1. Installation

1-1 Connections and Wiring

7 Connect the Sensor to the Touch Finder or Computer via the FQ-WNC Ethernet Cable.

Touch Finder

FQ2-S

Ethernet Cable

FQ Ethernet Cable

2-1 Rotate the Sensor.

1. Power ON the Sensor.

Turn ON the power switch on the side of the Touch Finder, too.

2. Power ON the Touch Finder.


3. Select the language to display on the Touch Finder.

Example 1

Example 2

Here, a process switching signal is input from an external device to switch the scene.

3 Connect a power supply to the Touch Finder.

Note

- A Touch Finder with an AC/DC/battery power supply is used on an AC-AT Adapter (sold separately) or FQ-BAT1 Battery (sold separately) can also be used.

2-2 Image Setup

Make sure the image is stable and adjust the brightness and image input timing.

1 Focus the image.

Press [Camera setup].

The camera image will be displayed.

2 Adjust the brightness.

Adjust the shutter speed so that the Sensor can capture images of the measurement object at a suitable brightness. If the display is still dark, increase the gain.

Press [ ] and then [Shutter speed].

3 Adjust the image input timing.

Adjust the delay from when the trigger is input until the image is input. Press [Trigger setup].

4 Adjust the focus.

Press [Trigger delay].

5 After the TRIG signal is input, images will be continuously input. Press [OK].

2-3 Starting the Sensor

Example 1

Here, measurements are performed when the trigger signal is input and the overall judgement is output.

Example 2

Here, a process switching signal is input from an external device to switch the scene.
4 Adjust the image.
Adjust the image that is taken by the Sensor to make it easy to measure. Here, the position is corrected by searching to enable measurements even if the position of the measurement object is not consistent.
Press [Image adjustment].

Place the object that is to be used as the measurement reference in front of the camera. Move the rectangle so that the characteristic part for position compensation is inside it.

Check the area, press the [OK] Button, and then press the [TEACH] Button. Register the characteristic part and reference position for position compensation will be registered.

Press [OK].
You can add filter items to adjust the image to make it easier to measure. Refer to the User’s Manual for details.

2-2 Measurement Settings
Select items for the desired measurement and register an image as the reference for the measurement.

1 Select the inspection items.
Example to Register Search as the Measurement Method
Press [Inspect]. Next, touch [Inspection].

Press an unused inspection item number and then press [Add item.] on the menu.

Press [Search].

Check the area, press the [OK] Button, and then press the [TEACH] Button. Register the image as the measurement reference.

Press [Back].
The best judgement parameters will be set automatically.

2 Register the measurement reference.
Press [Teach].

Place the object that is to be used as the measurement reference in front of the camera. Move the rectangle so that the mark to be measured is inside it.

Check the area, press the [OK] Button, and then press the [TEACH] Button. Register the image as the measurement reference.

Press [OK].
The calculation settings can be used to perform calculations using the results of multiple inspection items. Refer to the User’s Manual for details.

2-3 I/O Settings
The data that is output to external devices and the input signal assignments can be changed. (Changes are not normally required.) For example, the following can be input or output. • Judgements for individual inspection items can be output. • Commands to register models can be input from an external device. • If you want to output data externally Refer to the User’s Manual for details.

3. Testing
Tests are made with some samples to see if consistent measurements are possible.
When Test Mode is entered, images are measured continuously. A trigger input is not required. Measurement results are only displayed. They are not output to an external device.

1 Perform tests.
Press [Test]. Then press [Continuous test].

4. Operation
Switch to the Run mode display.
Press [Run]. Then press [Switch to Run mode].

Save the settings.
Press [Yes].

Execute measurements.
Measurements will be executed according to the trigger signal input. And the result of measurement will be output to an external device.

Note
There are six types of displays that can be used, as shown below.
Press the [Display] Button and then press [Selected display] to display the following menus.

Displaying the Most Recent Measurement Values
Displaying Measurement Values Over Time
Variable and Measurement Values
Measurement Monitor
Graphical
Measurement Data

Menu Structure

Setup Mode

The inspections that were set on the Setup Mode are used to perform measurements.

Test and adjust the set inspections.

Press [OK].

Run Mode

When a Sensor that is already set is connected

Press the parameter to set.