

Hunter®

 **Hydrawise™ Ready**
IRRIGATION CONTROLLERS

Hydrawise Software/App Owner's Manual



hydrawise.com

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Connecting WAND with Smartphone via Bluetooth – Hydrowise

The X2 Controller with the WAND WiFi device allows for Wi-Fi setup over Bluetooth connection via smartphone. Bluetooth is a wireless technology that is used for exchanging data between fixed and mobile devices over short distances. This is a useful way to communicate easily when Wi-Fi is not available at the location of the controller.

NOTE: If you receive either of the messages listed below, please use these steps before reconnecting. Under your mobile Bluetooth settings, choose a WAND device, then select **FORGET THIS DEVICE**.

- **Alert** - Peripheral disconnected.
- **Notification** - Hunter device not responding; please try again.

Steps for Connecting WAND with Smart Phone via Bluetooth

1. Navigate to the Hydrowise **SETUP** wizard on the Hydrowise app or Hydrawise.com website.
2. Select your **X2 CONTROLLER**.
3. Click **CONTROLLER SETTINGS** in the left menu tab.
4. Click the **CONNECT TO Wi-Fi** button.
5. Select the **BLUETOOTH** button on the app or website.
6. Select the [WAND] HunterX2XXX device matching the last 3 digits of the module's serial number.
7. Enter the **6-digit code** on the X2 controller display and click the Pair button in the app.
8. A list of nearby Wi-Fi networks will appear. Select your wireless network and click the **CONNECT** button.
9. Enter your Wi-Fi password and click the **CONTINUE** button.
10. Once connected, the WAND LED will turn solid green •, the word **ONLINE** with a solid Wi-Fi icon will appear on the controller LCD. The Hydrowise app will show a 'Connection Successful' message.
11. Click the **CONTINUE** button to continue set irrigation schedules.

IMPORTANT: When the controller first connects, you may notice a controller message UPd8 A, B C. This indicates a firmware update and the WAND should **NOT** be removed during this process. If the WAND is removed, the controller could be damaged.

Connecting Using SAP Mode - iPhone

SAP MODE will allow you to set up your iPhone using a direct connection method. This method will require you to enter your network name and password manually.

1. Navigate to the Hydrowise **SETUP** wizard on the Hydrowise app or Hydrawise.com website.
2. Select your **X2 CONTROLLER**.
3. Click **CONTROLLER SETTINGS** in the left menu tab.
4. Click the **CONNECT TO Wi-Fi** button.
5. Select the **Wi-Fi Direct (SAP Mode)** button on the app or website.

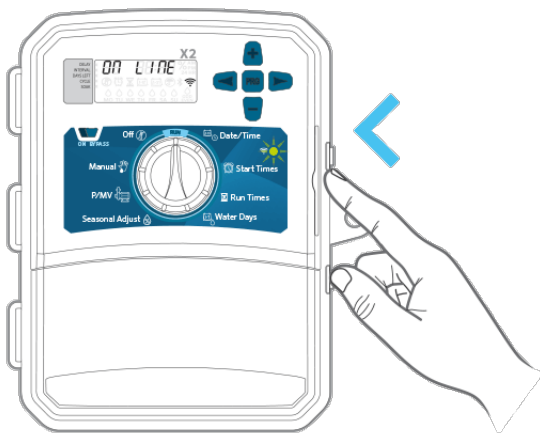
6. Press the **BLACK** button on the WAND 2X for the Wi-Fi setup. WAND's Wi-Fi status LED will blink **AMBER** • twice per second. **SAP** will appear on the controller LCD.
7. Select the **CONTINUE WHEN LED IS BLINKING TWICE** button.
8. Go to the **Wi-Fi** settings on your iPhone or iPad device. Select the **HUNTERX2 XXX** Wi-Fi network name matching the last **3 CHARACTERS** of your WAND serial number.
9. Open the Hydrowise app and enter the **NETWORK NAME** and **PASSWORD**. For additional WiFi specifications, [click here](#) ^[2].
10. Click **CONNECT**.
11. **CONNECTING TO AP** will display on the screen.
12. Click the **DONE** button to continue set irrigation schedules. If not connected, select **START AGAIN** to repeat the process. Once connected, the WAND LED will turn solid green •, the word **ONLINE** with a solid Wi-Fi icon will appear on the controller LCD.

Still Not Connecting?

If the WAND does not connect using this SAP mode, we recommend the **FACTORY RESET** listed below and then the BT Connection method.

1. Press and hold the WAND button for 5 seconds and **Fdr** will appear on the controller LCD.
2. The module **LED** will turn off.
3. Release the button when the solid amber LED appears. The word **DONE** will appear on the controller LCD.
4. Return to the online setup wizard in your Hydrowise controller settings account page to reconnect **WAND** to Wi-Fi.

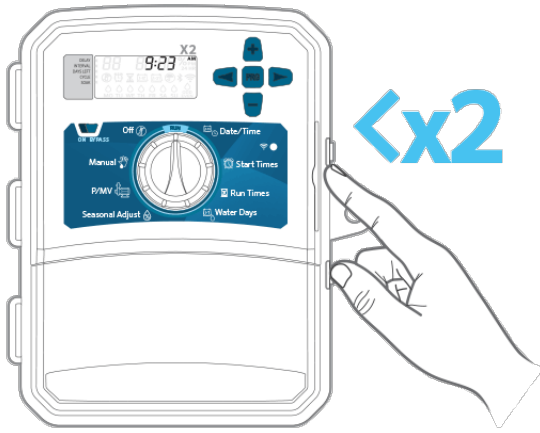
Bluetooth Connection ^[3]



IMPORTANT: The WAND's Wi-Fi pairing process will automatically stop after 10 minutes if no action is taken. Press the WAND button twice to restart the Wi-Fi Direct Setup process or press the WAND button until "SAP" appears on the controller LCD.

Connecting WAND with Android Smartphone (Wi-Fi Direct Setup - SAP Mode)

1. Navigate to the Hydrowise **SETUP** wizard on the Hydrowise app or [Hydrowise.com](https://www.hydrowise.com) website.
2. Select your **X2 CONTROLLER**.
3. Click **CONTROLLER SETTINGS** in the left menu tab.
4. Click the **CONNECT TO Wi-Fi** button.
5. At the controller, press the **BLACK** button on the WAND twice for the Wi-Fi setup. WAND's Wi-Fi status LED will blink **AMBER** • twice per second. **SAP** will appear on the controller LCD.

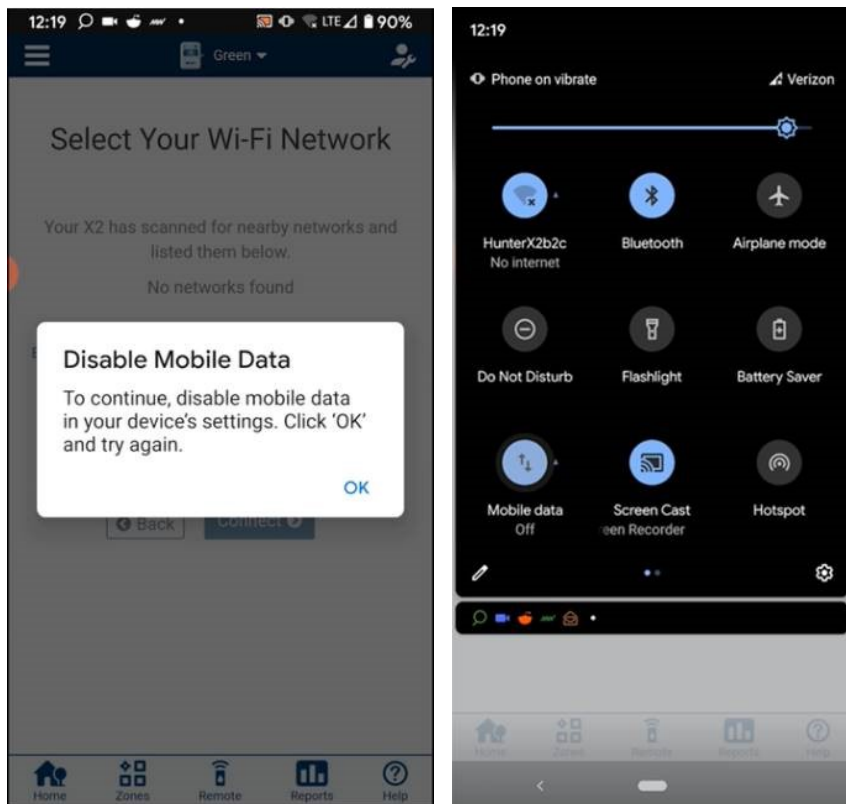


6. Select the **Wi-Fi Direct (SAP Mode)** button.

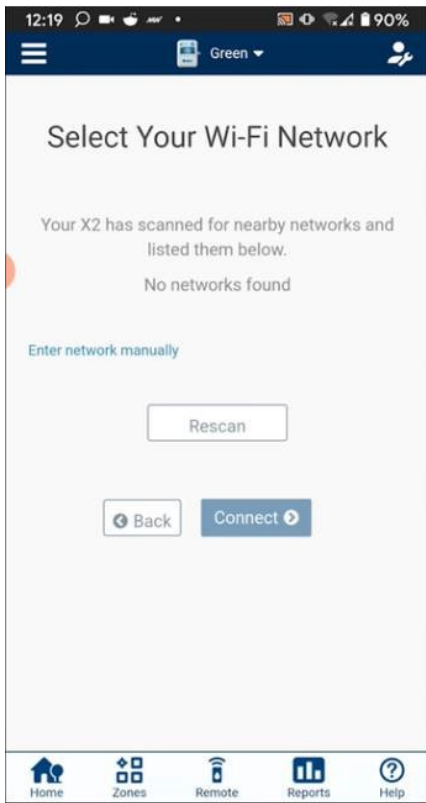
7. Click the **Continue when the amber LED • is blinking twice a button.**

8. You should be seeing the **CHOOSE YOUR X2** screen. Select the **HUNTERX2XXX** Wi-Fi network name matching the last **3 CHARACTERS** of your WAND serial number.

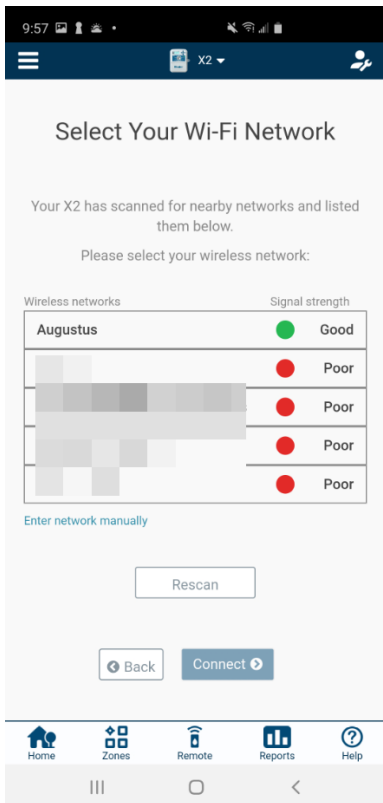
9. Disable **MOBILE DATA** ^[4] only on your device when prompted.



10. Return to the Hydrowise app and click the **RESCAN** button.

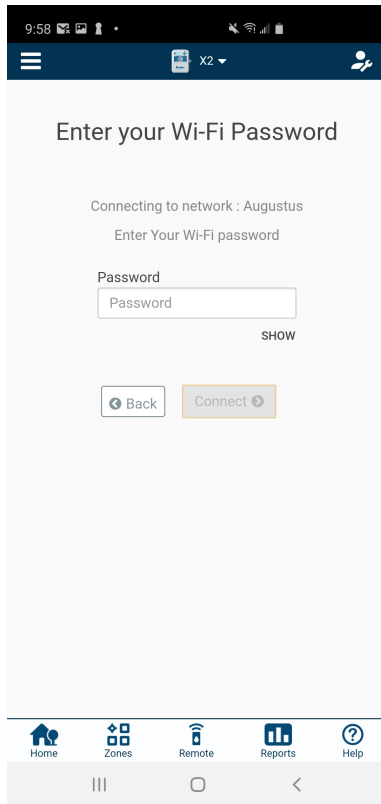


11. A list of nearby Wi-Fi networks will appear. Select your wireless network and click the **CONNECT** button.



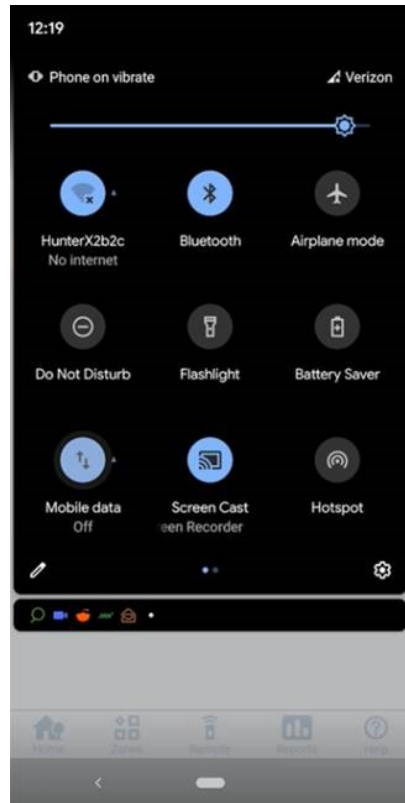
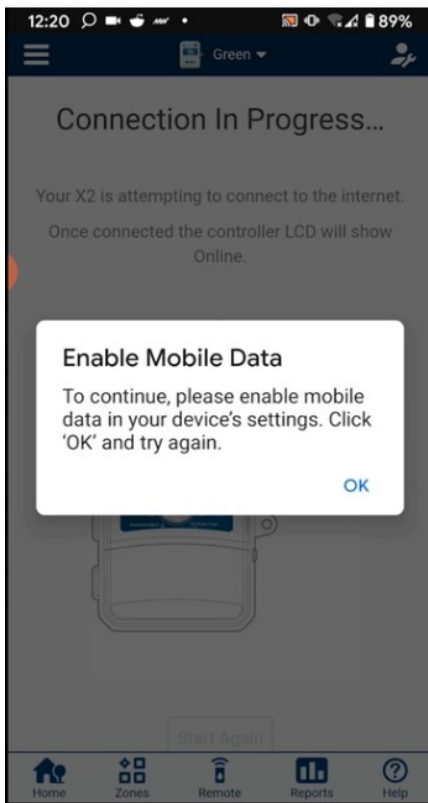
12. Enter your Wi-Fi password and click the **CONNECT** button.

If your password is longer than 19 characters, you will need to update your WAND firmware before continuing. [See article](#) ^[5].

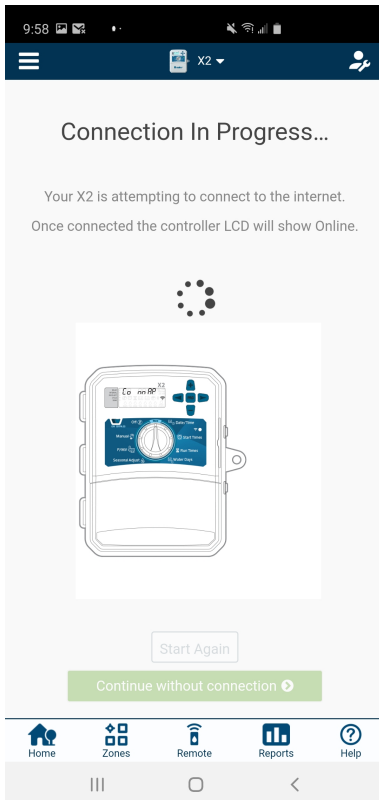


The screenshot shows the WAND mobile app interface. At the top, the status bar displays the time 9:58 and various icons. The app's header bar is dark blue with a menu icon, a device icon labeled 'X2', and a user profile icon. The main content area is titled 'Enter your Wi-Fi Password'. Below this, it says 'Connecting to network : Augustus' and 'Enter Your Wi-Fi password'. There is a 'Password' label above a text input field containing the placeholder 'Password'. To the right of the input field is a 'SHOW' link. At the bottom of the form are two buttons: 'Back' and 'Connect'. The bottom navigation bar features five icons: Home, Zones, Remote, Reports, and Help.

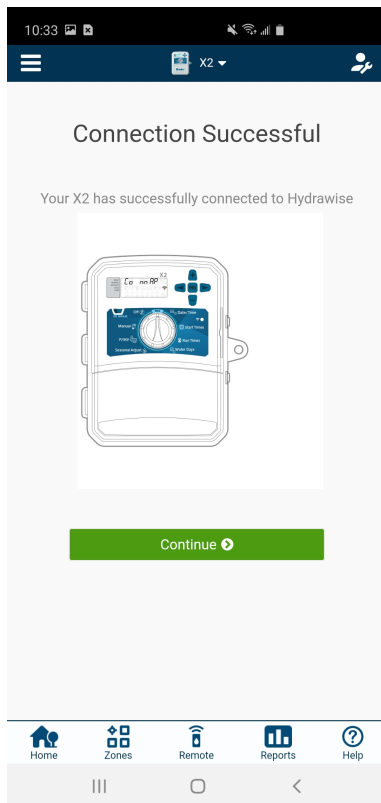
13. Enable **MOBILE DATA** ^[4] on your smartphone when prompted. WAND will connect to your Wi-Fi network.



14. Once connected, the **WAND LED** will turn solid green •, the word **ONLINE** with a solid Wi-Fi icon will appear on the controller LCD. The Hydrowise app will show a **CONNECTION SUCCESSFUL** message.



15. Click the **CONTINUE** button to continue set irrigation schedules.




NOTE: In some cases, establishing a connection may be an issue, so you may have to re-start using this process.

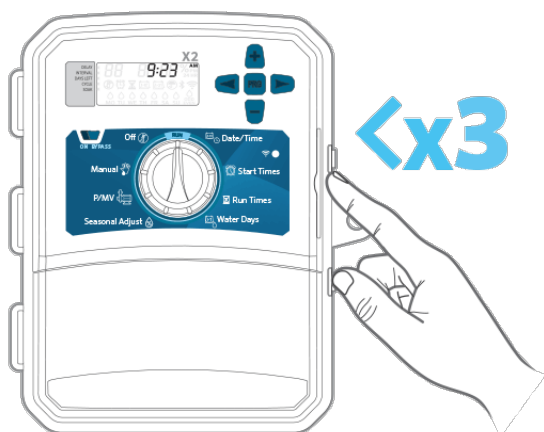
IMPORTANT: The WAND's Wi-Fi pairing process will automatically stop after 10 minutes if no action is taken. Press the WAND button twice to restart the Wi-Fi Direct Setup process or press the WAND button until “SAP” appears on the controller LCD.

Connecting WAND Using a Router WPS Button (PBC Setup)

Wi-Fi Protected Setup (**WPS**) is a feature supplied with many **routers**. It is designed to make the process of connecting to a secure wireless network from a computer or other devices much easier.

NOTE: The button is usually located on the front or rear of the router labeled WPS. Refer to the manufacture of the router for the specific location. You will be asked for this in STEP 8.

1. Navigate to the Hydrowise setup wizard on the Hydrowise app or Hydrawise.com website.^[1]
2. Select the controller **X2** model if you have more than one controller. See [link](#) ^[6] for more details.
3. Click **CONTROLLER SETTINGS** in the left menu tab. For mobile devices, this is located by clicking the hamburger icon  in the upper left side.
4. Click the green **CONNECT TO WiFi** button.
5. Select the **PBC (WPS)** button on the app or website.
6. Press the black button on the **WAND** three times for Wi-Fi setup.



7. WAND's Wi-Fi status LED will blink amber three times per second.

PBC will appear on the controller LCD.

Select the **CONTINUE WHEN LED IS BLINKING THREE TIMES** button.

8. Press the WPS button on your Wi-Fi router.

Once successfully connected, the WAND LED will turn solid green , the word **ONLINE** with a solid Wi-Fi icon will appear on the controller LCD. Return to the Hydrowise website to set irrigation schedules.

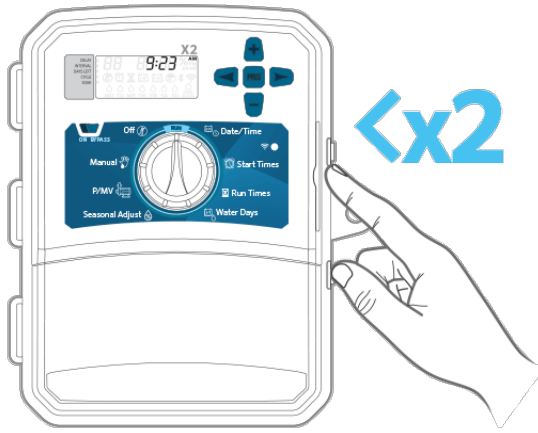
IMPORTANT: The WAND's WPS router pairing process will automatically stop after 2 minutes if no action is taken. Press the WAND button three times to restart Connect with Router (WPS Setup) or press WAND button until “PBC” appears on the controller LCD.

Connecting WAND Using Laptop & Desktop Computers (SAP Setup)

Wi-Fi Direct Setup (SAP mode) uses the Wi-Fi feature on your computer to connect your controller to the Wi-Fi network.

IMPORTANT: Before WAND can connect to Wi-Fi, the WAND's serial number must be added to your Hydrowise account.

1. Navigate to the Hydrowise setup wizard on the Hydrowise app or [Hydrowise.com](https://www.hydrowise.com) website.
2. Select your **X2 CONTROLLER**.
3. Click **CONTROLLER SETTINGS** in the left menu tab.
4. Click the **CONNECT TO Wi-Fi** button on Hydrowise.
5. Select the **SOFTAP (SAP)** button on Hydrowise.
6. Press the **BLACK** button on the WAND twice for Wi-Fi setup.



7. WAND's Wi-Fi status LED will blink amber twice per second. SAP will appear on the controller LCD.
8. Select the **CONTINUE WHEN LED IS BLINKING TWICE** button on Hydrowise.
9. Choose your device below and continue with the setup steps.
10. You should be seeing the 'Connect to the Hunter X2 Wi-Fi' screen. If not, go to Hydrowise, navigate to **CONTROLLER SETTINGS**, click the **CONNECT TO Wi-Fi** button, select the **SAP (SoftAP)** button, click the **CONTINUE WHEN LED IS BLINKING TWICE** button.
11. Go to the **Wi-Fi SETTINGS** on your computer.
12. Select the **HunterX2XXX** Wi-Fi network name matching the last **3 characters** of your WAND serial number.
13. A new window will appear or launch a web browser on your device and enter **www.hunterx2wifi.com** ^[7] (192.168.7.7) in the address bar.
14. Select or enter your Wi-Fi network name and password of your router.
15. Click the **CONNECT** button to join to your network. WAND will connect to your Wi-Fi network
16. Once successfully connected, the WAND LED will turn solid **GREEN** , the word **ONLINE** with a solid Wi-Fi icon will appear on the controller LCD.
17. Return to the Hydrowise website to set irrigation schedules.

IMPORTANT: The WAND's Wi-Fi pairing process will automatically stop after 10 minutes if no action is taken. Press the WAND button twice to restart Wi-Fi Direct Setup (SAP Mode) or press the WAND button until “SAP” appears on the controller LCD.







WAND - No Internet Connection Message

This message indicates the WAND is not fully connected to the network. We detect this within about 7 minutes for all Hydrowise controllers. When the controller is **OFFLINE**, it will continue to water the default watering schedule as it's stored on the memory of the controller. Any changes you make to your settings and schedules through the app will only update to the controller when it reconnects to the internet. In addition, no reporting and weather adjustments/predictive watering triggers will apply while offline.

NOTE: Online X2 controllers periodically receive firmware updates for the controller and Wi-Fi module improving operation, compatibility, and new functionality. If the X2 Controller screen is showing any of these Codes (UPd8A, UPd8b, or UPd8C) it is online, please wait until the update is complete. [Learn more](#) ^[8]

The following article will cover the topics listed below:

- LED Status
- Troubleshooting Steps
- WiFi Checklist
- Video

LED Status	Description
	WAND is waiting for the user to add Wi-Fi credentials.
	The controller is Online and connected to the Hydrowise server.
	Incorrect Wi-Fi password entered or Wi-Fi network lost.
 1 blink	WAND is in Bluetooth pairing mode.
 2 blinks	WAND is in SAP (Soft Access Point) mode.
 3 blinks	WAND is in Pbc, router-supported (WPS) mode.

Troubleshooting Steps

1. Check that your wireless router and controller are powered on.
2. Verify **serial numbers** in the software match the number in the controller status

screen.

- Serial number location in controller [Click here](#) ^[9]
- Serial number location in software [Click here](#) ^[10]

3. **Signal Strength check** - A medium or higher signal strength is required. To check the signal strength, use [SAP mode](#) ^[11].
4. **Reboot Controller** - Remove the WAND module and reinstall.
5. **Reset Controller** - Press the reset button in the lower wiring compartment. For factory reset, [Click here](#) ^[12].
6. **Reset Modem/Router** - Unplug for 15-20 seconds. Next, plug back in and wait 2-3 minutes. Repeat these steps two more times. Check the display of the X2 Controller to see if ONLINE. This will refresh the connection to an extender if you have one installed.
7. **Reset Extender (if have one)** - Reset extender as well to refresh the IP settings.
8. **Connection Methods** - Try each connection method below.
 - [X2 WAND - Installation and Connecting to Wi-Fi via SAP mode](#) ^[13]
 - [X2 WAND - Connecting to Wi-Fi via PBC mode with WPS button](#) ^[14]
9. **Testing with Hot-spot** - For testing with a hotspot, [Click here](#) ^[15].
 - Check Server Status. If the controller is connected, then the screen will display ONLINE.
10. **Check Network Settings** - The following Wi-Fi requirements apply to your Hunter Hydrowise-ready controller.

Wi-Fi Checklist:	
Network Types	Hunter WAND controller is 802.11 B/G/N
Bandwidth	2.4 GHz only. Not compatible with 5 GHz
Router Channel	Set between 1-11
Security Type	WPA or WPA2
Guest Networks/Networks with portal page login	Not compatible
Mac Address (If Needed)	Enter f8f0 followed by last 8 digits of serial number (e.g., f8f005fb90ce)
Outbound Ports	Secure MQTT (TCP Port 8883) HTTPS (TCP Port 443) NTP (UDP Port 123) DNS (TCP and DNS Port 53)

Inbound Ports

None