USB 2.0 to Serial High-Speed RS-232 Industrial Adapter

Product Manual

Coolgear, Inc.
Version 1.1
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Model Number: USB-COM-M

Revision History

Revision	Date	Author	Comments
1.0	03/6/2018	Coolgear	New Manual

About this document

This product manual outlines installation and features of the USB-COM-M USB 2.0 to Serial High-Speed RS-232 Industrial Adapter.

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; Remote Access, Retail & Industrial Data Centers, Serial Equipment, Kiosk, Office, and others.

Product Support

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1. Introduction

The USB-COM-M is an industrial USB 2.0 to Serial Adapter with a rugged industrial-grade metal chassis, which allows it to be mounted, convert any host USB port into an RS-232 Serial port. This USB 2.0 to Serial Adapter provides instant connectivity with modems, ISDN TAs, PDAs, handheld & pocket PCs, digital cameras, POS, serial printers giving RS-232 modem control signals and hardware/software flow control

WEIGHT	.293 lbs
DIMENSIONS	82mm x 76mm x 23mm (with DIN rail bracket)
UPC	729440690724
WARRANTY	1 year from date of purchase
COLOR	Black
PORTS	1 DB-9 Male Serial Port / 1 USB Type-B Female Port

1.1 Features

- TAA Compliant
- Installed as standard Windows COM port.
- SECC metal chassis with DIN rail bracket.
- Full RS-232 modem control signals and hardware/software flow control.
- High speed serial port with the baud rate up to 921.6K bps.
- Non-standard baud-rates supported.
- LED's of Power, TxD and RxD for easy port monitoring and diagnostics.
- Baud Rate: 300 bps up to 921.6k bps (user configurable).
- Serial port protected with surge protection of 10KV.
- Powered by USB port, no external power adapter required.
- Easy plug and play installation and RS-232 device connection.
- COM port number assigned can be changed to any COM port number required.
- Chipset: Utilizes an FTDI CHIPSET FT232BL.
- Virtual COM port drivers provided for Windows 7, Vista, 2003, XP, 2000.
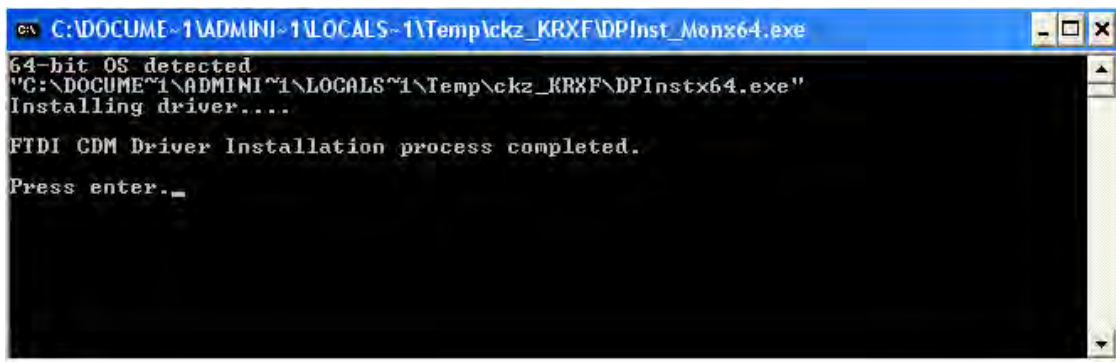- Works with USB 1.1 & 2.0 host port

2. Windows 7 / Vista / 2003 / XP / 2000 Driver Installation

You need to have administrator privileges to install any new drivers under Windows 7/ Vista / 2003 / XP / 2000. To install the driver or update the configuration please log onto Windows as "Administrator" or ask your system administrator to install the USB-COM driver.

You need to install driver first, prior to hardware installation. Do not connect the USB-to-Serial Adapter to the USB port of your computer, before you finish driver installation.

Please proceed with the following steps to install the driver:

1. Insert the "USB COM Series Driver and Utility" CD into your CD-ROM.
2. The "USB COM Series Driver and Utility CD" dialog box appears.
3. Under "Driver Installation", double click "Windows 7, Vista, 2003, XP, 2000 driver" to install the device driver.
4. The USB COM install program will auto-detect the OS type and install the driver automatically. (Note: in Windows 7 or Vista OS you will find another dialog box, please click on "OK" to confirm the drivers install program).

Figure 1

5. After the message "FTDI CDM Driver installation process completed" appears, press "Enter" to complete the driver installation.
6. Plug in the USB to Serial Adapter to the USB port of your computer. Windows will finish installing the driver files.

2.1   Check Installation

You can now verify the installation has been completed successfully by looking under Device Manager of the System Properties screen. (Go there by Start-Setting- Control Panel-System Properties-Hardware-Device Manager.

The device should have installed as a "USB Serial Port (COMx)" attached to "USB Serial Converter (A/B or A/B/C/D)".

2.2   Change COM Port Properties & COM Port Number

This feature is particularly useful for programs, such as HyperTerminal, which only work with COM1 through COM4. Please ensure that you do not change the COM Port Number already in use.

To change the virtual COM port properties:

- Select the "USB Serial Port"
- Click "Properties".
- Select "Port Setting" and "Advanced".
- Click the drop down arrow on COM Port Number and scroll to the required COM port. Select "OK".
- Return to the Device Manager Screen. You will see that the USB Serial Port installation has been changed to the new COM Port Number.

3. Uninstalling Windows 2003 / XP / 2000 Drivers

Please proceed with the following steps to uninstall the 2003/XP/2000 driver:

1. Insert the "USB COM Series Driver and Utility" CD into your CD-ROM.
2. The "USB COM Series Driver and Utility CD" dialog box appears.
3. Under "Driver Uninstalling", double click "Windows 2003, XP, 2000 driver uninstall" to uninstall the device driver.
4. When following dialog box appears, double click "Clean System" to uninstall the 2003/XP/2000 drivers.

Figure 2

5. You need to disconnect all USB to Serial Adapters from your PC, when the message below appears. Double click "OK" to start uninstalling Windows 2003/XP/2000 USB to Serial drivers.

Figure 3

6. Double click "**Yes**" to confirm it.
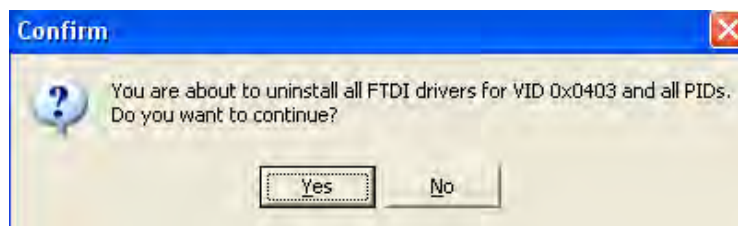

Figure 4
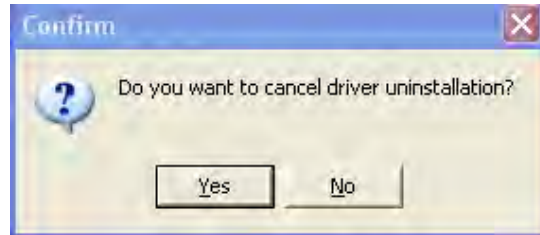
7. Click "**No**" to proceed.

Figure 5

8. When the message "Status: System clean completed" appears, double click "Exit" to complete the USB to serial drivers uninstall.

Figure 6

9. Press "**Start**" button and select "**Control Panel**".
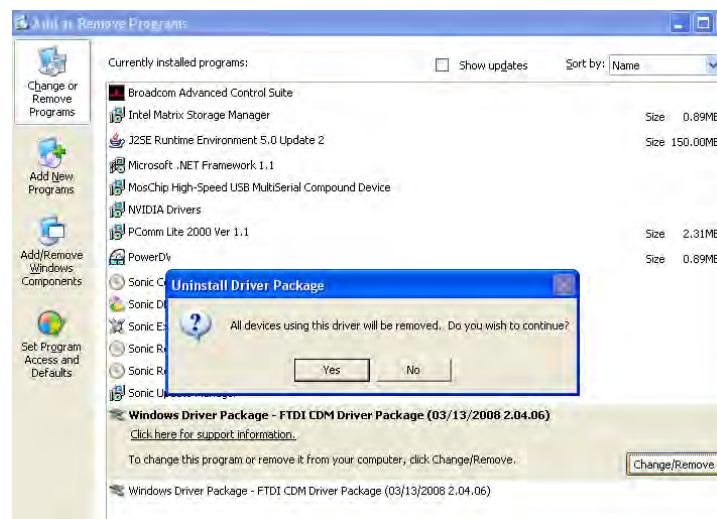10. Open the Add or Remove program.

Figure 7

11. Remove the first "Windows Driver Package – FTDI CDM Driver Package (…)".
12. Click "Change/Remove" and "Yes" to remove the first Windows Driver Package.
13. Remove the second "Windows Driver Package – FTDI CDM Driver Package (…)".
14. Click "Change/Remove" and "Yes" to remove the second Windows Driver Package.
15. Reboot the computer to complete the driver uninstall.

3.1 Uninstalling Windows 7 or Vista Drivers

Windows 7 and Vista have many new security features. You need to proceed with the following steps to uninstall the Vista driver:

1. The USB to serial devices must connect to the PC.
2. Press "Start" button and select "Control Panel".
3. Select "Classic View" from the top left hand corner and then "System" from the list.
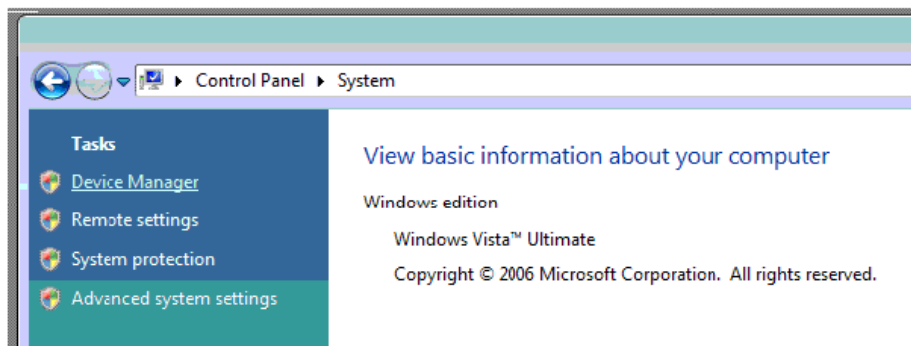4. Select "Device Manager" from the top left hand corner.

Figure 8

5. Locate your device under the ports (COM & LPT) section and right click on it to bring up the menu shown.
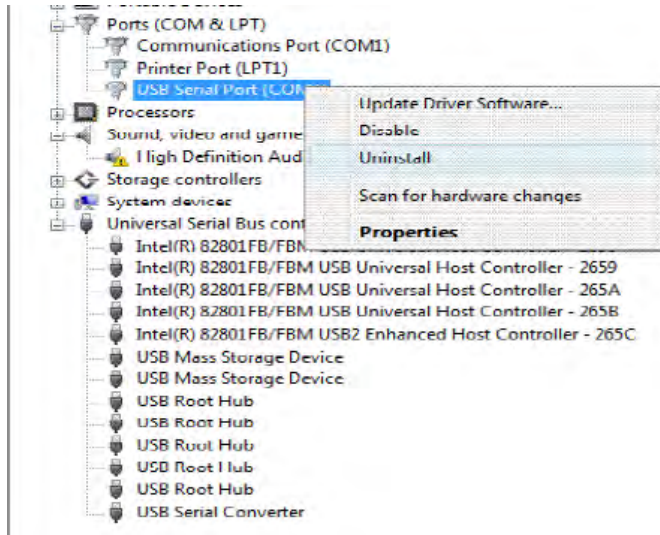
Figure 9

6. Select uninstall and be sure to click the box for "Delete the driver software for this device" in the next window and press "OK".
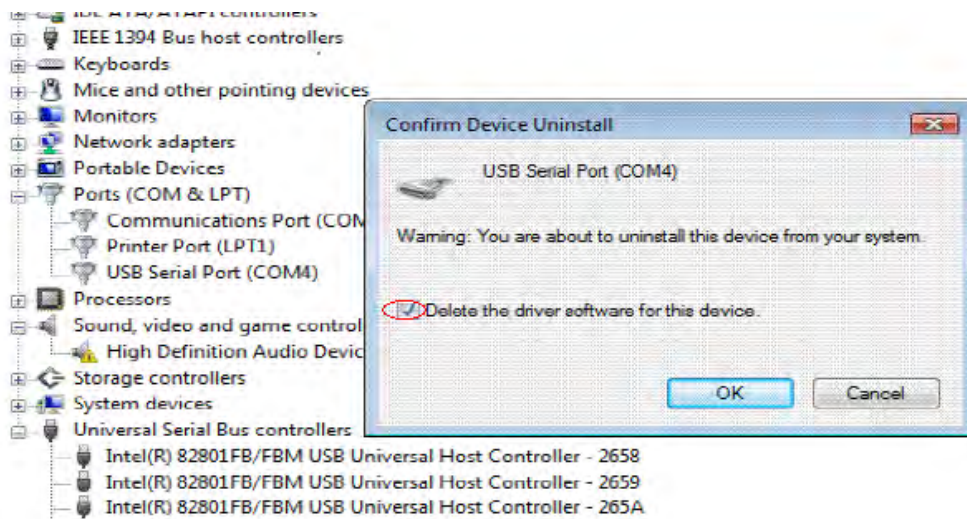

Figure 10

Note: If you have more than one USB Serial Port (COMx) installed in your PC, you need to repeat from step 5 to step 6 to delete the driver software for each port.

7. Locate your Device under the Universal Serial Bus Controllers section, and right click on it to bring up the menu shown.
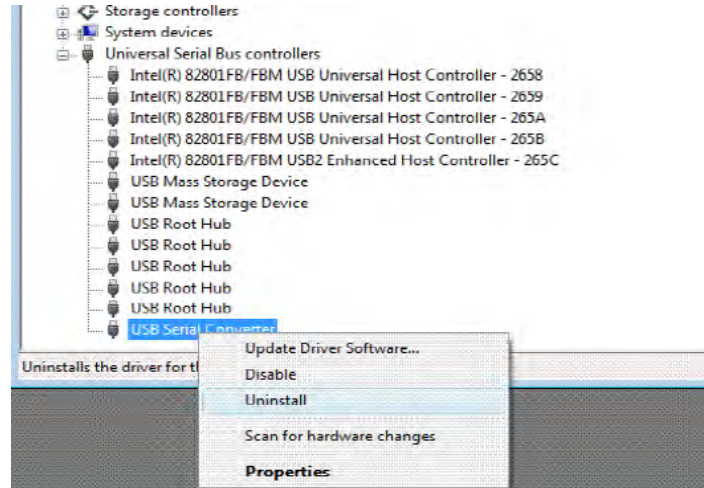
Figure 11

8.   Select uninstall and be sure to click the box for "Delete the driver software for this device" in the next window and press "OK".
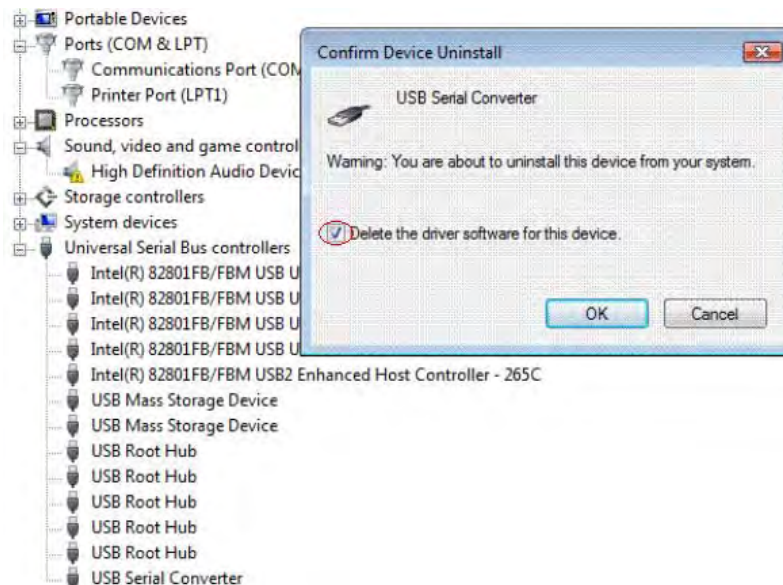

Figure 12

Note: if you have more than one USB Serial Converter installed in your PC, you need to repeat step 7 and step 8 to delete the driver software for all devices.
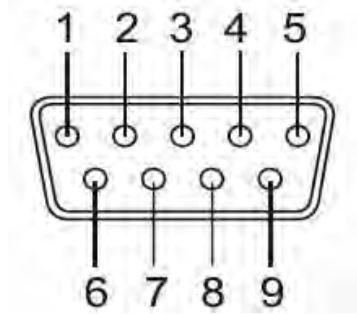
4. RS-232 Signal Pin-outs of DB-9 Male

Figure 13

Pin 1	DCD
Pin 2	RxD
Pin 3	TxD
Pin 4	DTR
Pin 5	GND
Pin 6	DSR
Pin 7	RTS
Pin 8	CTS
Pin 9	RI

5. Notes, Tips, Warnings, and Safety

Note	**Note**: You need to install driver first, prior to hardware installation. Do not connect the USB-to-Serial Adapter to the USB port of your computer, before you finish driver installation. Reference section 2. **Note**: If you have more than one USB Serial Port (COMx) installed in your PC, you need to repeat from step 5 to step 6 to delete the driver software for each port. Reference section 3.1 step 6.

Tip	N/A

Warning	N/A

Safety	• 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.

6.   Supporting References

Document	Link
Website Product Page	https://www.coolgear.com/product/usb-2-0-to-serial-high-speed-rs-232-industrial-adapter-metal-case-with-din-rail-bracket