

Monitoring Times HD Radio Report

Part 1 - Boston Acoustics Receptor HD

Boston Acoustics (BA) has enjoyed a reputation for quality Hi-Fi components for several decades. Their speaker systems have always been among the best. For several years, this company has marketed a monaural table top radio known as the Receptor. It's a high ticket model designed to compete with similar Bose and Kloss models.

Last year BA was among the first to introduce a table radio capable of tuning the new HD Radio signals. Their approach was to use the existing Receptor model, add HD capability to the receiver, and add a second speaker. The two units are tethered by a coaxial speaker cable.

The Receptor HD is a competent radio all around. It has a very small desk/tabletop footprint, making it easy to place in the office, kitchen, bedroom or den. It has the smallest remote control of all the tabletop sets; it's easy to use, with buttons and a menu display which is fairly intuitive. It has 20 station presets, which can be assigned in any combination on either band. That's a plus, because with the addition of HD multicasting, consumers need more than just a few presets to add their extra favorites.

Despite the generally excellent design and sturdy construction, the radio comes up a little short in certain areas. For instance, the cable between the two units could be a good thing when used on a desk as a combination radio/computer audio source. But, a longer cable would have allowed more separation between the two units, similar to the way powered speakers are used. At the length it is now, one speaker has to be in front of the monitor, while the other is to the side.



Given the audio heritage of this radio, the sound should be better than it is. Even though it's possible to adjust the audio, I found the sound too bass-heavy which, when compared to other HD Radio sets, gave the overall sound a mushy quality. However, the audio balance was noticeably improved when tuned to an HD Radio station.

MANUFACTURER'S SPECIFICATIONS

Features:

Station Presets: 20 AM FM Total

Alarms: 2

Sleep function: 60 minutes in 10 minute increments

Tuning: Multi-function tuning knob for direct tuning or by presets

Connections:

AM external antenna terminals (300 Ohms)

FM external antenna (75 Ohms)

Aux input mini jack (for MP3 player, CD player or computer audio)

Headphone output jack (8 Ohms)

Second speaker output jack

12 volt DC power jack

Dimensions:

Cabinet size: 4"H x 7 1/2"W x 6"D

Second Speaker Dimensions: 4"H x 4 3/8"W x 6"D

Weight: 3 lbs. 14 oz.

Remote Control: 1 1/2"H x 3 1/2"W x 1/4"D uses CR2025 3 volt battery

Warranty: One year limited warranty.



Boston Acoustics, famed Hi-Fi label, makes this unusual two part HD Radio called the HD Receptor. (Courtesy: Boston Acoustics)

The display is unusually bright, even by the new blue HD Radio display standards. I found that even using the controls to dim the display, it was still too bright in a dark room. On the high position it's possible to read a book by the light of the display.

INTRO TO HD RADIO

Stung by the rapid acceptance of satellite radio, the National Association of Broadcasters (NAB) is spending a lot of money this year to push the concept of HD Radio (loosely, "high definition" radio, i.e., digital). You may have seen the "HD Radio Discover it!" ads touting "New Music, New Sounds With No Subscription Fee!" The intimation is that there are new radio stations in your area with amazing programming you've never heard before. So, obviously, don't sign up with satellite radio!

As is often the case in the hi-tech world, the public relations people are months, if not years, ahead of the rest of the industry. The reality is that in some locations, mostly urban areas, there are HD Radio stations which multicast or transmit additional program material on second or third HD channels. But, at present, most HD Radio stations on the air have no multicast. The reason there are no commercials on the multicast channels is that the FCC bans them during this early phase of HD Radio acceptance. Of course, there won't be subscription fees, because they play commercials on the main channel just like they've always done. Still, the sound does live up to the hype when the stations are paying attention to how hard they're driving the audio.

HD Radio and the products that receive it will no doubt improve over the next several years. The wider implementation of HD Radio transmissions throughout the country may bring more interest to

the FM band, but the future of HD Radio on AM is another story. Until recently, the FCC required AM stations to turn off their HD signals at sundown. Even so, during the day the audio is as good as analog FM is today (real AM Stereo!). AM stations are not allowed to multicast.

There has been a lot of disappointment expressed nationwide regarding reception of FM HD Radio signals. One reason is that the FCC requires stations to transmit the HD portion of their broadcast signal at one tenth the power of the analog signal. Eventually, of course, the signals will go to full power, but for now, this fact results in HD signals falling far short of their analog counterpart. And, it makes HD mobile nearly impossible.

Manufacturers have tried to remedy this by including a folded dipole "T" antenna for FM reception and a small AM loop antenna with each unit. Even in cases where such an antenna helps HD reception, how do you install it? You tack it to the wall behind the radio. Gee, that looks great!

All AM loops used by all HD Radios are identical. Somewhere in China there is a company working overtime to crank out an AM loop antenna not worth the space in a landfill that it takes to bury it. I've found that all HD Radios benefit most from a real AM loop antenna such as the Terk AM Advantage. Still, don't get your hopes up on AM HD reception. Unless you live in the first broadcast contour of the station, you'll get only analog reception.

One really great idea with the Receptor HD is that basic instructions for setting the presets are printed under the flip-up panel on top of the radio, making it impossible to forget how to set and cancel the presets.

When it was the only HD Radio on the market it would have been easy to overlook the flaws. But, with other HD Radios now available with better features and lower price, the Receptor HD is going to have to introduce a second

generation with some refinement or additional features to remain competitive.

❖ Where to Buy:

The Boston Acoustics Receptor HD is widely available at many consumer electronics stores, including Tweeter and B & B Electronics. It's also found at catalog and on-line retailers such as Crutchfield (www.crutchfield.com; 1-888-955-6000), C. Crane (www.ccrane.com; 800-

522-8863 or 707-725-9000), J&R Electronics (www.jr.com; 800-806-1115) and Hammacher Schlemmer (www.hammacher.com; 800-321-1484). The BA Receptor is also available direct from Boston Acoustics (www.bostonacoustics.com; 978-538-5000) for \$299.99 with free UPS ground shipping. Prices at other retailers varied within \$20 of the BA price; some retailers offer free shipping while others don't. It pays to check out all the retail sources and compare.

Part 2 - Radio Shack's Accurian HD Radio

Last winter Radio Shack wasted no time getting an HD radio to the market to cash in on Christmas sales. In fact, they were available by Thanksgiving at a deep discount. Sales were so brisk they quickly depleted supplies. Among the early buyers were radio station engineers who were snapping them up to monitor their new HD transmitters. It was a sensational sales success. What the engineers liked most was the price. While early HD Radio sets were selling in the \$300 range, here was one on sale for \$99!

Radio Shack calls its HD Radio the Accurian HD, and it's one of several products in the Accurian audio stable carried in Radio Shack stores. The Accurian design turns the radio almost literally on its head. Instead of having a deep speaker cabinet as all the others do, Radio Shack's model is upright. The advantage here is that it presents the smallest desktop footprint of all HD Radio models to date. That's an issue for small desks or kitchen countertops, for that matter.

The clean lines and swept back cabinet with only one big knob in the center gives the radio what can only be described as a futuristic-retro look. One result of the upright design is that it

requires shallow speakers, resulting in a sound that lacks any real depth. If you're not looking for a booming bass, you may have found the right HD Radio in the Accurian HD.

As with most tabletop HD Radio sets, the Accurian has what have become HD Radio standard features: a front mounted mini jack input for your MP3 player (or computer audio output or a CD player), the ubiquitous blue HD Radio display panel (this one much less hard to live with than others), which shows the frequency, signal strength, and station call letters. When tuned to an HD station, it also displays the station logo ("Mix 99" for example), the HD Radio symbol, plus any pertinent music information the station may be broadcasting, such as song title, artist, album, etc. Keep in mind that the display will only show what the station is transmitting. Some stations have very little information in their data stream; others take full advantage of this feature.

The Accurian uses a remote control which is nearly identical to the one used by Boston Acoustics' Receptor HD. It's the smallest one used by any of the HD Radios and yet has all the functions of the buttons on the front panel. One interesting note is that there's a molded slot in the back of the

Accurian which can hold the remote when you're not using it.

Reception on the Accurian is not sensational. As with all HD Radios, it benefits from an external antenna. If you live in a large urban area, you may have good results with the folded dipole "T" antenna all of the radios are packaged with. If not, you'll definitely need an outside antenna. If that doesn't do the job, you'll need to add an antenna pre-amplifier and possibly a rotator to lock in the digital signals. While the Accurian allows adjustment of the audio according to the type of music, i.e. Rock, Classical, Jazz, I found very little difference among the settings.

At the often offered sale price of \$99, the Accurian is the best value for consumers wanting to see what HD Radio is all about without spending a fortune.

❖ Where to Buy:

The Radio Shack Accurian HD is available at most Radio Shack retail outlets and via the Radio Shack web site (www.radioshack.com). The list price is \$199.99, but it routinely sells for \$149.99 with a \$50 mail-in rebate. Look for even deeper discounts at typical gift giving times such as graduation, Father's Day and Christmas. The Accurian has been found for as low as \$99 at these times.

Not all Radio Shack stores carry the product. Shipping and handling from the Radio Shack web store is typically under \$10. Check your phone book or the online store finder for a store near you.

MANUFACTURER'S SPECIFICATIONS

Features:

Remote Control: 1 1/2"H x 3 1/2"W x 1/4"D
uses CR2025 3 volt battery

Connections:

AM external antenna terminals (300 Ohms)
FM external antenna (75 Ohms)
Aux input mini jack (for MP3 player, CD player or computer audio)
Headphone output jack (8 Ohms)
12 volt DC power jack

Specifications:

Cabinet size: 6.97"H x 12"W x 6.61"D
Weight: 5 lbs.

Warranty: Limited 90 days



Clean lines, clean sound and a small foot print make the Accurian HD radio from Radio Shack a versatile desk top radio at an affordable price. (Courtesy: Radio Shack)