

Quick Start

MS-9 Laser Scanner

This guide is designed to get your scanner up and running quickly. When connected to a host computer with Windows™ operating system (2000 or above), you can use **ESP** (Easy Setup Program) to configure and control your **MS-9 Laser Scanner**. In addition to **ESP**, you can send commands to your scanner by serial command and by the scanner's embedded menus.

For a full explanation of the MS-9's commands and features, refer to the **Help** section of **ESP** or contact your Microscan sales representative.

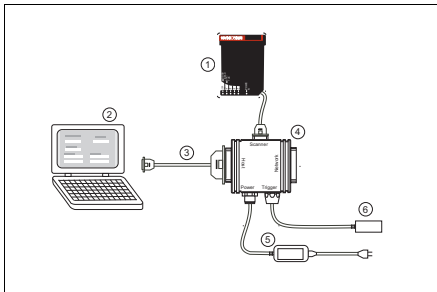
Warranty

For current warranty information, see: www.microscan.com/warranty.

Step 1 — Check Required Hardware

Caution: If using your own power supply, be certain that it is wired correctly and supply voltage is 10 to 28VDC. Incorrect wiring or voltage can cause software or equipment failures.

- **(1) MS-9 Laser Scanner, FIS-0911-XXXXG**
- **(2) A Host Computer**
- **(3) Null Modem Configuration Cable, 61-300026-01, DB-25 Plug to DB-9 Socket, 6 foot.** If using another host cable, be certain it does not have RTS/CTS connected to the host.



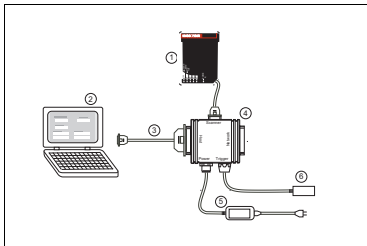
Hardware Required

- **(4) IB-131 Interface Box, 99-400005-02**
- **(5) Power Supply, 97-100004-05 (120V), 97-100004-06 (240V)**
- **(6) Object Detector (optional), 99-4400021-03**

Step 2 — Connect the System

Caution: Be certain all cables are connected **BEFORE** applying power. Always power down **BEFORE** disconnecting cables.

1. Connect the scanner (1) to the **IB-131 Interface Box (4)**.¹
2. Connect the **IB-131 (4)** at the “HOST” 25-pin connector to the **Host Computer (2)** via a **Null Modem Configuration Cable**.
3. Connect the **Power Supply (5)** to the **IB-131’s “POWER”** connector.
4. Apply power to the system.



Hardware Configuration

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1. When wiring the **IB-131** to a **Host Computer** that has a 25-pin connector, cross pins 2 and 3.
 3. When wiring the **IB-131** to a **Host Computer** that has a 9-pin connector, do NOT cross pins 2 and 3.

Step 3 —Install ESP

ESP Software can be found on the Microscan Tools Drive that is packaged with the MS-9.

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.

Minimum System Requirements

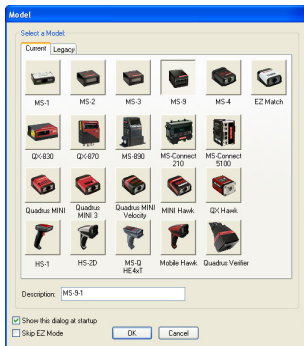
- 233 MHz Pentium PC
- Windows 8, 7, Vista, or XP operating system (32-bit or 64-bit)
- Internet Explorer 6.0 or higher
- 128 MB RAM or greater
- 160 MB free disk space
- 800 x 600 256 color display (1024 x 768 32-bit color recommended)

Refer to the *MS-9 Laser Scanner User Manual* for detailed information about using ESP to configure the MS-9.

Step 4 — Select Scanner Model

When you start the program, this menu will appear:

1. Select **MS-9 Laser** from the menu and click **OK**. If you do not want to make this selection every time you load **ESP**, uncheck “Show this window at Startup”.
2. Select the default name (**MS-9 Laser-1**, for example) or type in a file name of your choice and click **OK**.
3. Click **Yes** when the connect dialog appears.



Note: If you need to select another model later, you can find it in **App Mode** under **Model** on the menu bar.

Step 5 —Autoconnect

1. In the **Connecting...** dialog, if your communications port is not the default **COM1**, use the pull down arrow to change your communications port.
2. Click the **Start** button.

When connected, the scanner's settings will be loaded into ESP and the **CONNECTED** message will appear in a green box in the status bar at the bottom right of your screen.



3. If the connection fails, enable a different **Com Port**, check connections, and try again.

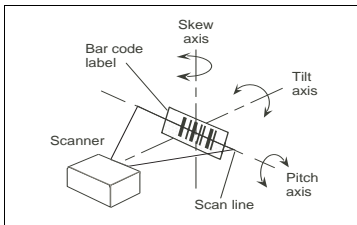
Tip: If you do not see the **CONNECTED** or **DISCONNECTED** message at the bottom of your dialog, try expanding the **ESP** window horizontally.

Step 6 —Position Symbol and Scanner

1. Set up a symbol at the scanning distance you will be using in your application.

Note: If using an I 2/5 symbol, verify that the number of characters in the symbol being scanned matches the symbol length enabled for the I 2/5 symbol type (default is 10 and 6).

2. Avoid bright light or IR light from other sources, including other readers.
3. Pitch the symbol or reader at a minimum of $\pm 15^\circ$ to avoid specular reflection (the return of direct, non-diffused light).



Scanner/Symbol Positioning

Note: **Code 39** is the default symbol type enabled. If you are uncertain as to your symbology type, enable all symbologies by selecting the **Auto Discriminate** macro in **Terminal** mode.

Step 7 —Test Read Rate

If you don't have a test symbol, print out this page and use the symbol here for testing. With this test you can learn the percentage of decodes per images captured by observing the active LEDs (20% through 100%) on the top of the scanner.



Code 39 Test Symbol

You can also find test symbols on the Microscan Tools Drive.

By ESP

After connecting to the reader, **ESP** will open in **Setup Mode**.

1. Click the **Test** button in **Setup Mode** to begin the read rate test.
2. Follow the instructions on the **Setup Mode** screen.
3. To end the read rate test, click the **Stop** button.

Note: If the reader is in the default **Continuous Read** mode, it will read and beep repeatedly as long as a readable symbol remains in the read range, and as long as the Read Cycle configuration has not changed.

By Serial Command

Send a **<C>** to begin the read rate test.

Send a **<J>** to end the read rate test.

Step 8 —Configure the Scanner

By ESP

To change reader settings, or to access the **Utilities** or **Terminal** window, click the **App Mode** button.

To return to **Setup Mode**, click the **Setup Mode** button.

By Serial Command

From your terminal program or the **Terminal** screen in **ESP**, you can enter serial commands and configuration and utility commands.

Note: You can learn the current setting of any parameter by inserting a question mark after the number, as in **<K100?>**. To see all **K commands**, send **<K?>**.