

What's NEW

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Larry Van Horn, New Products Editor

Alinco DX-SR9T SDR Transceiver

The DX-SR9T, a new desktop transceiver designed to be affordable without compromising performance, features three ceramic filters with narrow modes and optional mechanical filter insertion capabilities; excellent 1-ppm stability and an internal voice/data VOX circuit to make data-communication modes such as SSTV and PSK31 a snap.

The DX-SR9T is a hybrid, stand-alone analog and digital SDR transceiver, featuring simple operating commands, straightforward and logical key layout.

With front-panel separation, a large, bright LCD display, frontfacing speaker, auto-keyer and many other desirable features, the DX-SR9T will appeal to the beginner in the world of shortwave and to the most experienced amateur radio operators.

Here are just some of the features for this radio:

- General coverage receive from 150 kHz to 30 MHz in AM/SSB/CW/FM and SDR modes.
- Internal VOX, which eliminates optional interface box for your computer connection.
- Rugged, die-cast chassis and huge LCD display.
- Front speaker and plenty of audio output.
- Front and rear jacks for your computer interface.
- Narrow ceramic filters (AM 2.4-kHz/SSB 1-kHz), 0.5-kHz CW audio-filtering and space for optional mechanical filter insertion.
- Dual VFOs, three banks/600 memory channels, two sets of programmed search pairs and a variety of scanning modes.
- IF shift, RIT, noise-blanker, four level RF preamp/attenuator, auto-power-off, sleep timer, dial/key locks, indicator illumination and more.
- Computer utility software makes it easy to manage settings and edit memories.

The SDR system in the DX-SR9T consists of an I/Q signal output and a mixer circuit. It requires a high quality sound device (internal or USB-interface) and PC specs as follows (the higher the PC spec, the better the SDR performance): Windows Vista or 7 OS; Intel Core i5 2.4 GHz equivalent or faster CPU; 2-GByte or more memory; 1024x768pixel, 32 bit or more display resolution/color; 48-kHz 16 bit sampling

sound device capable of stereo record/replay; center wheel and high-speed scroll feature mouse; and a pair of commonly available audio cables with 3.5 mm stereo-plug PC speaker, PC microphone or headset (with microphone).

Alinco recommends that, before you purchase the DX-SR9T, you should visit www.alinco.com to download the KG-TRX SDR software. Read the included instruction manual and start the program to understand how it works with your PC system.

The DX-SR9T has not been type-accepted by the FCC as of press time, so pricing information is currently not available.

MFJ-266C Antenna Analyzer

The MFJ-266C digital antenna analyzer covers HF, VHF, plus UHF amateur and commercial frequencies with digital precision. It also displays SWR, complex impedance, and impedance magnitude simultaneously – all on the same LCD screen. Use it to measure capacitance, inductance, field strength, frequency and generate test signals. You can also fine tune stubs, analyze coax, test baluns and RF transformers, as well as perform many other important RF-related tasks around the shack or on the road. Not only is this analyzer easy-to-use, but it fits comfortably in one hand for on-the-fly measurements on the bench or in the field.

The MFJ-266C covers frequencies from 160 through 6 Meters, the FM broadcast band, air band, 2 Meters, 220 MHz, 70 cm, plus VHF/UHF commercial 2-way frequencies (Band A 1.5 to 2.7 MHz; Band B 2.5 to 4.8 MHz; Band C 4.6 to 9.6 MHz; Band D 8.5 to 18.7 MHz; Band E 17.3 to 39 MHz; Band F 38.7 to 65 MHz; Band V 85 to 185 MHz and Band U 300-490 MHz).

The velvet-smooth 10:1 vernier drive and solid state varicap makes fine tuning easy and a built-in dial lock prevents accidental detuning while making measurements. A switched, backlit LCD screen is easy-to-read in any light.

In SWR Mode, MFJ-266C reads SWR 1:1 to 9.9:1, impedance magnitude 10-500 Ohms and complex impedance (resistance and reactance). Best of all, it displays all three parameters simultaneously and operating frequency with one quick glance. No other low-cost handheld analyzer can do this. (Note: Z-mag and R+jX are not displayed on UHF).

The MFJ-266C is like owning several pieces of test equipment. You get a powerful wide-range signal source, inductance/capaci-

tance meter, network analyzer, RF field-strength meter and a 500-MHz frequency counter all in one small package.

MFJ-266C uses eight internal AA alkaline batteries or optional 12 VDC/110 VAC adapter with MFJ-1312D (\$16). It has a built-in Li-ion battery charger. You may also use the optional MFJ-18650 (\$9) a powerful 3.7V, 3000 mAh Li-on battery. MFJ-266C is compact (3.75-inch wide, by 6.5-inches high, by 2.75-inches deep) and weighs just 1.32 pounds. It draws 30-mA in counter mode and 140-mA in analyzer mode and includes an N to SO-239 adaptor. The MFJ-266C sells for \$360 and is available from various amateur radio suppliers.

MFJ Ultrasonic Receiver Pinpoints Power Line Noise

HF and VHF operation can be greatly affected by band noise which makes it hard to hear the weaker stations and adds to ear fatigue. Many times the noise is coming just outside your doorway, from the power lines.

Power companies are usually very willing to help out with noise issues, but not all companies have the necessary equipment or trained personnel to properly locate nearby noise sources.

MFJ-5008 aids in locating the noise sources generated by corona discharge and arcing components on the power system using a receiver tuned to the ultrasonic range of 40 kHz.

MFJ uses an 18-inch diameter plastic dish giving a narrow beamwidth to pinpoint noise sources to less than 12 inches at 50 feet. The dish also has a short focal point making the overall front to back depth just seven inches. With the handle mounted close to the dish, the center of gravity is closer to the handle reducing fatigue on the hand from the weight of the dish pulling down in front.

An ultrasonic transducer mounted inside a sturdy metal support helps reduce dish bending and warping. Targeting holes built into the transducer mount and on the dish are aligned with the beam of the dish allowing you to pinpoint the noise sources on the pole.



Receiving electronics are mounted on the handle for convenient operation. MFJ-5008 operates on a standard 9-Volt battery (not included). The gain of the receiver is such that you can receive noise generated from power line sources from several hundred feet away. A 3.5 mm headphone jack lets you use any stereo or mono headphones.

Not only can you use the MFJ-5008 to find power line noise sources, you can also listen to a wide range of nature sounds. In the ultrasonic range bats, birds, and insects can easily be heard. MFJ-5008 can give you a whole new perspective on the wildlife around you. It can also help locate mechanical noise sources in the ultrasonic range. MFJ-5008 measures 20.5-inches wide by 19.5-inches high by 7-inches deep and weighs just 2.5 pounds.

The MFJ-5008 sells for \$180 and you can get more details on the company website at www.mfjenterprises.com.

AOR AR6000 Professional Receiver

The AR6000 delivers continuous tuning from 40-kHz to 6-GHz in a wide variety of modes for professional monitoring performance that's nothing short of amazing in terms of accuracy, sensitivity and speed. Standard modes include AM, FM, WFM, FM Stereo, USB, LSB and CW. An optional module can add the capability to receive APCO 25 digital communications plus an optional I/Q output can be added to capture up to one megahertz of bandwidth onto a storage device for later listening or signal analysis.



Designed for the monitoring or technical service professional, there are no interruptions in the AR6000's tuning range. With exceptional tuning accuracy and sensitivity throughout its tuning range, the AR6000 begins at the floor of the radio spectrum and continues up through microwave frequencies so it can be used for land-based or satellite communications. It works as a measuring receiver for those seeking a reliable frequency and signal strength standard. To support its broad spectrum, the AR6000 has two antenna ports, with the added capability of an optional remote antenna selector from the front panel of the receiver.

With its popular analog signal strength meter and large easy-to-read digital spectrum display, the AR6000 is destined to become the new choice of federal, state and local law enforcement agencies, the military, emergency managers, diplomatic service, lab technicians,

news-gathering operations and security professionals.

The AR6000 professional grade receiver feature set includes:

- 40 kHz to 6 GHz frequency coverage with no interruptions
- Multimode AM, FM, WFM, FM Stereo, USB, LSB and CW
- Tuning steps of 1-Hz up to 3.15-GHz; 2-Hz from 3.15 to 6-GHz
- Receiver is programmable and manageable through a USB computer interface
- Up to 2,000 alphanumeric memory channels
- Analog S-meter, large tuning dial, front panel power, volume and squelch controls
- Direct frequency input
- Fast Fourier Transform algorithms
- An SD memory card port can be used to store recorded audio
- Two selectable antenna input ports plus optional remote antenna selector

Complete specifications can be found at <http://aorusa.com/receivers/ar6000.html>. The AOR AR6000 is available in the U.S. from Grove Enterprises only to qualified purchasers with documentation.

New DSP Noise-Cancelling Base Station Speaker from bhi Ltd

The new bhi "DESKTOP" DSP noise-cancelling base station speaker has been designed to clean up noisy radio signals and will work with most radios and receivers, including SDR radios and other receivers with stereo line out, giving a new listening experience. The new rotary controls make it very easy to use and set up for your own operating conditions.

The "DESKTOP" noise-cancelling speaker has a 4-inch bass driver and a 1-inch tweeter with a built-in 10-Watt audio amplifier. The speaker functions are micro-processor controlled with features that include: Separate rotary volume and filter level controls, stereo line-in and speaker level audio input sockets, 3.5 mm headphone socket, LED and audio indication of filter function, audio level overload feature, sleep mode, noise reduction 9 to 35 dB, tone reduction 4 – 65 dB, 12 to 18V DC (2.5A peak). Size: 8-inches high by 6-inches wide by 6.25-inches deep.

For more info, visit www.bhi-ltd.com



Shared Apex Loop Array™

Array Solutions, from Sunnyvale, Texas, has introduced a new compact wideband receiving antenna for MW and HF called the Shared Apex Loop Array™.

Now you have a new interference fighting



weapon in your receiving arsenal. The Shared Apex Loop Array™ is a revolutionary receiving antenna that will change the way that you listen to the radio. The patented design provides performance over a range of frequencies that will please both the rag-chewer and DXer alike.

The antenna is a true time-delay array with four identical wire loops supported by a single non-conductive mast. Signals from each loop are transferred through a ferrite coupler to a short, balanced-line that connects to the switch/combiner/amp enclosure mounted at the base of the antenna. Within this enclosure, signals from each loop are routed either directly to a combiner or through a delay line and then to the combiner, where they are amplified by a dual stage balanced broadband amplifier and sent out to the feedline to the controller located in the shack. The controller connects directly to your receiver, and sends power and control signals over the feedline to the antenna.

This unique antenna features:

- Wide frequency range and compact size. This antenna is especially effective at reducing local interference.
- Provides eight instantly selectable directions in single or unidirectional mode.
- Provides four instantly selectable directions in bi-directional mode.
- Only one delay line
- Signals, power, and direction commands are carried by a single coax cable from the controller to the antenna.
- Pattern and sensitivity is adjustable by positioning loop couplers and selecting delay line length.
- No termination resistors or RF ground is required.
- Unique patented design (manufactured and marketed under U.S. patent number 8,350,776 and patent pending).

For more information contact Array Solutions, 2611 North Beltline Rd Suite 109, Sunnyvale, Texas 75182, Phone (214) 954-7140 or visit their website at www.arrayolutions.com.

Books and equipment for announcement or review should be sent to What's New, c/o Monitoring Times, 7540 Highway 64 West, Brasstown, NC 28902. Press releases may be faxed to 828-837-2216 or emailed to Larry Van Horn, larryvanhorn@monitoringtimes.com.

When ordering or inquiring about the products mentioned in this column, be sure to tell them that you saw it in the pages of *Monitoring Times* magazine.