

X2-CB-I BUOY-MOUNTED DATA LOGGER

QUICK START GUIDE

IMPORTANT - BEFORE FIELD DEPLOYMENT: Completely configure new X2 systems with sensors and a web connection 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-CB Buoy-Mounted Data Logger

Overview

The X2-CB buoy-mounted data logger with Iridium telemetry includes an integrated Iridium satellite modem. Five sensor ports provide industry standard protocols including SDI-12, RS-232, and RS-485. The Solar/COM port offers direct communication (serial to PC) and power input. The X2-CB is powered from the CB-Series buoy's solar rechargeable battery reserve.

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-CB buoy-mounted data logger
- (5) Sensor port plugs, (3) spare orings
- (1) Power port plug, (2) spare orings
- (1) Oring grease
- (2) Spare sensor port plugs
- (1) Iridium antenna
- (1) Quick start guide

WQData LIVE Setup

- 1 To get started:
 - a. Go to 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. 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. Create and save the site before entering the claim code.
- 3 Enter the claim code listed below into the space provided under Assigned Devices.
- 4 Click Add Device.
 - a. The new device should be visible in the Assigned Devices list.

Iridium Account Setup

- 1 If Iridium service is *not* purchased through NexSens, visit the article link below to setup an Iridium Short-burst data (SBD) account.
nexsens.com/wqsetiracc
 - a. If Iridium activation is purchased through NexSens, skip to the *Data Logger Setup*.
- 2 If using a Gmail for the SBD account, visit the article below to provide WQData LIVE access to transmit commands through the account.
nexsens.com/wqsetgmir

- 3 Visit the link below to enter the iridium account information into the Advanced Device Remote Configuration settings on WQData LIVE.

nexsens.com/wqconfir

Data Logger Setup

- 1 Follow the article below to use the CONNECT software to set the proper settings on the X2 and push the sensor configuration to the WQData LIVE web datacenter.

nexsens.com/connirist

- 2 Connect the RF cable to the logger's antenna port.
 - a. Rotate the RF cable counterclockwise (Figure 2) to ensure the cable is straight once threaded onto the antenna port.
 - b. Push down firmly (Figure 4), and turn the connector clockwise until the connection is hand-tight.

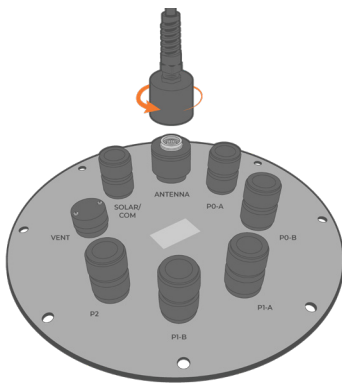


Figure 2: Rotate the antenna port counterclockwise.

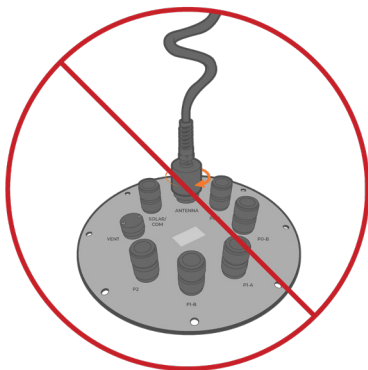


Figure 3: Avoid coiling the RF antenna cable while installing.

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

nexsens.com/x2cbkb

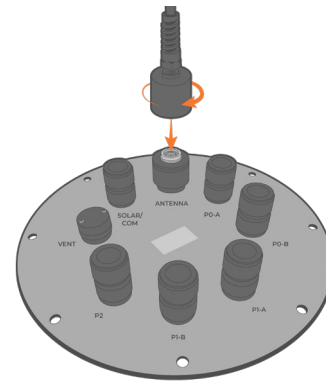


Figure 4: Proper antenna connection.

- 3 Connect the 6-pin solar panel plug to power the X2-CB. The device will beep once when powered.
- 4 Wait up to 60 seconds for the system to check iridium satellite coverage.
 - a. Two consecutive beeps = adequate signal
 - b. Three consecutive beeps = no signal
 - Move the X2-CB-I into an area devoid of overhead obstructions, if three beeps occur.
- 5 After 5 minutes, refresh WQData LIVE and confirm the last contact time updates.
 - a. Updated data will appear at the next transmit interval.

Buzzer Pattern Indicators

Table 1: X2-CB Buzzer Pattern Indicators.

Buzzer Event	Beep Type	Status
When power is applied	One short beep	System boot successful
During telemetry connection	Two short beeps	Connection successfully established
During telemetry connection	Three short beeps	No signal/connection failed
During sensor detection	Three second beep duration	WQData LIVE Setup completed successfully

¹WQData LIVE setup is automatically done after sensor detection.