

ZS2400 User Manual

(ZigBee Speaker Mic)



SHINPOONG Electronics inc.

Contents

Product overview

In the package

Part description

How to use ZS2400

Mode Selection

Power on/off

Mode & CH Change

Normal & Intercom Change

Volume control

Low Battery

Charging

Specification

Appendix

Declaration of confirmation

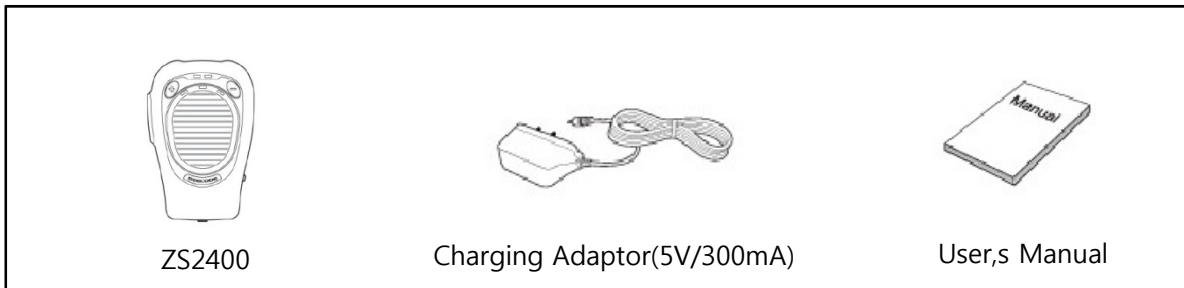
WARRANTY

Product Overview

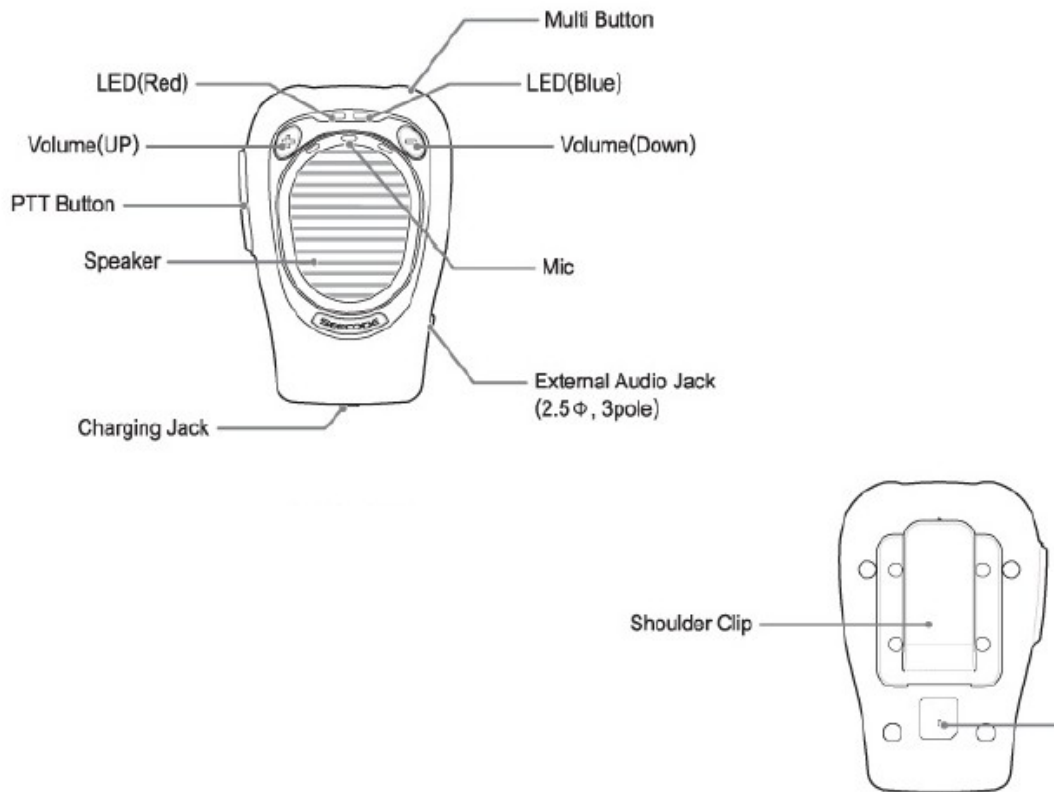
Thank you for choosing SEECODE ZigBee Speaker Mic. This device connect Your two-way radio to ZigBee Speaker Mic without wire and let you more Comfortable to use.

You can put heavy two-way radio in car or office and just use ZigBee Speaker Mic. Instead. This device removes inconvenience and danger especially for police, sailor, Workers in plant, construction site & etc.

In the package



Part description



How to use ZS2400

Mode Selection

This device is available with 2 types of mode

- Normal Mode : This device control transmitting/receiving remotely by connecting ZigBee module in two-way radio. This device is available with two-way radio supporting ZigBee and uses 8 channels from 11 to 18.
- Intercom Mode: Once you set up a channel between ZigBee Shoulder Mic, you can transmit and receive messages each other at short range without two-way radio. Multiple users(256 people) can transmit/receive messages at short range at the same time. The device uses 8 channels from 19 to 26.

Power ON

In Power Off state, when you press MULTI button over a second, the power turns on with Booting tone and informs Mode and Channel with voice.

- Normal Mode : It informs Channel information with voice.
- Intercom Mode : It informs Intercom Mode and Channel information with voice.

Power OFF

In Power On state, when you press MULTI button over a second, the device turn off with Booting tone.

How to change Normal/Intercom Mode

Normal Mode

- 1) In Power Off state, when you press Volume Up with MULTI button, RED and BLUE LED come on with 'INTERCOM' sound and the device goes to change mode of Normal channel.
- 2) In this state, you can change channels from 1 to 8 by pressing Volume Up/Down button.
- 3) After setting up a channel, when you press PTT button, it will be completed.
- 4) When pressing MULTI button, the device turn on and you will hear set channel information after 'INTERCOM' sound.

Intercom Mode

- 1) In Power Off state, when you press Volume Up with MULTI button, RED and BLUE LED come on with 'INTERCOM' sound and the device goes to change mode of Intercom channel.
- 2) In this state, you can change channels from 1 to 8 by pressing Volume Up/Down button.
- 3) After setting up a channel, when you press PTT button, it will be completed.
- 4) When pressing MULTI button, the device turn on and you will hear set channel information after 'INTERCOM' sound.

How to Change Normal/Intercom Mode

While using the device you can change to Normal/Intercom mode. You should press Volume Up button over a second for changing from present mode to other.

If you are using normal mode now, it will change intercom mode and inform 'INTERCOM' and channel information by voice. But if you are using Intercom mode now, you will hear only Channel information when it goes to Normal mode.

Volume Control

There are 5 levels of volume. You can control by pressing Volume Up/Down button. When you control volume in standby state, you hear beeps. But in receiving state, in order to prevent cutting off receiving voice, you can control the volume without hearing beeps prevent cutting off receiving voice.

Low-Battery State

In Low-Batter State, it beeps at interval of 5 seconds and turns off automatically after 5 minutes with booting sound. The device will not turn on again unless you recharge it.

Charging

This device can be charged in On/Off state in any circumstances.

ZigBee speaker Mic has a built-in battery and needs to be fully charged before using. You can charge with Charging Adapter. Charging time is less than 3 hours and BLUE/RED LEDs blink every 3 seconds. All LEDs turn off when charging is completed.

When you charge in 'On' state, RED LED will turn off and BLUE LED blinks every 5 seconds. When it charge in 'OFF' state, all LEDs turn off.

Specification

Specification	
Base technology	IEEE802.15.4
Frequency	2.405~2.480GHz
Channel	11~26CH
Extended Device	65536
Power	20dBm(100mW)
Sensitivity	-85dBm
Distance	100m(LOS)
Data Rate	1Mbps(Voice Application)
Chip Modulation	OQPSK
Application	Voice
Dimension	88(L)x59(W)x27(H)
Weight	113g
Operating Temp	-10~+60
Battery	3.7V/1,000mA
Talk time	
Stand-by time	

Declaration of confirmation

Section 15.19 Labelling requirements

This device complies with part 15 of the FCC rules.

Operations 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.


Section 15.21 Information to user

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

IMPORTANT NOTE

To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

WARRANTY

<h3>WARRANTY</h3> <p>This product was produced under strict quality management and inspection.</p>	
Free of charge service	
1. All defective units within the applicable Warranty period/s will be repaired or replaced, in the case those faulty goods were handled normally.	
2. If you use it commercially, the warranty period/s will be reduced half.	
Free of charge Warranty shall not apply to	
1. Defects or damage resulting from use of the unit in other than its normal and intended manner, eg. in excess of their maximum specifications or operating instructions.	
2. Defects or damage from misuse, accident, neglect, improper testing, installation, alteration or modification of any kind, or spillage of food or liquid.	
3. Faulty is caused by a nature Disaster.	
4. The capacity of expendables is exhausted.	
Product name	
Model number	
Warranty period	
Purchases date	
Outlet the unit was purchased	
Tel	
Customer	Address
	Name
	Tel
	

FCC Information to User

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 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.



Caution

Modifications not expressly approved by the party responsible for compliance could void the 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

IMPORTANT NOTE:

IMPORTANT Safety Instruction:

CAUTION	
To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside, refer servicing to qualified personnel.	
	This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure-voltage that may be sufficient to constitute a risk of shock.
	This symbol, wherever it appears, alerts you to the important operating and maintenance instructions in the accompanying literature. Please read the manual.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this equipment near water.
- 6) Do not use near any heat sources such as radiators, heat resistors, stove, or other equipment that produce heat.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Shinpoong Electronics Inc.

A1107, Gwangmyeong TechnoPark, 60, Haan-ro, Gwangmyeong-si, Gyeonggi-do, KOREA

TEL : +82-70-8855-8300 / FAX : +82-2-2083-2272 / E-mail : jaebongoh@hanmail.net

CONTACT INFORMATION

Manufacturer Address : A1107, Gwangmyeong TechnoPark, 60, Haan-ro, Gwangmyeong-si,
Gyeonggi-do, KOREA

To locate in-country Shinpoong Electronics Inc., distributors of the ZigBee Shoulder Speaker Microphone
please refer to the Shinpoong Electronics Inc. Website <http://www.seecode.com>

These distributor(s) represent local contacts for this product.

CORPORATE HEADQUARTERS:

Shinpoong Electronics Inc.

A1107, Gwangmyeong TechnoPark, 60, Haan-ro, Gwangmyeong-si, Gyeonggi-do, KOREA

Tel: +82-70-8855-8300

Fax: +82-2-2083-2272

E-mail: jaebongoh@hanmail.net

Web: [http:// www.seecode.com](http://www.seecode.com)

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is Subject to the following two condition: (1) this device may not cause interference
,and (2) this device must accept any interference, including interference that may cause undesired
operation of the device.

EUROPEAN UNION “DECLARATION OF CONFORMITY”

DECLARATION OF CONFORMITY

Shinpoong Electronics Inc.

A1107, Gwangmyeong TechnoPark, 60, Haan-ro, Gwangmyeong-si, Gyeonggi-do, KOREA

declare under our sole responsibility that the product(s)

ZigBee Shoulder Speaker Microphone – ZS2400

to which this declaration relate(s) is in conformance with the following standards:

EN 301 489-1 V1.9.2:2011

EN 301 489-17 V2.2.1 :2012

EN60950-1:2006

EN 300 328 V1.7.1:2006

following the provisions of the 1999/5/EC Directives.