Quick Start Guide
Microvision USB Cables

Microvision USB Cables

Microvision USB cables let you connect your Microvision scanner to a USB port on your Windows or Mac device. The straight USB cable is designed for desktop devices. The coiled USB cable is designed for laptop and mobile devices.

You can use Microvision USB cables in two modes: KBD (keyboard) or VCOM (virtual communication). In KBD mode, the cable sends bar code data to the Windows or Mac device as if the data was typed as letters, numbers, and symbols on a keyboard. In VCOM mode, a software application that integrates the scanner assigns a specific port number to send and receive bar code data.

Note: Microvision recommends that you select a mode and do not switch. If you switch frequently between KBD mode and VCOM mode, it can cause system errors, and you may have to restart your system.

Cable Features

Microvision cables can emulate a keyboard and act as a hardware wedge. You don't need any connectivity software - just connect and start scanning.

Work with any software applications integrated with the scanner.

Easy plug and play installation.

Full compliance with USB specification 1.1.

Supports standard RS-232 serial interface.

No IRQ resources required.

Powered by USB port - no separate power supply required.

System Requirements

Windows 2000, Windows XP service pack 1 or 2 (KBD and VCOM)

Mac OS X, Linux (KBD only)

AMD or Intel Pentium 133MHz or better

USB 1.1 or higher port

What is KBD Mode?

KBD (Keyboard) mode lets your Microvision scanner emulate a USB keyboard. This means that bar code data is transferred as if it is typed as letters and numbers on a keyboard. KBD mode lets you scan bar code data into any software application that accepts keyboard input. You are not required to load any special software – you can just plug and play.

Use KBD mode when you want plug and play scanning.

If you use KBD mode when the cable is connected, then scanned bar codes appear immediately in the active software application.

If you use KBD mode when the cable is not connected (batch mode), then the bar codes are saved in scanner memory. The bar codes are then downloaded into the active software application when the scanner is connected.

What is VCOM Mode?

VCOM (Virtual Communication) mode lets a software application assign a specific port number to communicate with your Microvision scanner.

Use VCOM mode with software applications that control your scanner connection. You can use VCOM mode only when you have a software application that receives data directly from the scanner.

If you use VCOM mode when the cable is connected, then bar codes should appear in the software application immediately after each scan.

If you use VCOM mode when the cable is not connected (batch mode), then bar codes should appear when you connect the cable to the scanner.

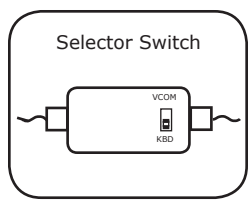
KBD Mode Installation

Use KBD mode when you want your Microvision scanner to send bar code data as letters, numbers, and symbols typed on a keyboard.

You can use KBD mode with Windows or Mac devices.

Windows KBD Installation

1. On your USB cable, move the selector switch to **KBD**.
2. Connect your USB cable to the USB port on your Windows device.
3. A text balloon should pop up in the bottom right of the screen. Windows should recognize the hardware, and apply a KBD driver to the cable. The installation process can take one or more minutes. When the process is complete, the balloon text "Your hardware is installed and ready to use" appears.
4. Connect your USB cable to your scanner, open the application you want to capture the bar codes, and start scanning.

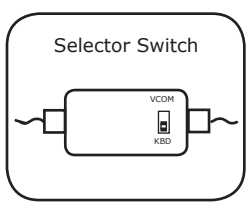


KBD Mode Installation

Mac KBD Installation

1. On your USB cable, move the selector switch to **KBD**.
2. Connect your USB cable to the USB port on your Mac device.
3. An installation wizard appears on the screen. The wizard recognizes the cable as an unknown keyboard.
4. The wizard may ask you to press a key on the keyboard. Instead of pressing the key, connect the cable to your scanner, and then scan the bar code below. Scanning the bar code below completes the Mac installation process.

Mac KBD Bar Code



Configure and Scan in KBD Mode

Before you start scanning bar codes in KBD mode, complete the following steps. Use the bar codes on page 14 .

1. Scan the **Download Delay is 500 Milliseconds** bar code.
   This adds a 500 millisecond delay between each bar code download, which prevents bar codes from overwriting each other when downloading a batch of scanned bar codes. The Windows or Mac keyboard buffer may not be big enough for all bar codes saved in scanner memory.

2. Scan the **Bar Code Prefix (STX) is False** bar code.
   This stops the scanner from adding unwanted data to your bar codes. For Windows applications, this stops characters in bold. For Mac applications, this stops unwanted cursor movements from being added to bar codes.

Note: Make sure to prepare your application before you connect your Microvision scanner, or you may lose the bar codes in scanner memory.

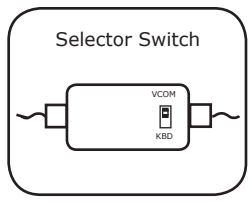
Troubleshoot KBD

Issue	KBD Mode
Bar code data does not appear in my application, or appears incorrectly.	Scan the Restore Factory Settings bar code on page 14, and then complete steps in Configure and Scan in KBD Mode on page 8.
Bar code data is **bold** when it appears in your software application.	Scan the Bar Code Prefix is False bar code on page 14.
Not all bar codes appear when downloading multiple bar codes.	Scan the Download Delay Is 500 Milliseconds bar code on page 14.
My scanner does not work when I switch from VCOM to KBD.	Scan the Restore Factory Settings bar code on page 14, and then complete steps in Configure and Scan in KBD Mode on page 8.
Extra characters appear at the beginning of a batch of bar codes when I connect the cable.	This sometimes occurs when you connect the cable. Your can edit the bar code data after downloading, or switch to VCOM mode and use wedge software.

VCOM Mode Installation

Use VCOM mode when you want a software application to assign a specific port number for your Microvision scanner. You can use VCOM mode with Windows devices only.

VCOM Installation



1. On your USB cable, move the selector switch to **VCOM**.
2. Connect your USB cable to the USB port on your Windows device.
3. The new hardware wizard starts.
4. When you see the "Your hardware is installed and ready to use" message, start a Web browser, and go to: www.microvision.com/barcode/support

VCOM Mode Installation

1. Download the **USBVCOM Driver**.
2. When the download is complete, double-click the installer. When the Finish button is active, click **Finish**.
3. When you see the warning about unsigned drivers, click **Continue**.
4. When the installer window disappears, the installation is complete.

Note: If you disconnect the cable, make sure that you connect the cable to same port. If you do not use the same port, you must install the driver again.

Configure and Scan in VCOM Mode

Before you start scanning bar codes in VCOM mode, complete the following step.

- Scan the **Download Delay is 500 Milliseconds** bar code on page 14. This adds a 500 millisecond delay between each bar code download, which prevents bar codes from overwriting when downloaded in a batch. The batch may be too big for the Windows buffer.

Most software applications that use a Microvision scanner control the scanner connection within the application. See your application user guide to learn how to use a Microvision scanner with your application.

Note: Microvision recommends that you select a mode and do not switch. If you switch frequently between KBD mode and VCOM mode, it can cause system errors, and you may have to restart your system.

Troubleshoot VCOM

Issue	VCOM Mode
Bar code data does not appear in my application, or appears incorrectly.	Scan the Restore Factory Settings bar code on page 14, and then complete steps in Configure and Scan in VCOM Mode on page 12.
Not all bar codes appear when downloading multiple bar codes.	Scan the Download Delay Is 500 Milliseconds bar code on page 14.
My scanner does not work when I switch from VCOM to KBD.	Scan the Restore Factory Settings bar code on page 14, and then complete the VCOM installation.

ROV Scanner Control Bar Codes

ROV Download Delay is 500 Milliseconds

ROV Download Delay is 0 Milliseconds

ROV Bar Code Prefix (STX) is False

ROV Bar Code Prefix (STX) is True

ROV Clear Bar Codes

ROV Restore Factory Settings

Flic Scanner Control Bar Codes

Flic Clear Bar Codes from Memory

Flic Download Delay is 500 Milliseconds

Flic Bar Code Prefix (STX) is True

Flic Return to Factory Defaults

Flic Download Delay is 0 Milliseconds

Flic Bar Code Prefix (STX) is False

Regulatory Information

FCC Declaration of Conformity
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference (2) this device must accept any interference received including interference that may cause undesired operations. This applies to all product options.

FCC Radio Frequency Interference Statement
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

» Reorient or relocate the receiving antenna.

» Increase the separation between the equipment and receiver

» Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

» Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this equipment not expressly approved by manufacturer could void the user's authority to operate this equipment.

Notice for Canada
Radio Interference Notice for Canada
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme á la norme NMB-003 du Canada.

Compliance Information
Product Name: PnP USB Cable Straight, PnP USB Cable Coiled
Product Number: HS 2122-02, HS 2122-01

The product herewith complies with the requirements of Low Voltage Directive 73/23/EEC, EMC Directive 89/336/EEC, WEEE Directive 2002/96/EC, and carries the "CE" mark accordingly.

CE

Limited Warranty

Manufacturer warrants that this laser bar code scanner will be free of defects in material and workmanship for one (1) year from the date of shipment. Manufacturer will, at its option, either repair, replace or refund the purchase price paid by buyer for the defective Products. Such repair, replacement or refund shall be buyer's sole remedy in the event of Manufacturer's breach of this limited warranty. Repaired or replaced parts or product may include new, reconditioned or re-manufactured parts and equipment at Manufacturer's option. All costs associated with shipment to Manufacturer for warranty service, including but not limited to freight, duties, insurance and customs fees are buyer's responsibility. Manufacturer will pay the freight costs (duties, insurance, customs and any other fees are buyer's responsibility) associated with the return shipment to buyer. The method of shipment will be at Manufacturer's discretion. Repair or replacement of any parts or equipment does not extend the period of warranty provided for herein. THIS LIMITED WARRANTY IS MANUFACTURER'S ONLY WARRANTY. MANUFACTURER DOES NOT GIVE WARRANTIES OF MERCHANTABILITY OR WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. To take advantage of this warranty, buyer should contact the seller not Manufacturer. Manufacturer does not warrant that the Product or associated software will run error free or without interruptions. Manufacturer is not liable for loss of data, loss of profit, cost of cover, indirect, incidental or consequential damages.

The warranty set forth herein does not cover and Manufacturer will have no obligations hereunder if any non-conformance is caused in whole or in part by; accident, transportation, neglect, misuse, alteration, modification, or enhancement of the products or incorporation, interfacing, attachment of any feature, program, or device to the products by a person or entity other than Manufacturer, failure to provide a suitable installation environment, use of the products for other than the specific purpose for which the products are designed or any use of the product not in accordance with the User Manual or other misuse or abuse of the product.

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DA0119426 Rev. D