

MFJ *tunable* Super DSP filter

Only MFJ gives you *tunable* and programmable "brick wall" DSP Filters

MFJ's *tunable* super DSP filter automatically eliminates heterodynes, reduces noise and interference *simultaneously* on SSB, AM, CW, packet, AMTOR, PACTOR, RTTY, SSTV, WeFAX, FAX, weak signal VHF, EME, satellite.

You get MFJ's *tunable* FIR linear phase filters that minimize ringing, prevent data errors and have "brick wall" filter response with up to 57 dB attenuation 75 Hz away.

Only MFJ gives you 5 *tunable* DSP filters. You can tune each lowpass, highpass, notch, and bandpass filter including optimized SSB and CW filters. You can 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 automatic notch filter searches for and eliminates multiple heterodynes.

You also get MFJ's advanced adaptive noise reduction. It silences background noise and QRN so much 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 and RTTY jump out of QRM when you switch in MFJ's exclusive *tunable* FIR bandpass filters.

You can tune the center frequency from 300 to 3400 Hz, and vary the bandwidth from 30 Hz to 2100 Hz -- from super-tight CW filters to wide razor-sharp Data filters.

You can use two tunable filters together. For example, tune one to mark, one to space and set bandwidth tight for a super sharp RTTY filter.

Tunable highpass/lowpass filters

You can tune the lower cutoff frequency 200

U.S. Patent D374,010
MFJ-784B
\$249⁹⁵
Ship Code B



to 2200 Hz and the upper cutoff frequency 1400 to 3400 Hz. This lets you create custom filters for voice, data and other modes.

Signals just 75 Hz away literally disappear -- they are reduced 57 dB!

Automatic notch filter

MFJ's automatic notch filter searches for and eliminates multiple heterodynes in milliseconds. It's so fast, that even interfering CW and RTTY signals can also be eliminated.

You can selectively remove unwanted tones using the two manually tunable notch filters -- an 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 noise, hiss.

The LMS algorithm gives you up to 20 dB of noise reduction. Noise reduction is adjustable to prevent signal distortion.

15 pre-set filters -- factory set or you custom program

You can select from 15 pre-set filters. Use for SSB, AM, CW, packet, AMTOR, PACTOR, RTTY, SSTV, WeFAX, FAX or any mode.

If you don't like our pre-set filters, you can program your own -- an MFJ exclusive! Save center frequency/bandwidth, lowpass/highpass cutoffs, auto/manual notch, noise reduction -- all filter settings -- in 10 programmable filters.

Plus more . . .

A push-button bypasses your filter -- lets you

hear the *entire* unfiltered signal.

2 1/2 Watt amplifier, volume control, input level control, speaker jack, PTT sense line, line level output. 9 1/2 x 2 1/2 x 6 inches.

Plugs between your transceiver or receiver and external speaker or headphones. Use 12 VDC or 110 VAC with MFJ-1312D, \$14.95. Cable Pack, MFJ-5184, \$7.95, includes receiver cable, DC cable, 2 open-end TNC cables.

New Features

MFJ's exclusive *tunable Spotting Tone*™ -- accurately tunes even the narrowest CW filter.

MFJ's exclusive *Adaptive Tuning*™ -- tuning rate automatically becomes finer as you narrow bandwidth -- makes narrow filters easy-to-use.

MFJ's exclusive *FilterTalk*™ -- sends precise filter settings in Morse code.

Has automatic notch with variable aggressiveness, new quieter 2 1/2 Watt audio amplifier, new speaker switch keeps phones always active.

Manual and automatic notch can be used together. Noise reduction, automatic notch and custom filter you saved in memory is selected.

You get an accurate easy-to-use input level indicator, improved manual notch in the CW mode, adjustable line level output, more Mark-Space frequencies and baud rates for data filters and automatic bypass during transmit for monitoring CW sidetone, voice or data by sensing the PTT line.

60 dB Null *wipes out* noise and interference

MFJ-1026
\$179⁹⁵
Ship code A



Wipe out noise and interference before it gets into your receiver with a 60 dB null!

Eliminate all types of noise -- severe power line noise from arcing transformers and insulators, fluorescent lamps, light dimmers, touch

controlled lamps, computers, TV birdies, lightning crashes from distant thunderstorms, electric drills, motors, industrial processes . . .

It's *more effective* than a noise blanker because interference much stronger than your desired signal can be completely removed without affecting your signal.

It works on *all modes* -- SSB, AM, CW, FM -- and frequencies from CB to lower VHF.

You can null out strong QRM on top of weak rare DX and then work him! You can null out a strong local ham or AM broadcast station to prevent your receiver from overloading.

Use the MFJ-1026 as an *adjustable phasing network*. You can combine two antennas to give you various directional patterns. You can

null out a strong interfering signal or peak a weak signal at a push of a button.

Easy-to-use! Plugs between transmitting antenna and transceiver. To null, adjust amplitude and phase controls for minimum S-meter reading or lowest noise. To peak, push reverse button. Use built-in active antenna or an external one. MFJ's exclusive *Constant Amplitude Phase Control*™ makes nulling easy.

RF sense T/R switch automatically bypasses your transceiver when you transmit. Adjustable delay time. Uses 12 VDC or 110 VAC with MFJ-1312D, \$14.95. 6 1/2 x 1 1/2 x 6 1/4 inches.

MFJ-1025, \$159.95. Like MFJ-1026 less built-in active antenna, use external antenna.



Add DSP to any Multimode

MFJ-781 Add "brick wall" DSP \$129⁹⁵ filtering to any TNC or multi-mode data controller. Copy signals buried in noise and QRM.

Under severe QRM, DSP greatly improves copy of Packet, AMTOR, PACTOR, GTOR, Clover, RTTY, SSTV, WeFAX, FAX, CW -- nearly any digital mode. Automatic gain control, On/Off Bypass switch. Plugs between transceiver and multi-mode. Uses 10-16 VDC or 110 VAC with MFJ-1312D, \$14.95. 4 1/2 x 2 1/2 x 5 in.

DSP for your MFJ-1278/B

Plug a MFJ-780 "brick wall" DSP filter into your MFJ-1278/B multi-mode and you won't believe your eyes when you see solid copy from signals completely buried in QRM!

MFJ-1278/B automatically selects the correct DSP filter for Packet, AMTOR, Pactor, RTTY, ASCII, FAX, Color SSTV, Navtex or CW. Plug in a MFJ-780 and copy signals that other multi-modes can't. *Some soldering is required for this plug-in filter.*

MFJ-780
\$99⁹⁵
Ship Code A

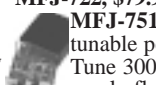
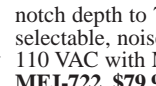


MFJ's SSB/CW Audio Filters

MFJ-752C, \$99.95. (left, bottom) All mode dual tunable filter has variable bandwidth 40 Hz to almost flat, eliminates noise and heterodynes notch depth to 70 dB, inputs for two rigs, switch selectable, noise limiter, plus more. Use 9-18 VDC or 110 VAC with MFJ-1312D, \$14.95. 10x2x6 inches.

MFJ-722, \$79.95. SSB/CW tunable 70 dB notch filter.

MFJ-751B, \$69.95. Zero in SSB/CW with tunable peak and notch filters. 1 1/4 x 4 3/4 x 5 in. Tune 300-3000 Hz. Vary bandwidth 80 Hz to nearly flat. 50 dB notch. 12 VDC at 300 mA.



NEW! Contest Voice Keyer

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

MFJ-434
\$179⁹⁵
Ship Code A

Store frequently used phrases like "CQ Contest this is AA5MT", "You're 59" ... "Qth is Mississippi" and more! Contest by pressing a few buttons and save your voice.

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

You can repeat messages continuously and vary the repeat delay from 3 to 500 seconds. Makes a great voice beacon and calling CQ is so easy.

A receive audio jack lets you record and play back off-the-air signals -- great help if you didn't get it right the first time! No more



"Please repeat".

A playing message can be halted by pressing the *Stop Button*, your PTT mic button or by your VOX PTT line. A closure to ground via remote control or computer can also halt messages.

Has jack for remote or computer control (using CT, NA or other program and its interface). Lets you select, play and cancel messages.

The MFJ-434 is transparent to your microphone -- your mic's audio characteristics do

not change when your MFJ-434 is installed. Dual controls make it easy to tailor audio level to match your voice.

All audio lines are RF filtered to eliminate RFI, audio feedback and distortion. An audio isolation transformer totally eliminates hum and distortion caused by ground loops.

It's easy to use -- just plug in your 8 pin microphone cable and plug the MFJ-434 shielded cable into your transceiver's mic connector. Internal jumpers let you customize it to Kenwood, Icom, Yaesu, Alinco or Radio Shack rigs. Use your station or built-in microphone for recording.

Built-in speaker-amplifier lets you monitor stored messages. 3.5 mm speaker/headphone jack. SMT technology. Use 9 Volt battery, 9-15 VDC or 110 VAC with optional MFJ-1312D, \$14.95. 6 1/2"Wx2 1/2"Hx6 1/2"D inches.

MFJ-73, \$29.95. Remote Control Head with cable for MFJ-434.

MFJ Desk Mic/Ham station console



MFJ-299
\$99⁹⁵
Ship Code A

A high-sensitivity ceramic microphone element (10.5 inches with *FlexNeck™*) bends and stretches to your most comfortable operating position. A fine mesh metal grill helps to eliminate background noise.

MFJ-299 has a high quality compressor amplifier with high, medium, and low selection switches. It always sends out a constant and optimum level without distortion, regardless of audio input level.

MFJ-299 is equipped with a built-in graphic equalizer with center frequencies of 270, 540, 1000 and 2000 Hz. Gives best audio quality for FM mode and max efficiency for SSB.

Has *On-Air* indicator and an output level volume control. *On-Air* blinks on and off when in receiving mode and will light up continuously when transmitting.

MFJ-299 is equipped with PTT momentary

and PTT lock switches that allow you to switch between long one-sided QSOs and fast two-sided conversations.

The frequency up/down switches let you operate your transceiver at your desktop microphone. 4 function keys (CALL, VFO, MR, PF) are for Kenwood transceivers only.

An output level meter lets you adjust the output level to not exceed 0 dB.

A revolutionary triple radio input socket makes it super easy to install for any model transceiver: Icom, Yaesu, Kenwood and compatible transceivers. See cable chart below.

Built-in battery check circuit. Press power switch and the level meter will show battery condition with power voltage for a few seconds.

MFJ-297 Desk Mic

MFJ-297 speech frequency

tailored microphone cuts

through noise and QRM.

Switch for powerful SSB

punch or full range broadcast

quality FM/AM. Has

Silbiant Sound Shield™,

momentary/locking PTT

switch, On-Air LED, Frequency up/down

button, output level control and more!

Compact 4Wx1 1/2"Hx6D inches with 11 inch

flexible boom. 1 lb. Use 2 "AA" batteries.

Select cable from chart, below.



MFJ-297
\$69⁹⁵
Ship Code A

8 Pin Round Mic Plug - \$15.95 each

8 Pin Modular Mic Plug - \$15.95 each

MFJ Desk Mic	ICOM	Kenwood	YAESU	ICOM	Kenwood	YAESU
MFJ-297	MFJ-5397I	MFJ-5397K	MFJ-5397Y	MFJ-5397MX	MFJ-5397MX	MFJ-5397MY
MFJ-299	MFJ-5397I	MFJ-5397K	MFJ-5399Y	MFJ-5397MX	MFJ-5397MX	MFJ-5397MX

MFJ Deluxe Hybrid Phone Patch

MFJ-624D Deluxe Hybrid Phone Patch gives you crisp, clear, hum-free audio, and that's what phone patching is all about. It's jumper selectable for Kenwood, Icom, Yaesu, and Alinco rigs with 8 pin mic connectors.

MFJ-624D
\$129⁹⁵
Ship Code A

You can use either VOX or push-to-talk. RF pi-filters and PC board construction eliminates RF feedback. Use with virtually any rig. Built-in VU meter monitors phone line levels to prevent cross talk. Adjust null depth for maximum isolation between receiver/transmitter. Separate transmitter and receiver gain controls eliminate the need to readjust your rig after patching. Null control, standard phone connection, RJ-11. Jacks for speaker, audio in/audio out. 8x2x6 in. Use 12 VDC, 9V battery or 110 VAC with MFJ-1312D, \$14.95.



MFJ Professional grade Boom Mic Headphones

New!



Cut through Noise and QRM!

MFJ-393 This
\$59⁹⁵ professional
Ship Code A grade

MFJ Boom-Mic Headphones set is for contesting, DXing and traffic nets. Comfort designed leatherette padding lets you operate for hours at the rig.

Superb 3/4 inch thick padding on each ear and headband. MFJ-393 is so super lightweight, you won't even know they're there! Headband adjusts for perfect fit to keep out external noise.

Frequency response is enhanced for communications to bring out speech fidelity you never knew existed. Signals never sounded so clear!

The flexible microphone boom lets you position the mic comfortably at an optimum distance to minimize silbiant sounds.

MFJ's frequency tailored microphone element lets you bust through noise and QRM! 6 feet of cable lets you move about your ham station!

Even casual operators will appreciate the advantages of MFJ's superbly crafted Boom-Mic headphones for hands-free operating and DXing at an incredibly low MFJ price.

MFJ-393, \$59.95, comes with pre-wired adapter cable. Order MFJ-393I for Icom and compatibles, MFJ-393Y for Yaesu and compatibles, MFJ-393K for Kenwood and compatibles.

MFJ PTT Foot Operated Switch

Add MFJ-1709
the luxury of foot control \$21⁹⁵
Ship Code A



PTT transceiver operation. MFJ-1709 keeps your hands free for logging, computer operation and tuning. Greatly reduces fatigue and improves your efficiency -- could be the difference between winning and losing a contest. 2 1/2"Wx3 1/2"Dx1 1/4"H inches with non-skid pad foot pedal. 1/4 in. phone plug. Ten ft. cord.

MFJ Accessories for FT-817 and other QRP Transceivers

MFJ Walkabout Antenna covers 80 through 6 Meters

Work DX walking about! This MFJ MFJ-1899T DX walking about! Ship Code A

Walkabout antenna for the FT-817 and other QRP rigs covers all bands 80 Meters through 6 Meters including WARC bands.

Its ten section telescoping whip is 52 inches fully extended and is 7 inches when collapsed. The whip unscrews from the 12 inch base loading coil. It's ultra-compact for easy traveling. Handles 25 Watts.

You change bands by plugging the "wander lead" into the appropriate socket on the base coil. Fine tuning is done by adjusting the telescopic whip. Has BNC connector. Use adapter for SO-239.

MFJ Single Band Walkabout Antennas

Highly efficient single band MFJ-1806T \$29.95 Walkabout Ship Code A

antennas for the FT-817 and other QRP rigs let you work exciting DX no matter where you are!

Each 10-section telescoping whip is 51 inches fully extended and collapses to 5 1/2 inches and screws into a base loading coil.

Handles 25 Watts. Has BNC connector. Use adapter for SO-239.

MFJ-1806T (6 Meters) \$29.95.

MFJ-1810T(10M), MFJ-1812T(12M), MFJ-1815T(15M), MFJ-1817T(17M), MFJ-1820T(20M), MFJ-1830T(30M), \$39.95 each.

MFJ-1840T (40 Meters), MFJ-1880T (80 Meters), \$49.95 each.

Tiny 10 ounce Switching Power Supply for the Yaesu FT-817 and other QRP rigs

This 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 with no RF hash!

It's an incredibly tiny 4 1/8x2 5/8x1 1/8 inches and weighs just 10 ounces including output power cord and connector.

Output DC cable with a standard MFJ coaxial DC power connector (2.1 mm ID, 5.5 mm OD) that fits most MFJ and other ham accessories and QRP rigs. Sturdy adapter cable included for Yaesu FT-817. Also works with the VX-5, VX-1 series Yaesu radios.

The MFJ-4103 has excellent specs and outperforms all other switching power supplies made for the FT-817. It's RFI-free with no RF hash. It's perfect for QRP rigs needing up to 2.89 Amps.

It 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 overtemperature protected.

Has excellent 1% line and 5% load regulation and 1% peak to peak ripple and noise. Operating temperature is 0-40 degrees C. Mean time between failure is 100,000 hours at full load at 25 degree C ambient. Meets FCC part 15 class B, UL 1950 and CSA 22.2.



MFJ-4103 \$39.95

Ship Code A

MFJ QRP Wattmeter/Dummy Load

MFJ-840, \$19.95. Accurately checks the power output of your FT-817 and other QRP rigs into a 50 Ohm dummy load. 5 Watts full scale. Covers 160-2 Meters. Accurately checks battery charge. BNC connector.



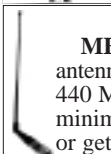
MFJ miniature Travel Iambic Paddle

MFJ-561, \$19.95. 1 3/4Wx1 3/4Dx3/4H in. Full-size feel for smooth, easy CW. Precision formed from resilient phosphorous bronze. Stainless steel base. 4 ft. cord, 3.5 mm plug.



MFJ 2 Meter/440 MHz FT-817 Antenna

MFJ-1717PL, \$24.95, foldover dual band flexi-duck 16 1/2" antenna with quality PL-259 connector. Hearty 2.15 dBi gain on 440 MHz and full size 1/4 Wave on 2 Meters. Factory set for minimum SWR. No more coax, finding a place for a magnet or getting an outside antenna. High-Q, low loss construction.



PL-259-to-BNC Female Right Angle Adaptor

MFJ-7703, \$6.95. Sturdy, adapter for your FT-817 and multimode HF antennas like MFJ-1899T, above. Quality connectors on both ends with re-inforced elbow for less stress on radio connectors.



MFJ-1262 Microphone Control Center

This new MFJ-1262 Microphone Control Center lets you switch between any two microphones by pushing a button.

You can switch between a boom mic/headphone and a desk or hand mic, between a hi-fi ragchewing mic and a hard hitting DX mic or between a hand mic or desk mic.

You can also convert any favorite 8-pin microphone for use with any radio.

PTT foot switch frees your hands for contesting and DXing

By plugging in an external PTT foot switch you can free your hands for contesting and DXing. Or you can let a computer or voice keyer control the PTT line for automated operation.

Perfect for Boom-Mic/Headset

Switching between your desk or hand mic and your Boom Mic/Headset is quick and easy.

You can plug in an external foot or hand operated PTT switch.

You can also plug in your boom-mic headphones.

The MFJ-1262 has a built-in headphone volume control so you won't have to readjust your rig's volume when you switch the speaker on.

Keep Your Headphones On

During a contest or field day when several operators are busy, everyone can use a



MFJ-1262

\$79.95

boom mic/headset or a pair of headphones and operate privately.

When you want others to hear what you're hearing in your headphones, you can push a button and turn on an external speaker (like the MFJ-281, \$12.95) that you plug into the MFJ-1262. The headphones are always active. A push button turns the speaker on or off.

Switch from Ragchewing to DXing

Instantly switch from a wide range hi-fi microphone when ragchewing with your buddies to a hard hitting DX microphone when you suddenly hear some rare DX.

Works with any radio

The MFJ-1262 works with any radio - Kenwood, Yaesu, Icom, Alinco and compatible transceivers - using an 8-pin round or modular microphone jack. You set internal jumpers to configure the MFJ-1262 for your radio - it never becomes obsolete!

Order MFJ-1262 for 8-pin round mic plug or MFJ-1262M for 8-pin modular mic plug.

<http://www.mfjenterprises.com>

Converts any 8-pin microphone to work with any 8-pin radio

Say you have a favorite Kenwood microphone and want to use it on your new Yaesu radio.

All you need to do is plug your Kenwood microphone into the MFJ-1262 and set the internal jumpers to configure it for your new Yaesu radio.

No More Fuss

The MFJ-1262 takes away all the fuss - no more plugging and unplugging to change microphones - just push a button.

It's perfect for contests, field day or in a confined room where instant switching between a high performance boom mic/headset and a hand or desk microphone may be needed.

Super Easy-to-Use

Just unplug your microphone from your transceiver and plug it into the MFJ-1262. Plug in a second microphone if desired.

Then plug the MFJ-1262 cable into your transceiver microphone input.

Push the button to select your desired microphone.

Sleek and Compact

It stays out of your way. The sleek and compact MFJ-1262 is so tiny it can sit on top of other equipment or get tucked away. Measures 6Wx1 1/2Hx5D in. Has 3 ft. of 8-pin cable to go to radio microphone input.

MFJ *pocket size* Morse Code Tutor

Learn Morse code fast, anywhere . . . LCD display lets you check your copy instantly . . . Easy no-code beginner's course . . . Takes you beyond Extra Class . . . Plain English QSOs .



MFJ-418
\$79⁹⁵

Beginner's Course

ARRL/VEC format. Learn Ship Code A small fixed sets of characters. Previously learned sets are combined with new sets to reinforce all you have learned.

InstantReplay™

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

Custom Character Sets

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

Realistic Plain English QSOs

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

MFJ Word Recognition Mode™

MFJ's Word Recognition Mode™ gives you hundreds of commonly used words in ham radio. Practice recognizing entire

words instead of individual letters.

You'll never run out of practice

Select letter, number, punctuation, prosign or FCC character sets (has only letters, numbers and prosigns required on FCC tests), random call signs, random words, QSOs or combo sets for practice -- you'll never run out of study material!

MFJ InteractiveMode™

InteractiveMode™ lets you decide when to copy the next or previous group and how many -- great for beginners!

Normal or Farnsworth

Select normal or Farnsworth spacing.

Farnsworth makes it easier to learn entire characters. Stop counting individual dots and dashes that slows learning!

Adjustable 10 to 60 WPM for high-speed.

Fixed or Random Length Groups

Use fixed length or more realistic random length groups (up to 8 characters).

Change speed on the Fly

You can change speed on-the-fly while playing a session 3 to 60 words-per-minute.

SettingSaver™

Settings are automatically saved, ready to use next time--just turn on and hit replay.

LARGE LCD Display

Check your copy, select from menus and program custom characters and words on 2 line LCD display with 32 huge 1/4 inch high-contrast characters -- powerful

sound and sight learning!

SilkySmoothSidetone™

Only MFJ gives you SilkySmooth Sidetone™ with TruTone™ sinewave and SoftStart™ dots/dashes -- lets you concentrate on learning without the distraction of harsh keyclicks. Use earphones for private practice or built-in speaker for groups.

Volume control. Variable pitch 300-1000 Hz.

True Pocket Size

Fits in your shirt pocket with room to spare -- smaller than a pack of cigarettes. Tiny 2 1/4 x 3 3/4 x 1 in., weighs less than 5 1/2 ounces. Uses 9 volt battery (not included).

Tapes can't compare

Tapes play the same old boring stuff over and over again. Unlike tapes, you'll never memorize MFJ-418's random sessions.

Pocket Tutor Accessories

MFJ-26B, \$6.95.

Soft leather protection for MFJ-418 with pocket/belt clip.

MFJ-281, \$12.95.

Speaker for group practice. Loud, powerful audio! 3 3/4 x 3 x 2 1/4"



More pocket size MFJ Morse Tutors

MFJ-417, \$59.95. Similar to MFJ-418, but no LCD. Most software features.

MFJ-413, \$39.95. Similar to MFJ-417, less random words, QSOs, SettingSaver™.

Deluxe Morse straight key for code and sending practice

MFJ-557 features a heavy steel base, tone/volume controls and an earphone jack for just \$29.95!



MFJ-557
\$29⁹⁵

Ship Code B

MFJ-550
\$7⁹⁵

Ship Code A

MFJ-557 Deluxe Code Practice Oscillator

features a Morse straight key on a non-skid heavy steel base -

- stays put on table and doesn't move around while you're sending.

MFJ-557 lets you practice sending code at home, work, riding in your car -- practically anywhere -- because it's so easy to take it

wherever you go. Volume control adjusts from barely audible to blaring full sound. You can practice without bothering anyone.

Tone control gives you a wide adjustment, from high "squeaky" to low "booming" tones. You even get an earphone jack for private listening times.

Plug in an external speaker (MFJ-281, \$12.95, loud, powerful compact speaker) for super high volume in the classroom.

MFJ-557 runs on a 9 volt battery (not included) or 110 VAC with MFJ-1312, \$14.95. Plugs into power jack on the side.

When you're finished cleaning up your sloppy fist with the MFJ-557, hook up the straight key to your transmitter and go on-the-air sounding like you were born working QSOs.

Don't pass up a super buy! Built-in speaker, adjustable contacts. Solid 8 1/2 x 2 1/4 x 3 3/4 inches. Black. 1 year MFJ warranty.

On-the-air CW Fun using HT

MFJ's JimHandy™ CW

interface plugs into your 144/440 MHz handheld and converts it into a modulated CW transceiver -- just plug in your key. Get your ham buddies together on-the-air and enjoy some fantastic CW fun. Run a little code practice on your repeater. Start your own FM CW Net. Have fun and upgrade! A transmit/receive switch automatically switches your HT to transmit when you send CW and returns you to receive when you stop keying. Has built-in speaker, volume control and great sounding true sinewave sidetone -- no harsh keyclicks. 4W x 1 1/4 H x 3 3/4 D inches. Use 9V battery (not included). Pre-wired patch cables, \$15.95 for your HT on page 31.

MFJ-550, \$7.95. Straight telegraph key.



MFJ-552
\$79⁹⁵

Ship Code A

Classroom Code Oscillator

The world's finest code

practice oscillator is designed for demanding classroom use and abuse. It produces a true pure sinewave sidetone with no trace of harsh keyclicks. You'll hear the clearest, sweetest sounding CW you have ever heard. Delivers full 1 watt into built-in 3" speaker -- fills an entire room. Low distortion -- less than .2% total harmonic distortion from its BTL (Bridge-Tied-Load) amplifier. Volume control, 400-1000 Hz tone control, on/off switch, power on LED, 1/4 inch key jack, 3.5 mm external speaker jack, uses 12 VDC. All metal enclosure 4 3/4 x 1 1/2 x 5 in. **Save \$15.85!** MFJ-554X, \$99.95. Includes MFJ-554 Code Oscillator, MFJ-281 ClearTone™ speaker, MFJ-550 Telegraph Key, & MFJ-1312D AC adapter.



MFJ-554
\$79⁹⁵

Ship Code A

Class Room Morse Code Tutor

The Cadillac of all Morse Code trainers!

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 interface. . . Use full featured memory keyer with 1000 character memory. Serial port and open end HT cables included. 110 VAC /12VDC operation. 8 1/2 W x 2 1/4 H x 6 D inches.



MFJ-414
\$199⁹⁵

Ship Code A

MFJ-464 Morse Reader with built-in Keyer

Is your CW rusty?

Relax and plug-in this MFJ Morse Code Reader with built-in Keyer at your operating station . . .

Then watch CW turn into solid text messages as they scroll across an easy-to-read LCD display.

It makes working high speed CW a breeze - - even if you're rusty. A type-ahead buffer, message memories and adjustable speed get you ready to compete with the world's best hi-speed CW operators -- and they won't even know you just passed the code test!

The MFJ-464 gives you everything you need to have the ultimate CW Station: sends and Reads 5-99 WPM . . . Automatic speed tracking . . . Large 2-line LCD shows send/receive messages . . . single or iambic paddle or computer keyboard operation . . . Front panel speed, volume controls . . . 4 message memories . . . type ahead buffer . . . read again buffer . . . adjustable weight & sidetone . . . speaker . . . RFI proof . . . much more!

Reader has Auto Speed Track

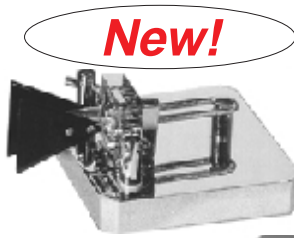
MFJ AutoTrak™ automatically locks on, tracks and displays CW to 99 wpm.

Simply plug-in your MFJ-464 to your receiver speaker until the lock LED flashes in time with the CW.

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



MFJ-464
\$179⁹⁵
(Keyboard, paddle not included.)



copy a sloppy fist, especially weak signals with lots of QRM/QRN.

Superb built-in Keyer Features

The MFJ-464 combines the latest millennium microprocessor technology with non-volatile EEPROM memory for a full featured, low cost, high reliability design.

You can send CW or load messages using a paddle, keyboard or through your computer serial port.

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

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

The MFJ-464 has 4 message memories of 256 characters each. You can repeat messages continuously, insert timed pauses within messages, insert an auto-incrementing serial number, have messages call other messages or insert embedded commands to change speed, weight, etc. automatically.

Sinewave Sidetone . . . More!

MFJ-464 supports Direct keying output. Has PTT output, built-in speaker, sinewave sidetone and more! Iambic keyer with dot and dash memories; automatic, 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 from 5-99 wpm Farnsworth Mode with speed adjustable from 10-99 wpm.

Ultra speed sets messages up to 990 wpm. Adjustable weight 25% to 75%.

Adjustable sidetone from 300 to 1000 Hz.

Keying output delay up to 20 milliseconds.

Push-to-talk (PTT) hang time to 5 seconds.

Timed tune function for XMTR adjusting.

Timed pauses in messages/message loop.

Internal speaker with adjustable volume.

Support for Qwerty & Dvorak keyboards.

Type-Ahead Buffer

190 characters type-ahead keyboard buffer with low buffer warning.

Keyboard Input lets you plug in any AT keyboard. All commands, functions & memories can be done through the keyboard!

Compact and handsome all-black metal cabinet measures just 6 1/4"Wx2 1/2"Hx6 1/4"D in. Use 12 VDC or 110 VAC with MFJ-1312D, \$14.95, optional AC adapter.

MFJ-464 Accessories

MFJ-5161, \$14.95. MFJ-464 to computer serial port cable (DB-9).

MFJ-5162, \$5.95. Connects MFJ-464 to radio's external speaker 3.5 mm jack.

MFJ-551, \$39.95. RFI suppressed AT-101 compatible keyboard.

MFJ-564, \$49.95. Chrome Iambic Paddle.

MFJ-564B, \$49.95. Black Iambic paddle.

MFJ Pocket CW Keyer



This new MFJ Travel Keyer is a full-featured CW keyer with a built-in iambic paddle.

Ultra-compact size (2 1/4"D x 3 3/4"W x 1 1/4"H inches) is

MFJ-403P
\$69⁹⁵
Ship Code A

perfect for traveling or for home use with QRP or "big" rigs. Throw it in your briefcase along with your MFJ QRP Cub™ or other favorite rig on your next trip.

A built-in sidetone with LM386 audio amplifier, speaker and volume control makes monitoring your sending easy. Speed adjustable from 3 to 60 WPM. Sidetone pitch is adjustable 300 to 1000 Hz. Weight adjustable from 25% to 75%. Tune mode, RF proof, Battery Saver feature.

You can select a keyer mode to suit you - - Iambic mode A or B, fully automatic or semi-auto "bug" mode. Use 9 Volt battery, not incl.

MFJ-403, \$49.95. MFJ ultra compact CW Travel keyer only.

Nano-size Keyer/Paddle

MFJ-402
\$59⁹⁵
Ship Code A



Ham radio's

tiniest electronic keyer has built-in iambic paddle! It's a nano-size 2x3x1 inches and weighs just 3 1/2 ounces!

Fully-enclosed iambic paddle has a full-size feel for smooth, easy CW. It's precision formed from resilient phosphorous bronze.

It's super easy-to-use. Just set one button and send one letter to change your keyer settings -- speed 5-65 WPM, weight 25%-75%, iambic mode A or B, normal or "bug" mode and reverse paddle.

Screwdriver adjustment lets you instantly change speed. Tune mode for tuning antenna tuner or transmitter. RF proof.

Has 4 foot cord with 3.5 mm plug.

Keys nearly any QRP or QRO rig.

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

MFJ miniature Travel Iambic Paddle



MFJ-561
\$19⁹⁵
Ship Code A

This miniature, lightweight Iambic pad-

dle is just 1 3/4"Wx1 3/4"Dx3/4"H inches and weighs just 2 1/2 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. This 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, \$14.95. MFJ iambic paddle kit with instructions, cord, all hardware.

MFJ/Curtis/Bencher combo Keyer™



MFJ-422D
\$169⁹⁵
Ship Code B

MFJ-422DX
\$79⁹⁵
Ship Code A



or MFJ-564B iambic paddles. See below.

BENCHER IAMBIC PADDLES
BY-1, \$119.95. Black Bencher paddle.
BY-2, \$139.95. Chrome Bencher paddle.

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

MFJ's most popular keyer is small in size, big in features. It gives you adjustable weight and tone and has front panel volume and speed controls (5-65 wpm). Has built-in dot-dash memories, speaker, sidetone

and automatic or semi-auto/tune modes. Keys solid state or tube transmitters. Fully shielded. Use 9 volt battery or 110 VAC with MFJ-1312D, \$14.95.

The keyer mounts on the paddle base to form a small (4x2 1/4x4 1/4 inches) attractive combination that is a pleasure to look at and use. You can buy the combo or just the MFJ/Curtis™ Keyer (MFJ-422DX, \$79.95) to fit on your Bencher or MFJ-564

MFJ Deluxe Iambic Paddles



MFJ-564
\$49⁹⁵
Ship Code B

- Full range adjustment in tension/contact spacing
- Self-adjusting nylon/steel needle bearings
- Machine frame, non-skid feet, heavy base
- MFJ-564, Chrome or MFJ-564B, Black.

Deluxe MFJ Curtis Keyer™ with dot-dash memory



MFJ-407D
\$69⁹⁵
Ship Code A

Get everything you need to send beautiful CW from this Deluxe 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.

Plugging in a dual paddle key such as the MFJ-564, 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. This lets you send characters such as C, K, and R with a single squeeze. It turns an inexperienced fist into a professional.

You can use the automatic mode with a single or dual paddle. You automatically generate dots and dashes by pressing the paddle. You can switch into a semi-automatic "bug" mode to generate dots automatically and dashes manually. Or you can 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. Select Type A or Type B keying to match your sending style.

Weight control lets you adjust your dot-

dash space ratio to make your signal distinctive to bust through pile-ups. It also lets you compensate for the turn-on delay of your transmitter.

Has tune switch for tuning your transmitter or antenna tuner. RF proof. Built-in speaker for sidetone. Keys solid state and tube transmitters. Use 9 volt battery or 110 VAC with MFJ-1312D, \$14.95. Attractive black cabinet measures 5 3/4x1 3/4x4 3/4 inches.

MFJ/Curtis ECONO Keyer™



MFJ-401D
\$49⁹⁵
Ship Code A

MFJ-401D is the same as MFJ-407D except weight and tone controls are adjusted internally and doesn't have a tune switch. Use 9 volt battery or 110 VAC with MFJ-1312D, \$14.95. 4x1 3/4x3 3/4 inches.

MFJ SlimLine™ Electronic Keyers with Memory



MFJ-442
\$159⁹⁵
Ship Code B

Tired of sending Morse Code with a straight

key? It's fun for a while. But making code sound good and easy-to-copy is tedious, hard work!

Plug an iambic paddle into MFJ's new SlimLine™ electronic keyer. By squeezing, you can automatically generate perfect code with almost no effort.

Press the dot paddle before a dash completes, MFJ's SmartDotDash™ will finish the dash, make a space and then the dot!

It's so forgiving you can concentrate on enjoying your QSO -- not critical timing.

For beginners, type A keying makes sending code easy -- nothing is sent when the dot or dash being sent is completed.

Type B keying makes it even easier to produce certain characters, such as a period or a letter C. Release the paddle while a



MFJ-447
\$79⁹⁵
Ship Code A

dot or dash is being sent, the dot or dash completes and an opposite element is sent. MFJ's weight control lets you lengthen or shorten dots and dashes. It compensates your transmitter for a proper 1:3 ratio.

Here's a more exciting use! Adjust your dot/dash lengths to sound distinctive. Rare DX easily picks you out of a pile-up.

MFJ-447/442 has MFJ's 500 character non-volatile MessageMemory™. You can embed Message Loop, Extra Word Space, pause and serial number increments after each sending. LED blinks during programming and blinks faster for low memory.

All SlimLine™ keyers have speaker pitch and volume controls for sidetone and speed and weight controls. Speed is 5 to 65 words-per-minute. Pitch is 300 to 1000 Hz. Weight is 50 to 150 percent.

Select A or B keying. Self-completing dots and dashes. Semi-auto lets you make

dashes manually for "bug" operation.

Use dual or single lever paddle. 1/4 inch jack for paddle.

Positive and Negative keying. Use a 9 volt battery or 110 VAC with optional MFJ-1312D, \$14.95.

MFJ-442, \$159.95. SlimLine™ Keyer and MFJ paddle combo. Front panel speed, volume controls. MFJ-442X, \$89.95. Keyer only. 4x1 3/4x2 3/4 inches. Fits on your Bencher or MFJ-564/B iambic paddle.

MFJ-447, \$79.95. SlimLine™ Deluxe keyer is just 1 3/4 inches tall. Front panel speed, weight, tone, volume controls and message, semi-auto, tune, power buttons. Tune button keys transmitter. Jack for speaker/headphones. 6 1/4x1 3/4x5 inches.

MFJ-441, \$59.95. SlimLine™ Econo Keyer. Just 1 1/4 inches tall. Has volatile 89 character MessageMemory™. Front panel speed/volume controls. 4x1 3/4x3 3/4 inches.



CK-8045ABM
\$19⁹⁵
Ship Code A

Curtis 8045ABM™ Keyer Chip

The world's most famous keyer chip is better than ever!

The legendary Curtis 8044ABM keyer chip is now the revolutionary new Curtis 8045ABM with more features than ever at no extra cost! Features include: built-in 89 character memory, expandable non-volatile memory, true sinewave sidetone with soft rise/fall times eliminate harsh keyclicks for beautiful sounding sidetone. You also get type A or B iambic keying, dot-dash memory, adjustable weight, tone and speed, automatic or semi-auto mode, low current drain . . . Choose . . . 28 pin skinny DIP or SMT SOIC package.

MFJ Millennium™ CW keyer

World's most powerful CW keyer has LCD readout . . . Menu-driven, super easy to use -- no instruction manual needed!

Is CW dead?

Not at MFJ!

While others neglect CW keyers, MFJ has developed the world's most powerful millennium keyer. It makes CW a pleasure for operators around the world.

MFJ's menu driven LCD display makes it so easy to use, you don't need an instruction manual.

The MFJ-495 combines the latest millennium microprocessor technology with non-volatile EEPROM memory for a full featured, low cost, high reliability design.

You can send CW or 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 pushing buttons. Keyer functions can also be changed from your paddle, keyboard or computer.

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

The MFJ-495 has 32 message memories of 256 characters each. You can repeat messages continuously, insert timed pauses within mes-



MFJ-495
\$159⁹⁵

Ship Code A

sages, insert an auto-incrementing serial number, have messages call other messages or insert embedded commands to change speed, weight, etc. automatically.

MFJ-495 supports both Direct and Grid-Block outputs and has a port for an optional remote control. Has PTT output, built-in speaker, sinewave sidetone and more!

Use 12 VDC or 110 VAC with MFJ-1312D, \$14.95, optional AC adapter.

Some of its features:

Iambic keyer with dot and dash memories; automatic, semi or hand-key mode

Keyboard Input lets you plug in any AT keyboard for type ahead buffer. All commands,

functions, and memories can be done through the keyboard!

Message editing capability

Input queue to store multiple messages

Auto-incrementing contest serial numbering from 001 to 9999

Digital and linear analog speed control from 5 to 99 wpm (3:1 to 20:1 speed range)

Farnsworth with speed from 10 - 99 wpm

Ultra speed sets messages up to 990 wpm

Adjustable weight 25% to 75%

Adjustable sidetone from 300 to 1000 Hz

Keying output delay up to 20 ms

Push-to-talk (PTT) hang time up to 5 seconds

Direct (positive) or grid-block (negative keying)

Timed tune function for XMTR adjustment

Timed pauses within messages/message loop

Internal speaker with adjustable volume

Support for Qwerty and Dvorak keyboards

190 characters type-ahead keyboard buffer with low buffer warning

Dual user mode supports operators with different configuration settings

Compact and handsome all-black metal cabinet measures just 6 1/4" W x 2 1/2" H x 6 1/4" D inches.

MFJ-551, \$39.95. RFI suppressed keyboard.

MFJ Menu Driven Memory Keyers™

MFJ Keyer/Bencher Paddle Combo



MFJ-490

\$199⁹⁵

Ship Code B

The best of all CW worlds -- nearly all the features of the MFJ-492 in a compact configuration that fits right on the Bencher Iambic paddle!

U.S. Patent # 363,724.

MFJ-490 lets you immediately enjoy CW without reading an instruction manual -- there's no keypad, no complex sequences,

nothing to remember. You just simply select a menu by pressing a button. An LED lights to show you which menu is active. You select a feature by pressing a feature button. It's as easy as using a computer touch screen!

Each menu is clearly printed on the front panel -- there's no confusion. From the menu you can save and play messages, decrement serial numbers, set speed, weight, sidetone, enter iambic, semi-auto, handkey, message queue, paddle command modes, turn on and off sidetone, transmitter tune, keying output on and off, select iambic A or B, reverse paddle, Morse trainer and store starting serial number. You can bypass the menu by keying in simple two letter commands. The keyer tells you status in CW.

Buy the combo or just the keyer for your Bencher. Memories, Morse trainer, sidetone, automatic serial numbering -- more! 5x3x5 1/2 in. MFJ-490, \$199.95. MFJ-490X, \$109.95. Keyer only. Uses 9 volt battery (not incl) or 110 VAC w/ MFJ-1312D, \$14.95.

Super Menu Driven Keyboard Keyer

MFJ-492

\$99⁹⁵

Ship Code B

Memory is expandable to over 8000 characters. You can expand the MFJ-492 standard 192 characters in four soft sectored message memories to over 8000 characters in eight message memories by simply plugging in the MFJ-80, \$19.95, Memory Expansion Kit. Memories are backed up by lithium battery.

You can adjust CW speed, 5-100 WPM by pressing the dot or dash paddle smoothly or by knob control. Powerful Morse trainer lets you practice or teach in Farnsworth or normal mode. Select letters, numbers, prosigns or any combination for practice using 5 character groups, or more realistic 1-8 character groups.

There's so much more! You get contest serial numbering (0-9999) with auto-increment, built-in sidetone, speaker, front panel volume control and adjustable 300-3000 Hz tone. You can use automatic, semi-automatic bug or handkey modes, reverse dot/dash paddles, adjust weight from 5 to 95% and compensate for transmitter distortion, direct and grid block keying, keys solid state and tube rigs. Special MARS characters are recognized.

Uses 9 Volt battery (not included), 12 VDC or 110 VAC with MFJ-1312D, \$14.95. 6 1/2" x 2 1/2" x 6 1/4 inches. Order MFJ-492, \$99.95 or MFJ-492X, \$114.95. MFJ-492 with MFJ-80 memory expansion pre-installed. MFJ-78, \$29.95. Full function remote control puts message memories and menu control at your finger tips.



MFJ-452 Super CW Keyboard Keyer



MFJ-452
\$139⁹⁵
Ship Code B

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

You get a standalone MFJ CW Keyboard that includes an RFI suppressed keyboard, a two line 16 character LCD display, eight 250 character nonvolatile message memories, a 150 character type-ahead buffer, iambic keyer, plus a powerful Morse Code trainer, much 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 1/2" x 2 1/2" x 3 1/2 inch interface. Use 12 VDC or 110 VAC with MFJ-1312D, \$14.95. MFJ-452X, \$109.95. No keyboard.

MFJ-451, \$109.95, like MFJ-452 but without LCD display and has two 100 character memories. MFJ-451X, \$89.95. No keyboard.

<http://www.mfjenterprises.com>

MFJ 24/12 Hour Clocks



Shown actual size

Dual 24/12 hour LCD Clock

MFJ-108B
\$19⁹⁵
 Ship code A

MFJ-108B 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 makes it easy to read across the room. Mounted in attractive solid brushed aluminum frame with sloped face for easy viewing. Synchronizable to WWV for split-second timing. Quartz controlled for excellent accuracy. Long life button battery included. 4 1/2 Wx1 D x2 H in. MFJ's famous *No Matter What™* one year limited warranty.

DXer's Wall Clocks



MFJ-125, \$29.95. 12 inch DXer's Quartz wall clock gives 24 hour time plus more. Has three smaller independently settable dials for 12 hour time, day of week and date. No more day/date confusion when logging DX! Highly visible, easy-to-read dials! Has Seconds hand.



MFJ-115, \$24.95. Set this 24 hour clock to UTC/ GMT and you can determine the time in any time zone of the world at any time of the day. Premier world cities encircle its colorful world map face to indicate time zone. 12 inch face is easy to see across room. Has Seconds hand.



MFJ-105C, \$19.95. *World's most popular ham radio wall clock!* True 24 hour Quartz movement. Huge 12 inch black face with large white numerals give excellent visibility across room. Attractive gold colored hour, minute and seconds hands.



MFJ-126, \$24.95. 12 hour Quartz movement gives 12 hour time on inner dial (for XYL) and 1200 to 2400 hour time on its outer dial (for you). Attractive clean, white face is highly visible. Real glass cover! Handsome hunter green trim. Has seconds hand.

Hi-Contrast LCD Clocks



MFJ-107B, \$9.95. 24 hour UTC Clock has large 5/8 inch LCD numerals. Synchronizable to WWV. Solid brushed aluminum frame lasts for years. Long life battery included. 2 1/4 x 1 x 2 in.



MFJ-118, \$24.95. MFJ's *JUMBO LCD™* shows time in 24 UTC or 12 hour format with huge 1 1/4" high-contrast LCD digits. 5 1/4 Wx2 1/2 Hx1 1/2 D in. Also has year, month, date, and day of week. Choose English, Spanish, German or French for day-of-week display. Easy-to-operate. Has 100 year full calendar. Quartz controlled for excellent accuracy. Synchronizable to WWV. Black designer scratch resistant case. Mounting holes for wall mount or flip stand for desk mount. Use "AAA" battery (not included).



MFJ-112B, \$24.95. 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 every time zone. Daylight saving time feature. Attractive grey. *Cool blue* backlight for night viewing. Great for gift or use as logging clock. 4 1/2 Wx3 3/8 Hx2 1/2 D inches. One year *No Matter What™* warranty.

12 VDC LED Clock



MFJ-116DC, \$19.95. 12 VDC, plugs in cigarette lighter. *Great for motorhomes and truckers!* 12 hour only. Attractive black cabinet.

Bright LED Clocks



MFJ-117, \$59.95. This 12/24 hour clock has the biggest and brightest LEDs of any clock we have ever seen! Giant 2.5 inch super bright LEDs are

nearly the width of a 2-Meter HT -- you can see them from across the street, day/night! Perfect for decreasing eyesight. 12/24 hour switch. Wall/desk mount. Black with bright red LEDs looks great! 12 Wx7 1/2 H in. Use 9V battery for backup. Front panel hour/minute set buttons. 110 VAC, 60 Hz. **MFJ-113, \$19.95.** Switchable 12/24 hour display with *HUGE* 1.8" red LEDs. Super compact 1 1/8 Hx9 Wx2 1/2 D inches. 9 minute ID timer, alarm, 9V battery back-up. Use 110 VAC, 60 Hz.

GIANT 24" Wall Clock



MFJ-129, \$69.95. This is the largest clock in ham radio! This huge, massive 24 inch quartz accurate wall clock will totally dominate any room you put it in! Has 24 hour inner dial and 12 hour outer dial. Glass cover, hard black plastic outer ring.

Ohm's Law Wall Clock



MFJ-127, \$24.95. Fast, easy calculation for voltage, amperage, resistance, or wattage for electronic circuits. Great for electricians, techs, engineers, students and amateurs! Easy-to-read, Quartz movement, 8 1/2" diameter.

Use Code A for all MFJ Clock shipping.

MFJ Wireless Weather Station

Displays . . . Wind, Temperature, Humidity, Rainfall, Pressure. **Has . . .** Weather forecasting icons -- (sunny, cloudy with sunny intervals, cloudy, rainy), compass display for wind speed, wind direction and wind direction change, wind chill temperature, air pressure and air pressure tendency. **Includes . . .** graphic display of air pressure changes within last 24 hours, rainfall recording -- (total, last 24 hours, last hour), dew point, all min/max recordings with date and time.

Also has . . . 39 programmable visual and audible alarms (for example: frost, air pressure, temperature, unstable or stormy weather), solar



MFJ-194
\$399⁹⁵
 Ship Code C



powered outdoor wind, temperature, humidity and rain sensors with 433 MHz radio transmitter, battery powered indoor temperature, humidity, pressure sensors with 433 MHz transmitter, battery operated receiver -- displays all current information at-a-glance on large high contrast LCD.

More . . . receive signals from up to 9 temperature/humidity sending units (two included, others optional), all outdoor sensors are solar powered with self-charging battery backup, FCC approved wireless sensors transmit over 100 feet at 433 MHz.

Options . . . MFJ-194RS, \$169.95. RS-232 computer interface for MFJ-194 weather station.

MFJ ATOMIC 24/12 HOUR CLOCKS

• Automatically receive WWVB radio signal from National Institute of Standards and Technology in Ft. Collins, Colorado for absolute millisecond accuracy • Choose 24/12 Hour time format or simultaneous dual times • Choose from huge selection of wall or desk mounts

Atomic 24/12 Hour LCD Desk Clock



MFJ-124
\$24⁹⁵
Ship Code A

This compact radio-controlled clock is 24/12 hour switchable. It's the perfect atomic LCD Desk Clock because of its size and features. Auto daylight savings time can be turned off, when setting clock for UTC. Has dual alarms, snooze and bright backlight. Month/date display, indoor temperature (14F-122F). U.S. time zone map display. Use 2 AAA batteries. Attractive dark grey/silver cabinet measures 5 3/4"Wx3 3/4"Hx2"D in. LCD is 3 3/4"Wx1 1/8"H in.

Econo ATOMIC 24/12 LCD Desk Clock



MFJ-122
\$19⁹⁵
Ship Code A

This is the Lowest priced atomic clock in ham radio! MFJ gives you an exceptional bargain that is loaded with fantastic features! 24/12 hour switchable, seconds display, date/day, snooze/timer, bright green backlight, US time zone map display, dual crescendo alarms. Handsome jet black with vibrant silver buttons. Operates on two AAA batteries. Super tiny -- pocket camera size, 4 1/2"Wx2 1/4"Hx1 1/2"D in. LCD is 2 1/8"Wx1 1/8"H in. An unbelievably loaded clock with an unbelievable price!

Solar Powered Eternity Atomic Clock



MFJ's exclusive solar powered Eternity Atomic Clock™ works for an "eternity"! No need for batteries or to set time! Receives WWVB signal. Whopping display is 2Hx6 3/4"W inches. Choose 24 or 12 hour time format. Huge running seconds display. Calendar format. 10 3/4"Wx6Hx3 1/4"D in. Wall or desk mount.

MFJ-123
\$79⁹⁵
Ship Code A

ATOMIC Information Control Center



This 24/12 hour wall or desk mount atomic clock has got all the information you need at a single glance! Auto daylight savings time can be turned off, when setting clock for UTC. Metallic blue/silver colored clock (8 1/2"x9 in.) has easy-to-read LCD display. Time digits are 2 1/4 inches tall. Running seconds display. Month, date, day and indoor temperature is displayed on bottom LCD display. Easy-to-program. Choose Celsius or Fahrenheit for temperatures. Use two AA batteries. Mounts on wall or includes desk mount. 10 3/4"Wx6Hx3 1/4" inches.

MFJ-130RC
\$39⁹⁵
Ship Code A

MFJ dual time display atomic Clock



MFJ-133RC
\$29⁹⁵ **New!**
Ship Code A

MFJ-133RC dual time zone LCD clock can display two time zones. Lets you read any two time zones in 24 or 12 hour format. Atomic-controlled for absolute pinpoint accuracy! Features huge 1 1/8 inch high-contrast LCD numerals easily read from 6 feet away. Super compact 4Wx3Hx3 1/4"D inches. Super attractive silver clock folds up and slides in your shirt pocket for great travelability.

Dual Time Zone Atomic Clock



MFJ-121
\$69⁹⁵
Ship Code A

Read both UTC and local time at-a-glance with this MFJ-121 dual atomic clock. Displays 24/12 hour time simultaneously. Mounted in a handsome black, hard-plastic frame, the MFJ-121 features HUGE, easy-to-see 2" tall by 1 1/2" wide LCD numerals and also has running seconds display. 10 1/2"Wx8Hx3 1/4"D in. Wall or desk mount. Use two AAA batteries. This is the clock true ham radio operators have been waiting for!

12-inch Atomic 24/12 Hour Wall Clock



This huge 12-inch diameter atomic wall clock can be seen from across the room! It'll liven up any hamshack wall and it automatically receives the WWVB signal. Has both 12 and 24 hour time format displays. Has second hand with clearly marked seconds display points. Attractive, clean white, real glass face is highly visible and will improve the decor of any room. Black, thick, rugged plastic covers the outer rim.

MFJ-131RC
\$59⁹⁵
Ship Code A

ALL MFJ clocks are protected by MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace your clock for one full year.



A. MFJ-184
\$19⁹⁵
Ship Code A

New!

MFJ-182
\$19⁹⁵
Ship Code A



B. MFJ-182, \$19.95. This MFJ Dual Time Ham Radio Wrist Watch is a high-tech instrument displaying two time zones simultaneously. The self-governing movements can be independently set according to the user's preference. Quartz accuracy, long-life button battery operation (included), synchronizable with WWV, Stainless steel adjustable wrist band. Beautiful white face and silver outer rim and band.

MFJ 24/12 Hour Ham Radio Wrist Watches

B. MFJ-184, \$19.95. MFJ's World Time Ham Radio Wrist Watch displays 2 time zones on the same dial. 24/12 hour time are on the same dial! 12 hour hands are bio-luminescent for night-time viewing. Additional 24 hour hand gives you UTC time at-a-glance! Quartz accuracy, long-life battery, synchronizable with WWV, stainless steel adjustable wrist band. Brilliant blue face with red 24 hour points. Silver trim and band.

MFJ DX Beacon Monitor

Get up-to-the-minute worldwide DX band conditions in minutes on 14, 18, 21, 24, 28 MHz bands using the International Beacon Network of 18 worldwide beacons!

MFJ DX Beacon Monitor lets you instantly see on world map which beacon you're hearing on your transceiver . . . No need to copy 22 wpm CW . . . Positively identify beacons even if CW is weak, fluttery or distorted . . . Tells you where to point your antenna . . . Fascinates visitors . . .

MFJ-890
\$99⁹⁵
Ship Code A

Get up-to-the-minute worldwide DX band conditions in minutes on 14, 18, 21, 24, 28 MHz bands using the International Beacon Network of 18 beacons throughout the world!

MFJ's new DX Beacon Monitor lets you instantly see which beacon you're hearing

on your transceiver -- an LED lights up on its 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 become active across the world.

It's great for DXers, contesters, ragchewers and SWLers.

The International Beacon Network

The International Beacon Network provides a reliable source of signals for determining HF propagation 24 hours a day.

It consists of 18 beacons evenly located throughout the world.

Each beacon transmits on 14.1, 18.11, 21.150, 24.93 and 28.2 MHz.

The transmit sequence moves westward from New York across North America, Asia, Pacific to Africa, Europe



and South America.

On each frequency, each beacon transmits for ten-seconds -- its call sign at 22 wpm CW and a one-second dash at 100 Watts and three one-second dashes at 10, 1, 0.1 Watts.

When each beacon completes a transmission it goes silent on that band and switches to the next higher band.

For more information see Oct/Nov, 1994, Sept, 1997 *QST* and Jan 1999, Sept/Dec 2001, Jan 2002 *Practical Wireless* of U.K.

How are band conditions?

Tune to a beacon frequency. If band conditions are good, you'll hear each beacon identifying in Morse and four dashes each at a lower power level.

The more beacons you hear, the more open the band is to different parts of the world.

The more dashes you hear per beacon, the better the quality of propagation and the more robust the band is. If you hear the 100 milliwatt dashes from many beacons you know the

band is wide open!

In just three minutes you'll know how band conditions are worldwide.

It's interesting to see how propagation vary from day to day -- what beacons you can hear and at what power level.

You may find that the band is wide open but nobody is on.

Which band is best to reach a particular part of the world?

By storing the beacon frequencies in your transceiver's memory, you can quickly check all five bands to see which band has the best propagation to a particular part of the world.

MFJ DX Beacon Monitor lets you instantly see on world map which beacon you're hearing

You don't have to copy CW at 22 wpm to identify a beacon.

When you hear a beacon, an LED instantly lights up on a world map to show you its location. You can positively identify each beacon -- even if the signal is weak, and the CW is fluttery or distorted.

The world map display also

New!

tells you where to point your antenna.

How does it work?

The transmit sequence of the beacons are precision timed using GPS (Global Positioning Satellites).

The MFJ DX Beacon Monitor duplicates this precision timing sequence and lights an LED to show which beacon is transmitting. A micro-processor and a built-in WWVB atomic clock

receiver provides ultra precise synchronization. Has manual sync for use anywhere in the world. MFJ-890 is not a beacon receiver that receives beacons directly.

The MFJ-890 is a self-contained standalone unit. It requires no antenna and no connection to your transceiver or receiver. 6 $\frac{1}{4}$ "x5 $\frac{1}{4}$ "x3 $\frac{3}{8}$ " inches. Uses 12 VDC or 110 VAC with optional MFJ-1315, \$14.95.

Free MFJ-890 Instruction Manual

Visit our website:

<http://www.mfjenterprises.com> or call toll-free 1-800-647-1800 to order a free MFJ-890 instruction manual.

No Matter What™ Warranty

Protected by MFJ's famous No Matter What™ one year limited warranty. MFJ will repair or replace (at our option) your MFJ-890 no matter what for one full year.

Try it for 30 Days

Order from MFJ and try it -- no obligation. If not delighted, return it within 30 days for refund less shipping.

MFJ 6 Meter SSB Adventure Radio™

Incredibly low \$259.95 . . . for No-code Techs and Veterans alike . . . Explore the world, Ragchew with locals . . . 10 Watts Out . . . Super Hot Receiver!

MFJ-9406
\$259.95
MFJ-9406X
\$269.95 with mic
Shipping Code A



Work exciting 6 Meter DX from all over the world on ham radio's "magic band"!

It's an adventure every time you turn on your MFJ-9406 six meter SSB transceiver.

Distant stations come rolling in loud and clear with crystal clean armchair copy. You'll have fun exploring exotic 50 MHz band openings -- Tropo, Sporadic E, F2, TE, Aurora, Meteor Scatter, and more.

Ragchew with locals, hunt down new grid squares from far-away places from home, car or mountain top.

Special Offer!! MFJ-9406X, \$269.95!

Includes MFJ-9406 & MFJ-290 microphone.

Here's what you get . . .

Full SSB/CW coverage: 50.0-50.3 MHz covers SSB, CW, propagation beacons.

Potent Signal: 10 Watts PEP output. MFJ's exclusive *ConstantCurrent™* syllabic speech processing gives you up to 6 dB more punch to cut thru noise, fading, QRM.

Hot receiver: Crystal-mixed single conversion superhet with low-noise preamp digs deep into the noise to capture weak signals. If a station is there, you'll hear it!

Easy to operate: No microprocessor mumbo-jumbo . . . just turn on and tune in.

Low power drain: Mountain-top all day on lightweight NiCads or operate from home on 110

MFJ 6 Meter FM Communicator™ Transceiver

MFJ-9606
\$159.95
MFJ-9606X
\$169.95 with Mic
Shipping Code A



MFJ-9606 FM Communicator™ is the most inexpensive way to get on 6 Meter FM voice or Packet! Potent 10 Watt transmitter and *CrystalClearVoice™* puts fun and fidelity

VAC with MFJ-4110, \$49.95.

Great selectivity: Sharp HF proven crystal ladder filter reduces QRM & passband noise.

TVI protection: 7 element low pass filter knocks out TVI -- operate when you want to!

Real S-Meter: Give meaningful signal reports, accurately steer your beam, monitor speech processing.

Smooth tuning: Vernier reduction drive makes tuning precise and easy.

External amplifier: Jack provides a key line for activating 6 Meter amplifiers.

Built-to-last: Premium PC board, quality components, brushed-aluminum panel and tough vinyl clad case gives years of service.

Compact: At only 2 1/2"x6 1/2"x6 inches, the MFJ-9406 fits in just about anywhere.

Fully guaranteed: MFJ's exclusive one year *No Matter What™* warranty. We will repair or replace your MFJ-9406 for 1 full year.

MFJ-9406 Adventure Radio accessories

Handheld dynamic SSB microphone: Specially matched to compliment the *ConstantCurrent™* speech processor used in the MFJ-9406. **MFJ-290, \$29.95.**

CW Module: Install this and operate CW -- a must for DXers. Provides semi-QSK break-in and sidetone. **MFJ-416, \$49.95.**

Power Supply: Heavy duty wall transformer and voltage regulator delivers 13.8 VDC for MFJ-9406. Powerful, yet small. Fits in your coat pocket. **MFJ-4110, \$49.95.**

Portable Battery/AC Power Pack: Use Ni-Cad, Alkaline, regular D cells or 110 VAC. Charges Ni-Cads, fastens to MFJ-9406. Batteries not included. **MFJ-4114, \$69.95.**

back into ham radio with *true-to-life* speech quality and ultra-clean AFSK data signals.

Super fast PIN diode switching, no compromise dual-conversion FM receiver with quiet LNA, factory installed 52.525 MHz calling crystals. Add 1 plug-in crystals, \$24.95 per frequency.

6 Meter Antennas/Accessories

MFJ-1762, \$79.95. 6

Meter Yagi quadruples your effective radiated power over 1/2 wave dipole. 6 foot boom, 2 pounds. Can use TV rotator and mast. Handles 300 Watts PEP SSB. Mounts vertically or horizontally. Current balun decouples feedline. Great front-to-back ratio. **MFJ-1756, \$79.95.**

Omni-directional low-angle vertical radiator lets you work plenty of DX in all directions even with low power.

GroundIsolated™ radial system eliminates common mode current paths. Reduces undesirable feedline/supporting structure radiation. 55" strong aluminum radiator. **MFJ-1736, \$29.95.** Hang this 6 Meter J-pole in the clear and enjoy some exciting DX QSOs. Omni-directional full size 1/2 wave antenna with low angle radiation outperforms 1/4 waves.

MFJ-1776, \$39.95. Efficient low SWR folded dipole is lightweight, easy-to-carry, easy-to-put-up. Perfect for portable. **MFJ-903, \$49.95.** 6 meter antenna tuner.

Less meter. **MFJ-906, \$79.95.** 6 Meter antenna tuner with cross-needle meter. 100 Watts FM, 200 Watts SSB PEP. See more details/tuners on page 6 and 7.



MFJ 2 Meter SSB Adventure Radio

No Code Techs & Veterans can enjoy DXing and ragchewing with far away hams on 2 Meter SSB . . . 7 Watts PEP, Hot receiver, 2.3 KHz crystal Filter, Real S-Meter, low drain . . . more!



NEW! MFJ-9402X
\$299.95
with mic
MFJ-9402
\$289.95
without mic

No Code Techs and veterans . . . join the SSB crowd! Enjoy crystal clear armchair QSOs. DX, ragchew or hunt down new grid squares from far away places from your home, car or mountain top. This little rig is great for home contesting or mobile.

MFJ's 2 Meter SSB Adventure Radio™ packs 7 powerful Watts with potent *ConstantCurrent™* syllabic speech processing that'll punch through pile-ups.

If a signal is there, you'll hear it! A low-noise front end and doubly-balanced mixer

fight intermod, yet dig into band noise for weak signals. Sharp crystal filter fights contest QRM. Enjoy reduced passband noise with HF-style 2.3 kHz ladder filter.

Easy to Operate: No microprocessor mumbo-jumbo. Just turn on and tune in!

Potent Signal: 7 Watts PEP -- plus *Constant Current™* syllabic speech processing adds 4 to 6 dB advantage to punch through pileups or climb above the noise.

TVI Protection: Built-in 7 element low-pass filter knocks down TVI -- lets you operate day or night, when you want to!

Real S-Meter: Aim your beam with pinpoint accuracy and give out signal reports that mean something!

Agile Tuning: Analog VFO lets you scan for signals quickly, then zero in smoothly. Ideal for fast-paced hunt-and-pounce opera-

tion during contests and band openings.

Loud Audio: 3 1/2 inch top-mount speaker delivers robust audio, overcomes noise.

Phone Jack: 1/4 inch jack for stereo headphones, cuts off speaker automatically.

Amplifier Friendly: Built-in FET switch keys solid-state or tube amps. Output signal is tailored for our popular multi-mode amps. **CW Operation:** Operate 2 meter CW with optional MFJ-416 CW adapter board.

Built-to-Last: Conservative design, premium PC board, quality surface mount components and rugged cabinet provides years of dependable and enjoyable service.

Compact: At only 2 1/2"Hx6 1/2"Wx6"D inches, the MFJ-9402 fits just about anywhere.

Accessories: Our *huge* line of 2 Meter antenna accessories is on pages 30, 31, 34. See antenna tuner on page 10.

MIRAGE
POWER!



. . . 2 and 6 Meter Power Bricks!

Get up to 160 Watts of power out from an MFJ SSB Radio! A-1015-G, 6M Amp, \$389. B-1016-G, 2M Amp, \$379. See Mirage pages 51-52.

<http://www.mfjenterprises.com>

MFJ 10 Meter SSB Adventure Radio

10 Meters is red hot! Work the world with MFJ's new 10 Meter SSB rig for an incredibly low \$259.95! 20 Watts PEP... Hot receiver... 2.3 KHz Crystal Filter... Real S-Meter... Syllabic Speech Processing... Covers 28.3 to 28.6 MHz... Low power drain...



NEW!

MFJ-9410
\$259.95
 MFJ-9410X
 \$269.95 with mic
 Shipping Code A

Ten Meters is red hot!

10 Meters is open to the world nearly everyday. Enjoy crystal clear armchair QSOs. Ragchew with locals and DXers or hunt down new grid squares from far away places from your home, car or mountain top.

MFJ's compact 10 Meter SSB Adventure Radio™ packs 20 powerful Watts with potent ConstantCurrent™ syllabic speech processing that'll punch through pile-ups.

If there is a signal there, you'll hear it! Single conversion superheterodyne receiver with low noise preamp, double balance mixer, low noise heterodyne VFO and 2.3 kHz crystal filter gives excellent weak signal performance.

Special Offer MFJ-9410X, \$269.95!
 Includes MFJ-9410 & MFJ-290 microphone.

Here's what you get...

Easy to Operate: No microprocessor mumbo-jumbo. Just turn on and tune in!

Potent Signal: 20 Watt PEP -- plus Constant Current™ syllabic speech process-

ing for an added 4 to 6 dB advantage to cut through noise, fading, and QRM.

Low Drain: Operate from a 3 Amp AC supply or 12 Volt battery. All analog circuitry means highest energy efficiency!

Hot Receiver: Low noise preamp and active Double Balanced Mixer front end dig deep into the noise to capture weak ones. If the signal is there, you'll hear it.

Excellent Selectivity: Sharp 2.3 KHz SSB crystal ladder filter reduces passband noise, fights QRM, and improves intelligibility.

TVI Protection: Built-in 7 element low-pass filter knocks down TVI -- lets you operate day or night, when you want to!

Real S-Meter: Steer your beam with pinpoint accuracy and give meaningful reports with a full-sized analog S-meter. Also, monitor speech processing level.

Agile Tuning: No unexpected tuning rate shifts or stair-stepping. Reduction drive analog VFO lets you scan the band for signals quickly, then zero in smoothly. Best VFO for hunt-and-pounce contest operation!

Loud Audio: Efficient rugged 3 1/2 inch top-mount speaker delivers robust audio, overcomes ambient noise.

Phone Jack: 1/4 inch jack accepts standard stereo headphones, cuts off speaker automatically. Attenuated output protects phones and ears, makes gain adjustment easy.

Amplifier Jack: Solid-state FET switch keys external linear power amplifier.

CW Operation: Operate ten meter CW with optional CW adapter board.

Built-to-Last: Conservative design, premium quality, plate through PC board, quality components, handsome brushed aluminum panel and tough vinyl clad case make for years of dependable service.

Compact: At only 2 1/2 Hx6 1/2 Wx6 D inches, the MFJ-9410 fits just about anywhere.

MFJ-9410 Adventure Radio Accessories

Handheld dynamic SSB microphone: Specially matched to compliment the ConstantCurrent™ speech processor used in the MFJ-9410. **MFJ-290, \$29.95.**

10 Meter Folded Dipole: Efficient low SWR folded dipole is lightweight, easy-to-carry, easy-to-put-up. Perfect for portable rigs. **MFJ-1770A, \$39.95.**

10 Meter Mobile Magnet Mount: High-Q, high performance, low wind resistance low SWR, handles 100 Watts. Magnet mount with coax. **MFJ-1727, \$39.95.**

10 Meter SWR/Power Meter/Tuner: Single meter reads SWR/power for ten meters. Two power ranges: 60/150 Watts. Tiny 4x2x1 1/4 in. Tuning tool included. No zero adjustment. **MFJ-940A, \$79.95.**

MFJ 20 Meter SSB Travel Radio™

... the most powerful 12 Watt radio you'll ever own ... hot receiver ... potent speech processing ... rugged transmitter ... proven on-air design ... real Analog S-Meter ... Powerful audio ...



MFJ-9420, MFJ-9440, kind! Transceiver and accessories easily fit in a small bag.

MFJ-9475
\$239.95
 \$249.95 with mic
 Shipping Code A

Great sensitivity: Features a quiet double balanced mixer front-end, single conversion clarity and plenty of gain. If a signal is there,

you'll get it loud & clear!

Analog S-Meter: A real calibrated S-meter -- not a useless bargraph -- that makes peaking a tuner or finding the best beam heading clear-cut.

Excellent Selectivity: Eight poles of tight IF filtering cuts adjacent chatter and focuses transmitter power where you need it.

Smooth VFO: No annoying synthesizer jump or obscure keypad commands to deal with. Effortless tuning, custom reduction-drive ball-bearing capacitor.

Powerful audio: Big audio -- even in noisy locations from a special Sigenetics audio chip and rugged 3 inch speaker.

RF Speech processing: MFJ's ConstantCurrent™ RF speech processing slashes through noise and QRM like a full-sized radio running many times more power.

Low Current Requirements: You'll never have to lug around a heavy power

supply to run this radio.

See MFJ-4110, on page 23.

Rugged Transmitter: Bullet-proof PA transistor runs cool, easily tolerates 3:1 VSWR and accidental feedline shorts or opens.

Proven on-air design: You may have already worked an MFJ radio without even knowing it. Designer Rick Littlefield, K1BQT literally developed these radios on-air, under the same real-world operating conditions you will.

Built to last: Conservative design, premium plate-through PC board, quality components, handsome brushed-aluminum panel and a tough vinyl clad case ensure years of dependable service.

MFJ-9420 covers 14.150-14.350 MHz, **MFJ-9440** covers 7.150-7.300 MHz, **MFJ-9475** covers 3.750-4.000 MHz. One Watt audio output at 10% THD. Draws 50-100 mA on receive and 1.2 amps peak on transmit at 13.8 VDC. 2 1/2 x 6 1/2 x 6 inches. All have MFJ's No Matter What™ warranty.

MFJ-415B, \$49.95. Install this CW Module and operate CW, a must for DXers. Provides semi-QSK break-in and sidetone.

Free Instruction Manual on all MFJ products. Call 800-647-1800.

Turn on your new MFJ SSB Transceiver and you'll marvel at how well it performs...

Weak stations roll in with surprising clarity, faithfully reproduced by MFJ transceivers' single conversion receiver.

On transmit, MFJ's exclusive ConstantCurrent™ speech processor cuts through noise and QRM like a far more powerful radio.

Take world class DX performance along on your next vacation or business trip -- the MFJ transceiver, microphone, power supply, and antenna can easily fit into your brief case or carry-on bag.

At home, in the car, or on the road, you'll be amazed at what MFJ's SSB radios can do!

Here's what you get for \$239.95:

Simple operation: No microprocessor mumbo-jumbo -- you'll have it operating in minutes!

Truly portable: Smallest rig of its

<http://www.mfjenterprises.com>

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: The most user-friendly radio you'll ever own. Sets up in seconds -- no microprocessor 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 QRM and noise to the maximum.

Smooth and 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 the signals you want to hear -- it never locks onto strong signals outside the audio bandpass. MFJ's InstantRecovery AGC™ snaps the receiver back at full gain after transmitting.

Built-in speaker: High efficiency 3" speaker driven by 100 mW of audio gives great volume.

Rugged Transmitter: Motorola power amplifier transistor delivers full QRP output, tolerates opens and accidental shorts without damage.

Sinewave Sidetone: Pure 700 Hz CW

MFJ-9040/9030/9020

MFJ-9017/9015

\$189⁹⁵

Each. Choose band.
Shipping Code A



sidetone makes sending as much fun as receiving!

Semi-QSK: Set adjustable hold transmit/receive switching to suit your normal sending speed or set it for full QSK during contests.

Easy to Power: It uses little power -- only 50 mA average on receive and 1.2 amp peak on transmit. Perfect for battery operation in remote locations!

Rugged Construction: MFJ CW radios are built on G-10 double-sided plate-through PC boards in our plant.

Rugged all-metal cabinet with brushed aluminum front panel and vinyl clad cover.

Frequency Coverage:

Choose your favorite band! 40 & 15 Meter models cover Nov-ice and TechPlus band segments --makes a perfect "first radio" for new upgrading hams.

MFJ-9040 covers 7.000-7.150 MHz;
MFJ-9030 covers 10.100-10.150 MHz;
MFJ-9020 covers 14.000-14.075 MHz;
MFJ-9017 covers 18.068-18.110 MHz;
MFJ-9015 covers 21.000-21.200 MHz.

Integrated CW Station

Radio, tuner, power pack fastens together to form tiny 6x6 1/2 x 8 1/2 inch integrated CW station.

SAVE \$30! \$364.80

\$364⁹⁵ buys complete CW station. Includes CW transceiver, \$189.95; MFJ-971 tuner, \$99.95; MFJ-4114 power pack, \$69.95; portable antenna, \$39.95 . . . order:

MFJ-9140B, 40M; MFJ-9130B, 30M; MFJ-9120B, 20M; MFJ-9117B, 17M; MFJ-9115B, 15M. \$399.80 if purchased separate.

Keyer/Filter not incl. MFJ-27, \$4.95 handle.



MFJ QRP-CUB™ CW TRANSCEIVER



MFJ-93XXX, \$99⁹⁵.

QRP-Cub™ Kit.

MFJ-93XXW, \$149⁹⁵.

Wired & tested cub.

MFJ QRP-Cub™

Transceivers use surface mount technology to achieve big performance in a pocket-sized package.

The kit version has all SMT parts mounted and soldered. You just insert and solder the "through-hole" parts such as the connectors, inductors and trimmer caps.

Designed by QRP-ARCI hall-of-famer K1BQT for real world low-power operating

conditions. Buy all or choose from 80, 40, 30, 20, 17, or 15 Meters. Specify band in "XX" area of model number.

Hot receiver with 0.2 uV sensitivity, low noise, sharp passband crystal filter, Differential mode AGC, rock steady, over 80 dB signal range, robust AF output, 2 Watts thru 20 Meters, 1 Watt 15/17 Meters. Power adjustable to zero, full QSK for smooth break-in, natural sidetone, shaped keying, custom TX offset, receiver passband center, low power drain. Tiny 3 3/4 W x 1 1/2 H x 4 1/2 D inches. Wired unit covered by MFJ's No Matter What™ warranty.

MFJ SSB/CW XCVR ACCESSORIES

MFJ-4110, \$49.95.

Portable AC power supply. Connect to MFJ radios. LED indicates when power is applied. Output is approximately 13.8 VDC at 1.2 amps.

MFJ-4114, \$69.95.

AC Power supply/Battery Pack uses Ni-Cd D cells or alkaline D cells (not included). Matches MFJ radios. Output is 13.8 VDC at 1.2 amps. Voltage regulated. Ni-Cd charge circuit.

MFJ-415B, \$49.95. Plug in CW adapter for MFJ-9420/9440. Semi break-in T/R switching. Sidetone, key jack, mode switch.



MFJ-416, \$49.95. CW for MFJ-9406/9402.

MFJ-726, \$29.95. Narrow audio filter for MFJ transceivers.

MFJ-412, \$49.95. Curtis chip iambic keyer module. Use your MFJ paddles.

MFJ-1770, \$34.95.

15 Meter dipole antenna.

MFJ-1770A, \$34.95.

10 Meter dipole antenna.

MFJ-1771, \$34.95.

17 Meter dipole antenna.

MFJ-1772, \$34.95.

20 Meter dipole antenna.

MFJ-1773, \$34.95.

30 Meter dipole antenna.

MFJ-1774, \$34.95.

40 Meter dipole antenna.



33 Feet Telescoping fiberglass Mast . . . Collapses to 3.8 feet, weighs 3.3 lbs

Just pull out each section and twist to lock. It extends to a whopping 33 feet -- long enough to be a full 1/4 Wave on 40 Meters!

It collapses to just 3.8 feet and weighs a light 3.3 pounds for true portability. Bottom section is 1 3/4 inch diameter.

Great for portable and temporary use -- traveling, camping, from hotels, hamfests, field day, DX-peditions.

Put up a full size inverted Vee dipole or vertical antenna in minutes and get full size performance.

Use to construct other types of antennas like loops and quads.

Super strong fiberglass flexes to resist breaking. Black resists UV.

Use to construct other types of antennas like loops and quads.

Super strong fiberglass flexes to resist breaking. Black resists UV.



10 Bands -- 1 MFJ Antenna!

Full size performance . . . No ground or radials

*Operate 10 bands: 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters with one antenna
Separate full size radiators . . . End loading . . . Elevated top feed . . . Low Radiation Angle . . . Very wide bandwidth . . . Highest performance no ground vertical ever . . .*

Operate 10 bands -- 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters with this MFJ-1798 vertical antenna and get full size performance with no ground or radials!

Full size performance gives high efficiency for more power radiated. Results? Stronger signals and more Q-5 QSOs.

Full size performance also gives you exceptionally wide bandwidths so you can use more of your hard earned frequencies.

Full size performance is achieved using separate full size radiators for 2-20 Meters and highly efficient end loading for 30, 40, 75/80 Meters.

Get very low radiation angle for exciting DX, automatic bandswitching, omni-directional coverage, low SWR. Handles 1500 Watts PEP SSB.

MFJ's unique Elevated Top Feed™ elevates the feedpoint all the way to the top of the antenna. It puts the maximum radiation point high up in the clear where it does the most good -- your signal gets out even if you're ground mounted.

It's easy to tune because adjusting one band has minimum effect on the resonant frequencies of other bands.

Self-supporting and just 20 feet tall, the MFJ-1798 mounts easily from ground level to tower top -- small lots, backyards, apartments, condos, roofs, tower mounts.

Separate Full Size Radiators

Separate full size quarter wave radiators are used on 20, 17, 15, 12, 10 and 2 Meters. On 6 Meters, the 17 Meter radiator becomes a 3/4 wave radiator.

The active radiator works as a stub to decouple everything



MFJ-1798
\$289⁹⁵
Ship Code F

beyond it. *In phase* antenna current flows in all parallel radiators.

This forms a very large equivalent radiator and gives you incredible bandwidths.

Radiator stubs provide automatic bandswitching -- absolutely *no loss* due to loading coils or traps.

End Loading

On 30, 40, 75/80 Meters, end loading -- the most efficient form of loading -- gives you highly efficient performance, excellent bandwidth, low angle radiation and automatic bandswitching.

MFJ's unique Frequency Adaptive L-Network™ provides automatic impedance matching for lowest SWR on these low bands.

Tuning to your favorite part of these bands is simple and is done at the *bottom* of the antenna.

No Ground or Radials Needed

You don't need a ground or radials because an effective counterpoise that's 12 feet across gives you *excellent* ground isolation.

You can mount it from ground level to roof top and get awesome performance.

No Feedline Radiation to Waste Power

The feedline is decoupled and isolated from the antenna with MFJ's exclusive *AirCore™* high power current balun. It's wound with *Teflon®* coax and can't saturate, no matter how high your power.

Built to Last

Incredibly strong solid fiberglass rod and large diameter 6061 T-6 aircraft strength aluminum tubing is in the main structure.

Efficient high-Q coils are wound on tough *low loss* fiberglass forms using highly weather resistant *Teflon®* covered wire.

MFJ's Super High-Q Loop™ Antennas



MFJ's tiny 36 inch diameter loop antenna lets you operate 10 through 30 MHz *continuously* -- including the WARC bands!

Ideal for limited space -- apartments, small lots, motor homes, attics, or mobile homes.

MFJ-1786
\$379⁹⁵
Ship Code F

Enjoy both DX and local contacts mounted vertically. Get both low angle radiation for excellent DX and high angle radiation for local, close-in contacts. Handles 150 watts.

Super easy-to-use! Only MFJ's super remote control has *Auto Band Selection™*. It auto-tunes to desired band, 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.

All welded construction, no mechanical joints, welded butterfly capacitor with no rotating contacts, large 1.050 inch diameter round radiator -- not a lossy thin flat-strip -- *gives you highest possible efficiency.*

Each plate in MFJ's tuning capacitor is welded for low loss and polished to prevent high voltage arcing, welded to the radiator, has nylon bearing, anti-backlash mechanism, limit switches, continuous no-step DC motor -- gives smooth precision tuning.

Heavy duty thick ABS plastic housing has ultraviolet inhibitor protection.

NEW! MFJ-1788, \$429.95. Same as MFJ-1786 but covers 40 Meters-15 Meters continuous. Includes super remote control.

MFJ-1782, \$339.95. Like MFJ-1786 but control has only fast/slow tune buttons.

MFJ-1780, \$249.95. *Box Fan* Portable Loop is about the same size (2x2 foot) as a box fan, complete with handle. Covers 14-30 MHz. Control has fast/slow tunes.

MFJ Portable Antenna

MFJ-1621
\$89⁹⁵



MFJ-1621 lets you operate in most any electrically free area -- apartment, campsite, hotel, the beach, etc. DXCC, WAZ, WAC, WAS have been won with MFJ-1621! Work 40, 30, 20, 17, 15, 12 and 10 Meters with a telescopic whip that extends to 54 inches. Mounted on a sturdy 6x3x6 inch cabinet. Built-in antenna tuner, field strength meter, and 50 feet of RG-58 coax cable. Handles 200 Watts.

MFJ's G5RV Antenna



MFJ-1778, Ship Code A
\$39⁹⁵

Covers all bands, 160-10 Meters with antenna tuner. 102 feet long, shorter than 80 Meter dipole. Use as inverted vee or sloper to be more compact. Use on 160 Meters as Marconi with tuner and ground. Handles full legal limit power. Add coax feedline -- *get on the air!*

MFJ halfwave vertical

6 bands: 40, 20, 15, 10, 6, 2 Meters . . . No radials or ground needed

Only 12 feet high and has a tiny 24 inch footprint! Mount anywhere -- ground level to tower top -- apartments, small lots, trailers. Perfect for vacations, field day, DXpedition, camping.

Efficient end-loading, no lossy traps. Entire length is always radiating. Full size halfwave on 2/6 Meters. High power *air-wound* choke balun eliminates feedline radiation. Adjusting 1 band has minimum effect on others.

Automatic bandswitching, low radiation angle, omni-directional, handles 1500 watts PEP. Goes together in an afternoon.

Super 80/40 Meter Vertical

MFJ-1792, \$169.95, is a high-performance 80/40 Meter vertical. Full size quarter wave radiator for 40 Meters -- that's 33 feet of ruthless radiating power. End loading, low-loss fiberglass form, high strength 6061-T6 aluminum tubing, handles 1500 Watts PEP, requires guying and radials, counterpoises or ground screen.

Super 80/40/20 Meter Vertical

MFJ-1793, \$189.95, like MFJ-1792 but has full size 20 Meter 1/4 wave radiator also.

