

BovBox WL082

BovBox WL082TX&RX Wireless HDMI Transmitter and Receiver Instruction Manual

Model: WL082TX&RX | Brand: BovBox

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your BovBox WL082TX&RX Wireless HDMI Transmitter and Receiver kit. This system is designed to extend HDMI signals wirelessly, offering a flexible solution for various audio-visual needs.

The BovBox WL082TX&RX kit supports 1080p@60Hz output and 4K@30Hz decoding, utilizing dual-band (2.4G & 5G) technology for stable transmission. Key features include a low latency of 0.05 seconds, an HDMI loop-out port on the transmitter for local monitoring, and IR remote control extension, allowing control of the source device from the display location. The system also supports multiple power options and can connect one transmitter to up to five receivers for extensive monitoring.

2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- 1x BovBox WL082TX Wireless HDMI Transmitter
- 1x BovBox WL082RX Wireless HDMI Receiver
- 2x USB-C Power Cables
- 1x IR Blaster Cable
- 1x IR Receiver Cable
- 1x User Manual (this document)

3. PRODUCT OVERVIEW

The BovBox WL082TX&RX system consists of a Transmitter (TX) unit and a Receiver (RX) unit. Each unit features various ports and indicators for connectivity and status monitoring.



Image 3.1: BovBox WL082TX (left) and WL082RX (right) units. The TX unit has 'TX' and the RX unit has 'RX' printed on them for easy identification. Both units feature a robust design with external antennas.

Transmitter (TX) Unit

- **HDMI IN:** Connects to the HDMI output of your source device.
- **LOOP OUT:** Provides an additional HDMI output for a local display.
- **IR OUT:** Connects to the IR Blaster cable for remote control extension.
- **5V/2A:** USB-C power input port.
- **RESET:** Button to reset the device.
- **Indicators:** Power, Signal, and Link status LEDs.

Receiver (RX) Unit

- **HDMI OUT:** Connects to the HDMI input of your display device.
- **IR IN:** Connects to the IR Receiver cable for remote control extension.
- **5V/2A:** USB-C power input port.
- **Indicators:** Power, Signal, and Link status LEDs.

BovBox Wireless HDMI Transmitter and Receiver

Designed for Cameras

Image 3.2: Detailed view of the Transmitter (TX) unit's ports and interfaces.

4. SETUP INSTRUCTIONS

Follow these steps to set up your BovBox Wireless HDMI system:

4.1 Power Connection

1. Connect one end of a USB-C power cable to the **5V/2A** port on the Transmitter (TX) unit.
2. Connect the other end of the USB-C power cable to a 5V/2A power adapter (not included) or a compatible power source.
3. Repeat steps 1 and 2 for the Receiver (RX) unit.

4.2 Transmitter (TX) Setup

1. Connect an HDMI cable from the HDMI output of your source device (e.g., PC, laptop, camera, DVD player) to the **HDMI IN** port on the TX unit.
2. **(Optional) Local Loop-Out:** If you require a local display to monitor the source content, connect an HDMI cable from the **LOOP OUT** port on the TX unit to the HDMI input of a local display.
3. **(Optional) IR Blaster:** For remote control extension, connect the IR Blaster cable to the **IR OUT** port on the TX unit. Position the IR emitter head directly over the IR sensor of your source device.

4.3 Receiver (RX) Setup

1. Connect an HDMI cable from the **HDMI OUT** port on the RX unit to the HDMI input of your display device (e.g., HDTV, projector).
2. **(Optional) IR Receiver:** For remote control extension, connect the IR Receiver cable to the **IR IN** port on the RX unit. Position the IR receiver head in a location where your remote control can easily point to it.

4.4 Power On and Connection

Once all connections are made, ensure both the TX and RX units are powered on. The devices are pre-paired from the factory and should automatically establish a wireless connection. The status indicators on both units will confirm successful connection.



Plug and Play

Pre Pairing & Stream
No Need App or Bluetooth



1.Plug Receiver and External Antenna to HD Input device like TV, and plug USB cable to power supply 5V/2A

2.insert Transmitter to HD Output device like laptop and plug USB cable to power supply 5V/2A
3.installation succeeded

Image 4.1: Basic Plug & Play connection diagram.

IR Extend Function

Control Your TV Box in Two Room

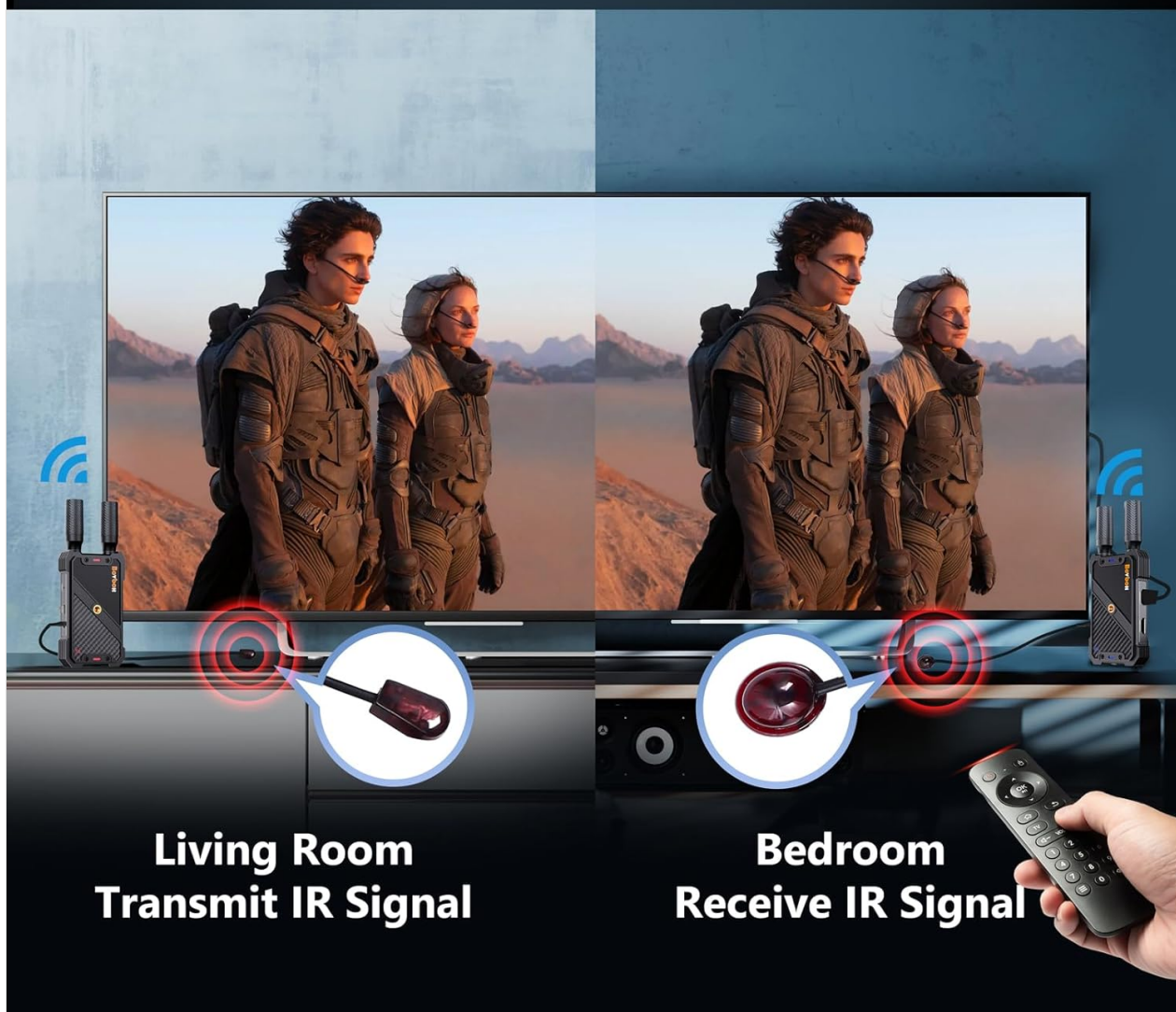


Image 4.2: Setup for IR Remote Control Extension.

5. OPERATING INSTRUCTIONS

5.1 Basic Operation

Once the TX and RX units are properly connected and powered, the video and audio signal from your source device will be wirelessly transmitted to the display connected to the RX unit. No additional software or configuration is typically required for basic operation.

5.2 Using the Loop-Out Function

The HDMI LOOP OUT port on the Transmitter (TX) allows you to connect a local display. This is useful for monitoring the source content directly at the source location while simultaneously transmitting the signal wirelessly to a remote display.

5.3 IR Remote Control Extension

With the IR Blaster connected to the TX and the IR Receiver connected to the RX, you can control your source device (e.g., cable box, DVD player) from the location of your remote display. Simply point your remote control at the IR Receiver connected to the RX unit, and the signal will be relayed wirelessly to the IR Blaster at the TX unit, which then controls the source device.

5.4 Multiple Receiver Support (1 TX to 5 RXs)

The BovBox WL082TX&RX system supports connecting one Transmitter (TX) to up to five Receivers (RXs) simultaneously. This allows for broadcasting the same video signal to multiple displays. When adding additional RX units, they must be paired with the TX unit initially. The effective transmission distance decreases with more receivers:

- 1 TX to 1 RX: Up to 1312ft (400m)
- 1 TX to 2 RXs: Up to 820ft (250m)
- 1 TX to 3 RXs: Up to 590ft (180m)
- 1 TX to 4 RXs: Up to 492ft (150m)
- 1 TX to 5 RXs: Up to 328ft (100m)



Image 5.1: Example of 1 TX to multiple RXs setup.

5.5 Display Modes

Depending on your source device and operating system, the system supports various display modes:

- **Duplicate Mode (Mirror):** The wireless display mirrors the content of your source device's primary screen.
- **Extend Mode:** The wireless display acts as an extension of your source device's desktop, providing more screen real estate.
- **Second Screen Only Mode:** The wireless display becomes the primary display, and the source device's screen is turned off.

6. MAINTENANCE

To ensure the longevity and optimal performance of your BovBox Wireless HDMI system, please follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the devices. Avoid using liquid or aerosol cleaners, as they may damage the units.
- **Environment:** Keep the devices in a cool, dry place, away from direct sunlight, extreme temperatures, and high humidity.
- **Storage:** When not in use for extended periods, disconnect the power adapters and store the units in their original packaging or a protective case.
- **Ventilation:** Ensure proper ventilation around the units to prevent overheating. Do not block any ventilation openings.

7. TROUBLESHOOTING

If you encounter issues with your BovBox Wireless HDMI system, refer to the following common problems and solutions:

7.1 No Signal or Poor Picture Quality

- **Power Check:** Ensure both the Transmitter (TX) and Receiver (RX) units are powered on and their power indicators are lit.
- **Cable Connections:** Verify that all HDMI cables are securely connected to the correct ports on the source device, TX unit, RX unit, and display.
- **Source Output:** Confirm that your source device is outputting a video signal. Try connecting the source directly to the display to rule out source issues.
- **Distance and Obstructions:** Reduce the distance between the TX and RX units. Ensure there are no significant physical obstructions (e.g., thick walls, metal objects) between them that could interfere with the wireless signal.
- **Interference:** Minimize potential wireless interference from other 2.4GHz or 5GHz devices (e.g., Wi-Fi routers, cordless phones) by repositioning the units or other devices.
- **Resolution Compatibility:** Ensure your display device supports the output resolution (1080p@60Hz) from the system.

7.2 IR Remote Control Not Working

- **Cable Connections:** Check that the IR Blaster cable is connected to the **IR OUT** port on the TX unit and the IR Receiver cable is connected to the **IR IN** port on the RX unit.
- **Emitter Placement:** Ensure the IR Blaster emitter head is positioned directly over the IR sensor of your source device. The exact location of the IR sensor may vary by device.
- **Receiver Placement:** Make sure the IR Receiver head is positioned where your remote control can easily point to it without obstruction.
- **Remote Batteries:** Verify that your remote control has fresh batteries.

7.3 Latency Issues

- While the system is designed for low latency (0.05s), some delay may become noticeable over longer distances or when using multiple receivers.
- This product is generally not recommended for applications requiring extremely precise real-time interaction, such as competitive gaming, where even minimal latency can impact performance.

7.4 Power Issues

- Ensure you are using 5V/2A power adapters for both units. Insufficient power can lead to unstable operation.
- If using NP-F series batteries (not included), ensure they are fully charged. The battery low light indicator on the units will signal low power.

8. SPECIFICATIONS

Feature	Specification
Model Number	WL082
Connectivity Technology	Wireless HDMI, IR Remote Control
Power Source	Corded Electric / Battery (NP-F series, not included)
Video Resolution	Supports 4K@30Hz decoding, 1080p@60Hz output
Transmission Range (1 TX to 1 RX)	Up to 1312ft (400m) Line of Sight
Latency	0.05 seconds
Special Features	Dual HDMI Output (Loop-out), IR Extension, Dual Band (2.4G & 5G)
Max Receivers per Transmitter	Up to 5 RXs
Product Dimensions (Package)	6"L x 3"W x 10"H
Item Weight	1.85 pounds

9. WARRANTY AND SUPPORT

This product is subject to a 30-day refund/replacement return policy. For specific warranty details, technical support, or further assistance, please refer to the documentation included with your product packaging or visit the official BovBox website. Please retain your proof of purchase for any warranty claims.

10. OFFICIAL PRODUCT VIDEOS

No official product videos from the seller were available in the provided data for embedding based on the specified criteria (m3u8 format, creator_type: Seller).