

USB to RS-422/485 Serial Adapter

(ID-SC0911-S1/SC0A11-S1)

User's Manual

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Disclaimer

Information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

Safety Instructions

Always read the safety instructions carefully

- Keep this User's Manual for future reference
- Keep this equipment away from humidity
- If any of the following situation arises, get the equipment checked by a service technician:
 - The equipment has been exposed to moisture.
 - The equipment has been dropped and damaged.
 - The equipment has obvious sign of breakage.
 - The equipment has not been working well or you cannot get it work according to User's Manual.

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1. Introduction

USB-to-RS422/485 device provides an easy way to connect serial ports as needed for systems. USB-to-Serial functions as a converter between a USB port and standard serial ports. We can easily connect this converter to the USB port on your PC or USB hub and get access to any RS-422/485 devices such as PDAs, scanners, printers, etc. This device is suitable for portable devices, equipments, sales-end applications.

Feature

- Compliant with USB 2.0 specification, HI-Speed USB data transmission rate can up to 480 Mbps
- No extra U/O or IRQ required
- Support Serial port data transmission rate up to 230 Kbps
- Auto direction flow control
- Support USB plug-and-play
- 15KV DC ESD immunity to serial interface
- 3KV optical coupling isolation
- Wall mount support

Package Content

Before installation, please check the package contains the following items:

- USB-to-R422/485 Device x1
- USB Cable x1
- CD (Driver and User's Manual) x1

System Requirement

- IBM compatible computer
- Windows® 7 / Vista / XP / 2000
- Built-in USB port computer
- 64 MB RAM or higher
- Pentium® 233 MHz or higher

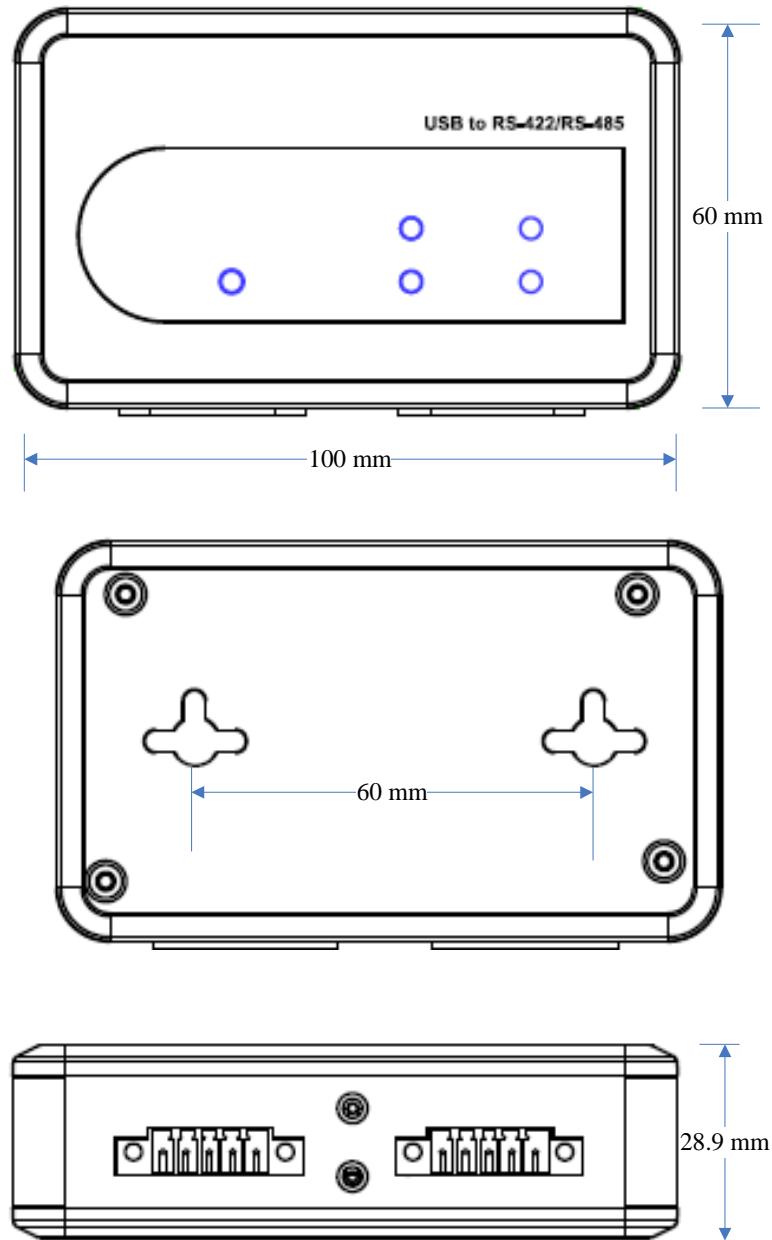
2. Specification

Ports	2xRS-422/485 (ID-SC0911-S1)
	4xRS-422/485 (ID-SC0A11-S1)
Connector	Terminal block-5 pin
ESD Protection	15KV ESD, 3KV isolation
FIFO	4K bytes
Serial Communication Speed	300 bps to 921.6 Kbps
Interface	USB2.0
Power Requirements	Bus-power (ID-SC0911-S1)
	Bus-power/5V 3ADC/9~36VDC (ID-SC0A11-S1)
Operating Temperature	0°C to 55°C
Operating Humidity	5 to 95% RH
Dimensions (LxWxH)	100x60x29mm (ID-SC0911-S1)
	195x80x38mm (ID-SC0A11-S1)
Regulatory Approvals	FCC/CE

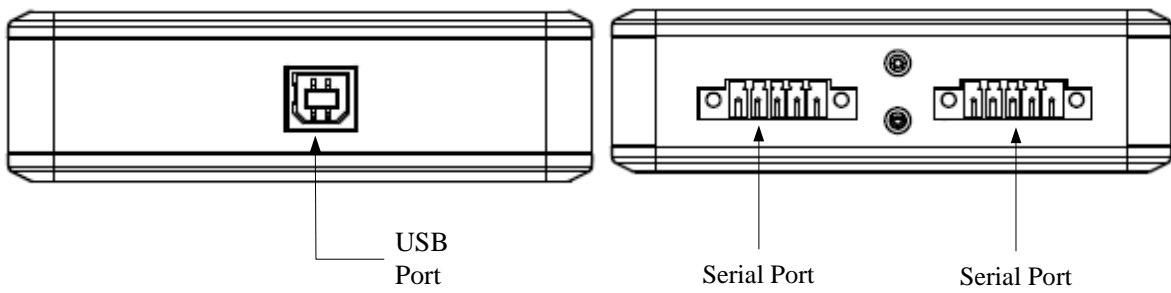
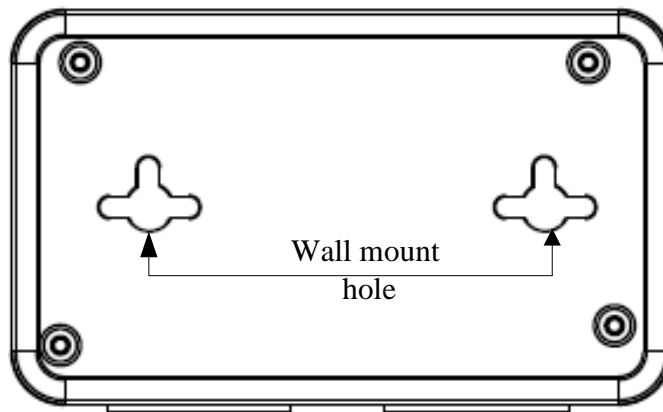
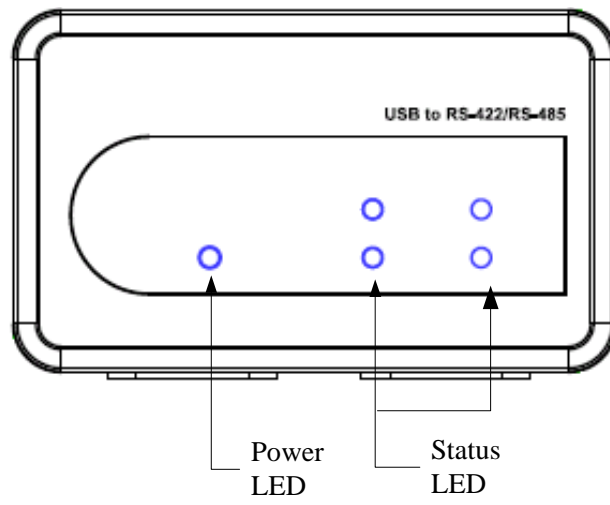
* Specification is subject to change without further notice.

2-Port Industrial USB to 422/485 Serial Adapter

Hardware Dimension

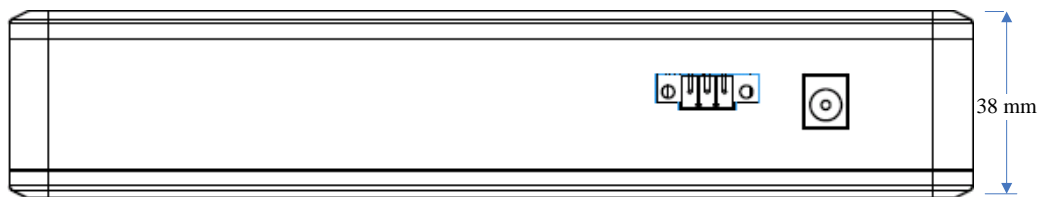
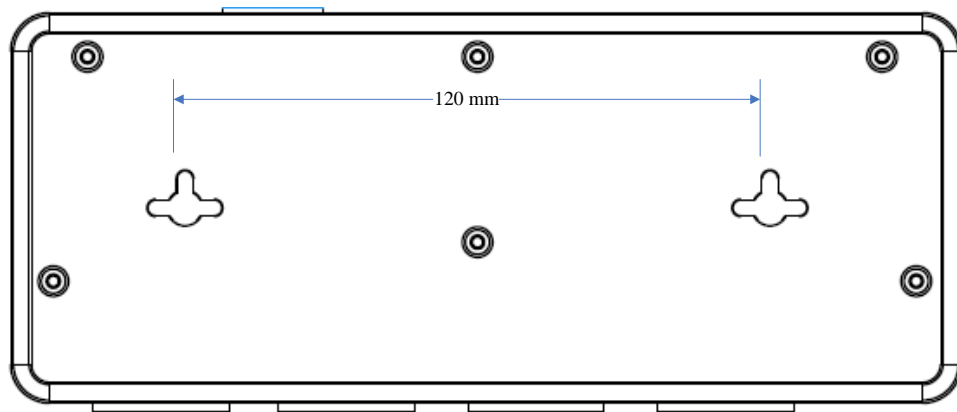
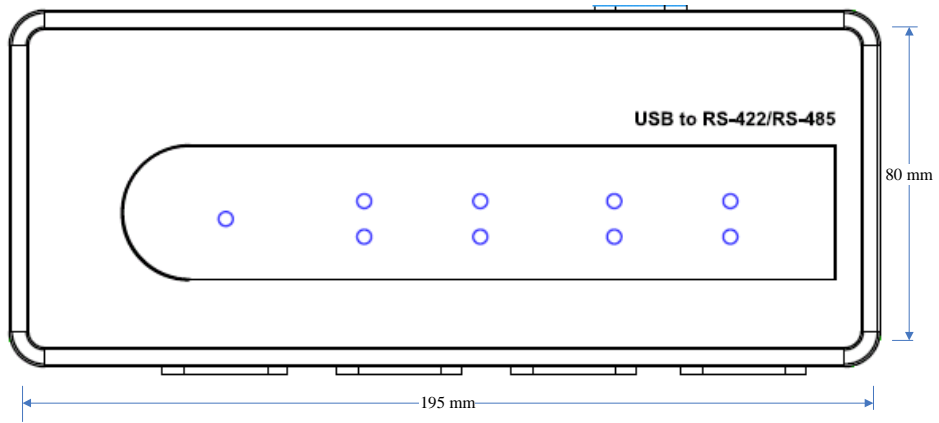


Hardware Introduction

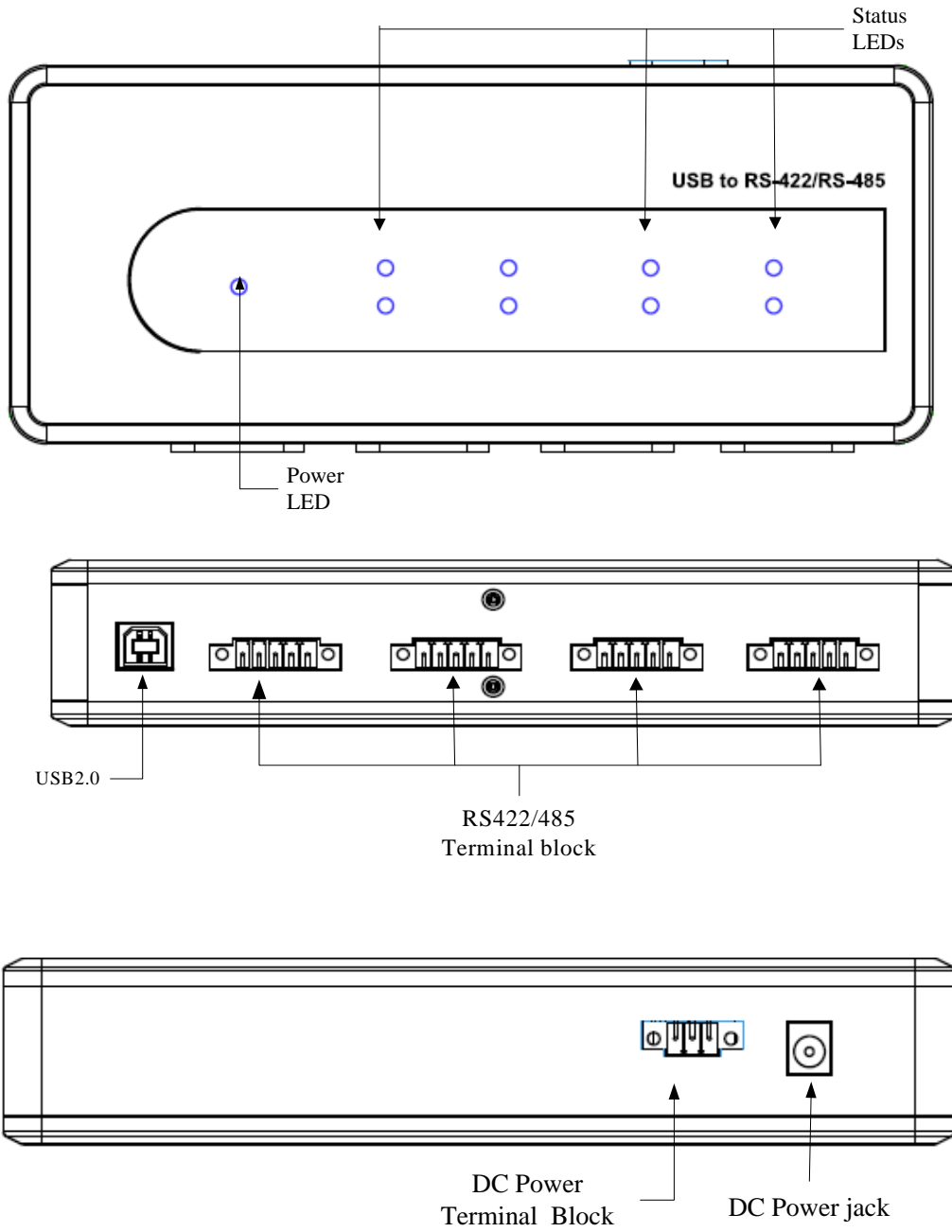


4-Port Industrial USB to 422/485 Serial Adapter

Hardware Dimension



Hardware Introduction

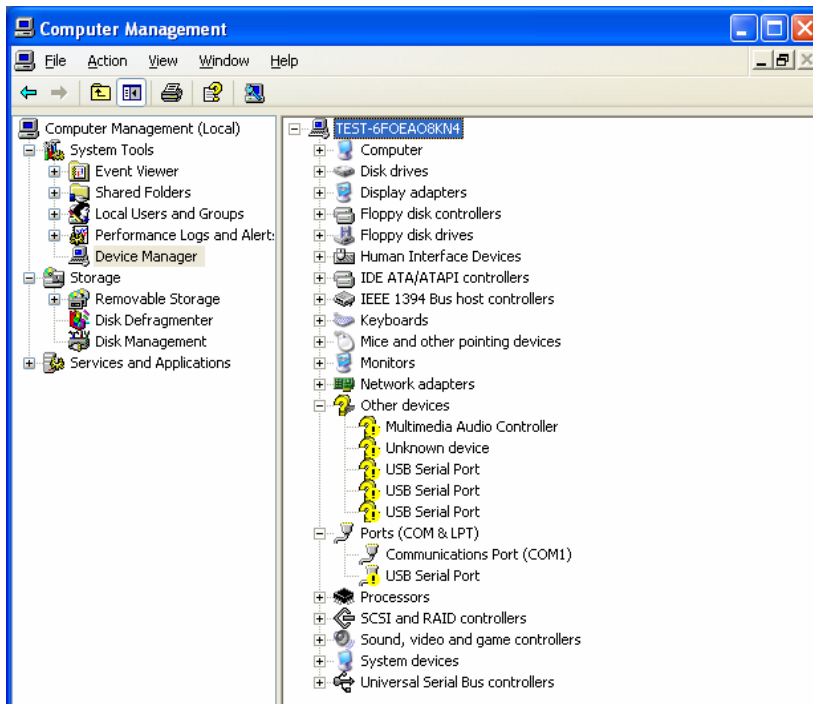


3. Installation

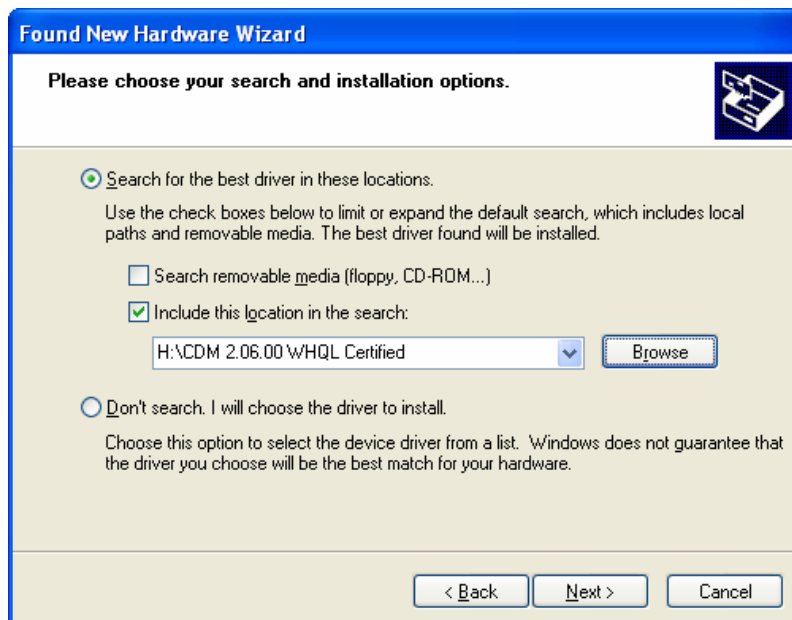
On Windows 2000 / XP / Vista

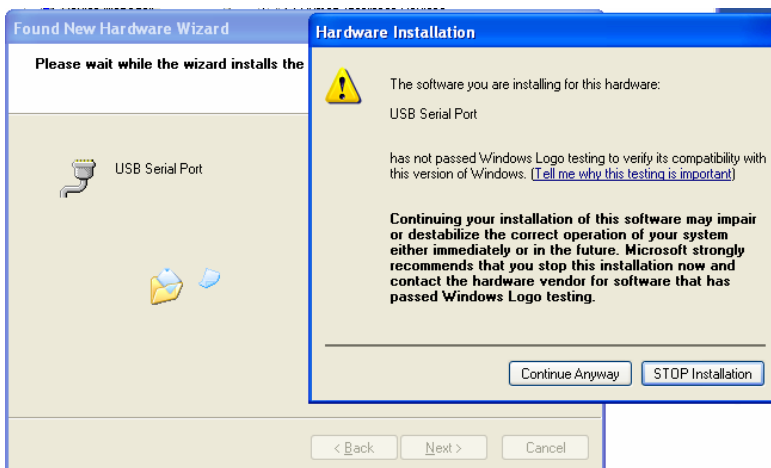
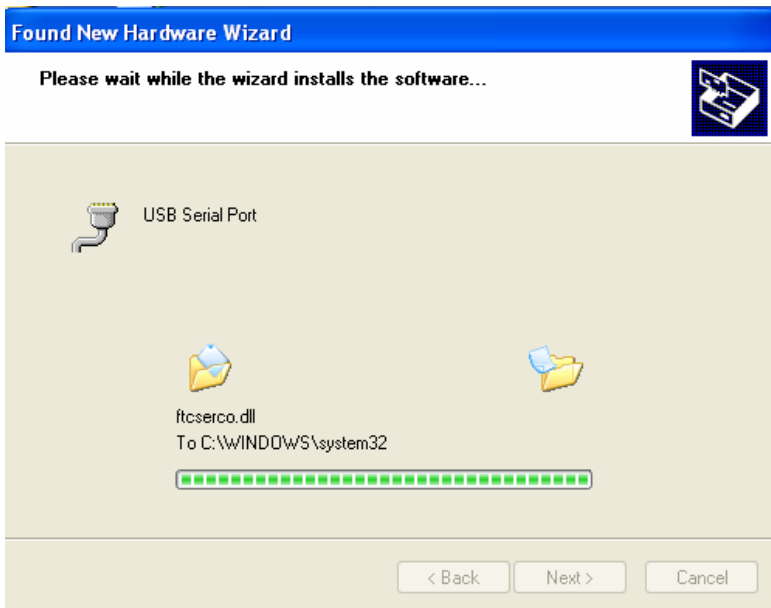
Note: DO NOT connect the Serial to USB Device to computer before installing the driver.

1. Please insert the provided CD into CD-ROM and click driver setup file to install.

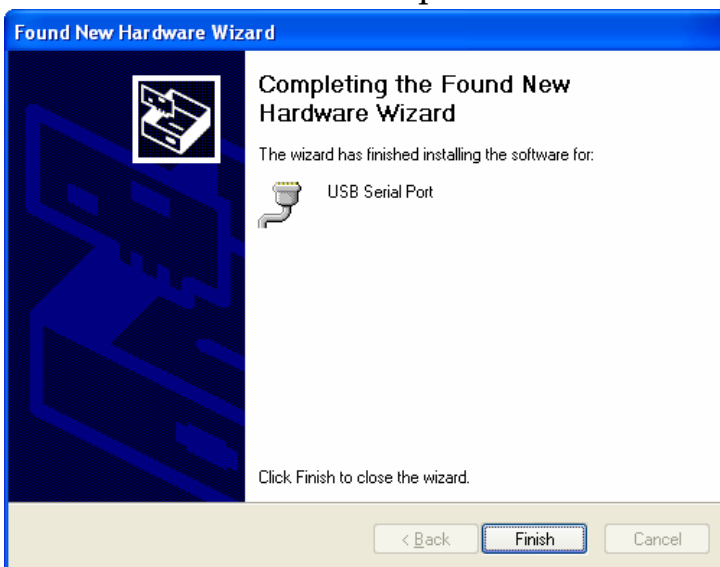


2. Please select Install from a list or specific location and click Next.





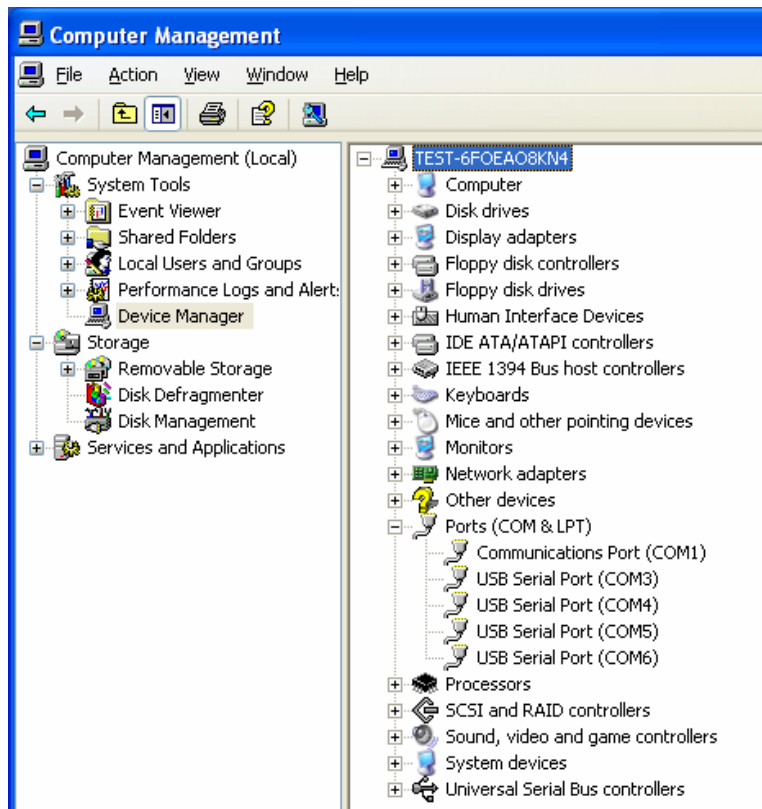
When the installation completed, please connect the USB to Serial Converter to available USB port.



Installation Verification

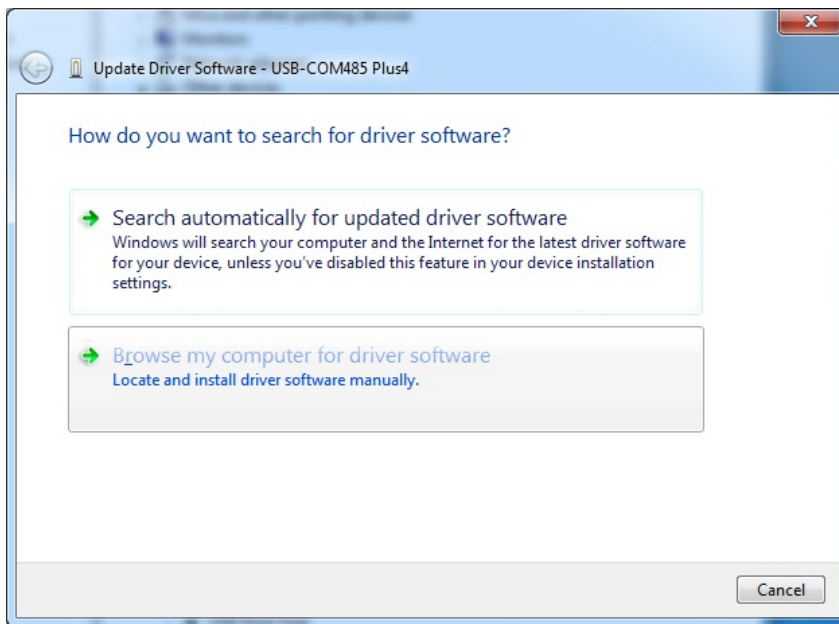
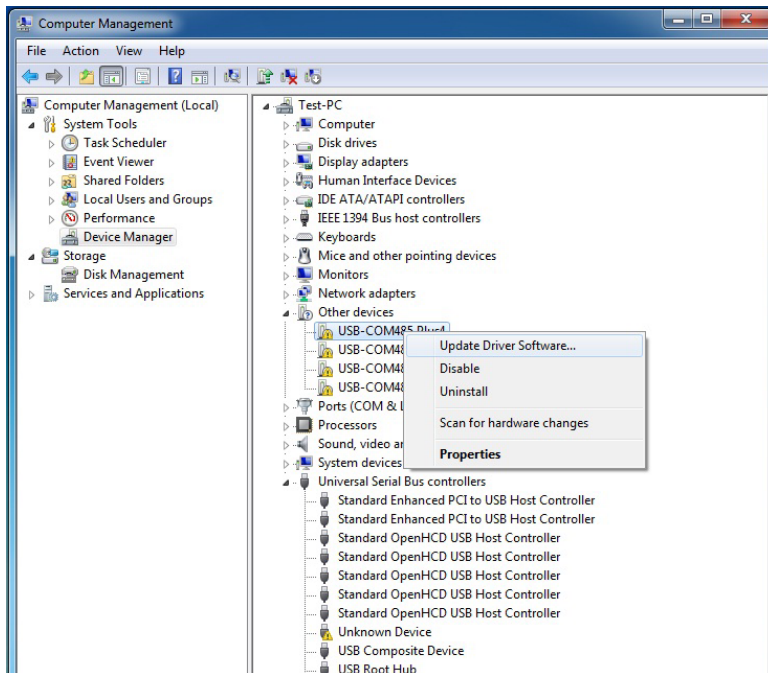
To verify your installation, please launch Device Manager as following:

- Under Windows 2000/ XP Operation System: Right-Click **My Computer** and select **Properties > System > (Hardware) > Device Manager > Ports (COM & LPT)**.
- Under Windows Vista/ 7 Operation System: Right-Click **My Computer** and select **Properties > Device Manager > Ports (COM & LPT)**

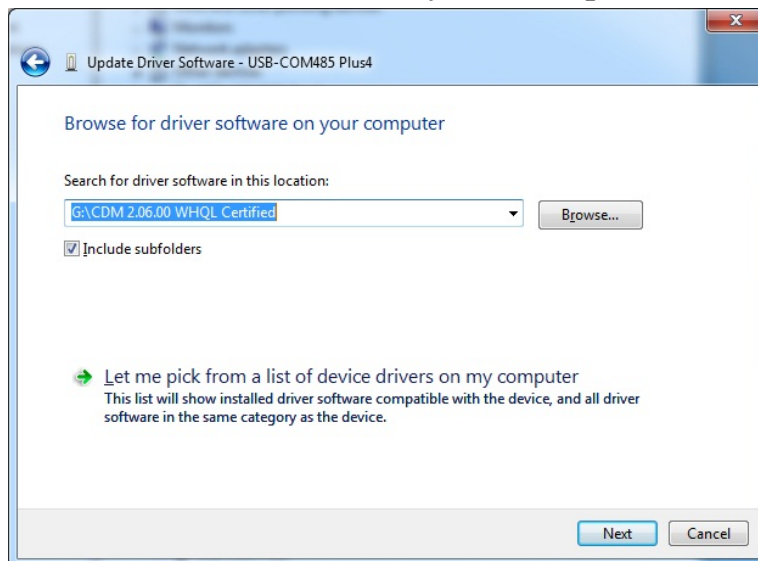


On Windows 7

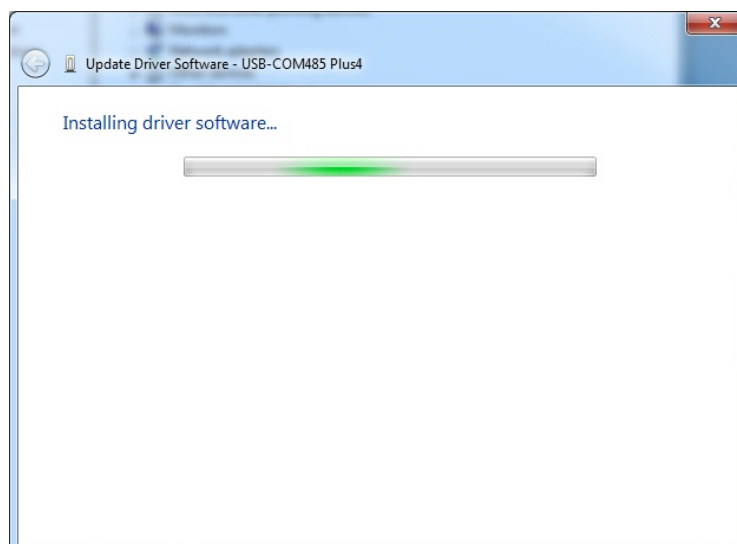
1. Please Locate and install driver software manually.



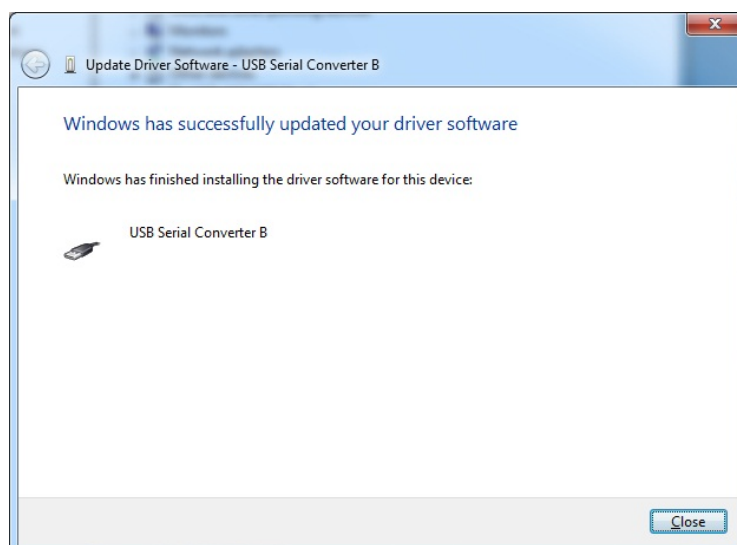
2. Please browse for driver software on your computer.



3. Please click Next to install driver.



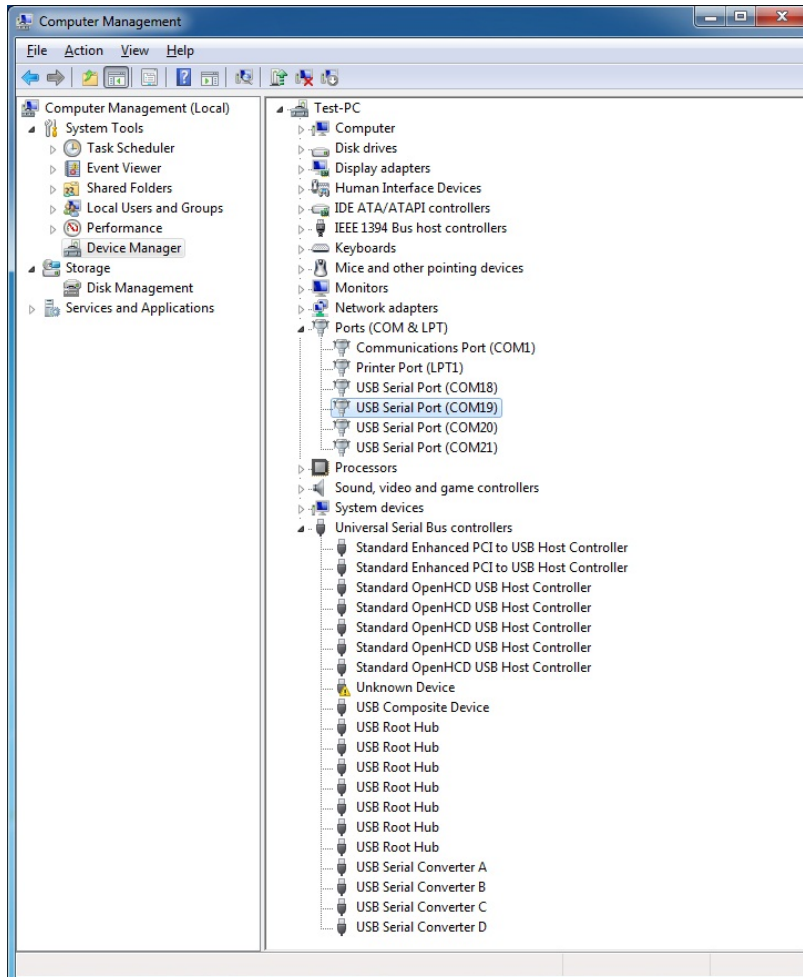
4. Please click Close to complete installation.



Installation Verification

To verify your installation, please launch Device Manager as following:

- Under Windows Vista/ 7 Operation System: Right-Click **My Computer** and select **Properties > Device Manager > Ports (COM & LPT)**

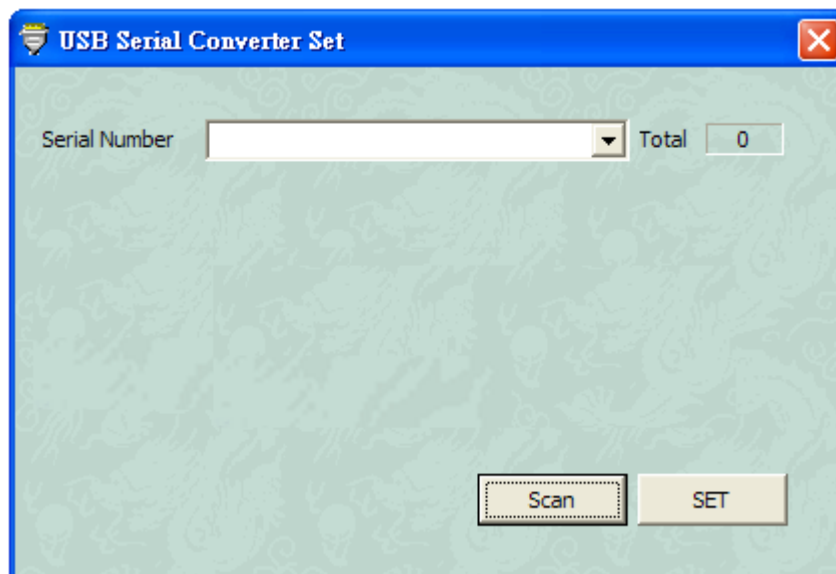


4. RS-422/RS-485 ModeSetting

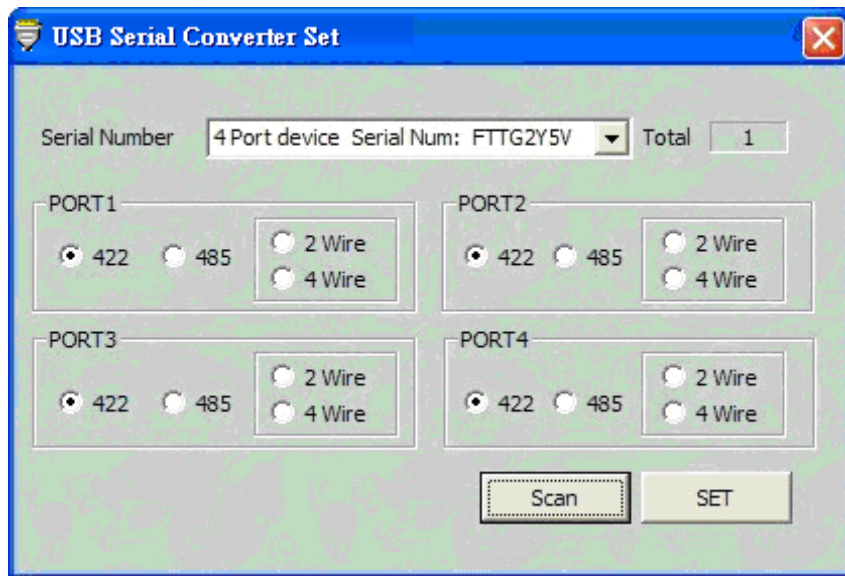
ID-SC0911-S1/SC0A11-S1 can support the 4-wire RS-232 and the 2/4-wire RS-485 operation mode, user can use the **USB Serial Converter Set** utility on the driver CD to change the ID-SC0911-S1/SC0A11-S1 operation mode on each port.



Run the **USB Serial Converter Set** tool utility on the driver CD, they will show up as following



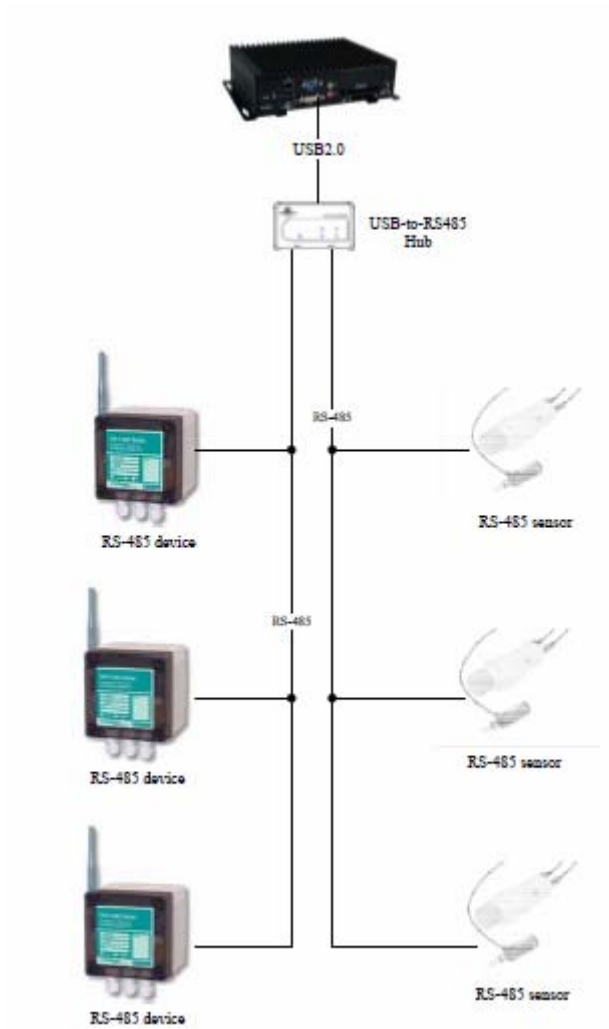
Click **Scan** button to locate all the RS-422/RS-485 serial server on line, selected the desired serial server on list



Selected the desired port mode and click the **SET** button to finish the mode setting

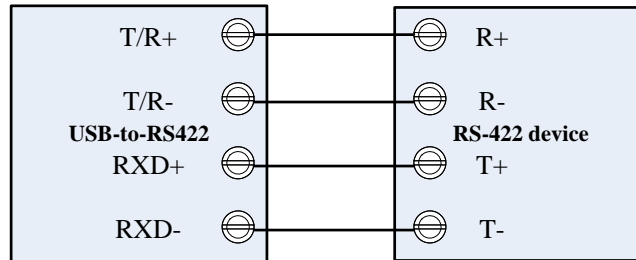
Connect Serial Port Device

Now you can connect your RS-422/485 device and sensor through the USB to 422/485 Serial Adapter

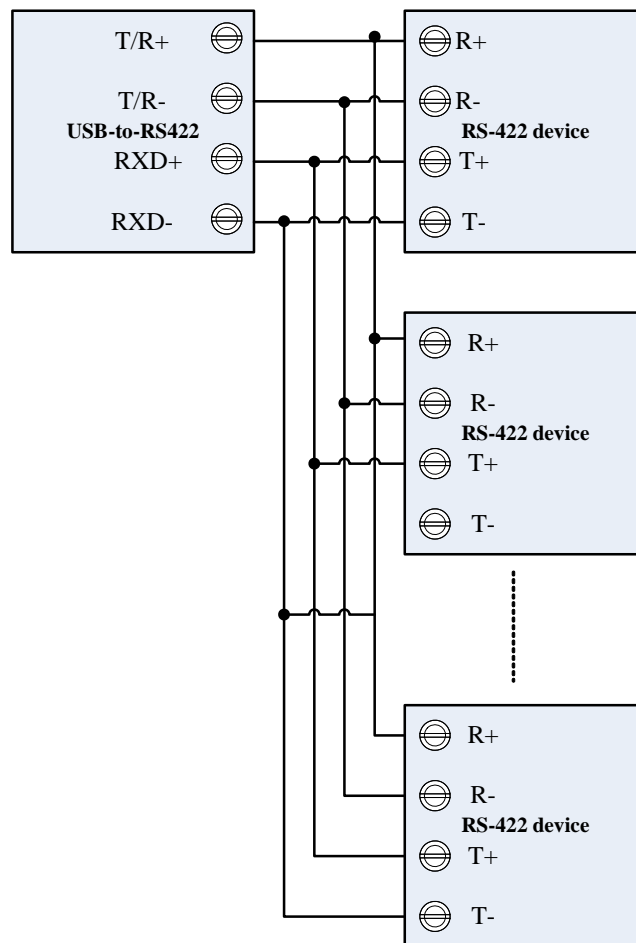


Appendix

RS-422 wire diagram

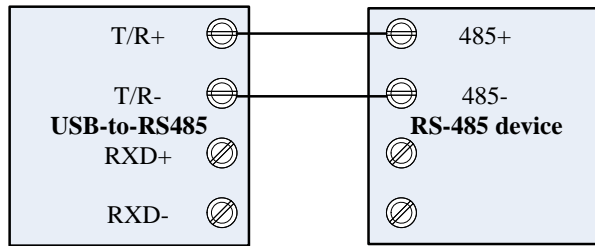


RS-422 point-to-point/4-wire full-duplex communication

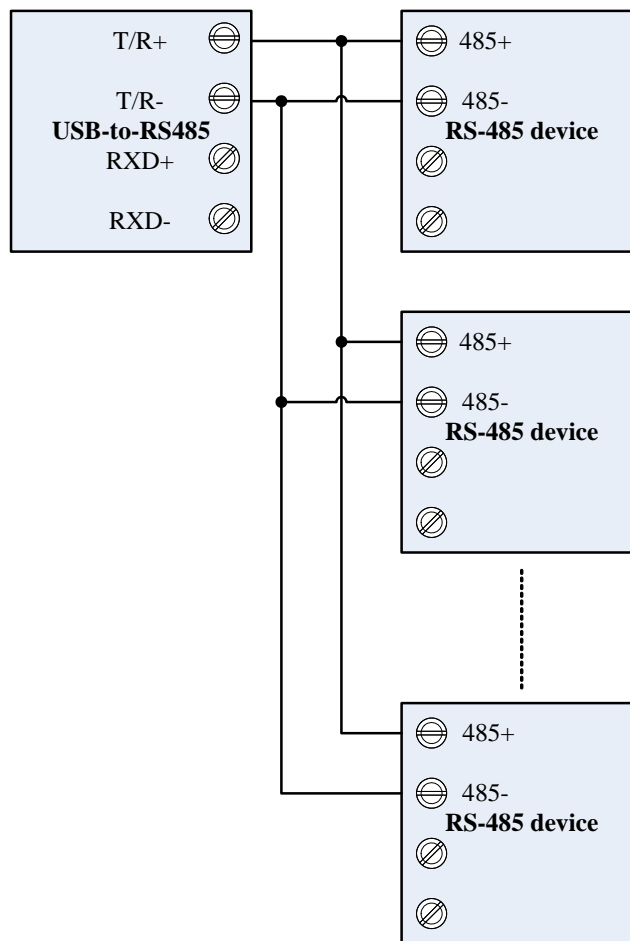


RS-422 point-to-multi point/4 wire full duplex communication

RS-485 wire diagram



RS-485 point-to-point/2 wire half-duplex communication



RS-485 point-to-multi point/2 wire half-duplex communication

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Technical Support and Warranty:

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our website at www.siig.com and click on **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and one of our technical support analysts will promptly respond.

SIIG offers a 3-year manufacturer warranty with this product. This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for three (3) years from the date of purchase of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Please see our web site for more warranty details.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to www.siig.com, click Support, then **REQUEST A PRODUCT REPLACEMENT**, then RMA to submit a request to [SIIG RMA](#) or fax a request to 510-657-5962. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping the product to SIIG at the following address:

SIIG, Inc.

6078 Stewart Avenue

Fremont, CA 94538-3152, USA

RMA #: _____

- SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/ Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. All centered around the distribution and switching of A/V signals over CAT5/6, these products include matrix switches, distribution amplifiers, extenders, converters, splitters, cabling, and more.

SIIG is the premier one-stop source of upgrades and is committed to providing high quality products while keeping economical and competitive prices. High-quality control standards are evident by one of the lowest defective return rates in the industry. Our products offer comprehensive user manuals, user-friendly features, and most products are backed by a lifetime warranty.

SIIG products can be found in many computer retail stores, mail order catalogs, and e-commerce sites in the Americas, as well as through major distributors, system integrators, and VARs.

PRODUCT NAME

USB to RS-422/485 Serial Adapter

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.
6078 Stewart Avenue
Fremont, CA 94538-3152, USA
Ph: 510-657-8688

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