**syntech**

# Install Bullet M5 Wireless Network

## Contents

> **CAUTION** If the omni-directional antenna is used, the additional black neoprene sealing washer provided with the kit must be installed in the antenna connector to ensure a waterproof seal. Water intrusion into the Bullet may occur if the additional washer is not installed.

> **NOTE** The reference to Cat 5 herein is a general term to describe Cat 5, Cat 5e, or Cat 6.
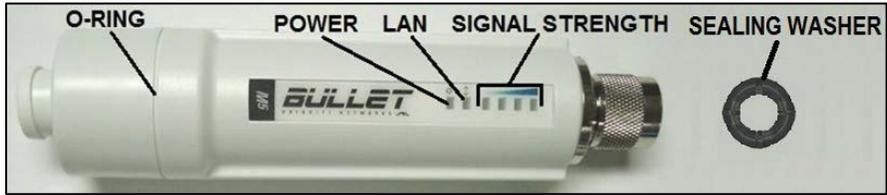


Figure 1. Bullet M5 LEDs and Seals
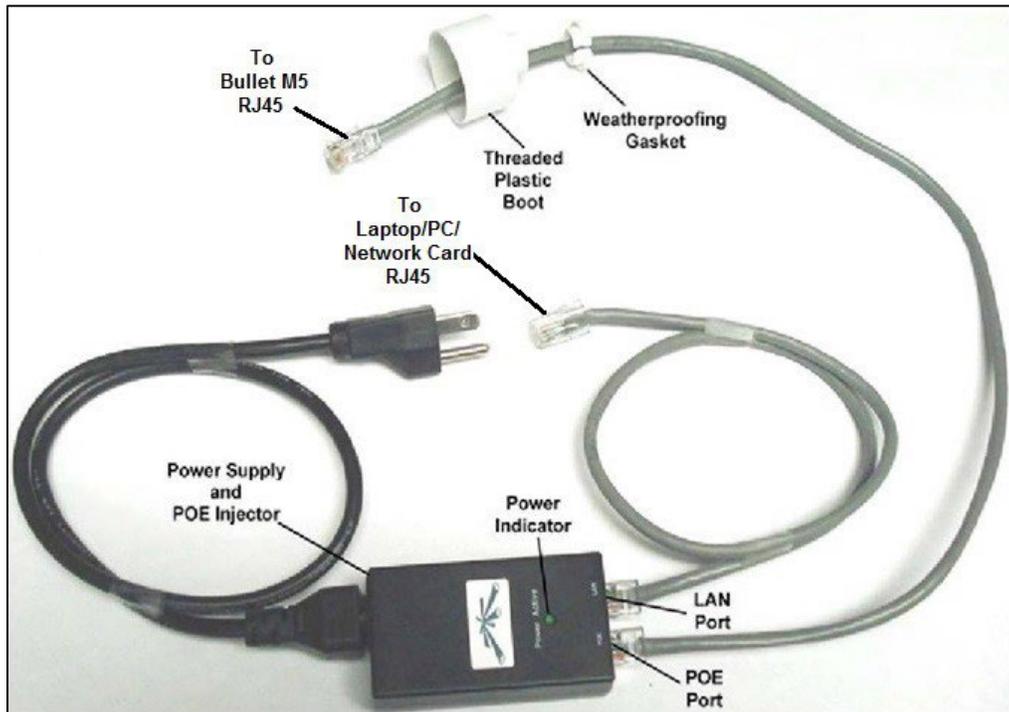


Figure 2. Power Supply/POE Injector and Patch Cables

# Introduction

With an advertised range of 50 km (~ 32 mi), the Bullet M5 is a wireless network transmitter/receiver, which may be set up as an access point (on a building), station (on an FMU), or a repeater. If purchased from Syntech, Bullet M5 is supplied in kit form with a power supply, power-over-Ethernet (POE) injector, antenna, patch cables, and mount hardware. If not purchased from Syntech, the components must be purchased separately.

Figure 2 illustrates the kit components used in conjunction with the Bullet M5 to make up one end of a wireless network connection. Ubiquiti recommends the use of their grounded power supply integrated with a POE injector to eliminate ESD (electrostatic discharge) attacks, which can damage Bullet M5. Ubiquiti recommends

a 15 VDC POE injector (Syntech-supplied) if the POE cable is no longer than 100 feet (30 meters). If the cable length exceeds 100 feet, a 24 VDC POE injector is recommended. The POE injector must supply power on Cat 5 lines 4 and 5, as well as, ground on lines 7 and 8.

As the Bullet M5 has no internal antenna, the kit's external antenna with a female N-type connector must be installed on all applications. An omni antenna should be installed on the access point (building end of the system) and may be installed on the FMU if other equipment broadcasting in the 5 GHz range does not interfere. If any interference with other equipment occurs, install a directional antenna on the FMU end.

A repeater, which can redirect the wireless signal around or over an obstacle if the obstacle is preventing reception, may be configured with a Bullet M5.  A repeater only needs a connection to a POE cable and location in the line of sight between the Access Point and Station. Try setup without a repeater first, as the signal strength of the Bullet M5 is strong enough to work around or over many obstacles.

# Bullet M5 Kits

Four different Syntech Bullet M5 kits have been developed and tested for specific applications (note some items are specified as required. If needed, parts marked as required must be noted in the purchase request.)

> **NOTE** Bullet M5 with Passive Mobiles require kit 941B0590 for the building and master FMU. Both also require an omni antenna to communicate with Passive Mobiles

## Kit 941B0590 Access Point

The Kit 941B0590 Access Point has a 110 VAC power supply and omni-directional antenna for mounting either on a building as an access point or on a master FMU as a station. This kit may be prone to interference from external sources when mounted on a master FMU. This kit includes a network switch should it be necessary to link multiple inputs to the FMU network card. The passive mobile applications are covered in Product Bulletin 213.

| Part # | Description | Amount |
|--------|-------------|--------|
| 193453* | washer | 4 |
| 210161 | ¼-20 nut | 4 |
| 211052 | ¼-20 x 0.75 screw | 4 |
| 246093 | network switch | 1 |
| 248177 | 2 ft patch cable (network switch to NIC, POE injector to Bullet M5) | 2 |
| 256641 | Bullet M5 | 1 |
| 256668 | 6dbi omni antenna | 1 |
| 256684 | power supply with POE injector (plugs into 110VAC) | 1 |
| 941B0591 | 3 ft outdoor patch cable with weather seal | 1 |
| 257257 | universal wall/pole mount bracket | 1 |
| 257338 | neoprene washer, 3/8 ID, 5/8 OD | 1 |

## Kit 941B0590B Station

The Kit 941B0590B Station has a 110 VAC power supply and directional antenna for mounting on a master FMU to communicate with a fixed position access point. This kit includes a network switch should it be necessary to link multiple inputs to the FMU network card.

| Part # | Description | Amount |
|--------|-------------|--------|
| 193453* | washer | 4 |
| 210161 | ¼-20 nut | 4 |
| 211052 | ¼-20 x 0.75 screw | 4 |
| 246093 | network switch | 1 |

| 248177 | 2 ft patch cable (network switch to NIC, POE injector to Bullet M5) | 2 |
|---|---|---|
| 256641 | Bullet M5 | 1 |
| 256641 | 23dbi directional antenna | 1 |
| 256684 | power supply with POE injector (plugs into 110VAC) | 1 |
| 941B0591 | 3 ft outdoor patch cable with weather seal | 1 |
| 257257 | universal wall/pole mount bracket | 1 |
| 941B0591A | 20 ft outdoor patch cable with weather seal | 1 |

## Kit 941B0590C Repeater

The Kit 941B0590C Repeater has a 110 VAC power supply and omni-directional antenna for redirecting the signal around or over obstacles which block the signal. It is mounted at a point where it has line of sight with both the Access Point and Station. A Repeater has no LAN connection, only a POE connection. The passive mobile application is covered in Product Bulletin 213.

| Part # | Description | Amount |
|---|---|---|
| 193453* | washer | 4 |
| 210161 | ¼-20 nut | 4 |
| 211052 | ¼-20 x 0.75 screw | 4 |
| 248177 | 2 ft patch cable, (POE) injector to Bullet M5) | 1 |
| 256641 | Bullet M5 | 1 |
| 256668 | 6dbi omni antenna | 1 |
| 256684 | power supply with POE injector (plugs into 110VAC) | 1 |
| 257257 | universal wall/pole mount bracket | 1 |
| 257257 | neoprene washer, 3/8 ID, 5/8 OD | 1 |

## Setup Procedures

There are setup procedures for the laptop/PC, the Bullet M5, the Master FMU Network Interface Card (NIC), and FuelMaster® software. The following procedures are the minimum necessary to set up a wireless network connection between the Central Controller and a master FMU. Each device (Bullet M5, FMU NIC, PC) on the same network configured for this procedure must have a different static IP address on the same physical subnet. Bullet M5 is delivered with a static IP address of 192.168.1.20 and with a 255.255.255.0 subnet mask.

## PC/Laptop Setup

### Assumptions

These procedures assume the following:

- Your PC (or laptop) is configured with a compatible static IP address

- Where the application includes a Central Controller connection to the wireless network, the Central Controller is configured with a compatible static IP address.

> *NOTE*   For instructions on how to do so, please see search online "how to setup a compatible static IP Address."

# Bullet M5 Setup

## Assumptions:

This tutorial assumes:

- The Bullet M5 has default settings active

- Reader has access to Ubiquiti AirOS 5.5 User Guide at the following link: http://dl.ubnt.com/guides/airOS/airOS_UG_V55_3-20-12.pdf for more information

1. From the power supply/POE injector (Figure 2, STS part number 256684), run a patch cable from the LAN connector to the PC/laptop LAN port.

2. Remove the Bullet M5 threaded plastic boot and weatherproofing gasket.

3. Run a patch cable from the power supply/POE injector POE connector through the threaded plastic boot to the Bullet M5 RJ45 connector.

4. Plug the power supply/POE injector into a 110VAC power source. The green Power Active light on the power supply/POE injector will illuminate, and the green power (⏻) LED, and the green LAN connect (↔) LED on the Bullet M5 will illuminate.

After 15-30 seconds, connect using url: http://192.168.1.20/. The first window that opens states there is a problem with this website's security certificate (Figure 3).
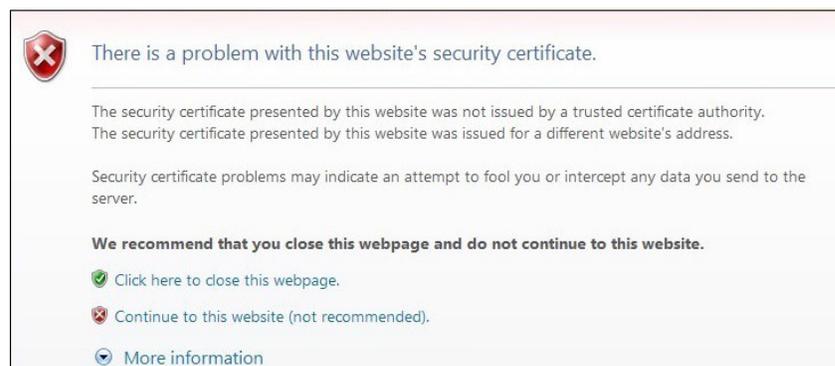


Figure 3. Certificate Error

5. Click on "Continue to this website (not recommended)".

6. Accept the Terms of Use, and enter your Login credentials (Figure 4). The default credentials are as follows:

   **Username**: ubnt

   **Password**: ubnt

| NOTE | Upon initial login, you must provide a Country and Language. Subsequent login windows will only ask for Username and Password. If desired, you can go to the SYSTEM tab to change the Administrator password or select Dismiss to dismiss the message (Figure 5). This is optional. |
|---|---|



Figure 4. Terms of Use
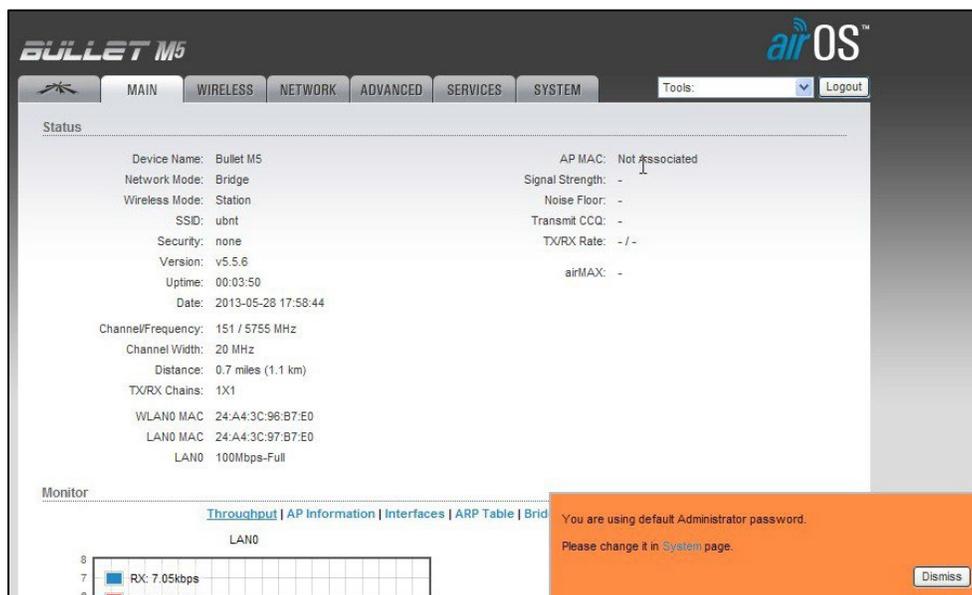


Figure 5. MAIN Tabbed Window

> **NOTE**  If a change is made in any window, select Change at the bottom of the window to save changes. At the top of the window, a prompt Configuration contains non-applied changes. Apply these changes? will appear with an Apply and Discard button (see Figure 14). Click on the Apply button.
>
> The default Base Station SSID is ubnt (lower case; case sensitive). Multiple Stations may be configured with ubnt, but only one Access Point. If ubnt is attempted when configuring an Access Point and it will not save, ubnt may already be in use with another onsite Bullet access point. Try changing to another Base Station SSID.

1. From the MAIN tabbed summary window (Figure 5), select the Wireless tab. The Wireless window will open.

2. Select the **Wireless Mode** drop down menu (Figure 6):

   - Access Point for the building end of the network

   - Station for the FMU end of the network

   - AP-Repeater for a repeater

> **NOTE**  The screen will refresh and offer settings applicable to the selected mode. These settings do not need to be changed for Access Point or Station. When selecting Access Point or Station, Ubiquiti recommends enabling WDS (Transparent Bridge Mode). Do not mix WDS settings with non-WDS settings.
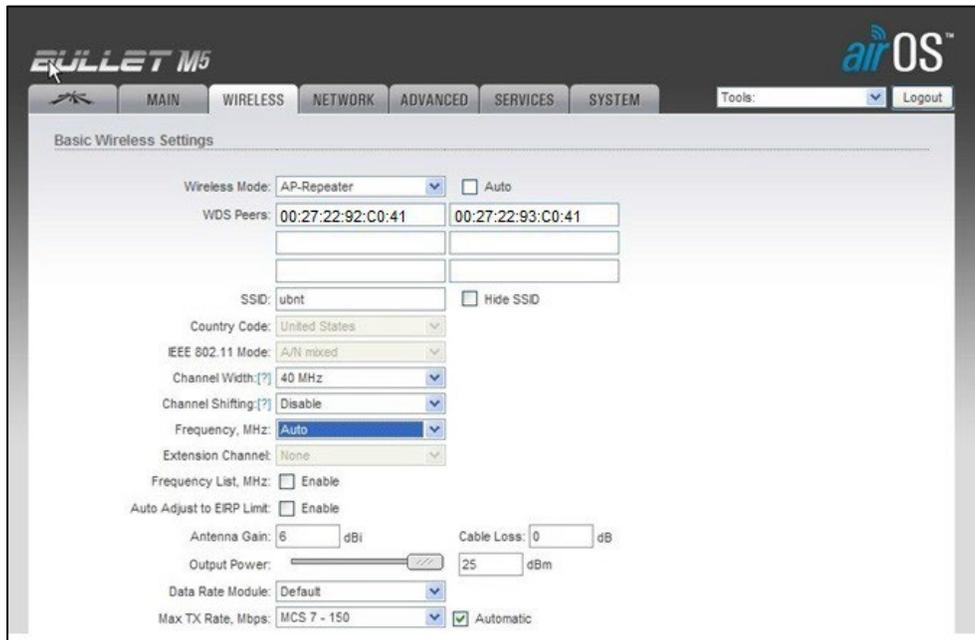


Figure 6. Selecting AP-Repeater Wireless Mode

3. Optional: If AP-Repeater is selected, perform the following:

    a. List the WDS Peers in the boxes as shown in (Figure 6). If the Auto box is checked to the right of AP-Repeater wireless mode, WDS Peers: will automatically be selected according to the SSID selection. This could put other devices in the network path of the repeater that may not be desired.

    b. Ensure the SSID, Channel Width, and Channel Shifting must match the same settings in the Access Point. If Frequency, MHz is Auto, the frequency selection will be automatically detected. If Auto is not selected, the selected frequency must match the frequency of the Access Point.

4. When using the part number 256668 omni antenna, enter 6 in the Antenna Gain in dbi box. When using the part number 256676 directional antenna, enter 23 in this box.

> *NOTE*    WPA and WPA2 security methods cannot be used when a repeater is used. All other available security options may be used.

5. **Optional**: Under Wireless Security, select a setting from the **Security** dropdown menu. Additional settings may be requested depending upon the security method chosen. See the Ubiquiti AirOS 5.5 User Guide for more information.

> *NOTE*    If changes are not saved before leaving a page of the firmware, the changes will be lost. Always ensure the **Change** button is activated to save changes. At the top of the window, a prompt Configuration contains changes. **Apply these changes?** will appear with a **Test**, **Apply** and **Discard** button. Select **Apply** button.
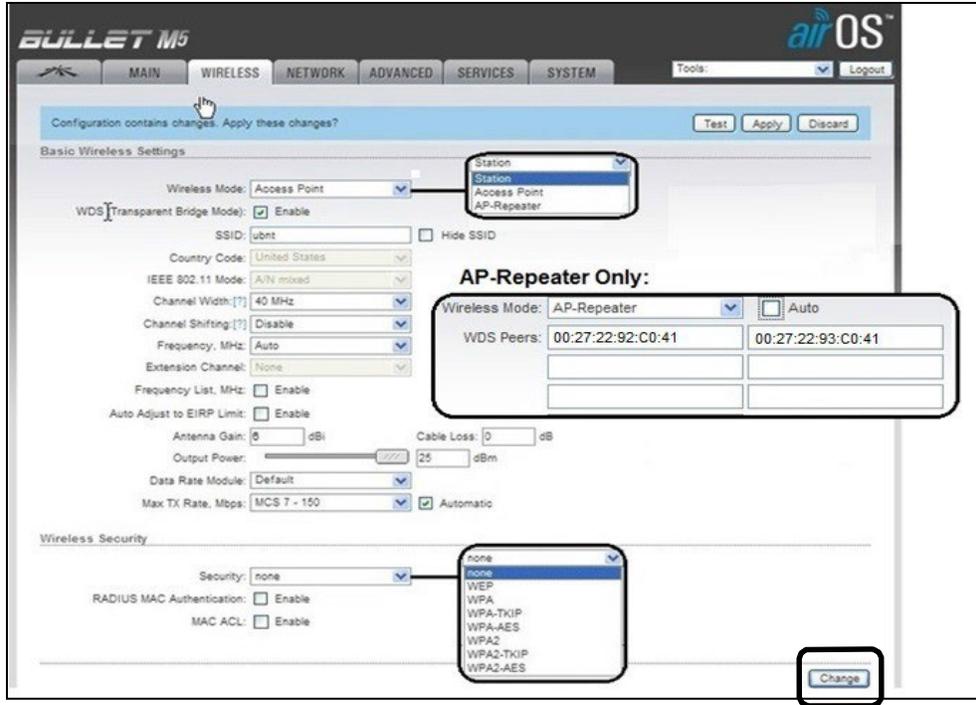
Figure 7. Link Setup

6.  **Optional**: If you are configuring a network which will require two Stations to communicate to each other (e.g,: using an Access Point between two Stations not within line of sight of each other), turn off **Client Isolation** on the Access Point (Figure 8).

    a.  With a connection to the Access Point, select the **ADVANCED** tab.

    b.  If **Client isolation** checkbox is ticked, disable it.

    c.  If necessary, select **Change** at the bottom of the screen to save your change and then select **Apply** beside Apply these changes.
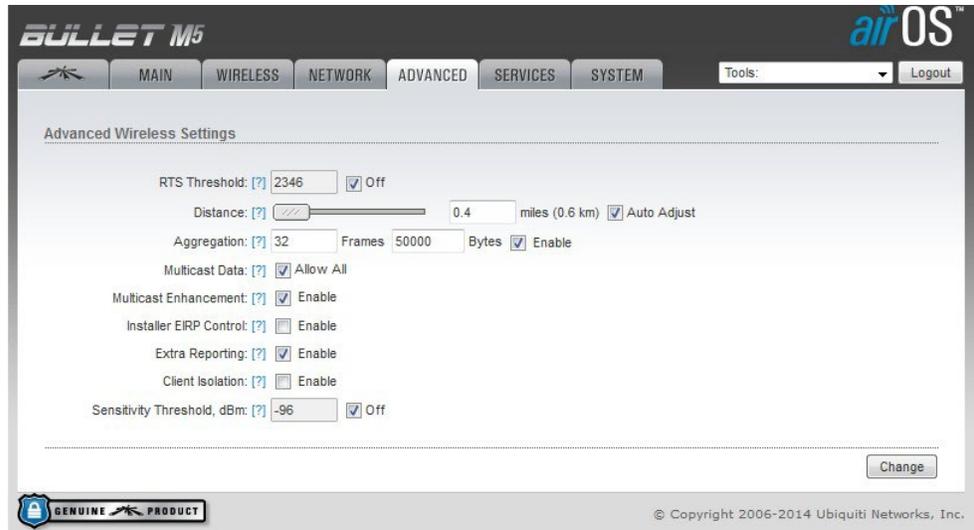
Figure 8. Client Isolation

7. Select the **NETWORK** tab (Figure 9). Each device being configured must have a different static IP address. One of the devices may continue to use the default IP address of 192.168.1.20. The other devices must have their IP address changed to a compatible address. Under NETWORK SETTINGS, verify Static is selected, and enter IP Addresses, as required.

Figure 9. Network Settings

8. Select **Change** and **Apply.**

9. Logout and exit the program.

# Software Setup

The software should be set up in accordance with the FuelMaster FMPlus User Manual for a LAN configuration. The IP address entered should be the IP address of the FMU NIC.

# Install Bullet M5 Access Point

## Assumptions

This tutorial assumes

- the access point has been setup

- you have the IP address of the FMU NIC on hand

| | |
|---|---|
| *CAUTION* | If the omni-directional antenna is used, the additional black neoprene sealing washer provided with the kit must be installed in the antenna connector to ensure a waterproof seal. Water intrusion into the Bullet may occur if the additional washer is not installed. |

1.  Find a suitable location for mounting the access point which will minimize the length of the patch cable to the PC or network and achieve line-of-sight with the station. As much as possible, avoid interference with other wireless devices operating on the same frequencies. Also consider winter weather when selecting a mount location, so it will be protected from snow/ice falling from an overhanging roof.

2.  Mount the access point, so the antenna is vertical with the Bullet M5 at the bottom (Figure 10).



**Figure 10. Bullet M5 Access Point with Omni Antenna**

3.  Mount the power supply/POE injector indoors where it may be protected from weather and plugged into a 110 VAC power receptacle.

4.  Run a patch cable from the PC LAN (or network switch) connector to the power injector LAN connector.

5. Run a second patch cable from the power injector POE connector outside the building to the Bullet M5.

6. Remove the threaded plastic boot and weatherproofing gasket, ensuring an o-ring is still present on Bullet M5.

7. Route the patch cable RJ-45 connector through the small end of the threaded plastic boot, and plug it into the Bullet M5 RJ-45 receptacle.

8. Thread the threaded plastic boot on Bullet M5 until it sits against the o-ring.

9. Install the split weatherproofing gasket over the patch cable into the small end of the threaded plastic boot.

*TIP*  Use some form of sealant such as silicon or RTV be applied over the weatherproofing gasket to prevent water intrusion. Verify the sealant will not react with the plastic material in the threaded plastic boot.

10. Seal any holes where the patch cable enters the building.

11. Plug the power supply into a 110 VAC power receptacle. A green power-on (⏻) and LAN (↔) light will illuminate on Bullet M5. Installation of the access point is complete.

# Install Outlet Box in FMU

| | |
|---|---|
| *NOTE* | Effective December 2012, FMUs ordered with a requirement for an electrical outlet will have a 178802A cable installed. This cable provides a 110VAC electrical outlet in the upper cabinet in front of the FMU mainboard. It will not be necessary to install an outlet box unless multiple outlets are required. |

# Install Bullet M5 Station

## Assumptions

This tutorial assumes

- the access point has been setup

- you have the IP address of the FMU NIC on hand

- there is access to a power supply within the FMU, which is plugged into a 110 VAC power receptacle

- the patch cables have been run

1. Configure the station operation in conjunction with the access point, FMU, and PC. If it has not been configured, return to Bullet M5 Setup and configure the Bullet M5 station.

2. Find a suitable location for mounting the station where it may attain line-of-sight with the access point. Mounting hardware is provided with the station for mounting on any flat surface, or on a pole. Wherever it is mounted, it must accept input from a patch cord connected to the power supply/POE injector in the FMU. If not mounted on top of the FMU, consideration must be given to the National Electric Codes when in or around a hazardous location. The Bullet M5 station (Figure 11) will not require full-time connection to the access point. The station and access point will only connect with each other when it is necessary for the FuelMaster® software to upload or download information to/from the FMU.

**Figure 11. Bullet M5 Station with Directional Antenna**

3.  If the Bullet M5 station will be mounted on the FMU, perform the following:

| | |
|---|---|
| *CAUTION* | Exercise caution when selecting an FMU mount location for the antenna bracket and entry point for the patch cable. Mounting or entry holes cannot interfere with FMU internal components or mount points. |

| | |
|---|---|
| *NOTE* | If the FMU is an AIM FMU, do not mount anything between the FMU AIM antennas and the fueling point. It will interfere with AIM RF reception.<br><br>Do not run the patch cable weatherseal through the top of the FMU cabinet under the sunscreen. If the antenna mount bracket is installed on the sunscreen, run the patch cable through a hole in the side or back of the FMU cabinet. |

   a.  Remove FMU power and Backplate Assembly in accordance with Product Bulletin 052.

   b.  Mark and drill holes for the antenna mount bracket, and patch cable weatherseal. The patch cable with weatherseal is 3 feet long, and must reach the power supply/POE injector mounted inside the cabinet.

   c.  Remove all drill shavings, and install the mount bracket and run the patch cable. The compression fitting of the weatherseal should be outside the FMU. An O-ring is provided to seal the hole from water intrusion into the cabinet.

   d.  Reinstall the FMU Backplate Assembly in accordance with Product Bulletin 052.

   e.  Loosely mount the station and directional antenna. After all connections are complete an antenna alignment procedure will be performed to attain maximum signal strength between the station and the access point. The station mount will be secured after the antenna alignment procedure is performed.

f.   Remove the threaded plastic boot and weatherproofing gasket, ensuring an o-ring is still present on Bullet M5.

g.   Route the patch cable RJ-45 connector through the small end of the threaded plastic boot and plug it into the Bullet M5 RJ-45 receptacle.

h.   Thread the threaded plastic boot on Bullet M5 until it sits against the o-ring.

i.   Install the split weatherproofing gasket over the patch cable and into the small end of the threaded plastic boot.

*TIP*   Use some form of sealant such as silicon or RTV be applied over the weatherproofing gasket to prevent water intrusion. Verify the sealant will not react with the plastic material in the threaded plastic boot.

j.   Leaving some slack, push the POE cable into the FMU through the weatherseal. As necessary, secure the POE cable to the antenna mount/FMU to prevent wind lash.

k.   Tighten the compression fitting to prevent water intrusion through the weatherseal.

4.   If the Bullet M5 will not be mounted on the FMU, perform the following:

a.   Mount the Bullet M5 and antenna in the desired location.

b.   Run a POE cable from the Bullet M5 station to the FMU. A 20-foot outdoor rated patch cable with weatherseal is available and must be specified in the equipment order. If the cable must be longer than 20 feet, ensure outdoor rated cable is used or enclose the cable in some type of protective conduit. If the cable is entering a hazardous area, an explosion-proof conduit will be necessary to enclose the cable. If the cable is over 30 meters (approximately 100 feet), Ubiquiti recommends the use of a 24 VDC power supply/POE injector. A weatherproof entry point for cable entry into the FMU must also be provided for.

c.   If a hole must be drilled into the FMU, ensure internal components are protected from damage and metal shavings.

d.   Disassemble as necessary following applicable Product Bulletin references to safely drill into the FMU.

e.   Run the POE cable into the FMU, and seal to prevent water intrusion.

5.   Mount the power supply/POE injector in the FMU to permit connection to the POE cable. If mounting close to any circuit board, anchor the power supply with industrial Velcro or other method to prevent contact with circuit boards. Ensure the mounting location supports connection to a 110 VAC outlet and permits patch cables to be routed to the FMU network interface card.

6.  Connect the POE cable to the power supply/POE injector POE port.

7.  Run a patch cable from the FMU network interface card to the power supply LAN connector.

8.  Plug the power supply into a 110 VAC power receptacle. A green power-on and LAN light will illuminate on Bullet M5. Installation of the station is complete.

9.  Seal any holes where the patch cable exits the FMU.

# Install Bullet M5 Repeater

An obstacle blocking reception between the access point and station prompts the need for a repeater. If an access point or station may gain line of sight by extending the POE cable to reposition the Bullet M5, the POE cable may be extended to 100 meters (330 feet). It is recommended an attempt be made to wireless connect the access point and station before a repeater is installed. The Bullet M5 has a strong wireless signal. It will connect in some instances where line of sight is not present. When required, the repeater must be installed where it has line of sight with both the access point and station, and it must have a 115VAC power connection. Look at all options. It could be on top of a building, or at the corner of a building. If the location is where there is a high potential for lightning strikes, keep it as close to the ground as possible. If it is a high traffic area, try to keep it high enough to avoid the signal being blocked or weakened by traffic.

# Directional Antenna Alignment for Access Point/Repeater

## Assumptions

- This tutorial assumes

- the Bullet M5 station on the FMU was loosely mounted

- devices not being tested are powered off

1. Connect a PC/laptop to the Bullet M5 access point or repeater, and verify the Bullet M5 shows a green power (⏻) LED, and a green LAN connect (↔) LED.

2. Access the Bullet M5 firmware with via the internet, and step to any tabbed window. The Tools drop down menu is available from any tab.

3. Select **Align Antenna**… (Figure 12). An antenna alignment popup window will open (Figure 13). You may be prompted for permission to allow the pop up. You may need to slide the RSSI RANGE, shown in the dBm box, SLIDER to adjust the signal output. If all lights are lit, antenna alignment shouldn't be necessary



Figure 12. Tools > Align Antenna
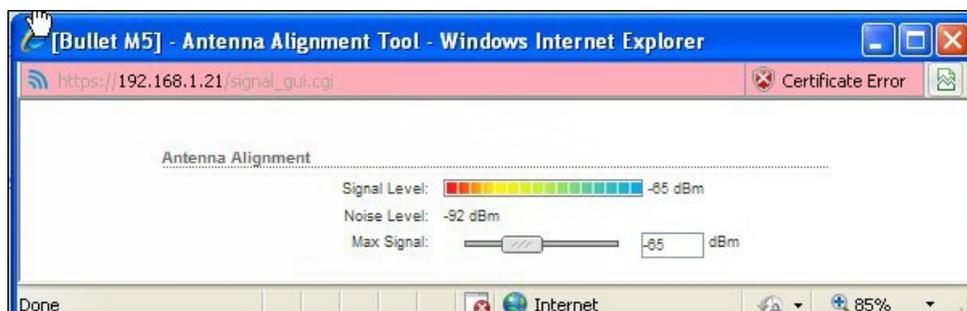


Figure 13. Antenna Alignment Test

4. At the Bullet M5 station on the FMU, turn the antenna while observing the indicator lights in the antenna alignment popup window. Changes may take several seconds to observe.

5. Continue the adjustment until the maximum number of indicator lights are observed, and then tighten the antenna mount brackets for the Bullet M5 station to lock it in place.

6. Exit the Bullet M5 firmware and disconnect the PC/laptop.

7. As required, reconnect the Bullet M5 access point or repeater as previously configured to place it in operation.

# Reset to Defaults

1. Go to the **SYSTEM** tab (Figure 14). At the bottom of the screen under Configuration Management will be an option to Reset to Factory Defaults.
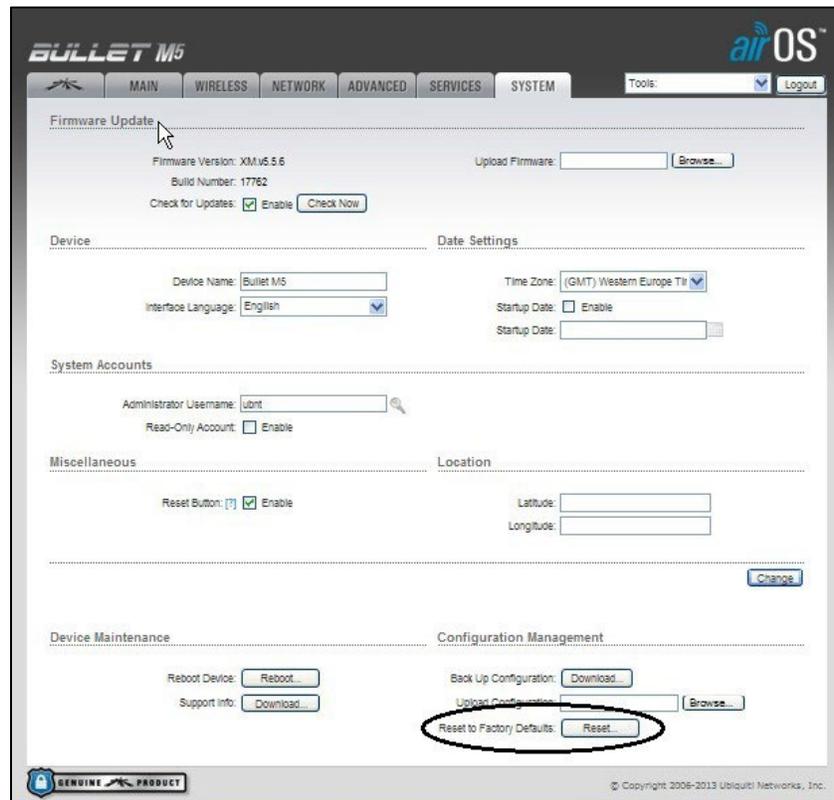


Figure 14. Selecting Reset to Defaults from within the Firmware

2. Select **Reset**.

3. Click on **Yes, reset** (Figure 15)!

Figure 15. Confirming Reset to Defaults from within Firmware

# Cannot Get into Firmware

If you don't know the IP address or login password, and cannot get into the firmware, perform the following:

1. Learn the IP address by utilizing the Ubiquiti Device Discovery Tool for all platforms. It is available at the following URL: http://www.ubnt.com/download/.

2. Connect your Bullet to your laptop/PC as you would if you were programming it, and perform a Scan. The Scan will tell you the IP address programmed into it. Then you can use that IP address to access the Bullet, or...

3. Reset the Bullet externally, as follows:

   a. See Figure 16. You will need a small device like the end of a small paper clip to depress the Bullet Reset switch.
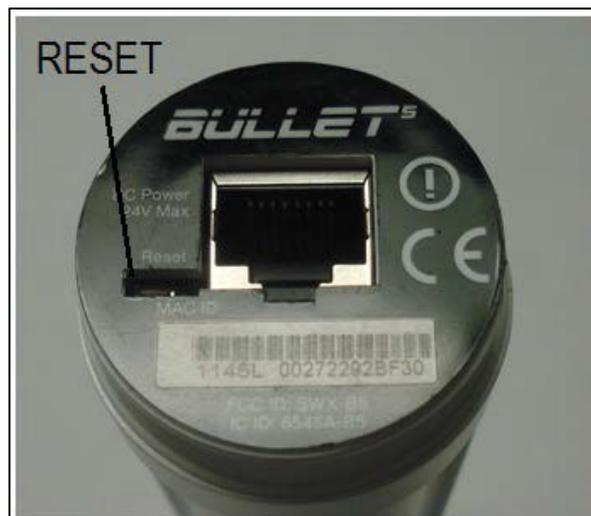


Figure 16. Bullet5 Reset Switch

   b. While the Bullet is powered through the POE cable, depress and hold the Reset switch with a small paper clip for 10-15 seconds. The four signal strength LEDs on the side of the Bullet will flash in an alternating pattern. They will not go out. The green power and LAN LEDs do not change during the process. The Bullet should be reset to defaults. You should be able to access using IP address 192.168.1.20, and username ubnt, and password ubnt. If unsuccessful, repeat steps a and b.

# Troubleshooting Tips

If you experience difficulty while setting up Bullet M5, perform the following:

- If you are unable to connect to a Bullet with any IP address, Reset to Defaults. The procedure will restore Bullet to the manufacturer's original default configuration.

- When you make a PC connection to a Bullet, remember it takes a moment for the device to boot up. It is not immediately available as soon as the connections are made and power is applied.

- If you are trying to communicate between two devices, which are very close together (as when you are performing setup), they may not communicate with each other because of too much output power. In the firmware, under the Wireless tab is a slider to adjust Output Power. Adjust it to the lowest setting, and retry.

- If you are having difficulty with your PC not connecting to the Bullet or to the FMU, reboot your PC and try again before assuming there is something wrong with the equipment. Reboot the FMU if the problem is with communications to the FMU. Sometimes the need to reboot is caused by the association of an IP address to a specific MAC address. If you go to the command prompt and type arp –a (enter a space with spacebar between arp and -a), you should see No ARP Entries Found. If you see something else, it is likely showing this association of the IP address to a specific MAC address. It can be cleared by going to the command prompt and typing arp –d * (space between arp and –d, and –d and *).

- Verify the two units are configured correctly. They, and the devices they are connected to, must be on the same subnet. They must be using the same SSID. They cannot be using the same IP address.

- When a directional antenna is being used, the signal may not be reaching all the FMUs. This may be tested by performing the Antenna Alignment procedure. It may be necessary to replace the directional antenna with an omni antenna.

- If the PC is presently on a network, it may have to be reconfigured with a static IP address as opposed to Obtain an IP address automatically.

- After any changes are made to the configuration of either of the two devices, be sure they are saved correctly after making changes. Do not remove power while a save or reboot is in progress.

- If wireless security is enabled, verify all devices are configured with the same settings.

- If troubleshooting doesn't resolve communicate conflicts, reset both devices to their default settings and accomplish configuration of both devices. A simple typographical error in one setting can be very difficult to find and can prevent communications.

| TIP | If any questions arise, contact Syntech Systems, Inc.'s Customer Satisfaction Center (CSC) at 1-800-888-9136, ext. 2, or email support@myfuelmaster.com. |

## Change Log

| Date | Description |
| --- | --- |
| 9/11/2013 | Original |
| 2/16/2014 | Page 1, added 3rd bullet to Note at top of page stating this revision adds repeater to Bullet procedures |
| | Page 3, added 4th paragraph describing repeater |
| | Page 3 and 4, updated Directory with new Figure and page numbers |
| | Page 5, added breakdown of parts supplied for repeater in kit 941B0590C |
| | Page 11, added new Figure 13, Selecting AP-Repeater Wireless Mode |
| | Page 11, added new step 10 to explain AP-Repeater settings in firmware |
| | Page 11, added new NOTE to highlight WPA and WPA2 security methods are not available when using a repeater |
| | Page 12, modified Figure 14 to show AP-Repeater application |
| | Page 20, added paragraph Install Bullet M5 Repeater |
| | Page 23, added use of Ubiquiti Discovery Device Tool to find IP address of unknown |
| 8/12/2015 | Page 1 and 17, added CAUTION: If the omni-directional antenna is used, the additional black neoprene sealing washer provided with the kit must be installed in the antenna connector to ensure a waterproof seal. Water intrusion into the Bullet may occur if the additional washer is not installed. |
| 3/25/2016 | Page 13 and Figure 15, added explanation and procedure for disabling Client Isolation. |
| | Revised PC/Laptop setup to match Windows 7 operating system |
| 12/1/2020 | Rebranded/Reformatted |