

# RS-232 to RS-422/485 Converter with 3KV Isolation Protection

(ID-SC0E11-S1)

# **User's Manual**



04-0779A

#### Introduction

The serial converter converts RS-232 signals to RS-422 or RS-485 and extends the communication range

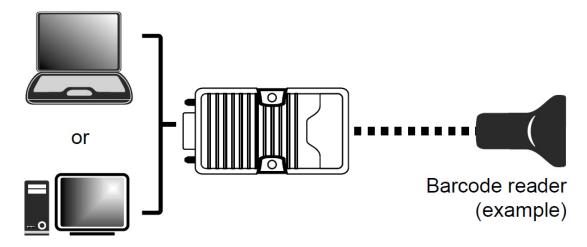
#### **Features**

- High- speed transmission up to 230.4 Kbps
- Compact size
- Converts RS-232 signal to RS-422, and both 2/4 wire RS-485
- RS-485 auto direction flow control
- 15KV ESD immunity to serial interface
- 3KV Ground isolation
- Wall mount support

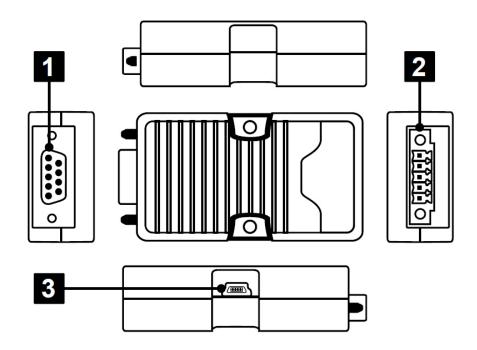
## **Package Contents**

- RS-232 to RS-422/485 Converter with 3KV Isolation Protection
- 5-pin terminal block
- USB cable
- Screws (2)
- User's manual

## **Connection Diagram**



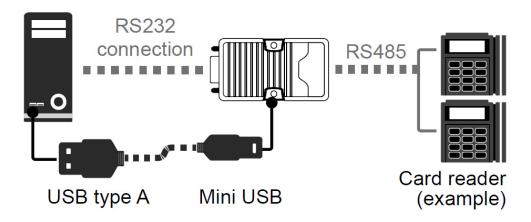
#### **Product Overview**



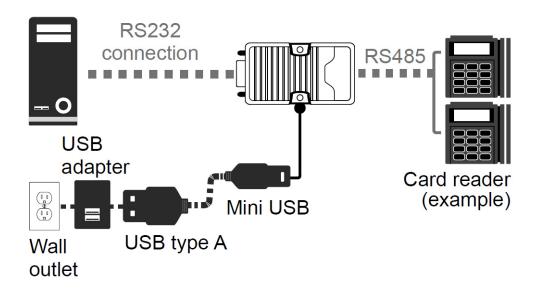
- 1. RS-232
- 2. RS-422/485
- 3. Mini USB Type-B plug (optional for additional power)

#### **External Power**

If the connected device requires more power than the converter can provide, use the included **USB cable** to connect the converter to your computer's USB port or USB wall power adapter (not included).

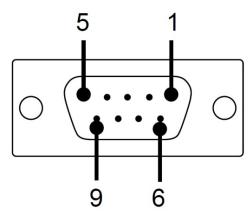


## **Alternatively**



# **Pin Assignment**

#### **DB9 Connector**



	DB9
1	DCD
2	TxD
3	RxD
4	DSR
5	GND
6	DTR
7	CTS
8	RTS
9	

## **5 Pin Terminal Block**

Pin 5

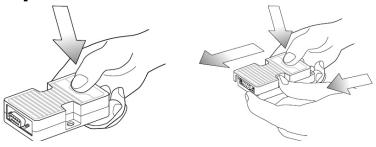


Pin	RS-422	RS-485 (4-wire)	RS-485 (2-wire)
1	TX+	TX+	Data+(A)
2	TX-	TX-	Data-(B)
3	RX+	RX+	
4	RX-	RX-	
5	GND	GND	GND

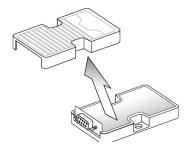
## **Dip Switch and Jumper Settings**

The converter's default setting is RS-422. To change the operation mode, make the following changes to the dip switch and jumpers

### Open the converter's cover

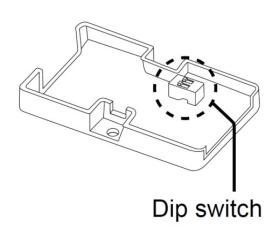


Hold the lower cover, push and slide the upper cover

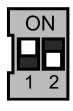


Remove the upper cover

## Adjust the dip switch



	SW1	SW2
RS-485	On	Off
RS-422	Off	On

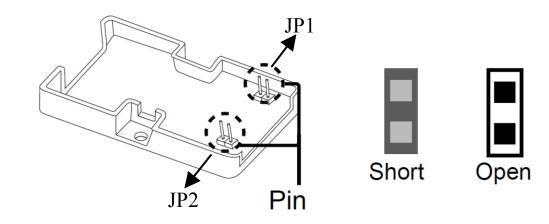




RS-485

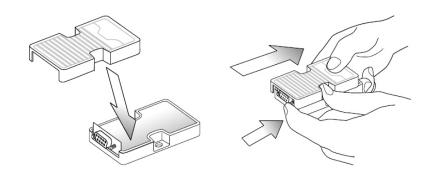
**RS-422** 

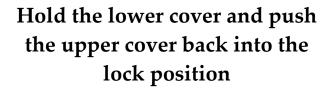
## **Jumper settings**

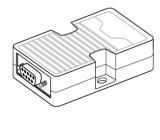


		JP1	JP2
RS422	Default	Short	Short
RS485	4-Wire	Short	Short
RS485	2-Wire	Short	Open

### Close the cover



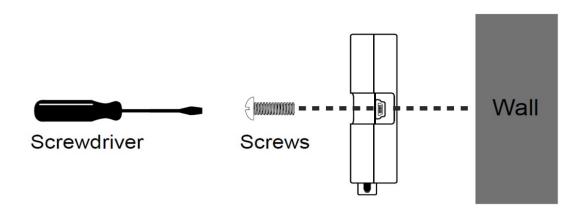




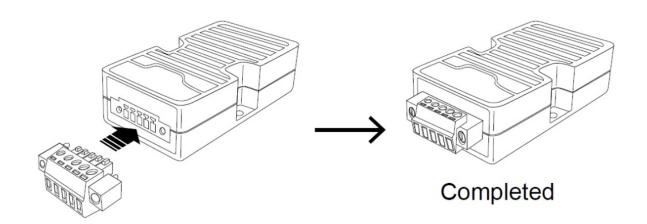
Properly locked with a click

# **Wall Mount Assembly**

Tighten 2 screws through the screw holes using a screw driver as shown.

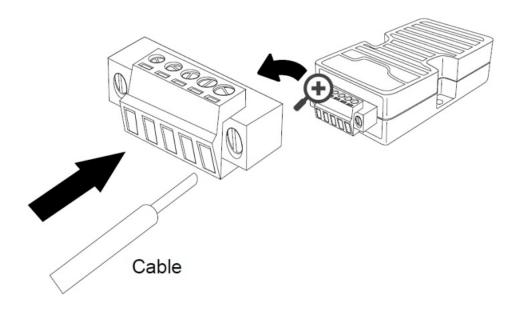


# **5 Pin Terminal Block Assembly**

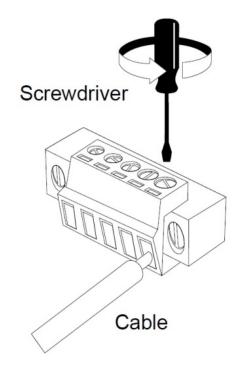


## **Insert the Cable**

#### 1. Insert the cable into the slot.



## 2. Tighten the screw.



**Specifications** 

Item	Description
Ports	1x RS-422/485
Connector	5 pin terminal block
FIFO	512 bytes
<b>ESD Protection</b>	15KV ESD, 2KV isolation
<b>Serial Communication</b>	Signals for RS-232: TxD, RxD,
	GND
	Baud rate: 230.4 Kbps
Interface	RS-232
<b>Interface Connector</b>	Female DB9, Mini USB
Power	Serial Power Source: TxD, RTS,
	DTR
	External Power (USB): 5V
	Operating Current: <40 mA @ 5
	VDC
<b>Operating Temperature</b>	0~60°C
Operating Humidity	5~95% RH
Regulatory Approvals	FCC/CE

Specification is subject to change without further notice

#### **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
<b>RMA</b> #:

• 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**

RS-232 to RS-422/485 Converter with 3KV Isolation Protection

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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