

## PAKITE PAT-590

# PAKITE PAT-590 Wireless HDMI Extender User Manual

Model: PAT-590

## 1. PRODUCT OVERVIEW

The PAKITE PAT-590 is a wireless HDMI AV sender system designed to transmit audio and video signals between rooms without the need for cables. It consists of a transmitter and a receiver unit, enabling wireless sharing of content from devices such as DVD players, DVRs, CCTV cameras, IPTV, satellite receivers, or digital TV set-top boxes to TV sets in different locations.

This system utilizes smart 2.4/5GHz dual-band Wi-Fi wireless transmission, offering a long transmission distance, strong anti-interference capabilities, and high mobility. It also supports IR remote control functionality, allowing users to control the source device from the receiver end.



Image 1.1: The PAKITE PAT-590 Wireless HDMI Extender system, showing the transmitter and receiver units with their dual antennas.

## 2. PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- 1 x Transmitter Unit
- 1 x Receiver Unit
- 2 x Power Adapters (DC 5V/2A)
- 2 x HDMI Cables
- 1 x IR Extender Cable
- 1 x User Manual (this document)

## 3. SETUP INSTRUCTIONS

Follow these steps to set up your PAKITE PAT-590 Wireless HDMI Extender system. Ensure all devices are powered off before making connections.

### 3.1 Component Identification



Image 3.1: Detailed view of the transmitter and receiver units, highlighting ports such as HDMI Input/Output, IR Extension Interface, Power Input, Reset Button, and Power Switch.

### 3.2 Connection Steps

#### 1. Connect the Transmitter (TX):

- Connect one end of an HDMI cable to the HDMI output of your source device (e.g., DVD player, set-top box).
- Connect the other end of this HDMI cable to the **HDMI Signal Input** port on the PAKITE PAT-590 Transmitter unit.
- If you wish to monitor the source locally, connect a second HDMI cable from the **HDMI Signal Output** port on the Transmitter to an HDMI input on a local display (optional).

- Connect the IR Extender Cable to the **IR Extension Interface** on the Transmitter. Position the IR emitter head near the IR sensor of your source device.
- Connect one power adapter to the **Power Input** port of the Transmitter and plug it into an electrical outlet.

## 2. Connect the Receiver (RX):

- Connect one end of an HDMI cable to the **HDMI Signal Output** port on the PAKITE PAT-590 Receiver unit.
- Connect the other end of this HDMI cable to an HDMI input on your remote display (e.g., TV, monitor, projector).
- Connect the second power adapter to the **Power Input** port of the Receiver and plug it into an electrical outlet.

3. **Power On:** Once all connections are secure, switch on the power for both the Transmitter and Receiver units using their respective Power Switches. Then, power on your source device and display.



Image 3.2: Diagram illustrating the connection flow from an HDMI signal source to the transmitter, and wirelessly to the receiver and a remote display, including IR remote control setup.

**Important Safety Hint:** To prevent damage, always ensure the product is powered off before connecting or disconnecting any cables. Only power on the units after all connections are firmly established. Avoid plugging or unplugging cables while the units are powered on. If the product will not be used for an extended period, please turn it off.

## 4. OPERATING INSTRUCTIONS

### 4.1 Basic Operation

After successful setup and powering on, the transmitter will automatically send the HDMI signal wirelessly to the receiver. The receiver will then output the signal to your connected display. The system supports HDMI resolutions from 480i/576i up to 1080P at 50/60Hz.

## 4.2 Dual-Band Transmission

The PAT-590 utilizes both 2.4GHz and 5GHz ISM bands for wireless transmission. This dual-band capability helps in achieving faster transmission speeds and improved anti-interference performance. The system automatically manages frequency selection to optimize signal quality.



Image 4.1: Illustration of the 2.4G and 5G dual-frequency transmission capabilities, indicating flexible frequency switching to avoid signal interference.

## 4.3 IR Remote Control Functionality

The built-in IR signal extension feature allows you to control your source device (e.g., DVD player, set-top box) remotely from the location of your receiver. Ensure the IR Extender Cable is properly connected to the transmitter and its emitter head is positioned correctly near the IR sensor of your source device. Point your original remote control towards the receiver, and the IR signal will be relayed back to the source.

## 4.4 OSD Display and Web Configuration

The device supports an On-Screen Display (OSD) to monitor device status. Additionally, a web configuration interface is available for advanced settings, providing a simple way to manage the system.

# 5. MAINTENANCE

To ensure the longevity and optimal performance of your PAKITE PAT-590 Wireless HDMI Extender, follow these general maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the units. Avoid using liquid cleaners or abrasive materials.
- **Environment:** Keep the units in a dry environment, away from direct sunlight, extreme temperatures, and high humidity.
- **Power Off:** If the system will not be used for an extended period, power off both the transmitter and receiver units and unplug their power adapters from the electrical outlets.
- **Ventilation:** Ensure proper ventilation around the units to prevent overheating. Do not block any ventilation openings.

## 6. TROUBLESHOOTING

If you encounter issues with your PAKITE PAT-590, please refer to the following troubleshooting tips:

- **No Signal or Poor Picture Quality:**

- Verify that all HDMI cables are securely connected to both the source device, transmitter, receiver, and display.
- Ensure both the transmitter and receiver units are powered on and their indicator lights are active.
- Check the distance between the transmitter and receiver. The maximum transmission distance is 100 meters in open space. Walls and other obstacles will reduce this range.
- Minimize obstructions between the transmitter and receiver.
- Check for potential interference from other wireless devices operating on 2.4GHz or 5GHz frequencies.
- Try repositioning the units or their antennas for better signal reception.

- **IR Remote Control Not Working:**

- Ensure the IR Extender Cable is firmly connected to the transmitter.
- Verify that the IR emitter head is correctly positioned directly over or very close to the IR sensor of your source device.
- Check the batteries in your original remote control.

- **Video Delay/Lag:**

- A slight delay of less than 0.2 seconds may occur due to data compression. This is normal for wireless transmission.
- This product is not recommended for PC gaming or other real-time applications where minimal latency is critical.

- **Device Not Responding:**

- Locate the Reset Button on the unit (refer to Image 3.1). Use a small, pointed object (like a paperclip) to press and hold the reset button for a few seconds to restart the unit.
- Power cycle the units by unplugging them from power for 30 seconds, then plugging them back in and powering them on.

## 7. SPECIFICATIONS

Feature	Specification
Input/Output Jack	HDMI 1.4 / HDCP 1.4
Output Image Resolution	720/1080P at 50/60Hz
HDMI Audio Format	1080P HQ




HDMI Max Transmission Standard	IEEE 802.11a/b/g/n
Operating Frequency	2.4GHz, 5GHz ISM Band
Max Wireless Transmission Rate	2.4G 150Mbps, 5G 300Mbps
Transmission Distance	50-100m (open space accessibility)
IR Frequency Range	38KHz
DC Input	AC 100V-240V 50/60Hz
DC Output	DC 5V/2A
Operating Temperature	-10°C to +50°C
Operation Humidity	10-80% RH (Non-condensing)
Product Dimensions	158mm x 128mm x 37mm

## 8. WARRANTY AND SUPPORT

Information regarding product warranty and customer support is not available in the provided product data. Please refer to the product packaging or the manufacturer's official website for details on warranty coverage and how to contact customer support.

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## Related Documents - PAT-590

	<p><a href="#">Pakite Wireless Type-C HD Extender 1080p Model 830 User Manual</a></p> <p>User manual for the Pakite Wireless Type-C HD Extender 1080p (Model 830), detailing setup, connection guides for computers and phones, panel descriptions, and troubleshooting tips. Supports Thunderbolt protocol for seamless HD video and audio transmission.</p>
	<p><a href="#">PAKITE Wireless HDMI Transmitter and Receiver System - 1080P HD, Extended Range</a></p> <p>User manual and product information for the PAKITE Wireless HDMI Transmitter and Receiver system (Models BIN-850, XD-850). Features 1080P HD video streaming, extended wireless range up to 150m/200m, low latency, and various audio output options for home theater, conferences, and gaming.</p>
	<p><a href="#">PAKITE 4K Wireless HD Extender Model 950 User Manual and Installation Guide</a></p> <p>Comprehensive guide for the PAKITE 4K Wireless HD Extender Model 950, covering setup, installation, panel descriptions, troubleshooting, and advanced features like multi-transmitter/receiver modes.</p>

