

Metrologic Eclipse and Voyager barcode scanner interface options.

Introduction:

The Metrologic Eclipse and Voyager barcode scanners are available with three PC interface connector options. The first is called a "keyboard wedge" connector where you unplug the keyboard from the PC and then plug the bar code scanner into the PS2 keyboard port on the PC and then connect your keyboard to a small in-line PS2 connector on the barcode scanner's connector. This type of connection causes the barcode scanner to work like a second keyboard attached to your PC along with your original keyboard. No additional software is needed in order to scan barcodes however the data always goes into the PC as if it were being typed in on a keyboard. Although this approach is extremely simple, it offers little control over where the barcode data ends up. Only the application that is running in the foreground and has the input focus can receive the data from the barcode scanner because the data is going into the PC as if it were being typed in on the keyboard. If the cursor is not in the right place or is not in the correct application program, the barcode data ends up going into the wrong place.

The second type of connection is an RS232 interface where the scanner plugs into a 9-pin RS232 serial port on the back of your PC. The RS232 connection requires additional software to read in the data from the scanner however this type of connection allows you to create much more robust applications that do not depend on where the cursor is in the application where you want the barcode data to go. The barcode data can even be collected in the background while you work with other applications in the foreground.

The third type of connection is a USB connector. The USB connection is generally the best type of connection to get mainly because most new PCs do not have PS2 keyboard ports or RS232 serial ports and they only come with USB port connectors.

The USB versions of the Eclipse and Voyager scanners come configured from the factory to work as a "USB keyboard". When you plug the scanner into a USB port on your PC and scan a barcode, the data from the scanner will go into your PC as if it were typed in on a keyboard. In other words, it works exactly like the "keyboard wedge" interface described above. When the scanner is connected to the USB port, it identifies itself to Windows as a keyboard and Windows automatically loads the built in USB keyboard driver that comes pre-installed with Windows. This is why you do not need to install any drivers in order to use a USB scanner the same way that you would use a keyboard wedge scanner.

If you want to use a USB barcode scanner the same way that you would use a RS232 serial scanner then you need to first install a special "Virtual RS232 port driver" for the barcode scanner and then scan a special "reader programming" barcode that will configure the barcode scanner to use the new Virtual RS232 port driver instead of using the built in Windows keyboard driver. After you perform these two steps, the driver for the scanner will create a "Virtual RS232 port" that will work exactly like a physical RS232 COM port so that you can use standard RS232 communications software to read in the data from the scanner exactly the same way you would with a scanner that has a 9-pin RS232 serial port connection (just like the RS232 connected scanners described above).

Configuring Metrologic USB barcode scanners to use a Virtual RS232 Port interface

To set up a Metrologic Eclipse or Voyager USB barcode scanner to work like a RS232 scanner, use the following steps shown below:

Step 1 - Download the required Virtual COM Port driver for your version of Windows from Metrologic Website using one of the following two links:

If you are running Windows 2000 or XP download:

ftp://ftp.metrologic.com/pub/download/software/mtlgpos_2k.zip

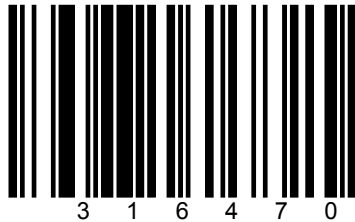
If you are running Windows 98 download:

ftp://ftp.metrologic.com/pub/download/software/mtlgpos_98.zip

Save the downloaded file to a new folder named C:\Metrologic on your hard drive. Because the file is a ZIP file, you will first need to un-zip the file and extract its contents to the same folder (C:\Metrologic) on your hard drive.

Step 2. - Reconfigure your scanner.

With the scanner plugged into the USB port of your PC and functioning properly in keyboard emulation mode, you must scan the following special programming barcode. The following barcode will reconfigure your scanner to use the new driver that you downloaded instead of using the Windows keyboard driver.



Note: You will need to print this document and scan the above barcode from a printed page. Your scanner cannot read a barcode from your computer monitor. The above barcode can also be found on page 68 of the scanner configuration manual. You can download the manual as an Adobe PDF document using the following URL: <ftp://ftp.metrologic.com/pub/download/productmanuals/00-02544.pdf>

Step 3. - Install the new Virtual COM Port Driver for the scanner.

After you scan the above bar code, the scanner will beep several times and the scan beam should turn off. The "Found New Hardware Wizard" should also appear and ask you if you want to automatically install the driver for the new device. Choose "no, not this time" and then click the Next button.

Choose the option "Install from a list or specific location" and click the Next button.

Choose "Search for the best driver in these locations" and put a check mark next to the option "Include this location in the search".

Click the "Browse" button and specify the folder named C:\Metrologic for the search location (this is the folder where you unzipped the driver files earlier).

Uncheck all other options and click the "Next" button.

If you see a warning that the driver has not been digitally signed, click the "Continue anyway" button.

Click the "Next" button after Windows finds the driver.

When driver installation is complete, click the "Finish" button.

Step 4. - Determine which COM Port the new driver created for your scanner.

At this point the new driver is installed and the scanner is now interfaced as a Virtual RS232 COM port on your computer.

To determine which Com Port was created, you will need to use the following steps:

Open the Windows Control Panel (click Start - Settings - Control Panel) and double click on the "System" icon in the Control Panel window.

In the System Properties window, click on the "Hardware" tab, and then click on the "Device Manager" button to open the Windows Device Manager window. In the Device Manager, find the "Ports (COM & LPT)" section and expand it by clicking on the small plus sign (+) next to the entry.

The scanner should be listed there as "Metrologic USB Scanner (COMx)" where x is the COM port number that you would use to open the port in whatever serial communication software you will be using.

For example, if the entry reads "Metrologic USB Scanner (COM4)", you would configure your serial communications software to open the serial port COM4. If the scanner does not appear listed in the

Device Manager, try unplugging the scanner from the USB port for a few seconds and then reconnecting it.

To change the COM port number to a different value, close any serial communication software that may have the current virtual COM port open and then double click on the "Metrologic USB Scanner (COMx)" entry in the Device Manager window.

Click on the "advanced" tab in the window that appears and choose a new COM Port number (Do not select a COM port number that is already listed in the Device Manager window.)

Click the OK button and then unplug the scanner from the USB port and wait a few seconds and finally reconnect the scanner to the USB port.