UeeVii CPE688KIT

UeeVii Point-to-Point Wireless Bridge System CPE688KIT Instruction Manual

Model: CPE688KIT | Brand: UeeVii

1. Product Overview

The UeeVii CPE688KIT is a comprehensive wireless bridge system designed for extending network connectivity over long distances. This kit includes two 5.8G wireless bridges, adjustable installation brackets, and a high-speed WiFi 6 AX3000 dual-band router. It provides an all-in-one solution for robust network extension and reliable WiFi broadcasting to remote areas.

Figure 1: UeeVii CPE688KIT Wireless Bridge System components including two bridges and a WiFi 6 router.

Key Features:

- **5KM Point-to-Point Transmission:** Supports long-distance data transfer up to 5 kilometers.
- **Dual Gigabit Ethernet Ports:** Each wireless bridge features two Gigabit RJ45 ports for high-speed wired connections.
- **48V PoE Power Supply:** Power and data transmission via a single Ethernet cable for simplified installation.
- **Adjustable Mounting Brackets:** Allows for flexible pole or wall-mounted setups with angle adjustment.
- **Seamless WiFi 6 AX3000 Router:** Provides ultra-fast speeds up to 3000Mbps with dual-band frequencies (2.4GHz and 5GHz).
- **Weather-Resistant Design:** IP66 weatherproofing ensures durability in outdoor environments.

2. What's in the Box

The UeeVii CPE688KIT comes with all necessary components for a complete setup:

- 1 x AX3000 WiFi 6 Router with Power Adapter
- 1 x CPE688 Wireless Bridge with 24V PoE Adapter
- 2 x 3FT Test Network Cables

- 2 x Adjustable Installation Brackets Kit
- 3 x User Manual (including this document)

Figure 2: All items included in the UeeVii CPE688KIT package.

3. Setup and Installation

3.1. Mounting the Wireless Bridges

The CPE688 wireless bridges can be mounted using the included adjustable brackets. These brackets support both pole and wall mounting, offering 150° angle adjustment for optimal alignment.

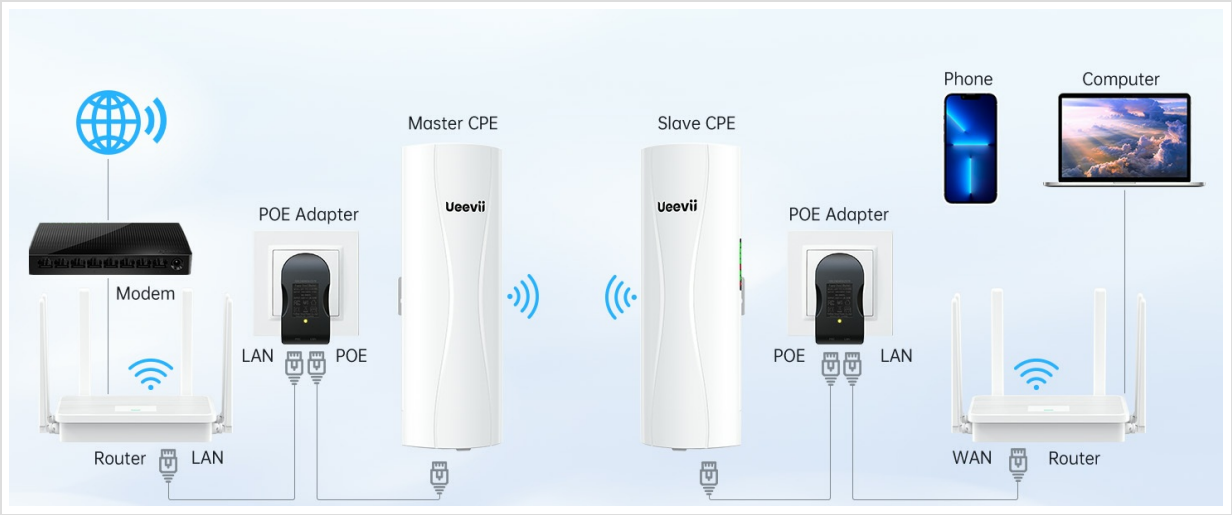

Figure 3: Illustration of pole and wall mounting options for the wireless bridges.

Wall Mounting:

1. Drill pilot holes in the desired wall location using the bracket as a template.
2. Secure the bracket to the wall using appropriate screws.
3. Attach the curved pole to the bracket and adjust the angle as needed.
4. Secure the wireless bridge to the pole using the provided hose clamps.

Pole Mounting:

1. Attach the bracket to the pole using the provided hose clamps.
2. Attach the curved pole to the bracket and adjust the angle as needed.
3. Secure the wireless bridge to the curved pole using additional hose clamps.

Ensure both bridges have a clear line of sight to each other for optimal performance. The antenna radiation angle is approximately 60 degrees horizontally and 30 degrees vertically.

3.2. Wiring and Power Supply

The wireless bridges support 48V Power over Ethernet (PoE), simplifying wiring by transmitting both power and data through a single Ethernet cable.

Figure 4: PoE adapter connecting the wireless bridge to a network switch.

1. Connect one end of an Ethernet cable (e.g., 3FT Test Network Cable) to the **POE** port of the PoE adapter.

2. Connect the other end of this Ethernet cable to the **LAN1/POE** port on the wireless bridge.
3. Connect a second Ethernet cable from the **LAN** port of the PoE adapter to your main router/network switch (for the Master bridge) or to your local network device/router (for the Slave bridge).
4. Plug the PoE adapter into a power outlet.

3.3. Pairing the Wireless Bridges

The bridges are pre-configured for easy installation. For initial setup or re-pairing, follow these steps:

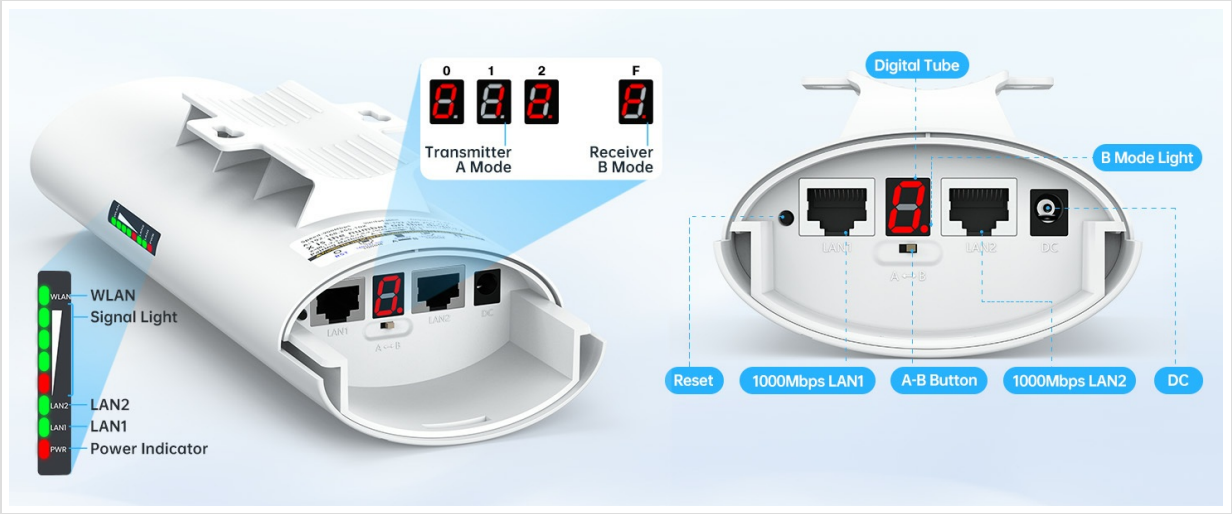

Figure 5: Visual guide for pairing Master (A) and Slave (B) bridges.

1. On the bottom of one bridge, set the A/B switch to **A** (Master).
2. On the bottom of the second bridge, set the A/B switch to **B** (Slave).
3. Power on both bridges using their respective PoE adapters.
4. On both bridges, use a small tool to short press the **RST** (reset) button to cycle through the channel numbers (0-F). Select the same channel number for both the Master and Slave bridges.
5. Wait for 2-5 minutes for the pairing process to complete. Solid green WLAN signal lights on both devices indicate successful pairing.

3.4. Router Setup

The included AX3000 WiFi 6 Router provides high-speed wireless connectivity. To set up the router:

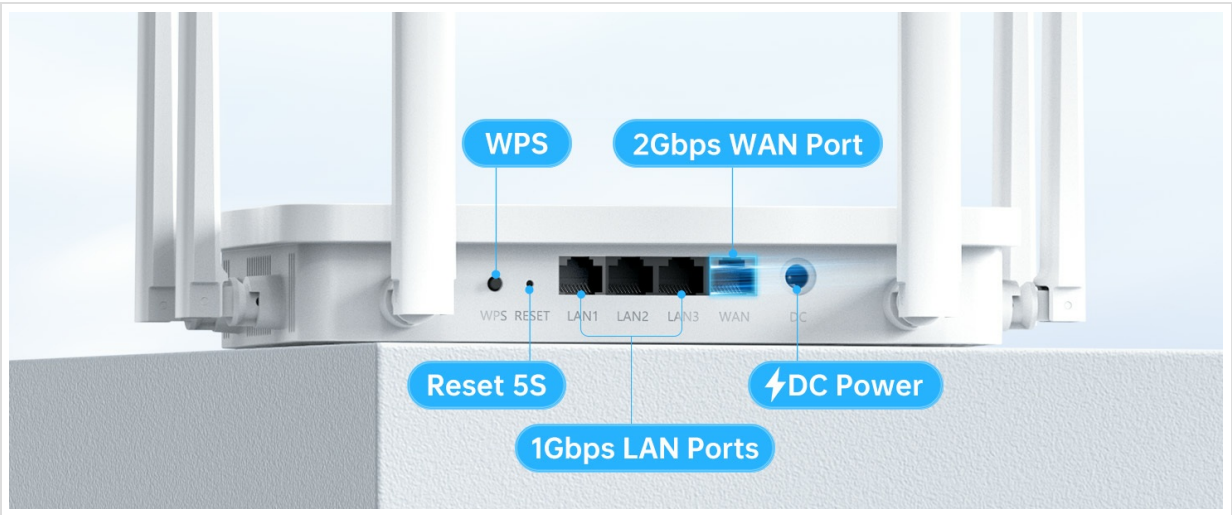

Figure 6: Router setup interface for login, guest network, and security settings.

1. Connect your computer or mobile device to the router's default WiFi network (SSID and password can be found on the router's label).

2. Open a web browser and navigate to the router's default IP address (e.g., http://192.168.100.1).
3. Log in using the default username and password (also on the router's label).
4. Follow the on-screen wizard to configure your internet connection, WiFi name (SSID), and password.
5. You can also set up a guest WiFi network and configure security settings for your home network.

4. Operating the System

4.1. Network Extension Scenarios

The CPE688KIT can be deployed in various scenarios to extend your network:

Point-to-Point Network Extension:

Figure 7: Point-to-Point setup for extending internet to another building.

- Connect the Master bridge to your main router/modem.
- Connect the Slave bridge to a secondary router in the remote location.
- This setup effectively creates a wireless Ethernet cable, providing internet access to the remote area.

Extending Network with Starlink:

Figure 8: Integrating the wireless bridge system with a Starlink setup.

- Connect the Starlink router to a Starlink RJ45 adapter.
- Connect the Master bridge to the Starlink RJ45 adapter.
- The Slave bridge then connects to your remote router, extending Starlink's internet.

Surveillance Camera Extension:

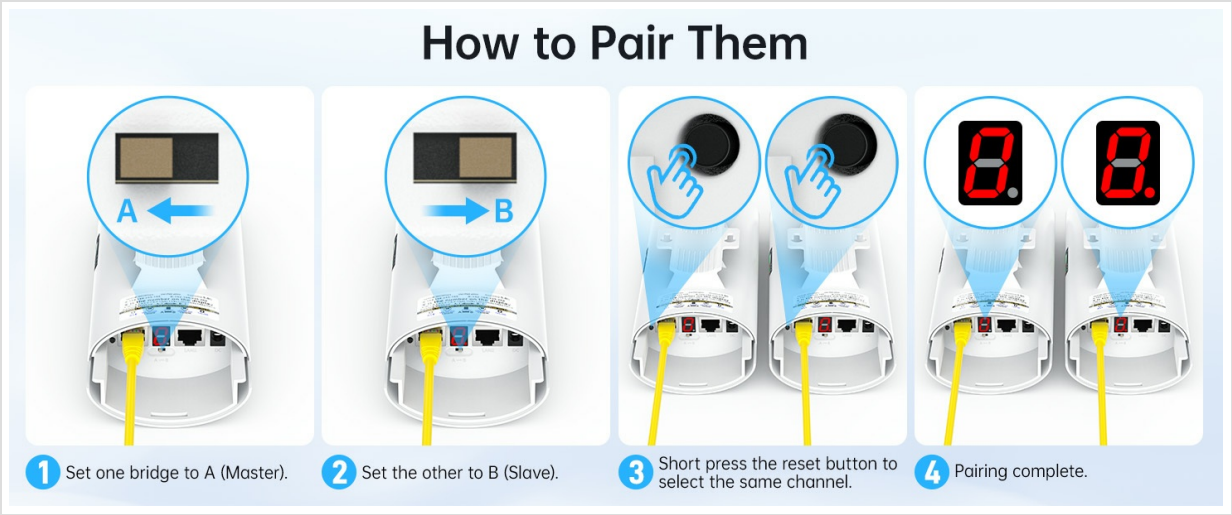

Figure 9: Using the wireless bridge to extend network for surveillance cameras.

- Connect the Master bridge to a network switch connected to your DVR/NVR.
- Connect the Slave bridge to a network switch where your IP cameras are connected.
- This allows for remote monitoring of cameras without long cable runs.

Point-to-Multipoint Surveillance:

Figure 10: Master bridge connecting to multiple slave bridges for wider camera coverage.

- A single Master bridge can connect to multiple Slave bridges (up to 8).
- Each Slave bridge can then connect to individual cameras or a local switch for multiple cameras.
- This configuration is ideal for covering large areas with multiple surveillance points.

4.2. LED Indicators

The wireless bridges feature LED indicators on the side to provide status information:

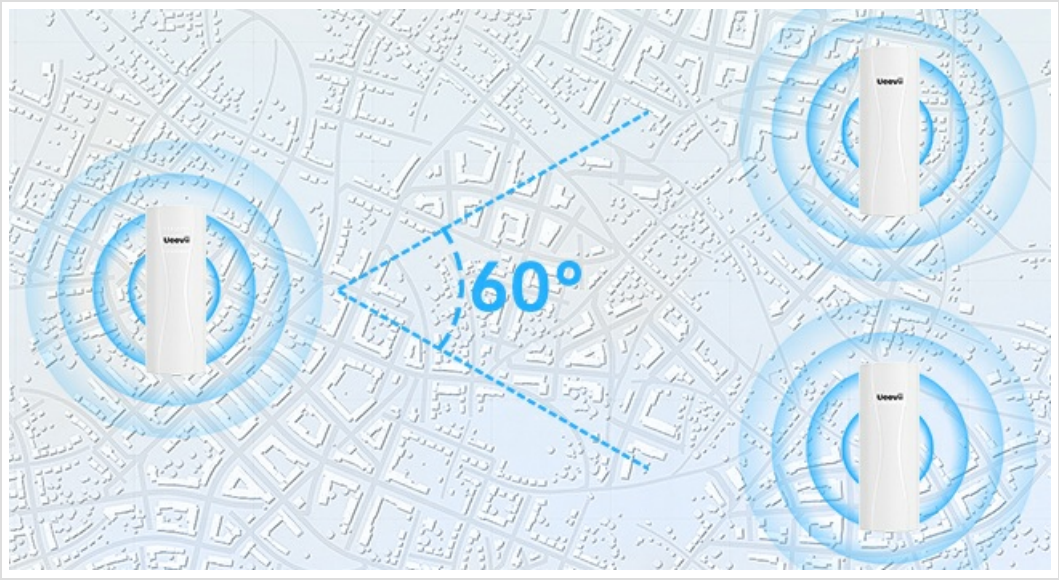

Figure 11: LED indicators on the side of the wireless bridge.

- **PWR:** Power indicator. Solid green when powered on.
- **LAN1/LAN2:** Ethernet port activity. Flashing green indicates data transfer.
- **WLAN:** Wireless link status. Solid green indicates a stable wireless connection between bridges. Flashing indicates searching for a link.
- **Digital Tube:** Displays the selected channel number (0-F).

5. Maintenance

The UeeVii CPE688 wireless bridges are designed for minimal maintenance due to their IP66 weather-resistant casing. This ensures protection against dust, rain, and extreme temperatures.

Figure 12: The IP66 weather-resistant design ensures durability in outdoor environments.

- Regularly check physical integrity of mounting brackets and cables.
- Ensure the bottom cover protecting the ports is securely closed.
- Clean the exterior casing periodically to remove dirt or debris that may accumulate.

6. Troubleshooting

If you encounter issues with your CPE688KIT, refer to the following common problems and solutions:

Common Issues:

- **No Power:** Ensure PoE adapters are correctly plugged into power outlets and connected to the bridges. Check LED indicators.
- **No Wireless Link (WLAN LED flashing):**
  - Verify clear line of sight between bridges. Obstructions can block the signal.
  - Ensure both bridges are set to the same channel number using the RST button.
  - Confirm one bridge is set to 'A' (Master) and the other to 'B' (Slave).
- **Slow Speed/Unstable Connection:**

- Check for physical obstructions between bridges.
- Ensure optimal alignment of bridges using the adjustable brackets.
- Test with shorter, verified Ethernet cables to rule out cable issues.
- Consider changing the channel number to avoid interference.

- **Unidentified Network (on connected device):** This issue may occur if the network configuration is not correctly established or if there's a conflict.

Troubleshooting Steps:

1. **Verify Power and Link:** Check all LED indicators on both bridges and PoE adapters.
2. **Re-pair Bridges:** Follow the pairing steps in Section 3.3 to re-establish the wireless link.
3. **Factory Reset:** If issues persist, perform a factory reset on both bridges. This can often resolve configuration conflicts.
4. **Test Cables:** Use known good Ethernet cables to connect devices.

For further assistance, please refer to the detailed user manual included in your package or contact UeeVii customer support.

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Video 1: This video provides a detailed overview of the UeeVii CPE688 wireless bridge, demonstrating its features and components. It highlights the dual Gigabit ports, PoE power supply, and the A/B switch for master/slave configuration. The video also shows the LED indicators for power, LAN activity, and wireless link status, which are crucial for troubleshooting connectivity issues.

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Video 2: This video showcases the AX3000 WiFi 6 router included in the CPE688KIT. It demonstrates how to connect the router and highlights its high-speed capabilities and dual-band frequencies. This is useful for users setting up the router component of the system and understanding its basic functionality.

7. Specifications

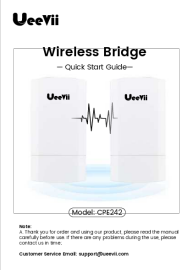
Feature	Detail
Model Name	CPE688KIT (CPE688 Bridge+WiFi6 Router)
Brand	UeeVii
Product Dimensions	3.5 x 2.1 x 9.6 inches
Item Weight	5 pounds
Connectivity Technology	5G, Ethernet, Wi-Fi
Wireless Communication Standard	802.11a, 802.11ac, 802.11n
Frequency Band Class	Dual-Band (2.4GHz and 5GHz)

Special Feature	2*1000mbps RJ45 Port, Access Point Mode, Complete Point to Point Wireless Bridge Kit, With 2 Adjustable Installation Brackets, With WiFi 6 AX3000 Router
Power Supply	48V PoE
Weatherproofing	IP66
Max Transmission Range	5 Kilometers

8. Warranty and Support

For warranty information and technical support, please refer to the specific terms provided in your product packaging or contact UeeVii customer service directly. Contact details are typically found in the included user manual or on the manufacturer's official website.

Related Documents - CPE688KIT

	UeeVii CPE688 Wireless Bridge User Manual - 5.8GHz Long-Range Network Extender Comprehensive user manual for the UeeVii CPE688 Wireless Bridge, detailing installation, configuration, troubleshooting, and specifications for 5.8GHz long-range point-to-point and point-to-multipoint network extension.
	UeeVii CPE242 Wireless Bridge Quick Start Guide This guide provides essential information for setting up and configuring the UeeVii CPE242 Wireless Bridge, covering product introduction, specifications, installation, and advanced settings for reliable wireless connectivity.
	UeeVii CPE990 Wireless Bridge User Manual: Setup, Configuration, and Troubleshooting Comprehensive user manual for the UeeVii CPE990 5.8GHz Wireless Bridge. Learn about installation, pairing, advanced settings, WiFi configuration, and troubleshooting for extending network range and surveillance camera connectivity.
	UeeVii UAP180 Wireless Access Point User Manual Comprehensive user manual for the UeeVii UAP180 outdoor high-power Gigabit Wireless Access Point. Covers product description, functions, package contents, interfaces, quick start guide, advanced settings, working modes, installation, specifications, and troubleshooting.

	[UeeVii CPE852 Outdoor Dual-Band Wireless Bridge User Manual] Comprehensive user manual for the UeeVii CPE852 Outdoor Dual-Band Wireless Bridge. Learn about installation, configuration, specifications, troubleshooting, and application cases for extending network range up to 5KM.
	[UeeVii CPE58G Wireless Bridge User Manual - Setup, Specs, and Troubleshooting] Official user manual for the UeeVii CPE58G 5G high-performance outdoor wireless bridge. Covers product introduction, features, specifications, interface details, button operations, quick start guide, installation, application cases, advanced settings, and troubleshooting for optimal network connectivity.