# RS232 to USB Serial Adapter Cable (w/ Isolation and Surge Protection)

Installation Guide

## 1. Introduction

Thank you for purchasing this RS232 to USB Serial Adapter Cable. It is an intelligent expansion module that connects to a PC or server via the Universal Serial Bus (USB), providing high-speed serial connectivity. The serial port is full optical isolated and surge protected. With its complete software kit, it is an ideal solution for most critical applications.

#### Features:

- ✓ Provides 1 RS232 Serial Ports over USB Port
- ✓ Provides 1 DSUB-9 Connectors
- ✓ Supports 3-wire RS232 Signals (TXD, RXD, GND)
- ✓ Baud Rate from 300 bps to 921.6Kbps
- ✓ Supports 7.8 Data Bits
- ✓ Odd, Even, Mark, Space, or None parity mode
- ✓ Supports 1, or 2 Stop Bits
- ✓ Provides 2,500Vrms Optical Isolation
- ✓ Built-in Bi-direction Surge Protection Circuits
- ✓ Supports USB Bus Power
- ✓ Supports Win98, Me, XP, CE, Win2000, 2003



## 2. Plugging the Adapter Cable

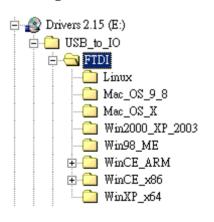
- 1. Plug the USB connector (Type-A) of the cable into the USB host port of your PC or an available USB port on a USB hub.
- 2. Plug the serial device to the DB9 male connector at the other end of this adapter cable.
- 3. Proceed with the next section "Installing Drivers" to install the virtual COM port drivers for your Operating System.

## 3. Installing Drivers

The RS232 Serial Adapter Cable can be hot-plugged to the USB port of your computer due to the specifications of USB. It supports the following operating systems. The drivers are shipped in the following folder on the supplied driver CD.

#### Driver Locations on the CD

These instructions are for installing the drivers from the CD supplied with the product. If you are installing drivers for Win98, ME, 2000 or XP, when prompted for the location of the drivers, specify your CD-ROM drive and the locations according to the following table:



- Linux
- Mac OS 9.x, 8.x
- Mac OS X
- Windows 2000, XP, Server 2003
- Windows 98, 98SE, ME
- Windows CE for ARM
- Windows CE for ix86
- Windows XP, 64bit



#### Installing Serial Port Drivers for Win98, ME, 2000, XP

- Insert the Driver CD supplied with the Adapter
- Connect the USB cable, the "Add New Hardware Wizard" appears. Click Next.
- Select "Search for the best driver for your device" and click Next
- Assume the CD-ROM is drive E:, select "Specify a location" and browse to the following folder: E:\USB\_to\_IO\FTDI\Win2000\_XP\_2003
  E:\USB\_to\_IO\FTDI\Win98\_ME

  For Win2000, XP or Server 3003.

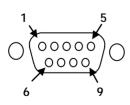
For Win98, ME

Click Next. Windows will then copy the driver files.

- Click Finish to complete the driver installation.
- After installing the drivers, Windows will detect the new COM ports and will begin to initialize them. Your new COM ports, numbered sequentially following the existing ports in your system, and they are now ready!

### 4. Male DB9 Pin Assignments and Cable Wiring

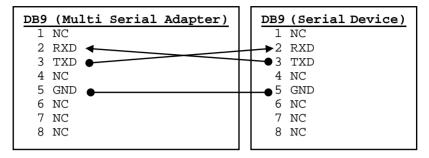
## DB9-Male Pin Assignment:



| Pins | Signal |  |
|------|--------|--|
| 1    | NC     |  |
| 2    | RXD    |  |
| 3    | TXD    |  |
| 4    | NC     |  |
| 5    | GND    |  |
| 6    | NC     |  |
| 7    | NC     |  |
| 8    | NC     |  |
| 9    | NC     |  |

NC = No connection

#### DB9-Male to DB9-Male Cable Wiring:



## 5. Specifications

| Туре                    | Specifications               |
|-------------------------|------------------------------|
| Connectors              | USB type-A, DB9 Male         |
| Cable                   | USB                          |
| Number of Ports         | 1 RS232                      |
| RS-232 Signals (3-wire) | TXD, RXD, GND                |
| Baud Rate               | 300 bps to 921.6Kbps         |
| Data Bits               | 7,8                          |
| Stop Bits               | 1, 2                         |
| Parity                  | None, Even, Odd, Mark, Space |
| Isolation               | 2,500Vrms Optical Isolation  |
| Surge Protection        | 500W                         |
| Power Requirement       | 5V/110mA (USB Bus Powered)   |
| Operating Temperature   | 0 to 55°C(32 to 132°F)       |
| Operating Humidity      | 5 to 95% RH                  |
| Storage Temperature     | -20 to 85°C (-4 to 185°F)    |

