



Shenzhen Baojia Energy Co.,

LTD

Shenzhen BaojiaBattery Technology.Co., LTD

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## specification

Document Number: BJ-WI-RD-RP-

Product name: Bluetooth speaker

Product model number: MBS100

Product brand: MIPOW miffy

Date: 2020-12-04

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examin e and verify :	
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## 1.0 Product Introduction: Product introduction

**BTS100 This product combines fashion elements with new wireless technology and supports the latest Bluetooth standard version 5.0, supporting (compatible) all mobile phones, PDA, PCs and other devices with Bluetooth function.**

## 2.0 Appearance: Product example diagram



### **3.0 Product Basic Information Basic product information**



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product name	Name:	bluetooth speaker
product model	Model No:	MBS100
Paired name	Bluetooth name:	MIFFY MBS100
Ontology size	Size:	L: 98.6mm* W:84.5mm* H:172.8mm
Ontology weight	Weight:	g
Ontology material	Material:	Silicone gel pad + ABS shell material
key	Button:	* 1, volume + * 1, volume- * 1,
LED	LED light:	Red LED * 2, blue LED * 1,
suona	Loudspeaker:	1404 O 3 watts
microphone	Microphone:	14015 all points to-38 ± 2 dB
cell	Battery:	Soft pack lithium battery 602040 comes with lithium battery protection 400mAh/3.7V/1.48Wh
antenna	Antenna:	Built-in PCB antenna
USB	Charge port:	TYPE-C
Bluetooth specifications	Bluetooth version:	Bluetooth5.0
transmission distance	Distance:	And 15 meters of open space
Standby time-Connect to the mobile phone	Standby time:	38H
Maximum volume for call time	Talk time:	3H
Music play time maximum volume	Music time:	2H
charging interval	Charge time:	<2H
Product attachment configuration	Accessories:	1 TYPE-C charging line, length and material to be determined

### 4.0 Hardware Spec Standard Hardware specification definition

Scheme platform	Program:	AB5365C
transmitting power	Transmit power:	CLASS2, MAX4 dbm
Accept sensitivity	Receiver sensitivity:	-88dbm
service frequency (HZ)	Working frequency(HZ)	The 2.4 GISM band, 2.402 – 2.480 GHZ
modulation mode	Modulate way:	GFSK, TT/4 DQPSK,8DP SK
power rating (W)	Rated power(W)	3W

Rated operating voltage (V)	Rated operational voltage(V)	3.7V
Rated charging voltage (V)	Ratedcharging voltage(V)	5V



### 5.0 Softward Spec Standard Software specification definition

The Bluetooth headphone protocol software version	BT software version:	1.2
Bluetooth hands-free protocol software version	BT HF softwareversion:	1.7.1.2
Bluetooth stereo	Bluetooth stereo	1.6.1.2
AVRCP	AVRCP	1.6.1.2
A2 DP	A2DP	1.3.1.2

### 6.0 Using the interface definition Product Functional Operational Definition

starting up	Power on	Long press the power button 3S to start the power, and play the special prompt sound
Paired connection	Pairconnect:	After startup, it is preferred to connect the paired devices. If the return fails to enter the pairing mode, the blue light flash prompts
answer the telephone	Answer calls	Connect the Bluetooth phone, when there is an external call, short press the power button to answer the call
ring off	Hang up calls	During the call, short press the power button to hang up the phone
Refuse to call	Refuse calls	When the external call comes in, long press the power button 1S to reject the call
voice dial	Voice dial	Connect Bluetooth phone and press power button 1S (need phone support)
Voice switching	Voice change	During the call, long press the volume + button 1S, the voice will switch to the phone, the same operation, the voice will switch to Bluetooth
The end of the redial	Redial the last dialed number	Connect the Bluetooth phone, on standby, double click the power button, redial the phone
Volume regulation	Volume adjust	Short press and continuously press the volume plus to increase the volume, short press and continuously press the volume reduction volume (the maximum volume is prompted)
Play and pause	Play and pause	Connect successfully and short press the power button in TF mode to play or pause music.
The last song is the next song	Last/ next	When playing music, press volume to jump to the last song; press volume to jump to the next song.



Iphone Electric quantity display	Iphone battery status	support
Low power prompt	Auto power- off	Battery below 3.4 V, red light flash prompt, and voice prompt every 30 seconds
auto shut off	Auto power- off	Pairing mode, 5 minutes without connected device automatically shut down
		The device is disconnected for 5 minutes or the battery is below 3.2 V
Manual shutdown	Manual shutdown	Power connected or not connected, long press power button 3S, blue light 1S, and voice prompt
TF card play	TF Model	Enter the TF play mode when inserting the TF card. The boot enters the Bluetooth by default
Clear the pairing and reset	Factory reset	Quickly clear the pairing record by power supply 5, and press the power supply for 10 seconds to enter the hardware reset



#### 7.0 LED light indicator LED indication

starting up	Power on	The red light is on 1S, and the blue light flash when entering the matching, the blue light is on 0.5S, off 5S
shut down	Power off	Turn off the blue light is on for 1S
Standby (not connected to the cell phone)	Standby (not connectwith mobile phone)	The blue light was flashed every 5 seconds
Standby (connected to the mobile phone)	standby (connect withmobile phone)	The blue light was flashed every 5 seconds
To call	Calling in	Blue light flash
on the line	On the line	The blue lights flash once every 5S
charge	charging	The red light is often bright
charge complete	Full charge	All the lights out
Low voltage alarm	Low voltage alarm	Red light flash

#### 8.0 Features Spec characteristic specification

Audio features	Frequency features	
Range of horn output frequency sound (HZ)	speaker output frequencyresponse range: (HZ)	20~20 KHZ
Distortion T. H. D (DB)	Distortion + noiseT.H.D(DB)	3%max. At1W 1kHz(Sine Wave)
Output sound voltage level (S. P. L)	Output sound pressure level(S.P.L)	88±3dB(at1000,1.2K,1.5K,2.0KHz 0dB=20 upa) Measurement is as shown in fig(2), Ouput1W
麦克风输入频响范围(HZ)	microphone input frequencyresponse range:	200~12 KHZ
信噪比(DB)	Signal to noise ration	>80 dB
RF特性	RF character	
频率范围(HZ)	Frequency range:	2.402-2.480GHz
发射功率(DB)	Transmitted power	-2 ~ 4 dBm
载波频差(HZ)	carrier frequency offset	-40~40 KHz
通讯距离(M)	Communication distance (M)	正向不小于15M, 反向不小于5M

接受灵敏度 (DBM)	Receiving sensitivity (DBM)	-80~-93 dBM
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在 0.1% BER下的接受信号强度 (DBM)	received signal strength under 0.1% BER (bluetooth standard $\geq -20$ dBm) (DBM)	3dBm
<b>电特性</b>	<b>Electrical characteristics</b>	
充电输入电压范围 (V)	Charge input voltage range:	4.7~6V
充电器最小电流要求 (MA)	Charger minimum current:	500mA
电池充电饱和电压 (V)	Charge full voltage:	4.1~4.25V
低压提示 (V)	Low tension:	3.3~3.5V
低压自动关机 (V)	Low tension auto power-off:	3.1~3.2V
通话电流 (MA)	Speaking current(MA)	≒150 mA
播放音乐电流 (MA)	Play music current( MA)	≒200
待机电流 (MA)	Standby current(MA)	≒15mA
漏电流 (UA)	Leakage current(UA)	≒10uA
充电电流	Charger current:	350~400 mA

#### 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.

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

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.

#### Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.