

DB9024966/63/33 DB9 – DB9 over Bluetooth

Features

- RS232 DB9 – DB9 connection over Bluetooth
- Integrated antenna
- Bluetooth Class 1 Radio
- Data encryption
- Automatic Bluetooth connection
- LED indicators
- Configuration via USB
- Power from RS232 port or USB port



Specifications

Bluetooth	Bluetooth v2.1 + EDR Class 1 Radio
RS232	Connector: DB9 male/female Baud rate: 1200bps to 115200bps Parity: Even, Odd, None Data length: 8-bit Stop bits: 1-bit, 2-bit
Power	3.6v to 5v 100mA DC via DB9 pin 9 or USB Micro-B port
Part Number	DB9024966 DB9 male – DB9 male DB9024963 DB9 male – DB9 female DB9024933 DB9 female – DB9 female

System Requirements

Configuring Bluetooth adapters on a PC requires:

- Microsoft Windows 8, Windows 7, Windows Vista, or Windows XP.
- eeTerminal (download from www.devicefunctions.com).

DB9 – DB9 Connections

The signals connected between two DB9 connectors are Pin 2, 3, and 5. The configuration for all other pins is described in section **DB9 Connector Pin Descriptions**.

DB9F	-	DB9F , Null modem configuration	DB9F	-	DB9M , RS232 extension configuration
2		3	2		2
3		2	3		3
5		5	5		5
DB9M	-	DB9M , Crossover			
2		3			
3		2			
5		5			

LED Indicator - Bluetooth connection

Status	LED Flash Rate
Connected	Solid on
Waiting for connection	Once per second
Configuring	10 times per second

DB9 Connector Pin Descriptions

Pin #	DB9 Male Connector	DB9 Female Connector
1	1 - 4 - 6	1 - 4 - 6
2	Rx	Tx
3	Tx	Rx
4	1 - 4 - 6	1 - 4 - 6
5	GND	GND
6	1 - 4 - 6	1 - 4 - 6
7	7 - 8	7 - 8
8	7 - 8	7 - 8
9	3.6v to 5v input	3.6v to 5v input

Pin9 is internally connected with USB micro-B pin1.

USB Micro-B Receptacle Pin Descriptions

Pin #	Micro-B Receptacle
1	3.6v to 5v input
2	NC
3	NC
4	NC
5	GND

Pin1 is internally connected with DB9 pin9.

Power Up

First, power on one Bluetooth-RS232 adapter, then power on another Bluetooth-RS232 adapter. Bluetooth LEDs will be solid on in a while. If Bluetooth LEDs keep flashing, power off both adapters. Switch the power on sequence. If Bluetooth LEDs still keep flashing, the two devices need to be paired.

Configuration

Plug H0087135 in your PC's USB port. Start eeTerminal. During configuration process, **ONLY** power on both Bluetooth adapters if they need to be paired. Otherwise, power on one Bluetooth adapter and power off the other adapter.

Step 1 Start configuration

Connect the selected Bluetooth adapter with H0087135. The Bluetooth adapter will be powered on via DB9 pin9.

Click *File* from eeTerminal's menu bar and click *Open Device*. A *Select Device* window, Fig 1, will popup with a list of devices.

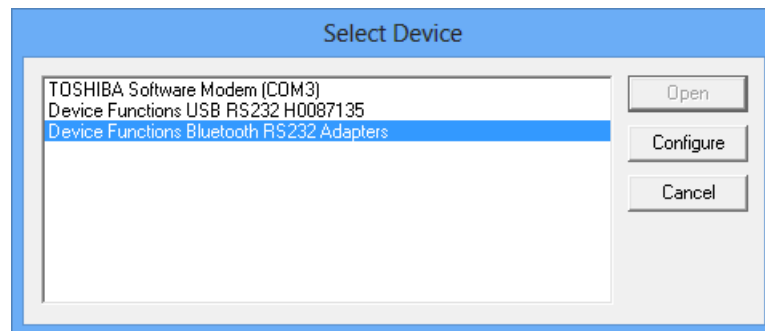


Fig 1

Select *Device Functions Bluetooth RS232 Adapters* from the device list and click *Configure* button. The *Bluetooth Adapter Serial Port Settings* window, Fig 2, will popup. If you have

DEVICE FUNCTIONS

Bluetooth adapter's RS232 settings, select the settings and click *Ok* button. If you don't have the information click *Auto Baud* button.

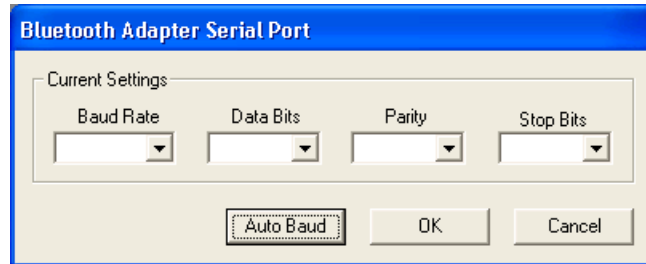


Fig 2

After H0087135 establishes communication with Bluetooth adapters, a *Bluetooth Settings* window, Fig 3, will popup.

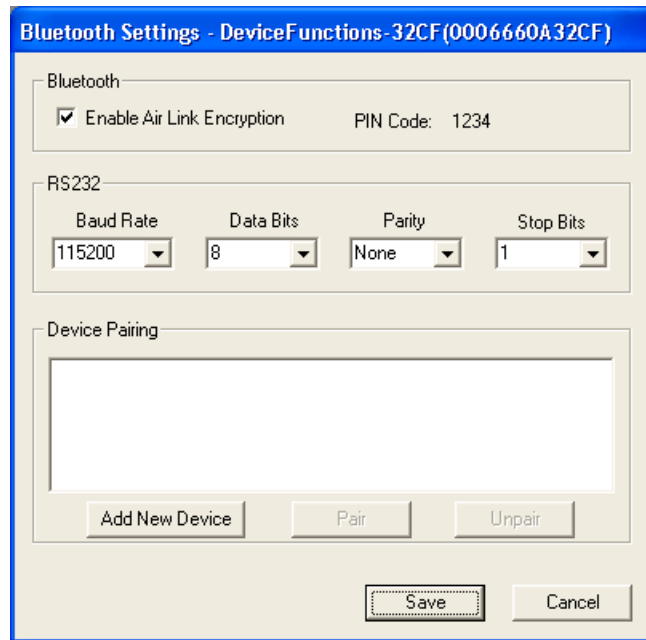


Fig 3

Step 2 Configure Bluetooth adapters

- Encryption support is always enabled. The paired device must also support link encryption in order to set an encrypted connection.
- Authentication pin code is 1234. Authentication is turned off by default.
- RS232 settings. Set serial port's baud rate, parity, and stop bits.
- Device Pairing. In order to make a Bluetooth connection, two Bluetooth devices must be paired. Click *Add New Device* button. Visible Bluetooth devices in range will be listed in a few seconds. You may need to click *Add New Device* multiple times to find Bluetooth devices. Select a Bluetooth device and click *Pair* button.
- Device Unpairing. Click *Unpair* button if enabled to erase pairing information.

Step 3 Save Bluetooth adapters' settings

Click *Save* button to save new settings or click *Cancel* button to cancel any modifications. The new settings will take effect immediately once saved.

Step 4 Disconnect Bluetooth adapter from H0087135.

Step 5 Configure the second Bluetooth adapter

Repeat Step1 to Step 4 to configure the second Bluetooth adapter.

Step 6 Pair Bluetooth adapters

DEVICE FUNCTIONS

Power on both Bluetooth-RS232 adapters. If they are paired, they will connect with each other automatically and the LEDs will be solid on in a while. If the LEDs keep on flashing, the two devices are not paired. Follow Step1 to Step 3 to pair the Bluetooth adapters. You can only save the pairing information in one Bluetooth-RS232 adapter.

Contents

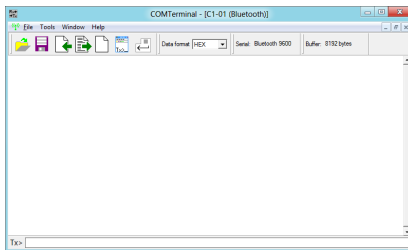
All models include two Bluetooth RS232 adapters and one USB RS232 adapter. The two Bluetooth adapters create an air link that connects two DB9 serial interfaces. The USB adapter is for configuring Bluetooth adapters.

DB9024966	Two B102496 Bluetooth-RS232 adapters, one H0087135F USB-RS232 adapter
DB9024963	One B102496 Bluetooth-RS232 adapter, one B102493 Bluetooth-RS232 adapter, one H0087135M USB-RS232 adapter
DB9024933	Two B102493 Bluetooth-RS232 adapters, one H0087135M USB-RS232 adapter

Accessories

eeTerminal

Configure, read, and write Bluetooth adapters. Upload/download files.



Environmental Conditions

Operating temperature range	-20 °C TO +65 °C
Storage temperature range	-40 °C TO +85 °C
Relative humidity	0% to 90%, non-condensing

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