



UBIQUITI BRIDGE CONFIGURATION PROCEDURE **(PowerStation & NanoStation Units ONLY)**

Hardware Installation

1. Initial placement for programming and configuration purposes should be performed in an indoor environment. This will facilitate the link setup procedure.
2. After configuration, place the unit in an appropriate place using the mounting kit.
3. Run the Ethernet cable outdoors and plug it into the PoE injector port labeled "**POE**".
4. Plug one end of another Ethernet cable into your PC/Notebook and the other end into the PoE injector port labeled "**LAN**".
5. Insert the DC-inlet of the power adapter into the PoE injector port labeled "**DC**", and the other end into the wall outlet.

IP Address Configuration

This device can be configured as a Station or Access Point. The default IP address of the device is **192.168.1.20**. In order to log into this device, you must first configure the TCP/IP settings of your PC/Laptop.

For Windows XP users:

1. In the control panel, double click Network Connections and then double click on the connection of your Network Interface following screen.
2. Select **Internet Protocol (TCP/IP)** and then click on the **Properties** button. This will allow you to configure the TCP/IP settings of your PC/Notebook.
3. Select **Use the following IP Address** button and then enter the IP address and subnet mask. Ensure that the IP address and subnet mask are on the same subnet as the device.

For Example:

Device IP address: 192.168.1.20

PC IP address: 192.168.1.70

PC and Device subnet mask: 255.255.255.0

4. Click on the **OK** button to close this window, and once again to close LAN properties window.



For Windows Vista Static & DHCP TCP/IP Configurations:

There are two ways that a TCP/IP address is assigned to a computer either Dynamically, or with a Static method (Manually). These are outlined below:

Dynamic: This address is assigned automatically through DHCP (otherwise known as "Obtain IP address automatically." This is the default setting that Windows Vista tries to configure for the PC. It contacts a DHCP server on the network and asks for an IP address. The DHCP server will either be from your Internet Service Provider (ISP) or from your own router. This is the easiest configuration you can get, as everything will be done behind the scenes without intervention.

Static: If you don't have a DHCP server running, for any reason, you will have to give your PC a specific address that you will have to configure Windows Vista IP manually. Here is a short walk through:

- 1) Go to the Start Orb and click Control Panel. In the control panel click **Network and Internet**:
- 2) Now click on **Network and Sharing Center**:
- 3) In the Network and Sharing Center look along the **left** pane and click **Manage Network Connections**:

This will bring up a window with your Network Connections this will vary by computer and what is installed. In this case you need to right click on the adapter you want to configure. Choose **Properties**:

[If you are not logged in as an administrator you will get a UAC prompt, click **Continue**]

- 4) You now will see the Network Adapter properties window that will have all the protocols and services attached to that network adapter. 99% of users are still on IPv4 networks, compared to IPv6. If this is true, then select Internet Protocol Version 4 (TCP/IPv4) from the list of protocols and click **Properties**:
- 5) On the properties page you will set the button to use the following IP address and then configure the following according to your network:

- # IP Address
- # Subnet Mask
- # Default Gateway
- # Preferred DNS
- # Alternate DNS



6) Configure IP Gateway and Subnet

In almost all the cases all you have to do is hit **Ok** and you will be ready to go.

- 7) If you had clicked the Advanced buttons you would have options to setup multiple IP's, Gateways, DNS and WINS settings. These are advanced concepts that are beyond the scope of this procedure guide.

Logging Into Your AP/Station:

This device can be configured as a Station or Access Point. The default IP address of the device is **192.168.1.20**. This will describe the steps to switch from Station to Access Point and Access Point to Station.

Configuring Station/Bridge to Access Point:

- 1) Enter the default IP address (192.168.1.20) of the bridge into the address bar of the web-browser.

- 2) By default, a user name and password is:

U: ubnt

P: ubnt

(All entries are lower case by default)

If you have already configured a user name and password, please enter them into the corresponding fields in order to continue.

- 3) Once you have logged in, click on the **Link Setup** tab (next to **Main**) within the Web Based Configuration User Interface menu (i.e. Air OS 3.0).
- 4) Since this device is shipped in **Station** mode by default you will need to change the operation mode of the unit.
- 5) Select **Access Point** from the drop down menu in **Wireless Mode**, and the operation mode of the unit will switch to Access Point. In order to apply that setting change, you must click on the "Change" button, and continue with the changes by pressing the "Apply" button.
- 6) Wait for about 30 seconds and the device will automatically restart into Access Point mode.



Setting Up a Point to Point Link (i.e. Backhaul)

- 1) First, you need to start with two similarly matched units (PowerStation2, PowerStation5, NanoStation2, NanoStation5). Frequencies must be in the same band for both units.
- 2) You need to decide which side will be the “Access Point” and which side will be the “Station”.
- 3) In general, the “Access Point” will be located at the site of the network infrastructure that you are looking to associate to. On the unit that you decide is the “Access Point”, first start by going in to the Web GUI.
- 4) From here select the “**Link Setup**” tab. Click on the **Mode** drop down box, and select “**Access Point**”.
- 5) Next, you will see the options that let you input the SSID that you would like to use. Type in the SSID in this field to create the wireless network identifier.
- 6) Select the channel drop down and pick the Channel that you would like to use for this link.
- 7) Select the “Change” button, then the “Apply” button. This will soft boot the unit into AP mode.
- 8) The last step is to change the IP address so that there is no conflict with this device. In order to accomplish this, you would click on the “**Network**” tab. From here you can change the IP address to either a specific (Static) IP address, or you can set it up as DHCP from your server.
- 9) The next step is to configure the Station side of the wireless link. In general, the remote location is where the “Station” will be located.
- 10) Go into the Web UI and select the “Link Setup” tab. All units are shipped from the manufacturer in “Station” mode, by default. Select the Scan button (next to the SSID field).
- 11) Select the AP that you just set up. Verify the Access Point by matching the MAC Address of the Access Point that you initially programmed. From here select “**Change**”, and then “**Apply**”.
- 12) This will perform a soft reboot of the unit. Upon restart the “Station” will associate to the selected SSID.



Note: The SSID must match in both the Access Point, as well as the Station. It is not necessary to enter an SSID in the “Station/Client” unit if you choose the “Scan” button located next to the SSID field in the Station Mode unit only.

FIRMWARE UPGRADES

It is recommended that you install the most current and up to date firmware revision for the specific Ubiquiti model that you are using (i.e. PS2, PS5, NS2, NS5, etc.). You can find the firmware you need by going to the manufacturer’s website:

<http://www.ubnt.com/support/>

Contact Ubiquiti Support:

Ubiquiti support engineers are located in the U.S. and in Europe and are dedicated to helping customers resolve software, hardware compatibility, or field issues as quickly as possible. We strive to respond to support inquiries within a 24-hour period.

Email:

support@ubnt.com

Phone:

408-942-1153 (9am-5pm PST)

Ubiquiti Support Forum - You will find a wealth of information from both the Ubiquiti Networks support engineers and the WISP communities. The forum is a great place to find information.

<http://forum.ubnt.com/forum/>