil wound on fiberglass with Teflon® wire, and capacitance hats at each end (no lossy traps).  
6/2M are full-length halfwave dipoles.  
Incredibly strong solid rod fiberglass center insulator and 6063 T6 aircraft strength radials.  
Assemblies in an afternoon. Adjusting one band has little effect on other bands.  
MFJ-1775W, $339.95. WARC band version, 12/17/30/60M only.

Ship Code D  MFJ-1775  $339.95  MFJ-1789  $404.95  Ship Code D
6-Bands: 40/ 20, 15, 10, 6, 2 20/17/15/10/6/2

Build your own wire antenna with these special MFJ parts . . .

Coax Center Insulator MFJ-16B01, $21.95.  
Built-in SO-239, super strong, UV resistant, custom injection molded, hang hole for inverted vees, wire tie points, lightweight.

Center Insulator for Dipole Antennas MFJ-16G01, $31.95.  
Strong, UV resistant, custom injection molded, hang hole, multi-band dipole ends. Accepts 1/4 or 3/8” diam. coax.

End Insulator for Multi-Band Dipole Antennas MFJ-16H02, $7.95.  
Two for multi-band doubles. 7”, (178 mm).  
Heavily serrated end insulators with 5/16” holes. Aluminum tube inserts in end holes for max loads.

TriPod Anchor Foot Braces MFJ-1905, $29.95.  
Ship Code A

Hold your tri-pod extra sturdy with these stainless steel anchor foot braces. 3-pack, stainless hardware fits MFJ or others. Ground secure with two spikes (not included). For high winds or uneven ground areas for safety. Fits any tripod leg up to 1½" dia. Drilling holes in tripod legs may be necessary.

MFJ 20/15/10/6 Meter Rotatable Dipole

Full-size high-efficiency 26’, 20/15/10/6M full legal limit rotatable dipole is super low-profile – almost invisible from across the street! 13’ turning radius, tiny 9 lb. weight fits on small roofs, apartments and condos – easily turned by a lightweight rotator like MFJ’s Hy-Gain® AR-303/500. Mount in the attic for your tri-band 20/15/10. It’s small enough to work DX!  
Operate 1.25, 15Wx46Hx3D inches.  
Operate the low bands on 80, 40, and 20 Meters with a true rotatable dipole that’ll blend in with the sky!  
Take advantage of the excellent propagation of the low bands during the low sunspot cycle.  
Focus your signal in your desired direction so you can work some real DX! Small, low profile. 

Entire antenna length is used on all three bands. 
The MFJ-1785 is constructed of 6063 T6 aircraft strength aluminum tubing with a solid center fiberglass insulator and handles 1500 Watts SSB/CW.  
The 80 and 40 meter end-loading coils are wound on fiberglass forms with Teflon® wire, and resonated with capacitance hats to ensure an extremely low-loss structure.  
Balun included! 33 feet wide. Requires a medium-duty rotator such as Hy-gain’s AR-40, $369.95.

Build your own wire antenna with these special MFJ parts . . .

Coax Center Insulator MFJ-16B01, $21.95.  
Built-in SO-239, super strong, UV resistant, custom injection molded, hang hole for inverted vees, wire tie points, lightweight.

Center Insulator for Dipole Antennas MFJ-16G01, $31.95.  
Strong, UV resistant, custom injection molded, hang hole, multi-band dipole ends. Accepts 1/4 or 3/8” diam. coax.

End Insulator for Multi-Band Dipole Antennas MFJ-16H02, $7.95.  
Two for multi-band doubles. 7”, (178 mm).  
Heavily serrated end insulators with 5/16” holes. Aluminum tube inserts in end holes for max loads.

TriPod Anchor Foot Braces MFJ-1905, $29.95.  
Ship Code A

Hold your tri-pod extra sturdy with these stainless steel anchor foot braces. 3-pack, stainless hardware fits MFJ or others. Ground secure with two spikes (not included). For high winds or uneven ground areas for safety. Fits any tripod leg up to 1½" dia. Drilling holes in tripod legs may be necessary.

MFJ 80/40/20 Meter Rotatable Dipole

A full legal limit efficient 80, 40, and 20-meter antenna that is shorter than a 20-meter dipole . . .

MFJ-1785  $424.95  Ship Code E

Operate the low bands on 80, 40, and 20 Meters with a true rotatable dipole that’ll blend in with the sky!  
Take advantage of the excellent propagation of the low bands during the low sunspot cycle.  
Focus your signal in your desired direction so you can work some real DX! Small, low profile.  
Entire antenna length is used on all three bands.  
The MFJ-1785 is constructed of 6063 T6 aircraft strength aluminum tubing with a solid center fiberglass insulator and handles 1500 Watts SSB/CW. 
The 80 and 40 meter end-loading coils are wound on fiberglass forms with Teflon® wire, and resonated with capacitance hats to ensure an extremely low-loss structure.  
Balun included! 33 feet wide. Requires a medium-duty rotator such as Hy-gain’s AR-40, $369.95.


d designed for 1.25, 15Wx46Hx3D inches.  
Operate the low bands on 80, 40, and 20 Meters with a true rotatable dipole that’ll blend in with the sky!  
Take advantage of the excellent propagation of the low bands during the low sunspot cycle.  
Focus your signal in your desired direction so you can work some real DX! Small, low profile.  
Entire antenna length is used on all three bands.  
The MFJ-1785 is constructed of 6063 T6 aircraft strength aluminum tubing with a solid center fiberglass insulator and handles 1500 Watts SSB/CW. 
The 80 and 40 meter end-loading coils are wound on fiberglass forms with Teflon® wire, and resonated with capacitance hats to ensure an extremely low-loss structure.  
Balun included! 33 feet wide. Requires a medium-duty rotator such as Hy-gain’s AR-40, $369.95.

Build your own wire antenna with these special MFJ parts . . .

Coax Center Insulator MFJ-16B01, $21.95.  
Built-in SO-239, super strong, UV resistant, custom injection molded, hang hole for inverted vees, wire tie points, lightweight.

Center Insulator for Dipole Antennas MFJ-16G01, $31.95.  
Strong, UV resistant, custom injection molded, hang hole, multi-band dipole ends. Accepts 1/4 or 3/8” diam. coax.

End Insulator for Multi-Band Dipole Antennas MFJ-16H02, $7.95.  
Two for multi-band doubles. 7”, (178 mm).  
Heavily serrated end insulators with 5/16” holes. Aluminum tube inserts in end holes for max loads.

TriPod Anchor Foot Braces MFJ-1905, $29.95.  
Ship Code A

Hold your tri-pod extra sturdy with these stainless steel anchor foot braces. 3-pack, stainless hardware fits MFJ or others. Ground secure with two spikes (not included). For high winds or uneven ground areas for safety. Fits any tripod leg up to 1½" dia. Drilling holes in tripod legs may be necessary.
MFJ Telescopic Fiberglass Masts

Lightweight Telescopic Portable Masts – 20-43 feet!

Pull out each section, twist to lock. Portable, temporary telescopic fiberglass masts extend to the sky! Select from 20 to 43 feet, 5 models.

Each mast collapses for travel portability. Fiberglass masts are used for super lightweight and extended height. Weight is not a factor – the largest mast, MFJ-1917 weighs just 7.7 lbs. Twist and lock sections allow quick pull-up and take-down.

Use while traveling, camping, hotels, hamfests, fire departments, AMAT, emergency or small, lightweight beam or vertical.

Put up a full-size inverted Vee, dipole or vertical in minutes. Get full size performance and the height you need to QSO with anyone, anywhere. Use multiple telescopic masts to construct other antennas like loops, quads, rotatable dipole even beams. The ideas are endless!

A. MFJ-1910, $89.95. 33 ft., light duty top tie ring.
B. MFJ-1911, $99.95. 30 ft., light duty top tie ring.
C. MFJ-1912, $129.95. 33 ft., heavy duty use.
D. MFJ-1916, $169.95. 34 ft., for heavy duty use.
E. MFJ-1917, $179.95. 43 ft., heavy duty top ring.

Antenna Balun/Unun, Center Insulators & RF Isolators

MFJ Hi-Permeability Ferrite Bead Baluns

Choose from 1:1, 4:1 or 9:1 baluns . . .

True Current Balun/Center Insulator forces equal antenna currents in dipole for superior performance.

Reduces coax feedline radiation and field pattern distortion – your signal goes where you want it! Reduces TVI, RF and hot spots in your shack. MFJ-1 balun uses high-permeability ferrite beads on high-quality RG-58 coax. Handles 1.5 kW, 1.8-5.4 MHz. Has Teflon® connectors, stainless steel wire with direct 14-gauge stranded copper wire connector to antenna. 1:1, 4:1 or 9:1 for dipole antenna uses.

For portable uses . . .

Made of heavy-duty weather protected PVC with Teflon® SO-239 connector, stainless steel eye bolts.

MFJ-918, $34.95. 1:1 balun. 2" diameter by 6 inches length.
MFJ-2918B, $54.95. 1:1 balun, 2.125" dia.x6 long.
MFJ-2920B, $74.95. 9:1 balun,1.8-30 MHz, 1.5 kW.

True 4:1 Current Balun/Center Insulator

MFJ-913/MFJ-919 are true current baluns/ antenna center insulators that transform 200 ohms to 50 ohms. Transmission line Transformer construction using 100 ohm characteristic impedance transmission line gives flat 160-10 Meter response. Low permeability ferrite cores, SO-239, stainless steel core with direct 14 gauge stranded copper wire connection to antenna. Heavy duty weather housing. MFJ-913 handles 300 Watts and is 4/7 Hz inches in diameter.

 MFJ-919 handles 1500 Watts, 3/4 W x3/8 H x21/4 D.

Stop RF from traveling on coax lines

MFJ-915 RF Isolator

Unwanted RF from traveling on the outside of your coax shield into your expensive transceiver. This unwanted stray RF can cause painful RF “bites” when you touch your microphone or volume control, cause your display or settings to go crazy, lock up your transceiver or even turn off your power supply. In mobile installations, stray RF can be even more drastic and harmful – it could cause your car to do funny things or even (tragically) blow your automobile’s computer system. Clear up these problems, plug an MFJ-915 RF Isolator between your antenna and transceiver and then relax. Heavy duty weather proofed PVC is just 5.5 W x2” diameter. Handles 1.5 kW, 1-8.3 MHz.
MFJ Antennas for Restricted Areas

**MFJ Super High-Q Loop™ Antennas**

Super easy-to-use! MFJ’s super remote control has Auto Band Select™. It auto tunes to desired bands then beeps to let you know. No control cable is needed. Fast/slow tune buttons and built-in two range Cross-Needle SWR/Wattmeter lets you quickly tune to your exact frequency.

Welded construction, no mechanical joints, butterfly capacitors, no rotating contacts, 1.050” diameter round radiator -- not a lossy thin flat-strip -- gives you highest possible efficiency.

Each plate of the tuning capacitor is welded for low loss, polished. Prevents high voltage arcing. Welded to radiator, nylon bearing, anti-backlash, limit switch, continuous no-step DC motor -- smooth precision tuning.

Heavy duty thick ABS plastic has ultraviolet inhibitor protection.

**MFJ-1786** $474.95, Like MFJ-1766 but covers 40-15M continuous.

**MFJ-1782** $434.95, Like MFJ-1786 has fast/slow tune controller.

**Box Fan Portable Loop**

MFJ-1780, $349.95.

The MFJ box fan portable loop antenna is about the size (2x2”) of a box fan, complete with handle. Covers 14-30 MHz. Includes MFJ-1782 remote control box with fast and slow tune buttons. Carrying handle.

**MFJ Compact Vertical Antennas**

Get 8 popular bands in one antenna!

You get a 1/4 Wave on HF, 80-6 Meters, a 1/2 Wave and 2.15 dBi gain on 2M, 5/8 Wave on 60 Meters and 2.5 dBi gain on 40 MHz. SWR 1.5:1 or less. 200 Watts PEP on SSB, 150 Watts on 60 M to 70CM on FM.

Inside the MFJ-1780 box fan loop

MFJ-2980, $109.95.

**Feather-Lite™ 80-6 Meter Antenna**

Self-supporting vertical antenna sets up in minutes, collapses to 3.8 feet -- perfect for RVs, vacations, field day.

This is more than a simple “flagpole”, this antenna includes a base-loading coil, balun, and counterpoise wires.

Stout 1/4” inch base supports twist-lock fiberglass sections -- telescopes to a massive 31 feet in literally just seconds.

Air-wound high-efficiency loading coil is continuously tapped, 3.5 to 7 MHz. No guess work or ground rods needed, connect 4 insulated 12 foot radial wires at the base of the self-supporting antenna.

Lab rated Guanella balun gives 30-dB common-mode suppression.

Use conductive eye-bolt at the top of the antenna mast to install wires for inverted “L” or “T” to enhance low frequency coverage.

Operation on 30/20/15/12/10/6M requires an ATU. 600 Watts PEP on SSB/CW.

MFJ-2980, $109.95.

Like MFJ-2982, but covers 40 through 6 Meters, smaller matching box.

**MFJ Portable Ground-Coupled Antenna Base**

A stable way to mount verticals, provides an effective ground. Place base in a desired location, push legs firmly into the ground. Attach radials for improved performance. Easily set-up or take down for stealth operation.

Stainless steel 2x2” base has folded and tapered stainless legs on corners. Supports 18 foot verticals. Two u-bolts included plus SO-239 and 3/8-24 threaded connectors.

MFJ-1919, $99.95. Portable heavy-duty tripod for mounting. Extra-wide base gives full support to 100 lbs.
**MFJ 160-6 Meter Antenna**

Operate all bands 160 through 6 Meters at full 1500 Watt with this self-supporting, 43 feet high performance vertical! Assembles in less than an hour -- low-profile blends in with the sky. Neighbors won’t even know it’s there!

*Entire length radiates to provide exceptional low angle DX performance on 160-20M and very good performance 17-6 Meters. Shorten by telescoping down for more effective low angle radiation on higher bands.*

*Wide-range automatic or manual tuner at your rig easily matches this antenna for 160-6M. There’s no physical tuning adjustments on antenna -- simply put it up! Optimized balun design allows direct coax feed with negligible coax loss (typically less than 2/3 db from 60 to 6 Meters, less than 1 db 160-80 Meters with good quality low-loss coax).*

*With just 2 square feet wind load, the MFJ All-band Ground Radial Kit improves efficiency on 160/80M for popular 43-foot all band vertical antennas by eliminating SWR-related coax and unun mismatch losses. Fed with a 1/4 unun, 43 antennas have a reasonable compromise SWR on 60-10 Meters. However, at 160/80M it is virtually impossible to match because of the low radiation resistance. If you are using low loss coax, you’ll lose power in coax and unun due to bad mismatches. Installs at base of the vertical. Significantly eliminate these losses and put 160/80M back within the tuning range of the tuner. Includes high-voltage insulated base tube, remote power injector with switch for 160/80M and off positions. 1.5kW. Matching box mounted in rugged, weather-resistant PVC. Fits at forty-three foot antenna base, just 3Wx16Hx3D inches.*

**1.5kW 80/160M high-efficiency Matching Network**

*Improves efficiency on 160/80M for popular 43-foot all band vertical antennas by eliminating SWR-related coax and unun mismatch losses. Fed with a 1/4 unun, 43 antennas have a reasonable compromise SWR on 60-10 Meters. However, at 160/80M it is virtually impossible to match because of the low radiation resistance. If you are using low loss coax, you’ll lose power in coax and unun due to bad mismatches. Installs at base of the vertical. Significantly eliminate these losses and put 160/80M back within the tuning range of the tuner. Includes high-voltage insulated base tube, remote power injector with switch for 160/80M and off positions. 1.5kW. Matching box mounted in rugged, weather-resistant PVC. Fits at forty-three foot antenna base, just 3Wx16Hx3D inches. Works on 80, 300 Watts on 160M. 3Wx11Hx3D inches.*

**600 Watts 80/160 Meter Matching Network**

*MFJ-2908, $269.95. Like AV-6110, but handles 600 Watts on 80, 300 Watts on 160M. 3Wx11Hx3D inches.*

**160 Meter Tuner Range Extender for 43’ Verticals**

*In/out. 31/2W x31/2Hx11D”. Use MFJ-9948RT/MFJ-9949RT.*

**MFJ 50-75 Ohm Transformers**

*Dipoles raised above close proximity to ground become 75-Ohm antennas. Tenttens as it is to correct this mismatch in the shack with a tuner, why not fix it at the source? These low-cost, no-tune 50-75 Ohm transformers can also be used to match equipment into low-loss 75-Ohm cable or tv coax, or reverse connect them to match 35-Ohm verticals and yagis. 1500 Watts PEP SSB/CW, ICAS 1.8-50 MHz. 100% shielded indoor. Low insertion loss (0.05 dB), large binocular ferrite core, silver plated Teflon® jacked db, large binocular ferrite core, silver plated Teflon® jacked db, large binocular ferrite core, silver plated Teflon® jacked db, large binocular ferrite core, silver plated Teflon® jacked db,*

**Universal Vertical Tilt Base**

*Unique design allows this tilt base to fit most verticals with or without base bracket. Pre-punched hole makes it easy to mount many types of verticals. Fits Hygain’s AV18VS/14VS/18AV/Q/860/640/620/AV-6160, Cushcraft R8/R9, MFJ-1796/1798/2990 and others with tube bases, masts to 2¼” OD. Mount one side of tilt base to the mast and the other to the base. Raise antenna up/dowen easily before severe weather by yourself — just walk it up or down. Ground radial holes. 1/8” thick aluminum. Includes (4) 2¼” U-bolts, (4) 1¼” U-bolts, mast saddles, stainless steel nuts/bolts.*

**Ladder Line, Twin Lead, Copper Wire, Installation Rope**

*A. 450 Ohm ladder line, 18l solid copper covered steel, insulated/spaced by heavy duty black polyethylene. Uniform spacing of conductors insures proper balance for balanced/dipole antennas. MFJ-18H050, 50 Ft., $24.95 MFJ-18H100, 100 Ft., $49.95 MFJ-18H250, 250 Ft., $99.95 Additional per foot, $0.40. B. 300 Ohm TV twin-lead, 28l stranded copper wire, insulated/spaced by heavy duty black polyethylene. For dipole, j-pole, loop antennas. MFJ-18T050, 50 Ft., $29.95 MFJ-18T100, 100 Ft., $49.95 MFJ-18T250, 250 Ft., $109.95 Additional per foot, $0.50. C. Copper Antenna Wire. Flexible 7-strand, 14g solid copper wire. Strong, lasting. MFJ-16G100, 100 Ft., $29.95 MFJ-16G220, 220 Ft., $49.95 Additional per foot, $0.30. D. Nylon or Polypropylene Rope. Black nylon (D) or Polyester dacron rope for wire antenna installations. UV resistant. MFJ-18N100, 100 Ft., $11.95 MFJ-18N220, 220 Ft., $21.95 MFJ-19C100, 100 Ft., $14.95 MFJ-19C250, 250 Ft., $34.95*
MFJ Low-Noise Receiving Loops

Pull weak signals out of static crashes, atmospheric, man-made and power line noise!
Hear 50 KHz to 30 MHz signals clearer than ever and stations you never knew were there. Power line noise and static just disappears.

MFJ-1886 drastically reduces noise and interference by receiving the magnetic field and rejecting the electric field. Figure 8 pattern with deep null can be rotated to completely eliminate interfering signals or greatly peak desired.

Excellent antenna and preamplifier balance gives a very deep null. An expensive antenna ro-tator can position this null to eliminate interference.

State-of-the-art Gall MMICs in push-pull give you a preamp with extra wide dynamic range, low IMD and 25 dB of low noise gain. You’ll get excellent performance on both strong and weak signals without overload.

Fully protected preamplifier -- magnetically coupled voltages to 40V and capacitively coupled voltages to 40V and noise figure: 1.7dB. Multi-coupler has four output ports and one input. +15dB IP3. Noise figure: 2dB. MFJ-1888 can work with MFJ-4113TR transmit/receive switch or biastee power injector.

New! MFJ-1888MC, $199.95. Hook up to four SDR, shortwave or other receivers to one antenna. +23 dB P1dB and +30dB IP3. Noise figure: 2dB. MFJ-1888 can work with MFJ-4113TR transmit/receive switch or biastee power injector. New! MFJ-1888MC, $419.95. Like MFJ-1886 but adds built-in T/R switch and Bias-Tee. New! MFJ-1888TR, $319.95. Like MFJ-1886 but adds built-in T/R switch and Bias-Tee. New! MFJ-1888, $419.95. Like MFJ-1886, covers 50 KHz to 34 MHz (reduced gain to 80 MHz), adjustable gain 1 to 12 dB, and also includes MFJ-1888MC remote multi-coupler controller. +23 dB P1dB and +30dB IP3. Noise figure: 2dB. MFJ-1888 can work with MFJ-4113TR transmit/receive switch or biastee power injector.

New! MFJ-1888MC, $199.95. Hook up to four SDR, shortwave or other receivers to one antenna. +23 dB P1dB and +30dB IP3. Noise figure: 2dB. MFJ-1888 can work with MFJ-4113TR transmit/receive switch or biastee power injector. New! MFJ-1888MC, $419.95. Like MFJ-1886 but adds built-in T/R switch and Bias-Tee. New! MFJ-1888TR, $319.95. Like MFJ-1886 but adds built-in T/R switch and Bias-Tee. New! MFJ-1888, $419.95. Like MFJ-1886, covers 50 KHz to 34 MHz (reduced gain to 80 MHz), adjustable gain 1 to 12 dB, and also includes MFJ-1888MC remote multi-coupler controller. +23 dB P1dB and +30dB IP3. Noise figure: 2dB. MFJ-1888 can work with MFJ-4113TR transmit/receive switch or biastee power injector.

Front and back of MFJ-1888MC controller. power “ON” LED indicator. Use 12 VDC or 110 VAC with MFJ-1312D, $17.95. RF tight all metal enclosure measures a compact 7¼Wx1½Hx5D inches.

MFJ HexBeam Antenna 3-Elements Per Band!
6 Bands: 20/17/15/12/10/6M . . . Full size Elements . . . 1.5kW +

Six Stacked Monobanders!

The only three element hexbeam in the world!
Run with the big guns and pay far far less!
MFJ-1856 is 6 individually stacked monoband yagis -- on a single feedline!
Each yagi is optimized for maximum performance. You’ll get the same high gain and nearly equal front-to-back ratio at far, far less than half the price. Works great as low as 20 feet.

Full size elements, no lossy traps or coils, wide bandwidth and low swr across each band gives best possible performance -- no tuner needed. Single feedline lets you instantly jump to where the action is on any band! Never switch antennas or tune -- save time, reliability.

QSO on one band and monitor many other bands with multiple receivers or SDRs and a multi-coupler! It weighs only 30 pounds and has a short 17 foot turning radius. Small windload, light weight and tiny footprint -- tun with hy-gain’s CD-4511. Instead of an expensive tower, all you need is a guyed push-up-pole.

Exceptionally strong symmetrical fiberglass construction withstands harshest weather. Lessens the effect of rain, wind, snow and ice -- reliable DX.

See www.mfjenterprises.com for full performance specifications.

2-Elements per band HexBeam

MFJ-1846, $529.95
MFJ-1846, $739.95

6 Bands: 20/17/15/12/10/6 Meters, 2-elements per band, full legal limit. 25 lbs. Turning Radius: 11 feet.

MFJ-1848, $739.95

6 Bands: 20/17/15/12/10/6 Meters, 2-elements per band, full legal limit. 25 lbs. Turning Radius: 11 feet.

MFJ-1856, $689.95

6 Bands: 20/17/15/12/10/6 Meters, 2-elements per band, full legal limit. 25 lbs. Turning Radius: 11 feet.

MFJ-1888, $419.95

50 KHz to 34 MHz (reduced gain to 80 MHz) Receiving Loop with adjustable gain 1 to 12 dB and multi-coupler remote control.
MFJ Cobweb Antenna

For restricted spaces, 6-Bands: 20/17/15/12/10/6 Meters...

Now Includes 6 Meters!!!

Restricted space spoiling your operating fun? MFJ Cobweb puts your call back on the map!

This six-band (20, 17, 15, 12, 10, 6 Meters) full half-wave Cobweb Antenna is perfect for restricted space or portable operation. Sky-gray fiberglass spreaders and nearly invisible wire elements (flat 9x9x1/2 feet square, 8 pounds), blend in with your surroundings while standing tough against nasty weather.

Outstanding performance! Horizontally polarized for less local noise pickup plus solid gain over verticals will allow you to work DX easily -- even on QRP. Omni-directional. No radials needed! Works great at low heights. Low SWR is due to MFJ’s exclusive Spider-Match™ broadband network. Use lightweight TV hardware to chimney, balcony, mast mount.

Low in cost, BIG on performance. MFJ Cobweb Antenna turns your space problem into a huge stacks of QSLs from far away places.

MFJ-1836HK, $69.95. Converts MFJ-1836 to MFJ-1836H to handle 1500 Watts.

MFJ-1836HK34, $129.95. Add-on kit adds 40/30 Meters to MFJ-1835/1835H and MFJ-1836/MFJ-1836H cobweb antennas.

1/2-wave, 6-Band Verticals

MFJ-1796, $319.95

Only 12 feet high with tiny 24” footprint!

Mount anywhere -- ground level to tower top -- apartments and small lots.

Perfect for field day, DXpeditions, camping.

Efficient end-loading, no lossy traps. Entire length always radiating.

Full size 1/2 wave on 2/6M.

High power air-wound choke balun eliminates feedline radiation.

Adjusting one band has minimum effect on others.


MFJ-1796W, $319.95.

WARC version for 12/17/30/60M.

MFJ-1792, $204.95.

80/40M, 33 ft. Requires guying/radials.

MFJ-1793, $224.95. Like MFJ-1792, but full size 20 Meter 1/4 Wave radiator also. Covers 80-40-20 Meters.

1/2 Wave, 10 Band Verticals

MFJ-1799, $424.95

80-2M Verticals

Highly efficient end-loading 1/2 Wave vertical covers 10 bands:

75/80, 40, 30, 17, 15, 12, 10, 6 Meters.

Requires no radials, no lossy traps. Features efficient end-loading.

Only 20 feet high and has a very manageable 7-foot footprint so you can easily mount it in a small area or patio.

MFJ-1799 is low profile so it can blend in with trees and the sky.

High power air-wound choke balun eliminates feedline radiation. MFJ-1799 features automatic bandswitching, a low radiation angle, omni-directional, 1500W PEP.

Built-to-last. Incredibly strong solid fiberglass rod and large diameter 6063 T-6 aircraft strength aluminum tubing are in the main structure. Efficient high-Q coils are wound on tough low loss fiberglass forms with Teflon® wire.

MFJ-1799X, $369.95. Like MFJ-1799, but covers 40-2 Meters.

7-Band SkyMaster 40-10M Verticals

MFJ-1797, $349.95

SkyMaster® vertical antenna covers all your favorite HF bands: 10, 12, 15, 17, 20, 30 and 40 Meters and handles 1000 Watts PEP. It is best these days to be inconspicuous and MFJ gives a super small footprint.

It’s the perfect antenna for roof-mounting, ground mounting, off your patio deck, or to blend into the trees. It is super lightweight, just 7.5 lbs. with the whip and only 23.5 feet.

With the 14.5 foot whip you get more efficiency on 40 Meters. No ground or radials are needed. Super low profile without the whip. Use mast size up to 1/4 inches.

MFJ-1797L.P, $319.95. Like MFJ-1797 but without the 14.5 foot whip section. Less efficient and narrow bandwidth on 40M. Weighs 6 pounds, only 9 feet tall for super low profile.

www.mfjenterprises.com • Toll-free 1-800-647-1800
MFJ Antenna Window Feedthrough Panels

Weather-proof window feedthrough panels bring HF/VHF/UHF antennas, balanced lines, random wire antennas, ground, DC/AC power and Rotator/Antenna Switch Cables into your hamshack without drilling through walls!

- Inside/outside stainless steel plates bond all coax shields together to ground connection. Stainless steel ground post brings outside ground connection inside.
- Seven models to choose from:
  - **MFJ-4603, $94.95. Universal Window Feedthru Panel.** Four 50 Ohm Teflon® SO-239 coax connectors lets you feed HF/VHF/UHF antennas at full legal power limit.
  - **MFJ-4601, $64.95.** Like MFJ-4603, with N-connectors.
  - **MFJ-4601N, $84.95.** MFJ-4601 with N-connectors.
  - **MFJ-4602, $74.95.** Our most popular model. 3 SO-239 Teflon® coax connectors feed HF/VHF/UHF antennas. High voltage ceramic feedthru insulators bring 450/300 Ohm balanced lines into your hamshack. Has Ceramic feed-thru insulators for long random wire. Stainless steel ground post.
  - **MFJ-4604, $104.95. For coax fed antennas.** 6 high quality Teflon® SO-239 connectors for HF/VHF/UHF coax fed antennas and a stainless steel ground post. 1.5 kW.
  - **MFJ-4605, $169.95.** Like MFJ-4601, with N connectors.
  - **MFJ-4600, $84.95. Balanced Line/Coax Feedthru Panel.** 4 sets of ceramic feedthroughs and two SO-239 connectors. MFJ-4604, $104.95. **MFJ Weather-Sealed CableThru® Window Panel.** 5 Adaptive Cable Feedthrus™ for connectors up to 1"x1/4" and 3 for UHF/N size connectors. Adapts to virtually all cables used in ham radio. Seals out weather.

- MFJ-4605, $169.95. **All-Purpose FeedThru/CableThru™ Window Panel.** Combines MFJ-4603 and MFJ-4604! Gives every connection you’ll ever need without drilling holes!

**Bring cables thru eave of your house**

- MFJ Weather-Proof Antenna Feedthrough Panels mounts in your window sill. Lets you bring all your antenna connections into your hamshack without drilling holes through walls. Simply cut customizes it for any window up to 48 inches. Use horizontally or vertically. Real Western Red Cedar wood is naturally resistant to rot, decay and insects -- lasts longer, maintenance-free. Pitch and resist heat for a wide range of beautiful finishes or leave it in its naturally beautiful raw finish. Edges sealed by weather-stripping. Seals and insulates against all weather conditions. All are 3/4Dx3/4Hx48W", except for MFJ-4605, which is 3/4Dx7/8x48W".

- Inside/outside stainless steel plates bond all coax shields together to ground connection. Stainless steel ground post brings outside ground connection inside.

**MFJ AdaptiveCable™ Wall Plates**

- MFJ AdaptiveCable™ Wall Plates let you bring nearly any cable -- rotator, antenna switch, coax, etc. -- through walls without removing connectors. Pass cable connectors up to 1"x1/4" inches. Sliding plate adjusts hole size to weather-seal virtually any size cable. Rubber grommet seals out rain, snow, other adverse weather. Complete kit includes 18 gauge stainless steel plates for each side of wall, sliding plates, rubber grommets, weather stripping and mounting screws. Models for one, two and four cables.

- **MFJ-4611A (Four Holes) $39.95.**
  - Ship Code A
  - MFJ-4611B (Two Holes) $29.95. Ship Code A
  - MFJ-4611C (Single Hole) $16.95. Ship Code A

**Exclusive Adaptive Cable Feedthru™**

Brings in rotator/antenna cables, etc. without removing connectors (up to 1"x1/4" in). Adapts for any cable size.

**Seals out rain, snow, adverse weather.**

- **MFJ-4602, $74.95.** Stainless steel panels together and drains away static charges. Stainless ground post brings outside ground connection inside.

**Stainless ground post.**

- Stainless ground post bonds inside/outside stainless steel panels together and drains away static charges.

**Weather-proof window feedthrough panels**

- Weather-proof window feedthrough panels bring HF/VHF/UHF antennas, balanced lines, random wire antennas, ground, DC/AC power and Rotator/Antenna Switch Cables into your hamshack without drilling through walls!

**Inside View**

**Outside View**

**MFJ AdaptiveCable™ Wall Plates**

- **MFJ-4603, $94.95.** Universal Window Feedthru Panel.

**Outside View**

**Inside View**

- **MFJ-4600, $84.95.**

---

**FMJ... The World Leader in Ham Radio Accessories**
* Items D are broadcast style variables and are used in MFJ Analyzers and Air Variable Capacitors

High Voltage Air Variable Capacitors

Item D has two capacitance sections. Used in Ameritron high power linear amplifiers. Items B have delrin insulated shaft. Dual-gang capacitors, capacitance specified is total capacitance. Items E are butterfly tuning capacitors. Used in MFJ loop tuners, have no rotating contacts, super low losses.

Amplifier high-voltage Variable Caps

Shaft couplers for rollers, switches 725-3105-1, $0.95

3/4 Diameter by 1/16 length, Nickel plated brass Shaft Coupler for 1/4 inch diameter shaft has two 10-32 hex socket set screws.

MFJ Air-Core™ Roller Inductors

Exclusive heavy duty AirCore™ roller inductors are cores that can’t burn up! Ultra high-Q, lowest loss, highest efficiency, highest power handling of any inductor in ham radio. Self-Resonance Killer™ keeps po-tentially damaging self-resonances away from your operating position. Large, self-cleaning wiping contact gives excellent low-resistance without contact arcing or burning. Solid 1/4” brass shaft, self-align bearings for smooth rotation. 12 gauge tin-plated copper, silver plated wheel/shaft. Fiberglass frame.

MFJ Air-Wound Coils

MFJ air-wound coils constructed with a solid rigid round acrylic rod and embedded tin-plated solid copper wires. Super strong and superbly crafted. MFJ winds them so they stay wound. Select MFJ air-wound coils for mobile and portable antennas, antenna tuners, amplifiers and other radio projects.

MFJ high power RF rotary switches

MFJ high power switches have 3-8/32 bushing and 1/4 inch round shaft. *D, E, and F are switches that are specially designed for amplifier hand switching. MFJ high power switches have 3-8/32 bushing and 1/4 inch round shaft.
**Select MFJ hard-to-find Components for Repair/Homebrew Projects**

### Amplifier Power Supply Electrolytic Caps

- High capacitance, computer grade aluminum can electrolytic caps
- Long life, low ESR and can handle high ripple currents
- Thermal-Pak extended cathode foil construction assures cool operation
- Great choice for high-capacity amplifiers, power supply and energy storage applications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Price</th>
<th>Value (uF)</th>
<th>WVDC</th>
<th>Ripple (I)</th>
<th>Size (D x L) inches</th>
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</thead>
<tbody>
<tr>
<td>270-6220-7B</td>
<td>$5.44</td>
<td>220</td>
<td>400 V</td>
<td>1.7 x 1.1&quot;</td>
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</tr>
<tr>
<td>270-7122-7</td>
<td>$9.55</td>
<td>1000</td>
<td>250 V</td>
<td>2 x 2.2&quot;</td>
<td></td>
</tr>
</tbody>
</table>

### RF Ceramic Doorknob Capacitors

- B.10-10989D, $29.95.
  - Wire. 1.5 kW, 1.8-30 MHz. Used in MFJ-989D tuner.
  - Pre-wound 200 Watts and 1.5kW Baluns

### High-Voltage Vacuum Relays

- These vacuum relays are ideal for amplifier and power supply applications. They have snap-in PCB terminals.
- A.408-8100, $19.95. Kilovac 505FJ238, DPST-NO, contact form, 2A, 5kV rating between contacts, current is 10A DC or 5A RF, 12 VDC coil voltage and 500 Ohm coil resistance.
- B.408-8500, $14.95. Wabash 1017-20-1, DPST, one pole normally open, 1/8" diameter x .625" long.

### Power Relays

- Special relays designed for amplifier TR switching, in-rush current protection and other high current applications.

### Slug Core Tuning Tool

- 965-6204, $3.00. Plastic tuning stick for adjusting slug cores. Has .1 inch hex end, 7/16" long. Fits all Ameritron tube amplifier input coils.
- MJF-TC12, $69.95. This Precision designed mechanical deluxe turns counter is used with roller inductors, vacuum capacitors, air variable capacitors, etc. Cannot be used with roller inductors, vacuum capacitors, air variable capacitors, etc.
- Precision 5-digit counter is enclosed in a dust-free plastic casing. Counts to 9999.9 turns. Counter is coupled to a 1/4" shaft at right angles with bevel gears.
- Assembly includes 1/4 inch shaft coupler and a 1/8" fast-turned crank knob.

### Pre-wound 200 Watts and 1.5kW Baluns

- B. 10-1009D, $29.95. Bifilar wound balun, 2-stack 2/" ferrite toroid cores with high-voltage wire. 1.5 kV, 1.8-30 MHz. Used in MFJ-9890D tuner.

### LED/Incandescent Replacement Light Bulbs

- Miniature DC Panel Meters
  - Quality, compact and inexpensive panel meters. Clear, removable cover, raised window for recessed front panel mounting. Solder lug terminals for meter movement, lamp. Linear moving coil movement.

### Ferrite and Iron Powder Toroidal Cores

- MFJ-249/B: $6.96.
- MFJ-259/B: $10.23.
- MFJ-269/B: $19.10.
- MFJ-289/B: $26.80.
- MFJ-299/B: $35.20.
- MFJ-309/B: $42.90.

- Unique, two-modes-in-one Cross-Needle design makes these meters ideal for use in RF amplifiers, power supply and energy storage application.
- 220, 250, and 400 VAC: 200uA/750 Ohm
- 450V: 1mA/120 Ohm 750 mA plate current.
- 0-2.0 kW Fwd power, 0-500W Rf power, 0-1500VDC, 0-50VAC
- 0-200mA Fwd power, 0-60mA Rf power, Sigma: 45R2C112-12 VDC
- 0-300 fwd power, 0-60 isolator power, SWR. "L" model is LED backlit.
- 0-500 fwd power, 0-60 isolator power, SWR, Curves. "Y" model is LED backlit.

- Ferrite and Iron Powder Mixes
  - T-200-2 Iron Powder Mix 2
  - T-106-2 Iron Powder Mix 2
  - T-68-2 Iron Powder Mix 2
  - T-37-2 Iron Powder Mix 2

- Used in tuners and wattmeters
- Scale, used in tuners and wattmeters
- 0-100 general purpose scale
- 0-2.0 KW Fwd power, 0-500W Rf power
- 0-100 general purpose scale
- 0-35 ALC, 12V, SWR
- 0-30 Pwr, 0-300 Pwr
- 0-30 Pwr, 0-300 Pwr
- 0-30 Pwr, 0-300 Pwr
- 0-2.0 KW Fwd power, 0-500W Rf power
- 0-35 ALC, 12V, SWR

- Ferrite and Iron Powder Mixes
  - T-200-2 Iron Powder Mix 2
  - T-106-2 Iron Powder Mix 2
  - T-68-2 Iron Powder Mix 2
  - T-37-2 Iron Powder Mix 2

- Unique, two-modes-in-one Cross-Needle design makes these meters ideal for use in RF amplifiers, power supply and energy storage application.
**Select MFJ hard-to-find Components for your Homebrew Projects**

**Amplifier Power & Filament Transformers**

Specially designed for our most popular HF amplifiers. Has unique build boost winding to adapt to low or high line voltage conditions.

*Use of electrical steel laminate makes these transformers highly efficient, resulting in low loss and producing less heat. Well constructed for low noise and coated with varnish. 110/220 V AC. Usable for 50 or 60 Hz.*

<table>
<thead>
<tr>
<th>Part No. #</th>
<th>Price</th>
<th>Volt</th>
<th>Descrip</th>
<th>Current</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJ-719F-0500C-2</td>
<td>$0.95</td>
<td>110/220 V</td>
<td>Filament choke form. 1” dia. by 5” long.</td>
<td>35W cont.</td>
<td>1 lb.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.95</td>
<td>Filament choke form. 1” dia. by 5” long.</td>
</tr>
</tbody>
</table>

*Amplifiers sells Eimac® tubes for amateur radio, broadcast and industrial uses. Call for a quote!*

**A.** MFJ-719F-0500C-2, $0.95. 3-500Z, 3CX1500A7/8877 tube plate. 

**B.** MFJ-719F-0500C, $0.50. 3-500Z, 3CX1500A7/8877 tube plate.

**C.** MFJ-719F-0500C-1, $0.50. 3-500Z, 3CX1500A7/8877 tube plate.

**D.** MFJ-719F-0500C-1, $0.50. 3-500Z, 3CX1500A7/8877 tube plate.

**E.** MFJ-719F-0500C-1, $0.50. 3-500Z, 3CX1500A7/8877 tube plate.

**Non-Inductive Resistors . . . Ideal for Dummy Loads**

<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4.95</td>
<td>Ceramic plate cap for 811A, 572B tubes.</td>
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</table>

<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
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<tbody>
<tr>
<td>$8.28</td>
<td>Ceramic plate cap for 811A, 572B tubes.</td>
</tr>
</tbody>
</table>

**Feedthru Insulators**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp, insulated.

**Feedback Insulators**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp.

**tube sockets**

<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
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<tr>
<td>$6.50</td>
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<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
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<tbody>
<tr>
<td>$142.60</td>
<td>Ceramic plate cap for 811A, 572B tubes.</td>
</tr>
</tbody>
</table>

**tube plate caps & heatsinks**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp, insulated.

**Tube Glass Chimneys**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp, insulated.

**Amplifier Plates and Filament Chokes**

<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>$9.00</td>
<td>Filament choke ferrite red. 5” dia. by 4” long. Used in 10-1515/1.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price</th>
<th>Descrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>$11.95</td>
<td>RF Choke, 2.5 mH, 300 mA, phenolic core, 1/2Dx1/2L.</td>
</tr>
</tbody>
</table>

**Cooling Spacers**

- **A.** 79C-0500C, $0.50. Ceramic spacer, 1/4"OD, 1/2" long, 6-32 threaded both ends.
- **B.** 79C-0500C-2, $2.50. Same as A except 1/2" OD.
- **C.** 78D-1000, $1.71. Delrin spacer, 1/2” dia. by 1” long, 8-32 threaded holes on both ends.

**High output box fans and blowers**

- **A.** 406-0003, $18.88. 80x86x8.5 mm. 60 RPM, 28 CFM, 30 dbA noise level, sleeve bearing. 120 VAC, 60 Hz, 1/4” wire lead. 
- **B.** 406-0004, $24.95. 350 RPM, 28 CFM, 35 dbA noise level, sleeve bearing. 120 VAC, 60 Hz, 1/4” wire lead.
- **C.** 406-0005, $34.95. 500 RPM, 28 CFM, 35 dbA noise level, sleeve bearing. 120 VAC, 60 Hz, 1/4” wire lead.
- **D.** 406-0006, $44.95. 650 RPM, 28 CFM, 35 dbA noise level, sleeve bearing. 120 VAC, 60 Hz, 1/4” wire lead.

**Feedthru Insulators**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp, insulated.

**HT Adapter Cable**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp, insulated.

**Feedthru Insulators**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
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**Feedthru Insulators**

- **A.** MFJ-719F-0500C-2, $2.95. 5-way binding post, black, 30 Amp, insulated.
- **B.** MFJ-719F-0500C-2, $2.95. 5-way binding post, red, 30 Amp, insulated.
Select MFJ hard-to-find Connectors, Plugs, Adaptors...

MFJ 2.4 GHz, WiFi Yagi Antenna

15 dB, 16-element WiFi Yagi antenna greatly extends range of 802.11b/g WiFi signals 32 times over an isotropic radiator. Turns unusable or slow WiFi into solid, fast connection. Highly directional, minimizes interfering signals. Works with 802.11b/g or 2.4 GHz device. Built-in N-type connector, tripod screw mount. Rearbottom holes for wall or desk/shelf mounting. Use vertically/horizontally. Precision punched aluminum, 18Wx2"Hx1 1/4D", 2 1/2 lbs.

WiFi Yagi Antenna-to-Computer Cable MFJ-5606SR, $29.95.

Reverse SMA male to N-male, 6’ RG-174 coax line.

HDTV Outdoor Antenna System

Super active outdoor antenna gives high quality far-reaching (up to 120 miles) reception for UHF/VHF TV, FM radio. Parabolic receives focuses reception, built-in high gain booster. Low noise circuit, 360° rotation, manual or infrared remote control system. VHF: 40-300 MHz, UHF: 470-890 MHz, F-connector output. Twistlock mount, mast not included.

64 Feet, 11-Section Telescopic Aluminum Mast

This 11-section multi-purpose aluminum telescopic pole can be used for vertical antennas or as a mast, pictured right. Use as a portable mast for field day and camping trips, temporary for emergency set-ups, or for permanent installation for wire antennas or for lightweight beams and vertical antennas.

MFJ-1965 is 64 feet fully extended so it can really get you up in the airwaves and just 6 feet fully collapsed (without clamps) so it can be handled easily while portable and stored in smaller locations. Guying is required if the mast is extended beyond 30 feet, especially in a permanent situation. Top section is 685 inches OD, so can handle most antennas. Bottom section is a hefty 2” ODx.120 wall. 24 lbs.

Base Mount for Fiberglass and Aluminum Masts

MFJ-1900, $74.95. Complete base assembly kit includes mounting plate, insulators, hardware, SO-239, etc. for fiberglass and aluminum mast installations. Fit up to 2.0 inches OD masts. Perfect companion for your 64 foot aluminum telescopic mast -- it will hold it steady and safely.

MFJ . . . The World Leader in Ham Radio Accessories
**MFJ QuickStudy™ Ham Radio License Guides**

New Question Pools!

MFJ Publishing guarantees that you’ll pass your written exam on your first try . . . if you don’t pass we’ll refund your money in full* . . . you can’t lose!

*Send copy of receipt, proof of failure to MFJ within 30 days of failing and we will refund the purchase price of your MFJ QuickStudy™. Limit 1 per license class.

<table>
<thead>
<tr>
<th>MFJ-3211-Tech</th>
<th>MFJ-3213-General</th>
<th>MFJ-3215-Extra</th>
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<tbody>
<tr>
<td>Technician</td>
<td>Technician</td>
<td>Technician</td>
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<tr>
<td>MFJ-3211</td>
<td>MFJ-3213</td>
<td>MFJ-3215</td>
</tr>
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<td>Quick Study™</td>
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<td>License Guide</td>
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<td>License Guide</td>
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<tr>
<td>and MFJ guarantees that you’ll pass the written exam on your very first try or you get your money back.*</td>
<td></td>
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</tr>
<tr>
<td>What is MFJ’s Quick Study™ concept? The objective is to pass the exam and get your license with a minimum amount of study time so you can start enjoying the hobby right away.</td>
<td></td>
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</tr>
</tbody>
</table>

Each MFJ license guide has all of the exact questions given on the written exam. Each question on the exam has a multiple choice answer. But why take the extra time to study the wrong answers? It’ll just add to the confusion and doesn’t help you pass the exam. MFJ gives you only the correct answers.

When you take the exam the answer jumps out at you -- no confusion, nothing to clutter the mind. It’s an instant correct answer because you only studied the right answer.

Study the material thoroughly a few times, pass the test and enjoy the hobby of ham radio -- it couldn’t be simpler.

QuickStudy™ License Guides are available for all classes: Technician, General and Extra.

MFJ-3211, Tech, MFJ-3213 General, MFJ-3215, Extra.

**MFJ QuickStudy™ Flash Cards . . . the fastest way to a ham license!**

Extra class quickly, efficiently and very simply. It’s the right way to study for an exam. Just ask college students all over America and they will tell you that flash cards are the way to go -- time tested and proven way to ace an exam! MFJ highlights the KEY words in the question and answer. QuickStudy™ Flash Cards come in a handy cardboard box that keeps your cards pressed and ready for the next study session. Just read the question and the right answer.

When you get ready to take a test, just turn them over and check yourself. The complete question and multiple choice of answers are on the back.

This is what you will see on the test. And then you will understand how the answer just sticks out at you. Technician . . . MFJ-3221, $31.95

General . . . MFJ-3223, $35.95

Extra . . . MFJ-3225, $49.95

General/Extra Set . . . MFJ-3226, $74.95

Best Deal! Buy all 3 sets . . . MFJ-3229, $94.95

MFJ QuickStudy™ Flash Cards will take you from no license all the way to a ham license! The complete question and multiple choice of answers are on the back.

When you take the exam the answer jumps out at you -- no confusion, nothing to clutter the mind. It’s an instant correct answer because you only studied the right answer.

Study the material thoroughly a few times, pass the test and enjoy the hobby of ham radio -- it couldn’t be simpler.

QuickStudy™ License Guides are available for all classes: Technician, General and Extra.

MFJ-3211, Tech, MFJ-3213 General, MFJ-3215, Extra.

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**MORE GREAT MFJ SELECTIONS**

**MFJ-3507, $21.95.** Doug DeMaw, W1FB, gives a wealth of info on circuits, including transmitters and receiver fundamentals, mixers, more.

**MFJ-3506, $21.95.** Legendary textbook from Doug DeMaw, W1FB, emphasizes the practical aspect of ferromagnetic core material.

**MFJ-3504, $21.95.** FET Principles, Experiments and Projects. By Ed Noll, W3FQJ.

**MFJ-3509, $21.95.** Ladder Crystal Filters are required in many different electronic applications. Generous references, John Pivinchny, N2DCH.

**MFJ-3303, $15.95.** "73 Verticals, Beams, and Triangle Antennas". By Ed Noll, W3FQJ. Theory, building techniques. Learn from one of the great masters.

**MFJ-3302, $16.95.** Solid State QRP Projects. By Ed Noll, W3FQJ.

**MFJ-3301, $15.95.** Troubleshooting Antennas and Feedlines. Search it out! Ralph Tyrell, W1TF.

**MFJ-3200, $21.95.** CW Essentials. By L.B. Cebik, W4RNL. Concise, clear chapters in Vol.1

**MFJ-3305, $21.95.** Easy-Up Antennas by Ed Noll, W3FQJ. How to build and how to put up fantastic, fully-tested practical designs. Wire, dipole, verticals, how and when to use a balun, etc. Great knowledge.

**MFJ-3226, $74.95**. Best Deal! Buy all 3 sets . . . MFJ-3229, $94.95

**MFJ-3302, $15.95.** 73 Dipole & Long Wire Antennas by Ed Noll, W3FQJ. The Classics! Build, test, and play with these classic antenna designs.

**MFJ-3303, $15.95.** 320 pages, 37 concise chapters. This great book gives you the underlying theory, powerful antenna building techniques, special antenna building projects and much, much more!

**MFJ-3304, $21.95.** 30 different electronic kit projects, schematics, part placement. Transceivers, receivers, filters, shortwave, spy equipment, ham toys, some kid friendly, etc.
ARRL License Study Guides & Books

ARRL-5977, $29.95. ALL you need to become an Amateur Radio Operator! Every page presents information you will need to pass the exam and become an effective operator. Easy-to-understand “bite-sized” sections. Use this book to pass the 35 question Technician license test. Includes the latest question pool with answer key. The ARRL Exam Review is now online for convenient study. Designed for self-study and classroom use. Intended for all newcomers and instructors, and school teachers. #0871
ARRL-5977QA, $17.95. Tech Q&A #0864.

ARRL-5919, $29.95. Upgrade to General and enjoy the thrill of the world-wide HF bands! All you need to pass your General class exam! All the exam questions with answer key. Detailed explanations for all questions, FCC rules for when you upgrade and get on-the-air. Pass the 35-question General Class exam -- The exciting world of HF, DX and meeting new friends all around the world awaits you! #0307
ARRL-5919QA, $17.95. General Q&A #0338

ARRL-5920, $29.95. Achieve the highest level in Amateur Radio! Pass the 50-question Extra Class exam and be the toast of your ham club! All the exam questions with answer key are contained in this book. Detailed explanations for all questions including FCC rules. Being “EXTRA” takes you to the final pinnacle of Ham Radio and affords more operating privileges, plus the distinction of being one of the top dogs! #0451
ARRL-5920QA, $17.95. Extra Q&A #0567

ARRL-5961, $30.95. Covers Raspberry Pi 2 (model B). Full color throughout, widely illustrated, aimed at those new to Pi. Get various aspects of computing and programming. #1022
ARRL-5958, $22.95. Proper Station Grounding is Important! We show you how to make sure your station follows communications standards for lightning protection and National Electrical Code. #0059

MFJ . . . the World Leader in Amateur Radio Accessories! 89
X5105 - **$599.95**

**Built-in Automatic Tuner . . . 3800 mAH Battery Pack . . . 160-6 Meters!**

Here are some of the X5105's advanced features:
- Large back-lit multi-function LCD display screen
- Transmit on all US bands, 160 through 6 meters including 5 MHz
- Receive with gap-free coverage from 500 kHz to 54 MHz
- Operate on all modes (USB, LSB, CW, AM, FM, and Digital)
- Selectable IF bandwidth (500-Hz CW, 2.4-kHz SSF, 6-kHz AM)
- Built-in DSP, noise blanker, and notch filter to suppress interference
- Robust 600-mW AF output with high-pass and low-pass audio EQ
- Deluxe multi-function keypad-microphone included
- Low-profile controls, heat sink, and desktop stand all built in
- Powerful 3800-mAH battery for extended "off-the-grid" operation
- More antenna choices using the built-in auto-tuner (ATU)
- Scan-feature displays band activity and plots antenna SWR
- Built-in Data Modem with CAR and AFC tracking, onscreen display
- Built-in auto-keyer with three memory channels plus CW trainer
- Adjustable SSB with speech-processing compressor
- Regular firmware updates are free, on-line, any time
- 6%WX3/HX1/D", 2 lbs w/battery
- Back-lit low-profile control switches conveniently spaced for fingers and a highly-visible 3.6" LCD display.
- Unique counter-tuning tuning knob with an unusually wide range of tuning rates make DX splits easy to set up
- Wide-range RIT has precision digital readout for surveying adjacent channels. Power adjustable 0.5 to 5 Watts in calibrated half-Watt increments is perfect for operating QRP, running miler-per-watt tests, or setting correct drive level on external amplifiers.
- You even get a built-in data modem with both CAR (carrier) and AFC (frequency) tracking, onscreen spectrum display. Also plots SWR graphically.
- Sensitive pre-amp boosts weak signals, front-end attenuator reduces overload, noise blanking (NB) for impulse noise, digital noise reduction (DNR) for atmospheric noise, variable notch filtering (NF) for pesky heterodynes, adjustable AGC-Rate (AGC), built-in CW filter, plus variable high and low-pass audio-EQ filtering. There's lots of spare audio-power for driving an external speaker.
- For CW get variable-speed automatic keying, 3 programmable message channels. For SSB contesting, adjustable speech processor scores extra points.
- Deluxe electret keypad microphone. Mic also built-into for walkie-talkie use.
- Power X5105 from a regulated 9-15V 3A DC source or go "off grid" for up to 8 hours using a powerful built-in 3800-mAH Lithium-ion battery pack. Monitors battery condition, controls recharging.

**Factory tested, complies with FCC rules, and has MFJ's one year warranty.**

**X5105 Accessories**
- **X5105 Control** $65.95
- **XPA-125** 125 Watts Amp, 1.8-54 MHz for Xiegu transceiver, other QRP rigs. FCC type accepted.
- **MFJ-7760** $5.95. BNC-to-JACK (female), BNC-to-BNC (right angle for MFJ-single and multi-band antennas on X5105.
- **MFJ-7708** $3.95. BNC to SO-239 Adapter.
- **MFJ-1899T**, $79.95. 80-6 Meter Antenna, 25 Watts. 52 inch telescopic whip unscrews from 12 inch base/coil.
- **MFJ-7752**, $59.95. Multi-Band Antenna 50 ft. 50 watts.
- **MFJ-7753**, $59.95. 6 meter tropo antenna 50 ft. 50 watts.
- **MFJ-7712**, $59.95. 432 MHz antenna 50 ft. 50 watts.
- **MFJ-7715**, $59.95. 230 MHz antenna 50 ft. 50 watts.

**XG90 - $449.95**

**20 Watt All Mode transceiver with built-n ATU, 1.8” color LCD, SDR architecture . . .**

**New!**

**XG90**

**Built-in Automatic Tuner . . . 3800 mAH Battery Pack . . . 160-6 Meters!**

Here are some of the XG90's advanced features:
- Extra portable all mode 20-Watt transceiver with a built-in automatic antenna tuner and an SDR architecture covering 0.5-30 MHz
- Features high-performance front-end broadband ESC preselector, 1.8” high-contrast color TFT LCD with a +24K bandwidth spectrum and waterfall display
- All Modes: SSB/CW/AM/FM and a software defined narrowband filter (SSB: 2.4 kHz, CW: 300 Hz). Detachable front panel that lets you flexibly put the transceiver out-of-sight while the display is still highly visible
- Wide-range built-in automatic antenna tuner lets you tune virtually any antenna to a low SWR fast. Initial tuning time is 12 seconds, return tuning is 2 seconds. It is also a very detailed interface. The baseband I/Q output allows it to interface with any external device handling baseband I/Q, including a soundcard or PC-based application such as a XDT1 panadapter.
- SDR structure based on 24-bit data size at 48kHz sampling rate. Provides excellent transmit and receive performance. Highly configurable for an enjoyable time.
- Get the new XG90 today and have a brand new extreme ham radio adventure!

**Specifications:**
- Sensitivity: 0.25uV@12dB
- Dynamic range: 96dB
- Suppression: $50dB
- Audio output: 5W@4O
- Standby: 350mA@Max
- Spurious suppression: $50dB
- Carrier suppr: $50dB
- Sideband suppr: $50dB
- Xmit current: 8A@Max
- Voltage: 12-15V DC
- Operating temp: 0-45°C
- Freq. Stability: ±2ppm
- Size: 4.1/8Wx4.1/8Hx3/4D”
- Weight: 2.3 lbs.
Premier Coaxial Cable . . . Made with passion!

Do it for engineering excellence and superior attention to detail in the best European tradition! State-of-the-art manufacturing facility specializes in premium-grade products for most demanding installations.

Advanced M&P product features include:

- Exclusive 24-spool braiding machines lay down 50% more conductor crossovers per inch than normally available. This innovation yields lower leakage specs and exceptionally tight bend-radius performance.

- PE-coated copper-foil shielding delivers much greater conductivity, physical flexibility and industry-leading leakage suppressed -105 dB or more. Noise is a huge problem, and we go the extra mile to lock it out!

- M&P's exclusive foam-expanded three-layer PE dielectric seals out moisture to prevent loss and to ensure low SRL across the cable's entire operating range for years to come.

- Select from 99.99% pure electrolytic annealed bare copper center conductors for fixed applications, or go with annealed copper-clad aluminum when weight is a factor (Airborne Series).

- Choose between highly flexible UV-resistant PVC jacketing for easy handling or trample-resistant UV protected PF for more difficult environments. Robust, flooded, dual-jacketed cables are also available for direct-burial or above-ground runs in difficult terrain.

- M&P's catalog is a valuable 44-page reference that gives all the info you’ll need to find the best solutions for your site. Detailed products, data tables, frequency charts, help guide you.

- Products Available Now in the US through MFJ and its coast-to-coast network of dealers:

### M&P versus LMR Isolation, Copper Foil and PE Dielectric Comparison

<table>
<thead>
<tr>
<th>Feature</th>
<th>M&amp;P Cables</th>
<th>LMR (R) Cables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Isolation</strong></td>
<td>M&amp;P Cables have greater than 105 dB of isolation shielding.</td>
<td>LMR (R) cables have greater than 90 dB of isolation shielding</td>
</tr>
<tr>
<td><strong>Copper Foil Shielding</strong></td>
<td>M&amp;P uses copper foil with Polyethylene coating and copper outer braid which does not set up galvanic corrosion problems over time. PE coating also reduces the chance of the copper foil breaking when flexing during install and over time.</td>
<td>LMR (R) uses aluminum tape and tinned copper. Galvanic corrosion can form over time between aluminum and tin plating that can cause deterioration of the aluminum, tin and tin plated copper wire. Deterioration can cause noise to be generated in the cable.</td>
</tr>
<tr>
<td><strong>Polyethylene Dielectric</strong></td>
<td>M&amp;P Foam PE Dielectric: High pressure dry nitrogen gas, physical injection dielectric allows high expansion, high velocity factor up to .87 and resists aging well. Foam between 2 protective layers, bonded Polyethylene greatly prevents moisture incursion.</td>
<td>LMR (R) Foam Dielectric: Closed cell, dry nitrogen. Multi-laminar aluminum composite tape bonded dielectric is a second moisture barrier unlike M&amp;P's superior triple layer skin foam skin dielectric.</td>
</tr>
</tbody>
</table>

LMR (R) is a registered trademark of Times Microwave Systems.
Airborne-5, $0.59/ft:
- .200" Double shielded, braidable. Can replace LMR®600UF, RG58C/U.

Airborne-10, $1.09/ft:
- .400" Double Shielded, lightweight. Can replace LMR®400UF, RG213.

Ultraflex-7, $0.89/ft:
- 287" double shielded, flexible, lightweight. Can replace LMR®3000UF, RG213, RG58C/U, RG8X.

More M&P Cables Available... Alum.: 75% Bare Cu. with clear jacket.
UF-7C, $0.98/ft
UF-5C, $0.89/ft

Hyperflex-10, $1.49/ft:
- .400" Amazing flexibility. Top performances at high frequencies. Replaces LMR®400UF, RG213.

Ultraflex-13, $2.99/ft:
- .500" Light, extremely flexible. Double shielded. Replaces LMR®600UF.

M&P Connectors
M&P Connectors are used for all jumper cables. Super high-quality connectors are weather-sealed, have very low SWR and will not alter the impedance of the cable. N-Male, N-Female and SO-239s are available. Refer to website for add’l selections.
FREE Shipping on all YouKits products! See full specifications www.mfjenterprises.com

New for 2018, the HB1B MK-4 QRP CW transceiver

Take QRP operating to the next level with full QSK break-in plus impressive hardware and firmware upgrades. The HB1B MK-4 is 100% "plug-and-play, comes fully assembled. FREE shipping on all YouKits!

YHB-1B $299
- Transmits on 40, 30, 20, 17' and 15 Meters
- Receives CW/SSB/AM
- Continuous Coverage reception, 5.9 to 22 MHz
- Crystal filter with 400-Hz and 3-kHz passbands
- LCD screen shows frequency, S-units, Po, SWR, mode, voltage, and bandwidth
- Rock-solid DDS VFO has 10-Hz, 1-kHz, and 100-kHz tuning steps.
- Wide-range RIT with 10 and 100 Hz steps for working DX splits
- Ultra-simple operation, up at half power consumption!
- 4-5 Watts RF output power with 12-V external supply
- 30 memory channels
- Built-in CW auto-keyer selects straight key or paddle, 5-40 WPM
- 100-mW 8-Ohm AF output drives headphones or external speaker
- External supply voltage: 9-14 VDC
- Current: 70 mA receive, 800 mA transmit
- Compact case: 5½Wx3½x1½ in.
- Weighs only 13.3 oz (minus battery)
- Charger included. Lithium-ion battery option also available.

(*expect reduced sensitivity on 17 Meters due to shared filtering)

Pocket-sized and fully self-contained, the upgraded HB1B MK-4 delivers big-rig CW performance you can hold in the palm of your hand.

Now is the time for road trips, camping and exploring the great outdoors. Tuck one in your pack and make this year's vacation a special event!

FG-02 Antenna Analyzer
FG01 has a larger color screen (3.6x3.1 cm), Impedance-scan, at half power consumption! Ultra-simple operation, up to 14 hours of operation (optional 18650 battery), 1-60 MHz, 10-channels memory captures, recalls data. Powerful +13 dBm test signal overrides local interference!

Specifications: Displays: graphic SWR plots, impedance-magnitude plus alpha-numeric data. Functions: Scanned plot or single-frequency. SWR: 1:1-5.1. Range: 0-300 Ohms. Center-Frequency Steps: 1, 10, 100 kHz, 1 MHz. Scan Width: 10 kHz-50 MHz in 12 steps. Output: +13 dBm. 3½Wx2½x1½". 55 lbs.

SK-1A 40-Meter QRP SSB/CW Transceiver
YSK-1A $218
Cover phone and CW with a wide range of features including built-in auto keyer, wide-range RIT for DX splits, 5-9.8 MHz receiver, 5-W. Assembled.

Specifications: Screen: Backlight LCD, Displays: Frequency, Memory, WPM, Key Type, Mode, ±RIT. Transmit: 7.0-7.3 MHz, VFO: DDS, 10-Hz, 100-Hz, 1-kHz, 100-kHz tuning steps. RIT: 10-Hz with 100-Hz steps. Output: 5W PEP@12V, 8-9W PEP@13.8V. Memory: 8 Ch, Keyer: 5-40 WPM man/auto, Sidelobe: 700-Hz. Mic: Electret, PTT. Voltage: 10-15 VDC. Current: 60-mA. TX: 8-A@12-V. TX: 7.3 MHz, VFO: 7.0-7.3, 10.1-10.15, 14.0-14.35 MHz. Receives: 5.9-16.0 kHz. VFO: DDS, 10-Hz, 100-Hz, 1-kHz, 100-kHz steps. RIT: 10-Hz or 100 Hz steps. Output: 5W (12-V). Keyer: 5-40 WPM, man/auto. Sidetone: 700-Hz. Voltage: 8-15 VDC. Battery: Optional 18650. RX Current: 70-mA. TX: 9A @12-V. Size: 3½Wx1½x1½", 62 lbs.

EHK1C 3-Band QRP CW XCVR
YEC-1C $218
Covers 40/30/20M with general coverage receive, 5W output. Ultra-compact "bullet-proof" case, fully assembled, ready QSO! Delivers "pro" quality CW wherever you go!


DP-1 Digital QRP Power and SWR Meter
YDP-1 $159
For the serious QRP operator. This YOUIKITS YDP-1 Digital power/SWR Meter provides an alpha-numeric and graphic power output and SWR measurements from 1-60 MHz on a high-contrast LCD display. In the shack or on-the-go, it's ultra-compact and self-powered (optional). Measures 5-mW to 25W. Tiny handheld size makes it easy to carry to the field and doesn't take up much room at your operating position. Use it to make tests on your equipment in the shack or up on the mountain.

YCW-40 $129
This high-tech 40-Meter CW transceiver packs a powerful 5-Watt punch. A true QRP rig, but has a high-contrast digital display with a super stable DDS VFO. All memory channels and a built-in automatic electronic keyer. All of this and more is packed on a tiny PC board, soldered, fully assembled, and tested to its specifications. You just provide your own special enclosure to make this radio you will be proud to use at home, on-the-road or mountain-topping. Start your YOUIKITS adventure today and make radio fun again.

YTJ-5A 20-Watt Four Band SSB/CW Transceiver
YTJ-5A $49
This high-performance multimode QRP transceiver covers 80, 40, 20, and 15 Meters. You get a fantastic 20 Watts output power to really reach out and grab big time QSOs. A diode ring mixer handles super strong signals while delivering .3 uV sensitivity. You can also receive 2-30 MHz for solid copy. Start your ham radio SSB/CW adventure today with this outstanding transceiver from YOUIKITS, the manufacturer of ham radio fun.

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the World’s High Power Leader!

From classic Tube Amplifiers . . .

To modern Solid State Amplifiers . . .

We are your world’s high power leader!
Ameritron

600 Watt solid state 160-6 Meters!

600 Watt solid state 160-6 Meters Amp… Radio automatically switches bands…

ALS-606S is only 4 dB below 1500 Watts full legal limit -- less than an S-unit!

ALS-606S

$1999
with switching power supply

Suggested Retail

ALS-606

$2099
Transformer Power Supply

600 Watts PEP and 500 Watts CW -- be heard, talk to anybody! No tubes to baby, no tuning, this is solid state rugged -- just turn it on, select your favorite band on your transceiver and sit back, relax and operate.

ALS-606S and ALS-606 are SWR/thermal protected and extremely quiet. Has large lighted peak reading Cross-Needle SWR/Wattmeter, front panel ALC control, an operate/standby switch, multimeter and much, much more! Call your favorite dealer for a super low price!

Just don't take it from us... here's what they say about our solid state station amplifier:

"...the amplifier faulted only when it was supposed to. It protected itself from our bone-headed, sleep-deprived band changing..."

"I found myself not worrying about damaging this amplifier. It seems quite capable of looking out for itself... Kudos to Ameritron."

"couldn't hear any noise at all from the SPS (switching power supply) on vertical or quad..."

"I came to greatly appreciate the size, weight, reliability and simplicity of this solid state amplifier."

"The ALS-600S makes it possible to pack a transceiver and a 600 Watt amplifier, that together weigh less than 30 pounds."

All from QST Magazine, 2005.

An Inside Peek... Back of ALS-606S.

ARI-1306 allows full control of the Ameritron ALS-1306 and ALS-606/ALS-606S amplifiers via USB or through the internet.

Let's you operate your amplifier from a remote location as if you were sitting right in front of it. Operate your amp on vacation, business trips, from exotic locations, even at work! Don't tell the boss about your fancy new contraption though.

Get full control of band selection (manual or automatic), standby/operate switch, ALC adjustment, power on/off and forward/reflected calibration.

Allows monitoring of digital forward and reflected power along with a bar-graph, PA module's voltage, current and temperature, band selection, SWR occurrence, etc.

Standby and operate switching, ALC voltage, power on and off and SWR/PA fault occurrences. The ARI-1306 is divided into two units. One is installed inside of the amplifier. The second is a stand-alone interface box. This box will connect to the remote jack located on the rear of the amplifier. The interface box includes a firewall protection circuit and secured access to the station devices. A single point of communications with the internet allows for secure and safe operation. The interface can allow multiple users to have operating controls or "monitor only" access.

ARI-1306 has USB, ethernet, amplifier power ports, on/off switch, & power, ethernet and amplifier status LEDs. 6W x 1/4" x 1/4" x 1/4". Must be factory installed, call 1-800-323-8211 for details.

ARI-1306 Amplifier Remote Interface gives full control

ARI-1306 $57995

New!

Back of ARI-1306 shows USB and ethernet jacks and the amplifier input with the radio interface cable. The box is powered separately. Prewired interface cables are available in this catalog.
Ameritron 1200W Output Solid State Amplifier

1200 Watts PEP Output, Instant bandswitching, no tuning, no warm-up, SWR protected, 1.5-22 MHz... Quiet Variable-Speed Cooling System... PEP Forward/Reflected Metering... PA Balance / ALC Metering and LED Indicator... Front Panel Band and Error LEDs...

$2899

AMERICAN ALS-1300 is a solid state near legal limit™ FET no-tune Amplifier. Get instant bandswitching, no tuning, no warm-up, no tubes to baby and no fuss!

Reliability of the ALS-1300 is insured by using eight rugged MRF-150 power FETs. Ameritron’s eight FETs are mounted on the dual heavy duty heat sink. They are properly arranged to spread out the heat over a large surface, something that other amplifiers using a single power device cannot do. Some FETs actually are a transistor fails they all have to be replaced.

The ALS-1300 RF deck operates at 50 Watts for efficient, low distortion linear RF power service. It’s cooled by a whisper quiet cooling fan. Fan speed is regulated by temperature sensors, assuring minimum noise for adequate cooling.

ALS-1300 runs up to 1200 Watts of clean SSB output power (just 100 Watts drive gives you the full rated 1200 Watts output) for continuous coverage between 1.5-22 MHz. 10/12 Meters available to licensed amateurs with an optional kit (MOD-10MK, $39.95). Must present FCC license at time of sale.

The operator-friendly layout fits nearly any station configuration. The attractive desktop amplifier unit weighs only 22 pounds. Compact 10Wx6½Hx18D inches.

SWR Protection prevents amplifier damage if you switch to the wrong band, use the wrong antenna or have a high SWR. Over-power protection enables if output forward power or reflected power exceeds a safe level. Output power is automatically reduced to prevent amplifier damage by controlling ALC to exciter.

LED illuminated Cross-Needle SWR/Wattmeter lets you read SWR, forward and reflected peak power simultaneously. You also get ALC, SWR, PA balance and current metering with LED backlight. An Operate/Standby switch lets you run “barefoot”, but you can instantly switch to full power if needed.

Front-panel ALC control! This exclusive Ameritron feature lets you adjust output power on the convenient front panel display.

You also get front panel Operation, Band, and error LED indicators like reflected power and bandwidth errors.

Enjoy 1200 Watts of no tune Solid State power with the Ameritron ALS-1300 amp.

ALS-1300 Power Supply

The ALS-1300 is powered by a 50 VDC switching power supply. Comes with pre-wired cable to plug into the ALS-1300. This hash-free fully-regulated switching power supply is only 12 lbs. and measures a compact 10Wx6x2Hx9.5D in. It can be placed conveniently out-of-the-way at your operating station. Output is 50 VDC at 50 Amps to the ALS-1300. Wired for 220 VAC, selectable to 110 VAC. Draws less than 25 Amps at 110 VAC; 12A at 220 VAC.

Let your rig auto bandswitch your Solid-State Ameritron Amps

Ameritron’s ARI-500 Amplifier Radio Interface reads band data from your Icom, Yaesu, Kenwood, Elecraft or Alinco rig so you can remotely and automatically band switch your Amplifier. Get instant bandswitching, no tuning, no warm-up, no ALC metering and LED Indicator... Front Panel Band and Error LEDs...

$1299

with serial numbers above 13049 requires the ARF-500K. Works with ALS-1300, ALS-600, ALS-800S amplifiers and older ALS-600 and ALS-600S amplifiers with the remote A/B jacks on the front panel.

Precision HF+6 Meter peak-reading SWR Wattmeters

Flat Mount Mobile SWR/Wattmeter

AWM-35B/BH $169.95

Suggested Retail

Precision electronics lets you read true peak or average power in two power ranges. Has “High SWR” LED. Flat-Mount watt meter measures 5Wx3/H x1½”D. remote sensor is tiny 3½/Wx2½/H x2”D. Uses 9V battery or 12 VDC.

AWM-35BH has 300 Watt low, 3 kW high meter scale.

AWM-35B/BH has 100W low, 1000W high meter scale.

Base Station 1500 Watt SWR/Wattmeter

We painstakingly designed the AWM-30B to make accurate, precise power measurements. Designed-inaccuracy is the result of a carefully designed ham shack directional coupler, an accurate active peak reading circuit and a precision d’Arsonval meter movement. Ameritron’s AWM-30B reads true-peak or average power on a large LED lighted three inch Cross-Needle meter. Handles 1500 Watts, 1.8 to 60 MHz. Has 3000/300 Watt ranges. Reads forward and reflected power and SWR on highly visible dual cross-needle meter movement. Remote sensor with cable lets you conveniently place sensor. Battery saver turns unit off with no RF applied. Uses 12 VDC or 9 volt battery (not included). Beautiful wrap-around custom metal cabinet looks great in your shack. Compact 4½/Wx4/Hx5½D inches.
No tuning, no fuss, no worries -- just turn on and operate . . . Incredibly low $1799 includes AC power supply, 600 Watts output, continuous 1.5-22 MHz coverage, instant bandswitching, no warm-up, no tubes to baby, fully SWR protected, extremely quiet, very compact . . .

600/S are amateur radio's RF power FETs -- gives unequaled solid state performance.

Get instant bandswitching, no tuning, no warm-up, no fuss! Gives 600 Watts PE PEP Output power and 500 Watts CW with continuous coverage 1.5 to 22 MHz; 10/12 Meters with easy-to-install optional kit. $29.95 plus shipping. Must present FCC license at time of sale.

SWR Protection prevents amplifier damage if you switch to the wrong band, use the wrong antenna or have a high SWR. Over-power protection enables if forward or reflected power exceeds a safe level. Power is automatically reduced to prevent amplifier damage.

Standby switch lets you adjust your output power on the convenient front panel. You also get front panel Transmit, ALC, and SWR LED indicators. A 12 VDC output jack lets you power low current accessories. Enjoy 600W of no tune Solid State.

If gets even better than this! Do you want to place even the main ALS-600 amplifier out of the way? Do you want the ALS-600 to change bands automatically when you change bands on your transceiver? You have these options. A pair of RJ45 remote control interface jacks on the amplifier permits it to be controlled either manually by the ALS-500RC Remote Control Head, or automatically by the ARI-500 Automatic Band Switch. Automatic Band Switch reads band data from your transceiver and automatically changes the ALS-600 bands as you change bands on your rig.

Heavy Duty Linear Power Supply (included with ALS-600) features:
- Massive choke input filter greatly improves regulation and reduces peak AC line current.
- AMERITRON's exclusive Multi-Voltage Power Transformer lets you compensate for stressful high line voltage and performance robbing low line voltage.

Step-Start Inrush Protection stops damaging inrush currents and extends the life of your power supply components.

Meter monitors voltage and current of 50 VDC line. Extremely quiet fan. Very compact 9\4Wx6\4Hx12D inches -- can be placed conveniently out of the way.

Switching Power Supply (included with ALS-600S) works with all ALS-600 amplifiers. Extremely lightweight, just 10 lbs. Superb regulation, very low radiated noise. Measures a compact 9\4Wx6\4Hx12D inches. Great for portability! Purchase ALS-600SPS separately for $649.95.

Just don’t take it from us . . . here’s what “they” say about our solid state station amplifier: “. . . the amplifier faulted only when it was supposed to. It protected itself from our bone-headed, sleep-deprived band changing . . .”

“I found myself not worrying about damaging this amplifier. It seems quite capable of looking out for itself . . . Kudos to Ameritron.”

“couldn’t hear any noise at all from the SPS (switching power supply) on vertical or quad . . .”

“I came to greatly appreciate the size, weight, reliability and simplicity of this solid state amplifier.”

“The ALS-600S makes it possible to pack a transceiver and a 600 Watt amplifier, that together weigh less than 30 pounds.”

All from QST Magazine, 2005.

AMERITRON Inrush Current Protector stops damaging inrush current

Protects your amplifier, tubes and power supply components . . .

RF Filter reduces harmonics

Use with rigs or amps that are producing unwanted harmonics. Frequency selects switches to 1 of 6 different ranges, 1.5-30 MHz, 1000W SSB input power, 600W CW or 400W RTTY, SWR <1.3:1 on all bands. SO-239s. 5\4Wx3\4Hx9\4D in.

Get power of 2 amplifiers with Ameritron's Splitter/Combiner!

Use ASP-200 and ACB-1000 together for a combined output power of 2 amps! ASP-200 splits radio's output into 2 outputs to drive 2 amps of equal power. ACB-1000 combines outputs of two amps for a combined amplifier output. Maintains 50 Ohm output for antenna.

Amps of equal power like two ALS-500M or two ALS-300 can be used. ASP-200, $74.95. Handles power to 200W. SO-239, 4\4Wx1\4Hx2\4D

ACB-1000, $159.95. Handles power to 1.5 kW. SO-239s. 6\4Wx3\4D.
AMERITRON mobile no tune Solid State Amp
500 Watts, Instant bandswitching, no tuning, no warm-up, SWR protected, 1.5-22 MHz... ARI-500 Amplifier Radio Interface reads transceiver band data -- automatically bandswitches ALS-500M amp... ALS-500RC Remote Head gives total remote control!

Typically 60-70 watts in gives full output. ON/OFF switch bypasses amplifier for "barefoot" operation. Extremely quiet fan comes on as needed. Excellent harmonic suppression, push-pull output, DC current meter. 13.8 VDC/80 Amps. Super-compact 3½x9x1½ inches. 7 pounds.

Ameritron’s ALS-500M solid state mobile amp gives you 500 Watts PEP SSB or 400 Watts CW output! Covers 1.5-22 MHz. (10/12 Meters with MOD-10M, $34.95 kit, requires FCC license). Mail with order to Ameritron.

Virtually indestructible! Load Fault Protection eliminates amplifier damage due to operator error, antenna hitting tree branches, 18-wheeler passing by. Thermal Overload Protection disables/bypasses amp if temperature is excessively high. Auto resets.

Let your rig auto bandswitch your Solid-State Ameritron Amps

Ameritron’s ARI-500 Amplifier Radio Interface reads band data from your Icom, Yaesu, Kenwood, Elecraft or Alinco rig so you can remotely and automatically bandswitch your Ameritron Solid State Amps (ALS-500M/ALS-600/S/ALS-1300).

Now you can mount your amp out-of-the-way in your trunk, at the back of your motorhome or elsewhere and operate with just this tiny box at your station control.

Works with ALS-500M serial numbers above 13049 (below 13049...see above).

ARI-500 $129.95 (Suggested Retail).

ARI-500 Cables...$27.95

Model # Transceiver
RF-13D Icom 706, 7000, 718
RF-7DI Icom ACC2, 7 pin Kenwood RS232/32100
RF-DB97DK Kenwood TS440, compatibles
RF-DB98MK Kenwood TS480, compatibles
RF-DH9Y FT-847 CAT
RF-8MY FT-847 Tuner Port
RF-8MY2 FT-857D, 897D, FT-1000MP
RF-10MY Yaesu FT-450/550/1200
RF-8DY Yaesu with 8 pin Data
RF-DB15X Yaesu FT DX3000
RF-DB15HE Elecraft (BCD)
RF-DB97DK Elecraft (BCD)
RF-USB6000, *99 RJ45-USB Cable, Flex 6000

Typically 60-70 watts in gives full output. ON/OFF switch bypasses amplifier for "barefoot" operation. Extremely quiet fan comes on as needed. Excellent harmonic suppression, push-pull output, DC current meter. 13.8 VDC/80 Amps. Super-compact 3½x9x1½ inches. 7 pounds.

Ameritron’s heavy duty 75 Amp switching power supply is excellent for powering your HF mobile amplifier or your HF and VHF/UHF rigs and accessories.

Great! For Ameritron’s ALS-500M Solid State HF Amplifier and others with a power requirement of up to 75 Amps.

SPS-75MV delivers 75 amps maximum and 70 amps continuously without even flexing its muscles. Input voltage selectable for 110 VAC or 220 VAC. Highly regulated. Load regulation better than 1%. Ripple voltage is less than 12 mV peak-to-peak at rated load.

No RF hash! Ameritron’s exclusive HashFilters™ Filtering System eliminates RF hash that plagues other manufacturer’s switching power supplies. Fully protected -- SPS-75MV has Short-Circuit, Overload and Over-Temperature protections. Also has an auto restart after a fault. Has power on and Fault LED indicators.

Attractive front panel features several options for connecting your gear: One pair of 5-way binding posts, two pair of Anderson PowerPoles™ one pair of high-current 5-way binding posts, a cigarette socket for mobile accessories, and two pairs of quick connects.

Whisper quiet fan speed increases as load current increases -- keeps components cool and protected.

An automatic battery charging feature provides charging current of 20 Amps maximum, 5 Amps continuous, and 30 mA trickle charge.

Measures 9½Wx5¼Hx9½D inches. Weighs just 10.5 lbs., so it’s still light enough to carry on DXpeditions, camping trips and vacations. No more hauling around big, bulky conventional power supplies that can give you a hernia!
AL-811...600 WATTS...$999!

More hams use Ameritron AL-811 amplifiers than any other amplifier in the world... The AL-811 has earned a worldwide reputation for legendary quality, flawless performance, proven reliability and superb customer service...

AL-811

$999
Suggested Retail

Ameritron’s AL-811 linear amplifier gives you plenty of power to bust through QRMs!

Get a quiet desktop linear so compact it’ll slide right into your operating position — you’ll hardly know it’s there... until QRMs set in and you can conveniently plug it into your nearest 120 VAC outlet — no special wiring needed.

You get three tough 811A transmitting tubes, extra heavy duty power supply, all HF band coverage, pressurized ventilation, tuned input, dual illuminated meters, adjustable ALC and much more for an incredible $999!

The First 600 Watts makes the difference

The AL-811 gives you 600 Watts PEP output -- that’s nearly 2 full S-units over your barefoot rig. That could mean the difference between hearing, “You’re Q-S armchair copy” and “Sorry, can’t copy you, too much QRM.”

Don’t stand aside while the big guns steal your DX. You’ll log those stations first.

All band, all mode Coverage

AL-811 covers all HF bands. No compromise on WARC and most MARS — you get a 100% rated output.

Operate AL-811 on all modes. Get 600 Watts output PEP SSB and 500W output CW. Get 300 Watts on continuous carrier modes like RTTY, SSTV, and FM.

The low cost 811A tubes resist failure because... First, they’re constructed with widely spaced elements that minimize the chance of elements touching and causing a short -- even if the plate gets hot enough to melt. Second, they use a directly heated thoriated tungsten filament cathode that prevents the electron emitting layer from instantly stripping off -- even if a mistrigger causes severe overload. The Ameritron AL-811 is Volts no load. That’s excellent high voltage regulation!

Rectifier diodes are rated for a massive surge current of 200 amps -- won’t blow even if you accidentally short the high voltage supply.

Wire wound, 7 Watt, 50 K Ohm equalizing resistors safely protect each filter capacitor -- not 2 Watt, 100 K Ohm carbon composition resistors that can open and cause filter capacitors to explode or fail. Ameritron’s AL-811 power supply is built tough so you get peak performance year after year.

Tuned input provides excellent load for any rig

A Pi-Network tuned input provides a 50 Ohm load for your rig. Even fusible solid state rigs can deliver their full drive to the AL-811.

Low loss slug tuned coils -- tunable from the rear panel -- let you optimize performance. High quality low drift tuning safe, precise, easy.

A quiet blower pressurizes the cabinet with a large volume of air flow. It keeps the 811A tube temperature well below the tube manufacturer’s rating -- even with a key down carrier at 400 Watts output without the overwhelming noise of oversized fans.

Two illuminated LED meters

Two illuminated LED meters give a clear picture of operating conditions so you can feel right away if something is wrong. Long-lasting LEDs.

The Grid Current meter continuously checks for improper tuning. The other meter switches between high voltage and plate current to warn of abnormal conditions.

Exclusive Adapt-A-Volt™ power transformer

Too high of line voltage stresses components, causes them to wear out and fail. Too low line voltage causes a “soft tube” effect -- low output and signal distortion.

Ameritron’s exclusive Adapt-A-Volt™ power transformer has a special buck-boost winding that lets you compensate for stressful high line voltage and performance robbing low line voltage. Your amplifier lasts longer and gives peak performance -- regardless of line voltage. Plus much, much more...

An Operate/Standby switch lets you run barefoot, but you can instantly switch to full power if needed. A transmit LED tells you when your rig is keying your AL-811. A 12 VDC keying relay makes it compatible with all solid state and tube rigs.

Back-pulse cancelling diode protects rig keying circuit. Shielded RF cabinet. One year limited warranty.

Compact 16 Dx13”Hx8”Wx8”H. 30 lbs. UPS shipbable. Transformer installed, wired for 120 VAC. Draws 8 amps at 120 VAC. Export model is AL-811X wired for 240 VAC.

AMERITRON...the world’s high power leader!
Only the AMERITRON AL-811H gives you four fully neutralized 811A transmitting tubes. You get absolute stability and superb performance on higher bands that can't be matched by un-neutralized tubes.

AMERITRON mounts the 811A tubes vertically -- not horizontally -- to prevent hot tube elements from sagging and shorting out. Others, using potentially damaging horizontal mounting, require hard-to-find 811A tubes to retard harmful sagging and shorting.

Powerful 20 CFM computer grade fan -- not an open frame phonograph motor -- draws in cool air to pressurize the cabinet and efficiently cool your 811A tubes for an extra long life.

You also get efficient full-size heavy duty tank coils, computer grade capacitors, heavy duty high silicon core power transformer, slug tuned input coils, operate/standby switch, transmit LED, ALC, dual meters, QSK compatibility with QSK-5 option and much more!

**SPECIFICATIONS:**

- **Output Power:** 800 Watts PEP, 600 Watts CW.
- **All Band Operation:** Covers 160-15 Meters including WARC bands. Can be user modified for 12 and 10 Meters.
- **Four 811A Tubes:** Uses four rugged, fully neutralized low cost 811A PA tubes.
- **Vertical Tube Mounting:** Prevents shorting of tube filament/grid, prolongs tube life.
- **Fully Neutralized:** Improves stability and performance on higher bands.
- **Input Tune Circuit:** Adjustable rear panel slug tuned input circuit.

**Get the AL-811HD with 572B tubes . . . $1419**

AL-811HD gives you the AL-811H with four 572B tubes installed. Get a higher power tank circuit and grid overload protection. Grid Overload Protection protects the tubes from excessive grid current due to mistuning and it protects against excessive drive power. Four 572B tubes give you more plate dissipation than a single 3-500Z tube. AL-811HD gives you 800 Watts output in SSB and 600 Watts for continuous duty in CW, RTTY, SSTV and AM operation.
**AMERITRON Doubles Average SSB Power**

**AL-80B kilowatt output desktop linear can double your average SSB power output with high-level RF processing...runs cooler because its 3-500G tube completely turns off between words.**

**Ameritron’s AL-80B**

Kilowatt output desktop linear doubles average SSB power output with high-level RF processing utilizing our exclusive Dynamic ALC™.

Get cooler operation because the AL-80B’s exclusive Instantaneous RF Bias™ completely turns off the classic 3-500G tube between words. Saves hundreds of watts wasted as heat.

Get a full kW PEP output from a whisper quiet desktop linear. It’s a compact 8 1/4"x14"x15 1/2" and plugs into your nearest 120 VAC outlet. Covers all bands 160-15 Meters, including WARC and MARS (10/12 Meters modifiable; FCC license required).

You get 800 watts output on CW, 500 watts output on RTTY, an extra heavy duty power supply, genuine 3-500G tube, nearly 70% efficiency, tuned input, Pi/Pi-L output, inrush current protection, multi-voltage transformer, dual cross-needle meters, QSK compatibility, two-year warranty, made in the USA, plus more!

**Dynamic ALC™ doubles average SSB power**

Exclusive Dynamic ALC™ gives high-level low-distortion RF processing. More than doubles average SSB power for up to 6 dB improvement in intelligibility, than doubles average SSB power for up to 6 dB improvement in intelligibility, giving you four separate indicators that monitor your operating conditions -- PEP forward power, PEP reflected power, SWR, Grid Current, Plate Current, Plate Voltage and ALC.

Operate/Standby switch lets you run barefoot, but can instantly switch to full power if needed. Has transmit LED; 12 VDC, 200 mA accessory jack; 12 VDC keying relay for solid state and tube type transceivers; tough Lexan over-aluminum front panel. Ameritron Two-year warranty.

Weights 48 lb. Power required: 120 VAC, 12A. Made in the U.S.A.

**SPECIFICATIONS:**

- **Frequency Coverage:** 1.8, 3.5, 7, 14, 21 MHz and WARC bands. Export/User modified models include 10/12 Meters.
- **Input Circuit:** Adjustable Pi-Network, VSWR 1.3:1 or less at resonance.
- **Output Circuit:** Pi/L/Pi-Network.
- **Input Bandwidth:** 20% for 2.1 VSWR or better.
- **Drive Requirement:** 85W for 800W CW output. 10 dB gain.
- **Shipping Weight:** Amplifier, 54 pounds.; tube, 3 pounds.
- **Operating Weight:** 48 pounds.
- **Efficiency:** CWSSB better than 66%.
- **Dimensions:** 14Wx8 1/4Hx15 1/4D inches.

**AL-80B**

Suggested Retail

$1729

**AN INSIDE LOOK AT AMERITRON’S AL-80B**

Dual LED illuminated cross-needle meters give you four separate indicators that monitor your operating conditions -- PEP forward power, PEP reflected power, SWR, Grid Current, Plate Current, Plate Voltage and ALC.

Heavy duty power supply; 26 lb. high silicone steel transformer and computer grade capacitors.

Rear panel adjustable input Pi-Network.

Genuine classic 3-500G Tube.

Heavy Duty Bandswitch.

Tank coils spaced away from chassis for optimum “Q”.

Pi-Network gives smooth tuning and full band coverage, even on 160 and 80 Meters.

www.ameritron.com • 1-662-323-8211
AMERITRON’S four 572B tubes . . . 1300 Watts . . . $1999!

AMERITRON creates a new class of Near Legal Limit™ amplifiers with the AL-572 . . .

you get nearly full legal SSB power output for 65% of the price of a full legal limit amplifier . . .

No one will ever know the difference!

You get 1300 Watts PEP SSB nominal power output on 160 through 15 Meters

Four rugged 572B tubes give you near legal limit power and instant 3-second warm-up time.

This whisper quiet, desktop linear plugs into your nearest 120 VAC outlet — no special wiring needed.

Get . . . Ameritron’s exclusive Instantaneous RF Bias™, Dynamic ALC™, ParasiticKill™, and more.

You get . . . Ameritron’s exclusive Instantaneous RF Bias™, Dynamic ALC™, ParasiticKill™, Step-Start™ Inrush Protection, multi-voltage transformer, front panel ALC control, 6:1 vernier reduction drives, and much more!

AL-572 gives 1300 Watts PEP SSB nominal power output on 160-15 Meters using 4 rugged 572B tubes with 3-second warm-up. This whisper quiet, desktop linear plugs into your 120 VAC outlet — no special wiring needed.

Get 1300 Watts PEP SSB, 1000 Watts CW continuous (typical) on all amateur bands from 160-15 Meters

Exclusive Instantaneous RF Bias™

AL-572 $1999

Suggested Retail

AL-800

$2095

Single Import tube

AL-800H

$2679

One Eimac® tube

Suggested Retail

AL-800HF

$2885

Two Import tubes

AL-800H

$4039

Two Eimac® tubes

ALERITRON AL-800/AL-800H HF Linear Amplifiers:
High POWER in a Compact, Desktop Package

Select the 1250 Watt PEP AL-800 single 3CX800A7 near-legal-limit amplifier, or the 1500 Watt PEP dual 3CX800A7 amplifier that loads along at full legal limit — and don’t worry about desk space.

AMERITRON AL-800/AL-800H HF Linear Amplifiers: 3CX800A7 tubes

High POWER in a Compact, Desktop Package

Select the 1250 Watt PEP AL-800 single 3CX800A7 near-legal-limit amplifier, or the 1500 Watt PEP dual 3CX800A7 amplifier that loads along at full legal limit — and don’t worry about desk space.

AL-800/AL-800H

Compact AL-800/AL-800H amps are both desktop linear with plenty of muscle!

At 14.25xWx8.5H x14.5D inches, the more compact AL-800 uses a single 3CX800A7 to provide 1250 Watts PEP SSB and 850W CW with 85W typical drive level. And the AL-800 will even run from a 20-Amp 120 VAC line source if desired. AL-800 typically draws 17 Amps peak current at 120VAC, or 8 Amps at 240 VAC and weighs 51 lbs.

For more power and headroom, the AL-800H uses a pair of 3CX800A7 tubes to easily provide 1500W PEP/CW with a typical drive level of 55 Watts. AL-800H draws 14 Amps peak current at 240 VAC (1500 Watts CW output) and weighs just 52 lbs. Other than power differences, these amplifiers are very similar in features and operation. Both cover 160-15 Meters, and modifiable to cover 12/10M with proof of your FCC license.

Both include a Step-Start™ input power circuit, a time delay circuit to allow for tube warm-up, thermal overload protection, grid current limiting to protect your tube(s), a DynamicBias™ circuit and a built-in multi-voltage (14 user-selectable AC line voltages from 90-140; 200-250 VAC) heavy duty power transformer. Hefty 32 lb. grain orientated silicone steel core transformer.

Front panel monitoring and tuning functions are also virtually identical. Both amplifiers include a Standby/Operate switch for barefoot or full power operation, an ALC SET control, Transmit and Fault LEDs.

Dual LED illuminated Cross-Needle meters provide detailed monitoring. Meters continuously measure grid and plate currents, and measures peak RF output power on one scale, and plate voltage. Reflected power and SWR, ALC voltage, and ALC adjustment set.

Quiet pressurized ventilation keeps tubes safely cooled. A Pi/Pi-L output network gives you smooth tuning and wide matching range. Vernier reduction drives make tuning and loading adjustments smooth and easy.

AL-800/AL-800H

Insided view of AL-800H

AL-800/AL-800H

Inside view of AL-800H

ALERITRON'S four 572B tubes . . . 1300 Watts . . . $1999!

AMERITRON creates a new class of Near Legal Limit™ amplifiers with the AL-572 . . .

you get nearly full legal SSB power output for 65% of the price of a full legal limit amplifier . . .

No one will ever know the difference!

You get 1300 Watts PEP SSB nominal power output on 160 through 15 Meters!

Four rugged 572B tubes give you near legal limit power and instant 3-second warm-up time.

This whisper quiet, desktop linear plugs into your nearest 120 VAC outlet — no special wiring needed.

Get . . . Ameritron’s exclusive Instantaneous RF Bias™, Dynamic ALC™, ParasiticKill™, Step-Start™ Inrush Protection, multi-voltage transformer, front panel ALC control, 6:1 vernier reduction drives, and much more!

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Exclusive Instantaneous RF Bias™

AL-572 $1999

Suggested Retail

AL-800

$2095

Single Import tube

AL-800H

$2679

One Eimac® tube

Suggested Retail

AL-800HF

$2885

Two Import tubes

AL-800H

$4039

Two Eimac® tubes

AMERITRON AL-800/AL-800H HF Linear Amplifiers: 3CX800A7 tubes

High POWER in a Compact, Desktop Package

Select the 1250 Watt PEP AL-800 single 3CX800A7 near-legal-limit amplifier, or the 1500 Watt PEP dual 3CX800A7 amplifier that loads along at full legal limit — and don’t worry about desk space.

AMERITRON AL-800/AL-800H HF Linear Amplifiers: 3CX800A7 tubes

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Both include a Step-Start™ input power circuit, a time delay circuit to allow for tube warm-up, thermal overload protection, grid current limiting to protect your tube(s), a DynamicBias™ circuit and a built-in multi-voltage (14 user-selectable AC line voltages from 90-140; 200-250 VAC) heavy duty power transformer. Hefty 32 lb. grain orientated silicone steel core transformer.

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Quiet pressurized ventilation keeps tubes safely cooled. A Pi/Pi-L output network gives you smooth tuning and wide matching range. Vernier reduction drives make tuning and loading adjustments smooth and easy.
**AMERITRON super legal limit amplifiers**

**Ameritron’s AL-1500 Amplifier with Eimac® 3CX1500A7**

**AMERITRON super legal limit amplifiers**

**Ameritron’s AL-1500 Amplifier with Eimac® 3CX1500A7**

**Radio’s toughest tube – Eimac® 3CX1200Z7 is in the toughest amplifier!**

- **AL-1500F**
  - $3565
  - Imported tube
  - Suggested Retail

- **AL-1500**
  - $4720
  - Eimac® tube

**Tuned input, Pi/PI-L output, inrush current protection, multi-voltage transformer, QSK option, and a one year warranty.**

**AL-1500 has a heavy duty power supply.**

**32 lb. Hypersil® transformer with high silicone steel core, computer grade capacitors (33 mfd total), heavy duty bleeders and twenty 3A, 1000V power rectifiers give a stiff 3300V fully loaded.**

**AL-1500 is built on a rugged steel chassis with a separate RF compartment fully shielded to keep RF from leaking out, keeping RFI and TVI to a minimum.**

**Superb RF design and layout, Hi-Q tank circuit and commercially rated RF power components give you 65% plate efficiency over the entire operating range. Power goes into the antenna instead of into heat.**

**50-ohm broadband Pi-Network tuned in-built with slug-tuned coils is used. Even fussy solid state transmitters deliver full power!**

**A carefully designed Pi/PI-L output network using the optimum Q for each band with vernier ball drives gives smooth tuning, wide matching range, full band coverage, and peak performance for best linearity on SSB or lowest quiescent current to low values when exciter output falls below 100 mW.**

**Remote detector board for Ameritron. EBS-1H, $54.95, for other brand amplifiers. Call 662-323-8211 for more details.**

**www.ameritron.com • 1-662-323-8211**

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**Ameritron’s Dual 3-500G Amplifier**

**This classic linear gives you full legal output using a pair of 3-500G graphite tubes. Examine the features and component ratings of the AL-82 and compare it to any competing amplifier. Most competing amplifiers using 3-500G’s can’t deliver 1500W because their lightweight supplies can’t use these tubes to their full potential. AL-82 amplifier uses the same Hypersil® power transformer used in the AL-1500 amplifiers – powerful, just loaf at full power!**

**Radio’s toughest tube – Eimac® 3CX1200Z7 is in the toughest amplifier!**

- **AL-1200**
  - $4599
  - Suggested Retail

- **AL-82**
  - $3250
  - Suggested Retail

**Plug Output Power Control**

**For rigs without output power control. Drive amp or tune an antenna tuner. Avoid over-driving amps/tuners. Use any rig/amp combo with external ALC. Front panel transmit and ALC control, in/out phone jacks for CW, Amp Key, ALC. 110 VAC. 5.1/2Wx2.5/Hx3.75.”**

**Add-on Electronic Bias for AL-82/1200/1500**

- **EBS-1H, $54.95, for other brand amplifiers. Call 662-323-8211 for more details.**

**Grid Overload Protect**

**Protects amp’s tube from excessive grid current. Fast-acting electronic circuit rapidly disables the amp if excessive grid current condition occurs. Easy to install in your Ameritron amp. Factory installation, 662-323-8211.**
**AMERITRON Amplifier-to-Transceiver Interface**

Protects expensive radio from damage by keying line transients and steady state current and voltages.

![ARB-704](ARB-704.png)

**ARB-704 Interface Buffer**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARB-704</td>
<td>for IC-706 series radios (Includes PNP-13D)</td>
<td><strong>$69.95</strong></td>
</tr>
<tr>
<td>ARB-704I2</td>
<td>(ARB-704 with Amp and ALC voltage inputs)</td>
<td><strong>$74.95</strong></td>
</tr>
</tbody>
</table>

**Why do you need the ARB-704?**

Amplifiers can damage radios if they have too much relay control voltage, voltage spikes, or excessive current on the control line. Such damage often appears as “stuck” or “sticky” transmit relays in exciters or shorted transistors on transmit control lines. In most cases where the radio is damaged, the system transmits normally but the external amplifier stays in “transmit” mode. This prevents receive signals from coming through the amp at normal levels in “ON”/“OPERATE” position.

ARB-704 has many advantages over conventional relay buffers. It has no moving parts, switches instantaneously, noiseless, long life, and no dirty contacts. It operates with negative, AC, or noiseless, long life, and no dirty contacts. It operates with negative, AC, or noiseless, long life, and no dirty contacts.

**Transmitter**

Switch uses electronic PIN diode switching to give you lightning fast QSK operation from any HF linear amplifier.

**Use**

For high power QSK CW, packet, AMTOR, any mode requiring fast switching between transmit and receive.

**Installation**

Installation is simple. Just plug in a few cables to start enjoying QSK — there’s no complicated internal wiring.

**QSK-5** is extremely quiet — no relay chatter keeping you from enjoying QSK. You won’t have to pay for QSK again if you buy another amplifier. Unplug the QSK-5 and use it with your new amp.

**2500 Watts PEP, 2000W CW in normal service, SWR below 1.5:1. 750W on continuous carrier modes: RTTY, SSTV, FM. Optional cooling fan (CF-5, $39.95) allows sustained operation at 1500W in any mode. Use with positive voltage keying to +25V, 91/2x4x6D.**

**Internal QSK Available** for AL-80B, AL-1500, AL-1200, AL-82, AL-800/AL-800H. Contact Ameritron for installation details on the QSK-5PC internal switch.

**Made in the USA!**

**Transceiver Front-end Protector**

TRP-150

$74.95

TRP-150 protects your receiver front-end from high level RF signals. Use this for added safety when operating in a high-level RF contest environment and when another station is nearby. Close proximity of a high power transmitter on one antenna can result in a potentially damaging RF signal being applied to a receiver on a nearby antenna. If both transmitters are on the same band, the filter on the receiver won’t help and receiver damage can occur. Connecting between transceiver and antenna, TRP-150 protects the rig during receiving and automatically bypasses it during transmitting. Includes 2 phono jacks for radio and amp keys. Requires 12VDC for power. Tiny 21/2x1/4x1/2 inches.
**AMERITRON HF Mobile “Screwdriver” Antenna**

1.2 kW... 3.5-30 MHz continuous ...1.5:1 VSWR...more!

- **SDA-100**
  - **$599.95**
  - **Ship Code D**

SDA-100 is the best built, best looking, best performing HF mobile screwdriver antenna in the world! Properly installed on your vehicle it covers 80-10 Meters with a 6 foot whip. Remove the whip for 40-6 Meters.

What makes our antennas stand above all the rest is that our CNC machined components are from aircraft aluminum or stain-less steel and blue-printed, meaning you can take the antennas apart and mix them up, then reassemble and they work the same. Our fiberglass coil form is approximately 2 inches in diameter. Other antenna builders know fiberglass is not superior to anything else on the market that we put our outstanding AMERITRON warranty behind it. Heavy duty Pittman commercial 12 volt gear motor is very durable and quiet while receive tuning. This motor is super heavy duty for years of trouble-free service. Antennas come with sensors already installed so if you add an auto controller, everything is ready.

**SDA-100 includes:**
- Up/Down switch, 5” motor DC cable with detachable waterproof sealed connector; decoupling toroid match coils.
- SDA-100 is handsome black, using Dupont Basecoat/Clearcoat system.

**Combination Prices:**
- **SDM-100, **$139.95**. Stainless steel flange mount base bracket, with multi-ple pre-punched holes. Mounting rod is 1” pipe thread, 14” long. Code B.
- **SWP-100, **$34.95**. 6-ft steel whip.
- **SMC-100, **$5.95**. Shunt matching coil with solder lugs. Use at mobile/screwdriver antennas base to lower SWR.

**Programmable 10-Memory Screwdriver Controller**

- SDC-105 works with all rigs 160-6 Meters! No interface cables needed! RF sensor reads frequency data and moves antenna to nearest programmed setting. 8 settings per band.
- Tun command will tune antenna automatically to lowest VSWR. LCD display reads frequency, VSWR, turns count and motor operating current. Manual up/down buttons can be used for fine tuning.
- 2-speed motor control: high for quick adjustments, low for fine tuning. Home mode allows hands-free lowering of antenna. Adjustable current limit prevents motor damage or improper stall-outs.
- Meter port allows use of AWM-35B/H SWR/Wattmeter.3’t/Wx3’/Hx1’/D”. 4-pin molex matches most screwdrivers.

**Ameritron Mobile Installation Accessories**

- **ALS-500M DC Power Wire Harness**
  - **MIA-6, **$74.95**.
  - Get an extra DC power harness for ALS-500M amp. Saves you from the hassle of moving your amp cable assembly. Assembled 8 foot cable, fuses and fuse holders included.
- **In-Line Fuse Holder/Distribution Block**
  - **MIA-1, **$7.95**.
  - AGU in-line fuse holder; waterproof, handles 80A, 4-10 gauge wire, built-in bracket.
- **MIA-2, **$15.95**.
  - AGU in-line fused power distribution block has one input for 4 gauge wire, two outputs for up to 8-gauge wires, plastic covered with mounting ears.
- **Remote Power ON/OFF for Amplifier**
  - **MIA-3, **$64.95**.
  - 12 VDC Bosch relay. Turns amplifier on high current DC supply line ON/OFF remotely with vehicle ignition switch.
- **Battery Post Break-out Block**
  - **MIA-4, **$19.95**.
  - Don’t damage your amp because of poor battery connections. Replace old clamps with this stainless steel battery break-out block. Has 4 AWG terminal for your auto battery and two 8 AWG connections for your amplifier.
- **Braided Ground Strips**
  - **MIA-5, **$11.95**.
  - Makes solid grounding for your mobile radio or screwdriver antenna installations. Made from ultra-fine tinned copper braid that is extremely flexible. 7/8-inch width, 13 inches long, 3/8 inch holes on each end.

**Truly Automatic Ameritron Screwdriver Controller**

- SDC-102 lets you save 10 screwdriver antenna positions in memory. With a push of a button, quickly return to any saved position. Up/Down buttons manually move the antenna to desired position. 4-digit turns counter, bright LEDs give precise positioning. Compact 3’/Wx3’/Hx1’/D”.
- **Automatic Screwdriver Controller: **Icom/Kenwood/Yaesu equipped with a CI-V interface.
  - **SDC-104 K,I,Y **$179.95**.
  - Ship Code A
- **SDC-105**
  - **$244.95**
  - **Ship Code A**

**SDC-104 Rig Interface Cables**

- No need to get a new controller because you buy a different radio, additional interface cables available. RJ-DDBKY, $27.95. Kenwood and Yaesu transceivers with DB9 Serial COM port.
- RJ-BMY2, $27.95. For Yaesu transceivers with 8 pin mini DIN, CAT/Linear port.
- RJ-CB-35, $5.95. For all Icom transceivers with a 3.5 mm Remote port.

**Digital Controller**

- 4-digit super bright LEDs tell exactly where your antenna is positioned! Re-tune exactly - fast, no guessing. Digital count range -999 to +999. On/off reset switch for easy calibration. 4Wx1’/Hx2D” inches. Use 13.8VDC.
- **SDC-100B, **$149.95**.
  - **Ship Code A**

**SRS-100, **$34.95**.
- Magnetic sensor kit for High Sierra to use SDC-100/102/104. Not compatible with High Sierra Sidekick™.
- **SRS-1001, **$15.95**.
- Mag sensor kit for Hi-Q antennas to use SDC-100/102/104.
Specifications:

**Input:**
- Circuit type: Pi-network, slug tuned coils.
- Maximum VSWR at resonance: 1.5:1 or less.
- Minimum 2:1 VSWR bandwidth: 1.5%.
- Max. drive power permissible: AL-811: 80 Watts, AL-1306: 100 Watts.

**Typical drive rated output:** AL-811: 60 Watts; AL-1306: 75 Watts.

**Output:**
- DC Input: 120 V, 60 Hz; 50 VDC, 50 A.
- AC Input: 120 V, 60 Hz; 50 VDC, 50 A.

**Power Supply:**
- AC Input: 120 V, 60 Hz; 50 VDC, 50 A.
- DC Input: 120 V, 60 Hz; 50 VDC, 50 A.
- Efficiency SSB (envelope crest): greater than 70%.
- MARS/WARC: Yes, set to the nearest band.

**Connectors:**
- Relay: engages amplifier when grounded.
- 12 VDC power, circuit and supplies 100 mA when grounded.
- Built-in back-pulse cancelling diode protects the exciter.
- RF input: SO-239, 50 Ohm input.
- RF output: 50 Ohms with full power into any SWR below 3:1.
- Power: NEMA 5-15P, 120 Volts.

**Dimensions:**
- 151/2D x 87/8W x 33/4H inches.

**Switching Power Supply:**
- Line Input: 120 VAC, 50/60Hz.
- Output: 50 VDC, 25 Amps, +14 VDC, 1 A.
- RF Connectors: SO-239 for input and output.
- Dimensions: 151/2D x 87/8W x 33/4H inches.
- Shipping Weight: 18 lbs.
- Third Order IMD at rated output: -35 dB PEP or better.

**Input:**
- Circuit type: Pi-network, resistor attenuated(slug tuned coils).
- Maximum VSWR at resonance: 1.5:1 or less.
- Minimum 2:1 VSWR bandwidth: within ±20% or 40% of selected band within 20% of center frequency.
- Max. drive power permissible: 100 Watts.
- Typical drive for full power output: 600 Watts.
- Output: Circuit type Pi/PI.
- Typical SSB PEP voice operation: 500 Watts PEP.
- Maximum CW operation: 400 Watts PEP.
- Power requirement for amplifier: 14-16 VDC, 80A (peak).
- Power output devices: MOSFET (4) MRF-150.
- Metering: Amplifier-Cross-needle meter for VSWR, FWD, reflected true peak indicating wattmeter.
- Efficiency CW: 60% or less/15%.
- Efficiency SSB (envelope crest): 55%.
- MARS/WARC: Yes, continuous coverage.
- Tuning: 1250/1500 Watts.
- Input: Circuit type: Pi/PI.
- BLU: medium.
- Dimensions: 7.5 lbs.
- Shipping Weight: 12 lbs.
- Third Order IMD at rated output: -35 dB PEP or better.

**Input:**
- Circuit type: Pi-network, resistor attenuated(slug tuned coils).
- Maximum VSWR at resonance: 1.5:1 or less.
- Minimum 2:1 VSWR bandwidth: within ±20% or 40% of selected band within 20% of center frequency.
- Max. drive power permissible: 100 Watts.
- Typical drive for full power output: 600 Watts.
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- Typical SSB PEP voice operation: 500 Watts PEP.
- Maximum CW operation: 400 Watts PEP.
- Power requirement for amplifier: 14-16 VDC, 80A (peak).
- Power output devices: MOSFET (4) MRF-150.
- Metering: Amplifier-Cross-needle meter for VSWR, FWD, reflected true peak indicating wattmeter.
- Efficiency CW: 60% or less/15%.
- Efficiency SSB (envelope crest): 55%.
- MARS/WARC: Yes, continuous coverage.
- Tuning: 1250/1500 Watts.
- Input: Circuit type: Pi/PI.
- BLU: medium.
- Dimensions: 7.5 lbs.
- Shipping Weight: 12 lbs.
- Third Order IMD at rated output: -35 dB PEP or better.
**Specifications:**

**Input:**
- Circuit type: Pi-network, slug tuned coils.
- Maximum VSWR: 1.3:1 or less
- Frequency coverage: 1.5-170 MHz

**Power Supply:**
- No load voltage: 3600 Volts
- Full load voltage: 3300 Volts

**Connectors:**
- 8-Pin DIN, 3 ft.
- 9-Pin DIN, 3 ft.
- 10-Pin DIN, 3 ft.

**RF Input:**
- SO-239, 50 Ohm input.

**RF Output:**
- SO-239, 50 Ohm input.

**Dimensions:**
- 18 x 17 x 10 in.
- Weight: 22 lbs.

**Covers:**
- 500-6005

**Price:**
- $6.95

**Radio Compatibility:**
- Ameritron AR-80A
- Elecraft K4
- Kenwood TS-480
- Yaesu FT-897/857/100/817/840/890/990
- Yaesu FT-817

**Table:**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Price</th>
<th>Description</th>
<th>Radio Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>620-8068</td>
<td>$6.95</td>
<td>8-Pin Mini DIN Male, 3 ft.</td>
<td>Ameritron AR-80A, Elecraft K4, Kenwood TS-480, Yaesu FT-897/857/100/817/840/890/990</td>
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<tr>
<td>620-80258H</td>
<td>$4.95</td>
<td>5-Pin DIN Male, 3 ft.</td>
<td>Yaesu FT-450/950/1200</td>
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<tr>
<td>620-80259H</td>
<td>$4.95</td>
<td>7-Pin DIN Male, 3 ft.</td>
<td>Most Kenwood, ICOM ACC 2</td>
</tr>
<tr>
<td>620-80278H</td>
<td>$4.95</td>
<td>8-Pin DIN Male, 3 ft.</td>
<td>ICOM ACC</td>
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<tr>
<td>620-80212H</td>
<td>$10.95</td>
<td>12-Pin DIN Male, 9 ft.</td>
<td>Yaesu FT-2000/3000/7000/718</td>
</tr>
<tr>
<td>660-6005</td>
<td>$3.95</td>
<td>5-Pin DIN Male, Connector</td>
<td>Ameritron AR-80A</td>
</tr>
<tr>
<td>660-5005</td>
<td>$3.95</td>
<td>5-Pin DIN Male Connector</td>
<td>Ameritron AR-80A</td>
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<tr>
<td>660-5008B</td>
<td>$6.95</td>
<td>8-Pin DIN modified connector</td>
<td>Yaesu Band Data</td>
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<tr>
<td>610-31515</td>
<td>$2.50</td>
<td>DB15 Male Connector</td>
<td>Yaesu FT-DX3000</td>
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<td>610-31515HDK</td>
<td>$3.50</td>
<td>DB15 Male High Current Connector</td>
<td>Elecraft</td>
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<tr>
<td>610-3409K</td>
<td>$2.50</td>
<td>DB9 Female Connector</td>
<td>ALS-1306</td>
</tr>
</tbody>
</table>

Ameritron Rig-to-Amplifier Interface Open-end cables and Connectors

These open-end cables and connectors will fit most current HF transceivers. Select the open-end cable or a connector from the chart (right). For an AR-80A cable, 600-5005 is also required. For an ALS-1306 cable, 610-3409K is also required. Pre-assembled amplifier-to-radio interface cables are available, see pages in this catalog.

**www.ameritron.com**
AMERITRON True Legal Limit™ Tuner

Easily handles 1500 Watts continuous carrier even on 160 Meters... High-current edge-wound silver plated Roller Inductor... Two 500 pf high capacitance tuning capacitors with 6:1 vernier reduction drives... 3 core choke balun... Six position antenna switch... True peak reading Cross-Needle SWR/Wattmeter...

- Handles over 1.5 kW carrier
- High Current edge-wound silver plated Roller Inductor
- 500 pf tuning capacitors, 6:1 vernier reduction drives
- 3 core choke balun
- 6 position antenna switch
- True peak reading meter with LED Meter Light

AMERITRON’s ATR-30 True Legal Limit™ roller inductor antenna tuner is ham radio’s toughest! It’ll handle 1500 Watts continuous carrier output on all modes and all HF bands into most antennas — even on 160 Meters where most antenna tuners fail.

Perfect for Ameritron’s most powerful amps where the ATR-30 just loafs.

All bands lets you operate 1.8-30 MHz including MARS & WARC bands. Super High Current Roller Inductor

You’ll see Ameritron’s new super high current air core roller inductor. It’s edge wound from a thick solid copper strip and silver plated.

This produces a large surface area and a massive conductor. It can carry huge circulating RF currents and withstand tremendous heat that’ll melt or burn ordinary roller inductors.

Gear driven turns counter, crank knob gives you precise inductance control.

Two 500 pf Tuning Capacitors

Two 500 pf — the highest of any

Fan Cooled
Dry Dummy Load

AMERITRON’s 2500 Watt fan cooled dummy load handles any legal limit amplifier, and lets you tune-up expensive amplifiers fast and easy. Works with all amps, radios and transmitters DC through 6 Meters.

Dissipates 2500 Watts average power for 1 minute on, 10 minutes off. 300 Watts continuous. SWR is less than 1.25 to 1 below 30 MHz and less than 1.4 30 to 60 MHz.

Four 50 Ohm non-inductive super high energy density resistors are used. Each has an incredibly high energy density of 7000 joules per cubic inch per second with a voltage gradient of 10 kV per inch!

Detailed specifications/Power curve are permanently silk-screened on the cabinet for easy reference. Uses 12 VDC, x8½" Wx4Hx9½"D. • $234.95

AMERITRON’s Legal Limit oil filled dummy load lets you run the maximum legal limit of 1500 Watts for a full five minutes.

ADL-1500X With Oil
Suggested Retail $59.95

ADL-1500 Without Oil
Suggested Retail $79.95

Oil included.
**AMERITRON RCS-4 Remote Coax Switch**

**RCS-4**

$179.95  
Suggested Retail

**Ameritron**

RCS-4 is a remote controlled coaxial switch that selects one out of four outputs by supplying all control voltages through the coaxial line.

**—you get two units** -- the switching box (7Wx3Hx5 1/8D inches) that can be tower, mast or wall mounted and the control console (5 1/2Wx3 1/4Hx6 1/16D inches) that is located and controlled at the operating position.

**The attractive indoor console has bright LED antenna selector indicators. A steel enclosure provides 100% shielding to prevent RFI and TVI interference.**

**Switching** time is 50 milliseconds.

**Teflon** quality SO-239 connectors provide reliable connections.

**The weatherproof switching box uses three heavy duty double pole 8 amperre hermetically sealed relays on a rugged G-10 fiberglass circuit board.**

**Quality components are used throughout both of the entire units to ensure maximum life for the sometimes difficult-to-reach switching box up on the tower or elsewhere.**

**RCS-4 operates 120 VAC. RCS-4X is for 220/240 VAC. RCS-4 allows safe operation with 14 Volts control voltage.**

**Frequencies** 1.5 through 100 MHz are covered by this excellent station accessory. Handles over 2.5 kilowatts.

**Specifications:**

- **4 positions.**
- **Loss** at 30 MHz less than 0.1 dB.  
  VSWR is less than 1.2 from DC to 250 MHz and less than 0.1 dB loss at 150 MHz -- great for the all HF/VHF/UHF radio operator.  
  It handles over 5 kW below 30 MHz and 1 kW at 150 MHz. You can ground unused positions or leave them open.  
  The indoor control unit is all metal to prevent RFI and TVI interference. It also has LEDs to indicate the antenna you’ve selected.  
  A Lexan scratch-proof panel has a markable surface for labeling your antenna positions.

**RCS-8V**

$199.95  
Suggested Retail

**Ameritron’s** Remote Coax Switch lets you remotely switch up to five separate antennas using one inexpensive small control line (like standard telephone wire) -- **Eliminate a tangle of troublesome coax and have a simple and neat installation -- with just one single feedline.**

**The RCS-8V consists of two units --**

- **Coax** and have a simple and neat installation -- with just one single feedline.

**RCS-10 Remote Coax Switch with 8 positions**

$199.95  
Suggested Retail

**RCS-10**

remote coaxial switch selects one of eight antennas using three or four conductor control line (such as standard telephone wire).

**Eliminate a tangle of troublesome coax and have a simple and neat installation -- with just a single coax feedline.**

**Clear** up space for other items or keeps it neat and tidy for comfort and proper operating.

**The RCS-10 consists of two units --**

- **Inexpensive** and simple wiring the weatherproof switching box that mounts on your tower or mast and the control unit that’s placed at your operating station.  
  VSWR is less than 1.2 from DC to 250 MHz and less than 0.1 dB loss at 150 MHz -- great for the all HF/VHF/UHF radio operator.  
  It handles over 5 kW below 30 MHz and 1 kW at 150 MHz. You can ground unused positions or leave them open.  
  The indoor control unit is all metal to prevent RFI and TVI interference. It also has LEDs to indicate the antenna you’ve selected.  
  A Lexan scratch-proof panel has a markable surface for labeling your antenna positions.

**RCS-8V operates from a 120 VAC power source or RCS-8VX for 220/240 VAC. Use any 6 conductor control line (not supplied) and allows safe operation into matched loads below 30 MHz.**

**Specifications:**

- **Number of antenna positions:** 5.
- **Loss at 150 MHz:** less than 0.1 dB.  
  VSWR: under 1.2:1 from DC-250 MHz.  
  Impedance: **50 Ohms.**
- **Power Capability:** 5 kW PEP below 30 MHz, 2.5 kW average.
- **Power requirements:** 12 VDC @ 100 mA, AC adapter supplied.
- **Connectors:** Teflon SO-239 for RCS-8V; “N” for RCS-8VN.
  **Control Box:** 6Dx6 1/16W x3 1/4H inches.
  **Switch Box:** 5 3/8Dx7Wx3H inches.

**SPECIFICATIONS:**

- **High Power Capability:** The RCS-10 relay box will handle over 5 kilowatts into matched loads below 30 MHz.
- **Impedance:** 50 Ohms.
- **Number of Antenna Positions:** 8.
- **Frequency Coverage:** DC to 100 MHz.
- **Input:** Under 1.25:1 below 30 MHz; Under 1.3:1 below 60 MHz; Under 1.8:1 below 150 MHz.
- **Impedance:** 50 Ohms.
- **Input Power:** 2000 watts average.
RCS-12 is an automatic remote antenna switch. It reads data from your transceiver and selects up to 8 pre-programmed antennas .

**WHAT IS COVERED**

- RCS-12 will not let them make a switching mistake. RCS-12 is compatible with virtually any antenna switching system. It works with BCD or one-of-eight outputs, and is fully compatible with 12 or 24 volt relay systems.
- The RCS 12 monitors the amplifier keying line. It prohibits relay transfers while your amplifier is active. Simultaneously, it remembers what antenna function the operator called for. When it switches the first amplifier drop, it holds the amp off until switching is completed and relays are settled.
- The RCS 12 monitors the band data from radios. The internal band decoder knows which positions are allowed on each band. It prevents a distracted operator from picking the wrong switch position. When the radio changes of product, serial number, date of purchase and dealer purchased from.

**WHAT IS NOT COVERED**

- If your Ameritron was purchased used or out-of-warranty, it needs to be sent to us prepaid for evaluation.
- Call 1-662-323-8211. Must contact us before ship.

**For Technical Information or parts order:** Call (662) 323-8211

For service, return amplifier with letter of explanation to:

**AMERITRON**, 116 Willow Road, Starkville, MS 39759

email: go to: www.ameritron.com

All products manufactured by AMERITRON have a one year limited warranty. $1 year extended warranty plan. For details, call 1-662-323-8211. Use chart to order a 1 or 2 year extended warranty plan.

**AMERITRON Automatic Remote Antenna Coax Switch**

Automatically reads data from your transceiver and selects up to 8 pre-programmed antennas .

**AMERITRON Extended Warranty Plan**

Ameritron’s extended warranty plan is the same as the original warranty, just extended for the amount of months you choose. Extended warranty warrants to the purchaser that if the product should fail during the agreed term, Ameritron has the option to repair or replace part(s) except tube and output transistors and provide necessary labor free of charge. Warranty repair can only be done at the Ameritron facility. Purchaser must return defective product to Ameritron prepaid in its original packing or equivalent. Ameritron is not re-sponsible for loss or damage due to shipping.

**For Technical Information or parts order:** Call (662) 323-8211

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**WHAT IS NOT COVERED**

- If your Ameritron product is still within its original warranty, contact Ameritron by phone, fax, mail or email with model number, serial number, date of purchase and dealer purchased from.
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Cushcraft Amateur Radio Antennas

2019 Ham Catalog

A Cushcraft Antenna would look great in your backyard too

Cushcraft Amateur Radio Antennas
308 Industrial Park Road
Starkville, MS 39759
1-662-323-9538
www.cushcraftamateur.com
The R-6000 is a 6 through 20 meter, no ground radial antenna. It includes many of the features of the R8, R7 and R5 antennas. R-6000 means excellent performance, easy installation and use, slim silhouette and high reliability. There are no traps used on 6, 10 and 15 meters for maximum efficiency and power handling.

- **EASY INSTALLATION**
  For typical use, tuning is not required

- **INSTANT BAND CHANGING**
  To any band 6 through 20 Meters

- **SLIM SILHOUETTE**
  Gain favor of family and neighbors with the slim, low profile of the R6000

- **6 METER OPERATION**
  Join the fun of the "Magic Band" and take advantage of new HF/50 MHz transceivers

- **AFFORDABLE PRICE**
  Cushcraft delivers the best quality and performance at a price no one else can match

### Specifications: R-6000

<table>
<thead>
<tr>
<th>Frequency/meters</th>
<th>6, 10, 12, 15, 17, 20</th>
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</thead>
<tbody>
<tr>
<td>Gain (dBi)</td>
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<tr>
<td>VSWR at resonance</td>
<td>1.2:1 typical</td>
</tr>
<tr>
<td>2:1 bandwidth, KHz</td>
<td></td>
</tr>
<tr>
<td>6m &gt;1300</td>
<td>10m &gt;1700</td>
</tr>
<tr>
<td>12m &gt;100</td>
<td>15m &gt;950</td>
</tr>
<tr>
<td>20m &gt;300</td>
<td></td>
</tr>
<tr>
<td>Power Watts PEP (FM)</td>
<td></td>
</tr>
<tr>
<td>Radiation angle, deg.</td>
<td>16</td>
</tr>
<tr>
<td>Horizontal rad, deg.</td>
<td>300</td>
</tr>
<tr>
<td>Height, ft (m)</td>
<td>20.5 (6.25)</td>
</tr>
<tr>
<td>Mast size range, in (cm)</td>
<td>1.5 -1.75 (3.8 - 4.4)</td>
</tr>
<tr>
<td>Wind load, ft (lbf)</td>
<td>1.5 (141)</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>16 (6.25)</td>
</tr>
<tr>
<td>Shipping Dimensions</td>
<td>7&quot;x4.5&quot;x63&quot;</td>
</tr>
</tbody>
</table>

The R-6000 employs quarter wavelength stubs on 10 and 15 Meters to replace standard trap coils. The result is lower loss and wider bandwidth. The R-6000 covers all bands 6 through 15 meters at a VSWR under 2:1. On 20 meters you can select the top 300 KHz or bottom 300 KHz of the band.

The R-6000 weighs only 12-1/2 pounds (5.6 kg). It is lightweight and easy to mount for portable or permanent installations. Machined aluminum clamps and UV stable insulators guarantee years of reliable service. The R-6000 comes with the standard warranty of one year from purchase - plus the industry’s leading technical support team stands behind each antenna.

The R-6000 makes an excellent diversity antenna to complement even the most complete stations, or pack up the R-6000 for a trip to the DX location of your dreams.
Cushcraft HF Vertical Antennas

Cushcraft R8 and R9 cover 6, 10, 12, 15, 17, 20, 30, 40 Meters. . . and the new R9 expands coverage to . . . . 80 Meters!

- NO GROUND RADIALS NEEDED
- RUGGED CONSTRUCTION
- INSTANT BAND CHANGING
- SLIM, LOW PROFILE

SILHOUETTE

Big Brother R9 now includes 75/80 Meters for local ragchewing and worldwide low band DX without radials!

It's omni-directional low angle radiation gives you exciting and easy DX on all 9 bands: 75/80, 40, 30, 20, 17, 15, 12, 10 and 6 Meters with low SWR. QSY instantly -- no antenna tuner needed.

Use full 1500 Watts SSB/CW when the going gets tough to break through pileups and poor band conditions.

The R9 is super easy to assemble, installs just about anywhere, and its low profile blends inconspicuously into the background in urban and country settings alike.

Compact Footprint: Installs in an area about the size of a child's sandbox -- no ground radials to bury with all RF-energized surfaces safely out of reach.

Rugged Construction: Thick fiberglass insulators, all-stainless steel hardware and 6063 aircraft-aluminum tubing is double or triple walled at key stress points to handle anything Mother Nature can dish out.

R9 is 31.5 feet tall, 25 lbs. Mounting mast 1.25 to 2 inches. Wind surface area is 4 square feet. Wind survivability is 60 MPH.

R8, $569.95. Like R9, but less 75/80 Meters.

R-8TB, $89.95. Tilt-base lets you lift your antenna up and down easily by yourself. Makes it easy to work on by yourself, no need to call your ham buddies over to help take it down and lift back up.

R-8GK, $69.95. 3-point guy kit for vertical antennas or antenna masts. Consists of guy brackets, thimbles, galvanized steel stakes, 150 feet of Danscord rope. Everything needed to secure your antenna or mast safe in high winds.

Specifications

<table>
<thead>
<tr>
<th></th>
<th>R8</th>
<th>R9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Meters</td>
<td>6,10,12,15,17,20,30,40</td>
<td>6,10,12,15,17,20,30,40,80</td>
</tr>
<tr>
<td>Gain (dBi)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>VSWR at resonance</td>
<td>1.3:1 typical</td>
<td>1.3:1 typical</td>
</tr>
<tr>
<td>VSWR 2:1 bandwidth, KHz</td>
<td>40M(150) 30M(150) 20M(150) 17M(150) 12M(150) 10M(150) 8M(150)</td>
<td>40M(35) 30M(35) 20M(35) 17M(35) 12M(35) 10M(35) 8M(35)</td>
</tr>
<tr>
<td>Power Watts PEP (FM)</td>
<td>1500 (500)</td>
<td>1500 (750)</td>
</tr>
<tr>
<td>Radiation angle, deg.</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Horizontal rad., deg.</td>
<td>360</td>
<td>360</td>
</tr>
<tr>
<td>Height, ft. (m)</td>
<td>28.5 (8.7)</td>
<td>31.5 (10.7)</td>
</tr>
<tr>
<td>Mast size range, in(cm)</td>
<td>1.25-2” (3.18-5.1)</td>
<td>1.25-2” (3.18-5.1)</td>
</tr>
<tr>
<td>Wind load, ft2 (m2)</td>
<td>1.5 (14)</td>
<td>1.5 (14)</td>
</tr>
<tr>
<td>Wind surface area</td>
<td>2.5 sq. ft (0.23m)</td>
<td>4 sq. ft (0.33m)</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>23 (10.5)</td>
<td>25 (12.5)</td>
</tr>
<tr>
<td>Shipping Dimensions</td>
<td>3.75x5.25x8.45”</td>
<td>3.75x5.25x8.45”</td>
</tr>
</tbody>
</table>

www.cushcraftamateur.com

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MA-5VA Five-Band Restricted-Space Vertical Antenna

The MA-5VA delivers superb HF multi-band performance while maintaining a neighbor-friendly low profile. Perfect for roof-mounts, patios, small backyards, condos, and motor homes, this 6.5-pound bantam-weight installs quickly without the “heavy lifting” required of larger antennas. Whether you install it permanently or take it down between operating sessions, you’ll appreciate special features like the MA-5VA’s gust-absorbing fiberglass base, resin-sealed resonator coils, aluminum mast blocks, and all-stainless hardware. Best of all, the MA-5VA is solidly engineered-its “no-radial” OCFD design delivers low SWR and high performance without using exotic matching networks or tuners. Simply connect a radio and you’re ready to work the world! The MA-5VA is the perfect restricted-space DX solution for 20, 17, 15, 12, and 10 meters!

- Light-weight rugged construction
- Rapid breakdown for storage or transport
- No exotic matching networks or tuners
- Advanced “no radial” OCFD design

MA-6VA Six-Band Restricted-Space Vertical Antenna

Made for today’s expanded-coverage radios, Cushcraft’s MA-6VA provides the same great versatility and performance of the MA5VA—with the addition of 6 Meters. Enjoy congestion-free FM-repeater operation and explore the world of exotic seasonal band openings on 50 MHz CW and SSB. It’s a great way to add amateur radio’s “magic band” to your operating repertoire!

- Neighbor-friendly low profile
- Rugged light-weight construction
- Air-baggage transportable (longest tube is 54”)
- Robust mounting hardware included
- New bandwidth enhancing 8-rod counterpoise
- New low loss balun

<table>
<thead>
<tr>
<th>Specifications</th>
<th>MA-5VA</th>
<th>MA-6VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (meters)</td>
<td>10, 12, 15, 17, 20</td>
<td>6, 10, 12, 15, 17, 20</td>
</tr>
<tr>
<td>Gain (dBi)</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>VSWR at resonance</td>
<td>1.2:1 All bands</td>
<td>1.2:1 All bands</td>
</tr>
<tr>
<td>Wind surface area</td>
<td>.82 ft^2 (0.76 m^2)</td>
<td>.82 ft^2 (0.76 m^2)</td>
</tr>
<tr>
<td>Wind Survival mph</td>
<td>&gt;80</td>
<td>&gt;80</td>
</tr>
<tr>
<td>Power Watts PE (FM)</td>
<td>250 W (100W)</td>
<td>250 W (100W)</td>
</tr>
<tr>
<td>Height (ft (m))</td>
<td>14.7 (4.48)</td>
<td>14.7 (4.48)</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>6.5 (2.95)</td>
<td>6.9 (3.13)</td>
</tr>
<tr>
<td>Shipping Dimensions</td>
<td>3&quot;x3&quot;x80&quot;-1/2&quot;</td>
<td>3&quot;x3&quot;x80&quot;-1/2&quot;</td>
</tr>
</tbody>
</table>

MA5V6M, $59.95. Six Meter Add-on Kit for MA5VA.
Cushcraft Compact HF Multi-Band Beam

MA-6B 6-Band Beam

Small Footprint – Big Signal 2-Elements on 20/17/15/12/10/6 Meters!!!

Cushcraft’s latest MA-6B gives you 2-elements on six bands! You get solid signal-boosting directivity in a bantam-size and weight. It mounts on your roof or mast using standard TV hardware. It’s perfect for exploring exciting DX without the high cost and heavy lifting of installing a large tower and a full-sized array. Its 7 foot 3-inch boom has less than 9 feet of turning radius. Contest tough -- handles 1500 Watts. The unique MA-6B is a two-element Yagi on 20/17/15/12/10/6 Meters. It delivers solid power-multiplying gain over a dipole on all bands. You get automatic band switching and a super easy installation in a compact 26-pound package. When working DX, what really matters are the interfering signals and noise you don’t hear. That’s where the MA-6B’s impressive side rejection and front-to-back ratio really shines.

Specifications:

<table>
<thead>
<tr>
<th>Element(s)</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-6B</td>
<td>8040V</td>
</tr>
<tr>
<td>MA-6B</td>
<td>160V</td>
</tr>
</tbody>
</table>

Cushcraft Low Frequency Verticals

MA-8040V 3.5-7.3 MHz Vertical Antenna

MA-8040V is a compact self-supporting HF vertical that delivers excellent DX-hunting performance on 80 and 40 Meters. Only 27 feet tall and weighing in at less than nine pounds, it is small and light enough for one person to handle easily without assistance. Once installed, the MA-8040V virtually disappears against a backdrop of trees and foliage. Parallel resonators use a combination of inductive and capacitive top loading to deliver automatic band switching, high efficiency, and rock-bottom SWR on both bands. Designed to handle maximum legal power and built to last year after year, it’s the perfect DX solution when the sunspots silence the higher bands. Radial kit included.

MA-160V 160-Meter Vertical Monopole Antenna

MA-160V is a compact efficient vertical especially designed for working top-band DX from an average-size house lot. A low launch angle and deep overhead null combine to pull in distant stations while rejecting local QRM. The MA-160V features a heavy-duty high-Q copper loading coil plus a wide 100-inch diameter stainless capacitive hat for high efficiency, resiliency and 1500-Watt power handling. An adjustable stinger provides coverage on any 40-kHz segment across the 1.8 – 2.0 MHz band. Weighing only 12-pounds, the MA-160V installs easily and blends in with backyard trees and vegetation. Each antenna comes with a 400-foot spool of ground-radial wire plus a Danscord™ insulated guying kit.
Cushcraft HF Yagis and Log Periodics

10-20 Meters

X-7 BIG THUNDER TRIBANDER YAGI

The X-7 Triband Yagi is geared to set new standards in both radiating performance and mechanical reliability. The product development team has employed the latest computer modeling technology to achieve a superior electrical design as well as elegant new mechanical hardware and assembly techniques. Each mechanical component was designed to 100+ MPH wind survival with a 1.25 safety factor. Traps were eliminated from the high current driven elements and reflectors using the new 4L Log Cell design, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high performance antenna which will easily handle the legal limit.

- New High Efficiency Computer Optimized Design for Maximum Gain and Ultra Clean Radiating Pattern
- 100+ MPH Construction for Best Reliability and Long Life
- NEW 4L Log Cell Driven Elements for better VSWR Bandwidth
- Trapless Driven Elements and Reflectors for Reliable Power Handling

LOG PERIODIC

Skylog ASL-2010, 13 - 32 MHz

The ASL-2010 log periodic antenna is the most cost effective, high gain, five band antenna solution on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL-2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. All stainless steel hardware and rugged element design are only some of the many features that provide years of superior antenna performance. Skylog ASL-2010 is the smart choice for multiband HF operation.

- Continuous five band coverage 13.5-32 MHz
- Constant over entire frequency range
- 6.4 dBi gain, 65 degree beamwidth
- 18 foot boom and 19.5 foot turning radius
- High efficiency design, antenna stays cool and VSWR steady
Cushcraft VHF/UHF Yagis

**A6270-13S 6 Meter / 2 Meter / 70 CM**

Cushcraft's multiband directional yagi is designed to provide hobbyists who have limited tower or mast space with directional antenna performance on three of the most popular bands. The A6270-13S combines 6 meters, 2 meters and 70 centimeters on one boom. The 2m and 70cm interlaced Yagis are designed to share a common feed line. An independent feed line drives the 6m portion.

- **Outstanding performance thanks to Cushcraft's unmatched multiband design technology and experience.**
- **Rugged stainless steel mounting hardware is easy to install and maintain.**

**Specifications:**

<table>
<thead>
<tr>
<th>Frequency MHz</th>
<th>50-54</th>
<th>144-148</th>
<th>430-450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Elements</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Gain, dBi</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Front to Back Ratio, dB</td>
<td>20</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>SWR 1:1 Typical</td>
<td>&gt;1</td>
<td>&gt;4</td>
<td>&gt;10</td>
</tr>
<tr>
<td>2:1 Bandwidth, MHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longest Element, in (cm)</td>
<td>117 (300)</td>
<td>117 (300)</td>
<td>117 (300)</td>
</tr>
<tr>
<td>Turning Radius, ft (m)</td>
<td>6.16 (1.87)</td>
<td>6.16 (1.87)</td>
<td>6.16 (1.87)</td>
</tr>
<tr>
<td>Boom Length, ft (m)</td>
<td>8.66 (2.66)</td>
<td>8.66 (2.66)</td>
<td>8.66 (2.66)</td>
</tr>
<tr>
<td>Wind Load ft² (m²)</td>
<td>2.52 (0.23)</td>
<td>2.52 (0.23)</td>
<td>2.52 (0.23)</td>
</tr>
<tr>
<td>Max. Power Watts PEP</td>
<td>10/0W</td>
<td>350W</td>
<td>350W</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>9.5 (4.3)</td>
<td>9.5 (4.3)</td>
<td>9.5 (4.3)</td>
</tr>
</tbody>
</table>

Cushcraft's SQUALO is a full half-wave, horizontally polarized omni-directional antenna. Outstanding all-around performance is achieved through a 360 degree pattern with no deep nulls. The square shape allows full electrical length in compact dimensions. Direct 52 Ohm Reddi-Match feed provides ease of tuning and broad band coverage. **Squalo** is well suited for horizontally polarized mobile or fixed operation on SSB, CW, and legacy AM. The omni-directional pattern is great for DX beacons and spotting, and elements may be stacked for added gain. **Squalo** is completely universal for mounting anywhere. A horizontal mast support is included for mast or tower mounting. Cushcraft **Squalos** are ideal for net-control, monitoring or as a general coverage antenna. Minimum SWR. Handles 200 Watts PEP CW/SSB.

Cushcraft 2, 6 and 10 Meter **“SQUALO”**Antennas

**Cushcraft ASQ-2**

Cushcraft's SQUALO is a full half-wave, horizontally polarized omni-directional antenna. Outstanding all-around performance is achieved through a 360 degree pattern with no deep nulls. The square shape allows full electrical length in compact dimensions. Direct 52 Ohm Reddi-Match feed provides ease of tuning and broad band coverage. **Squalo** is well suited for horizontally polarized mobile or fixed operation on SSB, CW, and legacy AM. The omni-directional pattern is great for DX beacons and spotting, and elements may be stacked for added gain. **Squalo** is completely universal for mounting anywhere. A horizontal mast support is included for mast or tower mounting. Cushcraft **Squalos** are ideal for net-control, monitoring or as a general coverage antenna. Minimum SWR. Handles 200 Watts PEP CW/SSB.

**XM-240 Big Thunder Monobander**

Cushcraft's XM-240 monobander utilizes rugged Big Thunder hardware that combined with high strength aluminum tubing affords the antenna outstanding wind survivability. Phillystran boom trusses are used in the XM-240 design for extra boom stability. Unique feed system is a 50 ohm direct feed VSWR is flat across the band. A high power 1:1 balun is included. The XM-240 is field-proven or reliability and performance. Excellent front-to-back ratio and gain makes the XM-240 the right choice for DX and for stacking as well.

**Specifications:**

<table>
<thead>
<tr>
<th>Frequency MHz</th>
<th>7.0 - 7.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Elements</td>
<td>2</td>
</tr>
<tr>
<td>Gain, dBi</td>
<td>6</td>
</tr>
<tr>
<td>Front to Back Ratio, dB</td>
<td>20 - 23</td>
</tr>
<tr>
<td>Side Lobe Att. dBi</td>
<td>&gt;35</td>
</tr>
<tr>
<td>VSWR Typical Minimum</td>
<td>1.1:1</td>
</tr>
<tr>
<td>Longest Element, in (cm)</td>
<td>43 (13.1)</td>
</tr>
<tr>
<td>Turning Radius, ft (in)</td>
<td>24.3 (7.4)</td>
</tr>
<tr>
<td>Boom Length, ft (m)</td>
<td>22 (6.7)</td>
</tr>
<tr>
<td>Wind Surface Area sq ft (sq m)</td>
<td>5.5 (51)</td>
</tr>
<tr>
<td>Wind Load @ 30 mph, lb (kg)</td>
<td>142 (64.4)</td>
</tr>
<tr>
<td>Max. Power Watts PEP</td>
<td>1300W</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>55 (25)</td>
</tr>
</tbody>
</table>

**ASQ-2**

**ASQ-6**

**ASQ-10**

**ASQ-15**

**ASQ-20**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Band</th>
<th>Size (LxW)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASQ-2</td>
<td>2-Meter</td>
<td>10x10 inches</td>
<td>$159.95</td>
</tr>
<tr>
<td>ASQ-6</td>
<td>6-Meter</td>
<td>30x30 inches</td>
<td>$149.95</td>
</tr>
<tr>
<td>ASQ-10</td>
<td>10-Meter</td>
<td>50x50 inches</td>
<td>$174.95</td>
</tr>
<tr>
<td>ASQ-15</td>
<td>15-Meter</td>
<td>65x65 inches</td>
<td>$204.95</td>
</tr>
<tr>
<td>ASQ-20</td>
<td>20-Meter</td>
<td>100x100 inches</td>
<td>$249.95</td>
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</tbody>
</table>

Cushcraft 2, 6 and 10 Meter “SQUALO” Antennas

www.cushcraftamateur.com
Cushcraft Multiband HF Yagis

A-4S Four Element Beam - 10, 15 & 20 Meters

A-4S is the true, high performance tribander. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A-4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. A-4S has pinned boom sections and formed aluminum brackets to keep elements straight in all conditions. Our solid construction keeps the A-4S on the tower! Add 40 meters with A744 kit.

A-3S Three Element Beam - 10, 15 & 20 Meters

A-3 World Ranger, our top selling tribander, has become the A-3S with all stainless steel hardware. It’s a real power-house in a small space and lets you work the pile-ups with confidence. All you need is a lightweight tower and rotator to enjoy the benefits of the A-3S. It’s a proven performer in DX-peditions and contests. Handles full power from your amp. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware. When space is a premium, but you want benefits of a full-size tribander, A-3S is right for you! Add 40M with A743 kit.

A-3WS WARC Bands 3 Element, 12 & 17M

Enjoy the excitement of the WARC bands with this popular beam. A-3WS gives full performance on 12/17 meters. With the addition of our easy-to-use A-103 add on kit, it will also cover 30 meters. A-3WS needs only a lightweight tower and rotator or mount it above an existing tribander. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware.

30/40M Add Kits for A-3S/A-4S/A-3WS

40 meters will come alive by adding one of these kits to the dipole of your A-3S or A-4S. Kits include high power traps with heavy wall fiberglass insulator and all hardware. A simple adjustment allows 30 meter operation. For our newest beam, the A3WS, we have a 30 meter add kit on the A-103

Specifications:

<table>
<thead>
<tr>
<th>Band</th>
<th>7 MHz (40 m)</th>
<th>10 MHz (50m)</th>
<th>10 MHz (50m)</th>
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</thead>
<tbody>
<tr>
<td>Adapter kit ft (m)</td>
<td>33.19 min</td>
<td>27.13</td>
<td>32.1</td>
</tr>
<tr>
<td>Width (m)</td>
<td>58.5 (0.22)</td>
<td>37.5 (0.33)</td>
<td>43.0 (0.46)</td>
</tr>
<tr>
<td>Bandwidth, kHz</td>
<td>155</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Power Rating, Watts</td>
<td>1500 PEP</td>
<td>1500 PEP</td>
<td>1500 PEP</td>
</tr>
<tr>
<td>Side Rejection, dB</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>34.4 (15.6)</td>
<td>29.1 (13.2)</td>
<td>32.5 (14.7)</td>
</tr>
</tbody>
</table>

Rotatable Dipoles

The World Ranger Dipoles give bi-directional patterns and rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.

<table>
<thead>
<tr>
<th>Specifications:</th>
<th>D-3W</th>
<th>D-4W</th>
<th>D-5W</th>
</tr>
</thead>
<tbody>
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<td>Frequency kHz</td>
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<td>28.21</td>
<td>28.21</td>
</tr>
<tr>
<td>SWR 1.2:1 Typical</td>
<td>&gt;40</td>
<td>&gt;30</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Power Rating Watts PEP (kW)</td>
<td>1500</td>
<td>1500</td>
<td>1500</td>
</tr>
<tr>
<td>Length ft (m)</td>
<td>42.25</td>
<td>35.8</td>
<td>23.8</td>
</tr>
<tr>
<td>Mass, kg (lb)</td>
<td>12.85</td>
<td>10.03</td>
<td>7.80</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>37 (16.8)</td>
<td>27 (12.2)</td>
<td>22.5 (10.2)</td>
</tr>
</tbody>
</table>
Cushcraft Dual Band Ringos & Yagis

AR-270B 5.5/7.5 dB Dual Band Ringo
This model gives very high gain with a low angle of radiation and it is only 7.7 feet (2.35 m) high. The AR-270B is computer optimized with two 5/8 wavelength collinear elements on 2 meters and four 5/8 wavelength elements on 70 cm. It is broadbanded for minimum SWR on both bands. It is easy to assemble with three rugged aluminum tubing sections, a durable mast mount and factory sealed coils for best performance.

AR-270 3.0/ 5.5 dB Dual Band Ringo
The “Dual Wonder” AR-270 is only 3.75 feet (1.1 meters) high. It has great performance for its size, making it the most popular 2m/70 cm base antenna.

AR-270B
Frequency MHz 144-148 430-450
Gain, dB 5.5 7.5
SWR 1.1 Typical 1.15
2:1 Bandwidth, MHz 4
Horiz. Radiation Pattern, Degrees
Height, ft (m) 3.75 (1.1)
Mast Size Range, in 1.25-2 (3.2-5.1)
Radial Length, in (cm) High: 360 360 360 360
Wind Load, ft2 (m2) 0.27 (0.03) 0.47 (0.044)
Power, Watts FM 250 250
Weight, lb (kg) 2 (0.9) 2.4 (1.09)

AR-270
Frequency MHz 144-148 430-450
Gain, dB 5.5 7.5
SWR 1.1 Typical 1.15
2:1 Bandwidth, MHz 4
Horiz. Radiation Pattern, Degrees
Height, ft (m) 3.75 (1.1)
Mast Size Range, in 1.25-2 (3.2-5.1)
Radial Length, in (cm) High: 360 360 360 360
Wind Load, ft2 (m2) 0.27 (0.03) 0.47 (0.044)
Power, Watts FM 250 250
Weight, lb (kg) 2 (0.9) 2.4 (1.09)

A270-10S and A270-6S
10 and 7.8 dB Dual Band Yagis
Increase your range by selecting one of the Cushcraft dual band Yagis on 2 meters and 70 cm. You can point the antenna at stations while you are in QSO with them. This will direct more of your output power when transmitting at the same time reducing interference and increasing signal strength when receiving. These antennas are perfect for packet applications. Assembly is a snap with our fully illustrated assembly manuals.

A270-10S
Frequency VHF UHF
Number of Elements 5 3
Forward Gain, dBi 10 7.8
Front to Back Ratio, dB 20 18 20 18
SWR 1.1 Typical 3.6 3.0 4 5.0
2:1 Bandwidth, MHz
Power Rating, Watts PEP 350 350
3dB Beamwidth, Degrees
E Plane 52 66
H Plane 60 106
Longest Element, in (cm) 40.3 (102.5) 41 (104.1)
Turning Radius, ft (m) 6 (1.8) 2.8 (0.85)
Boom Length, ft (m) 61.7 (18.8) 2.8 (0.85)
Mast Size Range, in (cm) 1.25-2 (3.2-5.1) 1.25-2 (3.2-5.1)
Wind Load, ft2 (m2) 728 (371) 3 (0.2)
Weight, lb (kg) 18.1 (8.2) 1.7 (0.8)

A270-6S
Frequency VHF UHF
Number of Elements 5 3
Forward Gain, dBi 10 7.8
Front to Back Ratio, dB 20 18 20 18
SWR 1.1 Typical 3.6 3.0 4 5.0
2:1 Bandwidth, MHz
Power Rating, Watts PEP 350 350
3dB Beamwidth, Degrees
E Plane 52 66
H Plane 60 106
Longest Element, in (cm) 40.3 (102.5) 41 (104.1)
Turning Radius, ft (m) 6 (1.8) 2.8 (0.85)
Boom Length, ft (m) 61.7 (18.8) 2.8 (0.85)
Mast Size Range, in (cm) 1.25-2 (3.2-5.1) 1.25-2 (3.2-5.1)
Wind Load, ft2 (m2) 728 (371) 3 (0.2)
Weight, lb (kg) 18.1 (8.2) 1.7 (0.8)
**Cushcraft Ringo Ranger**

2 Meters, 220/440 MHz

**Ringo Ranger II, Ringo Ranger, Ringo**

**Ringo Ranger II**

The Ringo Ranger II has more gain, less windload, and more mechanical integrity than other two meter antennas. You'll quickly appreciate the benefits of this amazing antenna! Based on the original W1BX Ringo, the Ringo Ranger II is the latest design featuring three 5/8 wave radiating elements and an adjustable 1/8 wave phasing stub. The result is a very low angle of radiation over your coverage area. The Ringo Ranger II has built-in lightning protection, UV-stabilized insulators, heavy wall tubing, improved decoupling radials to eliminate feedline radiation, and all-weather performance.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>ARX2</th>
<th>ARX2B</th>
<th>ARX220B</th>
<th>ARX450B</th>
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<tbody>
<tr>
<td>Frequency MHz</td>
<td>135-160</td>
<td>135-160</td>
<td>222-225</td>
<td>435-450</td>
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<tr>
<td>SWR 1:2:1 Typical Bandwidth, MHz</td>
<td>&gt;6</td>
<td>&gt;3</td>
<td>&gt;5</td>
<td>&gt;5</td>
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<tr>
<td>Gain, dBi</td>
<td>5.5</td>
<td>7.0</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Power Rating, Watt max</td>
<td>1000</td>
<td>1000</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Radiation Angle, Deg</td>
<td>16</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Horizontal Radiation Pattern, Degrees</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
</tr>
<tr>
<td>Radiator Base Dia, in (cm)</td>
<td>5 (12.7)</td>
<td>.75 (1.9)</td>
<td>.75 (1.9)</td>
<td>.50 (1.2)</td>
</tr>
<tr>
<td>Height, ft (m)</td>
<td>12.5 (3.8)</td>
<td>14 (4.3)</td>
<td>9.3 (2.8)</td>
<td>4.9 (1.5)</td>
</tr>
<tr>
<td>Mast Size Range, in (cm):</td>
<td>1-1.25: (2.54-3.2)</td>
<td>1-1.25: (2.54-3.1)</td>
<td>1-1.25: (2.54-3.1)</td>
<td>1-1.25: (2.54-3.1)</td>
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<tr>
<td>Wind Load ft^2 (m^2)</td>
<td>0.05 (0.02)</td>
<td>0.03 (0.02)</td>
<td>0.12 (0.02)</td>
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<tr>
<td>Radial Length, in (cm)</td>
<td>20.5 (52.1)</td>
<td>20.5 (52.1)</td>
<td>13.1 (33.7)</td>
<td>6.75 (17.1)</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>4 (1.8)</td>
<td>6 (2.7)</td>
<td>5 (2.3)</td>
<td>1 (0.5)</td>
</tr>
</tbody>
</table>

**Ringo**

These are the original W1BX FM Ringos. If you want a combination of compact size, wide bandwidth, a low radiation angle, these economical antennas are just for you. Since radials are not needed, you can even use our Ringos indoors. Our Ringos are 1/2 wave and include built-in lightning protection. Put up one of these easily installed antennas and start enjoying FM!

<table>
<thead>
<tr>
<th>Specifications</th>
<th>AR2</th>
<th>AR6</th>
<th>AR10</th>
<th>AR450</th>
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<tr>
<td>Frequency MHz</td>
<td>135-160</td>
<td>50-54</td>
<td>28-29.7</td>
<td>440-460</td>
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<tr>
<td>Gain, dBi</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Radiation Angle, Deg</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
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<tr>
<td>Horizontal Radiation Pattern, Degrees</td>
<td>360</td>
<td>360</td>
<td>360</td>
<td>360</td>
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<tr>
<td>SWR 1:2:1 Typical Bandwidth, MHz</td>
<td>10</td>
<td>2</td>
<td>&gt;1.5</td>
<td>20</td>
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<tr>
<td>Ring Diameter, in (cm)</td>
<td>5 (12.7)</td>
<td>13 (33)</td>
<td>13 (33)</td>
<td>3.5 (8.9)</td>
</tr>
<tr>
<td>Radiator Base Dia, in (cm)</td>
<td>.75 (1.9)</td>
<td>1 (2.5)</td>
<td>1 (2.5)</td>
<td>.5 (1.3)</td>
</tr>
<tr>
<td>Height, ft (m)</td>
<td>3.9 (1.2)</td>
<td>10.1 (3.1)</td>
<td>17.6 (5.36)</td>
<td>1.6 (4.3)</td>
</tr>
<tr>
<td>Mast Size Range, in (cm)</td>
<td>1-1.25</td>
<td>1-1.25</td>
<td>1-1.25</td>
<td>.75-88</td>
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<tr>
<td>Wind Load, ft^2 (m^2)</td>
<td>0.03 (0.01)</td>
<td>0.18 (0.16)</td>
<td>0.1 (0.01)</td>
<td></td>
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<tr>
<td>Max. Power Watts PEP</td>
<td>1000W</td>
<td>1000W</td>
<td>1000W</td>
<td>500W</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>1.5 (0.68)</td>
<td>2.5 (1.1)</td>
<td>4 (1.8)</td>
<td>1.45</td>
</tr>
</tbody>
</table>
**Cushcraft VHF/UHF Yagis**

**2 Meters, 220/440 MHz**

**A148-20T**

**2 Meter Hi-Lo Cross Yagi**

Here’s the antenna that solves multi-mode problems! Ten vertically polarized and ten horizontally polarized elements provide 11.1 dBi gain covering 144-148 MHz. The horizontal elements handle your CW and SSB needs, while the vertical elements cover FM. Hardware is stainless steel. Separate coax feeds allow polarization changes.

**A224WB**

**220 MHz Widebands**

This 222 MHz 4 element beam is perfect for Packet, FM repeaters, or sideband/CW. It can be mounted for vertical or horizontal polarization.

**A449-6S/A449-11S**

**440 MHz Beams**

Use one of these 440 MHz beams for your FM/Packet needs. Both work great for vertical or horizontal polarization.

---

**Specifications:**

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<thead>
<tr>
<th>A224WB</th>
<th>A1486OT</th>
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<tr>
<td>Frequency MHz</td>
<td>222-235</td>
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<tr>
<td>Number of Elements</td>
<td>4</td>
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<td>Forward Gain, dBi</td>
<td>10.2</td>
</tr>
<tr>
<td>Front to Back Ratio, dB</td>
<td>20</td>
</tr>
<tr>
<td>SWR 1.2:1 typical</td>
<td>&gt;5</td>
</tr>
<tr>
<td>21 Bandwidth, MHz</td>
<td>&gt;500</td>
</tr>
<tr>
<td>Power Rating, Watts PEP (1000 ft line)</td>
<td>1500 (750)</td>
</tr>
<tr>
<td>3dB Beamwidth, Degrees</td>
<td>60</td>
</tr>
<tr>
<td>E Plane</td>
<td>88</td>
</tr>
<tr>
<td>H Plane</td>
<td>114</td>
</tr>
<tr>
<td>Side Lobe Attenuation, dB E Plane</td>
<td>40</td>
</tr>
<tr>
<td>Boom Length, ft (in)</td>
<td>3.91 (97)</td>
</tr>
<tr>
<td>Electrical Wavelength</td>
<td>0.5</td>
</tr>
<tr>
<td>Length Element, in (cm)</td>
<td>367 (93)</td>
</tr>
<tr>
<td>Turning Radius, ft (in)</td>
<td>3.91 (97)</td>
</tr>
<tr>
<td>Mast Slope, Wavelengths (in cm)</td>
<td>1.15-2 (1.15-51)</td>
</tr>
</tbody>
</table>
| Wind Load, lb (kg) | 23 (10.4) | 0.19 (0.09)
| Weight, lb (kg) | 1.7 (0.77) | 7 (3.15) |

---

**Specifications:**

<table>
<thead>
<tr>
<th>A449-6S</th>
<th>A449-11S</th>
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<tbody>
<tr>
<td>Frequency MHz</td>
<td>430-450</td>
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<tr>
<td>Number of Elements</td>
<td>10</td>
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<tr>
<td>Forward Gain, dBi</td>
<td>13.2</td>
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<tr>
<td>Front to Back Ratio, dB</td>
<td>18</td>
</tr>
<tr>
<td>SWR 1.2:1 Typical</td>
<td>&gt;10</td>
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<tr>
<td>21 Bandwidth, MHz</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>Power Rating, Watts PEP</td>
<td>2000</td>
</tr>
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<td>3dB Beamwidth, Degrees</td>
<td>60</td>
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<tr>
<td>E Plane</td>
<td>80</td>
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<tr>
<td>H Plane</td>
<td>12</td>
</tr>
<tr>
<td>Side Lobe Attenuation, dB E Plane</td>
<td>60</td>
</tr>
<tr>
<td>Boom Length, ft (in)</td>
<td>4.6 (11)</td>
</tr>
<tr>
<td>Connector Type</td>
<td>UHF</td>
</tr>
<tr>
<td>Length Element, in (cm)</td>
<td>13.75 (34.9)</td>
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<tr>
<td>Turning Radius, ft (in)</td>
<td>3.2 (1.3)</td>
</tr>
<tr>
<td>Mast Slope, Wavelengths (in cm)</td>
<td>2.0 (80)</td>
</tr>
<tr>
<td>Wind Load, lb (kg)</td>
<td>3.4 (1.5)</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>5 (2.3)</td>
</tr>
</tbody>
</table>

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**A719B**

**FM, CW and SSB 15.5 dBi**

Looking for an antenna to enhance performance on all modes of the 70 CM band? The 13.5 foot long 719B is the right choice. Mount it vertical for FM or horizontal for CW and Sideband. The A-719B joins the 2 meter A-13B2 as a classic for improved performance.

---

www.cushcraftamateur.com
A13B2 - 13 Element Wideband Boomer

The A13B2 is as versatile as the A-17B2 is specialized. A13B2 will be your choice for high performance across the entire 2 meter band. New and experienced hams will enjoy 15.8 dBi gain on FM, packet, CW, or sideband across the 4 MHz operating range. The A13B2 is easily mounted vertically or horizontally for maximum performance on your favorite mode. Its optimum boom length makes it a popular antenna that fits just about anywhere. The new UltraMatch balanced feed on the A13B2 provides a 50 Ohm match via a standard SO-239 UHF female connector. Model A13B2N has N connector.

A17B2 - 17 Element CW/SSB Boomer

The serious two meter operator who is interested in EME, aurora, scatter, SSB, CW, tropo etc, will choose the A17B2. It has 17 elements on a 4.5 wavelength boom. Our computer-aided design supported by precise test range data and the latest manufacturing technology gives you a cleaner pattern and 18 dBi gain in this long boom design. Significant enhancement is provided by the new UltraMatch balanced feed system with N-connector.

UltraMatch is a modified T-match system that provides a balanced current distribution on your Boomer. It uses UltraLink Teflon® dielectric cable allowing for low loss high power applications. UltraMatch is completely enclosed for weather proofing. UltraMatch has an N-connector on the A17B2 and UHF SO239 on A13B2. When all-weather performance is important, you'll choose the UltraMatched Boomers every time.

A26B2 - 26 Element Wideband Boomer

This antenna offers the highest gain of any 2 Meter FM antenna in the world. A26B2 includes 2 complete A-13B2 antennas, stacking boom and phasing harnesses.

A124WB - 4 Element Wideband Boomer

This is the right choice for packet systems and other applications requiring a dedicated directional antenna.

A148-10S & A148-3S 2M Yagis

These antennas are computer optimized models of our 2 meter Yagis. We've improved the pattern and gain to give you better FM coverage. The A148-3S is the low priced quality leader for Packet, FM or even portable use. It is easily rear mounted. A148-10S is one of our best value designs with excellent gain and front-to-back ratio. Use it for long range FM or full band 2 meter operation.

### Specifications:

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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<tr>
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<td>144-148</td>
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<td>144-148</td>
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<tr>
<td>Elements per Band</td>
<td>13</td>
<td>17</td>
<td>4</td>
<td>26</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Gain, dBi</td>
<td>15.8</td>
<td>18.0</td>
<td>10.2</td>
<td>17</td>
<td>7.8</td>
<td>13.2</td>
</tr>
<tr>
<td>Front to Back Ratio, dB</td>
<td>26</td>
<td>26</td>
<td>19</td>
<td>26</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Side Lobe Attenuation, dB</td>
<td>&gt;60</td>
<td>&gt;60</td>
<td>40</td>
<td>&gt;60</td>
<td>&gt;60</td>
<td>&gt;60</td>
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<tr>
<td>SWR 2:1 Bandwidth, MHz</td>
<td>&gt;4</td>
<td>&gt;2</td>
<td>4</td>
<td>&gt;4</td>
<td>&gt;5</td>
<td>&gt;4</td>
</tr>
<tr>
<td>Largest Element, in (cm)</td>
<td>39.75 (101)</td>
<td>40.75 (103.5)</td>
<td>40.75 (104)</td>
<td>39.75 (101)</td>
<td>41 (104.1)</td>
<td>40.3 (102.4)</td>
</tr>
<tr>
<td>Turning Radius, ft (m)</td>
<td>8.9 (2.7)</td>
<td>17.25 (5.25)</td>
<td>4 (1.22)</td>
<td>10.4 (3.18)</td>
<td>2.8 (0.8)</td>
<td>6 (1.8)</td>
</tr>
<tr>
<td>Boom Length, ft (m)</td>
<td>15 (4.57)</td>
<td>31 (9.53)</td>
<td>4 (1.22)</td>
<td>13 (4.57)</td>
<td>2.8 (0.85)</td>
<td>12 (3.6)</td>
</tr>
<tr>
<td>Electrical Wavelength</td>
<td>2.2</td>
<td>4.5</td>
<td>5</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Wind Load ft (m²)</td>
<td>1.8 (0.17)</td>
<td>3.9 (0.36)</td>
<td>34 (1.034)</td>
<td>4.84 (0.45)</td>
<td>0.27 (0.02)</td>
<td>1.21 (0.11)</td>
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<tr>
<td>Max. Power Watts PEP</td>
<td>1500W</td>
<td>1500W</td>
<td>1500W</td>
<td>1500W</td>
<td>1000W</td>
<td>1000W</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>6.7 (3.1)</td>
<td>15.75 (7.14)</td>
<td>3 (1.36)</td>
<td>21.5 (9.75)</td>
<td>1.5 (0.7)</td>
<td>6 (2.7)</td>
</tr>
</tbody>
</table>

### Power Divider Harness for Boomers


### Stacking Kits for Cushcraft Boomers

Cushcraft 6 and 10 Meter Yagis

6 Meter Yagis - SSB/CW/FMI

Computer-aided modeling and test range techniques were used by Cushcraft engineers to further optimize the performance of our popular 6 meter Yagis. This process means more gain and cleaner patterns with excellent front-to-back ratios. S-models have very broad bandwidth so they will not detune in bad weather. They feature stainless steel hardware for long trouble-free life. Enjoy the new popularity and exciting contacts on the 6 meter band with one of the S-series Laird Yagis. The A50-3S, A50-5S and A50-6S may be mounted vertically for FM use.

TEN-3 10 Meter Yagi

Looking for a lightweight, economical alternative to the 10 meter big boys? Choose the TEN-3. Although it’s popular with novices and technicians, this antenna is for any ham who wants more gain with a good front-to-back ratio on 10 meters. This antenna has an 8 foot boom (2.4m) making it easy to install on a very simple mount with only a light rotator. The matching system is our proven Reddi-Match for 50 Ohm no balun feed and SO-239 connector. Make more positive contacts with the TEN-3 and snag that rare DX.

Cushcraft Amateur Information

Cushcraft antennas are designed to survive 80 MPH winds unless otherwise noted. Stainless steel hardware and high-grade seamless 6063-T832 tubing are used in all antennas. Cushcraft antennas are distributed by many fine dealers worldwide. For dealers in the USA, Canada and other countries, please contact Cushcraft.

Sales: Cushcraft Amateur Antennas, 308 Industrial Park Road, Starkville, MS 39759 USA.
Phone: 662-323-9538. Fax: 662-323-5803.
Email: cushcraft@mfjenterprises.com
Warranty: Cushcraft antennas carry a one year limited warranty.
Information: Visit our website: cushcraftamateur.com for additional information.
FREE download of Instruction manuals.
Service: Return product to: Cushcraft Antennas, 308 Industrial Park Road, Starkville, MS 39759 USA
Replacement Parts: To purchase or obtain warranty replacement parts, contact Cushcraft.

Specifications:

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<thead>
<tr>
<th>Specifications</th>
<th>A50-3S</th>
<th>A50-5S</th>
<th>A50-6S</th>
<th>TEN-3</th>
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<td>50-54</td>
<td>50-54</td>
<td>20-25</td>
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<td>Number of Elements</td>
<td>3</td>
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<td>3</td>
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<td>Gain, dBi</td>
<td>8</td>
<td>10.5</td>
<td>11.6</td>
<td>8</td>
</tr>
<tr>
<td>Front to Back Ratio, dB</td>
<td>20</td>
<td>24</td>
<td>25</td>
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<tr>
<td>Side Lobe Atten, dB</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
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<tr>
<td>SWR, Typical, 21 Bandwidth, MHz</td>
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<td>&gt;1</td>
<td>&gt;1</td>
<td>&gt;1.5</td>
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<td>Longest Element, in (cm)</td>
<td>1.17</td>
<td>1.23</td>
<td>1.23</td>
<td>1.19</td>
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<tr>
<td>Turning Radius, ft (in)</td>
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<td>2.35</td>
<td>2.35</td>
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<td>Boom Length, ft (in)</td>
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<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Wind Load, lb (m2)</td>
<td>1.15</td>
<td>2.8</td>
<td>2.8</td>
<td>4.44</td>
</tr>
<tr>
<td>Max. Wind Surface Area</td>
<td>3.22 (in 2)</td>
<td>3.22 (in 2)</td>
<td>3.22 (in 2)</td>
<td>3.22 (in 2)</td>
</tr>
<tr>
<td>Max. Rated Watts PEP</td>
<td>1000W</td>
<td>1000W</td>
<td>1000W</td>
<td>1000W</td>
</tr>
<tr>
<td>Weight, lb (kg)</td>
<td>7</td>
<td>11</td>
<td>16</td>
<td>9.8</td>
</tr>
</tbody>
</table>
Cushcraft Low Noise 6M Loop Fed Array

Low Noise 6 Meter LFAs designed for Cushcraft by world renowned Justin Johnson, G0KSC

Cushcraft's computer optimized third generation G0KSC Loop Fed Array (LFA) yagis are specifically designed for low noise -- hear weak signals that others can't! Highly suppressed side lobes eliminate unwanted noise and signal pickup from sides making your desired signal pop out!

See and hear for yourself how signals pop out from a low-noise G0KSC LFA as compared to a top performing yagi at www.cushcraft.com/LFA-6M5EL.php

Wide-spaced LFA yagis have lower SWR, higher gain, better front-to-back and more broadbanded than dipole fed yagis. Cushcraft's direct 50-Ohm feed has no lossy matching network that limits power handling. Hy-gain LFAs handle 5,000 Watts. Operational power is only limited by your coax, connectors and other accessories.

Cushcraft LFAs are also computer optimized for maximum mechanical strength using Cushcraft's exceptionally strong tooled parts to give you years of reliable service. All Cushcraft 6-Meter LFAs have heavy duty 2-inch dia-meter double walled booms, 5/8" fully insulated elements and 7/16" outer tip sections. Climb the tower only once! See www.cushcraft.com for full specifications including SWR curves, pattern plots, gain, wind loading, wind survival, front-to-back, and more.

LFA-6M4EL, $21995

LFA-6M5EL, $31995

LFA-6M7EL, $52995

LFA-6M8EL, $63995

Who is G0KSC?

Justin Johnson is a world-renowned antenna expert and the owner of InnovAntennas. He is the author of the VHF/UHF chapters for the 2017 ARRL Antenna Handbook.
Cushcraft Low Noise 2M Loop Fed Array

All of our LFA’s are SUPER LOW NOISE and HEAVY DUTY with large diameter booms and rated to 5KW+!

9-Element 2-Meter Loop Fed Array

LFA-2M9EL
$204.95

12-Element 2-Meter Loop Fed Array

LFA-2M12EL
$259.95

14-Element 2-Meter Loop Fed Array

LFA-2M14EL
$309.95

16-Element 2-Meter Loop Fed Array

LFA-2M16EL
$369.95

Cushcraft (R) 4/6M Yagi Antenna

World’s First!!! DB-46M8EL, $269.95

Cushcraft has the first 4/6 Meter, 50MHz/70MHz single feed point dual band Yagi! 8 elements (4 elements each band) on a compact 7 foot boom.

2-Meter Antenna Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>LFA-2M9EL</th>
<th>LFA-2M12EL</th>
<th>LFA-2M14EL</th>
<th>LFA-2M16EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain</td>
<td>14.09dB</td>
<td>15.62dB</td>
<td>16.64dB</td>
<td>17.3dB</td>
</tr>
<tr>
<td>FBG</td>
<td>26.97dB</td>
<td>30.53dB</td>
<td>34.21dB</td>
<td>36.01dB</td>
</tr>
<tr>
<td>Power Rating</td>
<td>100W</td>
<td>135W</td>
<td>165W</td>
<td>200W</td>
</tr>
<tr>
<td>Noise</td>
<td>&lt; 1.11 145.700MHz to 145.200MHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bands</td>
<td>2.54 lbs</td>
<td>2.73 lbs</td>
<td>3.06 lbs</td>
<td>3.57 lbs</td>
</tr>
<tr>
<td>Weight</td>
<td>7.55 lbs</td>
<td>11.77 lbs</td>
<td>16.92 lbs</td>
<td>22.07 lbs</td>
</tr>
<tr>
<td>Wind Loading</td>
<td>1.60 sq ft</td>
<td>2.04 sq ft</td>
<td>2.50 sq ft</td>
<td>3.00 sq ft</td>
</tr>
<tr>
<td>Wind Shear</td>
<td>1.15 mph</td>
<td>1.76 mph</td>
<td>2.41 mph</td>
<td>3.11 mph</td>
</tr>
<tr>
<td>Stack Distance Vertical</td>
<td>7-10 feet</td>
<td>7-10 feet</td>
<td>7-10 feet</td>
<td>7-10 feet</td>
</tr>
<tr>
<td>Stack Distance Horizontal</td>
<td>7-10 feet</td>
<td>7-10 feet</td>
<td>7-10 feet</td>
<td>7-10 feet</td>
</tr>
</tbody>
</table>

* Lower handling is limited only by operating station access and size.
** Other options available if higher wind loading/waterability is required.
*** LFA-2M16EL requires a 1:1 choke balun.

A Cushcraft antenna would look great in your backyard too.
Get 20-6 Meter monoband performance from the world's first Band-Optimized Log Periodic Array (BOLPA) designed by highly renowned G0KSC of InnovAntennas™.

Cushcraft 5-Band HF YAGI, 10/12/15/17/20 Meters

SR-5
$1059.95
10/12/15/17/20M
9-Elements, 5 kW

SR-3
$844.95
10/15/20 METERS
6-Elements, 5 kW

SR-5 is a 9-element multi-Band HF Yagi covers 20/17/15/12/10 Meters with a single feed point!

Reduced in length by more than 30% but still gives the same great performance on all 5 HF bands.

SR-5, comes with a capacity loaded 20-Meter element option and reduced turning radius too!

Boom Length: 11.5 feet
Weight: 61 lbs.
Turning Radius: 19.78 feet
Wind Loading: 4 Square feet
Wind Survival: up to 124 MPH

See full specifications at www.cushcraftamateur.com

Cushcraft antennas are stronger, lighter, have less wind surface area, better wind survival, need no adjustments, look professional and last years longer.

Cushcraft's famous super strong tooled die cast Boom-to-Mast Clamp

Tooled Boom-to-Element Clamp

Thick-wall swaged aluminum tubing

Tooled manufacturing is the difference between Hy-Gain antennas and the others -- they just don't have it, it’s too expensive!

Die-cast aluminum boom-to-mast bracket and element-to-boom compression clamps are made with specially tooled machinery.

Cushcraft antennas feature tooled swaged tubing deburred and cleaned for smooth, easy and secure assembly.

Durable precision injection molded parts.
2019 Ham Catalog

Hy-Gain® Multi-Band PATRIOT Vertical Antennas

9-band vertical covers 80/40/30/20/17/15/12/10/6 Meters
- No radials
- No traps
- No ground
- No tuning
- Handles 1500 Watts

Hy-gain’s HF vertical antennas are the best built, best performing and best priced multibanders on the market today. Make full use of your sunspot cycle with the PATRIOT’s low angle signal.

Instead of typical traps, hy-gain’s resonators are placed in parallel not in series. End loading of the lower HF bands allows efficient operation with a manageable antenna height.

Introducing the new Hy-Gain PATRIOT-PLUS AV-680 with a fully tunable 3.5-4.0 MHz coverage!

With the AV-680, you get the same great traditional performance of the AV-640 on 6 through 40 Meters plus top-to-bottom capability on 80 and 75 Meters.

It’s a great way to join new local nets and roundtables, explore the 75-Meter DX window, or add exciting digital frequencies to your operating repertoire.

Simply pick the band segment you wish to use, set the 80/75 Meter resonator, and you’re in business.

- No ground or radials needed – Effective counterpoise replaces radials, end fed with broadband matching unit.
- Automatic bandswitching – Single coax cable feed, each band is individually tunable, wide VSWR bandwidth.
- Sleek and low-profile – Low wind surface area, small area required for mounting, mounts easily on decks, roofs and patios.
- Built-to-last – Hy-gain’s Patriot series antennas boast a high wind survival due to its sleek, but sturdy frame. The matching unit is made from all Teflon insulated wire.
- Top Loading: Parallel resonators – best element efficiency
- Full ground independence: No unsightly wire add-on radials
- Top-to-bottom 3.5 to 4.0 MHz coverage: Pin-point fine-tuning accuracy for rock-bottom SWR on any frequency you choose.
- Single coax feed . . . and 100% automatic band selection!
- Low profile: Most compact ground-independent antenna!
- Legal-limit 1500-Watt PEP: Power handling on SSB/CW*

Adding 75/80 Meter coverage without compromising it’s classic performance, ground independence, and tiny footprint was no small task. Yet, AV-680 size, weight, and wind loading are nearly identical to AV-640 with no unsightly radial extensions, traps, or top-heavy vertical structures to render it less attractive or unsafe.

Band selection remains fully automatic, all components handle legal power, and you won’t need a tuner with your solid-state rig.

AV-680’s Expanded-Frequency Matchbox™ circuit ensures low SWR on every band, along with an upgraded balun design that concentrates all of your power in the antenna where it belongs!

If space is a premium at your QTH and appearance matters, let Hy-Gain® open the door to one of ham radio’s most attractive and popular bands with the new AV-680. This is your best choice for unparalleled versatility and band coverage from 6-80 Meters!

AV-640, $479.95. Like AV-680 vertical antenna but just 25.5 feet tall and weighs only 17.5 lbs. It covers all bands 6 through 40 Meters with no traps, no coils, no radials yielding an uncompromised signal across all bands. AV-640 uses 1/4 wave stubs on 6, 10, 12 and 17 meters and efficient end loading coil and capacity hats on 15, 20, 30 and 40 meters.

AV-620, $369.95. Like Hy-Gain’s AV-640 Vertical Antenna but just 22.5 feet tall, weighs only 10.5 lbs. Covers all bands 6 thru 20 Meters with no traps, no coils, no radials yielding an uncompromised signal across all bands.

Optional Guy Wire Kit, AGK-8, $69.95.

*Intermittent duty CW.
CD-45II . . . . . for arrays up to 8.5 square feet

<table>
<thead>
<tr>
<th>CD-45II Rotator Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind load capacity (inside tower)</td>
</tr>
<tr>
<td>Wind Load (w/ mast adapter)</td>
</tr>
<tr>
<td>Turning Power</td>
</tr>
<tr>
<td>Brake Power</td>
</tr>
<tr>
<td>Brake Construction</td>
</tr>
<tr>
<td>Bearing Assembly</td>
</tr>
<tr>
<td>Mounting Hardware</td>
</tr>
<tr>
<td>Control Cable Conductors</td>
</tr>
<tr>
<td>Shipping Weight</td>
</tr>
<tr>
<td>Effective Moment (in tower)</td>
</tr>
</tbody>
</table>

HyGain Antenna Rotators

T2X TAILTWISTER SERIES II

For large medium antenna arrays up to 20 square foot wind load

Tailtwister is the most popular rotator in the world. It's the standard to which competing rotators try to match up for well over many years. Ask any ham who owns one.

Water-tight AMP detachable twist-lock connectors at the rotator base and an 8-pin plug at the control box make it easy to hook up. Triple bearing race with 138 ball bearings for large load bearing strength. Electric locking steel wedge brake prevents wind induced antenna moving.

Control box has North/South center of rotation scale on meter and low voltage control for safe operation.

Clamp plate, stainless steel mounting hardware included. Use 2'16 inch maximum mast. Use 110 VAC. Order T-2XX for 220 VAC.

Optional lower mast. MSHD, $119.95.

T2XD, $1299.95 has DCU-1 Pathfinder with automatic operation of brake and rotator, computer control RS-232 passthrough with 1 degree heading accuracy.

Compatible with many logging/contest programs and has six pre-sets for favorite beam headings. Has automatic 8-second brake delay and 360 degree choice for engaging the brake while the rotator is in movement. T2X features a new low temperature grease which permits normal operation to -30°F. New alloy ring gear has tensile strength of 100,000 psi for max reliability.

Effective Moment (in tower) 3400 ft.-lbs.

Turning Power 9000 in.-lbs.

Brake Power 6000 in.-lbs.

Brake Construction Electric Wedge

Bearing Assembly Triple race/138 ball bearings

Mounting Hardware Clamp plate/steel U-bolts

Shipping Weight 31 lbs.

Effective Moment (in tower) 3400 ft.-lbs.

Call 662-323-9538 for details.
**the first choice of hams worldwide!**

**HAM-IV** . . . The most popular rotator in the world!

. . . for medium communication arrays up to 15 sq. ft. wind load . . .

![HAM-IV](image)

HAM-IV is the most popular rotator in the world for obvious reasons. Solidly constructed, time-tested, proven for over 20 years and is a heckuva buy at only $689.95!!! HAM-IV is for medium communications arrays to 15 sq. ft. wind load area (7.5 sq. ft., with mast adapter).

### HAM-IV Specifications
- **Effective Moment (in tower)**: 300 ft.-lbs.
- **Shipping Weight**: 26 lbs.
- **Control Cable Conductors**: 8
- **Mounting Hardware**: Clamp plate/steel U-bolts
- **Bearing Assembly**: Dual race/98 ball bearings
- **Brake Construction**: Electric Wedge
- **Turning Power**: 7000 ft.-lbs.
- **Wind Load (w/mast adapter)**: 7.5 square feet
- **Turning Power**: 300 ft.-lbs.
- **Brake Power**: 5000 in.-lbs.
- **Brake Construction**: Disc Brake
- **Bearing Assembly**: Dual race/12 ball bearings
- **Turning Power**: 5000 ft.-lbs.
- **Brake Power**: 5000 in.-lbs.
- **Brake Construction**: Electric Wedge
- **Bearing Assembly**: Dual race/98 ball bearings
- **Mounting Hardware**: Clamp plate/steel U-bolts
- **Control Cable Conductors**: 8
- **Shipping Weight**: 26 lbs.
- **Effective Moment (in tower)**: 300 ft.-lbs.

**AR-40** . . . for compact arrays up to 3.0 square feet

![AR-40](image)

AR-40 is for compact antenna arrays and large FM-TV up to 3.0 square feet wind load area. Dual 12 ball bearing race. Automatic position sensor never needs resetting. Fully automatic control -- just dial and touch for any desired location. Solid state, low voltage control, safe and silent operation. 2'/16 inches maximum mast size. MSLD, light duty lower mast support included. Use 110 VAC. Order AR-40X for 220 VAC operation.

### AR-40 Specifications
- **Wind Load capacity (inside tower)**: 15 square feet
- **Wind Load (w/mast adapter)**: 7.5 square feet
- **Turning Power**: 300 in.-lbs.
- **Brake Power**: 450 in.-lbs.
- **Brake Construction**: Disc Brake
- **Bearing Assembly**: Dual race/12 ball bearings
- **Mounting Hardware**: Clamp plate/steel U-bolts
- **Control Cable Conductors**: 5
- **Shipping Weight**: 14 lbs.
- **Effective Moment (in tower)**: 300 ft.-lbs.

**UHF/VHF/6-Meter/TV/FM/MFJ-1886 Lightweight Rotator/Controller, Remote**

For use of small VHF/UHF, 6-Meters, TV, FM, the MFJ-1886 wide band receiving loops and other lightweight amateur radio antenna systems.

**AR-500**

$159.95

Selectable 110 VAC or 220 VAC.

**AR-500** is programmable to remember up to 12 directions even after a power outage! Use included remote control or direct console. Displays location and relative position. Unlike other TV antenna rotators the Hy-Gain AR-500 Rotator is built in a weather-proof one piece cast aluminum housing with precision steel gears, steel thrust bearings. Includes rotator, controller, remote, clamps, and all hardware. User selectable 110 or 220 VAC.

www.hy-gain.com

129
Hy-gain Digital Automatic Controllers for HAM-IV and Tailtwister

DCU-3 Programmable Rotator Controller

6 Programmable memories; Point & shoot and manual control!

DCU-3 Digital Controllers feature six presets for beam headings, 1 degree accuracy and gives you fully automatic or manual control of your HAM or Tailtwister Rotators. Dial in your beam heading and press the rotate button or let Ham Radio Deluxe (or other) control your DCU-3. Your antenna automatically rotates to desired direction precisely and safely. First, DCU-3 makes sure your antenna is free and safely unlocked before turning begins and then turns off your motor before your antenna reaches its final destination. Your antenna gently coasts to a stop before the brake locks. Greatly reduces potentially damaging overshoot. Fine tuning and full manual control is effortless with automated Left and Right direction buttons - no more worrying about manually releasing and relocating the brake. Brake automatically releases before fine tuning begins and relocks after fine tuning is completed. Bright blue LCD displays actual, dial-in beam, and computer controlled beam headings in one degree increments and your call sign. AutoBrake Release - no need to remember to release brake or release too soon - release time is automatic 0-8 seconds. Coast feature allows antenna to gently stop before brake locks. Adjustable coast delay (0-10 degrees) turns off motor before antenna reaches its final destination to reduce potentially damaging overshoot.

DCU-1 Automatic Digital Controller

Hy-gain's DCU-1 Pathfinder automatic digital controller unit has a gas plasma display. The DCU-1 provides automatic operation of brake and rotor and calibration, and is computer-controlled with RS-232 pass-through and compatible with many logging and contest programs. Features 6 presets for beam headings, 1 degree accuracy, auto 8-second brake delay, 360 degree choice for center location, plus much more.

Order DCU-1X for 220 VAC operation.

HDR-300A ... for King-sized antenna arrays up to 25 square feet wind load

The HDR-300A is for king-sized antenna arrays up to 25 square feet wind load area (inside tower). It has a 5000 lbs. - pounds turning power and a tremendous 7500 inches - pounds braking power.

Brake construction is a solenoid operated locking brake and the bearing assembly is bronze sleeve with rollers built to handle huge loads.

Control cable connector with hardened stainless steel output shaft, North or South centered calibration.

Ferrite beads on potentiometer wires reduce RF susceptibility, longer output shaft keyway adds fantastic reliability.

Self-centering steel clamp and hardware included. Display is accurate to 1°.

Machined steel output. Mounting hardware, stainless steel bolts included. Use 110 VAC. Weighs A ROBUST 61 pounds.

UPS shippable. Order HDR-300AX for 220 VAC operation.

Replace your YAESU Rotator Controller

Hy-gain YRC-1 gives more features and a much more robust controller that is far less prone to lightning damage. YRC-1 costs less than repairing your original Yaesu controller! YRC-3 has all features of the YRC-1 plus it gives you 6 programmable memories!

Get rid of your old Yaesu controller that is prone to lightning damage and just doesn’t have as many great features as these Hy-gain replacement controllers!

Easy-to-use -- dial in your beam heading and tap GOTO button. Exclusive 180 degree AutoReversal™ for fast long-path operation. YRC-1 has all features of the DCU-2. Bright blue LCD shows current, dialed-in, computer controlled beam headings and your call. USB port for computer control. Extra heavy-duty AC power supply. Variable DC motor speed for minimizing damaging antenna overshoot and fast operation. Intuitive menu for calibrating, offsetting, or changing parameters. Field upgradeable firmware. Use with Yaesu G-800/1000/2800/ G450/650. For AC or DC motors.

YRC-3, $429.95 is like YRC-1, but adds six programmable memories. Pick six beam headings for quick adjustment.

HDR-300A Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind Load capacity (Inside)</td>
<td>25 square feet</td>
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<tr>
<td>Wind Load (w mast adapter)</td>
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</tr>
<tr>
<td>Turning Power</td>
<td>5000 in.-lbs</td>
</tr>
<tr>
<td>Brake Power</td>
<td>7500 in.-lbs</td>
</tr>
<tr>
<td>Brake Construction</td>
<td>solenoid operated locking</td>
</tr>
<tr>
<td>Bearing Assembly</td>
<td>bronze sleeve with rollers</td>
</tr>
<tr>
<td>Mounting Hardware</td>
<td>stainless steel bolts</td>
</tr>
<tr>
<td>Control Cable Connectors</td>
<td>61 lbs</td>
</tr>
<tr>
<td>Effective Moment (in tower)</td>
<td>5000 ft.-lbs</td>
</tr>
</tbody>
</table>

Digital Rotator Controllers

DCU-2 Digital Rotator Controller

DCU-2 Digital Rotator Controller

AutoBrake Release - great for older rotators with “sticky” brakes. It joggs rotator backwards slightly to ease brake pressure enough to release. Offset feature allows you to calibrate display to show actual beam heading. USB/RS-232 ports. Adjustable LCD sleep time. Field upgradeable. 8.5Wx4.3Hx5D”. 110 VAC. DCU-3X for 220 VAC. DCU-2, $429.95. Similar to DCU-3, but does not have programmable memories. 110 VAC.

Order DCU-2X for 220 VAC.

HDR-300A, $429.95. Like DCU-3 but for Pulse series rotators.

DCU-2P, $479.95. Like DCU-2 but for Pulse series rotators.

YRC-1, $349.95

YRC-3, $429.95

YRC-1 Pathfinder, $349.95

YRC-3 Pathfinder, $429.95

DCU-3 Programmable Rotator Controller

DCU-3 Programmable Rotator Controller

$479.95

DCU-3 Programmable Rotator Controller

$789.95

DCU-1 Pathfinder

$789.95

DCU-1 Pathfinder

$479.95
hy-gain / Spid Azimuth & Elevation Rotators

Super heavy-duty Rotators . . . Super strong Double Worm Gear Drive, Self-Braking, Extremely Quiet Motors, One Degree Position Resolution, Automatic Digital Controller. Up to . . . 38 sq. ft. wind load . . . 8000 in/lbs. turning torque . . . 24,000 in/lbs. brake torque . . . 700 lbs. vertical load

Super heavy-duty RAKs. Rotators are designed with a simple double worm gear drive. This results in a superstrong ultra-reliable rotator system with inherent self-braking. Each includes a precision automatic digital controller.

Turning is powerful, smooth, precise and extremely quiet. The inherent self-braking action of its double worm gear drive positively stops it every time -- won't move! It's fast! A high-torque DC gear motor rotates antenna 360° in just 60 seconds with 24V on motor. RAKs operate 12-24V AC/DC. Higher voltage the higher torque and faster turning speed -- a unique RAK feature.

RAK-1-<br>$999.95 <br>Includes RAK-1CU controller and<br>control box for Yaesu rotators and<br>Hy-gain HamII, IV, T2X, Yaesu and many other common rotators<br>

**Simple to mount!** Pipe mast mount on both ends allow coax cables to pass through the center of rotator and prevents cable tangling, damage. Optional adapter plate mounting. See accessories section below.

**It's precise!** RAK-1 controller has one degree resolution and a large 3/4 inch 4-digit easy-to-read soft LED digital readout. Sealed reed switch sensor technology gives reliable all-weather operation and super light touch to minimal play.

Tough & durable! Heavy-duty construction uses 3/16" thick-wall steel pipe, ultra-durable steel housing.

RAK-2-<br>$1369.95 <br>Includes RAK-1CU controller and<br>control box for Yaesu rotators and<br>Hy-gain HamII, IV, T2X, Yaesu and many other common rotators

### Econo Spid Rotator

Smallest rotator provides excellent support for direct round mast mounting. Elevator rotator provides full azimuth capability. Ideal for light duty 3-4 element antennas, short boom beams and 2/6 Meter/70 cm beam antennas.

RAU-1-<br>$629.95 <br>RAU Rotator only.

### Elevator Rotator

Elevator rotator has all specifications of the popular RAK-1 but is for moving antennas 180 degrees up or down. Package includes RAK-1CU controller.

REAL-1-<br>$739.95 <br>REAL Rotator only.

### Azimuth-Elevation Rotators

RAS-1 & BIG RAS-2 (RAS-2) super heavy-duty Azimuth-Elevation Rotators are the same heavy-duty design as RAKs and includes the RAS-2C Controller.

RAS-1-<br>$1309.95 <br>RAK-1CU controller.

RAS-2-<br>$1889.95 <br>RAK-2CU controller.

### MDS RC-1 Econo Digital Rotator Controller

For Hy-gain HamII, IV, T2X, Yaesu and many other common rotators.

**Get ALL these features at half cost of similar digital controllers!** The RC-1 is a direct replacement control box for Yaesu rotators and SA & DXA models and others. It is priced well below the repair cost of many factory control boxes. RC-1 uses slave power from existing Hams, AC controllers (RC1-G, RC1-H). Emergency and battery-power capable for DC models.

Graphical bright blue LCD is large for easy visibility. Huge beam heading digits! "Go-to" button gives reciprocal heading, quick changes.

Computer-controlled via included USB (for RC1-Y) or serial ports to use favorite software. Field upgradeable firmware via serial port.

Rugged aluminum enclosure for maximum RF shielding is a compact 5"Wx3 1/4"Hx4 1/2"D inches.

**RC1-Y for Yaesu DC rotators, RC1-G for Yaesu AC, RC1-H for Hygain, RC1-P for Spid, Orion.**

---

**Hy-Gain . . . Antennas, Rotators and Towers**
### Genuine Hy-Gain Rotator Replacement Parts

**Rotator Potentiometer**
Fits Hy-gain T2X, HAM-II, III, IV, V, and CD45II
Hy-gain rotators. Has silver plated contact point that makes for smooth traveling, longer lasting and more reliable contact between pot strip, wiper arm.
RPM-1, $44.95 500 Ohms, for most Hy-gain rotators.
RPM-2, $44.95. Like RPM-1, 1000 Ohms for AR-40.

**5-Second Brake Delay Kit**
Allows automatic 5-seconds brake delay for Hy-Gain rotators. This insures that rotator is fully stopped before brake is engaged. Avoid accidentally engaging the brake while the rotator is in motion.
Use with HAM-II, HAM-III, HAM-IV, HAM-V, and T2X. Easy to install inside controller. Includes pre-assembled PCB, mounting hardware.

### Motor Capacitors/Meters/Fuses

<table>
<thead>
<tr>
<th>Figure</th>
<th>Part No.</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5151501</td>
<td>$7.60</td>
<td>Motor start Capacitor for CD45, HAM-II, III, IV, V, T2X</td>
</tr>
<tr>
<td>B</td>
<td>5147705</td>
<td>$30.00</td>
<td>Panel meter for CD45/HAM-IV, T2X with “North” scale. Uses external meter lamp.</td>
</tr>
<tr>
<td>C</td>
<td>5099050</td>
<td>$36.40</td>
<td>Meter with internal LED lamp for “Plus” series CD45, HAM-IV, T2X, had “North” scale.</td>
</tr>
<tr>
<td>D</td>
<td>355-2678</td>
<td>$1.95</td>
<td>Incandescent light bulbs, 28 V for controller with external meter lamp. Bayonet base.</td>
</tr>
<tr>
<td>E</td>
<td>5056052</td>
<td>$1.44</td>
<td>7/8 Amp meter circuit fuse. For CD-45, HAMIV, T2X.</td>
</tr>
<tr>
<td>F</td>
<td>755-0103</td>
<td>$0.40</td>
<td>For HAM-III, HAM-IV, T2X, 3 Amp power fuse for CD45, HAM-IV, T2X, IV, V, T2X.</td>
</tr>
</tbody>
</table>

### Rotator Mast Plates and U-Bolts

<table>
<thead>
<tr>
<th>Figure</th>
<th>Part No.</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5177000</td>
<td>$14.95</td>
<td>Mast mounting plate for T2X, 3 1/2 zinc plated steel.</td>
</tr>
<tr>
<td>B</td>
<td>5121000</td>
<td>$6.96</td>
<td>Mast mounting plate for CD-45II, HAM-II, HAM-III, IV, V, T2X.</td>
</tr>
<tr>
<td>C</td>
<td>5141610</td>
<td>$11.95</td>
<td>Mast mounting plate for CD-45II/HAM-IV (2 sets). U-bolt with nuts, lock washers, stainless.</td>
</tr>
<tr>
<td>D</td>
<td>5124210</td>
<td>$11.95</td>
<td>Mast mounting plate for T2X (2 sets) U-bolt with nuts, lock washers, Stainless.</td>
</tr>
<tr>
<td>E</td>
<td>5020670</td>
<td>$8.20</td>
<td>Stainless U-bolt with nuts, lock washers, Zinc plated.</td>
</tr>
<tr>
<td>F</td>
<td>5141320</td>
<td>$26.60</td>
<td>1/4-40 AMP circular male potentiometer kit, complete with mast plate.</td>
</tr>
<tr>
<td>G</td>
<td>5141210</td>
<td>$39.90</td>
<td>T2X Rotator mounting kit: mast plate, 2 sets U-bolts, nuts and bolts.</td>
</tr>
<tr>
<td>H</td>
<td>9042510</td>
<td>$52.80</td>
<td>CD-45I, AR40 Rotator mounting kit: mast plate, 4 sets U-bolts, nuts, bolts, 6 each tower mounting bolts.</td>
</tr>
<tr>
<td>I</td>
<td>5191810</td>
<td>$15.75</td>
<td>T2X tower to lower stainless mast bolts/washers (4).</td>
</tr>
<tr>
<td>J</td>
<td>5105700</td>
<td>$0.99</td>
<td>Rotator bottom casting to top bell housing mounting bolts.</td>
</tr>
</tbody>
</table>

### Rotator Cables & Mast Supports

<table>
<thead>
<tr>
<th>Figure</th>
<th>Part No.</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>5121000</td>
<td>$6.96</td>
<td>Mast mounting plate for T2X, 3 1/2 zinc plated steel.</td>
</tr>
<tr>
<td>C</td>
<td>5141610</td>
<td>$9.95</td>
<td>HAM-IV (2 sets) U-bolt with nuts, lock washers, stainless.</td>
</tr>
<tr>
<td>D</td>
<td>5124210</td>
<td>$11.95</td>
<td>T2X (2 sets) U-bolt with nuts, lock washers, Stainless.</td>
</tr>
<tr>
<td>E</td>
<td>5020670</td>
<td>$8.20</td>
<td>Stainless U-bolt with nuts, lock washers, Zinc plated.</td>
</tr>
<tr>
<td>F</td>
<td>5141320</td>
<td>$26.60</td>
<td>1/4-40 AMP circular male potentiometer kit, complete with mast plate.</td>
</tr>
<tr>
<td>G</td>
<td>5141210</td>
<td>$39.90</td>
<td>T2X Rotator mounting kit: mast plate, 2 sets U-bolts, nuts and bolts.</td>
</tr>
<tr>
<td>H</td>
<td>9042510</td>
<td>$52.80</td>
<td>CD-45I, AR40 Rotator mounting kit: mast plate, 4 sets U-bolts, nuts, bolts, 6 each tower mounting bolts.</td>
</tr>
<tr>
<td>I</td>
<td>5191810</td>
<td>$15.75</td>
<td>T2X tower to lower stainless mast bolts/washers (4).</td>
</tr>
<tr>
<td>J</td>
<td>5105700</td>
<td>$0.99</td>
<td>Rotator bottom casting to top bell housing mounting bolts.</td>
</tr>
</tbody>
</table>

### Terminal board & Pigtail cable conversion kits

<table>
<thead>
<tr>
<th>Figure</th>
<th>Part No.</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
</table>

### Rotator Motors/Ring Gears/Gears/Solenoid

<table>
<thead>
<tr>
<th>Figure</th>
<th>Part No.</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5011500</td>
<td>$11.66</td>
<td>Motor Motor for CD45, HAM-IV, T2X</td>
</tr>
<tr>
<td>B</td>
<td>5110000</td>
<td>$14.95</td>
<td>Brake Solenoid for HAM-IV and T2X</td>
</tr>
<tr>
<td>C</td>
<td>5115100</td>
<td>$15.10</td>
<td>Motor Gear, Steel for CD45/HAM-IV and T2X</td>
</tr>
<tr>
<td>D</td>
<td>5033210</td>
<td>$9.95</td>
<td>Black Wedge for all HAM rotators. Stainless steel.</td>
</tr>
<tr>
<td>E</td>
<td>5033220</td>
<td>$12.77</td>
<td>Low Temperature Rotator Lubricant, 1 ounce.</td>
</tr>
<tr>
<td>F</td>
<td>8048900</td>
<td>$39.95</td>
<td>Bench Test Cable for T2X. 6 ft. pre-wired assembly. 8 pin Jones male to 8 pin AMP female.</td>
</tr>
<tr>
<td>G</td>
<td>5011390</td>
<td>$19.95</td>
<td>Lower mast support not included.</td>
</tr>
</tbody>
</table>

### Hy-Gain Rotator Accessories

- **Bench Test Cable for T2X. 6 ft. pre-wired assembly. 8 pin Jones male to 8 pin AMP female.**
- **Low Temperature Rotator Lubricant, 1 ounce.**

---

**Hy-Gain can repair or rebuild your rotator.**

*Call Hy-Gain for quote & other replacement parts not listed.*

1-662-323-9538 email: hygain@mfjenterprises.com

---

**RPM-1** $44.95 500 Ohms, for most Hy-gain rotators.

**RPM-2** $44.95. Like RPM-1, 1000 Ohms for AR-40.

**RBD-5** $34.95

---

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HF BEAMS…

...are stronger, lighter, have less wind surface and last years longer

TH-11DX, $1259.95. 11-element, 4.0 kW PEP. 10, 12, 15, 17, 20 Meters

*The* choice of top DXers. With 11-elements, excellent gain and 5-bands, the super rugged TH-11DX is the "Big Daddy" of all HF beams! Handles 2000 Watts continuous, 4000 Watts PEP. Every part is selected for durability and ruggedness for years of trouble-free service. Features a low loss log-periodic driven array on all bands with monoband reflectors, BN-4000 high power balun, corrosion resistant wire boom support, hot dipped galvanized and stainless steel parts. Stainless steel hardware and clamps are used on all electrical connections.

Compact 3-element

10, 15, 20 Meter Tri-Bander

For limited space... Installs anywhere... 14.75 ft turning radius... weighs 21 lbs... Rotate with CD-45II, HAM-IV

TH-3MK4, $529.95.

Hy-Gain’s most popular 3-element 10, 15, 20 Meter tri-bander fits on most lots! Same top performance as the full power TH3MK4 in a compact 600 watt PEP design. Excellent gain and F/B ratio let you compete with the "big guns".

Tooled manufacturing gives you Hy-Gain durability with 80 MPH wind survival.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Retail Price</th>
<th>No. of elements</th>
<th>avg gain (dBi)</th>
<th>avg F/B ratio</th>
<th>Max Pwr. Watts/PEP</th>
<th>Bands Covered</th>
<th>Wind speed Survival</th>
<th>Boom (feet)</th>
<th>Longest (ft)</th>
<th>Turning (ft)</th>
<th>Weight (lbs.)</th>
<th>Mast dia (in.)</th>
<th>Recom. Rotator</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH-11DX</td>
<td>$1259.95</td>
<td>11</td>
<td>8.6</td>
<td>25</td>
<td>1500</td>
<td>10, 12, 15, 17, 20</td>
<td>12.5</td>
<td>100</td>
<td>24</td>
<td>37</td>
<td>22</td>
<td>88</td>
<td>1.9-2.5</td>
</tr>
<tr>
<td>TH-7DX</td>
<td>$949.95</td>
<td>7</td>
<td>8.7</td>
<td>22</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>9.4</td>
<td>100</td>
<td>24</td>
<td>31</td>
<td>20</td>
<td>75</td>
<td>1.5-2.5</td>
</tr>
<tr>
<td>TH-3MK3</td>
<td>$399.95</td>
<td>5</td>
<td>6</td>
<td>22</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>7.2</td>
<td>100</td>
<td>19</td>
<td>18</td>
<td>13.5</td>
<td>35</td>
<td>1.9-2.5</td>
</tr>
<tr>
<td>TH-3MK4</td>
<td>$529.95</td>
<td>5</td>
<td>8</td>
<td>25</td>
<td>600</td>
<td>10, 15, 20</td>
<td>4.6</td>
<td>95</td>
<td>14</td>
<td>27.42</td>
<td>15.33</td>
<td>35</td>
<td>1.9-2.5</td>
</tr>
<tr>
<td>TH-3JRS</td>
<td>$399.95</td>
<td>3</td>
<td>8</td>
<td>25</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>3.35</td>
<td>80</td>
<td>12</td>
<td>27.25</td>
<td>14.75</td>
<td>21</td>
<td>1.25-2.0</td>
</tr>
<tr>
<td>TH-2MK3</td>
<td>$419.95</td>
<td>3</td>
<td>8</td>
<td>25</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>4.6</td>
<td>95</td>
<td>14</td>
<td>27.42</td>
<td>15.33</td>
<td>35</td>
<td>1.9-2.5</td>
</tr>
<tr>
<td>TH-3MK4</td>
<td>$529.95</td>
<td>5</td>
<td>8</td>
<td>25</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>3.25</td>
<td>80</td>
<td>6</td>
<td>27.3</td>
<td>14.3</td>
<td>20</td>
<td>1.25-2.5</td>
</tr>
<tr>
<td>EXP-14</td>
<td>$669.95</td>
<td>4</td>
<td>5.5</td>
<td>15-20</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>3.25</td>
<td>80</td>
<td>6</td>
<td>27.3</td>
<td>14.3</td>
<td>20</td>
<td>1.25-2.5</td>
</tr>
<tr>
<td>DB-1015</td>
<td>$479.95</td>
<td>7</td>
<td>7.4</td>
<td>25</td>
<td>1500</td>
<td>10, 15</td>
<td>6.7</td>
<td>115</td>
<td>14</td>
<td>29.5</td>
<td>16.3</td>
<td>36</td>
<td>1.9-2.5</td>
</tr>
<tr>
<td>DB-1217</td>
<td>$479.95</td>
<td>7</td>
<td>7.4</td>
<td>25</td>
<td>1500</td>
<td>10, 15, 20</td>
<td>6.7</td>
<td>115</td>
<td>14</td>
<td>29.5</td>
<td>16.3</td>
<td>36</td>
<td>1.9-2.5</td>
</tr>
</tbody>
</table>

www.hy-gain.com  •  1-662-323-9538  133
Hy-Gain Long Johns HF Monobanders

LJ-105CA, $309.95. 10 Meters, 5 elements. Exclusive 50 Ohm BetaMatch™. Excellent DC Ground. Stainless steel hardware and clamps. BN-4000 Balun recommended.

LJ-155CA, $459.95. 15/12 Meters, Five Elements. Exclusive 50 Ohm BetaMatch™. Excellent DC Ground. Stainless steel hardware and clamps. Includes 12 Meter setting. BN-4000 Balun recommended.

LJ-205CA, $819.95. 20/17 Meters, Five Elements. Exclusive 50 Ohm BetaMatch™. The LJ-204BA has a tiltable cast aluminum boom-to-mast clamp, heavy gauge machine-formed element-to-boom brackets and stainless steel hardware and clamps. BN-4000 Balun is recommended. Manual has setting for both bands.

LJ-105BA, $194.95. 10 Meters, Three Elements. Feeds with 50 Ohm coax, comes factory pre-tuned with Hy-Gain’s exclusive BetaMatch™. BN-86 balun recommended. Includes stainless steel hardware and clamps.

LJ-155BA, $249.95. 15 Meters, 3 elements. Feeds with 50 Ohm coax, BetaMatch™, 5.7 dBi gain. BN-4000 Balun recommended. Stainless steel hardware and clamps.

LJ-205BA, $349.95. 20 Meters, Three elements on a 16 foot boom. The LJ-205BA feeds with 50 Ohm coax, factory pre-tuned with Hy-Gain’s exclusive BetaMatch™. BN-4000 Balun is recommended. Stainless steel hardware and clamps. Tiltable, cast aluminum boom-to-mast bracket.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Gain (dBi)</th>
<th>F/B Max</th>
<th>Max Power</th>
<th>Boom Size</th>
<th>ele. length</th>
<th>turn Radius</th>
<th>Mast diam.</th>
<th>Surface</th>
<th>Boom</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>LJ-105CA</td>
<td>10.8 dBi</td>
<td>36 dB</td>
<td>1500 W PEP</td>
<td>24 feet</td>
<td>18 feet</td>
<td>15 feet</td>
<td>1.9-2.5 in.</td>
<td>3.9 sq. feet</td>
<td>100 m.p.h.</td>
<td></td>
</tr>
<tr>
<td>LJ-155CA</td>
<td>9.8 dBi</td>
<td>25 dB</td>
<td>1500 W PEP</td>
<td>26 feet</td>
<td>25 feet</td>
<td>17 feet, 6 in.</td>
<td>1.9-2.5 in.</td>
<td>5.2 sq. feet</td>
<td>88 m.p.h.</td>
<td></td>
</tr>
<tr>
<td>LJ-205CA</td>
<td>8.7 dBi</td>
<td>30 dB</td>
<td>1500 W PEP</td>
<td>34 feet</td>
<td>36 feet</td>
<td>25 feet</td>
<td>1.9-2.5 in.</td>
<td>9.0 sq. feet</td>
<td>99 m.p.h.</td>
<td></td>
</tr>
<tr>
<td>LJ-205BA</td>
<td>8.2 dBi</td>
<td>28 dB</td>
<td>1500 W PEP</td>
<td>26 feet</td>
<td>36 feet, 6 in.</td>
<td>22 feet, 6 in.</td>
<td>1.9-2.5 in.</td>
<td>7.3 sq. feet</td>
<td>100 m.p.h.</td>
<td></td>
</tr>
<tr>
<td>LJ-103BA</td>
<td>7.9 dBi</td>
<td>24 dB</td>
<td>1500 W PEP</td>
<td>8 feet</td>
<td>18 feet, 7 in.</td>
<td>10 feet, 2 in.</td>
<td>1.625-2.0 in.</td>
<td>2 sq. feet</td>
<td>107 m.p.h.</td>
<td></td>
</tr>
<tr>
<td>LJ-153BA</td>
<td>7.9 dBi</td>
<td>25 dB</td>
<td>1500 W PEP</td>
<td>12 feet</td>
<td>24 feet, 11”</td>
<td>14 feet, 3 in.</td>
<td>1.9-2.5 in.</td>
<td>3 sq. feet</td>
<td>80 m.p.h.</td>
<td></td>
</tr>
<tr>
<td>LJ-203BA</td>
<td>7.3 dBi</td>
<td>23 dB</td>
<td>1500 W PEP</td>
<td>16 feet, 6 in.</td>
<td>37 feet</td>
<td>20 feet</td>
<td>1.9-2.5 in.</td>
<td>5.4 sq. feet</td>
<td>80 m.p.h.</td>
<td></td>
</tr>
</tbody>
</table>

Hy-Gain Discoverer Series Antennas

DISCOVERER 71, $389.95. Covers 40/30 Meters. Rotatable dipole has low weight and wind surface area so it easily fits most existing beam installations. Tuned to 30 or 40 Meters with a front-to-side ratio of 30 dB for a fast expansion of band capability. Feed 50 Ohm coax. Pre-formed mast clamp.

DISCOVERER 72, $489.95. Covers 40 Meters. This two-element 40 Meter beam has a unique hairpin loading system. It delivers superior performance. Feeds with 50 Ohm coax and comes factory pre-tuned with Hy-Gain’s exclusive BetaMatch™. Tiltable boom-to-mast bracket and stainless steel hardware is included. Hy-Gain high power BN-4000 balun is recommended.

DIR-73K, $579.95. Add-On 30/40 Meter Director Kit Converts the fantastic Discoverer 72 into a three-element beam. Amazingly, it’s still all on a 35 foot boom, outperforming the other brands that are much larger arrays. Discoverer 72 with the director kit installed fits easily on medium duty towers such as HG-52SS, saving both cost and space. Hy-Gain offers wide band-width and Hy-Q efficiency without coils. Handles legal power limits.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Gain (dBi)</th>
<th>F/B Max</th>
<th>Max Power</th>
<th>Boom size</th>
<th>turn Radius</th>
<th>Mast diam.</th>
<th>Surface</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIS-71</td>
<td>6.5 dBi</td>
<td>35 dB</td>
<td>1500 W PEP</td>
<td>2.7 feet</td>
<td>45 feet</td>
<td>22.5 feet</td>
<td>1.9-2.5 in.</td>
<td>2.7 sq. feet</td>
</tr>
<tr>
<td>DIS-72</td>
<td>6.5 dBi</td>
<td>15 dB</td>
<td>1500 W PEP</td>
<td>22.6 feet</td>
<td>44.8 feet</td>
<td>25 feet</td>
<td>1.9-2.5 in.</td>
<td>6.0 sq. feet</td>
</tr>
<tr>
<td>DIR-73K</td>
<td>7.5 dBi</td>
<td>26 dB</td>
<td>1500 W PEP</td>
<td>35 feet</td>
<td>45.7 feet</td>
<td>28.9 feet</td>
<td>1.9-2.5 in.</td>
<td>9.0 sq. feet</td>
</tr>
</tbody>
</table>

Hy-Gain HF Log Periodic Antennas

LP-1009A, $2099.95. LP-1009A for UHF connector. LP-1009AN for “N” connector. 10/12/15/17/20 Meters Covers the complete 13-30 MHz HF spectrum under a 2:1 VSWR. Built to commercial specifications. It is used by MARS, monitoring, marine and government radio stations around the world and now it’s available to Hy-Gain customers. Discerning ham operators will appreciate its performance, ease of use. Imagine all that spectrum coverage with just one feedline. Exclusive 2KW BN-4000 current type balun included. Use T2X Tailtwister or HDR-300A rotators.

LP-1010A, $2519.95. LP-1010A for UHF connector. LP-1010AN for “N” connector. Covers 10-30 MHz (10, 12, 15, 17, 20, and 30 Meters) There are only a few antennas that offer as much HF frequency coverage as the LP-1010A. Like the LP-1009A, this antenna is built to commercial standards using stainless steel hardware and having a wind survivability of 93 mph. Rotatable with use of T2X or HDR-300A rotators.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Gain (dBi)</th>
<th>F/B Max</th>
<th>Max Power</th>
<th>Boom size</th>
<th>ele. length</th>
<th>turn Radius</th>
<th>Mast diam.</th>
<th>Surface</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP-1009A/N</td>
<td>7.3 dBi</td>
<td>22 dB</td>
<td>1500 W PEP</td>
<td>27 feet</td>
<td>39 feet</td>
<td>22.5 feet</td>
<td>1.9-2.5 in.</td>
<td>12.5 sq. feet</td>
<td>103 m.p.h.</td>
</tr>
<tr>
<td>LP-1010A/N</td>
<td>7.0 dBi</td>
<td>22 dB</td>
<td>1500 W PEP</td>
<td>36 feet</td>
<td>48 feet</td>
<td>28.5</td>
<td>1.9-2.5 in.</td>
<td>16 sq. feet</td>
<td>93 m.p.h.</td>
</tr>
</tbody>
</table>
Hy-Gain VHF Vertical Antennas

V-2R 2 Meter vertical with 5.2 dBi gain Covers 138-175 MHz derived from the famous extended double zeppl antenna design. Radiating elements are 2 collinear ⅜ wave fed in phase. 2 sets of ⅛ wave radiators properly decouple lower radiator from mast. SO-239, 500 Watts. 9 ft.

V-4R UHF vertical with 5.2 dBi gain derived from double zeppl antenna design. Type N, 500 Watts, 4 foot.

V-6R 1/4 Meter vertical with 5.2 dBi gain, double zeppl design. SO-239, handles 500 Watts. 9 inches.

Hy-Gain VHF Ground Planes

GPG-2B is an 5/8 Wavelength Ground Plane for two meters which is omni-directional and tunable from 142-185 MHz. It delivers an omnidirectional gain of 3.2 dBi. Handles 100 Watts. Measures 4 feet, max mast mount accepted is 1.625 in. O.D. Wind area is 0.30 sq. ft.

GPG-1B is a 1/4 Wavelength ground plane similar to the GPG-2B. It has unity gain, covers 144-148 MHz.

Oscar Link 435 MHz • 145.9 MHz

Hy-Gain’s Oscar Links are complete with necessary phasing lines, relays and hardware. Left and right circularity switching reduces fading. True RF switching elements are rated at 200 Watts and have an improved VSWR for higher efficiency. Feed points are encapsulated, weather protected for long life. The fiberglass cross-boom maintains the integrity of the circularity pattern.

DB-218SAT, $589.95. The complete 2-Meter/440 MHz Oscar Link antenna system with crossboom assembly with necessary phasing lines, relays and hardware.

VHF-FM Beam Antennas

2-Meter FM beam antennas include Hy-Gain’s exclusive Beta Match™ to provide exceptional Front-to-Back ratio, maximum obtainable gains. VB-23FM (8.3 dBi gain), VB-25FM (11.2 dBi gain), VB-28FM (14.6 dBi gain), and VB-214FM (15.2 dBi gain). Threaded stub for feedpoints. Accepts up to 2-inch mast.

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Hy-Gain LongJohn 10/12 Meter Beams
LJ-115 . . . 5-Elements . . . 9.7 dB Forward Gain . . . $319.95
LJ-113, is a five element 10/12 Meter beam antenna designed to give maximum performance. Whopping forward gain of 9.7 dB and front-to-back ratio 25:1. LJ-115 is constructed of the best quality aluminum tubing and uses a swaged (tapered) design for max strength, lightest weight. It boasts an 80 MPH wind survivability. This powerful beam features our exclusive Beta-Match™ which matches the antenna to a 50 Ohm feedline and puts driven element at DC ground for noise-free operation, lightning protection.

LJ-115 is easily rotated with a Hygain rotator for 360 degree coverage. See popular Hygain models AR-40 and CD-45II. Feed this antenna with any standard 52 Ohm coaxial cable. Expect 1.05:1 SWR at resonance if antenna is mounted in the clear and care is taken in feedline attachment. SWR will remain below 1.5:1 over the entire 10 Meter frequency range.

Hy-Gain 5/8 Wave 10/12 Meter Super-Penetrator™ Vertical Antenna
This fantastic true full-size 5/8 Wave 10/12 Meter vertical antenna from Hy-Gain was a legend in the 70’s . . . now it’s back to prove its legendary status once again!

A full-size radiator with lower radiation angle concentrates power closer to the ground, where you want it. Measures 22 feet, 9.5 inches. Larger diameter, heavy wall py-tubular construction makes the new Super-Penetrator™ the absolute top omnidirectional antenna around! Four full-length radials and special machine-formed brackets give extra talk-power and overall strength.

Electrical performance has increased to a new standard by use of longer radiator and double-matching tuning with linear phase tuning techniques to provide low SWR and more radiated energy. Double-matching provides DC path to ground to drain off precipitation static, gives an extremely low noise antenna that is capable of high power handling.

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**HF VERTICALS**

Self-supporting -- no guys required ... remarkable DX performance -- low angle radiation, omnidirectional... 1500 Watts... Low SWR ... 2 year limited warranty

All hy-gain multi-band vertical antennas are entirely self supporting -- no guys required. They offer remarkable DX performance with their extremely low angle of radiation and omnidirectional pattern.

All hy-gain vertical antennas handle 1500 Watts PEP SSB, have low SWR, automatic band-switching (except AV-18VS) and include a 12-inch heavy duty mast support bracket (except AV-18HT). Heavy duty, slotted, tapered swaged, aircraft quality aluminum tubing with full circumference compression clamps is used for radiators. Includes all stainless steel hardware. Recessed SO-239 prevents moisture damage.

Hy-gain verticals go up easily with just hand tools and their cost is surprisingly low. All hy-gain Verticals feature a two year limited warranty.

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### Model Specifications

<table>
<thead>
<tr>
<th>Model #</th>
<th>Price</th>
<th>Bands</th>
<th>Max Power</th>
<th>Height</th>
<th>Weight</th>
<th>Wind Surv.</th>
<th>Rec. Mast</th>
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<tbody>
<tr>
<td>AV-18HT</td>
<td>$1069.95</td>
<td>10/12/15/20/40/80 M</td>
<td>1500 W PEP</td>
<td>53 feet</td>
<td>114 pounds</td>
<td>75 MPH</td>
<td>1.5-1.625</td>
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<tr>
<td>AV-14AVQ</td>
<td>$199.95</td>
<td>10,15,20,40 M</td>
<td>1500 W PEP</td>
<td>10 feet</td>
<td>8 pounds</td>
<td>80 MPH</td>
<td>1.5-1.625</td>
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<tr>
<td>AV-18AVQ</td>
<td>$249.95</td>
<td>10,15,20,40 M</td>
<td>1500 W PEP</td>
<td>13 feet</td>
<td>9 pounds</td>
<td>80 MPH</td>
<td>1.5-1.625</td>
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<td>AV-18VS</td>
<td>$129.95</td>
<td>10 - 80 M</td>
<td>1500 W PEP</td>
<td>18 feet</td>
<td>4 pounds</td>
<td>80 MPH</td>
<td>1.5-1.625</td>
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<td>DX-88</td>
<td>$389.95</td>
<td>10 - 80 M</td>
<td>1500 W PEP</td>
<td>25 feet</td>
<td>24 pounds</td>
<td>75 mph</td>
<td>1.5-1.625</td>
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<tr>
<td>DX-77A</td>
<td>$479.95</td>
<td>10 - 40 M</td>
<td>1500 W PEP</td>
<td>29 feet</td>
<td>25 pounds</td>
<td>60 mph</td>
<td>1.5-1.625</td>
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<td>AV-18AVQ</td>
<td>$279.95</td>
<td>10,15,20,40 M</td>
<td>1500 W PEP</td>
<td>18 feet</td>
<td>12 pounds</td>
<td>70 mph</td>
<td>1.5-1.625</td>
</tr>
</tbody>
</table>

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### Hy-Gain Tower Bases

Specially designed for Hy-Gain crank-up towers. Complete with base hinge and foundation welded steel cage. Specify tower model. *Must be shipped by truck, call for quote.*

<table>
<thead>
<tr>
<th>Model #</th>
<th>Tower</th>
<th>Price</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB-37</td>
<td>TF-14</td>
<td>$179.95</td>
<td>50 lbs</td>
</tr>
<tr>
<td>TB-52</td>
<td>TF-14</td>
<td>$179.95</td>
<td>90 lbs</td>
</tr>
<tr>
<td>TB-54</td>
<td>TF-14</td>
<td>$199.95</td>
<td>90 lbs</td>
</tr>
<tr>
<td>TB-70</td>
<td>TF-14</td>
<td>$309.95</td>
<td>102 lbs</td>
</tr>
</tbody>
</table>

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### Hy-Gain Features

- **AV-18HT**, $1069.95
  - 10/12/15/20/40/80 M
  - 1500 W PEP
  - 53 feet tall, the famous *Hy-Gain* Hy-Tower is the world’s best performing vertical!
  - The AV-18HT features automatic band selection achieved through a unique stub-decoupling system which effectively isolates various sections of the antenna so that an electrical 1/4 wavelength (or odd multiple of a 1/4 wavelength) exists on all bands. Approximately 250 kHz bandwidth at 2:1 VSWR on 80 Meters. With the addition of a base loading coil LC-160Q or MK-160A, it also provides exceptional 160 Meter performance.
  - The 24 foot tower is all rugged, hot-dip galvanized steel and all hardware is indited for corrosion resistance.
  - Special tilt-over hinged base for easy raising and lowering. 53 feet, 114 lbs.

- **AV-18AVQ**, $199.95
  - 10,15,20,40 M
  - All bands are easily tuned with the DX-88’s exclusive adjustable capacitors. 80 and 40 Meters can even be tuned from the ground without having to lower the antenna. Super heavy-duty construction. 25 feet, 18 pounds.

- **AV-18VS**, $129.95
  - 10/12/15/20/40/80 Meters
  - High quality construction and low cost make the AV-18VS an exceptional value. Easily tuned to any band by adjusting feed point at the base loading coil. Roof mount with AV-14RMQ, $99.95. 18 ft, 4 lbs.

- **AV-12AVQ**, $149.95
  - 10, 15, 20 Meters
  - The AV-12AVQ also uses Thunderbird beam design air dielectric traps for extremely Hy-Q performance. This is the way to go for inexpensive tri-band performance in limited space. 13 ft., 9 lbs. Roof mount with AV-14RMQ kit, $99.95.

- **AV-14RMQ**, $99.95
  - **Roof Mounting Kit**
  - AV-14RMQ roof mounting kit provides rugged support for Hy-Gain models AV-18VS, AV-14AVQ, AV-12AVQ. Includes base plate, mast, radial/guy wires and mounting hardware.

**Hy-Gain Tower Bases**

Hy-Gain . . . Antennas, Rotators and Towers!
**Hy-Gain Insulators for Multiband Dipoles**

**HF Multiband Hy-Q trap Doublets**

| Model   | Description                             | Price  
|---------|-----------------------------------------|--------
| DP-2BDQ | A multiband Hy-Q trap doublet for 40/80 Meters. 101 feet maximum length of dipole. | $149.95
| DP-5BDQ | A multiband Hy-Q trap doublet for 40/80 Meters. 101 feet maximum length of dipole. | $279.95

80-10 Meters, maximum length of dipole is 94 feet. Hy-Gain DP-2BDQ and DP-5BDQ are Hi-Q trap doublets designed for horizontal or inverted "V" rated at legal power. Both feature individually pretuned matched traps for each band. 50 Ohm feed. Coaxial cable not included. Both handle 2 kW PEP.

**Heavy Duty Hy-Gain Baluns**

| Model | Description                             | Price  
|-------|-----------------------------------------|--------
| BN-86 | Balanced 50 Ohm ferrite balun. It is useable from 3-30 MHz. Rated at 1500 Watts. The BN-86 is recommended for all HF Yagi antennas. Includes clamp to bolt to boom, has SO-239 connector. | $89.95
| BN-4000 | Series are broadband 50 Ohm Beam current baluns. Each handles 4000 Watts. Range is 1 MHz to 54 MHz. SO-239 connector. | $119.95

**Hy-Gain Antenna Feedpoint Pig Tail**

Hy-Gain’s Antenna Feedpoint Pig Tail cable has 2-foot length for connecting between antenna and your coaxial feedline. Has SO-239 connector on one end and 2 (#10) ring terminals on the other end. Provides an easy and reliable connection for your feedline with PL-259 connector to your antenna feed point. Use with Hy-gain VB series beams and other antennas without an SO-239 feed point.

**Hy-Gain Lightning Surge Protector**

Safe-guard your expensive equipment from static electricity and lightning induced surges on 50 Ohm coaxial line. Hy-Gain’s Guardian Angel™ Lightning Surge Protector has an Ultra-fast gas discharge tube that safely shunts up to 5000A of peak impulse current harmlessly to an independent ground. SWR less than 1.1:1. Less than 0.1 dB loss. Use to 1000 MHz, 1.5 kW PEP. Does not protect against direct lighting hit. MFJ-97H, $19.95. Replacement gas discharge tube.

**Hy-Gain Guy-Wire Gripper**

Hy-Gain’s Guy-Wire Gripper turns the horrendous job of tightening guy wires into an easy one man operation. This wonder tool works together with a “come-a-long” cable puller to hold/ stretch guy wire or cable. Spring loaded for easy operation. Use for guy wire or cable up to 1/4” diameter.

**Hy-Gain Arrowpoint Anchor**

Hy-Gain’s Arrow Point Anchor is made of high quality 13 gauge steel. This 3-inch Arrow Point Anchor has a 36-inch integral swiveling 1/8” steel cable. APA-3 has a superior pullout resistance up to 2000 lbs. Use this ArrowPoint anchor to secure antennas, towers, tarps, trees, carports, flagpoles and much more.
Hy-Gain® 160-6 Meters Self-Supporting Vertical Antenna
Full 1500 Watts, 43 feet, includes base mount, great for stealth

Operates all bands 160-6 Meters at full 1500 Watt with this self-supporting, 43 feet high performance vertical!
Assembles in less than an hour. Low profile blends in with the sky and trees -- you can barely see it...

Exceptional Performance
The entire length radiates to provide exceptional low angle radiation 160-20 Meters and very good performance on 17-6 Meters. You can shorten it by telescoping it down for more effective low angle radiation on higher bands. Just talk with automatic tuner!

A wide-range automatic or manual antenna tuner at your rig easily matches this antenna for all bands 160-6 Meters.

Optimized balun allows direct coax feed with negligible coax loss (typically less than 1/2 dB 60-6 Meters and less than 1 dB 160-80 Meters with good quality, low-loss coax).

With just 2 square feet wind load, the AV-6160 has the lowest wind-loading and lowest visibility of any vertical antenna!

Its 2-inch O.D. and 1/2 inch thick wall tubing bottom section makes it incredibly strong.

Just 20 lbs., uses super-strong 6063 aircraft aluminum tubing. Stainless steel hardware.

Assembles in an hour
Ground mounting lets you hide antenna base in shrubbery. Requires ground system -- at least one radial. More extensive ground systems work even better. Optional GRK-6160, $39.95. All-band ground radial kit. See bottom right.

Stealth Operation
Low profile. Hide behind trees, fences, buildings, bushes. Use it as a flagpole. It easily telescopes down during the day.

64', 11-Section Telescopic Aluminum Mast
Includes one size of each slitted tube listed above and ten hose clamps. This is a super-strong heavy duty telescoping mast, not a flimsy pole! Mast is made of .320 inch thick wall aluminum tubing. ATM-65 is 64 feet fully extended and 6 feet collapsed without clamps. Guying is required if mast is extended beyond 30 feet. Top section is .625" OD. Bottom section is 2 inches OD x .120 wall.

Base Mount for Fiberglass and Aluminum Masts
ATB-65, $79.95. Complete base assembly kit with mounting plate, insulators, hardware, SO-239, etc. for fiberglass and aluminum masts. Fits up to 2.0" OD masts.

1.5kW 80/160M high-efficiency Matching Network
Improves efficiency on 160/80 Meters for the popular 43-foot all band vertical antennas. Eliminates SWR-related coax and unun mismatch losses. Fed with a 1:4 unun, 43' antennas have a reasonable compromise SWR on 60-10m. However, at 160/80 Meters it is virtually impossible to match this antenna because of the low radiation resistance. If you are using low loss coax, you will lose much power in the coax and unun due to bad antenna mismatches. Installed at the base of the 43' vertical, AV-6110 will significantly eliminate these losses and put 160 and 80 Meters back within the tuning range of the tuner inside the shack. Includes high-voltage insulated base tube, remote power injector with switch for 160, 80 Meters and off positions. Handles 1.5kW. Matching box mounted in a rugged, weather-resistant PVC housing. Fits at 43 foot antenna base, just 3Wx16Hx3D inches.

600 Watts 80/160 Meter Matching Network
AV-6108, $269.95. Like AV-6110. 600W-80M, 300W-160M.

160 Meter Tuner Range Extender for 43' Verticals
AV-6104, $89.95

43' vertical antennas are very popular. However, on 160M, they have a very high reactance and high voltage at the feedpoint. Tuning with a tuner results in max efficiency 80-10M, but conditions at 160M present a challenge for tuners. To get around this problem, add a range extender to the base of the antenna to increase 160M matching. Reduces reactance and puts antenna in range of the auto or manual tuner. Damaging high-voltage currents are reduced to prevent tuner damage. 1.5 kW. Weather-resistant PVC, ceramic feedthrus for in/out. 3½W x3½ Hx11D". Use MFJ-998RT/ MFJ-994BRT or other tuners.

AV-6102, $69.95. Like AV-6104. 300 Watts, 5-way binding posts for in/out. 3½W x3½ Hx7D". Use MFJ-926B/927/993BRT auto tuners or manual tuners.

All-band Ground Radials
All-band ground radial system for the AV-6160 and other verticals requiring a radial system. Convenient and effective, it provides the necessary return path for ground currents to reduce ground losses. Consists of 2 sets of 4 radial wire assemblies giving a total of eight 14 foot radial wires. Each has a 1/4 inch ring lug for attaching to the antenna ground point. Each end of the radial wires has a solder lug for staking at the wire end.

www.hy-gain.com
**ROHN™ Steel Telescopic Masts & Vertical Mounting Accessories**

20/30/40/50 foot Telescoping Masts

Telescoping masts are pre-galvanized and come pre-assembled with hardware. Erecting mast is made by simply connecting guys and brackets to the attached heavy duty rolled edge guy rings and clamps, extending the sections, inserting locking cotter pins, rotating tubes to locked position and tightening the clamps. Features interior tube flanging combined with double-crimped exterior tube to produce stronger, more stable joint than common masts. Also prevents sections from accidentally pulling apart and allows easy disassembly, pulling each section through lower end. Each section extends deeper into lower tubes than other designs, adding more structure stability. 1/4", 16-gauge galvanized tubing for top, others are 18 gauge.

- **H-20**, $84.95.
- **H-30**, $119.95.
- **H-40**, $179.95.
- **H-50**, $219.95.

All above models ship by truck only.

---

**Hy-gain Aluminum Tubing**

6063 T832 round, drawn aluminum tubing sold in 2 styles: **standard or slitted one end**, (0.035" gaps, 1/2" slit lengths). Available in 3 or 6 ft. lengths. Tubing is sized to allow telescoping into one another from 3/8"-2 1/4" OD. Select slitted for telescoping. Use Hy-gain hose clamps to secure.

---

**Hy-gain Vertical Antenna Mounting Hardware**

- **Deluxe "Y" Wall Mount Bracket WMD-12**, $59.95. 12" standoff with 3rd Leg for mounting of Anntenna Masts from 1 inch to 1.75 diameter and up to 10 foot Height. Standoff from Wall by 12 inches.
- **48" Galvanized Eave Mount Bracket EVE-48**, $44.95. Mount your mast on eave or roof. Lower Bracket is 16 gauge Hot Dip Galvanized steel. 48". Both upper/lower brackets are for masts up to 2/1" diameter with clamps, bolts and 2 1/2" lag screws. Will stand-off mast 2 1/2" from surface.

---

**Hy-gain Custom Made Precision Antenna Hardware**

**Hy-gain Stainless Steel Hose Clamps**

- **Hy-gain Stainless Steel Hose Clamps**
- **Hy-gain Custom Made Precision Antenna Hardware**
- **Element to Boom Clamp**

---

**MFJ Telescopic Fiberglass Tubing**

Super-strong, heavy duty telescoping sections, .125 thick wall fiberglass. 20/30/40/50 foot Telescoping Masts

<table>
<thead>
<tr>
<th>OD</th>
<th>Part Number</th>
<th>Price</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4</td>
<td>884-42500-6</td>
<td>$6.60</td>
<td>6 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-42250-6</td>
<td>$5.20</td>
<td>4 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-41750-6</td>
<td>$3.63</td>
<td>3 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-41250-6</td>
<td>$1.22</td>
<td>2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-40800-6</td>
<td>$6.28</td>
<td>1 1/2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-40400-6</td>
<td>$5.32</td>
<td>1 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-40000-6</td>
<td>$3.80</td>
<td>7/8 ft.</td>
</tr>
</tbody>
</table>

---

**Hy-gain Aluminum Tubing**

- **Lg OD x Wall x ID**
- **Price**
- **P/N No slit**
- **Price ea.**
- **P/N Slitted**
- **Price ea.**
- **Add'l**

<table>
<thead>
<tr>
<th>OD</th>
<th>Part Number</th>
<th>Price</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4</td>
<td>884-42500-775</td>
<td>$48.95</td>
<td>7.75 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-42000-775</td>
<td>$35.95</td>
<td>6 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-41250-775</td>
<td>$29.95</td>
<td>5 1/2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-40800-775</td>
<td>$21.95</td>
<td>5 ft.</td>
</tr>
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<td>3/4</td>
<td>884-40400-775</td>
<td>$18.75</td>
<td>4 1/2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-40000-775</td>
<td>$15.99</td>
<td>4 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-37500-775</td>
<td>$13.75</td>
<td>3 1/2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-35000-775</td>
<td>$12.08</td>
<td>3 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-32500-775</td>
<td>$10.33</td>
<td>2 1/2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-30000-775</td>
<td>$8.75</td>
<td>2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-27500-775</td>
<td>$7.95</td>
<td>1 1/4 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-25000-775</td>
<td>$6.88</td>
<td>1 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-22500-775</td>
<td>$5.88</td>
<td>7/8 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-20000-775</td>
<td>$4.95</td>
<td>5/8 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-17500-775</td>
<td>$3.95</td>
<td>1/2 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-12500-775</td>
<td>$2.50</td>
<td>1/4 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-10000-775</td>
<td>$1.95</td>
<td>1/8 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-7500-775</td>
<td>$1.77</td>
<td>1/32 ft.</td>
</tr>
<tr>
<td>3/4</td>
<td>884-5000-775</td>
<td>$1.58</td>
<td>1/64 ft.</td>
</tr>
</tbody>
</table>
Turn your mobile, base or handheld into 160 Watt powerhouses and talk further, longer, clearer... All modes: FM, SSB, CW... Superb GaAsFET preamp... Has exclusive Active-Bias™ system for crisp, clear voice in SSB mode... True push-pull circuitry and clean RF layout for excellent stability... Overdrive and high SWR protection... Remote controllable with RC-2...

MIRAGE's most popular amplifier gives you 160 Watts of output power for just 25 W in from your base/mobile rig!

The B-2518-G is ideal for your 20 to 60 Watt 2 Meter mobile or base station.

You'll talk further, longer, clearer on all modes -- FM, SSB, CW -- hear weak signals better than you've ever heard before!

You get a low noise 20 dB GaAsFET preamp with an excellent 1 dB noise figure for pulling out weak signals.

B-2518-G is fully protected with features found in expensive commercial amplifiers.

High SWR or excessive input power can damage your amplifier. Protection circuits auto bypass your amplifier to prevent damage and an LED lights to warn you.

Active-Bias™ gives crisp, clear voice in SSB mode!

New! An Active-Bias™ System keeps SSB voice crisp and clear for fantastic operation. Other amplifiers using conventional bias methods tend to produce splatter and distortion as power level changes. This amp with Active-Bias™ doesn't exhibit the problem.

Adjustable time delay gives you smooth transmit/receive switching. Remote external keying. You can remotely control your B-2518-G and place it out of the way. An RC-2, $59.95, Remote Control turns Power on/off, Preamp On/Off and select SSB/FM. Extra heavy duty custom heatsink spans the entire cabinet. Draws 17-22A from 13.8 VDC. Compact 12x3x5.5 inches.

Amp Remote Control

Remotely control your B-2518-G/B-5018-G/B-1018-G and place it out of the way. An RC-2, $59.95, Remote Control lets you turn power on/off, preamp on/off, select SSB/FM. Other Mirage amps use RC-1. Call Mirage for positive compatibility.

More 160 Watt, 2-Meter Amplifiers

B-2518-G, $469.95.
160 Watts output for 50 Watts input. For 20 to 60 Watt mobile or base station transceivers.

B-1018-G, $519.95.
160 Watts output for 8 Watts input. For 0.25 to 15 Watt input transceivers.

Power Curve -- typical output power in Watts

<table>
<thead>
<tr>
<th></th>
<th>25</th>
<th>50</th>
<th>140</th>
<th>150</th>
<th>160</th>
<th>--</th>
<th>--</th>
<th>--</th>
<th>--</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1018-G</td>
<td>0.25</td>
<td>0.5</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>B-2518-G</td>
<td>5</td>
<td>7</td>
<td>40</td>
<td>80</td>
<td>100</td>
<td>125</td>
<td>160</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>B-5018-G</td>
<td>--</td>
<td>2</td>
<td>15</td>
<td>25</td>
<td>40</td>
<td>50</td>
<td>70</td>
<td>100</td>
<td>130</td>
</tr>
</tbody>
</table>
MIRAGE . . . The World's Most Rugged VHF/UHF Amplifiers

**6 Meter Amplifier**

**Bust through 6 Meters with 150 Watts of brute power and work exotic DX!**

**Low Noise GaAsFET Preamp**

A built-in low noise GaAsFET receive preamp gives you 20 dB gain - lets you dig out weak signals and score exotic DX on sporadic E!

**The A-1015-G is the world’s most popular all mode FM/SSB/CW 6 Meter amplifier.**

**Bust** through 6 Meters with 150 Watts of brute power and work exotic DX! Power Curve chart shows typical output power.

**The A-1015-G is ideal for your 1 to 15 Watt transceiver, mobile or base station.**

**You’ll talk further, longer and clearer on all modes -- FM, SSB or CW.** Hear weak signals better than you’ve ever heard before! Get up to 150 powerful Watts!

**Extra** heavy-duty heatsink spans entire length of cabinet.

**Draws** 18-22 amps at 13.8 VDC. Weighs just 5 pounds, measures a compact 12x3x5.5 inches.

---

**MIRAGE 420-450 MHz AMPLIFIERS**

**MIRAGE D-Series Specifications**

<table>
<thead>
<tr>
<th>Model #</th>
<th>Price</th>
<th>Input</th>
<th>Output</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-1010-N</td>
<td>$479.95</td>
<td>10W-15 W</td>
<td>5-110 W</td>
<td>20 amps</td>
</tr>
<tr>
<td>D-3010-N</td>
<td>$459.95</td>
<td>5-45 W</td>
<td>7-100 W</td>
<td>20 amps</td>
</tr>
</tbody>
</table>

**D-3010-N** -- 100 W out/30W in. For 5 to 45 Watt mobile/base.

**D-1010-N** -- 100 Watt/10W in. For handhelds or mobile/base.

**MIRAGE Commercial Amplifier Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
<th>Input</th>
<th>Output</th>
<th>Preamp</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-34-GC</td>
<td>$199.95</td>
<td>.5-3 W</td>
<td>10-30 W</td>
<td>No</td>
<td>150-162</td>
</tr>
<tr>
<td>B-22-G</td>
<td>$459.95</td>
<td>5-25 W</td>
<td>5-100 W</td>
<td>No</td>
<td>450-475</td>
</tr>
<tr>
<td>B-30-ATV</td>
<td>$379.95</td>
<td>10-30 W</td>
<td>1-100W</td>
<td>No</td>
<td>150-174</td>
</tr>
</tbody>
</table>

**FCC Type Accepted**

---

**RC-1 Remote Control Use with Most Models**

**FEATURES**

- Easy remote ops with most models
- Preamp on/off
- Switch for SSB/FM operation
- 18 foot cabling included - Available in long lengths with special order
- Size: 3½”Wx2½”Dx1½”H inches
- Mod required for some models


---

**Mirage Amateur Television Amps**

**Specially designed for Amateur Television, 420-450 MHz**

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
<th>Input</th>
<th>Output</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-1010-ATVN</td>
<td>$499.95</td>
<td>10W-52 W Out (ATV-AVG)</td>
<td>52 Watts</td>
<td>20 Amps</td>
</tr>
<tr>
<td>D-100-ATVN</td>
<td>$509.95</td>
<td>2W-82 W Out (ATV-PEP)</td>
<td>82 Watts</td>
<td>20 Amps</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Power in</th>
<th>Power out</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-1010-ATVN</td>
<td>1 Watt to 15 Watts</td>
<td>500 mWatts to 5 Watts</td>
<td>20 Amps</td>
</tr>
<tr>
<td>D-100-ATVN</td>
<td>500 mWatts to 5 Watts</td>
<td>52 Watts</td>
<td>20 Amps</td>
</tr>
</tbody>
</table>

**Mirage Commercial Amplifiers**

**Commercial Amplifiers available for 150-174, 450-470 MHz and VHF marine bands, 70-100 Watts out. Most feature over-temperature sensing, bypasses amp when safe operating temps are exceeded. Heavy duty heatsinks are finned on 3 sides and have a wide input range. Amps designed for 2-way radio, commercial, mobile, or fixed location use. All are FCC type accepted.**

---

**RC-1**

Suggested Retail $59.95

**RC-1 Remote Control**

Suggested Retail $59.95

**Power Curve -- Typical A-1015-G Output Power in Watts.**

<table>
<thead>
<tr>
<th>Watts Out</th>
<th>6</th>
<th>22</th>
<th>42</th>
<th>63</th>
<th>84</th>
<th>98</th>
<th>122</th>
<th>142</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watts In</td>
<td>.25</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

---

**Power Curve -- Typical A-1015-G Output Power in Watts.**

<table>
<thead>
<tr>
<th>Watts Out</th>
<th>6</th>
<th>22</th>
<th>42</th>
<th>63</th>
<th>84</th>
<th>98</th>
<th>122</th>
<th>142</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watts In</td>
<td>.25</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>

---

**RC-1 Remote Control Use with Most Models**

**FEATURES**

- Easy remote ops with most models
- Preamp on/off
- Switch for SSB/FM operation
- 18 foot cabling included - Available in long lengths with special order
- Size: 3½”Wx2½”Dx1½”H inches
- Mod required for some models

Mirage 2-Meter/440 MHz Amplifiers for HTs!

Boost your dual band HT to 45 Watts on 2 Meters or 35 W on 440 MHz!

$259.95 Suggested Retail

- 45 Watts Output on 2 Meters • 35 Watts out on 440 MHz
- D*STAR, System Fusion COMPATIBLE!
- Reverse Polarity Protection
- Free Mobile Bracket Included
- Works with all major brand Handhelds up to 8 Watts
- Auto RF sense T/R switch

Add this MIRAGE BD-35 dual band amp and boost your handheld to a much more powerful mobile or base -- 45 Watts on 2 Meters or 35 Watts on 440 MHz! Get 35 Watts out with just 4W in! BD-35 is D-STAR, System Fusion compatible!

Power Curve -- typical Mirage BD-35 output power

<table>
<thead>
<tr>
<th>Watts Out (2 meters)</th>
<th>10</th>
<th>18</th>
<th>30</th>
<th>40</th>
<th>45</th>
<th>45+</th>
<th>45+</th>
<th>45+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watts Out (440 MHz)</td>
<td>4</td>
<td>10</td>
<td>16</td>
<td>26</td>
<td>32</td>
<td>35</td>
<td>35+</td>
<td>35+</td>
</tr>
<tr>
<td>Watts In</td>
<td>.25</td>
<td>0.5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

B-340-G . . . 100 W on 2 Meters

Reach distant repeaters . . . Log onto faraway packet bulletin boards.

This rugged Mirage B-310-G amplifier operates all modes: FM, SSB and CW. It's the perfect match for all HTs up to 8 Watts and multi-mode SSB/CW/FM 2 Meter rigs.

B-310-G $319.95 Suggested Retail

Built-in low noise GaAsFET receive preamp gives you 15 dB gain -- lets you dig out weak signals. SWR and Reverse Polarity Protection.

Mirage's integrated Heatsink Cabinet™ and whisper quiet fan gets heat out fast! The results?

An ultra-compact 4¾x1¾x7¾ inch 2½ pound amplifier that delivers a super powerful 100 Watts. Free 3 foot handheld to B-310-G coax cable and mobile bracket!

B-310-G...100 W on 2 Meters

Full one year Mirage warranty

With Mirage's legendary ruggedness, you may never need our superb warranty.

B-320-G . . . 200 Watts on 2 Meters with HT or Transceiver!

Add this amp to your 2 Meter HT or mobile radio and get 200 Watts brutal output. Talk further, longer, clearer!

Has 15 dB GaAsFET preamp, works all modes FM/SSB/CW. Fully protected by high SWR protection. Includes mobile mounting bracket. An input level switch selects proper input power from your HT or mobile radio. Low power input for hand-held radios. 250 mW to 10 Watts. 1/4 Watts in gives 132 Watts out. 3 Watts in from your HT gives full power. High power input for mobile radios, 10 Watts to 50 Watts.

Power Curve -- typical B-320-G output power

<table>
<thead>
<tr>
<th>Watts Out</th>
<th>1.5</th>
<th>4</th>
<th>32</th>
<th>95</th>
<th>165</th>
<th>186</th>
<th>193</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT Amp</td>
<td>132</td>
<td>165</td>
<td>200</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>In</td>
<td>.25</td>
<td>0.5</td>
<td>3</td>
<td>10</td>
<td>25</td>
<td>35</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>

www.mirageamp.com • Toll-free 1-800-647-1800
High gain ultra low noise GaAsFET preamps for receiving weak signals. Selectable gain prevents receiver intermod. 15-22 dB gain. Auto RF switching to 160W. Choose In-shack (details below) or Mast-Mount models (right).

MODEL KP-1
A. KP-1/10M • Automatic RF Switching, SO-239
B. KP-1/6M • GaAsFET boosts weak signals, SO-239
C. KP-1/2M • GaAsFET boosts weak signals, SO-239
D. KP-1/220MHz • In-Line design for easy ops, N-type
E. KP-1/440MHz • High or Low switchable gain, N-type

FREQUENCY
A. 28-30 MHz • Gain: 15 dB to greater than 25 dB
B. 50-54 MHz • Noise: less than 1 dB
C. 144-148 MHz • Power Handling: 100 Watts
D. 220-225 MHz • Size: 4 1/4W x 2 13/16H x 1 13/16D inches
E. 430-450 MHz • Size: 4 1/4W x 2 13/16H x 1 13/16D inches

MODEL KP-2
A. KP-2/10M • Automatic RF Switching, SO-239
B. KP-2/6M • GaAsFET boosts weak signals, SO-239
C. KP-2/2M • Mastmount design reduces loss, SO-239
D. KP-2/220MHz • In-Line design for easy operation, N-type
E. KP-2/440MHz • High or Low switchable gain, N-type

FREQUENCY
A. 28-30 MHz • Gain: 15 dB to greater than 25 dB
B. 50-54 MHz • Noise: less than 1 dB
C. 144-148 MHz • Power Handling: 100 Watts
D. 220-225 MHz • Voltage: 12-15 VDC
E. 430-450 MHz • Size: 4 1/4W x 2 13/16H x 1 13/16D inches

MODEL KP-1 $159.95
Suggested Retail

MODEL KP-2 $219.95
Suggested Retail

10 models to choose from
Continuous duty all mode FM/SSB/CW repeater amplifiers for 6, 2, 450 MHz, and ATV service.

50, 144 and 220 MHz Models
FEATURES:
Cool Running - A 10" high by 19" wide full finned rack-mounted heatsink keeps the transistor temperatures low for long life.
Chassis cover is perforated so air convection will keep the circuit board area cool.
Dual Protection - The amplifiers have two temperature sensors; one on the heatsink and one on the circuit board.
If conditions cause either to overheat, the amplifier will shut off until it cools down to a safe temperature.
Bypass Mode - These models will feed the exciter output straight through to the antenna in an overheated condition.
The bypass mode can also be remotely selected by proper interfacing to the repeater controller.
Either a relay contact or a TTL logic can be used to select the bypass mode or amplified mode of operation.
Reduced Relay Wear - The amps have a selectable long release time (adjustable up to 5 seconds) for the RF change-over relay.
This prevents unnecessary action during repeater operation.
On-site Control - The bypass mode and relay release time can be selected with built-in switches.
The operational MIRAGE RC-1 remote control box can be used to switch these functions up to 18 feet away from the amplifier.

440 MHz and ATV Models
FEATURES
Cool Running - A 10" high by 19" wide full finned rack-mounted heatsink keeps the transistor temperatures low for long life.
The chassis cover is perforated so air convection will keep the circuit board area cool.
The RF board is low loss Teflon® for minimum dielectric heating.
Reliable - The RF change-over relay has been eliminated on this model to provide the highest order of reliability.
Teflon® connectors are standard on this well-designed unit.
Protection - The amplifier will automatically shut off if conditions cause the heatsink temperature to rise to an unsafe level of operation.
All Mode Operation - Class AB linear operation is rated for FM, SSB, CW and ATV operation.

1 YEAR WARRANTY ON ALL REPEATER AMPLIFIERS
Warranty - Mirage repeater amplifiers are guaranteed for one year against failure due to defective workmanship or materials.

MIRAGE Repeater Amp Specifications

<table>
<thead>
<tr>
<th>Model#</th>
<th>Price</th>
<th>Input</th>
<th>Max Out</th>
<th>MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1015-R</td>
<td>$609.95</td>
<td>.25-5 W</td>
<td>98 W</td>
<td>50-52</td>
</tr>
<tr>
<td>B-1018-R</td>
<td>$749.95</td>
<td>.25-3 W</td>
<td>130 W</td>
<td>145-148</td>
</tr>
<tr>
<td>B-2518-R</td>
<td>$719.95</td>
<td>.5-10 W</td>
<td>111 W</td>
<td>145-148</td>
</tr>
<tr>
<td>D-1010-NR</td>
<td>$759.95</td>
<td>.25-4 W</td>
<td>80 W</td>
<td>440-450</td>
</tr>
<tr>
<td>D-3010-NR</td>
<td>$729.95</td>
<td>1-15 W</td>
<td>75 W</td>
<td>440-450</td>
</tr>
<tr>
<td>D-100-ATVN-R</td>
<td>$729.95</td>
<td>.25-1 W</td>
<td>52 W</td>
<td>420-450</td>
</tr>
<tr>
<td>D-1000-ATVN-R</td>
<td>$729.95</td>
<td>.25-4 W</td>
<td>80 W</td>
<td>420-450</td>
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</tbody>
</table>
VECTRONICS

2019 HAM RADIO CATALOG

 Vectronics 2 kW Roller Inductor Antenna Tuner

Vectronics HFT-1500 Roller Inductor Tuner has 3 continuously variable components -- two 4.5 kV capacitors and a roller inductor controlled by a precision crafted crank handle and a gear driven 5-digit counter.

Tune ANY Real Antenna!
HFT-1500 will tune ANY real antenna: verticals, dipoles, inverted vees, beams, long wires, SWL antennas . . . ANYTHING! And its huge components make the tuning ARC-FREE!

Tune your SWR down to absolute minimum 1.8 to 30 MHz, including MARS and the WARC bands. Handles 2 kW SSB PEP amplifier input power. 21-Segment Bargraph for SSB Power

The bargraph is a 21 segment display that makes analyzing SSB power amazingly easy. This LED meter shows your peak reading and has fully adjustable level and delay controls.

Lighted dual movement
D’Arsonval Cross-Needle
SWR/Wattmeter displays SWR, forward and reflected power simultaneously at a glance. RF directional coupler is fully shielded for even greater accuracy.

The meter measures peak and average power in the 300/3000 Watt ranges. Bargraph display and meter lamp require 12 VDC adapter, included.

 included are two 4.5 kV capacitors and a roller inductor. Top section is for forward power, bottom section is for reflected power.

The HFT-1500 has 3 continuously adjustable components. One for peak and average power simultaneously, another for reflected power, and a third for forward power.

The bargraph is a 21 segment bargraph with a backlit meter display. It shows peak and average power on 30/300 Watt scales. Lamp has front panel switch and uses 12 VDC or 110 VAC with optional AC-12D $17.95.

Antenna selector switch is a 6-position ceramic. Coax 1 for tuned and bypass. Coax 2 for tuned and bypass, bypass and balanced line antenna.

The HFT-1500 measures 5.5x12W x12.5D inches and is housed in a beautiful RF-tight aluminum cabinet. Weighs 10 lbs.

VC-300DLP . . . World’s most versatile HF Antenna Tuner

Get everything you’ve ever wanted . . . precise inductance control that rivals roller inductors and the ability to match any real antenna! VC-300DLP gives you full 1.8-30 MHz coverage, peak reading backlit Cross-Needle Meter, 8 pos. antenna switch, built-in 50 Ohm dummy load, finest components and world class quality.

VECTRONICS’ custom inductor switch was designed to withstand the extremely high RF voltages, currents developed in your tuner. Built-to-last. Tune any real antenna 1.8-30 MHz, including all MARS/WARC bands. Verticals, dipoles, yagis, quads, long-wires, G5RVs... 4:1 balun for balanced lines. Handles up to 300 Watts SSB PEP, 200W continuous (150W, 1.8 MHz).

A backlit Cross-Needle Meter displays SWR, forward and reflected power simultaneously. Reads both peak and average power on 30/300 Watt scales. Lamp has front panel switch and uses 12 VDC or 110 VAC with optional AC-12D $17.95.

8-position switch selects 2 coax fed antennas, random wire/balanced line or built-in dummy load for use with tuner or direct to your rig. Bypass position keeps SWR meter in line.

Built-in dummy load is for testing and repairing radios, setting levels, adjusting your mic gain and more. Chemically treated aluminum case, durable baked-on paint and scratch-proof color Lexan front panel. Compact 10Wx9.5Dx3.5H inches.

VC-300M . . . Mobile Antenna Tuner

Vectronics 300 Watt Mobile Tuner

Antenna Tuner is compact, lightweight, easy-to-operate and is our most economical. Compatible with any mobile antenna and any mobile HF rig and small enough to fit in a compact car.

Use at base station with dipoles, vees, verticals, beams or quads fed by coax. Backlit dual movement meter simultaneously monitors power/SWR.

Covers 18 to 30 MHz. Handles 300 Watts SSB PEP, 200 Watts continuous, (150 Watts on 1.8 MHz).

Measures just 7.25Wx8.75Dx3.6H inches. Weighs just 3.4 pounds.

VECTRONICS Deluxe 300 Watt Antenna Tuner with 21 Segment SSB Bargraph

VC-300D, $234.95. Like VEC-300DLP, but has 21-segment bargraph that makes analyzing SSB power amazingly easy. LED shows peak reading and has fully adjustable level and delay controls.

PM-30, $99.95. For 1.8-60 MHz. Displays forward and reflected power and SWR simultaneously on dual movement Cross-Needle Meter. True shielded directional coupler assures accuracy. Backlit meter displays peak or average power in 300/3000W ranges. Measures a compact 5.5x7.5x3.5 inches. Has quality SO-239 connectors.

PM-30UV, $109.95. For 144, 220 and 440 MHz ranges. Covers 144/220/ 440 MHz. Has 30 and 300 W ranges. SO-239s. Similar to PM-30UV but has N type antenna connector.

PM-30UVB, $109.95. Similar to PM-30UVD but has BNC antenna connector.

PM-30UVD, $109.95. For 440 MHz. Displays forward, reflected and SWR simultaneously.

AC-12D $17.95. 12 VDC adapter for VEC-300DLP or VEC-300M. 500 Watt lamp requires this adapter.

VC-300M $139.95. Ship Code B

300 Industrial Park Road, Starkville, MS 39759 • Toll-free 1-800-647-1800 • www.vectronics.com
**VECTRONICS HF/VHF/UHF Dry Dummy Loads**

**1500 Watts HF/VHF/UHF Dry Dummy Loads**

<table>
<thead>
<tr>
<th>Model</th>
<th>Wattage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL-650M</td>
<td>$84.95</td>
<td>Handles 100 Watts continuous, 1500 Watts for 10 seconds to 650 MHz. Ceramic resistor. SWR lower than 1.3:1. Has SO-239 connector.</td>
</tr>
<tr>
<td>DL-650MN</td>
<td>$89.95</td>
<td>Like DL-650M but has N-type connector.</td>
</tr>
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**300 Watts Dry Dummy Loads**

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<td>Handles full 300 Watts for thirty seconds. Air-cooled, non-inductive resistor in a perforated metal housing. Has SO-239 connector. Silk-screened derating curve. SWR below 1.1:1 to 30 MHz.</td>
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<td>DL-300MN</td>
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**2500 Watts Fan-cooled Dry Dummy Load**

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<tr>
<td>DL-2500</td>
<td>$239.95</td>
<td>2500 Watts dummy load is fan cooled. DC to 150 MHz. Can dissipate 2500 Watts average power for one minute on, ten minutes off. Detailed power curve.</td>
</tr>
</tbody>
</table>

**VECTRONICS Low Pass TVI Filters**

**1500 Watts Low Pass TVI Filter**

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<tr>
<th>Model</th>
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</tr>
</thead>
<tbody>
<tr>
<td>LP-30</td>
<td>$99.95</td>
<td>Use between transmitter and Antenna or Tuner. Reduces TV interference (TVI) radiated by transmitters operating below 30 MHz. Suppresses harmonics appearing in TV bands. Additional attenuation to TV IF frequencies above 40 MHz. Low loss to 30 MHz. 9-pole inverse Chebyshev design.</td>
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**2500 Watts Low Pass TVI Filter**

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<th>Model</th>
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<td>LP-2500</td>
<td>$149.95</td>
<td>Use between your Transmitter and Antenna or Tuner. Reduces TV interference (TVI) radiated by transmitters operating below 30 MHz. Suppresses harmonics appearing in the TV bands. Add-itional attenuation to TV IF frequencies above 40 MHz. Low loss to 30 MHz. 9-pole inverse Chebyshev.</td>
</tr>
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**High Pass TVI Filters**

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<thead>
<tr>
<th>Model</th>
<th>Wattage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPF-1</td>
<td>$34.95</td>
<td>Installs between VCR and TV and cable TV or antenna lead-in cable. Eliminates or reduces interference caused by nearby HF transmitters operating below 30 MHz. Low loss in the TV passband 52-550 MHz. Unique shield breaking circuit prevents cable from acting like an antenna.</td>
</tr>
</tbody>
</table>

**VECTRONICS HF/VHF/UHF Dry Dummy Loads**

**Tuned Active SWL Antenna**

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<thead>
<tr>
<th>Model</th>
<th>Wattage</th>
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</tr>
</thead>
<tbody>
<tr>
<td>AT-100</td>
<td>$109.95</td>
<td>This portable compact antenna is perfect for indoor use by itself or with an external antenna. Tuned from 300 kHz to 30 MHz in-cluding VLF, AM broadcast, all shortwave and ham radio bands. Great for Shortwave listening and for those without access to the outdoors!</td>
</tr>
</tbody>
</table>

**Deluxe Iambic CW Keyer**

<table>
<thead>
<tr>
<th>Model</th>
<th>Wattage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CK-200</td>
<td>$109.95</td>
<td>Speed, weight, tone, volume controls, tune, iambic A/B switch, 3 types keying output, speed: 6-50 WPM, self-complete dots/dashes. Use 9V battery/110 VAC.</td>
</tr>
</tbody>
</table>

**VECTRONICS Low Pass TVI Filters**

**1500 Watts Low Pass TVI Filter**

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**Seat Spec**

<table>
<thead>
<tr>
<th>Wattage</th>
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</tr>
</thead>
<tbody>
<tr>
<td>0.25 dB @ 30 MHz</td>
<td>Insertion Loss</td>
</tr>
<tr>
<td>VSWR: Less than 1.5:1</td>
<td>Less than 0.5 dB @ 52-550 MHz</td>
</tr>
<tr>
<td>Impedance: 50 Ohms</td>
<td>More than 50 dB: 25-30 MHz</td>
</tr>
<tr>
<td>More than 70 dB: 14-25 MHz; More than 80 dB: 1-14 MHz</td>
<td>Cutoff Freq: 35 MHz</td>
</tr>
<tr>
<td>More than -40 dB at 30 MHz; More than -55 dB at 20 MHz; More than -60 dB at 10 MHz</td>
<td>Freewave Receiver (RF current on shield - prevents cable from acting like an antenna)</td>
</tr>
<tr>
<td>Power Capacity: 1500 W Key Down - 50% Duty</td>
<td>Deliberate power curve.</td>
</tr>
<tr>
<td>2500 W Key Down - 50% Duty</td>
<td>Connections: CATV (Type F) 75 Ohms; More than 60 dB</td>
</tr>
<tr>
<td>Impedance: 75 Ohms; Insertion Loss: Less than 0.5 dB @ 52-550 MHz</td>
<td>Dimensions: 3.25Wx1.5Dx2H inches.</td>
</tr>
</tbody>
</table>

**DELUXE IAMMIC**

<table>
<thead>
<tr>
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<th>Wattage</th>
<th>Description</th>
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**VECTRONICS HF/VHF/UHF Dry Dummy Loads**

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**300 Watts Dry Dummy Loads**

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<td>DL-2500</td>
<td>$239.95</td>
<td>2500 Watts dummy load is fan cooled. DC to 150 MHz. Can dissipate 2500 Watts average power for one minute on, ten minutes off. Detailed power curve.</td>
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</table>
schematics, test and alignment, more. placement, PC board layouts, tips, complete parts lists, parts different kits on this page. Building Electronic Projects

The Giant Book of

VEC-8218K, $44.95.

Cases available for most kits listed above, $15.95. Add “C”. Example: VEC-201KC, $15.95.

High-performance electronic kits... fun to build and use!

Comprehensive Soldering Course Kit

Designed for schools and individuals. Aids in self-study at various levels. Includes study guide, theory, surface mount technology, quizzes, PC board and components for soldering practice. Used & endorsed by engineering schools in several universities, vo-tech schools, businesses and others. No kit case.

Order VEC-1500K, $34.95.

Crystal radio set Kit

Relive the experience of early radio pioneers! Wind your own inductor, wire up the earliest radio circuit without soldering a thing and listen to the magic of radio that needs no power. Put up an antenna, connect ground. Stations come in amazingly loud and clear. 1½ x5 6½, weekend!!! It’s a great way to start to elmer a new young ham! Order VEC-121K, $29.95.

SCA Decoder Kit

lets you discover interesting programming hidden in many standard FM broadcast signals: commercials, music, all-news, weather reports, stock quotes, digital data, ethnic programs, blind reading services, etc. Tune entire SCA band 50-100 KHz. Connect 422K to detector out of FM receiver. 1½ x 5 x 6½. Simple level. VEC-422K, $34.95.

Aircraft Receiver Kit

tuns entire voice aircraft band 118-136 MHz, air traffic up to 100 miles away. Track in/out traffic in your area, weather information, discover how National Air Traffic System works. Learn about aviation. Use 9V battery. Drives external speaker/phones. 1½ x 4 x 3½ in. Intermediate level. VEC-131K, $34.95.

Shortwave Converter Kit

converts AM or AM/FM radios to SW receivers at a push of a button. Choose 2 1 MHz bands between 3 and 22 MHz. Popular 13, 16, 19, 25, 31, 49, and 60 meters international. On/off by-pass, NE-602/612 mixer-oscillator IC, tuned input circuit. 9 V battery. 1½ x 4 x 3½ in. Intermediate level. VEC-101K, $34.95.

Voice Activated Recorder Switch Kit


QRP Transceiver Kits for

80/40/30/20 Meters gived VVO frequency control, broadband transmitter circuitry, solid 1-Watt plus output, shaped keying, 3 uV sensitivity, direct conversion receiver. Has crystal for popular QRP frequency. 1½ x 4 x 3½ in. Intermediate skill level. VEC-1380K (80 Meters), VEC-1340K (40 Meters), VEC-1330K (30 Meters), VEC-1320K (20 Meters), $65.95 each.

Counter Surveillance Monitor Kit

lets you search out and remove electronic bugs! Highly sensitive wideband receiver detector. Higher pitch audio occurs when bug is near 9 V batt. Moderate. VEC-8218K, $44.95.

The Giant Book of Electronic Projects

VEC-1901, $24.95. Includes 19 different kits on this page. Building tips, complete parts lists, board placement, PC board layouts, schematics, test and alignment, more.
Ameritron HF+ 1200W Solid State Amplifier

1.5-54 MHz... 1200 Watts PEP Output, Instant Automatic bandswitching, no tuning... no warm-up, SWR protected, Quiet Variable-Speed Cooling... PEP FWD/REF Metering... PA Balance / ALC Metering and LED Indicator... Front Panel Band/Error LEDs... more!

Ameritron's ALS-1306 is a 1.5-54 MHz solid state near legal limit™ FET no-tune Amplifier -- get 1200 Watts PEP output on all bands, including 6-Meters. Instant automatic bandswitching! No tuning, warm-up or tubes to baby, no fuss!

ALS-1306 reliability is insured by using 8 rugged MRF-150 power FETs. They are mounted on the dual heavy duty heat sink and properly arranged to spread out the heat over a large surface. This is something that other amplifiers using a single power device cannot do. Some FETs actually are a package of several transistors in one large case. This concentrates heat in one small package. They not only are more difficult to cool, if one transistor fails, they all have to be replaced.

ALS-1306 RF deck operates at 50 Volts for efficient, low distortion linear RF power. It's cooled by a whisper quiet cooling fan. Fan speed is regulated by temperature sensors, assuring minimum noise for adequate cooling.

1200 Watts SSB Output Power Covers 1.5-54 MHz (HF+ 6 Meters!)
ALS-1306 runs up to 1200 Watts of clean SSB output power (just 100 Watts drive gives you the full rated 1200 Watts output) for continuous coverage between 1.5-54 MHz. 10/12 Meters is already included.


SWR Protection prevents amplifier damage if you switch to a wrong band, use the wrong antenna or have a high SWR. Over-power protection enables if output forward power or reflected power exceeds a safe level.

Output power is automatically reduced to prevent amplifier damage by controlling ALC to exciter.

LED-illuminated Cross-Needle SWR/Wattmeter reads SWR, forward and reflected peak power simultaneously. You also get ALC, SWR, PA balance and current metering with LED backlight. An Operate/Standby switch lets you run "barefoot", but you can instantly switch to full power if needed.

Over 25 New Products inside!