

J-Tech Digital JTECH-WDEX-50M

J-Tech Digital JTECH-WDEX-50M Wireless HDMI Extender Kit User Manual

Model: JTECH-WDEX-50M | Brand: J-Tech Digital

1. INTRODUCTION

This manual provides detailed instructions for the J-Tech Digital JTECH-WDEX-50M Wireless HDMI Extender Kit. This innovative transmitter and receiver pair is designed for streaming full HD 1080p video with support for the latest movie content up to 100 feet away within the same room. It features a compact design, making it suitable for on-site transmissions and setups requiring quick source changes, such as conference rooms or camera monitoring.

Key Features:

- Wireless HD 1080p audio/video streaming up to 100 feet (line of sight, within the same room).
- Supports HDMI 1.3 and HDCP 1.2.
- Operates on a 5GHz wireless network to minimize interference.
- Wide 20-60KHz frequency range for IR control passthrough.
- Plug-and-play installation.
- Portable transmitter, powered by USB, ideal for various devices like laptops and cameras.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1x Extender Tx (Sender)
- 1x HDMI Extender Rx (Receiver)
- 1x DC5V/2A Power Adapter
- 1x IR Blaster Extension Cable
- 1x IR Receiver Extension Cable

- 1x User Manual
- 1x USB Cable
- 1x HDMI Male to Female Cable



Figure 2.1: All components included in the J-Tech Digital Wireless HDMI Extender Kit package.

3. PRODUCT OVERVIEW

The JTECH-WDEX-50M kit consists of a transmitter (Tx) and a receiver (Rx), designed for seamless wireless video and audio transmission.



Figure 3.1: The J-Tech Digital Wireless HDMI Extender Transmitter (dongle) and Receiver unit.

3.1. Device Interfaces

Familiarize yourself with the ports and indicators on both the transmitter and receiver units.



Figure 3.2: Detailed view of the Receiver and Sender interfaces, showing HDMI In/Out, Power, and IR ports.

3.2. Dimensions

The compact design allows for flexible placement and portability.

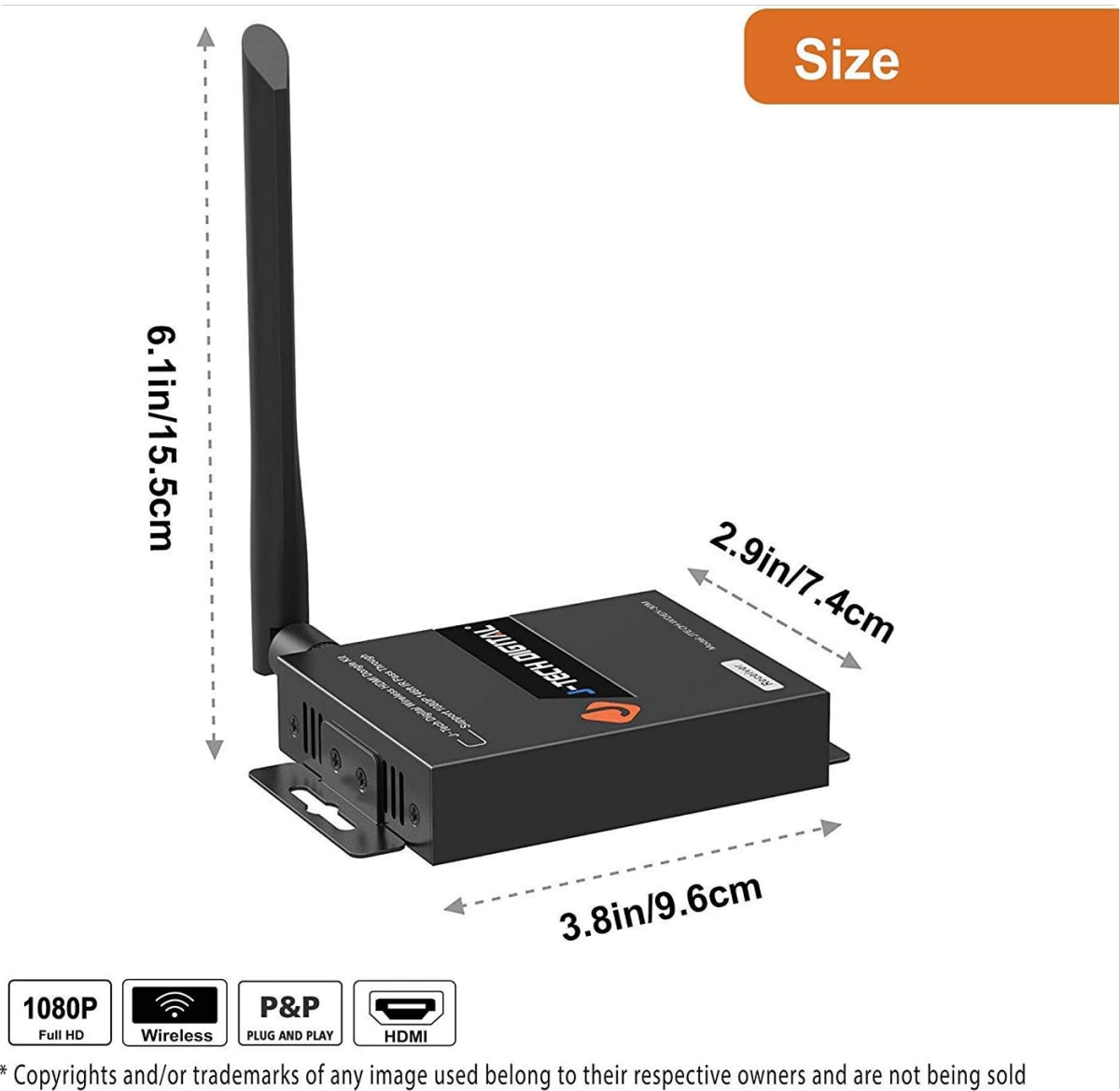


Figure 3.3: Dimensions of the J-Tech Digital Wireless HDMI Extender components.

4. SETUP INSTRUCTIONS

Follow these steps to set up your J-Tech Digital Wireless HDMI Extender Kit.

4.1. Powering the Devices

Both the transmitter and receiver require power. The transmitter can be powered via USB, offering flexibility for portable use.

Power Supply Options



Figure 4.1: Various power supply options for the J-Tech Digital Wireless HDMI Extender, including USB power adapter or laptop USB port.

4.2. Connecting and Pairing

The devices are designed for plug-and-play operation. For initial setup or re-pairing, follow the steps below:

1. Connect the transmitter (Tx) to your HDMI source device (e.g., laptop, camera).
2. Connect the receiver (Rx) to your display device (e.g., monitor, projector).
3. Ensure both devices are powered on.
4. The devices should automatically pair. A fast flashing green light on the TX indicates successful pairing, and the green light on the RX will be solid.

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Video 4.1: A tutorial demonstrating the pairing process for the Wireless HDMI Extender.

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Video 4.2: Step-by-step guide on how to pair the WL009 Wireless HDMI Extender.

4.3. IR Passthrough Setup

To control your source device remotely, connect the IR blaster extension cable to the transmitter and position the blaster near your source device's IR receiver. Connect the IR receiver extension cable to the

receiver and position it to face your remote control.

5. OPERATING INSTRUCTIONS

Once successfully paired, the extender will transmit video and audio wirelessly.

5.1. Video and Audio Transmission

The system supports wireless HD 1080p audio/video streaming. The transmission range is up to 100 feet within the same room, requiring a line of sight between the transmitter and receiver for optimal performance. A minimal latency of approximately 180ms is expected.



- Wirelessly transmit 1080p up to 100ft away, line of sight
- 5GHz Wi-Fi

Figure 5.1: Example application of the J-Tech Digital Wireless HDMI Extender in a conference room setting.

5.2. Supported Resolutions

The device supports a variety of HDMI resolutions, including:

- 480i@60Hz, 480p@60Hz
- 576i@50Hz, 576p@50Hz

- 720p@50/60Hz
- 1080i@50/60Hz, 1080p@24/30/50/60Hz

5.3. Portable Use with Cameras

The compact transmitter can be easily connected to HDMI cameras and powered by a USB connection, such as a camera's USB port or a 5VDC 2A power bank, for mobile monitoring applications.



Figure 5.2: The J-Tech Digital Wireless HDMI Extender transmitter connected to a camera setup, compatible with standard camera mounts.

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Video 5.3: An overview of the J-Tech Digital Wireless HDMI Extender Dongle, highlighting its features and applications.

6. SPECIFICATIONS

Feature	Detail
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Model Number	JTECH-WDEX-50M
Wireless Transmission	1080p up to 100 feet (line of sight)
HDMI Support	HDMI 1.3, HDCP 1.2
Wireless Frequency	5GHz
IR Frequency Range	20-60KHz
Supported Resolutions	480i/p, 576i/p, 720p, 1080i/p (24/30/50/60Hz)
Power Input	5VDC/2A (for receiver), USB (for transmitter)
Item Weight	1.3 pounds
Product Dimensions	20 x 25 x 10 inches
Hardware Interface	HDMI, USB

7. MAINTENANCE

To ensure the longevity and optimal performance of your J-Tech Digital Wireless HDMI Extender Kit, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the device surfaces. Avoid using harsh chemicals or abrasive cleaners.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Handling:** Handle the units with care to prevent physical damage. Avoid dropping or subjecting them to strong impacts.
- **Ventilation:** Ensure adequate airflow around the units to prevent overheating, especially during extended operation.

8. TROUBLESHOOTING

If you encounter issues with your Wireless HDMI Extender, refer to the following common troubleshooting steps:

- **No Signal:**
 - Ensure both the transmitter and receiver are powered on and their indicator lights are active.
 - Verify that HDMI cables are securely connected to both the source and display devices.
 - Check for line of sight between the transmitter and receiver. Obstructions (walls, furniture) can significantly reduce range and signal quality.
 - Confirm that the source device is outputting a compatible HDMI signal (1080p, 720p, etc.).

- Re-pair the devices if they lose connection (refer to Section 4.2).

- **Intermittent Signal/Poor Quality:**

- Reduce the distance between the transmitter and receiver.
- Minimize interference from other 5GHz wireless devices.
- Ensure antennas are securely attached and oriented correctly.
- Check power supply for stability. Use the provided power adapters.

- **IR Control Not Working:**





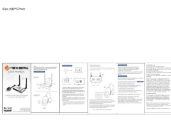

- Ensure the IR blaster is positioned directly in front of the source device's IR sensor.
- Verify the IR receiver is facing your remote control.
- Check that the IR cables are securely plugged into the correct ports on both units.




9. WARRANTY AND SUPPORT

All J-Tech Digital Products include a One-Year Manufacturer Warranty. Additionally, free lifetime technical support is available from our Customer Support Team located in Houston, Texas. Our team is available Monday-Friday, 9 AM-6 PM CST.

For contact information, please refer to the [J-Tech Digital Seller Page](#).

Related Documents - JTECH-WDEX-50M

 <p>J-TECH DIGITAL EXPLORE THE HIGH DEFINITION WORLD</p> <p>Website: www.jtechdigital.com Hot Line: 1-888-810-2510 (US)</p> <p>USER MANUAL</p> <p>Name: J-Tech Digital Wireless HDMI Dongle Kit Support 1080P 146ft IR PassThrough Model: JTECH-WDEX-50M</p> <p>HDmiT   </p> <p>JTD-ID-222</p>	<p>J-Tech Digital Wireless HDMI Dongle Kit User Manual</p> <p>User manual for the J-Tech Digital Wireless HDMI Dongle Kit, supporting 1080p resolution and 146ft IR PassThrough. Includes safety notices, introduction, panel descriptions, features, package contents, installation requirements, connection instructions, FAQ, and specifications.</p>
	<p>J-Tech Digital JTECH-WDEX-50M2 Wireless HDMI Dongle Extender User Manual</p> <p>User manual for the J-Tech Digital JTECH-WDEX-50M2 Wireless HDMI Dongle Extender. Learn about hardware and software casting, pairing, settings, troubleshooting, and warranty information.</p>
	<p>J-TECH DIGITAL JTECH-4K60-UNT/UNR ProAV HDMI Extender User Manual</p> <p>User manual for the J-TECH DIGITAL JTECH-4K60-UNT/UNR ProAV Many-to-Many 4K@60Hz HDMI Extender with IR. Covers features, specifications, installation, and troubleshooting.</p>

	<p>J-TECH DIGITAL JTECH-EX2 160ft 1080p HDMI Extender User Manual</p> <p>User manual for the J-TECH DIGITAL JTECH-EX2 160ft, 1080p HDMI Extender over Single CAT5E/6. Provides detailed information on features, specifications, package contents, panel descriptions, connection and operation, maintenance, and warranty.</p>
	<p>J-Tech Digital JTECH-EX100M HDMI Ethernet Extender User Manual</p> <p>User manual for the J-Tech Digital JTECH-EX100M, a 1080P 60Hz HDMI Ethernet Extender that supports up to 328ft transmission over a single CAT5E/CAT6 cable, featuring IR pass-through and H.265 encoding.</p>
	<p>J-Tech Digital JTECH-WEX-200M4K Wireless HDMI Extender User Manual</p> <p>User manual for the J-Tech Digital JTECH-WEX-200M4K, a 4Kx2K@30Hz Wireless HDMI Extender with IR function, supporting up to 660ft transmission.</p>