Quick Installation Guide

AIRNET 54 Mb Outdoor Bridge Point to Point Kit
AIR-PTP900L

Package Contents:

- Two Netkrom AIRNET Outdoor Bridge Units
- Two Mounting brackets (include: 2 Wall/ Pole mounting system and 4 screw nuts)
- Two PoE Injectors
- Two Power Cables
- Two RJ45 Waterproof Connector System
- CD-ROM
- Two 75’ Outdoor Rated Cat5e shielded cables
1. Hardware Installation

Warnings

- Do not work on the system or connect or disconnect cables during periods of lightning activity.

- NETKROM shall not be liable for incidental or consequential damages resulting from the furnishing, performance, or use of this manual.

- Do not locate the antenna near overhead power lines or other electric light or power circuits, or where it can come into contact with such circuits. When installing the antenna, take extreme care not to come into contact with such circuits, as they may cause serious injury or death.

- Only trained and qualified personnel should be allowed to install, replace, or service this equipment.

- To meet regulatory restrictions, the radio and the external antenna must be professionally installed. The network administrator or other IT professional responsible for installing and configuring the unit must be a suitable professional installer. Following installation, access to the unit should be password protected by the network administrator to maintain regulatory compliance.

- The AIRNET Outdoor Bridge Point to Point kit and PoE injector can be damaged by incorrect power application. Read and carefully follow the installation instructions before connecting the system to its power source.
Package contents

Take a moment to ensure you have all of the following parts in your Outdoor Waterproof Unit installation kit before you begin installing the product. If any parts are missing, please contact your local vendor or contact us, please see the contact information in Section 6.
**Setup Requirements**

Before starting, please verify that the following is available:

- CAT5/5e or FTP Outdoor Ethernet cable (from the AIRNET Outdoor Bridge to PoE Injector)
- At least one computer is installed with a Web browser and a wired or wireless network interface adapter
- TCP/IP protocol is installed and IP address parameters are properly configured on all your network’s nodes

**Important!**

- Configure and verify the AIRNET Outdoor Bridge kit operations first before you mount the unit in a remote location.
- You may need to install a lightning arrestor to protect your AIRNET Outdoor Bridge kit from lightning.
- For choosing the best location for your AIRNET Outdoor Bridge choose an elevated location where trees, buildings and large steel structures will not obstruct the antenna signals and which offers maximum line-of-sight propagation with the users.
**AIRNET Outdoor Bridge**

**Point to Point**

**Installation**

**Step 1:**
Connect one end of your UTP or FTP Outdoor cat.5 Ethernet cable with waterproof connector to the RJ-45 connector located in the AIRNET Outdoor Bridge unit. Then connect the other end of the cable to the PoE injector.

For the Netkrom PoE, the recommended length of the Category 5 cable is up to 260 feet or 80 meters.

1.- Remove the thin enclosure nut from the feedthru assembly. This can be discarded. Loosen the compression nut completely.

2.- Insert the RJ45 connector thru the feedthru assembly.

3.- Tighten the compression nut loosely to the feedthru assembly.
4.- Screw the entire feedthru assembly into the RJ45-ECS housing which is already mounted in the AIRNET Outdoor Bridge unit. There should be a rubber gasket between the two assemblies. Tighten the feedthru assembly to create a seal.

5.- The final step is to tighten the compression nut until the gaskets are tight around the Cat5 cable. Always push the cable toward the connector while tightening to ensure good strain relief of cable to connector.

Step 2

From the PoE injector connect one cat.5 Ethernet cable to the radio and another cat.5 cable to a switch or PC.

Step 3

Connect the power cable supplied in the Netkrom PoE kit to the main electrical supply and the power plug into the socket of the injector. Now, turn on your power supply. Notice that the POWER LED has lighted up. This indicates that the AIRNET Outdoor Bridge unit is receiving power through the Netkrom PoE Injector and that connection between your AIRNET Outdoor Bridge unit and your network has been established.

Note: Please use the PoE injector provided in the package. Using a PoE with a different voltage rating will damage this product.
Mounting the AIRNET Outdoor Bridge in a Pole or Tower

Netkrom AIRNET Outdoor Bridge device can be mounted on the pole or tower as shown in following:

1.- Attach the mounting bracket to the back of the radio using the four hex screws provided. (Do not over tighten the screws.)

Note: The bracket in the illustration side shows the normal orientation which allows the wireless unit to be pointed up towards the base station antenna. However, if you live somewhere that would require you pointing the device down towards the base station antenna (for example, you are on the side of a mountain in view of the base station antenna below), reverse the bracket so the Netkrom wireless radio Unit can be “tilted” downward when you aim the AIRNET Outdoor Bridge in a later step.

2.- You can use the pipe bracket assembly for either thin or thick poles by just inverting the position of one of the elements as it shown on the right.

Note: Do not tighten the screws all the way because you will need to adjust the AIRNET Outdoor Bridge direction in a later step.

4.- Mount the AIRNET Outdoor Bridge to the top of the pipe or other support and point the AIRNET Outdoor Bridge in the approximate direction of the base station antenna, then hand-tighten the nuts on the mounting system.
2. uConfig Utility

**uConfig** is a feature that provides the ability to directly access the AIRNET Outdoor Bridge without the need to know absolutely its IP address. It may be run directly from the product CD or installed on the user’s PC for later access.

### Using uConfig

When you execute the uConfig file you should see a window as it is shown on the right side. Click yes to continue.

The screen is divided into three sections. The top section shows the Ethernet adapter that is accessing the network device and the middle portion shows the routing table associated with the Ethernet adapter. In the lower window, a list of all **uConfig** compatible devices on the network is shown.

Highlight the device you desire to configure. Then click on the “Open web” button.
Click the OK button to continue

The default browser will be loaded using the correct IP address of the AIRNET Outdoor Bridge (regardless of how the computer’s TCP/IP properties are set),

Default Password: password

Click on LOGIN!, and start configuring the radio.
3. PC Configuration

If you don’t use the uConfig Utility you need to establish Ethernet connection between your PC and the AIRNET Outdoor Bridge, by default the AIRNET Outdoor Bridge has the IP address 192.168.168.1. Therefore, your PC must be in the same network segment as the AIRNET Outdoor Bridge is to get Ethernet connectivity.

Step 1
Go to Start button, then go to My Network Places and finally click on Network Connections.

Right-Click over your network adapter and select Properties.

Step 2
Select the Internet Protocol Option and then click in Properties.

Step 3
Now configure the IP Address of your network adapter with an IP in the same Network segment as your AIRNET Outdoor Bridge is as it is shown in the picture, you don’t need to assign any gateway address.

Press OK and then press the Close button.
4. Common Configurations

Find below typical and basic configurations using the AIRNET Outdoor Bridge. For advanced features please refer to the user manual.

Getting Started

You can start configuring your AIRNET Outdoor Bridge using either your Web Browser or the uConfig utility.

At the Address bar, enter http://192.168.168.1 and press Enter on your keyboard.

At the login page, click on the LOGIN! button to enter the configuration page.

Default Password: password

You will then reach the home page of your AIRNET Outdoor Bridge’s Web interface.
**Wireless Point to Point Setup**

The AIRNET Outdoor Bridge Point to Point Kit is commonly used in Point-to-Point Applications.

You can implement a Point-to-Point connection by simply setting one access point as RootAP in Access Point mode and setting the other access point in Transparent Client mode or in Client Mode.

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**NOTE**
- Client Mode does not provide transparent bridging.
- Transparent Client Mode does provide transparent bridging.

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**Follow these steps to setup RootAP**

Click on WLAN Setup from the CONFIGURATION menu. You will see the sub-menus expanded under WLAN Setup. Click on Basic.

Ensure that The Current Mode is set to Access Point.

Select Act as RootAP, click on the Apply button and reboot your device to let your changes take effect.
Follow these steps to setup Transparent Client/s.

Step 1
Select the Remote AP MAC checkbox. Enter the Remote AP MAC. Check the MAC address of your Remote AP under About system >> Wireless MAC.

Ensure that The Current Mode is set to Transparent Client.

Step 2
Select the Remote AP MAC checkbox. Enter the Remote AP MAC. Check the MAC address of your Remote AP under About system >> Wireless MAC.

Note: When using Remote AP MAC, the ESSID name must also match the AP’s ESSID name, especially when Closed System is enabled on the AP.

Repeat the Transparent Client steps to add more Clients to the Point-to-MultiPoint connection.
900 MHz Channel Conversion (AIR-PTP900L)

In order to use your 900 MHz AIRNET Outdoor Bridge, you have to select in Wireless Profile any of the following options:

- 802.11b only
- 802.11g only
- 802.11b/g mixed (recommended)

Channel conversion from 2.4 GHz to 900 MHz:

Channel 5 or 6 must be used in any Operational Mode when using a 900 MHz AIRNET Outdoor Bridge.
5. Advanced Configuration


2. – Bandwidth Control: Please go to page 95 of User Manual.


6. Congratulations

With these basics steps you can enjoy your wireless link without problems, please for more information about the capabilities and advanced configuration of our product please see the user manual.

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