



## Universal Wireless Rear Speaker Kit

**RF-WHTIB**

**User Guide**

# **Rocketfish RF-WHTIB Universal Wireless Rear Speaker Kit**

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## **Introduction**

Congratulations on your purchase of a Rocketfish RF-WHTIB Universal Wireless Rear Speaker Kit. Your RF-WHTIB represents the state of the art in wireless speaker kit design, and is designed for reliable and trouble-free performance.

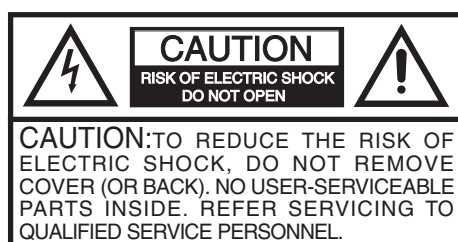
This manual explains how to correctly install, operate, and get the best performance from your universal wireless rear speaker kit. Read this user guide carefully before installing your system, then keep it near your system for quick reference.

Your RF-WHTIB Universal Wireless Rear Speaker Kit uses a proprietary 2.4 GHz wireless communication system to transmit low-latency, high fidelity audio to a stereo amplifier, providing a superior level of audio quality and resistance to interference.



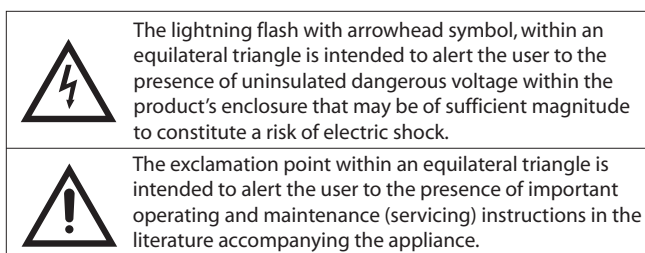
The system accepts speaker-level inputs, and is compatible with a complete range of multichannel home theater amplifier systems or AV receivers.

## Safety information



### WARNING:

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



## Important Safety Instructions

- 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 dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) 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 are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by 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  
(Symbol provided by RETAC)



13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel.

Servicing is required when the apparatus has been damaged in any way, such as power-supply 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.

## Additional safety information

- 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.
- The AC power plug or an appliance coupler is used as the disconnect device. This disconnect device shall remain readily operable.
- Read the Rating Labels on the bottom of the sender and receiver for power input and other safety information.



## Features

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

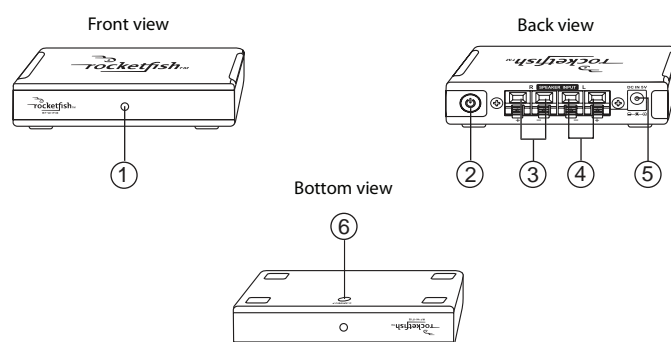
## Package contents

Examine the contents of the box for your RF-WHTIB Universal Wireless Rear Speaker Kit. The box should contain:

- A sender unit
- A receiver unit
- A holder for the receiver unit
- An AC power adapter (for the sender unit)
- Two 2-foot speaker wires
- A User Guide

## Sender unit

The sender transmits audio signals over a 2.4 GHz radio frequency carrier to the receiver.

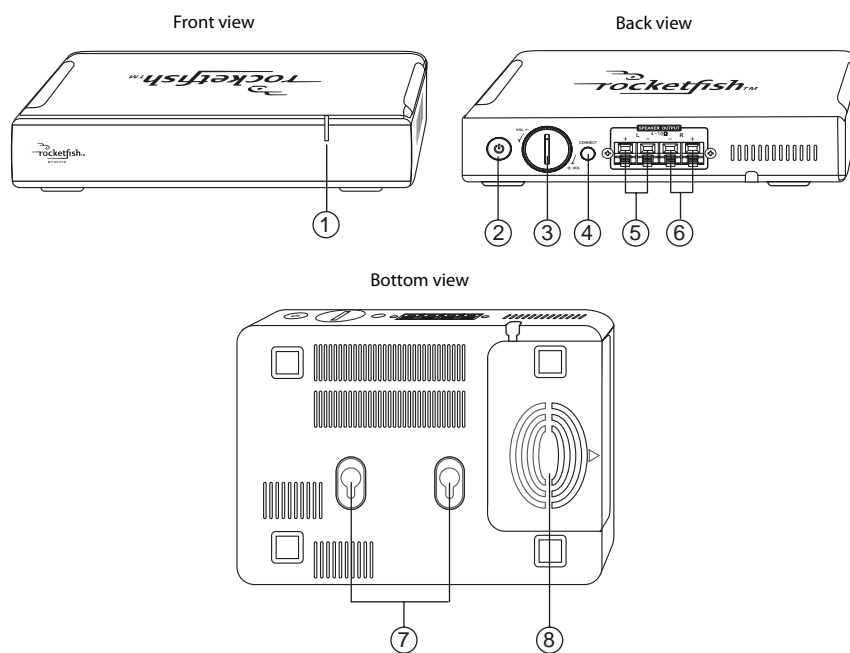


#	Feature
1	Power indicator LED
2	Power button
3	Right speaker input terminals
4	Left speaker input terminals
5	DC IN jack
6	Manual connect button



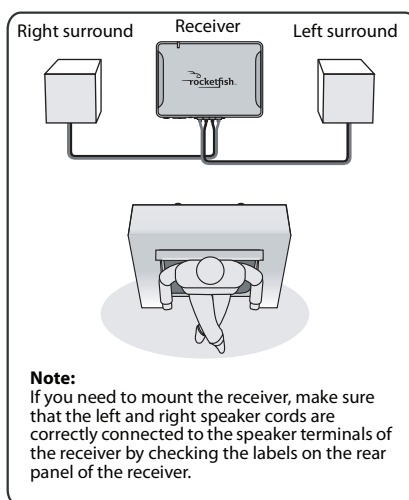
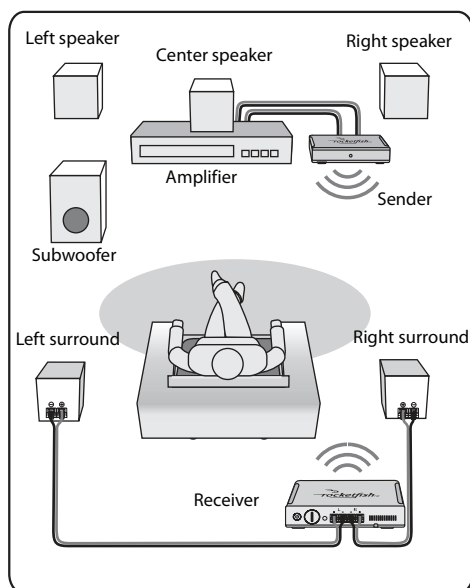
## Receiver unit

The receiver unit receives the 2.4 GHz audio signals from the sender.



#	Feature
1	Power indicator LED
2	Power button
3	Volume control knob
4	Manual connect button
5	Left surround sound speaker output terminal
6	Right surround sound speaker output terminal
7	Hanging holes for wall mounting the receiver (by using 3 x 15 mm self-tapping screws)
8	Cable storage compartment

## Setting up your universal wireless rear speaker kit

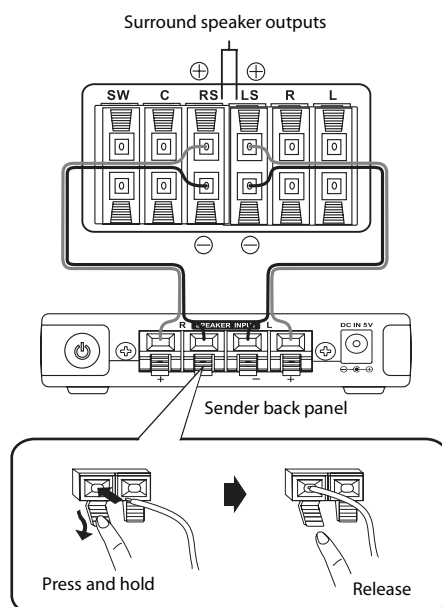






## Connecting the sender

### Connecting the sender to the amplifier



**Caution:** Turn off your amplifier while connecting the units.

#### To connect the amplifier to the sender:

- 1 Using the 2-foot speaker cords (provided), connect the right surround speaker terminals of your amplifier to the right speaker terminals of the sender by connecting the red wire to the Red (+) terminals, and the black wire to the Black (-) terminals.
- 2 Connect the left surround speaker terminals of the amplifier the same way.

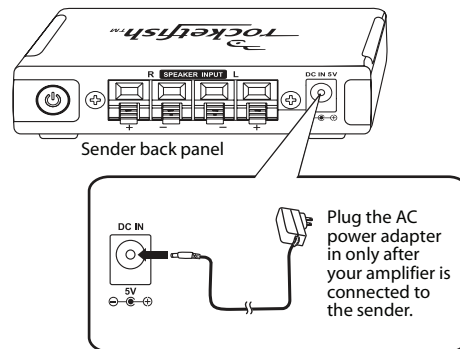
#### Notes:

Make sure the exposed tips of each cord do not touch each other, and that they are fully inserted into the terminals.

Speaker wire colors may vary with different speaker systems.

Make sure you connect your amplifier using the surround speaker terminals only.

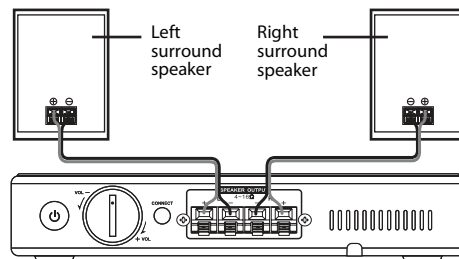
## Connecting the sender to the AC power adapter



**Caution:** To avoid risk of fire, and to prevent damage, only use the AC adapter supplied with your universal wireless rear speaker kit.

## Connecting the receiver

### Connecting the receiver to your surround speakers



#### To connect the surround speakers to the receiver:

- 1 Connect the right speaker to the right speaker terminals of the receiver, and the left speaker to the left speaker terminals.
- 2 If the speakers have wires instead of terminals, connect the positive (+) wire from the right speaker to the Red (+) terminal for the right speaker on the receiver and the negative (-) wire from the right speaker to the Black (-) terminal for the right speaker on the receiver.
- 3 Connect the left speaker the same way.

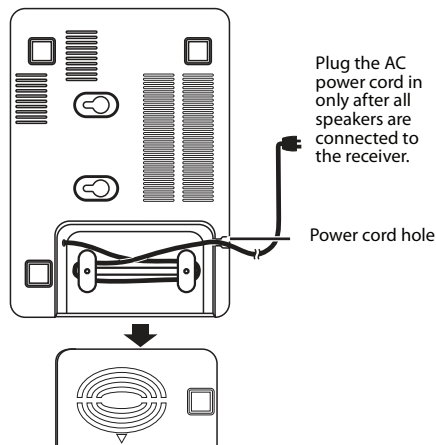


**Notes:**

*For speaker wires that have proprietary connectors, you may strip the end of the wires to allow connection to the receiver. However, check with the speaker manufacturer before doing this, as it may void the warranty.*

*Make sure the exposed tips of each cord do not touch each other, and that they are fully inserted into the terminals.*

**Connecting the receiver to an AC power outlet**

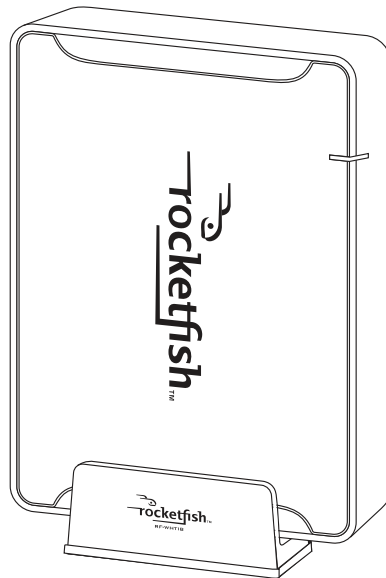


**To connect the receiver to an AC power outlet:**

- 1 Open cover of the cable storage compartment on the bottom of receiver, then unwrap the cable and extend it to the desired length.
- 2 Close the cover and make sure that the extended cable is not pinched and comes out from the power cord hole as shown in the diagram.
- 3 Plug the AC power plug into a power outlet.

## Placing the sender and receiver

To avoid risk of electric shock and fire, and to prevent damage, locate the sender and receiver units with no obstructions in front. The receiver can be placed horizontally on a level surface, vertically in the holder (provided), or mounted on a wall, using the mounting holes on the bottom.



**Warning:**

*This stand is intended for the RF-WHTIB receiver only. Use with other equipment can result in instability and may cause injury.*

**Note:**


*If you need to mount the receiver on a wall, install it against the wall so that cool air can travel through the ventilation slots in the unit and come out the top.*



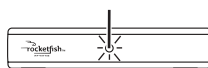
## Using your universal wireless rear speaker kit


### Establishing communications between the sender and receiver

#### To turn on the System:

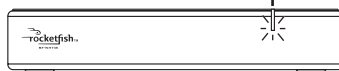
- 1 Press the  (power) button on the back panel of the sender. The LED indicator blinks to indicate that the sender is plugged in and in Standby mode.

Blinking LED



- 2 Press the  (power) button on the back panel of the receiver. The LED indicator blinks to indicate that the receiver is plugged in and in Standby mode.

Blinking LED



The sender and receiver were pre-paired at the factory. When an active link is established between them, the LED indicators turn solid.

**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 information, see "Troubleshooting" on page 15.

### Listening to the system

#### To listen to the system:

- 1 Power on the system. Make sure that there is an active link between the sender and receiver.
- 2 Turn on your amplifier, then play the audio or video source through your amplifier.



The volume control on the receiver is only used to adjust the balance of the volume between the front and rear speakers. After the system is set up, we recommend that you adjust the volume balance one time.

***To adjust the volume balance:***

- 1 Turn on the sender and receiver, then turn on the amplifier and adjust it to your normal listening level.
- 2 Adjust the volume on the receiver, using the volume control knob, to balance the front and rear speakers.

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

***To turn off the system:***

- 1 Press and hold the  (power) button on the sender for two seconds. The LED indicator will blink quickly first and then go off to indicate that the sender is turned off.
- 2 Press and hold the  (power) button on the receiver for two seconds. The LED indicator will blink quickly first and then go off to indicate that the receiver is turned off.

***Note:***

*You can leave both units on when not in use.*

**Optimizing your surround sound**

The RocketFish Universal Wireless Rear Speaker Kit uses state-of-the-art 2.4 GHz technology to digitally send audio data from the sender to the receiver. Wireless links create a small latency between the sender and receiver, and many A/V receivers let you adjust the delay between the various speakers in your surround system. To optimize your system when tuning your speaker setup, we suggest that you shorten the delay to the rear speakers by 15-20 ms.



## Troubleshooting

Please read this User Guide carefully before using your universal wireless rear speaker kit. Check this list for a possible troubleshooting solution before calling for service.

Problem	Solution
No sound	<ul style="list-style-type: none"><li>• Make sure that the AC adapter is connected to the sender and the power cord is connected to the AC supply for the receiver.</li><li>• Make sure that 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, the communication is working correctly and all speaker wires and the amplifier operation should be checked. If the LEDs are flashing, refer to the "No communication between the sender and receiver" section below.</li></ul>
Sound interference	<ul style="list-style-type: none"><li>• Move the sender and receiver slowly to find the best reception position for your system.</li><li>• Shorten the distance between your sender and receiver. The maximum distance is 100 feet.</li><li>• Check to determine if there are any obvious radio frequency interference sources near your system.</li></ul>
No communication between the sender and receiver	<ul style="list-style-type: none"><li>• Make sure that the power cords are connected correctly.</li><li>• After the power buttons have been pressed to turn on both the sender and receiver, the front panel LEDs should light. If they are solidly on, a communication link has been successfully established between the units. If they are flashing on one or both units, press and hold the <b>CONNECT</b> button on either the sender or receiver for two seconds. (The sender's <b>CONNECT</b> button is on the bottom and the receiver's <b>CONNECT</b> button is on the back panel.) This will put the unit into the "connection mode" for about 30 seconds. During this period the <b>CONNECT</b> button on the other unit must also be pressed for two seconds so that it will also enter "connection mode." The system proceeds with the connection process between the sender and receiver. While in "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 blink.</li></ul> <p><b>Note:</b> Try pressing the <b>CONNECT</b> buttons again if the LED indicators keep blinking after 30 seconds.</p>

## Specifications

### Sender

<b>Audio Input: Stereo, speaker-level</b>	<ul style="list-style-type: none"> <li>Maximum audio input signal: 10 V RMS into 6.6 Kohms</li> </ul>
<b>Audio Output: Wireless</b>	<ul style="list-style-type: none"> <li>Stereo, 16-bit, 48KHz uncompressed</li> <li>Bit-rate: 1.465Mbps</li> <li>Raw wireless bit-rate: 2Mbps</li> </ul>
<b>Supply voltage</b>	<ul style="list-style-type: none"> <li>5 V</li> </ul>
<b>Transmission Delay</b>	<ul style="list-style-type: none"> <li>15-20 ms</li> </ul>

### Receiver

<b>Audio Input: Wireless</b>	<ul style="list-style-type: none"> <li>Stereo, 16-bit, 48KHz, uncompressed</li> <li>Wireless audio system performance</li> <li>Signal-to-Noise Ratio: 87dB</li> <li>Total harmonic distortion: 0.4% (at 1 KHz, Output 2V RMS)</li> </ul>
<b>Audio Output: High Efficiency ClassD, Speaker-level</b>	<ul style="list-style-type: none"> <li>Supports 4 to 16 ohm speakers</li> <li>Audio output power: 2 X 25 W (RMS) into 4 ohms (no more than 10% THD)</li> </ul>
<b>Transmission Delay</b>	<ul style="list-style-type: none"> <li>15-20 ms</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>AC 120V ~ 60Hz</li> </ul>
<b>Power Consumption</b>	<ul style="list-style-type: none"> <li>15W</li> </ul>

## Legal notices

### FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.





### **FCC warning**

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

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For service and support call (800) 305-2204.





## 1 Year Limited Warranty

Rocketfish Products ("Rocketfish") warrants to you, the original purchaser of this new **RF- WHTIB Universal Wireless Rear Speaker Kit** ("Product"), that the Product shall be free of defects in the original manufacture of the material or workmanship for one (1) year from the purchase of the Product ("Warranty Period"). This Product must be purchased from an authorized dealer of Rocketfish brand products and packaged with this warranty statement. This warranty does not cover refurbished Product. If you notify Rocketfish during the Warranty Period of a defect covered by this warranty that requires service, terms of this warranty apply.

### HOW LONG DOES THE COVERAGE LAST?

The Warranty Period lasts for one year (365 days), beginning on the date you purchased the Product. The purchase date is printed on the receipt you received with the product.

### WHAT DOES THIS WARRANTY COVER?

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Rocketfish repair center or store personnel, Rocketfish will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Rocketfish and are not returned to you. If service of Products and parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Rocketfish Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

### HOW TO OBTAIN WARRANTY SERVICE?

If you purchased the Product at a retail store location, take your original receipt and the Product to the store you purchased it from. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging. If you purchased the Product from an online web site, mail your original receipt and the Product to the address listed on the web site. Make sure that you put the Product in its original packaging or packaging that provides the same amount of protection as the original packaging.

### WHERE IS THE WARRANTY VALID?

This warranty is valid only to the original purchaser of the Product in the United States and Canada.

### WHAT DOES THE WARRANTY NOT COVER?

This warranty does not cover:

- Customer instruction
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to acts of God, such as lightning strikes
- Accident
- Misuse
- Abuse

- Negligence
- Commercial use
- Modification of any part of the Product, including the antenna

This warranty also does not cover:

- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage supply
- Attempted repair by anyone other than a facility authorized by Rocketfish to service the Product
- Products sold as is or with all faults
- Consumables, such as fuses or batteries
- Products where the factory applied serial number has been altered or removed

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. ROCKETFISH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. ROCKETFISH PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

Contact Rocketfish:

For customer service please call 1-800-620-2790

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