

**TECHTION T46**

**Bluetooth Module User Manual**

## **Information to User**

This equipment has been tested according to ANSI C63.4-2003 and DA-00-705 and found to comply with pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

### **Caution**

Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

### **FCC Compliance Information**

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **RF Exposure Statements**

To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the integral antenna of this device and all persons.

# **1. RF Information**

## **1.1 Radio Frequency Range**

2.402-2.480GHz

## **1.2 Number of Frequency Channel**

79 channels

## **1.3 Transmission Method**

FHSS(Frequency Hopping Spread Spectrum)

## **1.4 Modulation Method**

GFSK(Gaussian-filtered Frequency Shift Keying)

## **1.5 Radio Output Power**

1.4 mW (E.I.R.P)

## **1.6 Power supply**

DC 3.3V

## **2. Introduction**

The Wireless Module is a short-range radio link intended to be a cable replacement between portable and/or fixed electronic devices.

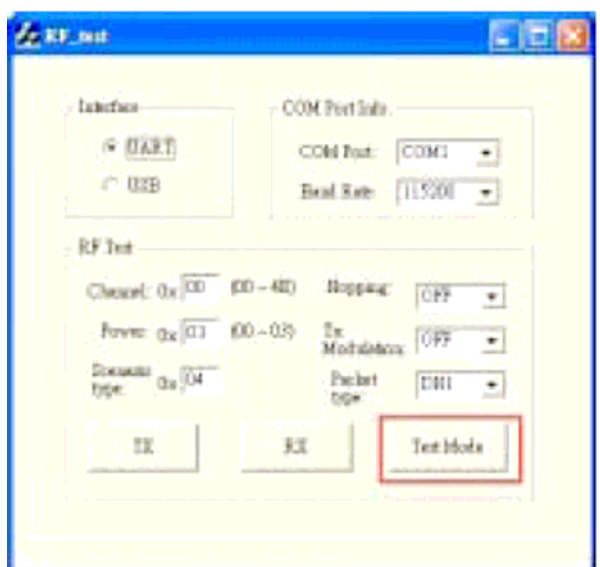
### 3. Operations

#### 3.1. Theory of Operation

Firstly, You must install a driver on PC, when installed to the computer, You can adjust operation mode through customer software, click Tx for transmitting and click Rx for Receiving. See below figure for details,

Function 1: Access to Test Mode (RF characteristics test with equipment)

Click “Test Mode”equipment access to test mode, you can conduct RF characteristics test through bluetooth test equipment.

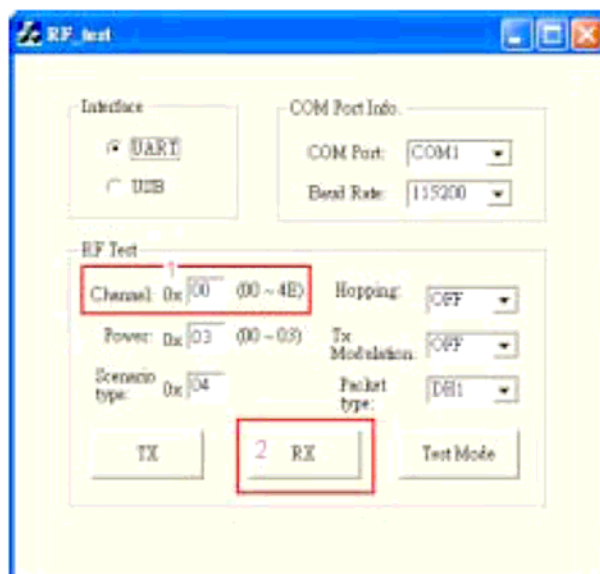


Function 2: Rx Mode

1). Frequency setting, please type two ASCII hexadecimal digits

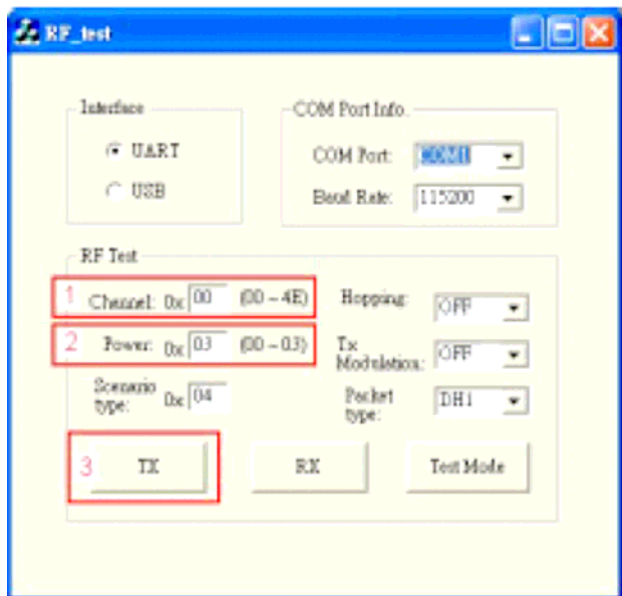
ex: 00 - 2402MHz, 27 - 2441MHz, 4E - 2480 MHz

2). Click Rx button to access into Rx mode



### Function 3: Transmitting CW (Single Tone)

- 1). Frequency set, please type two ASCII hexadecimal digits  
ex: 00 - 2402MHz, 27 - 2441MHz, 4E - 2480 MHz
- 2). Power adjustment: Type 03 for class 2 and 02 for class 1.
- 3). Click Tx button to access into Tx mode



### Function 4: Transmitting Modulation Signals

- 1). Frequency set, please type two ASCII hexadecimal digits  
ex: 00 - 2402MHz, 27 - 2441MHz, 4E - 2480 MHz
- 2). Power adjustment: Type 03 for class 2 and 02 for class 1.
- 3). Scenario type: transmitting packaged data, 04 indicates PRBS9 random data
- 4). Hopping: OFF indicates stop hopping, ON indicates start hopping
- 5). Tx Modulation: please select "on" position
- 6). Package Type: Three type, There are DH1, DH3 and DH5
- 7). Click Tx button to access into Tx mode

