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› Avantree TC419 Long Range Bluetooth 5.0 Transmitter Receiver for TV & PC Audio, Home Stereo Speakers, aptX Low Latency Wireless Adapter for Headphones, Digital Optical 3.5mm AUX RCA User Manual

## Avantree BTTC-419-GRY

# Avantree TC419 Bluetooth 5.0 Transmitter Receiver User Manual

Model: BTTC-419-GRY | Brand: Avantree

## INTRODUCTION

The Avantree TC419 is a versatile Bluetooth 5.0 audio adapter designed to function as both a transmitter and a receiver, offering long-range wireless audio solutions for various devices. It supports aptX Low Latency technology, ensuring synchronized audio with minimal delay, ideal for watching TV or movies. With multiple input/output options including Digital Optical, 3.5mm AUX, and RCA, the TC419 provides wide compatibility with televisions, PCs, home stereo systems, and headphones.



Image: The Avantree TC419 unit, a compact grey device with two external antennas, indicating its long-range capability. It features control buttons on the front panel.

## PACKAGE CONTENTS

Please check the box for the following items:

- Avantree TC419 Unit
- USB power cable
- 3.5mm audio cable
- Optical audio cable
- 3.5mm female to RCA male cable

# What's in the box?

1. AVANTREE TC419
2. USB cable
3. 3.5mm audio cable
4. Optical cable
5. 3.5mm female to RCA male cable



1



2



3



4



5

Image: A visual representation of the Avantree TC419 unit and all included accessories: the main unit, USB cable, 3.5mm audio cable, optical cable, and a 3.5mm female to RCA male cable.

## PRODUCT FEATURES

### Long Range Connectivity

The TC419 is engineered for extended range, allowing for stable audio transmission and reception up to 200 feet (60 meters) in optimal conditions, significantly outperforming standard Bluetooth devices.

# Long Range



Image: An overhead view of a house floor plan illustrating the extended range of the TC419 (up to 200ft/60m) compared to other devices (100ft/30m), demonstrating its ability to cover a larger area.

## No Lip Sync Delay (aptX Low Latency)

When paired with aptX Low Latency or FastStream compatible headphones, the TC419 minimizes audio delay to imperceptible levels, ensuring that sound is perfectly synchronized with video, preventing lip-sync issues.

# No Lip Sync Delay

Supports aptX low latency (aptX-LL) to deliver lag-free audio while connected aptX-LL / FS headphones.



Image: A person wearing headphones watching television, with the Avantree TC419 connected to the TV, visually representing the seamless audio experience without lip-sync delay.

## Wide Compatibility

The TC419 offers broad compatibility with various audio sources and devices through its multiple input/output options: Digital Optical (TOSLINK), 3.5mm AUX, and RCA audio connections.

# Wide Compatibility

Supports Digital OPTICAL / AUX / RCA audio output making it compatible with 99% of the TVs in market.



3.5mm



OPTICAL



RCA

Image: A close-up view of the rear ports of the Avantree TC419, showing the DC IN, TX input, OPTICAL input/output, and RX output. Below, icons illustrate the 3.5mm, Optical, and RCA connector types.

## All-in-one Audio Streaming Hub

The TC419 functions as a comprehensive audio hub, supporting Transmitter (TX), Receiver (RX), and Pass-through (Bypass) modes to adapt to various audio setups.

# All-in-one Audio Streaming Hub

## Transmitter (TX) Mode



## Pass-through (TX Mode)



## Receiver (RX) Mode



Image: Diagrams illustrating the three operational modes: Transmitter (TX) mode connecting a TV to headphones, Pass-through (TX) mode connecting a TV to a soundbar and headphones, and Receiver (RX) mode connecting a smartphone to stereo speakers.

## SETUP

Follow these steps to set up your Avantree TC419:

1. **Power Connection:** Connect the TC419 to a power source using the provided USB cable. You can use a USB wall adapter (5V/500mA-2A, not included) or a USB port on your TV/PC. Ensure a stable power supply for optimal performance.
2. **Select Mode:** Use the TX/RX switch on the unit to select the desired mode (Transmitter or Receiver).
3. **Audio Connection:** Connect the TC419 to your audio source (in TX mode) or audio output device (in RX mode) using one of the following cables:
  - **Optical Cable:** For digital audio output from TVs, soundbars, etc.
  - **3.5mm AUX Cable:** For devices with a standard headphone jack or AUX output/input.
  - **RCA Cable:** Use the provided 3.5mm to RCA adapter cable for devices with red/white RCA audio ports.
4. **Power On:** Press the power button on the front of the TC419 to turn it on.

## OPERATING MODES

The Avantree TC419 supports three primary operating modes:

## 1. Transmitter (TX) Mode

In TX mode, the TC419 sends audio wirelessly from a non-Bluetooth device (e.g., TV, PC, CD player) to Bluetooth headphones or speakers. This is ideal for private listening or adding Bluetooth capability to older audio equipment.

- Set the TX/RX switch to **TX**.
- Connect the TC419's input to your audio source (e.g., TV's optical out, headphone jack).
- The TC419 will automatically enter pairing mode (LED flashes blue/red).
- Pair with your Bluetooth headphones/speakers.

## 2. Receiver (RX) Mode

In RX mode, the TC419 receives Bluetooth audio from a smartphone, tablet, or other Bluetooth-enabled device and outputs it to a non-Bluetooth audio system (e.g., home stereo, wired speakers, car stereo).

- Set the TX/RX switch to **RX**.
- Connect the TC419's output to your audio system's input (e.g., AUX-in on a stereo).
- The TC419 will automatically enter pairing mode (LED flashes blue/red).
- Pair your smartphone/tablet with the TC419.

## 3. Pass-through (Bypass) Mode

This mode allows you to simultaneously output audio to both a wired speaker system and Bluetooth headphones. Audio from your source (e.g., TV) passes through the TC419 to your wired speakers while also being transmitted wirelessly to your Bluetooth headphones.

- Ensure the TC419 is in **TX** mode.
- Connect your audio source to the TC419's input.
- Connect the TC419's **RX Output** to your wired speaker system's input.
- Pair your Bluetooth headphones with the TC419.

## PAIRING INSTRUCTIONS

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To connect your Avantree TC419 with a Bluetooth device:

### 1. Enter Pairing Mode:

- If the TC419 is new or has been reset, it will automatically enter pairing mode (LED flashes blue and red alternately).
- If already connected, press and hold the Bluetooth button (**&B**) on the TC419 for 3 seconds until the LED flashes blue and red.

2. **Activate Pairing on Your Device:** Put your Bluetooth headphones, speaker, or smartphone into its pairing mode. Refer to your device's user manual for specific instructions.

3. **Connect:** Place the TC419 and your device close to each other. They should connect automatically within a few seconds. Once connected, the LED on the TC419 will turn solid blue.

4. **For Second Device (TX Mode):** To connect a second pair of headphones in TX mode, press the Bluetooth button on the TC419 again to enter pairing mode, then put the second headphones into pairing mode.

## MAINTENANCE

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To ensure the longevity and optimal performance of your Avantree TC419:

- Keep the device dry. Avoid exposure to moisture or liquids.
- Clean the device with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- Store the device in a cool, dry place when not in use.
- Avoid extreme temperatures.

- Do not attempt to disassemble or modify the unit, as this will void the warranty.

## TROUBLESHOOTING

If you encounter issues with your Avantree TC419, please refer to the following common problems and solutions:

- **No Sound or Intermittent Audio:**

- Ensure all cables are securely connected to the correct input/output ports.
- Verify the TC419 is in the correct TX or RX mode.
- Check the volume levels on both the TC419 and your connected audio device.
- Ensure the power supply is stable. If powered by a TV USB port, try connecting to a dedicated USB wall adapter for consistent power.
- Move the TC419 closer to the connected Bluetooth device to improve signal strength and reduce interference.
- Clear the pairing history on both the TC419 and your Bluetooth device, then re-pair.

- **Cannot Pair Devices:**

- Ensure both the TC419 and your target device are in pairing mode (LED flashing blue/red on TC419).
- Disable Bluetooth on any other nearby devices that might be trying to connect.
- Power cycle both the TC419 and your Bluetooth device.
- Ensure your device is not already connected to another Bluetooth transmitter/receiver.

- **Lip Sync Delay (Audio Lag):**

- Ensure both the TC419 and your headphones/speakers support aptX Low Latency (aptX LL) or FastStream (FS) codecs. If only one device supports it, the connection will default to a lower latency codec like SBC, which may introduce noticeable delay.
- Some TVs may have internal audio processing that introduces delay. Check your TV's audio settings for options like "PCM" or "Bypass" for optical output.

## SPECIFICATIONS

Feature	Detail
Product Dimensions	4.49 x 1.18 x 2.95 inches
Item Weight	3.2 ounces (0.2 Pounds)
Model Number	BTTC-419-GRY
Connectivity Technology	Bluetooth, Optical
Bluetooth Version	5.0
Supported Audio Codecs	aptX, SBC, aptX-LL, FastStream
Compatible Devices	Television, Speaker, Personal Computer, Headphones
Connector Type	RCA, 3.5mm Jack, Optical (TOSLINK)
Audio Output Mode	Stereo
Manufacturer	Avantree
First Available Date	October 2, 2019

## WARRANTY AND SUPPORT

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Avantree products typically come with a manufacturer's warranty. For specific warranty terms, registration, or technical support, please visit the official Avantree website or contact their customer service directly. Many users have reported positive experiences with Avantree's customer support.

For further assistance, you may also refer to the product's support page on the retailer's website where it was purchased.