

Circuit description

As we can see from the Schematic Document, the important part of this product is the headset, which is used to communication with other people when it paired with your mobile phone. The dock of BTE001 is used for the headset charging, the power of BH501 can from the computer or the charger.

The important part of the whole circuit is the Bluetooth Module. Which receives hoping frequency signal though Antenna, and change it into audio signal. So this can realize wireless transmission. It can control its surrounding circuit and realizes lots of function by the software.

The power of all the circuit is the battery which is 3.7V/120mAh. The SW1 is the On/Off Button, when you press it for about 3-4 second till the red and blue flash alternately that product enters pairing status, after you turn on the product, press the button for about 3-4 second, the BH500 will turn off. Pressing the switch SW2 and SW3 could adjust the voice of the speaker.

The LED1 and LED2 are indication light, which can indicate the working state of the product; they will be flashing when the LED0 and LED1 Pin of the Bluetooth Module output

high and low voltage quickly. The form below indicates the relation between LED indication and the working status.

LED of headset	Working Status
Red and blue blink alternately	Being pairing
Blue blinks every 1 second	Pairing unsuccessfully, waiting for pairing
Blue blinks quickly 2 times every 3 seconds	Standby status
Blue blinks quickly	Conversation status
Red light bright on	Charging

The Q1 is a NPN transistor, which could control the microphone to work or mute. If the base of Q1 is high, its collector and the emitter will be open, else will be cut off. When the product is working, the PIO4 of Bluetooth Module will output high voltage, then the collector and the emitter of Q1 will be open, at the same time, the MIC-N will be high, the MIC1 will be working. If the PIO4 output low voltage, the MIC1 will be mute.

When the headset of BH501 is paired with your mobile telephone or other Bluetooth equipment, the information can be transmitted by the Bluetooth, so it is convenience to communicate with your friends by the headset instead of mobile telephone.