

# X2 - BASE RADIO DATA LOGGER

## QUICK START GUIDE

**IMPORTANT - BEFORE FIELD DEPLOYMENT:** Completely configure new X2 systems with sensors and a direct connection to the CONNECT software in a nearby work area. Operate the system for several hours and ensure correct sensor readings. Use this test run to become familiar with the features and functions.



Figure 1: X2 Environmental Data Logger

### Overview

The direct connect X2 base radio system includes an integrated radio module for connection with a host of field radio nodes. Three sensor ports provide industry standard protocols including SDI-12, RS-232, and RS-485. The center port offers direct communication (serial to PC) and power input. Smartphones and tablets connect by WiFi.

Base radio connection is established through direct connection with the CONNECT software. Data is accessed and stored on the WQData LIVE web datacenter. An easy-to-use dashboard and built-in sensor library automatically facilitate setup and configuration.

### What's Included?

- (1) X2 data logger
- (1) X2 grounding kit
- (3) Sensor port plugs, spare orings
- (1) Power port plug, spare oring
- (1) Oring grease
- (1) Screwdriver with magnet tip
- (1) Antenna
- (1) Quick start guide

- 1 To get started:
  - a. Go to [WQDataLIVE.com](http://WQDataLIVE.com)
  - b. Create a new account or sign into an existing account.
  - c. Choose or create the project that will contain the data logger by selecting the Projects link from the bottom right footer of the page.
  - d. Open the project and go to the ADMIN tab located at the top of the project dashboard and click Settings.
- 2 From there, choose the Project/Site pull down menu and select the site for the new data logger.
  - a. If a site has not been created, select New Site.
- 3 Enter the claim code listed below into the space provided under Assigned Devices.
  - a. Do the same for all field nodes assigned to this base station.
- 4 Click Add Device.
  - a. The new device(s) should be visible in the Assigned Devices list.
- 5 Mount the X2-RB-DG in "line-of-sight" of the field radio deployment area and install the antenna.

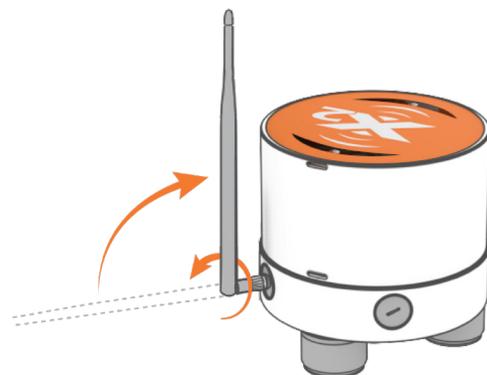


Figure 2: Step 5 - Rotate the antenna clockwise onto the threads of the female RPSMA connector.

- 6 Visit the following link on the NexSens Knowledge Base to download the CONNECT software and establish a connection with the base X2.
  - a. [nexsens.com/connst](https://nexsens.com/connst)
- 7 While in the CONNECT software, visit the following link on the NexSens Knowledge Base to establish communication between the base radio system and WQData LIVE.
  - a. [nexsens.com/connbru](https://nexsens.com/connbru)
- 8 Apply power to all the field radio nodes.
  - a. Wait for the next 10-minute transmit interval to ensure data is posting from each unit on WQData LIVE.

**Troubleshooting Info**

- 1 Ensure that the PC and monitor running the CONNECT software is on continuously.
  - a. If the PC goes to sleep or shuts off for any reason, the X2 base radio will stop transmitting data to WQData LIVE.
  - b. If this occurs, redo the steps above to gain connection between the field nodes and WQData LIVE.

**LED Light Indicators**



**Figure 3:** X2 LED light indicators located above the X2 logo on the clear top lid.

**Table 1:** X2 Base Radio Data Logger LED Indicators.

LED Color	1 Second Interval	3 Second Interval	5 Second Interval	3 Blinks Per 5 Seconds	Solid
Green	Primary power heartbeat	Secondary power heartbeat	Backup power heartbeat	N/A	N/A
Blue	N/A	N/A	Weak/No cell signal	Strong radio signal	WQData LIVE setup successful <sup>1</sup>
Yellow	N/A	N/A	Data acquisition in progress	N/A	Sensor calibration in progress
Red	Significant system error <sup>2</sup>	N/A	N/A	N/A	N/A

<sup>1</sup>WQData LIVE setup is automatically done after sensor detection.

<sup>2</sup>System errors can result from internal sensors detecting high current, humidity, or pressure. These errors can be indicative of a leak or other major problem with the system that requires attention.

For additional information, please reference the X2 Resource Library on the NexSens Knowledge Base.

[nexsens.com/x2kb](https://nexsens.com/x2kb)