



Custom Installation Guide Polk Audio Designs SR-H1000 Sirius Home Tuner



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This guide is provided as an aid to custom installation and home automation professionals who are integrating the Polk Audio Designs SR-H1000 Tuner into an automated entertainment system. No other use of the information provided in this document is authorized.

Antenna Installation Options:

Antenna Placement

Consult the map for the direction in which to point the antenna. Aim the portion of the antenna with the logo on it toward the location indicated by the X on the map. To ensure strong reception in your home, observe the following antenna placement considerations:

1. **BEST** Reception can be achieved by placing the antenna outside on the roof. The antenna is waterproof. This position will afford the best view of the sky for best reception. When placed in this location, an antenna extension cable may be required.
2. **BETTER** Reception can be achieved by placing the antenna outside a window, or by mounting it to the side of the house. In either case, try to achieve the best possible clear view of the sky.
3. **GOOD** Reception can be achieved by placing your antenna in or near a window, since terrestrial transmitters are used in major metropolitan areas to boost signal strength. In these cases, the antenna can be placed inside the home. Try to achieve a clear unobstructed view of the sky.

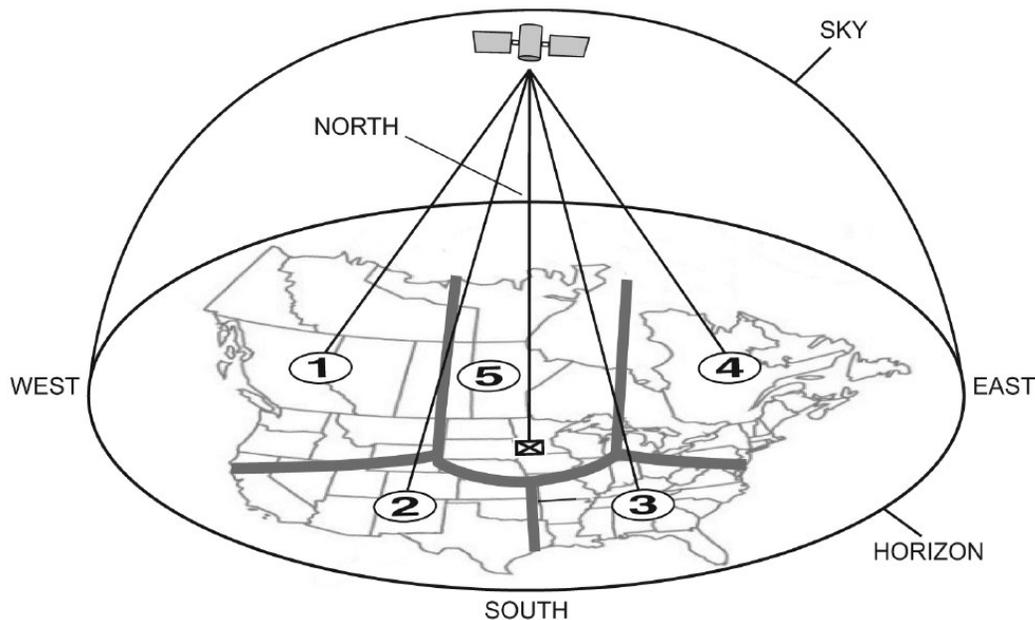
Area 1: Aim East, Northeast, or Southeast

Area 2: Aim North or Northeast

Area 3: Aim North or Northwest

Area 4: Aim West, Northwest or Southwest

Area 5: Aim Straight Up





4. Turn the Tuner on and listen for audio. If no audio is heard, aim the antenna in different directions until audio output is heard. This is the desired antenna aiming position.
5. After determining the optimum antenna aiming position, turn the Tuner off, disconnect the power adapter from the wall outlet receptacle, and disconnect the antenna cable.
6. Plan the routing of the antenna cable to the Tuner. Be sure you avoid any obstructions that could crimp, kink, or twist the cable. Use protective grommets wherever rough openings are encountered.

Note: Do not cut the antenna cable. Do not cut the antenna cable and attempt to splice it or attach alternative connectors or cable. The cable and connectors used in your SR-H1000 are specifically chosen and attached at the factory to ensure that they will work with Sirius's unique frequency band. Your High-Gain Home Antenna comes with 20-feet of cable. If that is not sufficient to locate the antenna where there is a strong signal, please see the section below on extension Cables.

7. If the antenna is mounted outside, route the cable from the antenna position to the interior of the home, working the cable through the basement, under a window sill, etc., and make adjustments and take up slack whenever necessary.
8. Plug the antenna cable into the ANTENNA connector on the back of the Receiver.
9. Plug the tuner into a 110VAC wall receptacle. The front panel STANDBY LED will light red.
10. You are now ready to activate and enjoy SIRIUS programming within your home.

Testing Antenna Signal Strength

The stronger the signal strength, the less likely it is that you will experience an interruption of the audio. In the menu options of the Tuner, there is an antenna aiming display which shows two bar graphs indicating signal strength. This can be a useful tool for positioning the antenna in an optimal location for maximum signal reception.

I. Accessories

A. Extension Cables:



Your SIRIUS Indoor/Outdoor Antenna comes with 21-feet of cable. If that is not sufficient to locate the antenna where there is a strong signal, purchase an extension such as the SIRIUS 50' Extension Cable (p/n 14230) or SIRIUS 20' Extension Cable (p/n 14130) from a local or on-line Authorized SIRIUS Retailer. Up to two 50' extensions can be used together for a total of 121-feet of cable. The 20' extension cable should not be extended further.



Both extension cables are weather resistant and have built in signal amplifiers to match the input gain with the Polk Audio Designs SR-H1000 tuner.

<http://www.directedsirius.com/products/Product.aspx?ProductID=4040>

<http://www.directedsirius.com/products/Product.aspx?ProductID=3160>

B. Prewire installation:

Prewire installation can be accomplished by using the SIRIUS 50' Extension Cable (p/n 14230) or SIRIUS 20' Extension Cable (p/n 14130) to route from the Tuner location to the desired antenna location. The Antenna that comes with your SR-H1000 tuner has 21-feet of cable and up to two 50' extension cables can be used for a total antenna cable length of 121-feet. (seems redundant)

For installations that require cables longer than 120-feet, there are a number of distribution systems available from Directed and others.

<http://www.directedsirius.com/products/homesignaldistributionkits.aspx>

(these pages all link to our store & will also to other e-tailers – would rather link there than to Sirius web store).

C. Outdoor Antenna:



The weatherproof outdoor SIRIUS antenna provides high-quality signal to your home or commercial installations. The antenna and mast feature a durable UV weather coating, and can be mounted on a mast (including existing satellite TV dish pole), on the roof, or on the wall. This antenna is great for locations where reception is blocked by low-lying obstructions

<http://www.directedsirius.com/products/Product.aspx?ProductID=4030>

D. Antenna Repeater



Enjoy SIRIUS radio throughout your home without the need to run antenna wires. SIRIUS Echo Signal Repeater system allows you to locate the SIRIUS antenna where it has the best view of the sky, and wirelessly redirect the signal to the rest of the house. Connect the SIRIUS antenna to the Echo transmitter and use one or multiple Echo antennas to receive the signal at the desired locations throughout the house. Broadcasts in the 900MHz band.

<http://www.directedsirius.com/products/echo.aspx>

E. Satellite TV distribution system



If you have satellite TV (DirecTV or Dish Network), this handy combiner/splitter package from SIRIUS (p/n 14255) runs both signals into your house using a single cable, simplifying your installation. The kit comes with an outdoor, weatherproof SIRIUS antenna with F-connector and a short F- to SMB adapter harness. You will need to make your own RG6/F cabling, or buy pre-made RG6/F cables to connect the SIRIUS antenna to the combiner, and to run from the splitter to the adapter harness.

<http://www.directedsirius.com/products/Product.aspx?ProductID=4085>

F. CATV distribution system:



The SIRIUS CATV Home Distribution Kit (p/n 14250) lets you send a SIRIUS satellite radio signal to any room in your home with a cable TV outlet. The kit includes an all-weather outdoor antenna, 2 diplexer signal splitters, and the necessary adapter to supply signal to a SIRIUS satellite radio. As with the Satellite TV Distribution System above, RG6/F cabling must be added to complete the antenna/combiner installation.

<http://www.directedsirius.com/products/Product.aspx?ProductID=4080>





IR Codes & Remote Controls:

CODES:

The following IR codes are accepted by the Polk Audio Designs SR-H1000 Tuner:

| SR-H1000 NEC Codes for Infrared Remote Controls | | |
|---|------------------|--------------------|
| NEC Custom Code: 0x01FE | | |
| Button | NEC Command Code | SR-H1000 |
| 0 | 0x1D | 0 |
| 1 | 0x10 | 1 |
| 2 | 0x11 | 2 |
| 3 | 0x12 | 3 |
| 4 | 0x14 | 4 |
| 5 | 0x15 | 5 |
| 6 | 0x16 | 6 |
| 7 | 0x18 | 7 |
| 8 | 0x19 | 8 |
| 9 | 0x1A | 9 |
| Select | 0x03 | Enter |
| Power (toggle) | 0x00 | Power (toggle) |
| Power On | 0x20 | Power On |
| Power Off | 0x21 | Power OFF |
| Menu | 0x08 | Menu |
| Memory | 0x0D | Memo |
| Preset Band | 0x0C | Band |
| Channel Up | 0x02 | Channel Up |
| Channel Down | 0x04 | Channel Down |
| Category Up | 0x05 | Category Up |
| Category Down | 0x06 | Category Down |
| Mute | 0x1C | Mute |
| Jump | 0x1E | Jump |
| Play/Pause | 0x0B | Play/Pause |
| Fast Forward | 0x07 | Fast Forward |
| Rewind | 0x0F | Rewind |
| Direct Tune | 0x09 | Direct Tuning |
| Scan Up | 0x22 | Scan channels up |
| Scan Down | 0x23 | Scan Channels Down |
| Tuner Select | 0x24 | Select a 2nd tuner |



II. 12 Volt Trigger:

The 12V Trigger Input allows your 12V-trigger-capable preamp or receiver to force the SR-H1000 Tuner to go from STANDBY mode (power button illuminated, front panel display off) into ON mode (power button not illuminated, front panel display on) or vice versa without the need to press the POWER button. To disable the 12V Trigger Input feature, simply do not connect anything to the 12V Trigger Input jack on the rear panel of the Tuner. To enable this feature, connect a 1/8" mono plug cable (tip +/ barrel -) from your preamp or receiver's 12V Trigger Output to your SR-H1000 Tuner's 12V Trigger Input jack on the rear panel. So long as the Tuner stays plugged into an active AC outlet, your SR-H1000 Tuner is ready to respond to power mode changes sent from your preamp or receiver.

III. Control features:

The SR-H1000 has two unique ports on the rear panel that allow the tuner to control a 2nd tuner and allow control systems to operate the SR-H1000 and the 2nd tuner*. These ports are labeled as RS-232 and SSP.

SSP port:

The SSP port is a connection for a 2nd tuner to be operated by the SR-H1000 in a similar manor to how a “Sirius Ready” receiver operates an outboard Sirius tuner. The SCH1 Sirius Connect Home Tuner (pictured below) is the tuner to be used to obtain the 2nd tuner source.

Alternatively, the second tuner can be a Dock and Play radio docked in the SIRIUS Universal Home Connect dock (p/n SUHC1). The dock is similar to the universal home dock but connects to the host A/V system with SIRIUS SSP cable. This allows use of a transportable radio for the second tuner source (provided it has the SIRIUS Universal Docking Connector) that can also be taken out of the home and used in a vehicle or other applications.



Model#: SC-H1



Sportster 5 in SUHC1 dock

RS-232 Overview:

The RS-232 port allows communication with the SR-H1000. All commands that are present on the front panel or the remote control of the SR-H1000 are available via the RS-232 port. In addition, the display data that is shown on the LCD display (or video output) is available over the RS-232 port.

Entering RS232 Operation mode

- 1) You must use a Null-Modem cable to connect to the RS-232 port.
- 2) Place the SR-H1000 into "Pass-through" mode by
 - a) Enter the Menu and select Sirius ID
 - b) Press BAND, DISPLAY, then press and hold 6 (you will see the diagnostic page)
 - c) Press BAND



The tuner will only stay in "Pass-through" mode until the power is cycled, a power cycle will exit this mode.

When the tuner is in RS232 Operation mode, the front panel controls & display are disabled and only communication over the RS-232 interface is possible.

If the control system you are working with (Crestron, Niles, AMX, Russound, etc) has firmware with the Sirius SSP protocol (the firmware that enables a device to be "Sirius Ready") then it can control the SR-H1000 with the same command sets. If the manufacturer of the control system you are using has not made arrangements with Sirius to provide the SSP protocol, they will need to contact Sirius directly and sign a non-disclosure agreement.
