

# Operation Description

PBLS is a PLAYFUL BASE LANTERN SPEAKER BOTTLE.

Main features include

- Bluetooth Version: Bluetooth 4.2 single mode (classic rate & EDR)
- Bulit-in rechargeable battery
- with LED light
- AntennaType: PCB antenna, Antenna Gain: 0.07 dBi
- Modulation type: Bluetooth 4.2 (classic rate & EDR)-GFSK, ( $\pi/4$ )DQPSK, 8DPSK

Because of firmware limitation, for the Bluetooth function, this device only supports the classic rate & EDR mode without the BLE mode.

- channel: 79(classic rate & EDR)
- Operation frequency: 2402MHz to 2480MHz
- HW: V1.1
- SW: V1.0
- RF Chipset model: ATS2823

## 1. Control and power part

The main power of the system through a 3.7V battery to get 3.7VDC and 3.7VDC voltage through regulator IC(U5: SGM2032) transformed to VCC 3.3V for chip. Charging battery by DC 5V from MICRO USB.

## 2. Bluetooth parts

through the Bluetooth antenna to receive the wireless signal for data exchange with Bluetooth device to answer the call.

3. The USB port is just for charging, it can't exchange data with PC.