

# Diamond 650 USB Interface Notes

## Firmware - All



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### Overview

This document describes the USB interface employed by USB variants of the Diamond MT650 range of equipment.

### Operating Systems supported

- Windows Vista x64
- Windows XP x64
- Windows Server 2003 x64
- Windows Vista
- Windows XP
- Windows Server 2003
- Windows 2000
- Windows ME
- Windows 98
- Linux
- Mac OS X
- Mac OS 9
- Mac OS 8
- Windows CE.NET (Version 4.2 and greater)

### Installation

Certain versions of Windows will detect the USB interface and automatically load the relevant driver when the device is first plugged in. If this does not occur, it will be necessary to download a driver from:

Windows drivers: [http://www.cjstechnology.com/html/desktop\\_usb.html](http://www.cjstechnology.com/html/desktop_usb.html)

Windows and other drivers: <http://www.ftdichip.com/Drivers/VCP.htm> (select driver suitable for FT232R)

When a suitable driver is installed and the device is plugged in to the USB interface, a virtual com port (VCP) will be created. This can then be used by applications such as HyperTerm to communicate with the device.

### Communication

Communication parameters for the VCP should be set to match the firmware in the card reader. Generally this is: 9600 baud, no parity, 8 data, 1 stop bit for Read Only (R/O) and MCUN firmware  
115,200 baud, no parity, 8 data, 1 stop bit for Read/Write (R/W) firmware v1.x, 2.x and 3.x

It is also possible to communicate with the card reader using the Bus-Mode interface (aka D2XX) supported by most of the drivers. This allows for more elegant programmatic detection of and communication with devices without using virtual com ports. A link to the development guide for Bus Mode operation can be found at [http://www.cjstechnology.com/html/desktop\\_usb.html](http://www.cjstechnology.com/html/desktop_usb.html)