

# BT-020 User's Guide

## 1. Introduction

### 1.1 Bluetooth technology

Bluetooth is a standard of wireless communication. Bluetooth technology is a kind of short distance wireless communication technology and a kind of open global criterion. The Bluetooth products work on universal industry, science, medical (ISM) frequency. In order to avoid intervene, adopt jumping frequency technique, divide 2.4GHz ~ 2.48GHz into 79 channels, transmit data at 1600 time/sec. The transmission distance is about 10m (Class II).

ISM frequency of 2.4GHz is free open frequency, no need to apply for license.

### Operation instructions



#### Introduction

BT-020 Bluetooth headset key-press and key-press function explanation

A. MFB key-press: realize power on, power off, receiving, voice dialing, hang-up, pairing etc.

B. Volume +: realize increasing volume, mute, rejecting incoming call, redialing etc

C. Volume -: realize decreasing volume etc.

#### Power on

In the state of power off, long press MFB, speaker will give off short BEEP sound. Blue light flashes. Then BT-020 will power on.

#### Power off

In the standby state, long press MFB, speaker will give off long BEEP sound. Blue light closes. Then BT-020 will power off.

#### Pairing

Firstly, confirm BT-020 Bluetooth headset is in the state of power off and is in the effective distance with other Bluetooth devices.

a. Long press MFB, speaker will send BEEP sound two times. Blue and red indicator will flash alternately. Then BT-020 will in pairing state.

b. Open Bluetooth function of mobile phone, choose Bluetooth device on mobile phone to search function, and proceed to search for BT-020 Bluetooth headset until BT-020 shows on mobile phone.

c. Select Bluetooth device

d. Input ID code 0000, and confirm, then mobile phone pairing with BT-020 Bluetooth headset.

e. After successful pairing, Blue and red indicator flash alternately changes to blue light flashes. Then the whole pairing process is over automatically.

#### **Power-saving mode**

a. When BT-020 Bluetooth headset fail in the process of pairing, after about 60sec, enter the standby state automatically, after more 5 sec, BT-020 will power off automatically.

b. When BT-020 Bluetooth headset disconnect with any Bluetooth device in the state of power on, it will close automatically after 5 minute.

#### **Receiving an incoming call**

When BT-020 Bluetooth headset is power on and connects with mobile phone, telephone in.

a. Short press MFB.

b. Then blue indicator changes from slow flash to quick flash.

c. If BT-020 Bluetooth headset has no power on, please open it firstly. After redialing mobile phone automatically (press one time to connect with mobile phone), press MFB again, then you can receive the incoming call.

#### **Voice dialing**

When BT-020 Bluetooth headset is power on and connects with mobile phone, you want to voice dialing.

a. Short press MFB, you can hear short BEEP sound, then enter voice dialing.

b. Speak the people' name saved in telephone book of mobile phone, such as David.

c. Mobile phone will dial according to the number in telephone book of mobile phone.

The function demands Bluetooth mobile phone to have voice recognition function.

#### **Rejecting an incoming call**

When BT-020 Bluetooth headset is power on and connects with mobile phone, telephone in but not to receive, long press VOL+, then the incoming call is rejected.

De electrifying Number dialing

In the standby state, long press volume +.

#### **Volume adjustment**

In the state of standby, speaking and calling etc, short pressing volume + or volume -, you can adjust volume. Short press volume + one time, the volume adds one step; Short press volume -, the volume decreases one step. When volume is adjusted to maximum or minimum, it will sound a warning.

#### **Low battery warning**

When the battery of BT-020 Bluetooth headset is not enough, blue light closes, red light flashes, and speaker send short BEEP sound.

Then you should charge BT-020 Bluetooth headset.

#### **Rebind automatically**

When BT-020 Bluetooth headset is power on and disconnects with devices, also in effective distance with mobile phone, if mobile phone connects and pairs with BT-020, it will rebuild connection with mobile phone automatically.

#### **Charging**

Plug DC head of power adapter into charging interface of charging socket, then place BR-020 Bluetooth headset into charging socket, close the upper cover of charging socket, and then

plug in power supply of power adapter, red light flashes, which means charging begin; red light goes out, which means charging end.

#### End speaking

In the process of speaking, short press MFB, it can end speaking.

#### Performance parameter

Item	Parameter
Standard	Bluetooth V2.0+EDR
Effective range	10m without obstacle
Audio frequency	15bits S/N 70db
Frequency	2.4GHZ-2.48GHZ ISM Band
Connection	Point-to-Point
Antenna Gain	2dBi
Type of antenna joint	Printed Antenna
Speaking time	4-5hrs
Standby time after pairing	About 70hrs
Standby time while power on and non-pairing	Close automatically after 10 minute
RF output Power	0dBm (class II)
Power consumption of power supply	18~25mA when speaking
Battery capacity	Rechargeable Lithium Polymer Battery 70mAh
Charging	5V DC, AC adapter input/100-240V
Charging time	2~3hrs
Using temperature	0 °C to +60°C
Storage temperature	-20°C to +85°C
Pairing code	0000
Pairing	One-to-one, allow many primary device but need to connect by turns
Operation voltage	3.0~4.2V
Receiving sensitivity	-70dBm
Standard allocation	Headset main body, headset, charging socket, charger(5V±0.2), specification

#### Important information

##### Product maintenance

- Please keep the product dry, and use clean soft cloth to clean Bluetooth headset surface.
- Please don't keep Bluetooth headset in the place having many dusts, high temperature or extremely low temperature.
- Please don't take down Bluetooth headset by yourself. The unprofessional disposal will lead to its damage.
- Please make wild operation for Bluetooth headset, such as beating and knocking etc.
- Please don't make charging port of Bluetooth headset short circuit, which leads to battery

damage.

f. Please use original binding fitting, using other fittings at random cause any accident will is not within the guarantee range.

#### Trouble clearing

Phenomenon	Reason	Solving method
Can not power on	Low battery	Charging up headset 2 -3 hrs
No voice after pairing	Incorrective pairing	Pairing again
Can speaking but red light flashes	Low battery, red light flashes	Charging up headset immediately
Charging without indication	AC adapter without voltage output	Check AC adapter if plug or the switch of power supply if open.
Headset close automatically	Low battery	Charging up headset 2 -3 hrs
Headset has echo.	Too loud volume or noisy environment	Change a place or adjust volume
Speaking has noise.	The environment interference cause headset is far from device.	Change a place or pull headset and device closer.
The other side is in a low voice.	The pairing of headset is not correct.	Adjust the position of headset

#### Storage environment

- a. Working temperature environment: 0℃ to 60℃without loss of function
- b. Storage temperature require: -20℃ to 60℃without any damage to the Kit's contents
- c. Humidity range: 30 %-90 %humidity @ 60℃ without loss of function

Caution: The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Notes: 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.

FCC Warning:

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.

## **EXPOSURE TO RADIO FREQUENCY ENERGY**

This device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter. To comply with FCC RF exposure requirements, only use supplied antenna.