USB to RS-422/485 Serial Adapter

User Manual

Ver. 4.00

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Chapter 1: Introduction

1.1 Product Introduction

USB to RS-422/485 Serial Adapter provides an easy way to add 1/2/4 serial ports to your desktop or notebook computer. This USB to Serial Adapter functions as a converter between a USB port and standard serial ports. You can easily connect this adapter to the USB port on your PC or USB hub and get access to any RS-422/485 devices. This device is suitable for portable devices, and industrial applications.

1.2 Features

- Compliant with USB 2.0 specification
- Serial communication speeds up to 1Mbps
- RS-422 and RS-485 auto detect and switching
- ±15KV ESD protection on all signal pins
- Additional I/O or IRQ not required
- LEDs for indicating TxD/RxD activity
- Wall mount support
- Drivers provided for Windows, Mac OS X and Windows CE

1.3 System Requirements

- Windows® XP/Vista/7/8/10/Server2008/2012
- Mac OS X 10.4 or later, Linux and Windows CE
- Available USB port

1.4 Package Contents

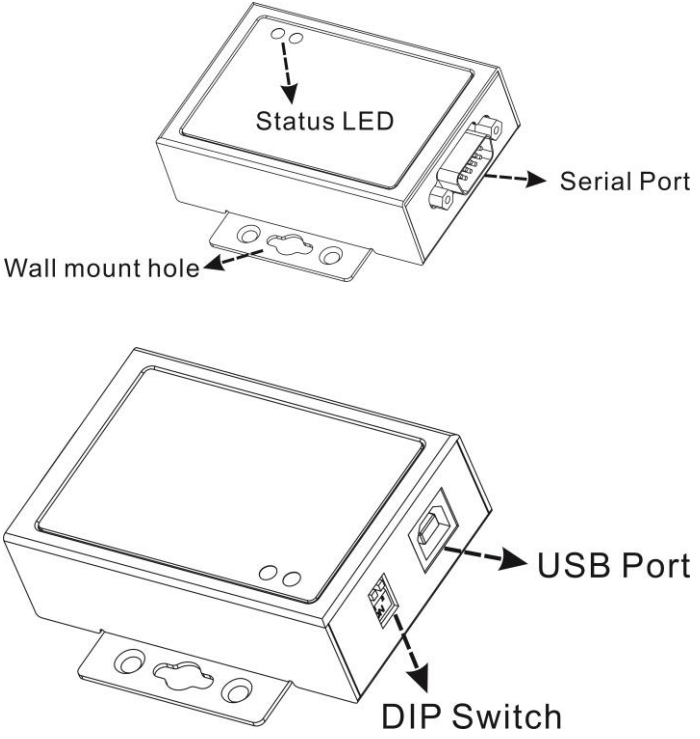
- 1 x USB to RS-422/485 Serial Adapter
- 1 x Driver CD
- 1 x User Manual
- 1 x USB type A-B cable
- 1 x Power Adapter (Optional)

Note: Contents may vary depending on country/market.

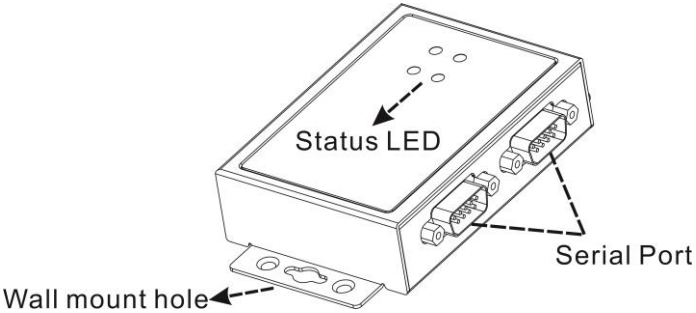
Chapter 2: Getting Started

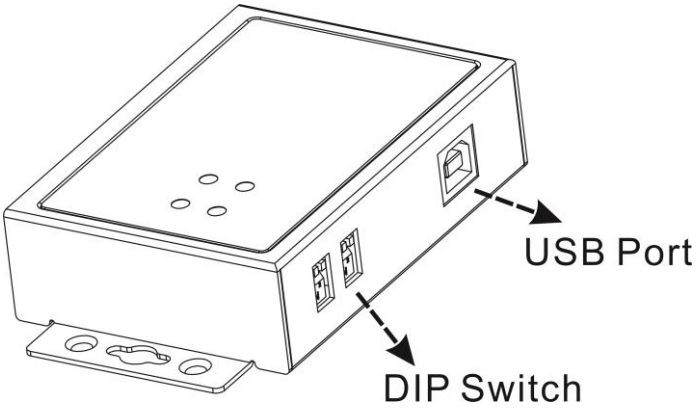
2.1 Hardware Layout

1-Port USB to RS-422/485 Serial Adapter:

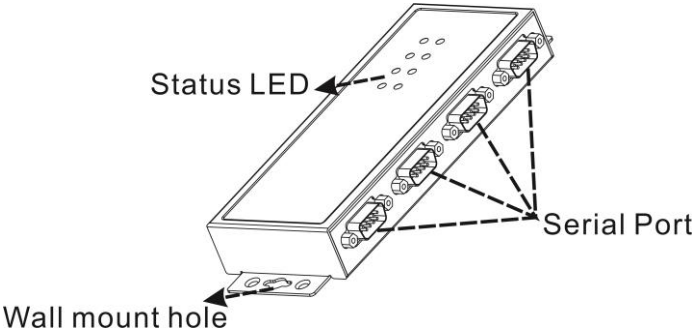

Status LED
Serial Port
Wall mount hole
USB Port
DIP Switch

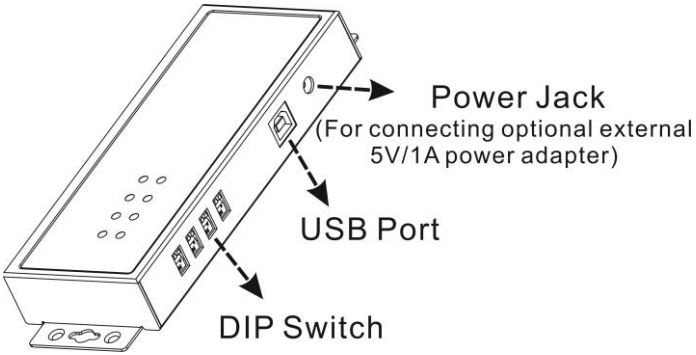
2-Port USB to RS-422/485 Serial Adapter:





4-Port USB to RS-422/485 Serial Adapter:





- **Status LED**:

1. Rx – Green, Blink when serial data received
2. Tx – Yellow, Blink when serial data sent

- **DIP Switch: RS-422/485 Mode Selector**

This USB to RS-422/485 Serial Adapter equips independent DIP switch for each serial port.

1). Auto RS-422/485 (Default)

This COM can automatically detect the state of RS-422 full duplex or RS-485 half duplex and control the data transmitting and receiving wires at the same port.

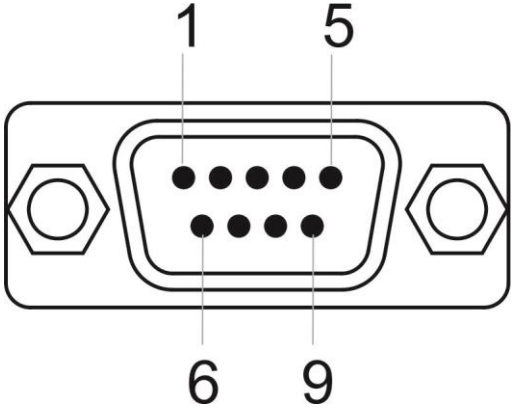
2). RS-422 (4-Wire RS-485)

This COM port forces to run RS-422 full duplex mode.

2.2 Pin Assignment

This USB to RS-22/485 Serial Adapter uses male DB9 connectors. Pin assignments are show in the following

Male DB9 Connector: Device-side Pin Assignments:

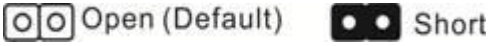


Pin	Transmission Signals		
	RS-422	4-Wire RS-485	2-Wire RS-485
1	Tx-	Tx-	D-
2	Tx+	Tx+	D+

3	Rx+	Rx+	
4	Rx-	Rx-	
5	GND	GND	GND

2.3 Jumper Settings

This USB to RS-22/485 Serial Adapter equips independent TX and RX termination resistors for each serial port. User can modify the jumper settings (short the pins) to avoid impedance mismatched problem when operate under Multi-drop transmission. User will need to open up the metal covers, and set the jumper setting to enable or disable 120 ohms termination resistors.



Factory default jumper setting is OPEN (disable 120 ohms termination resistors across the two wires).

2.4 Driver Installation

2.4.1 Installation for Windows XP/Vista/7/8/10

1. Insert the provided CD into your disk drive. The CD-ROM will start automatically. The following screen will show up and please click **"Install Driver"**.

*Note: Actual image may vary

Note: If the install program doesn't run automatically, please locate and double-click on the **Autorun.exe** file in the CD to launch the install program.

2. Please click **"RS-422/485 USB"** to start the installation.

*Note: Actual image may vary

3. Follow the instructions on screen to install the driver.

2.4.2 Installation for Linux 2.6.31 or later

Please update to Linux 2.6.31 or above supported. It's by kernel support. This is no need driver for kernel 2.6.31 above.

2.4.3 Installation for Mac OS X

Please refer to the installation guide and driver for Mac OS X operation system installation within the folder located in the CD driver.

:\Driver\USB\Mac OS X

2.4.4 Installation for Windows CE

Please refer to the installation guide and driver for Windows CE operation system installation within the folder located in the CD driver.

:\Driver\USB\Windows CE