BovBox 900S

BovBox Wireless HDMI Video Transmission System

Model: 900S - User Manual

Introduction

The BovBox 900S Wireless HDMI Video Transmission System provides a reliable and high-quality solution for transmitting Full HD 1080P video and audio wirelessly. Designed for professional video production, live broadcasting, and corporate events, this system offers extended transmission range, low latency, and flexible power options. It supports various configurations, including one transmitter to multiple receivers, and features an IR remote control pass-through for enhanced convenience.

Figure 1: BovBox Wireless HDMI Transmitter and Receiver units.

Safety Information

Please read and understand all safety instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- This product may interfere with other wireless devices. Ensure proper spacing from other wireless equipment.
- Do not expose the batteries to excessive heat or humidity. High temperatures can damage batteries and pose a fire risk.
- Follow the battery handling instructions provided with the product. Use only compatible NP-F series batteries (NPF970/NPF750/NPF550) or specified DC 5V/2A power sources.
- Do not disassemble or modify the device. Unauthorized modifications can void the warranty and cause damage.
- Keep the device away from water and other liquids.
- Ensure proper ventilation to prevent overheating during operation.

Product Overview

The BovBox 900S system consists of a transmitter (TX) and a receiver (RX) unit, designed for robust wireless video transmission. Each unit is equipped with dual antennas for enhanced signal stability.

Key Features:

- **1080P Full HD Transmission:** Supports high-definition video up to 1080P.
- **Extended Range:** Up to 820 feet (250 meters) line-of-sight transmission.
- **Low Latency:** Ultra-low latency of 0.01 seconds for real-time monitoring.
- **Dual-Band Frequency:** Operates on 2.4GHz and 5.8GHz frequencies for stable signal.
- **HDMI Loop-Out:** Transmitter includes an HDMI loop-out port for local monitoring.
- **IR Remote Control:** Allows control of the source device from the receiver location.
- **Multiple Power Options:** Supports NP-F series batteries, USB-C (5V/2A), and DC 5V/2A adapter.
- **Scalable System:** One transmitter can connect to up to four receivers (1TX to 4RX).

Figure 2: Overview of the BovBox Wireless HDMI System's key features including range, latency, and connectivity.

Setup Guide

1. Powering the Devices

The BovBox system offers flexible power options for both indoor and outdoor use:

- **NP-F Series Battery:** Attach a compatible NP-F970, NP-F750, or NP-F550 battery to the battery plate on the rear of the TX/RX unit. (Batteries not included).
- **USB-C Power:** Connect a 5V/2A USB-C power bank or adapter to the USB-C port.
- **DC Power Adapter:** Use the included DC 5V/2A power adapter for continuous power.

Figure 3: Illustration of the three power supply options: NP-F battery, USB-C, and DC adapter.

After connecting power, press the power button on the unit. The power indicators will light up.

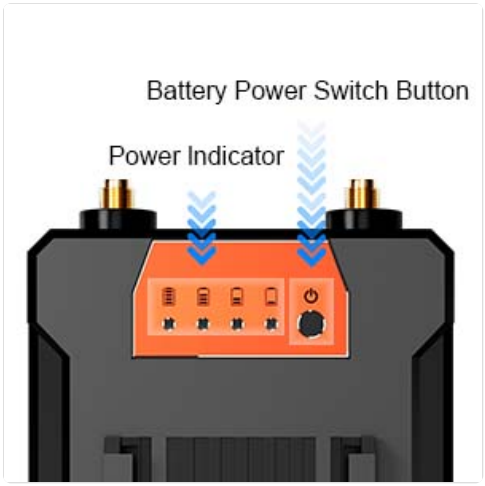

Figure 4: Location of the power indicator lights and power switch button.

2. Connecting HDMI Devices

Connect your HDMI source device (e.g., camera, laptop, game console) to the **HDMI IN** port on the Transmitter (TX) unit using an HDMI cable. Connect your display device (e.g., monitor, TV, projector) to the **HDMI OUT** port on the Receiver (RX) unit.

Figure 5: Connection diagram illustrating how to connect HDMI source to TX and display to RX.

The Transmitter (TX) also features an **HDMI Loop-Out** port, allowing you to connect a local monitor for real-time viewing of the source signal without delay.

Figure 6: HDMI Input and Loop-Out ports on the Transmitter unit.

3. Pairing (for multiple RX units)

The system supports connecting one Transmitter (TX) to up to four Receivers (RX). When adding multiple RX units, they must be paired with the TX. Refer to the specific pairing instructions in your product packaging if not automatically paired.

Figure 7: The system supports up to 1 TX to 4 RX connections. Note that transmission distance may decrease with more receivers.

Operating Instructions

Wireless Transmission

Once powered on and connected, the TX and RX units will automatically establish a wireless connection. The system utilizes 5.8GHz frequency for high-speed transmission and dual antennas for enhanced signal stability, allowing for transmission through obstacles like walls or glass.

Figure 8: The system offers up to 820ft transmission range with 0.01s low latency.

IR Remote Control

The system includes IR cables to allow you to control your HDMI source device (e.g., DVD player, set-top box) from the location of your display (where the RX unit is). Connect the IR Blaster cable to the TX unit and position its emitter near the IR receiver of your source device. Connect the IR Receiver cable to the RX unit and position its receiver to face your remote control.

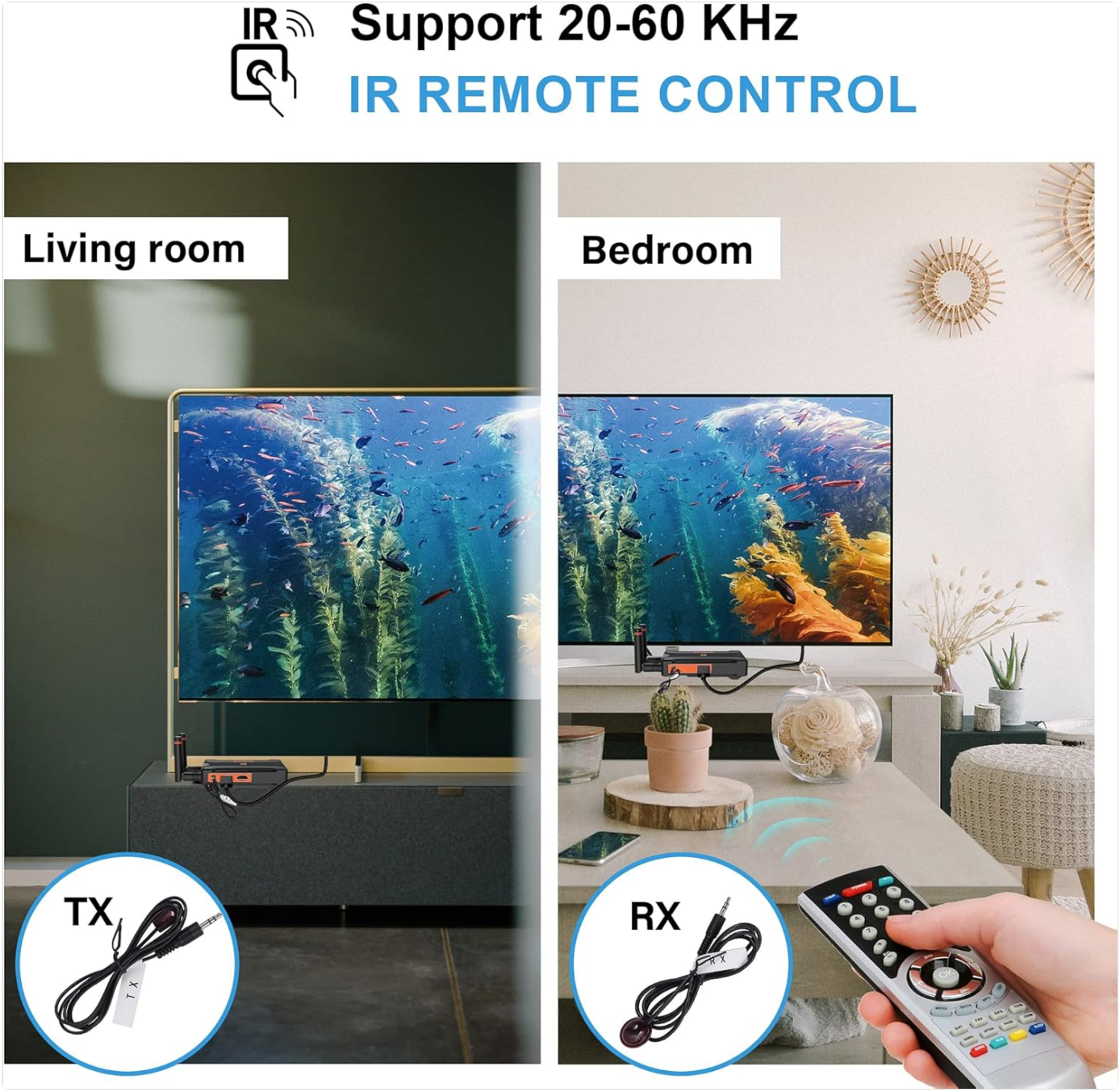

Figure 9: Setup for IR remote control functionality, enabling control of the source device from the receiver's location.

Audio Input and Separation

The Transmitter (TX) unit features an AMS interface for external audio input, allowing you to transmit audio from a microphone or other audio source along with the video. The Receiver (RX) unit also has an AMS port, which can be used to monitor the live audio signal via headphones.

Figure 10: Diagram showing audio input on the TX unit and audio monitoring (separation) on the RX unit.

Maintenance

To ensure the longevity and optimal performance of your BovBox Wireless HDMI Video Transmission System, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the units. Do not use liquid cleaners or aerosols.
- **Storage:** Store the devices in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Antennas:** Handle the antennas carefully. Avoid bending or applying excessive force to prevent damage.
- **Connections:** Periodically check all cable connections for secure fit.
- **Firmware:** Check the manufacturer's website for any available firmware updates to ensure the best performance and compatibility.

Troubleshooting

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

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
No video signal on display.	Incorrect HDMI connection. Power issue with TX/RX. Out of range or signal interference. Source device output settings.	Ensure HDMI cables are securely connected to correct ports (HDMI IN on TX, HDMI OUT on RX). Verify both TX and RX units are powered on and indicators are lit. Reduce distance between TX and RX, or remove obstacles. Avoid strong Wi-Fi signals or other 5.8GHz devices. Check if the source device is outputting a compatible resolution (up to 1080P).
Video signal is intermittent or choppy.	Weak signal due to distance or obstacles. Interference from other wireless devices. Low battery on TX/RX.	Move TX and RX closer, or ensure clear line of sight. Relocate the units away from other wireless devices (e.g., routers, cordless phones). Ensure batteries are fully charged or use a stable DC power source.
IR remote control not working.	IR cables incorrectly connected. IR emitter/receiver misaligned. Source device IR sensor issue.	Ensure IR Blaster is connected to TX and IR Receiver to RX. Adjust the position of the IR emitter to directly face the IR sensor on your source device. Ensure the IR receiver on the RX unit is facing your remote. Test the source device's IR sensor with its original remote directly.

If the problem persists, please contact BovBox customer support for further assistance.

SPECIFICATIONS

Feature	Detail
Model	900S
Transmission Frequency	2.4GHz / 5.8GHz
Video Resolution	Up to 1080P Full HD
Transmission Range (1TX to 1RX)	820 feet (250 meters) Line of Sight
Latency	0.01 seconds
Multi-Receiver Support	1 Transmitter to up to 4 Receivers (distance reduced with more RX)
Power Supply Options	NP-F series battery (NPF970/NPF750/NPF550), USB-C (5V/2A), DC 5V/2A
Connectivity	HDMI Input, HDMI Loop-Out (TX), HDMI Output (RX), IR Port, AMS Audio Port, USB-C Power Port
Item Weight	13.1 ounces (approx. 371 grams)

Feature	Detail
Package Dimensions	7.13 x 4.88 x 2.48 inches
Manufacturer	BovBox

Warranty and Support

The BovBox Wireless HDMI Video Transmission System is backed by a **1-year limited warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use.

For technical support, troubleshooting assistance, or warranty claims, please contact BovBox customer service. You can typically find contact information on the product packaging or by visiting the official BovBox website. When contacting support, please have your product model number (900S) and purchase details ready.

For additional resources and frequently asked questions, please visit the BovBox Store on Amazon.