



## **NPR Labs Recommended HD Radio Receivers**

May 2007

NPR Labs carefully evaluates many of the currently available HD Radio receivers. In our opinion, these HD Radios represent good values and will please most listeners.

### **Tabletop HD Radios**

Stand-alone, AC-powered radios with built-in loudspeakers and amplifiers

#### **Boston Acoustics HD Receptor**



An attractive, compact clock radio. The “satellite loudspeaker” included with the radio adds stereo capability.

Availability (may be limited):

- national web retailers (Amazon.com, Crutchfield.com, J&R.com, etc.) and some audio retailers
- [Boston Acoustics website](#) (web link)
- introduced November 2005
- list price: \$299.99, discounts offered by some vendors

- a \$40 user rebate is available to consumers who purchase a BA HD Receptor radio between 29 April and 3 July 2007; the rebate form can be downloaded [here](#) (.pdf file)

#### Features:

- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3); clearly displays availability of Multicast channels
- familiar user controls—rotary knobs for volume and tuning
- presets for 20 stations
- compact, limited-function remote control
- dual alarms, easy to set and use
- second (“stereo”) loudspeaker with 10-ft. cable, easy to attach
- dimmable monochrome digital display can show time, station frequency and call-letters with large characters; shows two lines of text of program-related information (PSD) for HD stations, generally regarded as best text display implementation currently available; displays radio data service (RDS) on analog stations (when available)
- extensive tone-control capabilities allows user to “tailor” sound quality
- headphone/line-level output on rear panel (1/8 inch stereo jack)
- auxiliary line-level input on rear panel (1/8 inch stereo jack)
- line-cord mounted “brick” power supply minimizes clutter at wall receptacle
- One year limited warranty

#### Performance:

- warm, inviting sound quality, will play relatively loudly for a compact radio
- good FM sensitivity, especially when used with supplied external “T” antenna (see “Resources,” below); use of the supplied “single wire” FM antenna should be avoided except in areas with very strong signals
- adequate AM sensitivity when supplied external AM antenna is substituted for internal AM antenna

#### Resources:

- [Boston Acoustics website](#) (web link)
- [HD Receptor datasheet](#)
- [HD Receptor user’s manual](#)
- [Boston Acoustics’ recommendations for improved HD Radio reception](#)

## Radio Shack Accurian HD Table Radio

(model/catalog number 12-1686)



A compact, easy to use, one-piece stereo table radio.

Availability:

- [Radio Shack stores \(nationwide\)](#)
- [Radio Shack online store](#)
- introduced October 2006
- list price \$199.00
- a \$40 rebate is available to consumers who purchase an Accurian HD Radio between 29 April and 3 July 2007; the rebate form can be downloaded [here](#) (.pdf file)

Features:

- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3) with indication of Multicast channel availability
- friendly user controls—rotary knob for setting volume; up and down pushbuttons for station selection
- 12 FM and 12 AM presets
- compact, full-function remote control
- two internal speakers offering “one box” stereo reproduction
- monochrome digital display shows time, station frequency and call-letters with large characters; program information (PSD) for HD stations
- five easy-to-select tone control settings
- retains station frequency and frequency presets during brief power outage; time-of-day clock must be reset
- line-cord mounted “brick” power supply minimizes clutter at wall receptacle
- headphone jack (1/8 inch stereo jack) on front of unit
- auxiliary line-level stereo input (1/8 inch stereo jack) on rear panel
- ninety day limited warranty



#### Features:

- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3)
- user friendly user controls—a rotary knob for setting volume; up and down pushbuttons for station selection;
- five pushbuttons for selection of 5 FM and 5 AM user-preset stations
- two internal speakers offer “one box” stereo reproduction
- monochrome digital display shows time, station frequency and call-letters, Multicast channel availability, and program information for HD stations (PSD) and analog stations (RDS)
- built-in telescoping “whip” antenna for FM; external loop antenna for AM
- headphone jack (1/8 inch stereo jack) on front of unit
- auxiliary line-level stereo input (1/8 inch stereo jack) on rear panel
- one-year limited warranty

#### Performance:

- clear, slightly bright sound quality; plays at comfortable volume levels
- good FM sensitivity when used with the detachable external whip antenna; a standard “F” connector is available for use with external FM antennas
- good AM sensitivity when used with supplied external AM antenna

#### Notes:

- backlit display can be difficult to read, especially in brightly lit areas; display darkens when radio is off—user can illuminate display by pressing any front panel button
- plug-mounted external power supply may interfere with use of wall receptacles
- signal delivered to the headphone jack is weak but adequate for most headphones

#### Resources:

- [Radiosophy website](#) (web link)
- [Radiosophy HD100 User Guide](#) (.pdf file)

## Polk I-Sonic HD Table Radio



A one-piece stereo table radio offering very high quality audio performance and many additional features, including CD and DVD-V playback and the ability to add XM satellite radio reception (additional hardware and an annual subscription required for satellite radio service)

### Availability:

- Internet retailers and high-end audio stores
- Polk Audio's [online store](#) (web link)
- introduced October 2006
- list price \$599.00
- a \$40 rebate is available to consumers who purchase an I-Sonic HD Radio between 29 April and 3 July 2007; the rebate form can be downloaded [here](#) (.pdf file)

### Features:

- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3); displays availability of Multicast program channels
- uses push buttons or compact remote control for all functions
- thirty station presets can be selected via menus
- four internal speakers offer impressive “one box” stereo reproduction
- monochrome digital display shows time, station frequency and call-letters with large characters; program information (PSD) for HD stations; RDS text display for analog stations is not supported
- full-function tone controls
- retains station frequency and frequency presets during brief power outage; time-of-day clock must be reset
- headphone jack (1/8 inch stereo jack) on side of unit

- auxiliary connectors on rear of unit include phono jacks for line level audio inputs and outputs, and both composite- and S-Video outputs for DVD video playback
- internal power supply (no external power supply device required)
- one year limited warranty; lifetime customer support available by email and via toll-free telephone numbers

Performance:

- excellent sound quality, can play at room-filling volume levels
- good FM sensitivity, especially when used with supplied external “T” antenna
- good AM sensitivity when used with supplied external AM antenna

Note:

- *some purchasers may find the Polk I-Sonic more complicated to operate than a typical table radio; users should plan on referring to the I-Sonic’s owner’s manual as they master the unit’s many capabilities*

Resources:

- [Polk Audio I-Sonic website](#) (web link)
  - [I-Sonic users manual](#) (.pdf file)
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## Aftermarket Auto Radios

*The installation of car radios can be difficult. Original equipment auto radios are often integrated with other important vehicle systems, such as climate control, navigation assistance, vehicle security systems, etc. We strongly recommend that potential purchasers of aftermarket auto radios thoroughly investigate all issues relating to the replacement or enhancement of the existing radio in their particular vehicle before purchasing an aftermarket HD Radio or HD Radio adapter, and we suggest that buyers consider using the services of a professional auto radio installer.*

### Kenwood KTC-HR100TR HD Radio Adapter



An external adapter unit that adds HD Radio reception capability to a variety of Kenwood after-market in-dash auto radio “head units.” Can *only* be used with compatible Kenwood radio models. Download this [Kenwood brochure](#) (.pdf file) to confirm which currently available radios are compatible with the KTC-HR100TR.

Availability:

- national web retailers—Crutchfield.com, Amazon.com, etc.
- specialist automobile audio dealers
- introduced in 2004
- list price: \$399.99, available at discount for \$200 or less
- a \$40 rebate is available to consumers who purchase a KTC-HR100TR adapter between 29 April and 3 July 2007; the rebate form can be downloaded [here](#)

#### Features:

- models KTC-HR100TR and KTC-HR100MC are fully Multicast-capable, offering reception of additional HD Radio program channels (HD-2, HD-3); the earliest KTC-HR100 (no suffix) version was NOT capable of Multicast reception
- Multicast channels can be stored as station presets
- control and display functions are dependent on the capabilities of the Kenwood in-dash radio used with the KTC-HR100TR adapter
- one year limited warranty

#### Performance:

- excellent FM sensitivity when properly installed in any vehicle incorporating a good original equipment radio antenna
- good AM sensitivity
- excellent audio quality when paired with a high-quality Kenwood in-dash radio
- displays program information (PSD) for HD stations when paired with an appropriate Kenwood in-dash auto radio

#### Installation:

- will require use of a Kenwood in-dash radio; professional installation recommended
- in-dash radio head unit wiring and installation kits for many vehicle makes and models are available from some vendors
- professional installation service may be available from some local dealers; units purchased through Crutchfield.com can be installed professionally for a pre-arranged fee through [Crutchfield's InstallCard](#) program; similar prepaid installation programs may be available from other online and mail order vendors

#### Notes:

- early model KTC-HR100 units lacking a "TR" or "MC" suffix may still be available from some dealers; KTC-HR100 (no suffix) units are NOT Multicast-capable; we recommend you confirm the exact model number of the adapter you are purchasing, and avoid the original KTC-HR100 version
- installation of the unit defeats remote control function of Kenwood in-dash auto radios (if originally provided)
- the HD Radio adapter defeats the radio data service (RDS) display on Kenwood in-dash radios that are designed to provide RDS capability

#### Resources:

- [Manufacturer's website](#) (web link)
- [Users manual](#) (.pdf file)
- [Catalog and data sheet](#) (.pdf file)

## JVC KD-HDR1 Aftermarket Auto Radio



A full-function, stand-alone HD Radio receiver for autos

Availability:

- national web retailers—Crutchfield.com, Amazon.com, etc.
- some automobile audio dealers
- introduced in 2006
- list price: \$199.95, often available at a modest discount
- a \$40 rebate is available to consumers who purchase a KD-HDR1 radio between 29 April and 3 July 2007; rebate form can be downloaded [here](#) (.pdf file)

Features:

- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3); Multicast channels must be selected after tuning to their host station
- “one-piece” installation—no separate HD Radio adapter unit required; standard single-DIN size fits in space used by many original equipment auto radios
- supports four loudspeakers; includes SRS ‘CircleSurround Auto’ surround sound decoding (requires separate front and rear speakers)
- conventional rotary volume control allows for easy adjustment of sound level
- search and scan control for station and Multicast channel selection
- 18 FM and 6 AM presets available to store station frequencies; presets do not store Multicast channels
- multi-band audio equalizer with user adjustment storage
- colorful digital display shows time, station frequency and call-letters and program information (PSD) for HD stations; analog radio data service (RDS) is not supported
- includes limited-function remote control
- built-in slot-loading disc player supports Compact Discs, recordable compact discs, and discs with MP3 and Windows Media Audio content
- can receive SIRIUS or XM satellite radio when equipped with an extra-cost external satellite receiver unit
- line-level audio input adapters available as options

- one year limited warranty

Performance:

- excellent FM sensitivity when properly installed in any vehicle incorporating a good original equipment radio antenna; good AM sensitivity
- very good audio quality playing HD Radio, standard analog radio and supported audio disc formats

Installation:

- requires replacement of existing auto radio; professional installation recommended
- wiring and installation kits for many vehicle makes and models are available from specialist vendors such as Crutchfield.com
- professional installation service may be available from some local dealers; units purchased through Crutchfield.com can be installed professionally for a pre-arranged fee through [Crutchfield's InstallCard](#) program; similar prepaid installation programs may be available from other online and mail order vendors

Resources:

- [Manufacturer's website](#) (web link)

## Directed HD Car Connect Aftermarket Auto Adapter

(model number DMHD10001)



Aftermarket adapter that allows HD Radio reception to be added to most existing auto radios.

Availability:

- national web retailers—Crutchfield.com, Amazon.com, etc.
- some automobile audio dealers
- introduced in November 2006
- list price: \$199.95, may be available at a modest discount

- a \$40 rebate is available to consumers who purchase a Directed Car Connect auto adapter radio between 29 April and 3 July 2007; rebate form can be downloaded [here](#) (.pdf file)

#### Features:

- functions as both an HD Radio and as a conventional analog radio; does not require removal or modification of existing equipment; doesn't interfere with use of the automobile's existing radio
- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3)
- “black box” HD tuner is connected between auto antenna and existing radio; delivers audio to the existing car radio via a wired FM modulator; for better audio quality the HD tuner's output can be connected to an existing line-level audio input on the car radio if one is available
- compact controller module with illuminated display can be mounted at any convenient location; provides full control of the HD adapter; search and scan control for digital and analog stations;
- buttons provided for 5 FM and 5 AM presets
- digital display shows station frequency and call-letters and program-related text information (PSD) for HD stations and RDS for analog stations
- includes a compact remote control
- thirty day limited warranty

#### Performance:

- excellent FM sensitivity when properly installed in any vehicle incorporating a good original equipment radio antenna; good AM sensitivity
- delivers very good audio quality for HD Radio and standard analog radio

#### Installation:

- requires wiring to the existing auto radio and the automobile's electrical supply; professional installation recommended
- professional installation service may be available from some local dealers; units purchased through Crutchfield.com can be installed professionally for a pre-arranged fee through [Crutchfield's InstallCard](#) program; similar prepaid installation programs may be available from other online and mail order vendors

#### Note:

- unit must be carefully grounded to vehicle's power source and chassis; failure to provide a good ground connection will result in unacceptably distorted audio

#### Resources:

[Manufacturer's website](#) (web link)

## Component Audio Tuners

HD Radio receivers intended to be used with existing audio systems

### Sangean HDT-1 Tuner



A component tuner that offers HD Radio and analog radio reception capability for existing audio systems such as home stereos and home theater systems when connected to the line-level inputs of an external amplifier.

Availability:

- [NPR Shop](#) (web link)
- national web retailers—Crutchfield.com, Amazon.com, etc.
- introduced in late 2006
- list price: \$199.99; discounts not widely available at this time
- a \$40 rebate is available to consumers who purchase a KTC-HR100TR adapter between 29 April and 3 July 2007; the rebate form can be downloaded [here](#) (.pdf file)

Features:

- fully Multicast-capable—offers reception of additional HD Radio program channels (HD-2, HD-3);
- presets for 20 FM and 20 AM stations; Multicast channels can be stored as presets
- displays program information (PSD) for HD stations and RDS for analog stations
- offers AM stereo reception for the limited number of stations providing this service
- internal power supply (no external power supply device required)
- one year limited warranty

Performance:

- excellent HD FM sensitivity when used with the provided “T” antenna or an external antenna
- good AM HD sensitivity when used with the provided AM antenna
- excellent audio quality delivered through line-level stereo outputs (rear panel phono jacks)

Installation:

- must be connected to an external amplifier and loudspeakers such as a component stereo or home theater system; confirm that your audio system has an unused line-level audio input available before purchasing this unit

Notes:

- early production units deliver a relatively high audio output level that may overload some amplifiers; contact Sangean if you experience unusual audio distortion when using this tuner
- the time-of-day clock in some early production units may not keep accurate time; contact Sangean if you experience this problem
- no headphone jack provided
- display cannot be dimmed; user may find the display to be too bright for use in bedrooms, etc.

Resources:

- [Manufacturer's website](#) (web link)
  - [Users manual](#) (as a .pdf file)
  - [Data sheet](#) (as a .pdf file)
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