PLEASE READ THESE INSTRUCTIONS BEFORE CONFIGURING OR DEPLOYING YOUR BULLET HIGH SPEED WIRELESS PLATFORM(S)
Thank you for purchasing the Bullet High Speed Wireless System. Using this device, you will be able to bridge LAN connections with wireless speeds up to/over 100 Megabits/second (condition and distance dependent). The Bullet Bridge System can act as a non-routing LAN extension or as a NAT-enabled gateway to link two locations via the IEEE 802.11N wireless protocol.

**Bullet Bridge kit Connection Diagram**

Bridge Kit Contents:
(2) Bullet High Speed Wireless Platforms  
(2) POE Injectors  
(2) 2.4Ghz Wireless Antennas  
(2) Category 5 Ethernet Cables (4 Required Total)

**Connecting the Bullet Compact Bridge System to your computer for configuration**

1. Connect a Category 5 Ethernet cable between your PC/MAC’s ethernet port and the LAN port of the POE Injector.
2. Connect a second Category 5 Ethernet cable between the POE port of the POE injector and the Ethernet port of the Bridge.
3. Connect the POE Injector to AC power with the included power cable.

*You will not need to connect an antenna to the Bridge at this time. You will be prompted to do so further along in these instructions.*
Before configuring your Bullet High Speed Wireless Platform(s), you will need to disable your internal wireless card or Airport (if applicable) and set a static or “unchanging” IP address.

**Windows**

**XP:**
1. Open Start Menu and select Control Panel
2. Select Network Connections (if unavailable, select show “Classic view”)
3. Right click the Local Area Connection and select properties
4. Highlight Internet Protocol Version 4 (TCP/IPv4) and click the properties button below
5. Select Use The Following IP Address and Enter 192.168.1.10 into the IP Address field and 255.255.255.0 into the subnet mask field
6. Select OK and select Close on the Local Area Connection properties window.

**Vista:**
1. Select Start Menu/Windows Logo > Network > Network and Sharing Center > Manage Network Connections
2. Follow Steps 3-6 above from Windows XP

**Windows 7:**
1. Select Start Menu/Windows Logo > Network > Network and Sharing Center > Change Adapter Settings
2. Follow Steps 3-6 above from Windows XP

When you are finished setting up the Bullet Bridge kit, you will need to change your connection back to “obtain and IP Address automatically” under “Internet Protocol Version 4 (TCP/IPv4)”
Macintosh OS X
1. Select the Airport Status Icon (upper right hand corner of screen) and select “Turn Airport Off”
2. Launch System Preferences and select Network
3. Select the Ethernet connection from the left column
4. Set the Configure IPv4 menu to “Manually”
5. Set IP Address to **192.168.1.10** and Subnet Mask to **255.255.255.0**
6. Click Apply to save these settings

Configuring the Primary Bridge Unit
1. Open a web browser (Internet Explorer, Mozilla Firefox, Safari, etc.) and enter **192.168.1.20** into the address bar and hit “Enter”. (Image Below)

2. Enter **ubnt** into both the User Name and Password fields and select “OK” (This is the default username and password for the bridge unit and can be changed in the System tab)
This is the main configuration page of your Bullet Bridge System. This will show the current status of the unit along with LAN/WLAN throughput and signal strength once the unit is configured.

3. Select the Wireless tab and change the “Wireless Mode” to “AP-Repeater”. This will open the “WDS Peers” table. Enter the MAC Address of the secondary Bridge (12-digit alphanumeric code located on the top of the Bridge product box) into the first WDS Peers field. The Mac Address must include a colon between every set of two digits.

(Do not enter the MAC address of the unit you are configuring into the WDS Peers field. If you are not sure of which address is correct, you can verify the address against the WLAN MAC address at the Main Tab of the configuration screen)

4. Select “Change” in the lower right hand corner and then “Apply” at the upper right hand corner.

5. Once the Bridge has rebooted, you are ready to configure the second half of the bridge. Unplug the Ethernet cable from the Bridge you have just configured and connect to the Ethernet port of the second Bridge. The already configured bridge should still have power but not be connected to the computer.
Configuring the Secondary Bridge Unit

1. Follow the above steps 1-2
2. Select the “Network” Tab and change the IP Address field to 192.168.1.21 (Image Below)

![Network Configuration Screen](image1.png)

3. Select “Change” in the lower right hand corner and then “Apply” at the upper right hand corner. Wait for the unit to restart and then repeat steps 1-2 again but with 192.168.1.21 in the address bar
4. Select the “Wireless” tab and change the “Wireless Mode” to Station
5. Check the box next to WDS (Transparent Bridge Mode)
6. Next to SSID, click the Select button (Image Below)

![Wireless Configuration Screen](image2.png)
7. Select the button next to the corresponding Mac Address of the primary station and click the Lock to AP button below (Image Below)

8. Select “Change” in the lower right hand corner and then “Apply” at the upper right hand corner.

When you are finished setting up the Bullet Bridge kit, you will need to change your connection back to “obtain and IP Address automatically” under “Internet Protocol Version 4 (TCP/IPV4)” This is found at the beginning of this guide.

Your Bullet Bridge System is now configured!
The radios can now be connected to the included antennas and the system can be deployed. The connection diagram at the beginning of this manual details the correct cabling connections for integration into an existing network or LAN. If you are bridging to a single computer, the LAN connection of the POE Injector of the remote unit or “Station” can be connected directly to the computer’s Ethernet port to allow network access.

Additional Information
Most connection issues can attributed to incorrect MAC address entry. If you are unable to gain network access or if the bridge is not functioning correctly, double check the MAC address entries against the WLAN MAC addresses listed on the Main Tab of each of the Bridge’s configuration page. The Bullet Bridge System is, by default, configured as a non-routing and non-addressing network device. If you wish to use these units to forward DHCP assigned addresses to a remote location, the default “Bridge” network mode will suffice (listed under the “Network” tab). If you wish to have the one of the Bridges act as a DHCP server or NAT gateway, select the “Router” option and the unit will allow configuration of your LAN/WLAN addressing and DHCP functionality.

Wireless speeds are affected by many different environmental variables, including line-of-sight, frequency interference and ambient radio noise. The Bullet Bridge System supports speeds up to 100 megabits/second (true throughput), however, due to natural variance in signal and the automatic speed selection, this may vary. If sustained speeds are required, you can lock the Bridge(s) into a throughput rate using the “Transmission Rate, Mbps” menu under the “Wireless” Tab.