

SWL IR Remote

Review by Kevin Carey, WB2QMY

ust about every TV, video player and sound system today comes with a handheld remote control. Some would call it a testament to the "couch potato" lifestyle. Nevertheless, there are certainly times when a remote control proves very useful. With few exceptions, SWLs have not had the luxury of remote control for their radios. Many tabletop receivers allow for PC-based control via a cable, but the concept of handheld remote control is not universal among the big players.

SWL-Remotes.com (Cincinnati, OH) aims to change that. Their *SWL IR Remote* is available for the majority of tabletop receivers in use today. It allows for wireless control of such receivers at a distance of at least 30 feet (9 meters). The SWL IR Remote consists of an infrared receiver module that connects to the radio through an interface cable, an AC power supply (unterminated DC cable for European shipments), and an optional handheld control unit. The photo below shows a typical setup with the remote connected to the rear panel of a Drake R8 receiver.



As of press time, the SWL IR Remote Control works with the following radios:

Drake R8/A/B Yaesu FRG-100, 8800 Most Icom Transceivers Icom R75 (virtually every function supported) JRC NRD-535, -545 Lowe HF-225 Kenwood R-5000 Uniden Scanners – many models

So, why would you need wireless remote control for your receiver anyway? For starters, suppose you are working on some project across the shack and need to change the frequency, mode or other parameter of your receiver. With a remote, you can make the change(s) and get back to what you are doing. It eliminates the need to keep walking back and forth to your receiver.

Remote control might also be useful for someone who is confined to bed due to an illness. Using the remote, most receiver functions can be controlled without having to be physically at the radio's front panel. This could allow some listeners to continue their hobby with high performance gear, instead of compromising with a portable set.

Setup

The unit I tested was configured for use with a Drake R8/A/B series receiver. My receiver is an original Drake R8 (1992 vintage). Installation was a simple matter of connecting the infrared receiver to the R8's serial data connector using the supplied cable, connecting the AC power supply, and entering a key sequence to prepare it for use with the R8. Total installation time was less than 5 minutes.

While many types of handheld remotes can be used with the IR unit, I recommend using the optional unit available from SWL-Remotes (\$11.95). It is very easy to use, and the keypad has a nice feel to it. The mostoften used keys even glow in the dark! Each numeric key is shown in the shape of the number it represents, making it very intuitive and easy to work with, even in marginal lighting conditions. This remote is not cluttered like some that I've seen. Why can't all remote controls be this simple?

What Can You Control?

While the supported functions vary by radio model, the following parameters are controllable on the Drake R8/A/B series...

Radio Power on/off Direct entry of frequencies Frequency & Memory Channel Stepping Frequency pacing Scan control VFO/Memory Mode Preamp on/off Attenuator on/off Antenna 1 or 2 selection VFO A/B selection Notch on/off AGC slow or fast Sync. Detection on/off Mode selection Bandwidth setting Tuning step sizes Memory management

I had only one small disappointment with the SWL IR Remote, and that was VHF tuning capability. My R8 is equipped with the optional VHF converter board, but the remote system did not function reliably in the VHF range.

To my delight, just before publication of this review, the folks at SWL-Remotes issued an upgrade that adds VHF tuning capability for R8A/Bs equipped with the VHF converter. I have tested the upgrade with my Drake R8 and found that it performed flawlessly. This is a significant enhancement for those of us who enjoy listening to VHF traffic while we're working around the shack.

Bottom Line

The SWL IR Remote was easy to use and performed all tasks listed in the manual without any difficulties. It is a useful accessory for extending the flexibility of your tabletop receiver and requires no modification to your gear. You can learn much more about the SWL IR Remote at the firm's website given below. You can even download an operator's manual from the site to see exactly what features are controllable on your receiver.

The cost of the SWL IR Remote varies from \$69.95 to \$99.95 depending on your receiver model. It is available online directly from **http://www.swl-remotes.com** or swlremotes.com, 8070 Reading Rd, Suite 4, Cincinnati, Oh 45237; 513-236-0646. It may also be ordered from Universal Radio Inc., Reynoldsburg, OH (Tel. 800-431-3939) or via their website at **http://www.universalradio.com.**

H-900 Gainprobe from LF Engineering

By Bob Grove W8JHD

hen an outdoor dipole or random wire for shortwave reception is not practical or desirable, a two-foot vertical sounds like a pretty good alternative!

For many years, LF Engineering has led the field of affordable active antennas; their H800 Skymatch offers excellent performance over the wide frequency range of 10 kHz-50 MHz. Now, LF Engineering has introduced a new model, the H900.

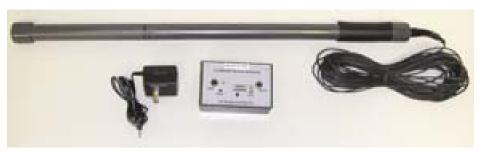
With better high-frequency performance and extending the upper frequency to 60 MHz (-3 dB), the H-900 will make many shortwave listeners have second thoughts about erecting wire antennas. This new active antenna can be mounted in a variety of locations, outdoor or in – like its predecessor, it's only 25 inches long, and a mere inch in diameter.

The added features in the new model include an improved MOS-FET amplifier in the probe, and the introduction of a high performance signal amplifier within the coupler. There is no internal battery option available for the H-900, because the current drain of the new design, up to 80 mA with the signal amplifier on, would rapidly discharge an internal battery. An AC wall adaptor is included to provide the necessary 12 VDC power.

But if battery operation is still desired to isolate the antenna system from AC line interference, an external 12 volt battery can be readily attached through the mini-jack used for the AC adaptor.

The low-noise preamplifier offers 6-12 dB higher gain than the former model as well, and is integrated into the hermetically-sealed antenna assembly (tested to -66 ft. pressure, or two atmospheres). The remote-mountable antenna assembly is connected to the control box (measures approx. 4" x 2-1/2" x 1-1/2") by 50 feet of thin-diameter RG-174/U coax. The control box also contains a toggle switch that can be used to kick in an additional 10 dB of wideband gain for the weakest signals.

Purists may be suspicious of signal loss in RG-174/U, but at these design frequencies and length of line, that's not really an issue. Not only that, but the power output of the preamp is a husky 16 dBm, enough to overcome any loss in the line! The directions say that the coax can actually be extended by an additional length of up to 200 feet with no



appreciable loss of signal!

To overcome third-order intermodulation, the bane of preamplified antenna systems, the husky amplifier in the H-900 boasts an IP3 greater than 35 dBm.

The antenna system operates over a wide temperature range of -25 to +120 degrees Fahrenheit, adequate for just about any geographical application.

While we would have preferred SO-239 coax connectors, the RCA phono jacks used on the H900 are easily adapted to the fitting required for any receiver.

Since no adjustments are required, this product is about as close to "plug and play" as you can get. Just be sure to plug the antenna input and output cables into the right receptacles!

So how well does it work?

Comparing the H-900 with a 50-foot wire antenna at approximately the same elevation, reception was virtually identical throughout the 100 kHz-30 MHz spectrum. In the AM broadcast band (530-1700 kHz), there was no evidence of intermodulation from our local broadcasters in spite of their S9 +30 dB signal levels.

Equally important was the absence of amplifier-generated "hiss" which obscures weak signals and artificially deflects the Smeter higher. Off-signal, our S-meter stayed right on 0 with the preamplifier turned on or off.

For two-way radio users, saturation from a nearby transmitting antenna is a real concern with active antennas. In our experiment, an adjacent antenna for a 60-watt, two-meter transceiver caused no HF desensitization of the H-900.

Keeping in mind that the H-900 sensi-

tivity rolls off above 60 MHz, we couldn't resist the temptation to try it on a VHF/UHF scanner. At 160 MHz and 460 MHz, signals were down by more than 20 dB, and at 860 MHz they were down by a good 30 dB. That was to be expected.

While it would be nice to have an active antenna that works with the new breed of wide-frequency-coverage receivers that have only one antenna port, the new H-900 GainProbe is a welcome addition to the below-30 MHz shortwave, medium wave, and longwave receiving market. Its performance is equivalent to a much larger wire antenna, and its compact, weatherproof construction invites installation just about anywhere.

The H900 GainProbe (\$189) and the standard H800 SkyMatch (\$139) are available exclusively from Grove Enterprises (1-800-438-8155; 7540 Hwy 64 West, Brasstown, NC 28904; http://www.grove-ent.com)

IR REMOTE RADIO CONTROL

Remote control your Shortwave Receiver, Scanner, or ICOM Transceiver from your easy chair with the SWL IR Remote and a Universal TV Remote control.

- SWL IR Remote for Drake R8/A/B \$89.95
- SWL IR Remote for Yaesu FRG-100 \$79.95
- ◆ SWL IR Remote for Yaesu FRG-8800 \$79.95
- SWL IR Remote for ICOM Transceiver . . . \$69.95
- SWL IR Remote for ICOM IC-R75...... \$79.95
- SWL IR Remote for JRC NRD-535, NRD-545. \$89.95
 SWL IR Remote for Lowe HF-150. HF-225. \$79.95
- SWL IR Remote for Kenwood R-5000 \$79.95
- ◆ SWL IR Remote for Uniden Scanners \$89.95

www.swl-remotes.com