UeeVii CPE241

UeeVii Wireless Bridge User Manual

Model: CPE241

Introduction

The UeeVii CPE241 Wireless Bridge is designed to extend your 2.4GHz wireless network over long distances, up to 1 kilometer (0.62 miles). This device provides a stable and reliable point-to-point wireless connection, ideal for scenarios requiring network extension to remote buildings such as barns, garages, shops, or for surveillance systems. This manual provides detailed instructions for setting up, operating, and maintaining your wireless bridge.



Image: UeeVii CPE241 Wireless Bridge units establishing a connection.

Package Contents

Before beginning installation, please verify that all items are present in your package:

- 2 x UeeVii CPE241 Wireless Bridge Units
- 2 x Passive PoE Power Adapters
- 2 x Ethernet Cables
- 2 x Mounting Clamps
- 1 x Quick Start Guide



Image: All components included in the UeeVii Wireless Bridge package.

Specifications

Feature	Detail
Model Number	CPE241
Wireless Communication Standard	2.4 GHz Radio Frequency (IEEE 802.11 b/g/n)
Wireless Transmission Rate	Up to 300Mbps
Ethernet Port Speed	10/100Mbps RJ45
Antenna	8dBi Directional Antenna

Feature	Detail
Transmission Distance	Up to 1 KM (0.62 miles) with clear line of sight
Power Supply	Passive Power over Ethernet (PoE) via included adapters
Security Protocol	WPS (Wi-Fi Protected Setup)
Operating System	Proprietary Router OS
Product Dimensions	9 x 4 x 1 inches
Item Weight	1.54 pounds



Image: Wireless transmission rate and frequency details.

Setup and Installation

Mounting the Devices

For optimal performance, the wireless bridge units must be mounted outdoors with a clear, unobstructed line of sight between them. Avoid any physical barriers such as trees, buildings, or dense foliage that could interfere with the wireless signal.

1. Choose a suitable mounting location for each unit. Ideal locations are high points like poles or building eaves, ensuring direct visibility to the other unit.
2. Use the provided mounting clamps to securely attach the units to a pole or other stable structure. Ensure the units are oriented to face each other directly.
3. Verify the stability of the mounting to prevent movement due to wind or other environmental factors.



Image: Wireless bridge unit mounted on a pole for outdoor use.

Connection Topology

The UeeVii Wireless Bridge operates in a Master-Slave configuration. One unit acts as the Master (transmitter) and connects to your main network, while the other acts as the Slave (receiver) and provides network access at the remote location.

- **Master Bridge (Transmitter Mode):** Connects to your existing router or network switch via an Ethernet cable. The included PoE adapter powers the unit and provides data connectivity.
- **Slave Bridge (Receiver Mode):** Connects to your remote device (e.g., PC, IP camera, NVR, or another router/switch) via an Ethernet cable. The included PoE adapter powers the unit and receives data wirelessly from the Master Bridge.



Image: General connection topology for the wireless bridge.



Image: Master Bridge (Transmitter Mode) setup.



Image: Slave Bridge (Receiver Mode) setup.

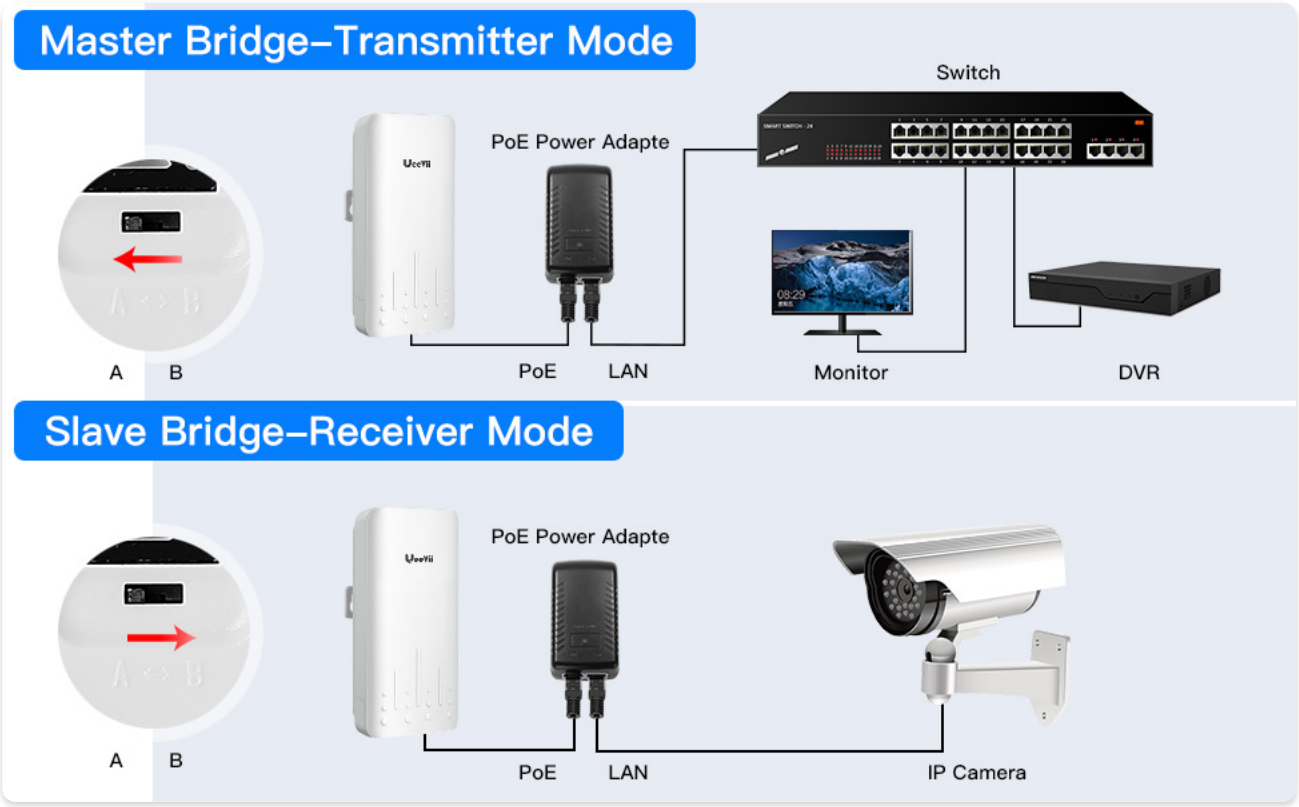


Image: Point-to-point setup for surveillance range expansion.

Device Pairing

The UeeVii Wireless Bridge units are designed for easy pairing:

1. Ensure both units are powered on using their respective PoE adapters.
2. On each unit, locate the H-C buttons. Push one unit's button to the 'H' side (for Master) and the other unit's button to the 'C' side (for Slave).
3. Within one minute of setting the H-C buttons, press the 'RST' (Reset) button on both units.
4. The pairing process should complete within 2 minutes. Observe the indicator lights on the units to confirm successful pairing (refer to the Quick Start Guide for specific LED indicators).



Image: Easy pairing process for Master and Slave units.

Operation

Once successfully paired and connected, the UeeVii Wireless Bridge creates a transparent wireless link between your two locations. Data transmitted over this link behaves as if it were sent through a physical Ethernet cable.

- The Master unit transmits your network signal wirelessly.
- The Slave unit receives the signal and makes it available via its Ethernet port.
- The 2.4GHz frequency band ensures compatibility with a wide range of devices, while the 300Mbps transmission rate is suitable for various applications including internet browsing, file sharing, and standard definition video streaming.

Applications

The UeeVii Wireless Bridge is versatile and can be used in numerous scenarios:

- **Extending Home Network:** Provide internet access to detached garages, barns, workshops, or other outbuildings.
- **Surveillance Systems:** Connect IP cameras or NVRs in remote locations without running long Ethernet cables.
- **Small Business/Campus Connectivity:** Link separate buildings within a property for shared network resources.
- **Outdoor Wi-Fi Hotspots:** Extend Wi-Fi coverage to outdoor areas by connecting an access point to the Slave unit.

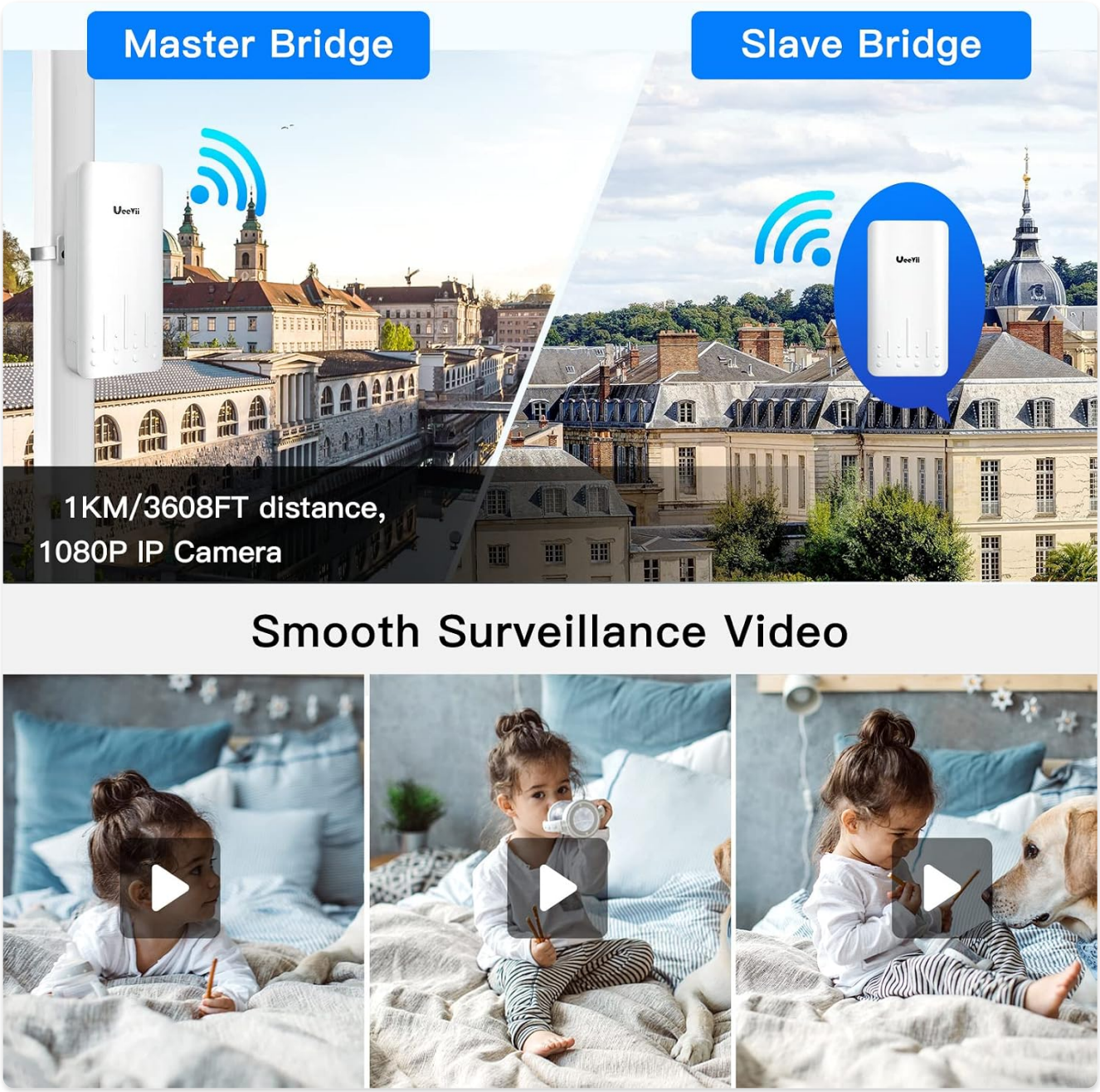


Image: Wireless bridge facilitating smooth surveillance video over long distances.



Image: Network extension solutions for various remote structures.



Image: Illustrating the 1 KM transmission distance capability.

TROUBLESHOOTING

- **No Connection/Pairing Issues:**
  - Ensure clear line of sight between both units. Any obstruction can severely degrade or block the signal.
  - Verify that the H-C buttons are correctly set (one 'H', one 'C') and the RST button was pressed on both units within the specified timeframe.
  - Check LED indicators on both units to diagnose status (refer to Quick Start Guide for LED meanings).
  - Confirm both units are receiving power from their respective PoE adapters.
- **Slow Speed/Intermittent Connection:**
  - Re-check line of sight for any new obstructions (e.g., growing trees, new structures).
  - Ensure units are securely mounted and not shifting, which could misalign them.
  - Minimize interference from other 2.4GHz devices in the area.
  - Verify Ethernet cable integrity and connections.
- **Power Issues:**
  - Only use the included passive PoE injectors. These units are not compatible with standard 802.3at/af PoE switches.
  - Ensure power outlets are functional.

Maintenance

To ensure the longevity and optimal performance of your UeeVii Wireless Bridge:

- Periodically inspect the mounting hardware for tightness and stability.
- Keep the units clean from dust, dirt, and debris. Use a soft, dry cloth for cleaning.
- Regularly check the line of sight between the units for any new obstructions and clear them if necessary.
- Ensure all cable connections are secure and free from damage.

Warranty and Support

UeeVii products are designed for reliability and performance. For any technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact UeeVii customer support. Refer to the contact information provided in your Quick Start Guide or visit the official UeeVii website for the most up-to-date support resources.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question