

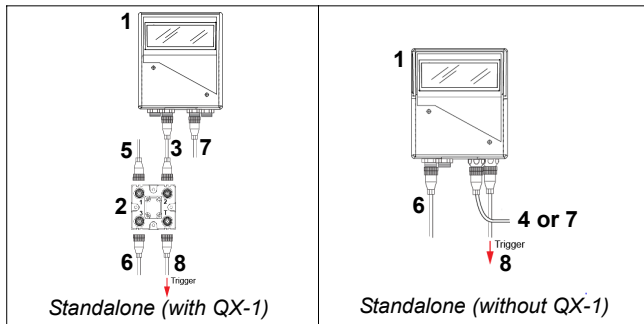
Quick Start Guide

QX-870 Industrial Raster Scanner



P/N 83-110870-04 Rev A

Step 1 — Check Hardware



Hardware Required

Caution: Be sure that all connections are secure **BEFORE** applying power. Always power down **BEFORE** disconnecting any cables.

Item	Description	Part Number
1	QX-870 Industrial Raster Scanner	FIS-0870-XXXXG
2	QX-1 Interface Device	98-000103-02
3	QX Cordset, Common, M12 12-pin Socket to M12 12-pin Plug, 1 m	61-000162-02
4	QX Cordset, Host, Serial, M12 12-pin Plug to DB9 Socket, 1 m	61-000152-02
5	QX Cordset, Host, Serial, M12 12-pin Socket to DB9 Socket, 1 m	61-000153-02
6	QX Power Supply, 100-240VAC, +24VDC, M12 12-pin Socket	97-000012-01
7	QX Cordset, Host, Ethernet, M12 8-pin Plug (Screw-On) to RJ45, 1 m	61-000160-02
8	QX Photo Sensor, M12 4-pin Plug, NPN, Dark On, 2 m	99-000020-02

Note: Additional cordsets and accessories are available in the Omron Microscan Product Pricing Catalog.

Step 2 — Connect the System

Important: If you are connecting Ultra-Lock cordsets to the QX-870 and QX-1, align the pins first and then push the connector into place. **Do not twist** the connectors, as this will bend the pins.

Important: Do not attempt to power more than four scanners with a single power supply in a daisy chain configuration. Add a QX-1 and one power supply for every four additional scanner in the daisy chain.

Note: The configuration instructions below are for simple, direct connections to an RS-232 or Ethernet host. The QX-1 can be added to RS-232 or Ethernet configurations in which greater flexibility and complexity are required. The first diagram in Step 1 shows a standalone configuration that includes the QX-1.

RS-232 Standalone (without QX-1)

1. Connect the Serial Communication Cable from “B” on the QX-870 to the host.
2. Connect the photo sensor (if required) to “T” on the QX-870.
3. Connect the power supply to “P/M” on the QX-870.
4. Plug in the power supply.

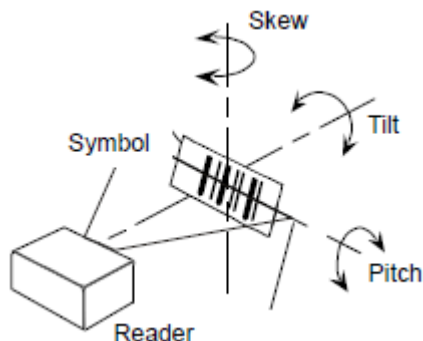
Ethernet Standalone (without QX-1)

Important: Configure Ethernet-enabled scanners off-line and then connect to the network when ready for dynamic use.

1. Connect the Ethernet Communication Cable from “B” on the QX-870 to the host network.
2. Connect the power supply to “P/M” on the QX-870.
3. Plug in the power supply.

Step 3 — Position Scanner

1. Place a test symbol in a location with as little ambient light as possible.
2. Position the scanner at the focal distance used in your application.
3. Align the test symbol with the scanner’s field of view.
4. Tip the scanner relative to the test symbol to avoid glare from specular reflection.



Maximum skew, tilt, and pitch: $\pm 30^\circ$

Step 4 — Install ESP

ESP Software can be found on the Omron Microscan Tools Drive that is packaged with the QX-870.

1. Follow the prompts to install ESP from the Tools Drive.
2. Click on the ESP icon to run the program.



Note: ESP can also be installed from the **Download Center** at www.microscan.com.

Refer to the *QX-870 Industrial Raster Scanner User Manual* for detailed information about using ESP to configure the QX-870.

Minimum System Requirements

- 233 MHz Pentium PC
- Windows 8, 7, Vista, or XP operating system (32-bit or 64-bit)
- Internet Explorer 6.0 or higher
- 128 MB RAM or greater
- 160 MB free disk space
- 800 x 600 256 color display (1024 x 768 32-bit color recommended)

Step 5 — Select Model

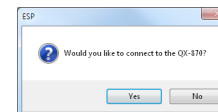
When you start ESP, the model menu will appear:



1. Click the button showing the QX-870.
2. Click **OK**.

Note: You can also simply double-click the button showing your scanner to make your selection.

3. Click **Yes** when this dialog appears:



Note: If you need to select another model later, click the **Switch Model** button near the top of the screen or use **Model > New Model** in the menu toolbar.

