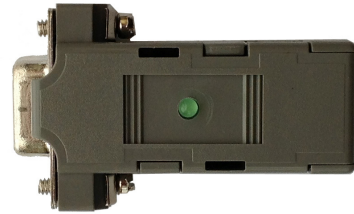


## B102496/3 Bluetooth RS232 Adapters

### Features

- Bluetooth pairing and unpairing tools
- Integrated antenna
- Bluetooth Class 1 Radio
- Data encryption
- Automatic Bluetooth connection
- Support Microsoft Windows Bluetooth COM port
- RS232 interface in DB9 male or female
- LED indicator
- Configuration via Bluetooth or USB
- Power from RS232 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	
Part	B102496	DB9 male
Number	B102493	DB9 female

### Typical Applications

#### 1. RS232 Extension over Bluetooth



##### App 1 **Pair with your Bluetooth (SPP) enabled devices**

Follow *Device Pairing* instruction to pair this adapter with your Bluetooth enabled device. The paired Bluetooth devices will connect automatically. You can access your Bluetooth enabled device remotely via Bluetooth adapter's RS232 port.

##### App 2 **Pair two Bluetooth adapters**

Follow *Device Pairing* instruction to pair the two adapters. The paired adapters will connect automatically.

#### 2. Microsoft Windows Virtual COM Port over Bluetooth

Power on Bluetooth adapter. Locate Bluetooth icon  on Microsoft Windows taskbar. Click on it and select *Add a Bluetooth Device*. Follow Microsoft Windows on-screen instructions to install the device. The authentication pin code is 1234. A virtual COM port (Outgoing direction) with SPP description will be created. To check the COM port number, click  on Windows taskbar and select *Open (Bluetooth) Settings*. Click *COM Ports* in *Bluetooth Settings* window.

### 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](http://www.devicefunctions.com)).
- Bluetooth connection to PC or USB adapter H0087135M/F.

## 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

## Serial Port Configuration and Bluetooth Pairing

### Configure via Bluetooth

You have 60 seconds to start configuration via Bluetooth after power on. Start eeTerminal, then power on Bluetooth adapter. Bluetooth connection to PC is required.

Step 1 Start configuration

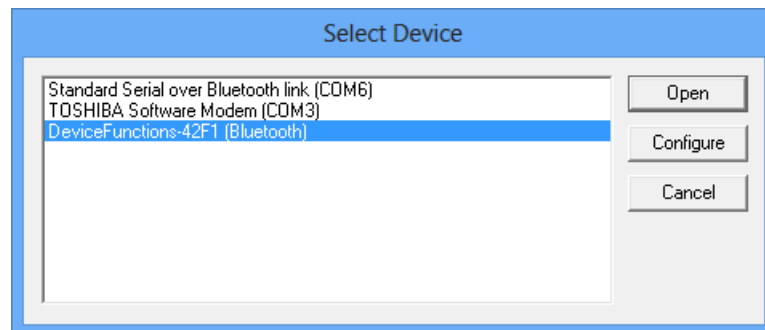


Fig 1

Click *File* from eeTerminal's menu bar and click *Open Device*. A *Select Device* window, Fig 1, will popup in a few seconds with a list of devices. You may need to repeat this process until your Bluetooth adapter is found. Turn off Bluetooth adapter then turn on if 60 seconds passed.

Select your Bluetooth device from the device list and click *Configure* button. A *Bluetooth Settings* window, Fig 2, will popup in a few seconds. If there is no *Bluetooth Settings* window, more than 60 seconds have passed from power on. Turn off Bluetooth adapter and start from beginning.

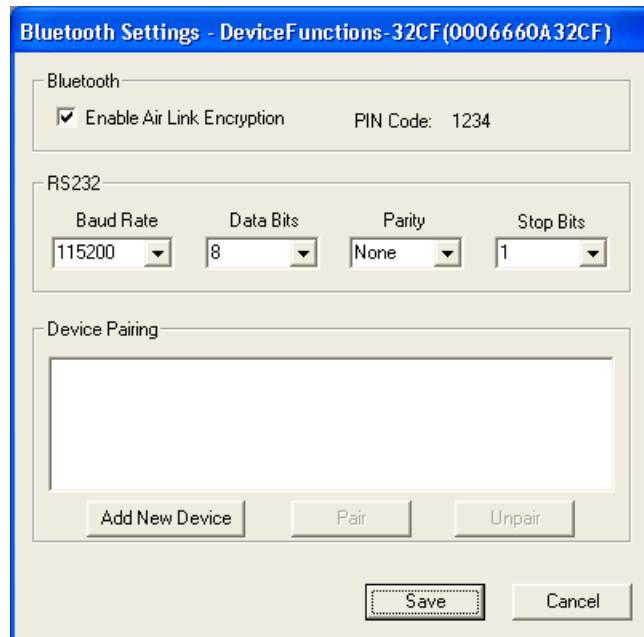


Fig 2

## Step 2 Configure Bluetooth adapter

- 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. You may need this code when pairing with other devices, such as PC.
- 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. **NOTE: You can only unpair this adapter using USB adapter H0087135 after you save the pairing information.**
- Device Unpairing. Click *Unpair* button if enabled to erase pairing information.

## Step 3 Save Bluetooth adapter's 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.

## Configure via USB

You can start configuration via USB at any time when Bluetooth adapter is not connected (The LED is flashing). USB adapter H0087135 is required. If you use Windows XP, you can only configure Bluetooth adapters via USB. **Make sure ONLY one of the PAIRED Bluetooth devices is powered on at a time.**

### Step 1 Start configuration

Plug H0087135 in your PC's USB port. Connect Bluetooth adapter with H0087135. The Bluetooth adapter will be powered on via DB9 pin9.

Start eeTerminal. Click *File* from eeTerminal's menu bar and click *Open Device*. A *Select Device* window, Fig 3, will popup with a list of devices.

Select *Device Functions Bluetooth RS232 Adapters* from the device list and click *Configure* button. The *Bluetooth Adapter Serial Port Settings* window, Fig 4, will popup. If you have Bluetooth adapter's RS232 settings, select the settings and click *Ok* button. If you don't have the information click *Auto Baud* button.

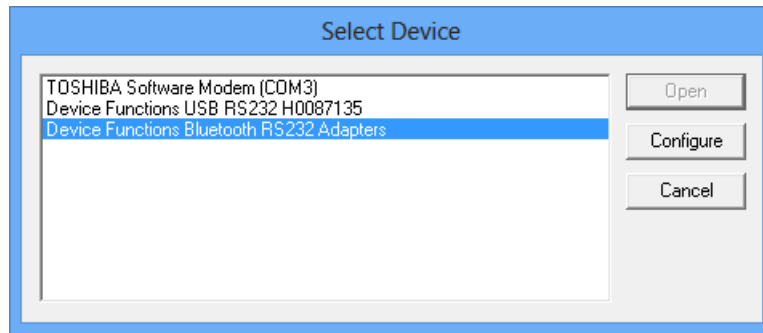


Fig 3

After H0087135 establishes communication with the Bluetooth adapter, a *Bluetooth Settings* window, Fig 2, will popup.

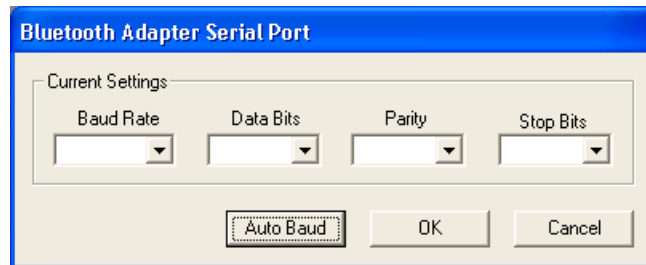


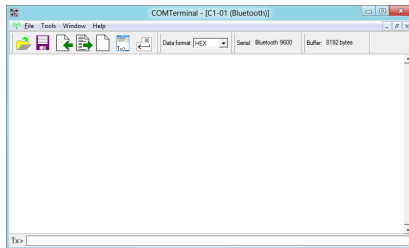
Fig 4

- Step 2 Configure your Bluetooth devices  
Refer to Step 2 in *Configure via Bluetooth*.
- Step 3 Save your Bluetooth device's settings  
Refer to Step 3 in *Configure via Bluetooth*.

## Accessories

### eeTerminal

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



### USB Adapter H0087135M/F

Configure Bluetooth adapters



## 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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