

RS-232 to Bluetooth Quick Installation Guide

Introducing the RS-232 to Bluetooth

The *RS-232 to Bluetooth converter* allows any device with an RS-232 port to communicate wirelessly.

Features and Benefits

- Replaces RS-232 cable
- Full Bluetooth 2.0 support + EDR
- Easy to configure baud rate and master or slave role selectable
- Supports baud rates up to 115.2 K bps
- 300 feet (Enhanced Antenna); CLASS 1

System Requirements

- Pentium II or equivalent PC
- Windows 2000 and above

Package Contents

- RS-232 to Bluetooth Converter with Antenna
- Power adapter (5V, 500mA)
- Software CD
- Quick Installation Guide

Serial Number Sticker

For future product return or exchange, this serial number is required. Please keep if for your reference.

Layout



Figure 1: Layout

LED Indicators

See Figure 2 on the next page for the location of the LEDs.

- **Red**: Power indicator on all the time.
- **Green**: Before connecting to synchronize between the serial device and the **BT RS232 Config Tool** software, the green LED will be blinking.**After** connecting to synchronize between the device and the **BT RS232 Config Tool** software, the green & red LED will blinked alternately.

DC-In Power Jack

Connect the power adapter to the power jack then plug the power adapter into a reliable power outlet. When power is properly supplied, the red LED will be on, see **Figure 2** on the next page.

Note: If the serial port can provide 5V DC, 150mA on pin #9 of its DB9 connector, then the power adapter is not needed.



Figure 2

Antenna Connector

The connector is a standard Reverse SMA jack. Simply connect it to a 2.0dBi, 50 Ohms impedance dipole antenna to support 2.4 GHz frequency. (The Antenna is changeable for high gain Antenna), see **Figure 2.**

RS-232 (Serial)

Connect the RS-232 port into the device as you would with any computer and serial device, see **Figure 3**.



Figure 3: RS-232



Figure 4

The purpose of the Set-up Button is for synchronizing between *RS-232 to Bluetooth Converter* and **BT RS232 Config Tool** software.

Hardware Installation

- 1. Connect the *RS-232 to Bluetooth Converter* to serial port of the PC. Connect the DC power adapter and jack into power outlet and DC-in outlet. You will see the red LED is going to be on and the green LCD will blink.
- 2. After running the **BT RS232 Config Tool** and finish configuration. Click the **Connect** icon in tool software and press the SET-UP button of the *RS-232 to Bluetooth Converter* immediately.
- 3. The green LED will turn on. The *RS-232 to Bluetooth Converter* is now active.

BT RS232 Config Tool Installation & Setup

When setting up *RS-232 to Bluetooth Converter* for the first time, you have to install and run **BT1.exe** as **BT RS232 config tool** first in your computer device. The utility CD is enclosed in the device box. Before you use *RS-232 to Bluetooth Converter*, you have to pair it with another E-BT232 device.

The *RS-232 to Bluetooth Converter* must be configured first before you use it. The purpose of configuration is to pair two devices for an exclusive connection between them, and pairing is done by utilizing Bluetooth address and PIN code.

• Tool Installation



Figure 5

When setting up the *RS-232 to Bluetooth Converter* for the first time, you have to install the utility software of **BT RS232 config tool** in your computer first which is an executable program in Windows environment. **SB-232 config tool** is used to detect and setup.

• SB-232 Config Tool Parameters Configuration

IBT RS232 Config Tool V1.00	🗆 🔀 🕫 81 RS232 Config Tool V1.00
File Help	Fie Holp
Com Port COMI _ Connect	Com Port COM2 - Connect
Device Name: SPP 1.2	Device Name: SPP 1.2
Local Address 0000 00 000000	Local Address 0000 00 000000
Peer Address 0000 00 000000	Peer Address: 0000 00 000000
FIN Code: 0000 ROLE: * Haster - Slave	PIN Code: 0000 ROLE: Master & Slave
Discoverable: 🖝 Enable 🤇 Disab.	Discoverable: # Enable C Disab.
Baud Rate 9600 BPS •	Baud Rate 9600 BPS -
Handshake(DSR/DTR) / Enable & Disable	Handshake(DSR/DTR) C Enable G Disable
Stop Bit: © One Bit ~ Two Bi	Stop Bit: @ One Bit (Two Bi
Parity: • NONE C Odd C Even	parity: • NONE = Odd = Even
Boad Write	Read

Figure 6

After double click the icon of BT1 as **BT RS232 Config Tool**, the configuration screen will be pop-up as the above picture.

A. COM Port

Select COM port number, you have to avoid port conflict with other devices in the computer, use an available port number

B. Device Name

Select device name is for identifying each device. You can follow the name by tool access or retyping the new name yourself.

C. Local Address

Local address will be automatically changed after finishing the parameter configuration to apply.

D. Peer Address

Peer address is for two or more devices to communicate in a same network address.

E. PIN Code

Device uses a **PIN Code** to identify during connecting and communication.

F. Role

Role is for identifying the role of the device as a master or slave. Select Master, for DTE mode, for Data Terminal Equipment (such as a PCs). Select **Slave** for DCE mode, for Data Communication Equipment (such as a Modem).

G. Discoverable

Allows or denies the device detection by other Bluetooth devices.

H. Baud Rate

The baud rate range is 1200 bps-15.2K bps depending on transmission distance and environment. Normally, the default baud rate is set to 9600 bps N, 8, 1.

I. Handshake (DSR/DTR)

The handshake is set at **Disable**.

J. Stop Bit

The stop bit is set at **One Bit**.

K. Parity

Parity is set at None.

Apply Connect

PBIRS232 Contig Teol V1.00	IT BT RS237 Config Tool V1.00	
File Heb	Får Help	
Com Port: COMI . Disconnect	Com Port: COM2 . Disconnect	
Device Hame SPP 1.2	Device Hame: SPP 1.2	
Local Address 0000 00 000000	Local Address 0000 00 000000	
Peer Address: 0000 00 000000	Peer Address: 0000 00 000000	
PIN Code: 0000 ROLE: @ Master C Slave	PIN Code: 0000 ROLE: [Master @ Slave	
Discoverable: G Enable C Disab.	Discoverable: # Enable (Disab.	
Band Rate: 9600 898 -	Baud Rate: 9600 BPS •	
Handshake(DSR/DTR) / Enable / Disable	Handshake(DSR/DTR) 🕝 Enable 🙃 Disable	
Stop Bit: © One Bit ⊂ Two Bi	Stop Bit: # One Bit ~ Two Bi	
Parity: " none r Odd C Even	Parity: * None C Odd C Even	
Read	Read Write	

Figure 7

After finish the parameters configuration, click the **Connect** icon in **BT RS232 Config Tool** screen and immediately press the **Set-up** button on the left side of the device. **Connect** is changed to **Disconnect** when connection is successfull.

Apply Write

BT R5232 Config Tool V1.00	II BT R\$237 Config Tool VI.00	
Fe Nb Com Port COMI - Disconnect	fin Hob Com Port COM2 • Disconnect	
Device Hame: SPP 1.2 Local Address 0000 00 0000000 Peer Address 0000 00 0000000 PIH Code: 0000 ROLE: © Master ~ Slave Discoverable: © Enable ~ Disab. Baud Rate 5600 NDS • Handshake(DSR/DTR) ~ Enable © Disable Stop Bit: © One Bit ~ Two Bi Parity: ° HORE ~ Odd ~ Even	Device Hame: SPP 1.2 Local Address 0000 00 000000 Peer Address 0000 00 000000 PIH Code: 0000 ROLE: F Haster # Slave Discoverable: F Enable = Disabl Band Rate 0600 BPS - Handshake(DSR/DTR) = Enable # Disabl Stop Bit: # One Bit = Two Bi Parity: * HORE = Odd = Even	
Read Write	Read Write	

Figure 8

Click **Write**, to save all parameters after configuring into the **BT RS232 Config Tool**.

Apply Read

# BT RS232 Config Tool V1.00	🛛 💷 8T RS232 Config Tool V1.00
File Help	File Help
Com Port COMI . Disconnect	Com Port COM2 _ Disconnect
Device Name: SPP 1.2	Device Hame: SPP 1.2
Local Address 0012 C8 90CE5D	Local Address 0012 CE 90CEAD
Peer Address: 0000 00 000000	Peer Address: 0000 00 000000
PIN Code: 0000 ROLE: @ Master C Slave	PIN Code: 0000 ROLE: C Master & Slave
Discoverable: G Enable C Disab.	Discoverable: G Enable C Disab.
Baud Rate:9600 BPS -	Baud Rate 9600 BPS -
Handshake(DSR/DTR) C Enable @ Disable	Handshake(DSR/DTR) C Enable G Disable
Stop Bit: @ One Bit C Two Bi	Stop Bit: @ One Bit = Two Bi
Parity: • NONE C Odd C Even	Parity: * None = Odd = Even
Read	Read

Figure 9

Clicking **Read** loads all parameters saved from the last configuration of the **BT232 Config Tool**.

RS-232 Pin Assignment

The pin assignment scheme for a 9-pin male connector on a DTE is given below



Pin1: X	Pin 6: DTR
Pin 2: TXD	Pin 7: CTS
Pin 3: RXD	Pin 8: RTS
Pin 4: DSR	Pin 9: DC 5V
Pin 5: GND	

RS-232 Wiring Diagram	
Serial Device	SB-232 Converter
2 RX	2 TX
3 TX	3 RX
5 GND	5 GRN
4 DTR	4 DSR (Flow Control)
6 DSR	6 DTR (Flow Control)

Technical Support and Warranty

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our web site at *www.siig.com* and click **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 a technical support analysts will promptly respond.

SIIG offers a 5-year manufacturer warranty with this product. Please see our web site for more warranty details. If you encounter any problems with this product, please follow the procedures below.

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 **RMA** to submit a request to <u>SIIG RMA</u>. 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. Ship the product to 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 computer upgrade manufacturer of I/O connectivity products, including PCIe, PCI & ISA serial and parallel ports, USB, Serial ATA & UltraATA controllers, FireWire (1394a/b), networking, sound cards, and other accessories. SIIG is the premier one-stop source of upgrades.

SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High-quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

PRODUCT NAME

RS-232 to Bluetooth Converter

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

RS-232 to Bluetooth Converter is a trademark of SIIG, Inc. SIIG and the SIIG logo are registered trademarks of SIIG, Inc. Microsoft, Windows and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Pentium is a registered trademark of Intel Corporation. Other names used in this publication are for identification only and may be trademarks of their respective companies.

June, 2008

Copyright © 2008 by SIIG, Inc. All rights reserved.