



4 port USB Serial Adapter w/ Isolation and Surge Protection

Product Manual



Coolgear, Inc.

Version 1.1

March 2018

Model Number: CM-41042

Revision History

| Revision | Date | Author | Comments |
|----------|------------|----------|------------|
| 1.0 | 03/20/2018 | Coolgear | New Manual |

About this document

This product manual outlines installation and features of the CM-41042 4 port USB Serial Adapter w/ Isolation and Surge Protection.

Scope

The scope of this manual is to give the user of the product an understanding of its use with detailed diagrams and verbiage. The manual allows the users to apply the product to their application.

Intended Audience

This product is intended for use in numerous industries including but not limited to applications such as; Factory Automation, Retail and Industrial applications, Data Centers, Serial Equipment, Office, and others.

Product Support

support@coolgear.com

Table of Contents

| | |
|-----------------------------------------------------------|----------|
| 1. Introduction | 4 |
| 1.1 Features | 4 |
| 2. Plugging in the Adapter | 5 |
| 2.1 4 Port RS-232 to USB Adapter Diagram | 5 |
| 2.2 Installing Drivers | 5 |
| 3. Male DB9 Pin Assignments and Cable Wiring | 7 |
| 4. Notes, Tips, and Warnings | 8 |
| 5. Supporting References | 9 |

Table of Figures

| | |
|---------------------------------|---|
| Figure 1 – Adapter Diagram..... | 5 |
| Figure 2 – Driver Location..... | 6 |
| Figure 3 – Pin Assignment..... | 7 |
| Figure 4 – Cable Wiring..... | 7 |

1. Introduction

This CM-41042 RS232 to USB Multi Serial Port Adapter is an intelligent module that connects to a PC or server via the Universal Serial Bus (USB), providing high-speed serial connectivity. The serial ports are fully optically isolated and surge protected. With its rigid metal case, it is an ideal solution for most critical applications.

| | |
|------------|---------------------------------------------------------|
| WEIGHT | .912 lbs. |
| DIMENSIONS | 6.83(L) x 3.83(W) x 1.70(H) (17.35 x 9.72 x 4.32 cm) |
| UPC | 729440626761 |
| WARRANTY | 1 year from date of purchase |
| COLOR | Black |
| PORTS | (4) DB-9 Male Serial Ports / (1) USB Type-B Female Port |

1.1 Features

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • TAA Compliant • Provides 4 serial port RS232 ports over USB. • Provides 4 DSUB-9 Connectors. • Supports 3-wire RS232 Signals (TxD, RxD, GND). • Baud Rate from 300 Bps to 921.6Kbps. • Supports 7, 8 Data Bits | <ul style="list-style-type: none"> • 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. • DC Jack for Optical DC 5V Power Input. • Support Win98, XP, CE, Win2000, 2003. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

2. Plugging in the Adapter

- 1) Connect the AC/DC Adapter if your USB bus power is not enough to drive the whole unit.
- 2) Plug the Type-A end of the USB cable into the USB Host Port of your PC or into an available USB port on a USB Hub.
- 3) Plug the Type-B end of the USB cable into the back of this unit.
- 4) Proceed with the next section “Installing Drivers” to install the virtual COM port drivers for your Operating System.

2.1 4 Port RS-232 to USB Adapter Diagram



Figure 1

2.2 Installing Drivers

The RS-232 Multi-Port serial adapter 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.

1) 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:

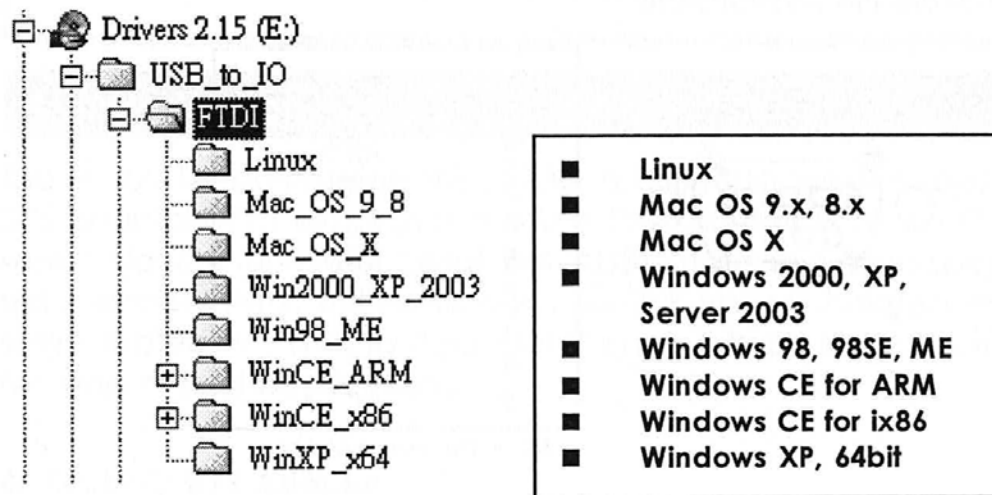


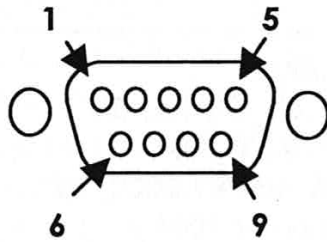
Figure 2

2) 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**.
- Assuming the CD-ROM is in drive E:, select “Specify a location” and browse to the following folder: **E:\USB_to_IO\FTDI\Win2000_XP_2003** (for Win2000, XP or server 2003) or **E:\USB_to_IO\FTDI\Win98_ME** (for Win98 and 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!

3. Male DB9 Pin Assignments and Cable Wiring

DB-9 Male Pin Assignment



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

NC = No connection

Figure 3

DB-9 Male to DB-9 Male Cable Wiring

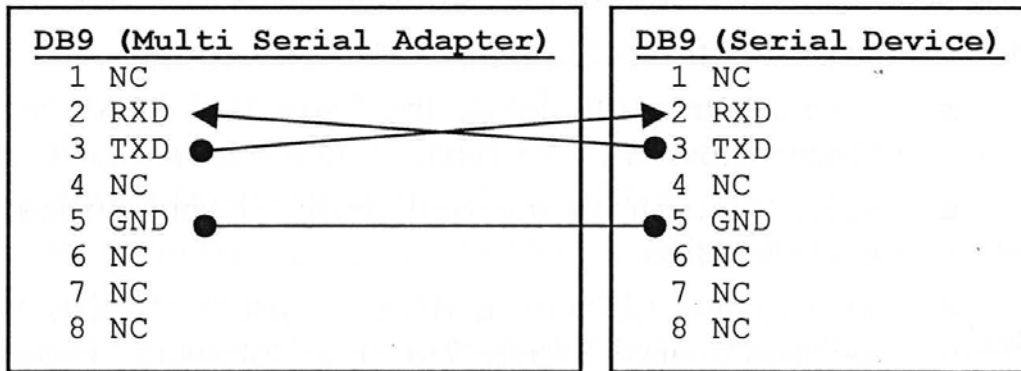


Figure 4

4. Notes, Tips, and Warnings

| | |
|-------------|-----|
| Note | N/A |
|-------------|-----|

| | |
|------------|-----|
| Tip | N/A |
|------------|-----|

| | |
|----------------|-----|
| Warning | N/A |
|----------------|-----|

| | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety | <ul style="list-style-type: none">• Read the entire Product Manual before implementing this product for your application. This manual contains important information about electrical connections that must be followed for safe and proper operation.• Inspect the product closely for visual defects before putting it to use.• Keep away from areas where moisture builds, this product contains electrical components that can be damaged by moisture build up, this can adversely affect your equipment connected to it.• Do not disassemble the product. Handling the product's internal components can expose it to ESD (Electro-Static Discharge) hazards that can affect the function of the device.• If this product is not functioning properly, email our support team at support@coolgear.com. |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

5. Supporting References

| Document | Link |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Website Product Page | https://www.coolgear.com/product/4-port-usb-serial-adapter-w-isolation-and-surge-protection |

© 2017 Coolgear, Inc. All Rights Reserved. All products and accompanying digital documentation including images are the property and / or trademarks of Coolgear Inc. Coolgear Inc. are continuously improving upon its products. Product specifications are subject to change without notice.