

## User Manual Wireless Receiver Avantree (RC500)



Scan me for warranty registration

[www.avantree.com](http://www.avantree.com)

### Contents

1. Features & aptX low latency	1
2. Package Contents	3
3. Product Overview & Basic Operation	4
4. LED Status Indications	6
5. Power on & Set up	8
6. Pair & Connect RC500 with your first device (Phone/PC/ Tablet)	8
7. Pair & Connect RC500 with your second device	9
8. Reconnect	10
9. Use two RC500 with True Wireless Stereo (TWS)	10
9.1. What is TWS?	10
9.2. TWS set up	12
9.3. TWS turn on & connect	12
10. Clear pairing history	13
11. Product Specifications	13
12. Troubleshooting	14
13. Warnings	15

### 1. Features & aptX low latency

The Avantree RC500 is a wireless long range audio receiver incorporating the latest "aptX low-latency" technology for CD-like quality sound with virtually no audio delay. Full voice menu prompts and easy to read status indicators make the RC500 simple to set up and use. The RC500 supports True Wireless Stereo (TWS) - purchase two RC500's to stream audio to 2 separate sets of speakers - one set will stream R channel audio and the other L channel.

- 1 -

### aptX® Low Latency

To take full advantage of the aptX Low Latency codec (aptX-LL), the paired device must also support aptX-LL. If the paired device only supports standard aptX, or SBC (low-complexity subband codec), then the connection will default to those codecs.

#### Audio delay when paired with different phones / transmitters

phone/ transmitter support-	The audio delay will be
aptX Low Latency codec	Around 40ms
aptX™ codec	Around 70ms
SBC codec (most standard Bluetooth audio)	Around 220ms

- 2 -

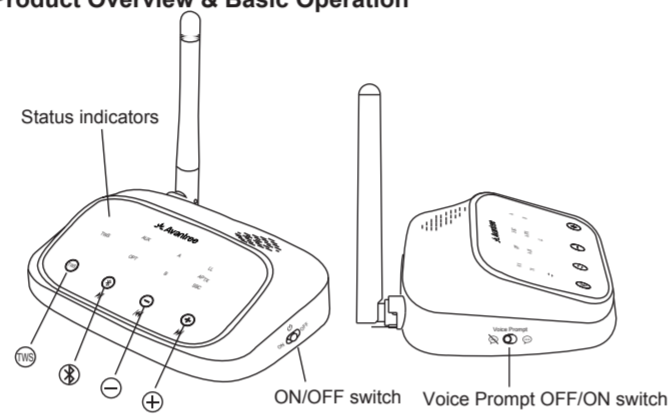
### 2. Package Contents:

- A. Avantree RC500
- B. Micro-USB cable
- C. Optical cable
- D. 3.5mm audio cable
- E. 3.5mm female to RCA male cable
- F. User manual & Quick user guide



- 3 -

### 3. Product Overview & Basic Operation

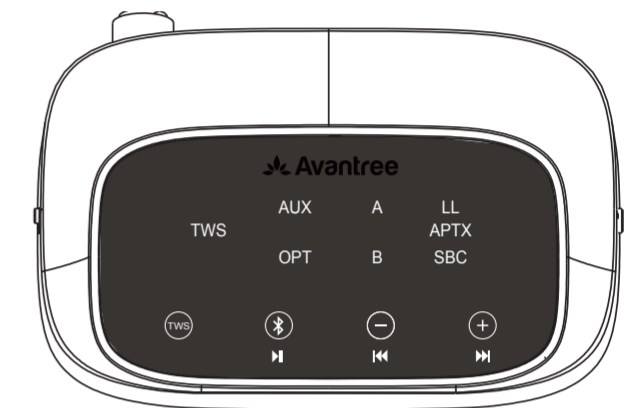


- 4 -

Button	Function	Operation
Power switch	Power on	Slide to "on" to turn on the device
	Power off	Slide to "off" to turn off the device
Voice prompt switch	Voice prompt on	Slide to "on" to turn on voice prompt
	Voice prompt off	Slide to "off" to turn off voice prompt
Bluetooth button	Enter pairing mode	Press & hold for 2 seconds
TWS button	TWS on	Press & hold for 2 seconds
	TWS off	Press & hold for 2 seconds
Volume down(-)	Volume down/	Short press once to reduce volume
	Previous track	Press and hold 2s for previous track
Volume Up(+)	Volume up	Short press once to increase volume
	Next track	Press and hold 2s for next track
+ / -	Clear pairing history	Press and hold +&- for 5 seconds (both bluetooth and TWS paired history are cleared)
Status indicators	Indicate status	Indicate status (details see table below)

- 5 -

### 4. LED Status Indicators



- 6 -

Indicator	Status
TWS	Flashing <b>WHITE</b> means RC500 in true wireless stereo pairing mode
OPT	Optical input selected (When an optical cable is plugged in and nothing into the 3.5mm audio jack)
AUX	AUX input selected (when 3.5mm audio cable is plugged in)
SBC	RC500 is using SBC codec
APT X	RC500 is using aptX codec
LL	RC500 is using aptX low latency codec
A	RC500 is connecting A device, Flash <b>WHITE</b> means RC500 is in pairing mode
B	RC500 is connecting B device, Flash <b>WHITE</b> means RC500 is in pairing mode

- 7 -

### 5. Power on & Set up

- Step 1.** Connect the RC500 to a power source (or compatible USB charger with 5V/500mA-2A output) via the supplied micro USB cable.
- Step 2.** Connect your speaker to the RC500 using one of the audio cables (optical or AUX/RCA).
- Step 3.** Slide power switch to "ON" position.

### 6. Pair & Connect RC500 with your first device (Phone/PC/ Tablet).

- Step 1.** Enter the RC 500 into **pairing mode** (on first use it will automatically enter pairing mode and the device "A" LED will flash **WHITE** quickly).
- Step 2.** Turn on the Bluetooth on your phone or other device and pair/connect with "Avantree RC500"

- 8 -

- Step 3.** Once connected, you will hear "Connected" from the RC500 and the device "A" LED will turn on.
- Note:** If the RC500 fails to pair, press and hold the button for 2 seconds to enter pairing mode.

### 7. Pair & Connect RC500 with your second device

- Step 1.** Enter the RC500 into pairing mode again; press and hold the button for 2 seconds until the device "B" LED flashes **WHITE** quickly
- Step 2.** Turn on Bluetooth on the second device and pair/connect with "Avantree RC500".
- Step 3.** Once connected, you will see both LEDs A and B on.
- Note:** Only one device can play music at any time. You must stop the music on one device to play on the other.

- 9 -

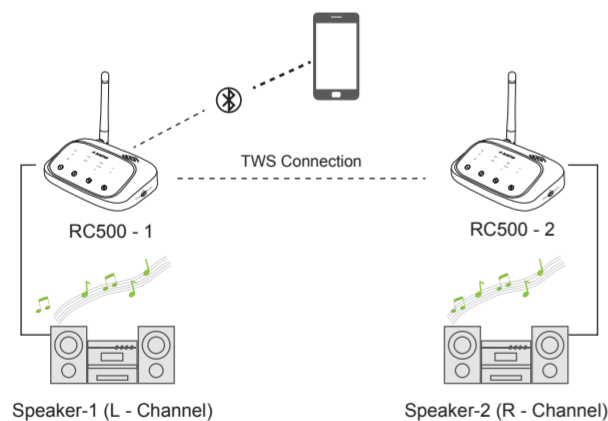
### 8. Reconnect

When the RC500 is powered on, it will automatically reconnect with the last connected device. The device "A" LED will flash once every 2 seconds. If it fails to reconnect after 30 seconds, it will enter pairing mode.

### 9. Use two RC500 with True Wireless Stereo (TWS)

- (Note:** To use TWS, you need two RC500 devices and two speakers)
- 9.1. What is TWS?**  
TWS enables you to use 2 sets of RC500 and speakers for streaming stereo music. This may be useful for a studio environment where you need to cover a large area and don't want wires running between two RC500 units. When using two RC500's as a pair of stereo speakers, the source device (e.g. your phone) connects to the first RC500 (RC500-1) which adopts the L channel audio. The RC500-1 then connects directly with the second RC500 (RC500-2) and streams the R channel audio to it.

- 10 -



- 11 -

### 9.2. TWS set up

- Step 1.** Connect RC500-1 to Speaker 1, then connect RC500-2 to Speaker 2
- Step 2.** Turn on RC500-1, pair with your phone as above. By default Speaker 1 becomes the Left audio channel. Speaker 2 becomes the Right channel.

### 9.3. TWS turn on & connect

- Step 1.** Press and hold the TWS button for 2 seconds on both RC500-1 and RC500-2 to enter TWS pairing mode (this establishes the relationship between the two speakers). The TWS LED flashes **WHITE** quickly and you will hear "True wireless stereo on".
- Step 2.** Once successfully connected, the TWS LED turns steady and you will hear "Left, right channel connected".
- Step 3.** You can now stream stereo music from the two speakers.

- NOTE:** 1) The two RC500 will not reconnect via TWS, you need to press and hold TWS button for 2 seconds on both RC500's to use this function again.
- 2) **How to Turn TWS on /off?** Press and hold TWS button for 2 seconds, you will hear "True wireless stereo on" or "Turn wireless stereo off"

- 12 -

### 10. Clear pairing history

Turn on the RC500, press and hold both "+" and "-" for 5 seconds until you hear a voice prompt "Pairing history cleared". All LEDs turn off then the RC500 will turn on again. This operation clears both the Bluetooth and the TWS pairing history.

### 11. Product Specifications

- BT version: 4.2
- Supports profiles: A2DP, AVRCP
- Audio codec: aptX low latency, aptX, SBC
- Operational range: Class I, up to 164FT/50M
- Operating temperature: -10 C ~ 45 C
- Storage temperature: -20 C ~ 60 C
- Product size: 114\*75\*30mm
- Product weight: 82g
- Output Impedance :10K
- Output sensitivity:1000MV

- 13 -

### 12. Troubleshooting

- 1) Why do I experience audio lag when watching TV or movies?**  
Make sure the transmitting device supports aptX low latency (visit [www.aptx.com](http://www.aptx.com) for a list of supported devices). Alternatively you can choose either the Avantree Oasis or our Priva III - both support aptX low latency.
- 2) The range doesn't seem far enough or the audio sometimes cuts out. What can I do?**
  - Please ensure there is a clear line-of-sight between the RC500 and your audio source (phone) as Bluetooth cannot transmit through walls or other obstacles.
  - Wi-Fi routers, wireless speakers, cordless phones and other wireless devices can affect Bluetooth reception. Please relocate your RC500 so it is not too close to such devices.
  - To get the full 164FT/50M range, the transmitting device must also be a "class 1" rated Bluetooth device like the RC500.

- 14 -

### 3) The RC500 is connected but I cannot hear any audio. What's wrong?

- When both a 3.5mm audio cable and an optical cable are plugged in, the AUX input (i.e. 3.5mm audio) will take priority. So if you want use the device with optical connection, please remove aux cable.
- If there is no sound from the speaker when connected to the PC, please ensure that you set the RC500 as the default playback device in your computer speaker settings. (Right-click speaker icon on taskbar -> playback devices -> select RC500 and set as default).

### 13. Warnings

#### Avantree Technology CO.,Ltd.

The 4th Floor, Yurpeng Building, NO.1019 Jiabin Rd, Luohu District, Shenzhen, Guangdong, China.

- 15 -

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** 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 a 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 this 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 or more of the following measures:  
-- Reorient or relocate the receiving antenna.

- 16 -

- Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- FCC ID: 2A1TF-BTRC-500
- To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

Qualcomm aptX is a product of Qualcomm Technologies International, Ltd. Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries, used with permission. aptX is a trademark of Qualcomm Technologies International, Ltd., registered in the United States and other countries, used with permission



Dispose of the packaging and this product in accordance with the latest provisions.



[www.avantree.com](http://www.avantree.com)  
[support@avantree.com](mailto:support@avantree.com)

Z-PKMN-RC500-V0

- 17 -