



MOTOROLA

VIP2502W
Wireless IPTV Receiver

THIS IS AN EDITED VERSION OF THE ORIGINAL DOCUMENT



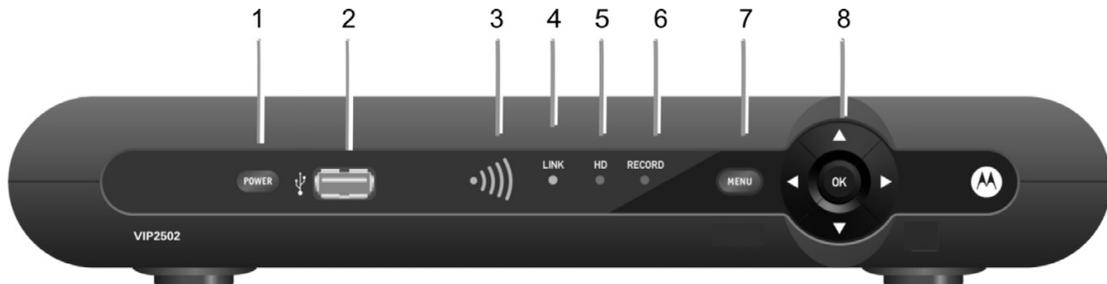
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Overview

Front Panel

The illustration below and the table following it describe the front-panel features, controls and indicator lights.

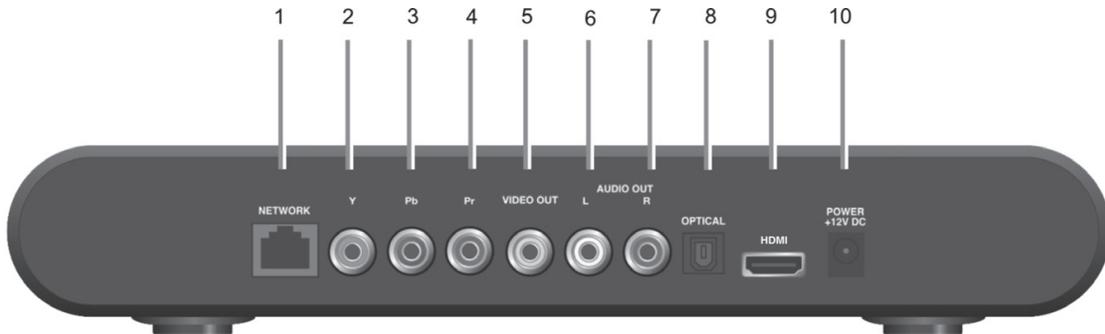


Key	Item	Function
1	POWER	Turns the Wireless Receiver on or off If held for ten (10) seconds or longer, restarts the wireless receiver Lights green when the wireless receiver is on
2	USB	USB 2.0 connector
3	SIGNAL QUALITY	The signal quality display lights green to indicate signal strength from your wireless Access Point device. From one to five bars are lit, depending on the strength of the received signal. When signal strength is low the bar may display as amber (weak) or red (unusable).
4	LINK	Lights green when receiving a video stream
5	HD	Lights blue when receiving video resolution of 720p or 1080i
6	RECORD	Lights red when a recording is in progress
7	MENU	Displays the VIP2502W menu on your TV screen
8	Up/Down arrow keys Left/Right arrow keys OK center key	Changes the channel (channel up/channel down) Use to navigate through on-screen program guide and menu Use to select programs or accept menu options

Overview

Rear Panel

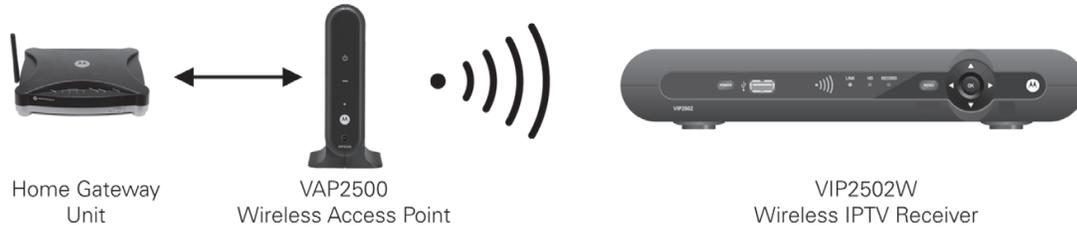
The VIP2502W rear panel features are described in the following table.



Key	Item	Function
1	NETWORK	Ethernet 10/100Base-T RJ-45 port
2	Y	RCA component video outputs to an HDTV
3	Pb	
4	Pr	
5	VIDEO OUT	RCA standard-definition composite video output to a TV, VCR or other device
6	L R	Left and right RCA stereo audio (analog) outputs
7	AUDIO OUT	
8	OPTICAL	Toslink (S/PDIF) digital audio output
9	HDMI™	Connects to a High-Definition TV or home theater receiver with an HDMI input (for a DVI input, use an HDMI-to-DVI adapter)
10	POWER +12V DC	Connector for the DC power adapter. Use only the adapter specified for VIP2502W.

Wireless Connection

As shown in the sketch below, programs and services for the VIP2502W are transmitted wirelessly over the air from a VAP2500 Access Point. The access point, in turn, is connected to your home network gateway device.



The VAP2500 Access Point is capable of transmitting separate programming streams to as many as five wireless IPTV Receivers. The Access Point uses Wi-Fi Protected Setup (WPS) protocols to identify, authorize and manage traffic to and from the client devices.

Register the TV Receiver with the Access Point

Before your TV Receiver can receive any programming, it must be registered as an authorized device with the Access Point. Run the WPS procedure as follows:

1. Install the VAP2500 Access Point as described in the VAP2500 Quick Install Guide.
2. Connect the cord from the DC Power Adapter to the POWER +12VDC connector on the rear of the VIP2500, and plug the adapter into an AC wall socket, and then connect the VIP2502W to your TV set as described starting on page 5.
3. The POWER button on the front of the VIP2502W lights green to indicate power is applied. Ensure power is applied to your TV as well.
4. Ensure that the VAP2500 is connected to your home gateway device and that power is applied to it.
5. When the TV Receiver starts up, it will look for a signal from an Access Point. When it detects the signal, a prompt will appear on your TV screen asking if you wish to connect.
6. On the front panel of the VIP2502W, touch **OK**.
7. Go to the Access Point, and then press and hold the WPS button on the front of the VAP for two seconds, then release to activate the WPS process. The Access Point's WPS LED will blink orange.
8. An icon appears on the screen, indicating that the connection sequence is in process. When three horizontal dots appear, the connection has been successful.
9. On the front panel of the VIP2502W, two or more bars on the signal strength indicator should light green. You have now established a secure wireless connection between the Access Point and your VIP2502W.



VAP2500
Access point

For further information on the VAP2500 Access Point, refer to your VAP2500 Quick Install Guide.

Connecting Your TV Receiver

This section describes alternative methods for connecting the VIP2502W to your home entertainment system.

Instructions and diagrams are included for connections to:

- High-Definition TV (HDTV)
- Home Theater Receiver–Audio
- Stereo TV

Before you move or change components on your entertainment system, always disconnect power from the wireless receiver.

Connection Options

The VIP2502W offers the following video outputs:

HDTV	HDMI or Component video
Standard	Composite Video Out

To determine the available inputs on your TV, check the manual supplied with the TV or on the TV itself. Use the following guidelines to determine the best connections for your system. Use one of the following:

Connector	Description
HDMI 	<p>HDMI offers higher video quality than component video. If your HDTV has an HDMI input, use the HDMI connector.</p> <p>HDMI provides both digital video and digital audio (including Dolby® Digital 5.1 Surround Sound). No other connections are necessary.</p> <p>If your HDTV has a DVI input, you can use an HDMI-to-DVI converter cable to connect to the VIP2502W HDMI connector. Use a cable with an HDMI connector on one end and a DVI connector on the other end. We do not recommend using an HDMI-to-DVI or DVI-to-HDMI adapter. Because DVI does not carry audio, a separate audio connection is required for a DVI TV. If your TV has an optical S/PDIF audio connection, use the OPTICAL connection. Otherwise, use the baseband AUDIO L and R connections.</p>
Component Video 	<p>The Y Pb Pr connectors provide component video, the most widely supported HDTV connection.</p> <p>Component video provides a High-Definition analog video signal. If your equipment supports an optical S/PDIF audio connection, use the OPTICAL connection. Otherwise, use the baseband AUDIO L and R connections.</p>

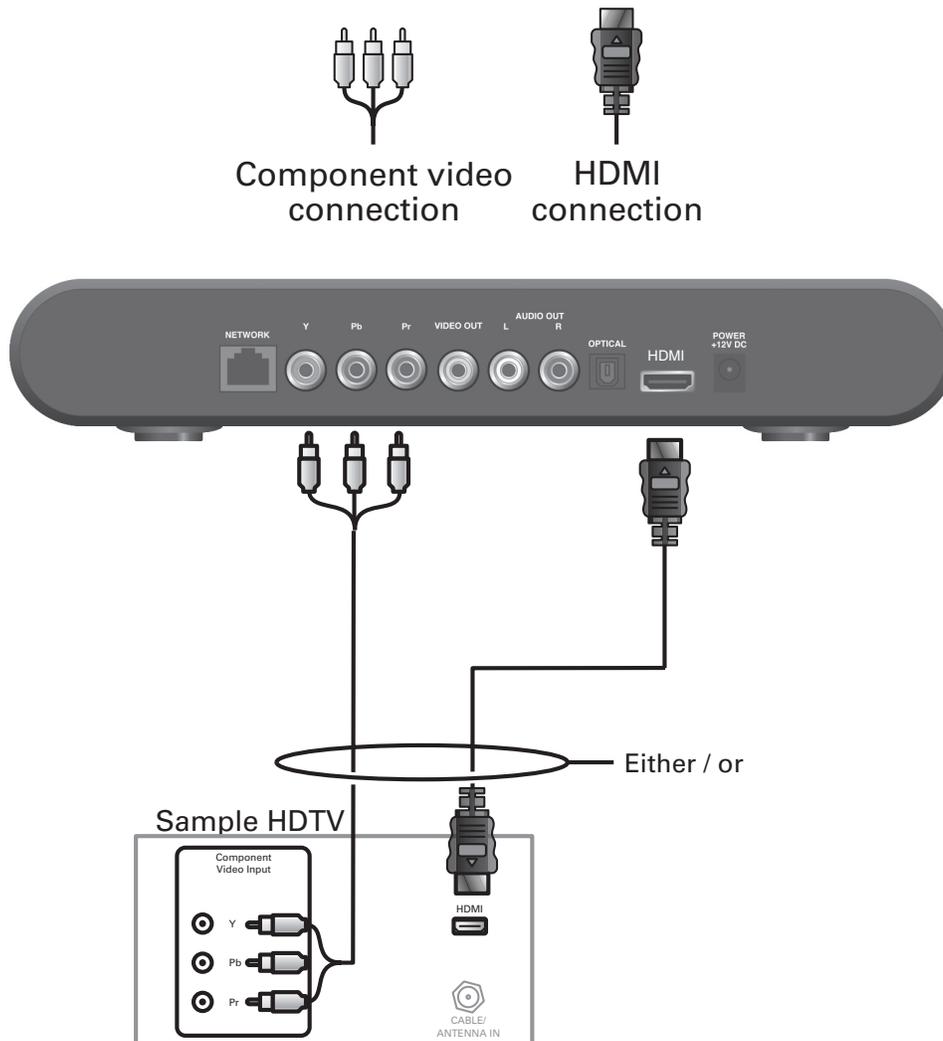
Connecting Your TV Receiver

Connector	Description
<p data-bbox="277 373 305 632">Standard-Definition</p> <p data-bbox="354 365 500 422">Composite Video</p> <p data-bbox="412 428 451 464">VIDEO OUT</p> 	<p data-bbox="537 365 1295 422">To connect a Standard Definition TV, use the composite VIDEO OUT connector.</p> <p data-bbox="537 443 1295 569">Composite video provides a Standard-Definition analog video signal. If your equipment supports an optical S/PDIF audio connection, use the OPTICAL connection. Otherwise, use the baseband AUDIO L and R connections.</p>

Common Cabling Examples

The following cabling diagrams illustrate common sample audio/video (A/V) connections. When connecting other components to your TV Receiver, refer to the other component installation manuals for additional connection information.

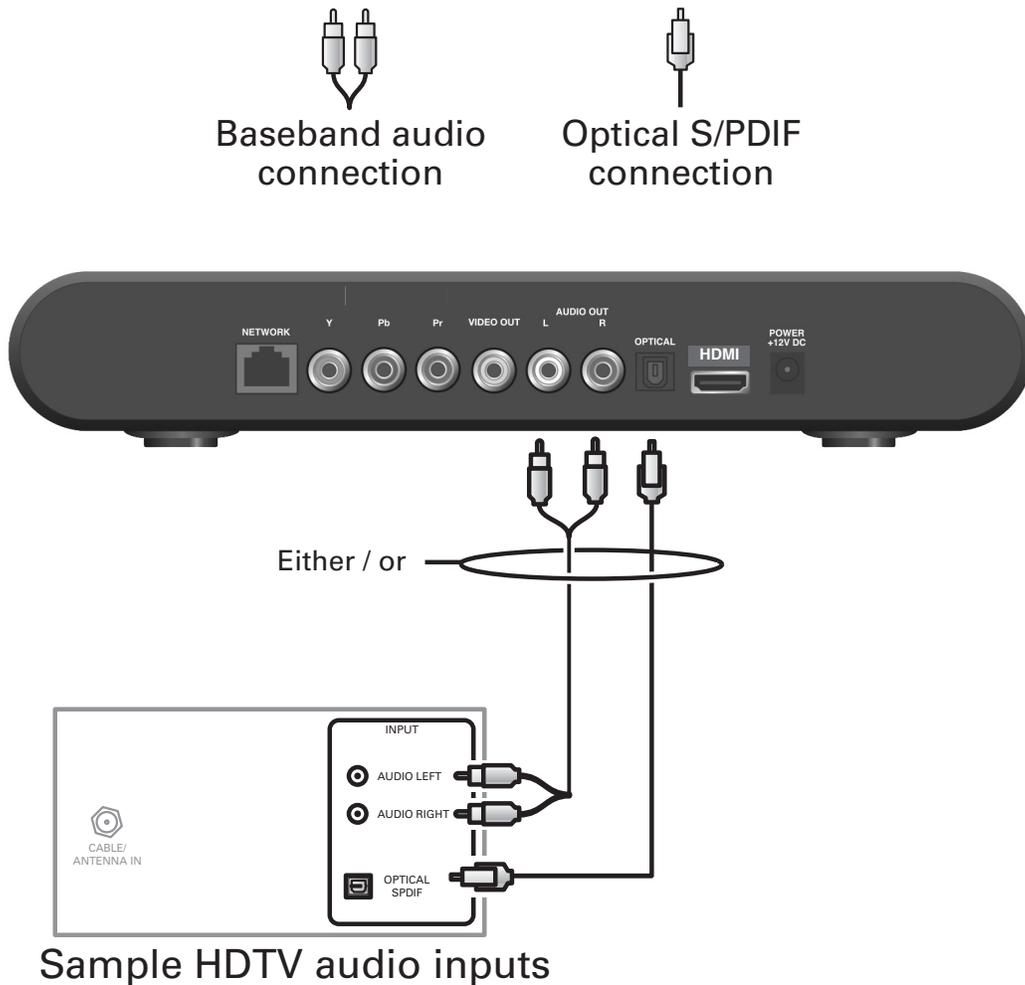
Connecting to an HDTV – Video Only



- If your HDTV has an HDMI input, connect an HDMI cable to the HDMI connector as shown. HDMI connection carries both video and audio signals.
- If your HDTV has a DVI input, you can use an HDMI-to-DVI converter to connect to the VIP2502W HDMI connector.
- If your HDTV has component video, connect component video cables to the Y, Pb, and Pr connectors as shown.

DVI and component video carry video signals only. To connect the audio, refer to the following page. To connect to a home theater receiver, refer to "Connecting Audio to a Home Theater Receiver – Audio Only."

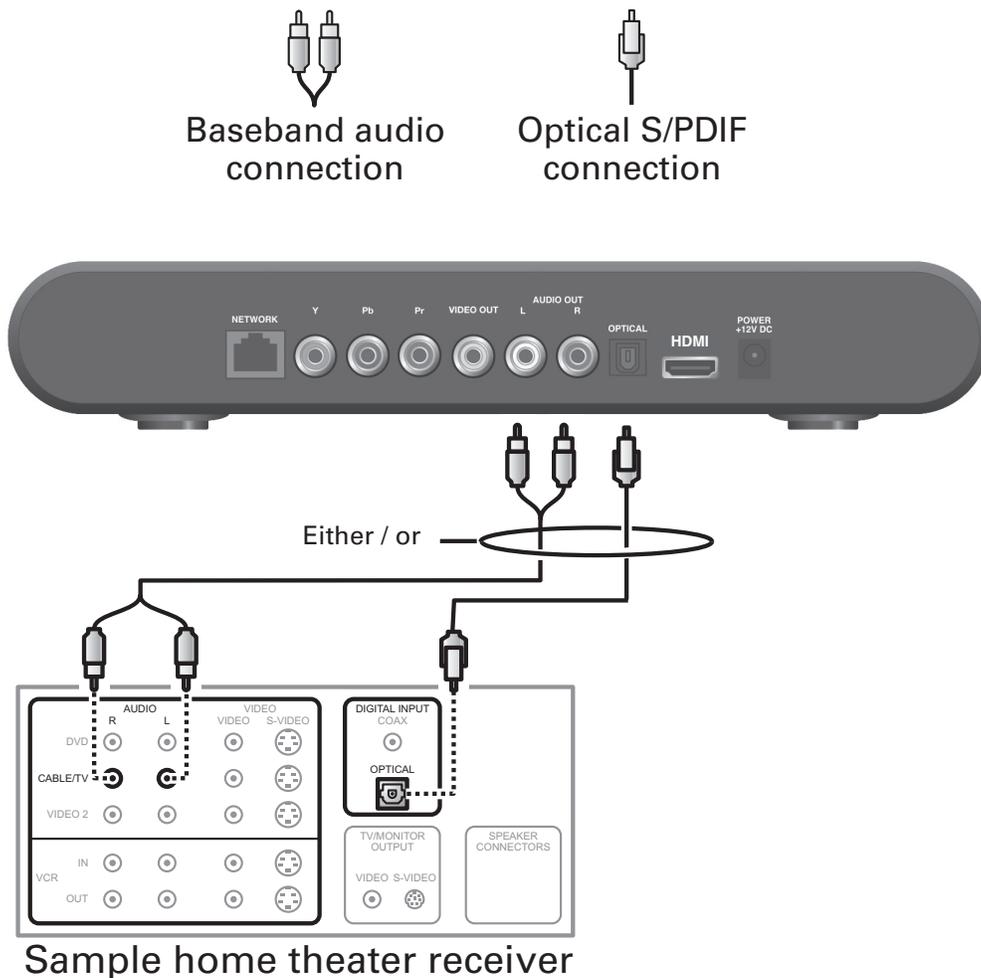
Connecting to an HDTV – Audio Only



If your equipment supports it, use the OPTICAL S/PDIF output. Otherwise, use the AUDIO OUT L and R connectors. In most cases, S/PDIF offers better audio quality, including support for Dolby Digital 5.1 Surround Sound.

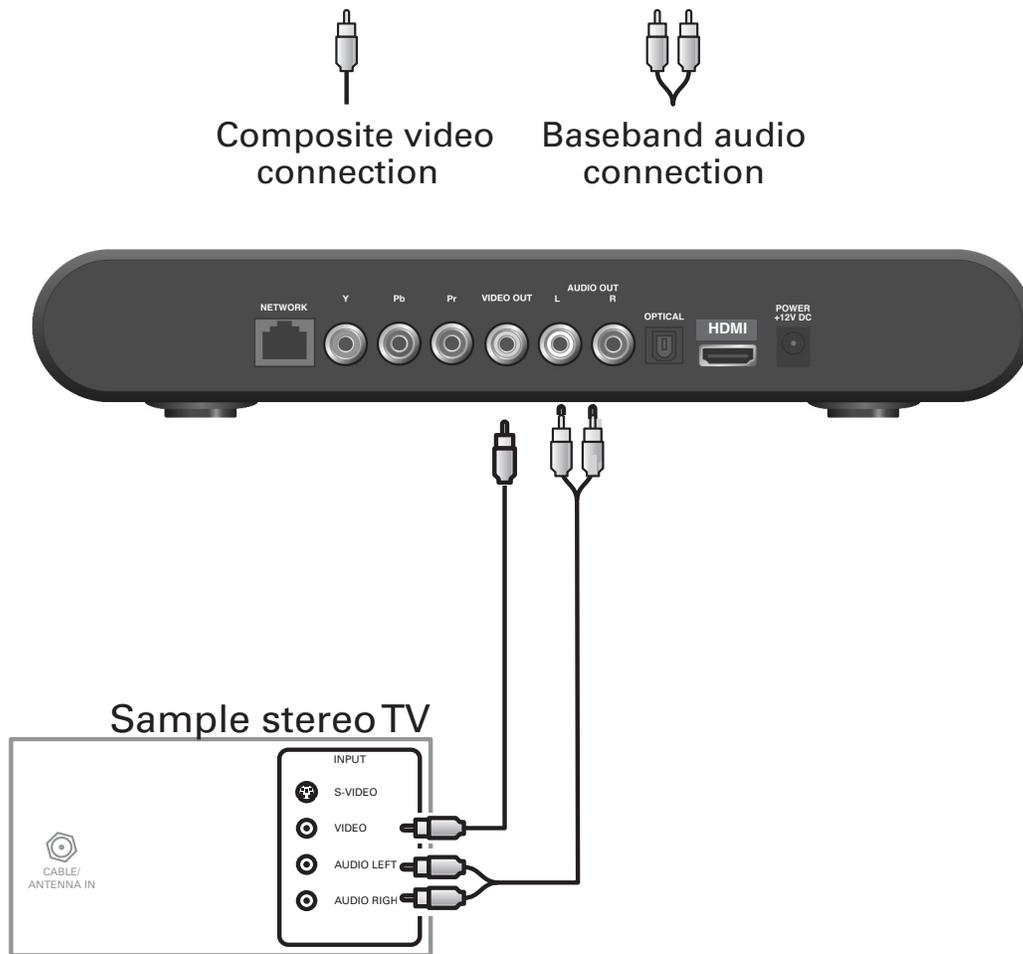
HDMI carries video and audio. If you connect your HDTV using HDMI, no additional audio connections to the TV are necessary.

Connecting Audio to a Home Theater Receiver



If your home theater receiver supports it, use the OPTICAL S/PDIF output. Otherwise, use the AUDIO OUT L and R connectors. In most cases, S/PDIF offers better audio quality, including support for Dolby Digital 5.1 Surround Sound.

Connecting to a Stereo TV



This video connection method does not support HD video. For more information, see "Connecting an HDTV – Video Only."

Troubleshooting

Before calling your service provider, review this troubleshooting guide. If the suggestions do not help you quickly solve a problem, contact your service provider.

Problem	Possible Solution
<p>The wireless receiver will not power on.</p>	<p>Verify that the power adapter is connected to the wireless receiver and an AC outlet. Unplug the wireless receiver from the outlet, plug it back in, and press the POWER button.</p> <p>If the wireless receiver is connected to a switched outlet on a wall or another unit, verify that the switch or unit is powered on. Unplug the wireless receiver from the AC outlet, plug it back in, and press the POWER button.</p> <p>Press the POWER button on the wireless receiver front panel instead of the remote control. The batteries in the remote control may be depleted.</p>
<p>The remote control does not work.</p>	<p>Verify that the TV is on.</p> <p>Verify that the remote control is on STB mode.</p> <p>Verify that there are no obstructions between the remote control and the wireless receiver. Aim the remote control directly at the wireless receiver front panel, not the TV or VCR.</p> <p>The angle between the remote control and the wireless receiver may be too large. Stand in front of the wireless receiver and not too far to either side.</p> <p>Press and release operation keys one at a time, firmly and deliberately.</p> <p>Try changing channels using the buttons on the wireless receiver front panel.</p> <p>Check the batteries in the remote control. Install new batteries if needed.</p>
<p>Video or Audio quality is poor or missing.</p>	<p>Verify the signal strength from the wireless Access Point. Signal strength is indicated by the number of illuminated bars on the front panel indicator.</p> <p>If signal strength is inadequate, try reorienting or relocating the Wireless TV receiver or the Access Point for improved reception.</p>

Troubleshooting

Problem	Possible Solution
There is no audio when viewing TV channels.	<p>Verify that the Mute button on the remote control has not been pressed. Press Mute on the remote control to restore sound.</p> <p>If the wireless receiver audio output is connected to the TV, verify that the Mute button on the TV has not been pressed.</p> <p>If the wireless receiver audio output is connected to a home theater receiver, verify that the home theater receiver is set to the appropriate input source and its Mute button has not been pressed.</p> <p>Verify that you have the correct cables for the audio ports.</p> <p>Verify that the audio cables are firmly connected between the wireless receiver and the audio playback device (TV, home theater receiver, etc).</p>
There is no audio from the center and/or surround speakers of a home theater receiver connected to the wireless receiver.	<p>Not all Dolby Digital programs feature full 5.1 Surround Sound. In some cases, the programs may only contain left and right stereo audio.</p> <p>Verify that the Optical S/PDIF cable is firmly connected to the wireless receiver and the home theater receiver.</p> <p>Verify that the home theater receiver is set to a Surround Sound audio mode (Dolby Digital, Dolby Pro Logic® II, Dolby Pro Logic).</p> <p>Verify that the home theater receiver is properly configured to work with all connected speakers.</p>

Regulatory Information

Federal Communications Commission Radio and Television Interference Statement for a Class 'B' Device

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in the residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the device and/or the antenna receiving the interference.
- Increase the separation between the equipment and the affected receiver
- Connect the equipment on a circuit different from the one the receiver is on
- Contact your service provider for help.

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For operation within 5.15 ~5.25GHz /5.25 ~5.35GHz/5.47 ~5.725GHz frequency range, it is restricted to indoor environment. The band from 5600-5650MHz will be disabled by the software during the manufacturing and cannot be changed by the end user. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.



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