Generic BT578

BT578 Wireless Serial Port Bluetooth RS232 Adapter User Manual

Model: BT578

1. Introduction

The BT578 Wireless Serial Port Bluetooth RS232 Adapter is designed to provide wireless communication capabilities for devices equipped with an RS232 serial port. This module enables seamless data exchange over Bluetooth, making it ideal for applications requiring cable-free connectivity, such as total stations, industrial equipment, and other serial devices.

It functions as a Bluetooth module, converting RS232 serial data into Bluetooth signals and vice-versa, allowing for remote control and data logging without physical cable connections.

Figure 1: Overview of the BT578 Wireless Serial Port Bluetooth RS232 Adapter. The device is white with a red "TRXON" label,

featuring a 5VDC power input, indicator LEDs, a mode switch (M/F), and a DB9 RS232 connector.

2. Setup

2.1. Package Contents

- BT578 Wireless Serial Port Bluetooth RS232 Adapter
- (Optional: Power Adapter, if included with purchase)

2.2. Powering the Device

Connect a 5V DC power adapter to the "5VDC" input port on the BT578 adapter. Ensure the power source provides stable 5V DC to prevent damage or unstable operation.

2.3. Connecting to RS232 Device

Identify the RS232 serial port on your target device (e.g., total station, PC, industrial controller). The BT578 adapter features a DB9 connector. Connect the adapter directly to the RS232 port. Ensure the screws on the DB9 connector are tightened to secure the connection.

2.4. Mode Selection (Master/Slave)

The BT578 adapter typically has a switch labeled "M" (Master) and "F" (Female/Slave, or sometimes "S" for Slave). Select the appropriate mode based on your application:

- **Master Mode (M):** The adapter initiates connections to other Bluetooth devices. Use this mode when the BT578 needs to actively search for and connect to a slave device.
- **Slave Mode (F/S):** The adapter waits for incoming connections from a master Bluetooth device. Use this mode when another device (e.g., a computer with Bluetooth) will connect to the BT578.

Refer to your specific application requirements to determine the correct mode.

3. Operating Instructions

3.1. Bluetooth Pairing

Once powered on, the adapter's indicator LEDs will show its status. Typically, a blinking LED indicates it's discoverable or searching for a connection, while a solid LED indicates a successful connection.

- **In Slave Mode:** On your master device (e.g., computer, smartphone), search for Bluetooth devices. The BT578 adapter should appear with a name like "BT578" or similar. Select it to pair. You may be prompted for a PIN (common default PINs are "0000" or "1234").
- **In Master Mode:** The BT578 will attempt to connect to a pre-configured or discoverable slave device. Configuration for master mode pairing might require specific software or AT commands, depending on the adapter's firmware.

3.2. Data Transmission

After successful Bluetooth pairing, the serial data from the connected RS232 device will be transmitted wirelessly via Bluetooth. Conversely, data received over Bluetooth will be converted and sent to the RS232 device.

Ensure that the serial communication parameters (baud rate, data bits, parity, stop bits) on both the RS232 device and the Bluetooth-connected device (e.g., computer's virtual COM port) are configured identically for proper data exchange.

4. Maintenance

The BT578 adapter requires minimal maintenance. Keep the device clean and free from dust and moisture. Use a soft, dry cloth for cleaning. Do not use liquid cleaners or solvents.

Store the adapter in a cool, dry place when not in use. Avoid exposing it to extreme temperatures or direct sunlight.

5. Troubleshooting

- **No Power/LEDs Off:**
  Ensure the 5V DC power adapter is correctly connected and functioning. Check the power outlet.
- **Cannot Pair/Connect Bluetooth:**
  Verify the BT578 is in the correct Master/Slave mode for your application. Ensure the adapter is powered on and its Bluetooth LED is indicating discoverability or pairing mode. Check that the master device's Bluetooth is enabled and searching. Try restarting both devices.
  Confirm the correct PIN (if required) is entered during pairing.
- **Data Transmission Errors/No Data:**
  Check that the RS232 cable connection is secure. Verify that the serial communication parameters (baud rate, data bits, parity, stop bits) are identical on both the BT578 and the connected RS232 device/software. Ensure the Bluetooth connection is stable and not experiencing interference.
- **Intermittent Connection:**
  Reduce the distance between the BT578 and the paired Bluetooth device. Avoid obstacles that might block the signal. Check for other wireless devices that might cause interference.

6. Specifications

Model	BT578
Interface	RS232 (DB9)
Wireless Technology	Bluetooth
Power Input	5V DC
Manufacturer	Generic
ASIN	B0C6FRF7NP

7. Warranty and Support

Information regarding product warranty and customer support is typically provided by the retailer or manufacturer at the time of purchase. Please refer to your purchase documentation or contact the seller for details on warranty coverage and technical assistance.