

IRCA TECHNICAL COLUMN

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Best DX Radios

by Gerry Thomas

A popular topic among MW DXers (and a popular page on my website) is the one that deals with which radios are the best for DXing the AM broadcast band. DXers have been submitting their nominations for several weeks now and because not all DXers presently have access to the internet, I thought I'd submit the current status of the poll and encourage others to send in their thoughts on the subject.

Over my many years as a DXer, I've been fortunate to be able to acquire or test a number of the better radios (a lot of duds too, hi) that are/were available for DXing the AM broadcast band. What follows is a list of my favorites and the favorites of some other DXers along with comments (mostly mine) about the various nominees. The rankings are rough and are based on DX quality, availability, maintainability, and apparently, on some undefinable subjective factors. All of the following, however, have proven to be good DX machines for more than one DXer. You are encouraged to add to, or comment about, the various selections either through email (radioplus@pcola.gulf.net) or via snail mail (Radio Plus+ Electronics, 3635 Chastain Way, Pensacola, FL 32504). You may also want to check the website (<http://www.dx-tools.com>) for the latest on this evolving poll.

BEST DESKTOP RECEIVERS FOR MW DX

1. Drake R-8 A/B --- King of the Hill for MW DX. Excellent sensitivity and selectivity and a good front-end. Pre-amp works on MW and PBT in the ECSS mode can be very effective in eeking out an ID, especially on split frequencies.
2. Drake R-8 --- Virtually the same as the R-8 A/B but lacks the pre-amp function on MW (not that big a deal) and its ergonomics aren't as friendly.
3. Palstar R-30 --- Sensitivity is on par with the best and selectivity is excellent in any model (though selectivity choices are limited to two). Has a good front-end but not on par with the Drakes. No frills at all but a very good performer for the money (thus the ranking). Audio quality a plus. Benefits more than most from a good ground.
4. Japan Radio NRD-515 --- A superb radio for all kinds of DX including MW. Would rank higher if it weren't discontinued and fairly hard to find. Has a manual peaking control for MW.
5. Japan Radio NRD-525/535D --- Both of these are excellent for MW DXing with external antennas. Beware, however, that if you use a loop or other indoor antenna, hash from the digital display circuitry radiates several feet from the receiver, especially with the 535D. Ergonomics a big plus; the 535D is particularly enjoyable to operate.
6. AOR 7030+ --- Recommended by several MW DXers (I have no first-hand experience) for its MW capabilities. Ergonomics may take some getting use to.
7. Watkins-Johnson HF-1000 --- Excellent sensitivity and a mind-boggling array of selectivity choices; good front-end. A noteworthy drawback is that PBT only works on CW and the synchro function isn't sideband selectable. Expensive new and now discontinued.

8. R-390A --- Venerated as the best MW DX machine of the 50's-70's. This military tube-type receiver has mechanical digital read-out, Collins mechanical filters, and is built like a tank (it also weighs a ton). Best acquired by the mechanically and electronically inclined.
9. Hammarlund HQ-180A/HQ-150 --- Two more tube-type receivers of the mid-20th century. Good sensitivity and a variety of selectivity options/controls. Typical full, aurally pleasing tube-type audio; front-end not as good as some modern rigs.
10. Kenwood R-5000/R-1000 --- Both do well on MW despite reports by some that MW sensitivity is lacking (note: sensitivity of the R-5000 on MW is about the same as the Japan Radio models). R-5000 has useful IF shift; noise floor on the R-1000 a bit elevated; both improved with filter upgrades.
11. Yaesu FRG-8800/FRG-100 --- Really are sleepers among MW DXers. Solid performers even though they lack some features (e.g., PBT). Benefit by filter upgrades.
12. Drake SPR-4 --- Extremely popular among MW DXers during the 1970's. Probably should be ranked higher (and probably will be as votes come in). Audio a bit iffy; in my case, the "ringing" of the crystals fatigues my ears after a while.
13. Hammarlund SP-600 --- The darling of serious MW DXers during the hey-day of MW DX. Definitely not a portable at 87 lbs. and requires some technical familiarity to keep it in tip-top shape. Audio is the typical tube-radio pleasing but the SP-600 has the added (elusive) capability of seeming to make signals stand out more from the noise.

These are some of my favorites and the favorites of those who have taken the time to email me. Precedence in the rankings is given to those still in production or those that are fairly easy to acquire (i.e., the Japan Radios have features of use on MW but are more difficult to find than the Palstar). Note that I haven't tried any of the AOR or LOWE receivers or the later generation ICOMs. Input continues to be welcomed on these and any other receivers you feel are excellent MW radios.

I've been asked why no ICOMs appear in the rankings. This is based primarily on my personal experience in side-by-side tests with other radios (and also to the fact that only one DXer nominated an ICOM, an R-70). I own, or have ready access to, the ICOM R-70 (heavily modified), R-71A (with upgrades) and an R-9000 (stock). All are absolutely superb for utility DX (my second passion) and ham use. Unfortunately (for us), it has historically been the case that ICOM apparently designs for the amateur radio market (and SSB performance) and not for the SWL/MW DX market. This shows in side-by-side weak signal tests with other manufacturer's radios. I used an R-70 for years for MW DX until I compared it side-by-side with radios by Drake and JRC and immediately saw the difference, especially in sensitivity on MW and "wide" AM filter quality. The ICOMs are good radios for MW DX (especially in the ECSS mode) and should probably appear somewhere in the rankings, they just aren't, in my opinion, among the best listed so far. As votes continue to come in, they are likely to make an appearance somewhere, however.

BEST PORTABLE RADIOS FOR MW DX

1. Sony ICF-2010 --- Still the one. After years of production, the 2010 still sits atop the mountain of MW DX portables. Unmatched in features important to MW DXers. In dozens of side-by-side tests with numerous portables, the 2010 always comes out smiling. Filter options and mods being available are a plus.
2. C. Crane CCRadio --- Usually a close second to the 2010 in side-by-side tests of sensitivity (some users report equal or better sensitivity than the 2010). Selectivity quite good for domestic (i.e., 10 kHz spacing) DX; needs a filter mod for split-frequency DX. Doesn't have the sometimes helpful features of the 2010 (e.g., synchro; ECSS). There is apparently some variability in samples

- (common among portables) that results in differences of opinion regarding this radio. Still, of the three I've seen, all performed extremely well, especially after alignment.
3. Panasonic RF-2200 --- This discontinued, 1970's era analog radio remains a marvel of engineering. From its raw sensitivity on MW to its rotating "gyro" AM antenna to its two selectivity bandwidths, the RF-2200 is one of my favorites for MW DX. Audio is also very pleasing. Note that MW band coverage stops at 1600 kHz.
 4. GE Superadio I or II --- The first two of the popular Superadio series and easily the best. Excellent construction quality with separate circuit boards for different stages, a high-quality variable capacitor (vice tuning diodes), etc. Superb sensitivity on MW and excellent selectivity for domestic DX. Coverage stops at 1600 kHz though and dial read-out is coarse. Long discontinued.
 5. Sony ICF-7600G --- This has to be the best under \$200 all-around portable currently available. Sensitivity on MW is very good (but not as good as those ranked higher); selectivity is good for domestic DX; the synchro works well and is sideband selectable; SSB on SW and MW (for ECSS use) is excellent; and audio is pleasing. This is the radio I grab when going on short jaunts that offer an opportunity for some casual DXing.
 6. Sangean 803A/Radio Shack DX-440 --- Sangean's best effort so far for MW DXing. Not outstanding in any category but a good all-around performer on MW.
 7. Realistic TRF (12-655) --- Ah, the legendary TRF. Radio Shack's one and only (other than the Sangean-made DX-440) truly great MW DX portable. This AM-only portable sold in the 1970's for about \$30 and had such DX-rich features as a tuned RF section and a ceramic filter in its two IF stage design. Easily modifiable with filter and other upgrades, this was one of the most enjoyable radios to own during the era. I still marvel at some of the DX loggings with this radio...how about Paraguay from Mississippi, or Hawaii from Florida? As good as it was/is, the higher ranked portables offer equal or better performance and more useful features; the TRF's legend is based on a combination of price, performance, and modifiability. Nonetheless, if you can find one, jump on it, for nostalgia's sake if nothing else. Note: Radio Shack's current and recent run of Superadio clones is a joke...avoid at all costs.
 8. Sony ICF-6500W --- This discontinued 1980's era analog/digital portable from Sony can be a hot performer IF it is properly aligned. Good sensitivity and selectivity for domestic DX. Split-frequency DX requires a filter mod.
 9. Grundig Satellit 700 --- I have no personal experience with this radio but it has been recommended by two respected DXers for MW DX. Check it out.
 10. Radio Shack DX-398/Sangean ATS-909 --- Good sensitivity and excellent selectivity (deep skirt/ultimate selectivity only fair) makes this a good MW DX choice especially if you can get it on sale. Principal shortcomings are somewhat muffled audio on weak signals and poor battery life. Forget about using SSB for ECSS.
 11. Grundig YB400PE --- Just had the opportunity to finally try this radio and was pretty impressed. Good sensitivity and selectivity for a small portable although audio was a little "hissy" on weak to moderate stations. SSB on MW for ECSS reception was poor. Not on par with the Sony ICF-7600G, in my opinion, even though its narrow filter is useful.
 12. GE Superadio III --- Okay, I've never had good luck with the SRIII. The ones I've tried have had less than expected sensitivity and various degrees of image problems. Nonetheless, several DXers whose opinions I respect say that they are good radios. I guess I've just been getting lemon samples....test before you buy.

Again, these are portables that I, and others, have tested and found to be good on the AM broadcast band. Not all are presently in production and some that are out of production do not cover the expanded AM band. Your input on these and other portables is welcomed!

Note: Russ Johnson kindly sent me a shirt-pocket-sized radio that is amazingly good on MW. It's the Sangean DT-200V (same as the discontinued Radio Shack Optimus 12-174A). Disarmingly sensitive for a radio this size (but not equal to some of the bigger boys, of course), it dethroned my previous <\$100, pocket-sized portable for sensitivity (the discontinued Sony ICF-4910). Audio is very crisp as well. I'm gonna get one of my own. Currently being carried by Universal Radio for \$59.95.

Again, if you know of a good MW DX radio, let me (and others) know about it.
73...GT