

Quick Start Guide

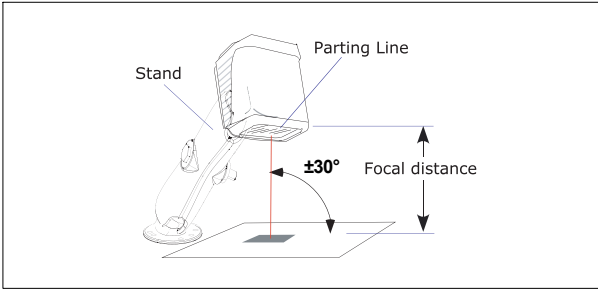
FIS-0004 Imager



P/N 83-730004 Rev A

Step 3 — Position Imager

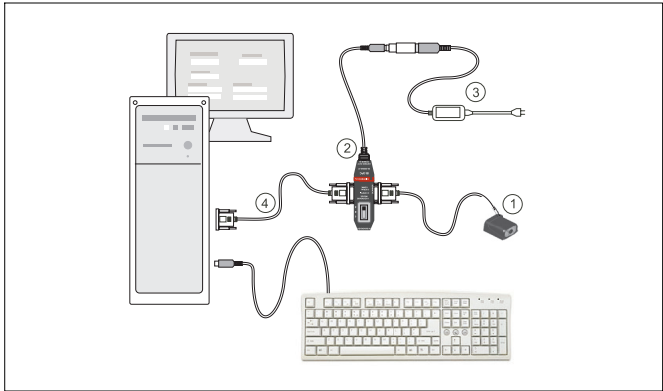
- Position the Imager at a distance from the symbol that matches the factory pre-set focal distance. For example, if your Imager is pre-set at 4", position the parting line 4" from the symbol.
- Tip the Imager relative to the symbol to avoid the glare of direct (specular) reflection. The case parting line should be perpendicular to the plane of the symbol by either pitching the symbol or the Imager as shown.
- Position the Imager in a place with as little ambient light as possible.
- Symbols can be rotated (tilted) at any angle; however, for best results symbols should be aligned with the FOV (field of view).
- In the case of linear symbols, aligning the bars in the direction of their movement ("ladder" orientation) will minimize the chances of blurring, and will produce better reads.
- Avoid excessive skew or pitch. Maximum skew is $\pm 30^\circ$; maximum pitch is $\pm 30^\circ$.



Imager / Symbol Positioning

Note: For instant setup and validation, the FIS-0004 can be hand-held or placed on its side. For accuracy, however, a mounting arm adapter kit is recommended.

Step 1 — Check Hardware



Hardware Required

Caution: Be sure that all cables are connected **BEFORE** applying power to the system. Always power down **BEFORE** disconnecting any cables.

Item	Description	Part Number
1	FIS-0004 Imager	FIS-0004-XXXX
2	IB-3PC Interface Box	AB0003
3	Power Supply	NT06US (110V); NT06 (220V)
4	Comm. Cable	BD25BD9V01-2M

Step 4 — Install ESP

(ESP stands for *Easy Setup Program*.)

Once your Imager is connected to a host computer with Windows™ operating system (98 or above), you can use **ESP** (Easy Setup Program) for configuration and control.

To install **ESP** from a CD:

- Insert your wenglor CD ROM (ZUB-FIS-GB) in your computer's CD drive.
- Select the "Configuration Software" file, launch **Setup.exe** under "wenglor **ESP**", and follow the prompts.

To download **ESP** from the Web:

- Go to <http://www.wenglor.de>.
- Navigate through the following sequence: **Download > Software > Barcode Scanner**
- Click the **Download** button and store the **ESP.zip** file to the location of your choice on your hard drive.
- Extract the wenglor **ESP** WinZip files to a directory of your choice. **Remember where your ESP.exe file is stored on your hard drive!**
- At the end of the install process, copy a shortcut **ESP** icon onto your desktop.



- Click the **ESP** icon to run the program.

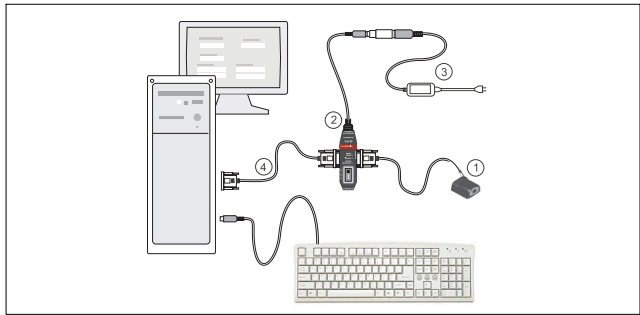
Step 2 — Connect the System

Connecting by RS-232 / RS-422

- Connect the Imager (1) to the IB-3PC interface (2).
- Connect the comm. cable (4) to the host (5) and to the host connector on the IB-3PC (2).
- Connect power supply (3) to the IB-3PC (2).
- Apply power to the Imager.

Connecting by USB

- Plug the FIS-0004 Imager's USB cable into a host USB port.
- Apply power to the Imager.



Hardware Configuration

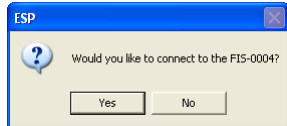
Caution: Be sure that all cables are connected **BEFORE** applying power to the system. Always power down **BEFORE** disconnecting any cables.

Step 5 — Select Model

When you start **ESP**, this menu will appear:



- Select the FIS-0004 from the menu and click **OK**. If you do not want to make this selection every time you start **ESP**, uncheck "Show This Window at Startup".
- Click **Yes** when this dialog appears:

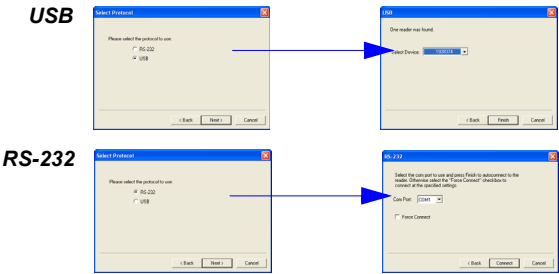


Note: If you need to select another reader model later, click the **Switch Model** button near the top of the screen.

Step 6 — Select Communications Protocol

Important: The Imager is in **Continuous Read Mode** by default. For best connection results, be sure that no symbols are within the Imager's field of view while attempting to connect.

- When the **Select Protocol** dialog appears, choose your connection protocol and click **Next**.



When you are connected, you will see the green connection indicator in the status bar at the bottom right of your screen.



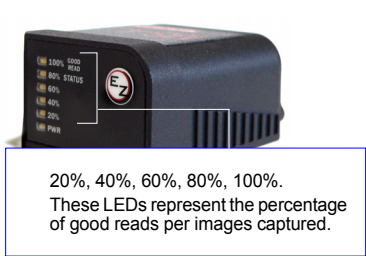
- If you are using an RS-232 interface and your connection attempt fails, click the **Autoconnect** button, select a different communications port, and try again.

Step 9 — Test Read Rate

This test will let you know the percent of good reads per images captured.

Testing by EZ Button

- To start the read rate test, hold down the **EZ** button about three seconds until you hear **three short beeps**. While the symbol is being decoded, the read rate LEDs will indicate the corresponding read rate percentage on the back of the unit.
- To end the read rate test, press the **EZ** button and quickly release.



Testing by ESP

- Click the **Test** button to start the read rate test and **Stop** to end it.



If your symbol has been successfully decoded, its data and related features will be presented under "Symbol Information." Also, while the symbol is being decoded, the read rate LEDs will indicate the corresponding read rate percentage on the back of the unit.

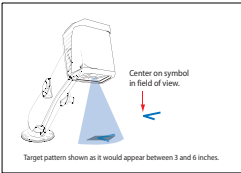
- To end the test, click the **Stop** button.

Testing by Serial Command

You can also start a test with the **<C>** or **<Cp>** command and end it with the **<J>** command.

Step 7 — Locate the Symbol

Move the symbol or the Imager so that the blue target pattern is centered over the symbol. At 2 to 3 inches, the pattern resembles an **X**. At 3 to 6 inches, the pattern resembles a **V**. It is important for the whole symbol to fall within the field of view (FOV) of the Imager. The field of view is what appears in **ESP's Locate/Calibrate** window.



Locate by EZ Button

If you are not connected to a host computer, the **EZ** button will allow you to locate a symbol in the Imager's FOV.



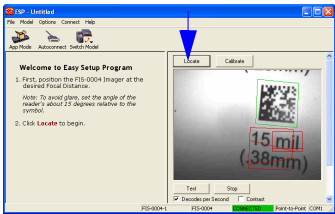
- Hold down the **EZ** button for about one second and release when you hear one short beep. You will see the blue target pattern.
- Center the target pattern on the symbol.

Note: To end all **EZ** button functions, press the **EZ** button once and quickly release.

Locate by ESP

In **ESP's EZ Mode**, click the **Locate** button to enable the target pattern. You will see the blue target pattern projected from the front of the Imager.

- Center the target pattern over the symbol you wish to read.
- Click the **Stop** button to end the **Locate** function.



Step 10 — Configure the Imager Using ESP

To make setup changes to the FIS-0004, click the **App Mode** button.

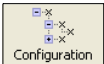


The following modes are accessible by clicking the buttons in the first row of **App Mode** icons:

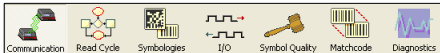


- Establish communications between **ESP** and the Imager by clicking the **Connect** button.
- Send or receive commands by clicking the **Send/Recv** button.
- Make changes to Camera options by clicking the **Camera** button.
- Access the Terminal window, where you can see symbol data and enter serial commands, by clicking the **Terminal** button.
- Review status settings or make changes to operational commands by clicking the **Utilities** button.
- Format data for output by clicking the **Data Output Format** button.

Click the **Configuration** button to display the second row of **ESP** icons.



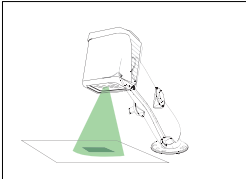
From here you can make changes in the configuration trees that can be accessed by clicking the buttons on the second row of icons in the **ESP** window.



For further details, see **ESP Help** in the pulldown Help menu.

Step 8 — Calibrate Settings

The Imager can be optimized by the **EZ** button, **ESP**, or **serial command**. During calibration, the Imager will flash its LEDs while determining the best configuration for decoding symbol data. Upon successful completion, a **green** LED pattern will flash brightly and illuminate the symbol. If unsuccessful, the Imager will emit 5 short beeps and stop searching.



Calibrate by EZ Button

- Hold down the **EZ** button for about two seconds and release when you hear **two short beeps**.
- The Imager will search through various camera and IP settings to determine the best configuration for decoding symbol data.

Note: To end all **EZ** button functions, press the **EZ** button once and quickly release.

Calibrate by ESP

- Click the **Calibrate** button in **EZ Mode**.



- The Imager will search through various camera and IP settings to determine the best configuration for decoding symbol data.

A successful calibration will display a green frame around the symbol, and the following message will appear: "Uploading all reader parameters." After a moment the symbol's data and related features will be presented under the "Symbol Information" box below the image display window.

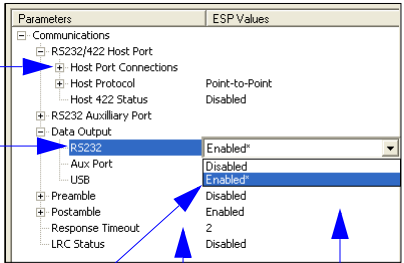
Calibrate by Serial Command

Send **<@CAL>** to the Imager to begin the calibration routine.

Step 11 — Make Menu Changes and Save in ESP

To make changes to a configuration setting:

- Left click** on the **+** to expand the desired tree.
- Double click** on the desired parameter and click once in the selection box to view options.
- Place your cursor in the selection box, scroll down to the setting you want to change, and **click** once on the setting.
- Left click** again on the open screen to complete your selection.
- Right click** on the open screen and select **Save to Reader** to implement the command in the Imager.



Saving Options

- Send, No Save.** Changes will be lost when power is re-applied to the Imager.
- Send and Save.** This activates all changes in current memory *and* saves to the Imager for power-on.