
USB to Serial Converter Operational Manual

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JANUARY 19, 1998

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The Federal Communications Commission Statement

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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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PREFACE

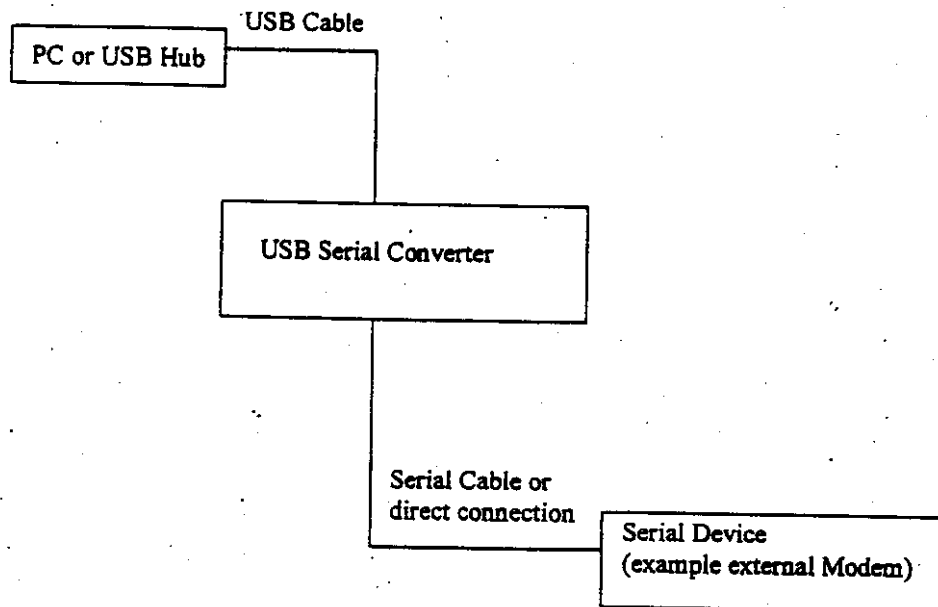
This document describes the operational aspects of the Peracom USB Serial Converter.

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INTRODUCTION

The Peracom USB to Serial Converter is a standalone device that allows a legacy RS232 peripheral to attach to a USB Host controller on a PC or a USB hub. The device will use a USB type B connector for connection to the USB host and a DB 25 pin connector for connection to the RS232 peripheral. Figure 1 below shows the high level block diagram of the device connections.

The USB to Serial Converter will support Microsoft Windows 95 (release OSR2.1 with USB support), Windows 98, and eventually Windows NT 5.0.



FUNCTIONAL OVERVIEW

The USB to Serial Converter will install an additional COM port on a PC when the USB serial converter is plugged into the PC. The installation process will choose the next available COM port to associate the COM port number with the system. This will enable any Windows application to use the USB to Serial Converter as a normal COM port. The applications do not need to be modified to access the additional USB COM port. The unit will require a device driver to be installed for operation on Windows 95, Windows 98, and Windows NT 5.0.

RS232 SUPPORT

The USB to Serial Converter will support all popular baud rates up to 115Kbps. The USB to Serial Converter will contain transmit and receive buffers to allow the maximum baud rate between PC and RS232 device.

Plug and Play

The USB to Serial Converter is a plug and play device. When the device is plugged into the PC, the additional COM port will be available for application use. If the USB to Serial Converter is attached to a Plug and Play RS232 device (example: Plug & Play external Modem) then the device will need to be added to the system via the Add Hardware Manager or the Refresh button in the Device Manager.

Multiple Device Support

There can be many USB to Serial Converters attached to a single PC. Each USB to Serial Converter has a unique serial number. Each time an additional USB to Serial Converter is attached to the PC, an additional COM port will be added to the system. If a device is unplugged and then later plugged into the same PC, it will retain the COM port number that was assigned during the installation of the USB to Serial Converter.

Uninstall USB COM port

A COM port may be uninstalled from a PC by using the device manager. In the device manager, the PORTS section should be selected and the appropriate COM port may be removed by clicking on the REMOVE button with appropriate COM port selected.

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Installation Process

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Control EMC Method in Serial Converter

1. Add ferrite bead (390nH) on RS-232 connect