

# Thinking of a Used VHF/UHF Radio?

You can often save lots of money by buying an older, used 2 meter or dual-band radio! Here are a few tips to help you get the best value:

## 1. A Few Places to Start:

<http://www.ebay.com> (there is a ham radio section, see my website for a link)

<http://swap.qth.com/>

<http://forums.qrz.com/>

<http://sfbay.craigslist.org/ele> (electronics section of local Craig's List, then search for "ham", etc)

The early bird catches the best deals, so check often. Feel free to call or email me for a sanity check!

## 2. Am I Buying Junk, or Getting Scammed??

These questions are what keep most people from doing this--how can I tell if it's a good buy? Is it too ancient to be useful? Are there simple fixes or updates that might make this a good deal? How can I avoid getting cheated?

I have done quite a few purchases and sales on eBay and QRZ.com, and I can vouch for its usefulness for buying ham gear, HOWEVER, there are scam artists or people who don't seem to know the difference between "mint" and "trashed" condition. The usual guidelines I can offer are:

1. Make sure you see a picture of it. The more the merrier. I often avoid fuzzy, shaky pictures.
2. Is the seller experienced? Does he have more than 10 or 20 transactions, with 100% feedback?
3. Avoid the seller who says he doesn't know much about the radio and hasn't tested it.
4. Best cases are those that offer returns if you are not satisfied, but most people don't.
5. Has the seller identified himself? Often the seller name has a ham call in it, or he adds his call.

With Craigslist, you don't have most of the eBay protections, but at least you usually end up meeting the seller face-to-face, and get a chance to look the gear over (for 5 minutes) before paying.

On the ham radio websites, it is common courtesy to include one's ham call sign, which you can then look up on QRZ.com. Anything that helps ID the seller helps, but a really experienced scammer can hide behind P.O. boxes, fake addresses, or identity theft.

Oh, in case you're curious, yes, I have gotten burned--once. I paid too much on eBay for an Alinco DR-235 220 MHz transceiver that turned out to have a burned out receiver preamp! Nobody is exempt from these "Doh!" moments, I'm afraid to say...

## 3. Some Guidelines for Older Gear

Names to look for are Kenwood, Yaesu, Icom, Alinco, Radio Shack. Avoid most Motorola, G.E., Heathkit gear. If you see these names, they are really old stuff and should be avoided: Clegg, Midland, Standard. Even Kenwood, Yaesu and Icom radios that are older than about 1989 should generally be avoided. Radios older than that may require individual crystals for each and every channel, or are lacking CTCSS (PL or sub tones) capability, have few or no memory channels, or they used Lithium battery technology to back up the limited memory. By now, that Lithium battery has expired, and most require surgery to replace.

Best bet is to stay with something that was made within the last 10 years. By then, most had CTCSS tones built in, used flash or EEPROM memory, had more channels, and have had less wear. There are exceptions, but that should be your general rule.

If you spot a possible candidate, go look it up by brand and model number on: <http://www.eham.net/> reviews. Go down to "Transceivers: VHF/UHF+ Amateur Base/Mobile (non hand-held)" and click there. There will be (sometimes incomplete) info listed on the model's age and features. If you're lucky, individuals will have left ratings for the radio, along with general comments. You can see if it had lots of problems, or other weaknesses. Some radios have had problems blowing out the final transistors (no power output!), or flaky display problems, etc. They should be avoided!

If they are not listed on eHam.net, you can also Google the name and number (best way to do this is often to enclose it in quotes: "Kenwood TR-7950" to avoid lots of references to Kenwood car stereos. Also have a look at <http://www.rigpix.com> for brief specs and a photo of the radio. (Note that rigpix.com is Swedish, so sometimes they only show the European model variants!) User manuals for almost all modern ham transceivers are freely available as downloads on the web as well, in case you might want to have a more detailed look at a particular model.

If you shop carefully, and are ready to accept a few compromises, you may end up with a relatively great radio for as little as \$50-100!

A few specific examples that you might come across, with caveats:

Kenwood: TR-7950 (early 1980's, Lithium battery, optional sub-audible board, only 3 tones--avoid!)  
Kenwood: TR-7930 (25 watt version of TR-7950, same caveats apply)  
Kenwood: T M-221, -231, -241 (Lithium battery, often lacked sub-audible tone board, but good radio)  
Kenwood: T M-251 (Lithium battery, can receive 440-500 MHz as well, very good radio)  
Kenwood: T M-V7 (Dual-band radio, very desirable, BUT had display lines show up in early models)  
Kenwood: T M-271 (current production, can sometimes be found for \$100-120)  
Yaesu: FT-2200 (very good radio, had lithium battery--mid 1990's)  
Yaesu: FT-2500 (very good radio, mid-1990's)  
Icom: IC-22U (late 1970's, NO memories, only one channel at a time, no sub-tones, but often \$50, add \$75 for an external sub-tone generator and a plug on the back, watch for beat-up condition)

There are dozens and dozens more I have not listed, so don't confine your search to just these. You should really, really check the ratings on eham.net before buying. The comments there will give you tones of useful information, as well as suggestions, modifications, etc.

#### **4. Why Buy Used When You Can Buy New?**

When you are looking at used radios, you should not pay more than about \$100-120 for a 2 meter-only radio, or \$200-240 for a dual-band radio, unless it includes special or high-end features. Why? Because you can buy brand new models for not much more! A new Yaesu FT-1900R (the model installed in our chapels) is about \$130, and is sometimes on sale for less. A new Yaesu FT-7900R dual-band radio is about \$289, and usually includes the \$50 separation kit to sweeten the deal. You'll have far fewer worries, and a warranty to boot, if you opt to save a bit more for a brand new radio. Just something to keep in mind. Watch for sales and special Internet prices.

#### **5. A Few Words About Walkie-Talkies**

Although I covered just VHF/UHF mobiles or base units here, the same general principles apply to walkie-talkies, except that they are more likely to be in abused or dirty condition. Additionally, you have to watch more carefully for malfunctioning buttons and switches, since they are generally not as robust as the ones on larger radios. This is where it can pay you to meet the owner and try out the radio first, if you can. Check all of the buttons and switches for smooth operation. Look at the display, check for dings and dirt, etc.

General things to watch for in used walkie-talkies are:

Physical wear--since they are hand-held and moved around, you'll have to pay close attention this.

Batteries--older units almost always used Nickel Cadmium batteries, which have long since worn out.  
You can get aftermarket replacements for \$25-60 that will last for another 2-4 years.

Accessories--does it have the original charger, owner's manual, carry strap or case, etc.?