



# USB RS-232 Industrial Adapter Isolated and Surge Protected FTDI Chip

Model Number: *USBG-SSRS1*

## Installation Guide

Coolgear, Inc.

Version: 1.0

Date: 04/17/2024



## Table of Contents

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<b>1. Introduction</b>	<b>2</b>
<b>2. Plugging the adapter Cable</b>	<b>3</b>
<b>3. Installing Drivers</b>	<b>3</b>
<b>4. Male DB9 Pin Assignments and Cable Wiring</b>	<b>4</b>
<b>5. Specifications</b>	<b>5</b>

## Revision History

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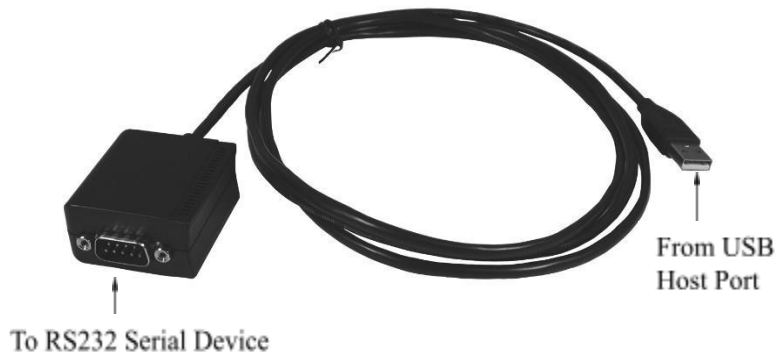
Revision	Date	Comments
1.0	04/17/2024	First Release

## 1. Introduction

Thank you for purchasing Coolgear's USB RS-232 Industrial Adapter Isolated and Surge Protected FTDI Chip. 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 fully 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, 2008, 2012, 2016 Vista, 7, 8.x and 10 and 11



## 2. Plugging the adapter Cable

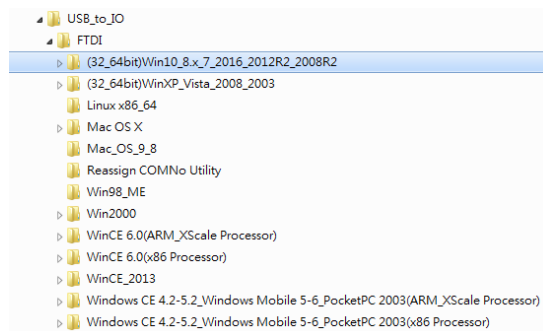
1. Plug the USB connector (Type-A) of the cable into the USB host port of your PC or an available USB port on a USB hub.
2. Plug the serial device to the DB9 male connector at the other end of this adapter cable.
3. Proceed with the next section “Installing Drivers” to install the virtual COM port drivers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

## 3. Installing Drivers

The 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.

### 1. Driver Locations on the CD

These instructions are for installing the drivers from the CD supplied with the product. Please If you are installing drivers for older OS such as 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:

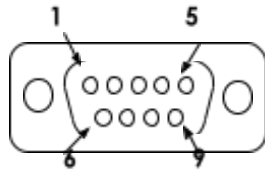


### 2. Installing Drivers for (32-bit and 64-bit) Win 10, Win7, XP, Vista, 2008, 2003 and 2000:

- Insert the Driver CD supplied with the Adapter Cable.
- Run (or double click) the Installer Program (e.g. **CDM21228\_Setup.exe**) in the corresponding folder for each OS on the driver CD
- Follows the instructions of the installer program to complete the setup procedures.
- Plugging the Adapter Cable will hook the drivers into the Windows kernel automatically.

## 4. Male DB9 Pin Assignments and Cable Wiring

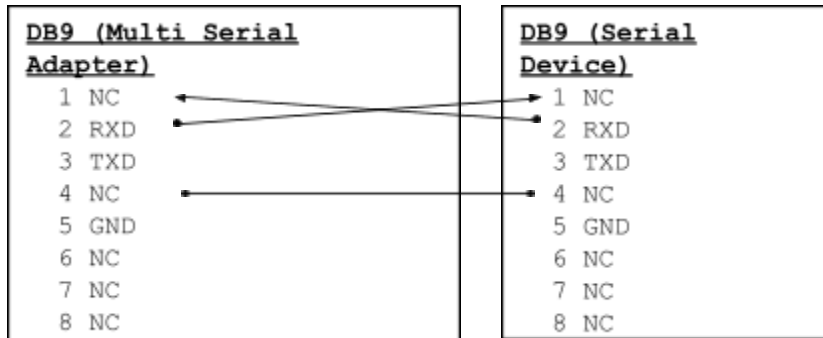
DB9-Male Pin Assignment:



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

NC = No connection

DB9-Male to DB9-Male Cable Wiring:



## 5. Specifications

Type	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	500 W
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)

## Contact Us:

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### Safety

- Read the entire Installation Guide before implementing this product for your application. This guide 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](mailto:support@coolgear.com).

## USB CHARGING & CONNECTIVITY EXPERTS

### Within Every Great Machine

For over 20 years our rugged, off-the-shelf USB hubs, chargers, and serial products are ready to go for your next project. Based in the US, Coolgear has successfully engineered and deployed millions of connectivity solutions into industrial, medical, automotive, commercial, and aerospace industries.

We understand the importance of reliability, build quality, & consider all our customers' applications as critical, wanting to ensure long-lasting event-free integrations.

#### Compliance Statement

View compliance within the product's respective Technical Data Sheet, found on the product's online listing.

#### Technical Support

When you reach out to Coolgear support, you'll find yourself in the hands of a solution-oriented and knowledgeable expert ready to answer whatever question you throw at them. If you ever need help with your product, visit [coolgear.com/support](http://coolgear.com/support) for support tickets, downloads, and other support resources. For the latest drivers, please visit [coolgear.com/download](http://coolgear.com/download).

**Product Standard Warranty**

One (1) Year Warranty from Date of Purchase Invoice. Coolgear will repair or replace any Product determined to be defective and which has been returned, at your risk and expense, to Coolgear. Where Coolgear determines in its sole judgment that repair or replacement of such Product is not reasonable, Coolgear will keep the non-conforming Product and refund to you the amount you paid for such Product. Returned Products shall be subject to the balance of the Warranty Period otherwise applicable. Any reconditioned parts used by Coolgear shall be subject to all the same provisions as otherwise applicable to new parts. THE FOREGOING DESCRIBES COOLGEAR'S SOLE LIABILITY, AND YOUR SOLE REMEDY, FOR ANY BREACH OF WARRANTY. IF YOU DO NOT AGREE WITH THE TERMS OF THIS LIMITED WARRANTY, YOU MUST RETURN THE PRODUCTS UNUSED AND IN THEIR ORIGINAL CONTAINERS TO YOUR ORIGIN OF PURCHASE.

**Limitation of Liability**

This Limited Warranty does not cover: (i) defects or damages resulting from natural causes, casualty, accident, misuse or abuse, neglect, alterations, service or repair by other than Coolgear, including without limitation by you; (ii) improper installation or de-installation, operation or maintenance, improper connections with peripherals or other causes not arising out of defects in the materials or workmanship of Products; (iii) any Product for which the warranty sticker has been removed, modified or defaced; (iv) normal wear and tear; (v) damage to or loss of repaired or replaced Products during shipping by Coolgear except when such damage or loss is caused by poor or inadequate packaging by Coolgear; or (vi) Products purchased outside the United States. UNDER NO CIRCUMSTANCES WILL COOLGEAR BE LIABLE FOR ANY LOSS OF USE, INTERRUPTION OF BUSINESS OR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING LOST PROFITS) REGARDLESS OF THE FORM OF ACTION WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT PRODUCT LIABILITY OR OTHERWISE, EVEN IF COOLGEAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE TOTAL LIABILITY OF COOLGEAR HEREUNDER EXCEED THE GREATER OF \$50.00 OR THE AMOUNT YOU ACTUALLY PAID FOR THE PRODUCT GIVING RISE TO SUCH LIABILITY, REGARDLESS OF THE CAUSE OF ACTION, IN CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE. NOT ALL JURISDICTIONS ALLOW SUCH LIMITATIONS OF DAMAGES SO THE FOREGOING LIMITATIONS MAY NOT APPLY TO YOU.

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