



QI2500 Wireless Vibration Sensor
Quick Start Guide

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Overview

The **QI2500 Wireless Vibration Sensor** is a compact, battery-powered device for monitoring machine health through vibration and temperature data.

The QI2500 helps maintenance personnel identify early signs of imbalance, misalignment, looseness, bearing wear, and other mechanical issues — enabling predictive maintenance and minimizing unplanned downtime.

Sensor Features

- Control Button – Used to select sensor modes
- Alert Light – Flashes to communicate alerts and functions
- Waterproof Screw-On Cap
- Base w/ Threaded Mount
- Magnetic Mounting Base (flat base included – curved base sold separately)
- CR123A Battery

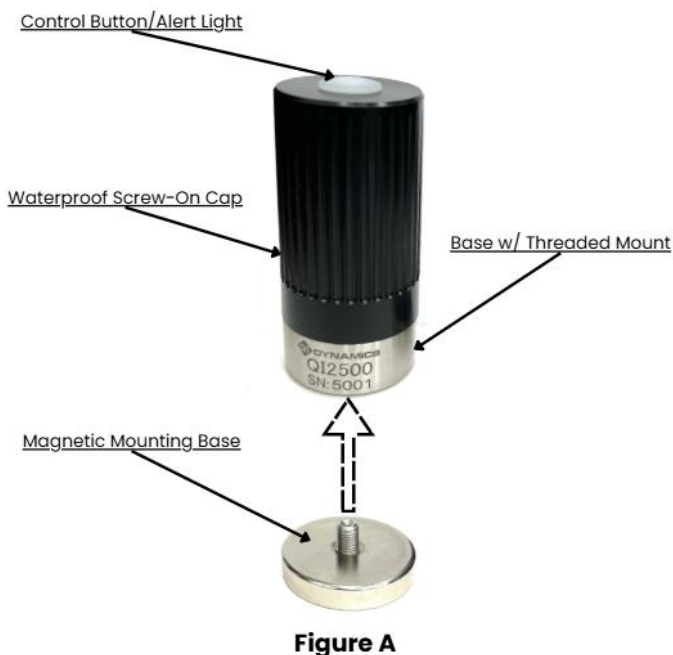


Figure B



Figure C

Sensor Setup

Activating Sensor

- Press the Control Button once to turn on sensor (blue light will flash signaling power-on)

Note: The control button is used to transfer between several sensor modes. When pressing the control button to switch modes, press in one second intervals. Pushing the button too quickly or slowly will prevent proper mode changes.

Entering Set-Up Mode

- Double press the Control Button to enter Set-Up Mode
 - Solid green light indicates sensor is in Set-Up mode and is ready to connect to mobile device

Note: If there is no setup activity for five minutes the Sensor will automatically disconnect from Setup Mode and resume normal operation.

Connecting to Mobile Device

- Open mobile device's Wi-Fi settings and select the network **QI2500-AP (sensor serial #)**
 - Network Password: **123456789**
- Open a browser and type **192.168.4.1** in the address bar
- Once entered, the sensor home page will open in browser
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Customizing Sensor Settings

Each sensor comes with default settings grounded in ISO guidelines. While default settings will work for most applications, custom settings can be set at any time using the Sensor Setup Page. This section gives an overview of the basic settings necessary for operation.

The Advanced Settings section of the Setup page and Graph Page are not necessary during initial setup. Advanced Settings enable users to diagnose specific issues and work best after

several data points have been gathered. Details on using Advanced Settings can be found in the User Manual section titled *Advanced Settings*.

- Beginning on the Home page, click the Setup button to open the Setup page

Timing Settings

Timing settings govern how often the sensor takes readings and flashes its LED. Using the Setup page, you may customize the following settings:

- Data period – Number of minutes between readings (default of 1440 translates to one reading per day)
- LED blink – Number of seconds between blinks during alert conditions
- Sample divider – Controls how fast the sensor records vibration (default of 4 is best for most applications)

Velocity Threshold Settings

Velocity Thresholds determine at what points the Sensor will issue alerts for excessive vibration. Based on the size of the machine being monitored, set the velocity thresholds using this ISO-provided chart:

- Velocity Threshold Yellow – Caution (indicates early wear)
- Velocity Threshold Red – Critical (indicates advanced wear)

ISO 10816 Reference				
Velocity RMS	C1	C2	C3	C4
0.71 mm/s	Green	Green	Green	Green
1.12 mm/s	Green	Green	Green	Green
1.80 mm/s	Yellow	Yellow	Green	Green
2.80 mm/s	Orange	Orange	Yellow	Green
4.50 mm/s	Red	Orange	Orange	Yellow
11.20 mm/s	Red	Red	Orange	Orange
18.00 mm/s	Red	Red	Red	Red
28.00 mm/s	Red	Red	Red	Red

C1: small machine
 C2: medium machine
 C3: large machine rigid foundation
 C4: large machine soft foundation

Temperature Threshold Settings

Temperature Thresholds determine when the Sensor will issue alerts for elevated temperatures. Based on knowledge of the machine, set the desired temperature thresholds:

- Temperature Threshold Yellow – Caution (above normal temperature)
- Temperature Threshold Red – Critical (high temperature)

Saving Settings

- Click Save All to save settings to Sensor
- Click Disconnect on the Home page or press the Control Button once to leave Setup Mode (light will no longer be green and will begin flashing intermittently)
- Press the Control Button three times to power off Sensor (solid yellow light followed by several blinks indicates Sensor is off)
- Sensor is ready to be mounted to a machine and begin monitoring

Mounting Sensor to Machine

- Select the proper magnetic mount (curved or flat) based on desired mounting area
- Ensure that magnetic mount is securely attached to the bottom of the Sensor (see Fig. A)
- Attach the Sensor to the machine as close to the bearings as possible. Sensor should be firmly fixed to the machine surface. Any wobbling of the sensor against the surface will result in inaccurate readings.
- Press and release Control Button once (blue blink indicates that the sensor is on and will record data)
- The Sensor is active and can be left to record data. Check the Sensor as often as desired for alerts. When vibration or temperature exceed the established thresholds, the sensor will begin to blink yellow or red.

Accessing Sensor Data

Data trends emerge over time and give insights into machine performance. Trends and machine data can be viewed by connecting to the Sensor. A trend will begin to emerge after the Sensor records five readings. Please allow at least five readings for best data results. Data can be viewed in response to an alert light or for general machine check-ups. The following section explains how to access Sensor data and graphs.

- Data and graphs can only be accessed in Setup Mode. Connect to the Sensor as described in *Connecting to Mobile Device* and navigate to the Sensor Home Page.

Loading Graphs

- From the Home Page, click the Graph Data button to open Graph Page (data graphs will appear)
- View graphs to see data trends and recent readings
- Click on individual graph points for exact measurements
- Using data trends, make decisions for machine replacement or maintenance
- If desired, stored data can be cleared using the Clear Graph Data button at the bottom of the Graph Page (clicking this button deletes ALL stored data but keeps Sensor settings intact). If moving the Sensor to a new machine, clearing the data and establishing new thresholds will be essential to avoid false alerts.
- When finished viewing data, click Disconnect on the Home page or press the Control Button once to leave Setup Mode (sensor will resume gathering data normally)

Additional Notes

1. The Sensor only records data while a machine is running. To adjust the threshold required to log a measurement, see the *Advanced Settings* section of the User Manual.
2. Alerts are based on the average of the last five recorded readings.