

## HTIB WIRELESS SURROUND SPEAKER SYSTEM

# **RF-WHTIB**



**USER'S MANUAL** 

# **Safety Information**



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



#### CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK:

DO NOT REMOVE SCREWS, COVERS OR THE CABINENT.

NO USER SERVICING PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### **IMPORTANT SAFETY INSTRUCTIONS**

To reduce the risk of electrical shock, fire, etc.:

- 1. Read these instructions.
- 2. Keep these Instructions.
- 3. Heed all Warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with damp cloth.
- The ventilation shall not be impeded by covering the ventilation openings with items, such as newspapers, table clothes, curtains, etc.
- 8. Do not place naked flame sources, such as lighted candles on the appliance.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- 10. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 11. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus. If the power cord is damaged, it must be repaired by a qualified repairer.
- The mains plug is used as the disconnect device which shall remain readily operable.
- 13. Only use attachments/accessories specified by the manufacturer.
- 14. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



PORTABLE CART WARNING

- 15. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 16.Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 17. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

 Please read Rating Labels at the bottom of the Sender and the Receiver for power input and other safety information.

## **FCC**

This device complies with Part 15 of the FCC Rules Operation that is subject to following two conditions:

- This device may not cause harmful interference and.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

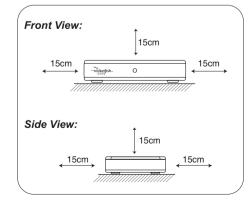
Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

## **Proper Ventilation**

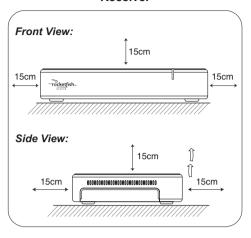
To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows: Front: No obstruction and open spacing.

Sides / Top / Back: No obstruction should be placed in the areas shown by the dimensions below.

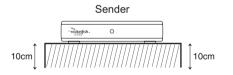
## Sender

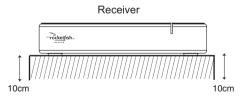


#### Receiver



Bottom: Place on a level surface. Maintain an adequate air path for ventilation by placing on the level surface with a height of 10 cm or more.





**Note:** In case you need to mount the Receiver onto the wall, install it against the wall as cool air can travel through the ventilation slots on the unit and come out from the top when it is wall-mounted.

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# Introduction

## **System Overview**

RF-WHTIB System uses a proprietary 2.4GHz wireless communication system providing a superior level of audio quality and interference resilience.

The System accepts speaker-level inputs, and so is compatible with a complete range of multi-channel home theater amplifier system or AV receivers.

The System transmits low-latency, high fidelity audio to a wall-powered stereo amplifier that retrofits existing satellite speakers that come with the HTIB system.

Listen to Hi-Fi quality stereo sound in any part of your home without the need to run expensive cables.

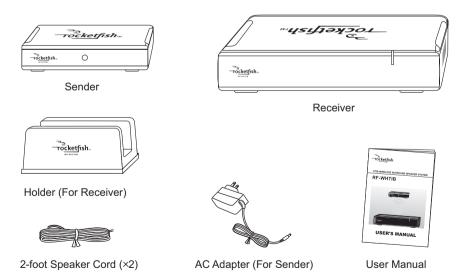
## **Main Features**

- 2.4GHz wireless sender and receiver
- Transmit high quality audio over a radio frequency communication link
- Compact size
- Hidden antennas
- Low power consumption

## **Packing Contents**

Examine the contents of the box for your RF-WHTIB System.

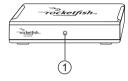
The box should contain:



## **Functional Overview (Sender)**

The Sender transmits audio signals over a 2.4GHz radio frequency carrier to the Receiver.

Front View:

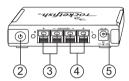


- 1. LED Indicator
- 2. Power On/Off Button
- 3. Right Speaker Input Terminals
- 4. Left Speaker Input Terminals
- 5. DC IN Jack

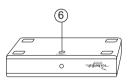
.2.

6. Connect Button for Pairing

Rear View:



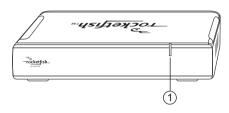
Bottom View:



## **Functional Overview (Receiver)**

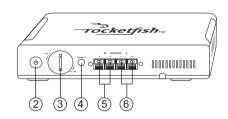
The Receiver receives 2.4GHz wireless Audio signals from the Sender.

Front View:

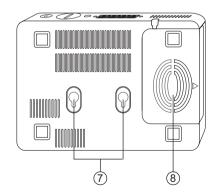


- 1. LED Indicator
- 2. Power On/Off Button
- 3. Volume Control Dial
- 4. Connect Button for Pairing
- 5. Right Surround Speaker Output Terminals
- 6. Left Surround Speaker Output Terminals
- 7. Hanging Holes for Wall-Mounting
- 8. Cable Storage Compartment

Rear View:



Bottom View:

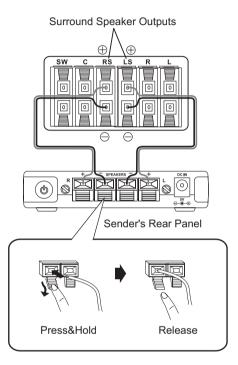


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# **Preparation of the Units**

## **Connecting the Sender**

#### A. Connecting the Sender with Amplifier



Caution: Turn off your amplifier while connecting the units.

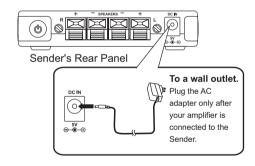
To connect the speaker cords between the speaker terminals of Sender and your amplifier. 1. Use the supplied speaker cords of 2 feet long.

- 2. Connect the Right speaker terminals of Sender to the Right Surround speaker terminals of your amplifier.
  - (Similarly, connect the Left speaker terminals of Sender to the Left Surround speaker terminal of your amplifier.)
- 3. Each speaker cord consists of two wires in different colors. Connect the Red (+) terminals with the exposed tips of the Black (with White line) wire, and connect the Black (-) terminals with the exposed tips of the Black wire.

#### Notes:

- · Make sure the exposed tips of each cord do not touch each other, and they are fully inserted into the terminals.
- The colors of the speaker cords may vary with different HTIB systems.
- · Make sure you connect your amplifier using the Surround Speaker Terminals only.

#### B. Connecting the Sender with AC Adapter



Caution: To avoid risk of fire, and to prevent

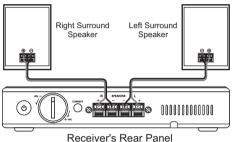
- Do not use AC adapters except for the supplied AC adapter.
- Do not use the supplied AC adapter for other equipment.

## **Connecting the Receiver**

## A. Connecting the Receiver with Surround Speakers

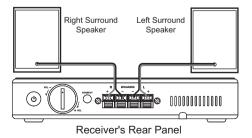
To connect the speaker cords between the speaker terminals of Receiver and your Surround Speakers.

Case 1 - If connecting to the Surround Speakers with speaker terminals



- 1. Use your surround speaker cords (not supplied).
- 2. Connect the Right speaker terminals of Receiver to the terminals of your Right Surround Speaker. (Similarly, connect the Left speaker terminals of Receiver to the terminals of your Left Surround Speaker.)
- 3. Connect the Red (+) and Black (-) terminals of Receiver with your surround speaker cords. Connect the other ends of the cords to the terminals of your surround speakers.
  - (Each speaker cord consists of two wires in different colors. Make sure to connect the same type (+/-) of terminals with the wire in one color.)

Case 2 - If connecting to the Surround Speakers with fixed speaker cords



1. Connect the fixed speaker cord of your Right Surround Speaker to the Right speaker terminals of Receiver.

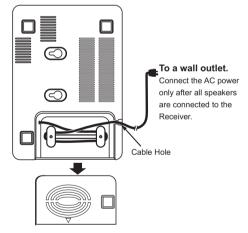
(Similarly, connect the fixed speaker cord of your Left Surround Speaker to the Left speaker terminals of Receiver.)

2. Connect the Red (+) and Black (-) terminals of Receiver with the fixed speaker cords respectively.

(Each speaker cord consists of two wires in different colors. Make sure to connect the same type (+/-) of terminals with the wire in one color.)

- · Make sure the exposed tips of each cord do not touch each other, and they are fully inserted into the terminals.
- For more details about connecting speakers, please see your speaker instruction book.

#### B. Connecting the Receiver with AC Power



- 1. Open cover of the cable storage compartment at the bottom of Receiver.
- 2. Unwrap the cable and extend it to the desired
- 3. Close the cover. Make sure the extended cable is not pinched and comes out from the cable hole as shown in the diagram.
- 4. Connect the AC power plug to a wall outlet.

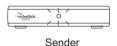
# **Basic Operations**

# Establishing Communication between the Sender and Receiver Units

## To power on the System.

a. Press the **t** button on the rear panel of Sender.

The LED indicator blinks to indicate that the Sender is plugged in and in Standby mode.



b. Press the **b** button on the rear panel of Receiver. The LED indicator blinks to indicate that the Receiver is plugged in and in Standby mode.



Receiver

c. The Sender and Receiver were pre-paired at the factory. When an active link is established between them, the LED indicators will be solid on and will not flash.

Note: In case the indicators continue to blink after 30 seconds, it means there is no active link between the Sender and Receiver. Try to connect the System manually using the CONNECT button. For more, please refer to "Troubleshooting" on page 8.

## To listen to the System.

- Make sure the System is powered on, and there is an active link between the Sender and Receiver.
- b. Turn on your amplifier. Play the audio or video source at your amplifier. Enjoy using the wireless audio system!

## To power off the System.

- a. Press and hold the power button for 2 seconds. The LED indicator will blink quickly first and then go off to indicate that the Sender is powered off.
- b. Press and hold the power button for 2 seconds. The LED indicator will blink quickly first and then go off to indicate that the Receiver is powered off.

**Note:** It is acceptable to leave both units powered on when not in use.

# **Additional Operations**

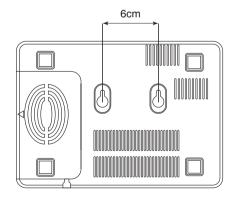
## **Placing the Receiver**

To cope with your different specific needs, the Receiver can provide you three ways of placement.

- Placing the Receiver horizontally on a level surface.
- 2. Placing the Receiver vertically with the supplied holder.



3. Wall Mounting the Receiver



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## **Adjusting the Volume**

After the System is set up, it is recommended that a 1 time adjustment of the Receiver volume is made.

The volume control on the Receiver unit is only used to adjust the balance of the volume between the front and rear speakers.

After the volume of Receiver is set up, always adjust the volume using the volume control on your amplifier whenever needed.

Note: The volume control on the rear panel of the Receiver is only used during the set-up process to establish the relative volume between the front and rear speakers.

# **Troubleshooting**

Please read this user manual carefully before using the System. Check this list for a possible troubleshooting solution before calling for service.

Problem	Solution
No Sound Output	Check the AC adapter is connected to the Sender and power cord is connected to the AC supply for the Receiver.     Check all the cables are connected correctly. Check to see if the LEDs illuminate on the front of both the Sender and Receiver units. If the LEDs are lit solidly then the communication is working correctly and all speaker wires and the amplifier operation should be checked. If the LEDs are flashing then follow through the "no communication between Sender and Receiver" section below.
Interference in the Sound	Move your Sender and Receiver slowly to find the best reception position for your System.     Shorten the distance between your Sender and Receiver. The maximum distance is 100 feet.     Check if there are any obvious radio frequency interference sources near your System.
No communication between Sender and Receiver	Check the power cords of the System are connected correctly.  Once the power buttons have been pressed to turn on both the Sender and Receiver units, the front panel LEDs should illuminate. If they are solidly on then a communication link has been successfully established between the units. If they are flashing on one, or both, units then press and hold the CONNECT button on either the Sender or Receiver for 2 seconds. (The Sender's CONNECT button is at its bottom and the Receiver's CONNECT button is on its rear panel.) This will put the unit into the "connection mode" for about 30 seconds. During this period the CONNECT button on the other unit must also be pressed for 2 seconds so that it will also enter the "connection mode". Then, the System proceeds with the connection process between the Sender and Receiver. During the "connection mode", the LED indicators blink at a faster rate. When an active link is established between the Sender and Receiver, the LED indicators will be solid on and will not flash.  Note: Try pressing the CONNECT buttons again if the LED indicators keep blinking after 30 seconds.

# **Specification**

## Sender

Audio Input: Stereo, Speaker-level

• Max audio input signal: 20V RMS into  $6.6k\Omega$ 

**Audio Output: Wireless** 

• Stereo, 16-bit, 48KHz, uncompressed

• Bit-rate: 1.465Mbps

• Raw wireless bit-rate: 2Mbps

Supply Voltage: 5V

## Receiver

## **Audio Input: Wireless**

- Stereo, 16-bit, 48KHz, uncompressed
- Wireless audio system performance
- Signal-to-Noise Ratio: 90dB
- Total Harmonic Distortion: 0.4% (at 1KHz, Output 2V RMS)

## Audio Output: High Efficiency Class D, Speaker-level

- Support 4 to 8 ohm speakers
- Audio output power: RMS: 2 x 25W per channel into 4 ohms (no more than 10% THD)

## **High Efficiency Class D Output**