

X2 Data Logger – Wi-Fi Setup

All X2 Data Loggers are equipped with Wi-Fi communications.

For applications using dedicated Wi-Fi telemetry, proceed through this document for network and web setup instructions.



X2 Data Logger – Wi-Fi Setup

Supply 12V power to the X2 through the center 6-pin port using one of the following sources:



SP6- Solar power pack

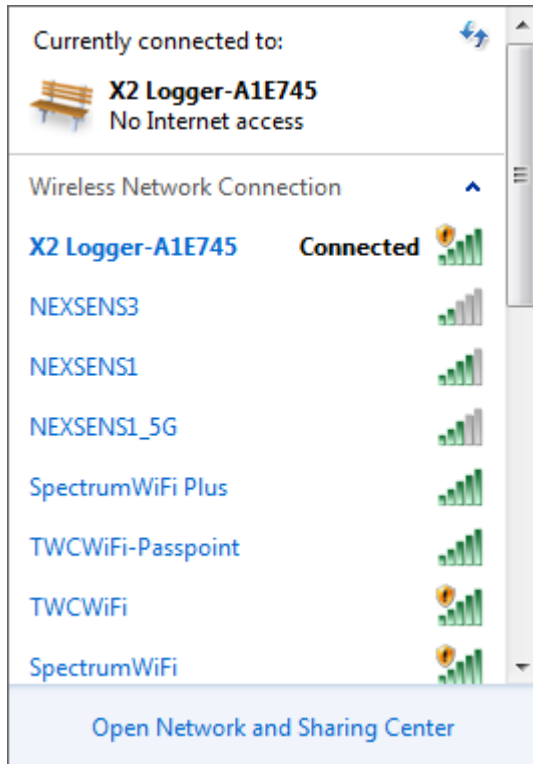


UW6-PW AC Power Adapter

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Select the X2 Logger from the list of available Wireless Networks on a PC or Mobile Device and connect to it.

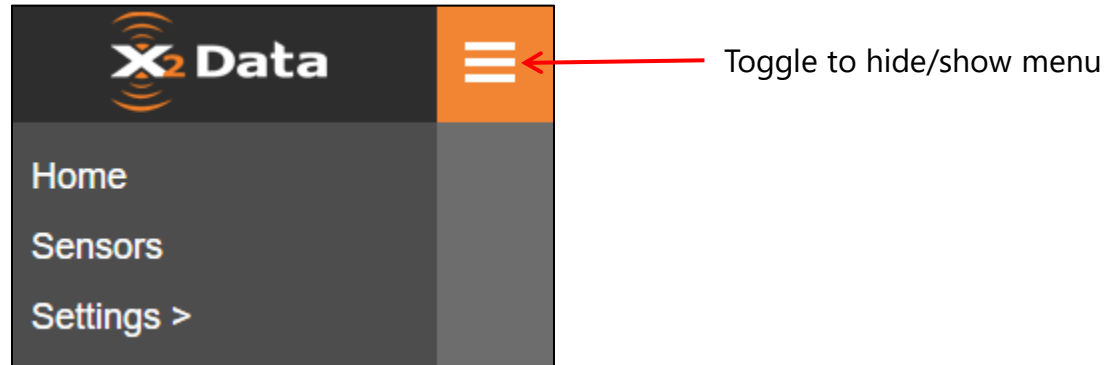
If the X2's network is not visible, disconnect and re-connect power to the logger or insert the magnetic base of the included screwdriver to reset the Wi-Fi module.



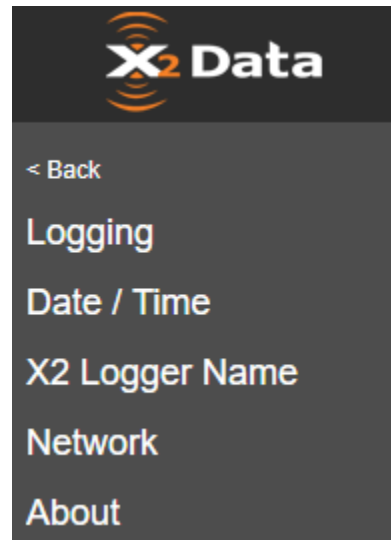
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On the logger network, navigate to **X2.NexSens.com** with any web browser to connect to the embedded web.

Access the **Main Menu**.



Go to **Settings|Network**

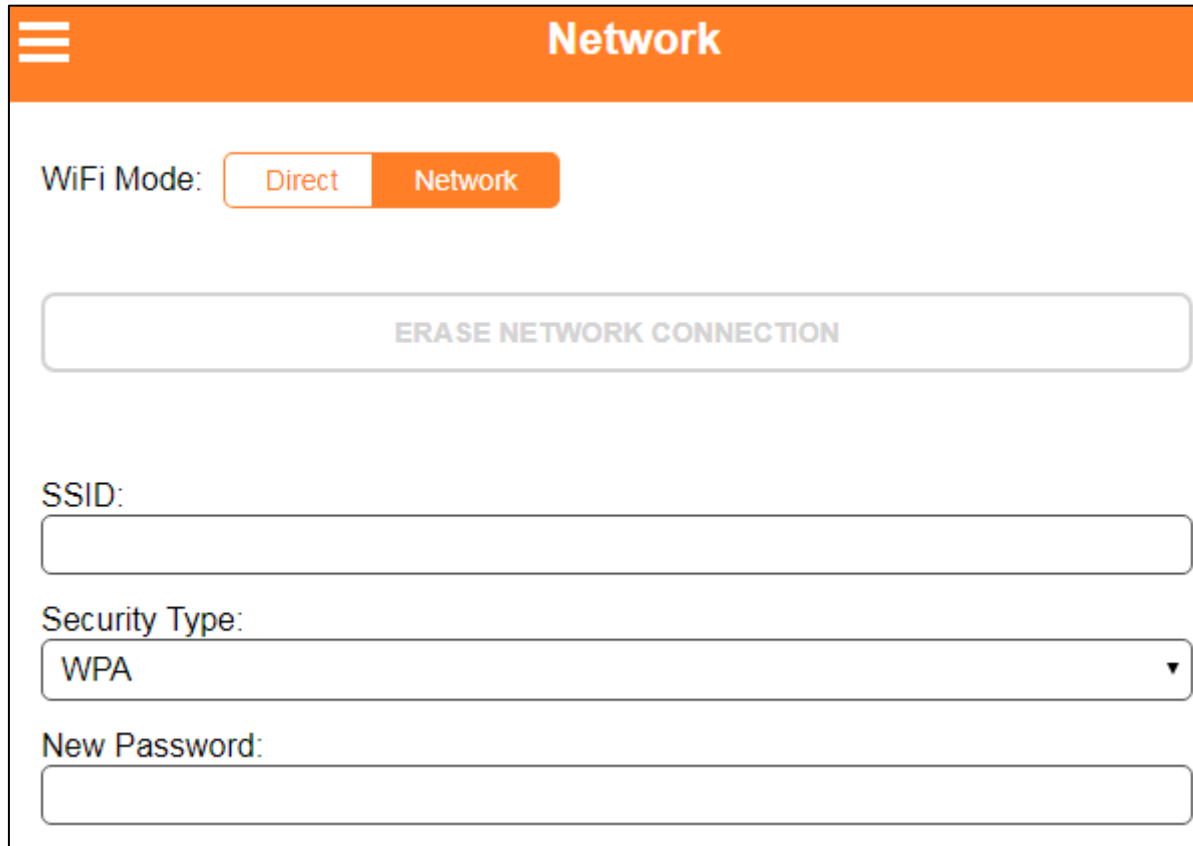


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Toggle the WiFi Mode to Network

Enter the local Network SSID, Security Settings, and Password at the X2 Deployment location and click **Save Settings**.

The SSID is case sensitive and must be entered **exactly** as it is displayed.



WiFi Mode: Direct Network

SSID:

Security Type:

New Password:

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Once the network information has been committed successfully, a prompt will appear to reset the X2 Wi-Fi via a magnet swipe or power cycle.

The accepted Network connection will be displayed above and the SSID and password fields will become greyed out.

Network

WiFi Mode: Direct Network

NEXSENS3 with WPA security

ERASE NETWORK CONNECTION

SSID:

Security Type:

New Password:

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To detect and update sensor configurations to the web, the X2 must be assigned a static IP address on the network.

This will allow the Embedded Web to be reached from any device by entering its IP address into any browser.

ADVANCED

IP Address:

Subnet Mask:

Gateway:

DNS Server:

SAVE SETTINGS

X2 Data

Not secure | 192.168.1.90

X2 Data

Logging

< Back

Logging

Date / Time

X2 Logger Name

Network

About

These settings will determine the logging schedule for this X2 Logger. Log and Transmit Intervals are how often the logger will wake up to take a reading and to transmit data to the web. The start time is when the logger will start calculating the log schedule from. If the current time is before the start time, the logger will not log or transmit any data until after the start time. If the start time is 10:05 am and the log and transmit intervals are 1 hour, then the logger will take a reading and transmit the data at 5 mins past the top of every hour.

Logging Interval:

00 days 00 hrs
10 mins 00 secs

Transmit Interval:

00 days 00 hrs
10 mins 00 secs

Start Time:

Dec 31 2015
07 00 00 pm

SAVE LOGGING SETTINGS

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Check with your Network Administrator to verify what range of static IP addresses are available on the network.

Many times the xxx.xxx.x.90- xxx.xxx.x.100 range is available.

ADVANCED

IP Address:	<input type="text" value="192.168.1.90"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
Gateway:	<input type="text" value="192.168.1.1"/>
DNS Server:	<input type="text" value="8.8.8.8"/>

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The Gateway and Subnet Mask can be determined by entering the **ipconfig** line into the command prompt of any Windows PC connected to the same network.

```
Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\thomasr>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : nexsens
    Link-local IPv6 Address . . . . . : fe80::69c6:c8dc:9872:df0c%14
    IPv4 Address. . . . . : 192.168.1.68
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : fe80::32b5:c2ff:fe03:ec7e%14
                               192.168.1.1

Tunnel adapter isatap.nexsens:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : nexsens
```

ADVANCED

IP Address:

Subnet Mask:

Gateway:

DNS Server:

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Typically Google's Public DNS addresses of **8.8.8.8** or **8.8.4.4** will work for the DNS Server settings, but confirm this with your Network IT Administrator.

Once this has been entered click **Save Settings** , then **Disconnect from the X2's WiFi network** and reset the X2 Wi-Fi as prompted via a magnet swipe or power cycle to apply the changes.

ADVANCED

IP Address:	<input type="text" value="192.168.1.90"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
Gateway:	<input type="text" value="192.168.1.1"/>
DNS Server:	<input type="text" value="8.8.8.8"/>

SAVE SETTINGS

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The logger should begin to contact the web every 10 minutes to update diagnostic data.

If the X2 has not yet been claimed into a WQData LIVE project, follow the steps outlined [here](#).

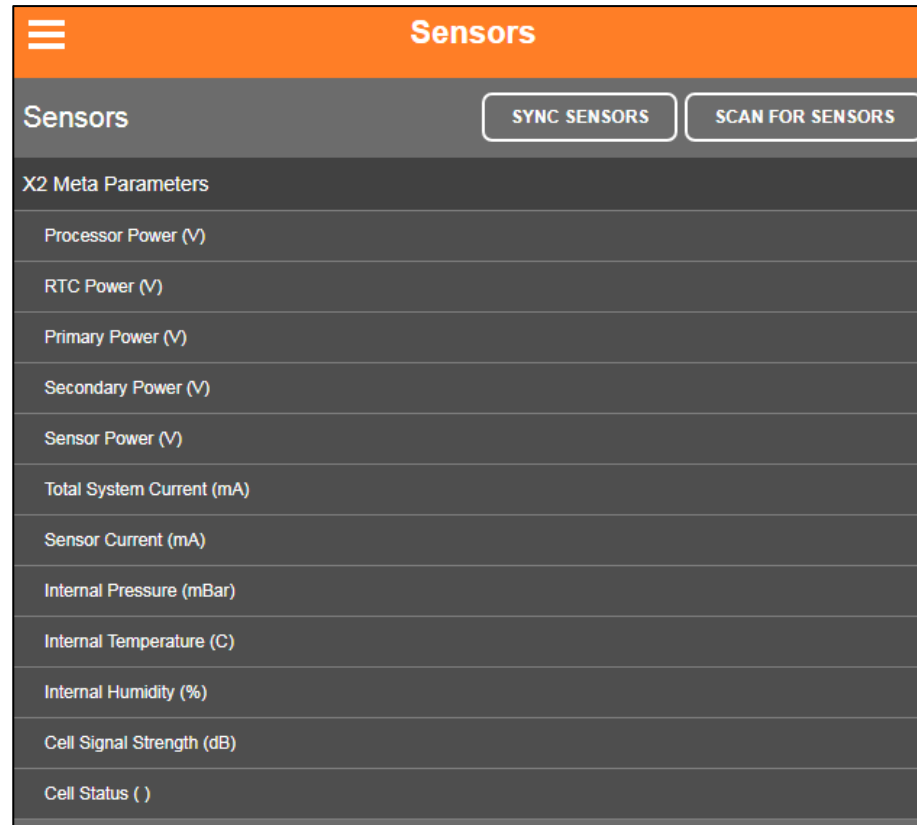
Log in to the project and verify the logger successfully makes contact and begins uploading data at the next transmission interval (typically 10 minutes).

Diagnostic Data			
✓	Last Contact		2018-09-14 16:10:13
✓	Primary Power (V)	13.0	2018-09-14 16:10:00
✓	Internal Pressure (mBar)	988.6	2018-09-14 16:10:00
✓	Internal Temperature (C)	24.18	2018-09-14 16:10:00
✓	Internal Humidity (%)	-1.5	2018-09-14 16:10:00
⚠	Cell Signal Strength (dB)	0	2018-09-14 16:10:00
✓	Cell Status ()	0	2018-09-14 16:10:00

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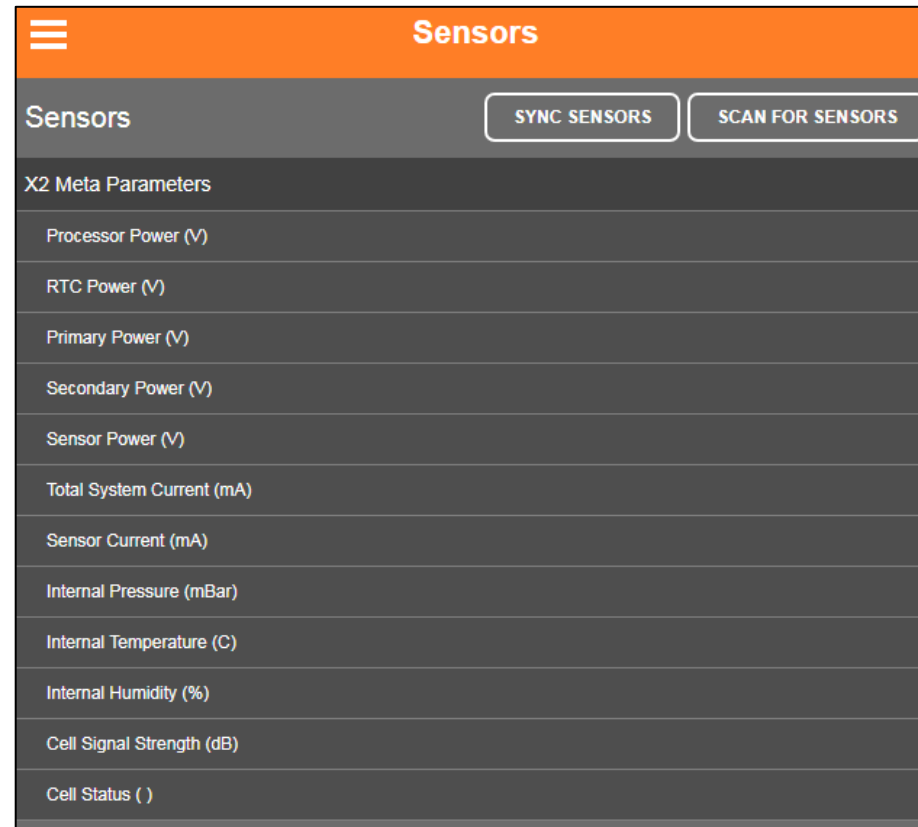
If sensors must be added, connect all sensors to the available ports on the X2 . **Record** the port connection information for future reference. Following the detection, sensors must be connected to the same port to read properly.

Continue by connecting to the Embedded Web via the previously assigned X2 IP address and navigate to the **Sensors** tab.



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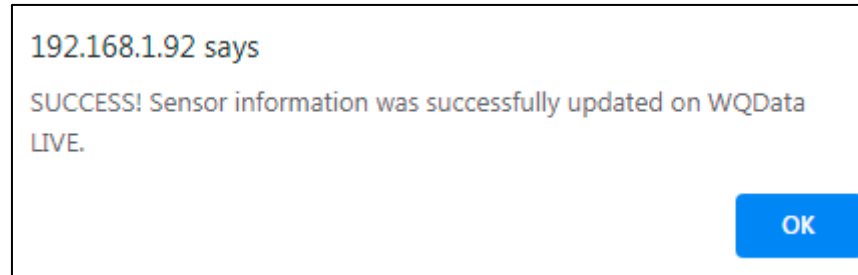
Click the **Scan For Sensors** button to initiate a detection.



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Once the detection is complete, select **Sync Sensors** for the sensor information to be updated on the project page.

A prompt showing the WQData LIVE setup was successful should appear. If it does not, double check the network SSID and password are correct and verify signal strength at the location is strong.



Refresh the project page on V2.wqdatalive.com to verify all sensors are now listed, then set logging and transmission settings as desired using the [Remote Device Configuration menu](#).