

chierda, LUITON

two way radio

User Manual

Model Name: CD-528, LT-5280

FCC ID: OA8CD-528

SAFETY TRAINING INFORMATION



Your Quanzhou Chierda Electronic Telecom Co.,Ltd. radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only”, meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only”. In addition, your Quanzhou Chierda Electronic Telecom Co.,Ltd. radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- ▮ FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- ▮ American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- ▮ American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields– RF and Microwave.
- ▮ The following accessories are authorized for use with this product. Use of accessories other than those (listed in the instruction) specified may result in RF exposure levels exceed the FCC requirements for wireless RF exposure.



To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- ▮ **DO NOT** operate the radio without a proper antenna attached, as this may damaged the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.
- ▮ **DO NOT** transmits for more than 50% of total radio use time (“50%duty cycle”). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the “TX indicator” lights red. You can cause the radio to transmit by pressing the “PTT” switch.
- ▮ **ALWAYS** keep the antenna at least 2.5 cm (1 inch) away from the body when transmitting and only use the HYT belt-clip which is listed in instructions when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Quanzhou Chierda Electronic Telecom Co.,Ltd. radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

MAINTENNANCE & PROTECTION

- ◆ Keep it dry, otherwise rainwater and dampness perhaps erode the electron line of PCB.
- ◆ Maintenance can only be undertaken by professional technicians.
- ◆ Do not use the radio or charge the battery in the environment (such as gas, dust ,or vapor)
- ◆ Do not turn on the radio while refueling at the gas station
- ◆ Do not put it in the extreme dusty, wet or splashed places, or on the unsteady surface
- ◆ To change antenna, only can be used antenna appointed.
- ◆ Do not directly touch in antenna or microphone

Caution:

If the equipment can not work normal, please sent to it distributor to maintains.

SAFETY ISSUE

- ◆ The Radio can't be used until your local Government permits it.
- ◆ Turn off the radio in flammable & explosive easily place
- ◆ Do not either replace battery, or charge battery in flammable & explosive easily place
- ◆ Do not use The Radio with damaged antenna.
- ◆ Do not disassemble the Radio, which must be maintained by professional technician.
- ◆ In order to avoid electromagnetism interfering as well as similar issue, please turn off the Radio in the place where it is forbidden to use wireless equipment, such as at Hospital, Airport, Oil Station.
- ◆ Do not hold the Radio near the effective space of the Air-bag in the car.
- ◆ Does not either put the Radio in the Sunshine for a long time, or near the hot equipment.
- ◆ Let the Radio upright when it is transmitting, and speak closely to the Radio.
- ◆ If the radio is put on your body, you body must keep about 2.5cm away from the antenna.

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ENCLOSED FORMS

Form 1: Technical Data

Frequency Range	400-470MHz
Memory Channel	16 (15+S)
Channel Spacing	Narrow band :12.50kHz
Frequency Sensitivity	± 2.5PPM
Working Temperature	-25°C-+55°C
Antenna Impedance	50 Ω
Working Voltage	7.2V
Reliable Standard	GB/T15844-1995
Output Power	5W
Audio Distortion	≤5%
RF Sensitivity	Narrow band 0.18uV
Selectivity	Narrow band 55dB
Inter-modulation	55dB
Audio Frequency Power	≥500mW
Measurement (wxdxh) mm	116x61x35mm

Thanks!

Welcome to using our two way radio, which it called "**The Radio**" in the down-said words, We believe The Radio is of stable communication, reliable quality and high feature as well as nice design.

The Radio have met the standard of the People's Republic of China GB/T15844-1995.

PRODUCTS INSPECTION

After you unwrap the color gift box, please check if it includes the following fittings and equipments.

Commodities



Note: Please refer to the antenna at the bottom of the antenna band circular labels.

02

Form 2 : Frequency form

Model No : _____

Channel	Transmit	QT/DQT	Receive	QT/DQT
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

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WARNING

We are not responsible for the following items

- (1) If the Antenna don't button up well with the two way radio
- (2) If plastic cover for microphone/earphone jack don't cover well.
- (3) If don't have been authorized to mentence/disassemble by our own factory, which result in water inflow.

CAUTION

- (1) After you use earphone with the radio, please fasten the cover jack down well soon in order to prevent water into the earphone/mirophone jack.
- (2) After the radio will be showered or falled into the water, you are required to dry the aluminium board, main body of the radio and battery pack as well as the contacting terminals and screws. Otherwise it maybe rust, which will result in no touching well .

FAQ

QUESTION	SOLUTION
No power	<ul style="list-style-type: none"> ● The battery have been used up ● Please recharge, or replace new one
Battery's continuous working time is very short after charged	<ul style="list-style-type: none"> ● The battery's life is finished ● Replace new battery
Can't talk with other member in your group	<ul style="list-style-type: none"> ● The members of the same group perhaps are too far away, make sure you are in effective range ● Be sure the QT/DQT of your radio is same as others
Haven't voice of your own group but other group	<ul style="list-style-type: none"> ● Please change your QT/DQT tone as well as all QT/DQT of your group
The volume is very low while transmit/receive	<ul style="list-style-type: none"> ● Be sure your Volume Knob is up to the final position clockwise ● Or send the radio to repair to the appointed place
Have noise always	<ul style="list-style-type: none"> ● Maybe the other member of your group is very far ● They or you walk closer each other/one anogther, and then try again

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Functions & characters:

- ◆ Waterproof IP 66 & dustproof
- ◆ Reduce noise
- ◆ Little for easily using
- ◆ Voice prompt(Chinese and English)
- ◆ Emergency alarm function
- ◆ Call function
- ◆ CTCSS/CDCSS
- ◆ Wide/narrow bandwidth(25KHZ/12.5KHZ)
- ◆ Wide range frequency design
- ◆ Low battery alarm function
- ◆ power protection
- ◆ PC programmable
- ◆ TOT
- ◆ Data copied by program cable



Warranty Card

Model: _____ purchasing time: _____

Serial number: _____

Seller: _____ telephone number: _____

User: _____ telephone number: _____

Address: _____ post code: _____

Warranty Note

- 1、 this card for the customer using, can not claim by it.
- 2、 this card is valid for stamping on seller or filled in date.
- 3、 this card can not be tamper with serial number and machine code number, otherwise it is not valid.
- 4、 we supply one year warranty for radio, only machine, charger, battery, earphone, and antenna are belong to consumer goods, it is not for warranty.
- 5、 Users can get warranty service for this radio from the Contributor or our Factory.

Cut along this line

when you choose channel, that is, the Sound Reminding function will be turn off.

- If you don't want to operate to program Software by Computer, you can directly press PF2 key not release for 2 seconds, meanwhile power on, after a pronunciation of [di:] sound, and then press MONI key, which will switch the other way of Sound Reminding for channel number. Repeat to circle such same way.

Mode Of Battery Saving

The radio will keep the mode of battery saving when it haven't received signal, or doesn't operating for continuously 10 seconds. (The function can be set up in the Program Software by Computer).

Busy Channel Lock Out (BCLO)

- After the BCLO function is running, which prevent other Radio which use same frequency to interface your communication.
- Usually the BCLO function is off when the radio leaves the factory.
- If the BCLO function of the channel chosen by Frequency Software/Distributor is on, the radio will has sound of "beep" while you are pressing PTT key (not releasing) and when the channel is working by other men of the Same Group. The sound of "beep" will stop after release the PTT key.

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Install/Remove Antenna

Install Antenna: 1、 Take the antenna to aim at SMA Connector of the Radio.

- And then screw down well along clockwise. (see pic.5)

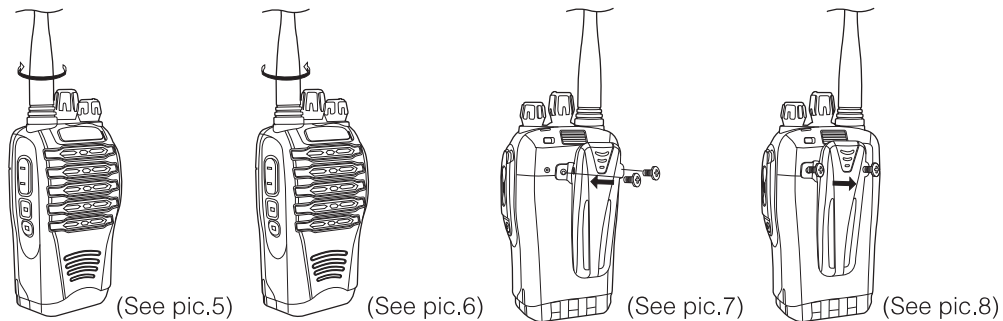
Remove Antenna: Otherwise, screw it off anti-clockwise. (see pic.6)

Install/Remove Belt Clip

Install Belt clip: The 2 eyelets of the belt clip is aimed at the 2 ones of Main Radio's back, and

then screw down with suited screws.(see pic.7)

Remove Belt clip: directly screw it off. (see pic.8)



(See pic.5)

(See pic.6)

(See pic.7)

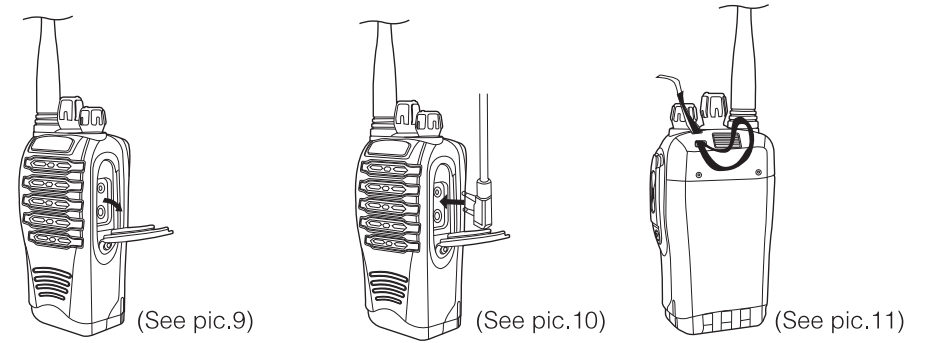
(See pic.8)

Install Extra Purchasing Earphone/Mic

- Unclose (not take down) cover for Earphone/Mic jack. (see pic.9)
- Earphone/Microphone is plugged into the jack. (see pic.10)

Install String

The string is passed through the eyelet of Radio's back.(see pic.11)



(See pic.9)

(See pic.10)

(See pic.11)

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- When the channel is free , the radio will transmit/call while you press PTT key again

Scan Feature

- Usually the scan function is off when the radio leaves the factory.
- The scan function is set up by Menu <Edit>→<Option Setting (0)> of Programming Software, you can choose Key PF1 or key PF2 . Press PF1 or PF2 key, it will automatically scan, the radio will stay the current channel when it receive scanning signal. And then it will automatically start to scan again if the signal disappear after 3 seconds.
- If you press PTT key, when the radio is scanning, the radio will transmit the current frequency /channel.

Time-out Timer (TOT) : Can Be Set Up Program Software By PC

- The purpose of the Time-out Timer is to prevent any one person always is using a certain channel for longer time.
- If you continuously transmit for more than 60 minutes (because it is set up for 60 minutes in Frequency Software on Computer before leave factory), the transceiver will stop transmitting and a Beep Tone will sound.

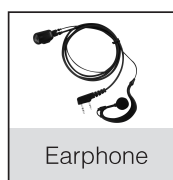
15

EXTRA PURCHASING FITTING

Our extra purchasing fitting of good quality as follows can be available.



Antenna



Earphone



Program Cable



Programming Cable

THE WAY OF USE

Battery

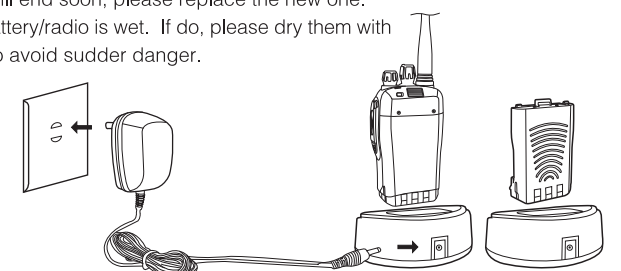
Please use our appointed battery to charge the radio, otherwise, we will not be responsible for it if explosion.

Caution:

- Do not either be short-circuit the battery, or threw it into fire, and do not disassemble it.
- Charge the battery in the Temperature 0°C– 45°C.
- Turn off the Radio when charging.
- Do not take the radio out from charger when charging.
- The talking time get very short even though it will be full-charged under the normal condition, which means the life of battery will end soon, please replace the new one.
- Do not charge the battery/radio when the battery/radio is wet. If do, please dry them with dry cloth, and then charge them, in order to avoid sudder danger.

Alarm:

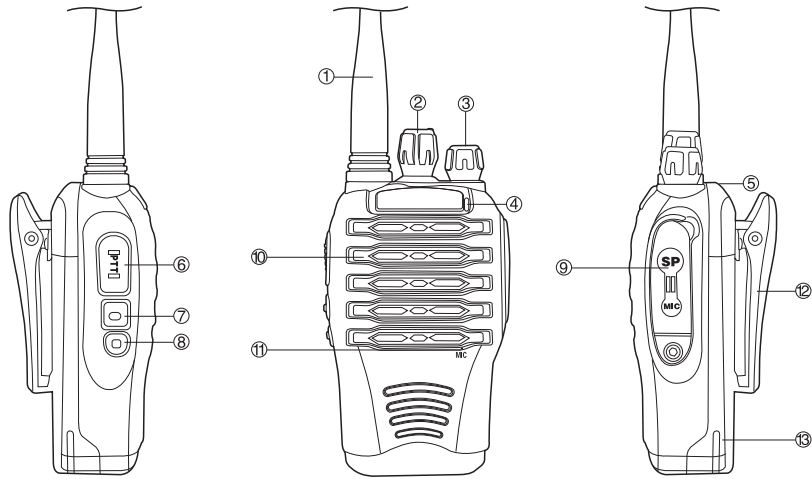
Please don't let some metal parts contact the anode (+) and cathode (-) of the battery or radio at the same time.



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03

THE TWO WAY RADIO



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- ◆ To stop the Beep Tone, release the PTT key.
- ◆ You can press the PTT key again to resume transmitting.

QT/DQT

The radio has pre-programmed 38 groups QT and 83 groups DQT (set up by Program Software of Computer).

- ◆ On the basis of same channel, they can transmit and receive each other/one another at the same QT and same DQT.
- ◆ When you receive the other radios which have different QT/DQT, you won't heard the clear signal.
- ◆ When you transmit the signal, your signal can be heard by only the Radio which have same QT/DQT. Caution: In despite of using the Channel which hasn't QT/DQT, you can avoid to receive the signal which you don't want. However it doesn't means that it is not private!

Charging operation

Charge the radio please do it as following items:

- 1、 Turn off the power of the two way radio.
- 2、 The DC plug-pin of Power Adapter is connected to the DC female jack of the charger.
- 3、 The AC plug-pin of Power Adapter is connected to female jack of AC Power socket.
- 4、 The battery (or the radio with battery) are upright plugged into the Charger, and confirm battery normally contact to the terminals of charger.

Charging indication

The indication light gets red when charge the battery, however It gets green when it is full-charged.

Caution when charging

- 1、 The battery is not be charged when it leave from factory, please charge the battery before you use it. And please charge the battery for 1 or 2 times if it keep for a long time.
- 2、 The capacity of the battery will reach the best state after you charge and discharge the battery to circle for 2-3 times. Please charge the battery or replace the battery when you find the capacity is very low.
- 3、 The use time of the battery get shorter and shorter, what's more, you always keep it to charge it on the normal condition, which the life of battery will end soon, please contact the local distributor to purchase new one.

04

Monitor

Such weaker signal can't be heard on the condition of normal operation when press PF1 key (not release), and adjust the volume by Power/Volume Knob. Cancel monitoring after you release PF1 key. (The function is set up by Computer).

Reduce / Avoid Noise

Setting up (turn on) or (turn off) in programming software by computer.

Dustproof & Waterproof

The transceiver is of dustproof & waterproof IP66. When it drop into water/river/rain for a while, please hold it and throw (but not leave go of your hand), finally the transceiver is easir to work/talk.

Urgent Alarm

Special sound will be heard when you press (not release) PF2 key for a longer time on condition after powered on. Alarm function will exit if you press any key again.

OTHER FUNCTION PROGRAMMED BY PC

Sound Reminding

- 1、 Turn the Power/Volume Knob clockwise "power on" sound (in Chinese or English) will be heard, but you also can set up in the Programming Software by Computer, the Radio will keep silence

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Antenna

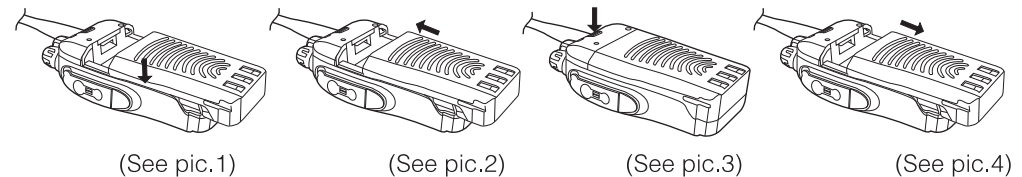
Thicker and shorter antenna is very suitable for talking in a short distance, thinner and longer antenna reaches the best talking effect by each other.

Install/Remove

Install/remove battery

Install battery: the 2 flutes of the battery aim at orbit of aluminum frame of the equipment make sure the battery fully contact aluminum frame. (See pic.1) and then push parallel along the orbit of aluminum frame, till they are buttoned well. (See pic.2)

Remove battery: Please turn off the two way radio if you want to remove the battery, and then press the battery button down (see pic.3) meanwhile push the battery out of the two way radio (see pic.4)



(See pic.1)

(See pic.2)

(See pic.3)

(See pic.4)

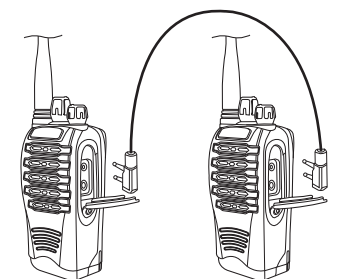
05

Low Battery Warning

When the voltage fall down to lowest level, the tone of "please charge" will sound, required to replace battery or recharge the battery.

Data Copied By Cable

- ◆ Firstly power on the radio which accept data, keep it the mode of use, then press the PF2 key of the other radio which transmit data but not release, meanwhile it is powered on and go on pressing PTT key for 2 seconds, now they step in the mode of copying data after you hear a tone [di:]. And then the 2 radios are connected by special copying cable well (see the right picture), press PTT key of the radio which transmit data, the green light of the radio which receive data will flash on and off very quickly when it receive the copy data. The green light will go out when receiving signal finish.
- ◆ If want to transmit the copy data to others, you can take same way to repeat it.



(Transmit data radio) (Receive data radio)

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BASIC OPERATION

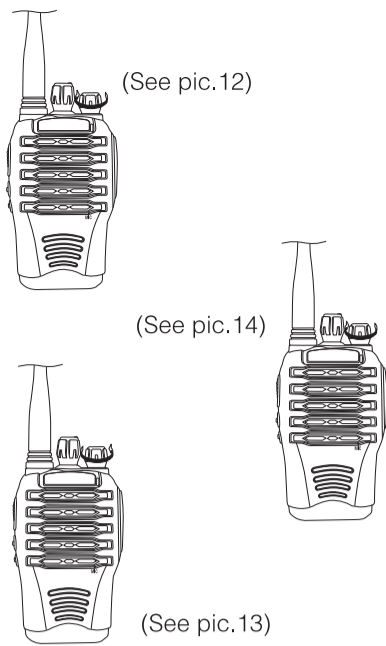
Power on and power off

Turn the Power/Volume Knob clockwise (see pic.12), "power on" sound (in Chinese or English) will be heard, at this time mean that it can work. But after you can set up in the Programming Software by Computer, the Radio will keep silence when you choose channel, that is, the sound of channel number can't be heard.

Otherwise turn the Power/Volume counter-clockwise (see pic.13), a special sound will be heard, at this time mean that the Radio is powered off.

Adjust Volume

On the condition that the Radio is powered on, you can adjust the volume when turn the Power/Volume Knob clockwise/counter-clockwise (see pic.14), the sound get louder/lower.



Choosing Channel

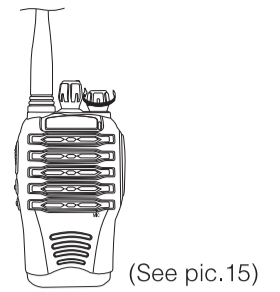
On the condition that the Radio is powered on, you can directly choose Channel 1–16 you want. (see pic.15)

Transmit (Call)

Firstly press PTT key but not release when you are transmitting (calling) the other one, you'd better keep your mouth about 5cm away from your radio's microphone.

Note:

1. the indication light get red when you press PTT key, it is transmitting at this time.
2. If the indication light is flashing on and off, the capacity of Radio's battery is very lower at this time; meanwhile the radio also can't work normally. Therefore at this time the Radio can't transmit (call).



Receiving

Do not press PTT key when you receive other one, at this time you will heard some sound of the caller.

BASIC OPERATION

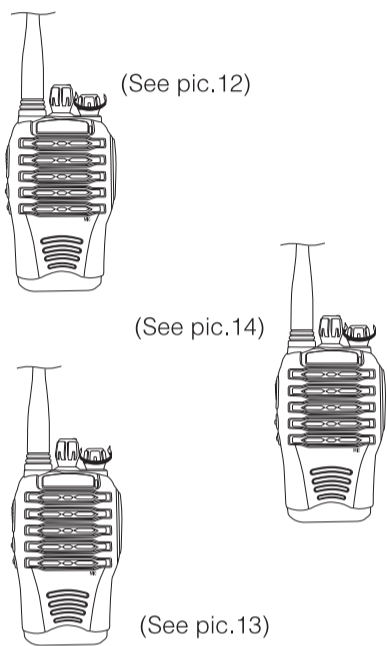
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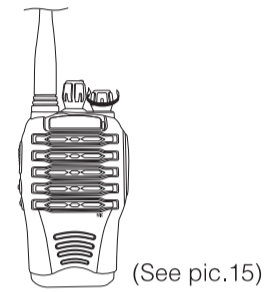
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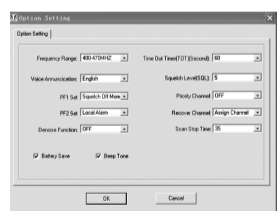
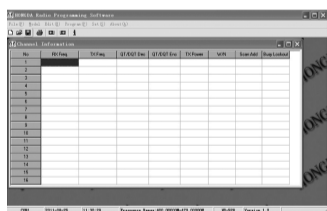
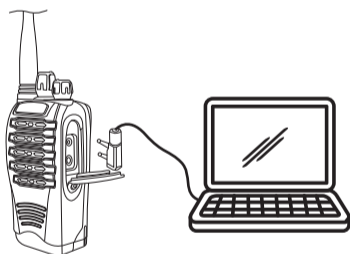
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SENIOR OPERATION

Some senior operation can be set up by Computer, such as sound reminding of Chinese or English for Channel Number, or keep silence for Channel number when you turn Volume Knob. Or write frequency of each channel in the Programming Software by Computer.

Writing Frequency By Computer

1. Firstly power off the Radio, the radio is connected to Computer by program cable well (see right picture)
2. Then power on the Radio, at this time you can write the Frequency on the Computer after the Frequency Software.
3. Login our company website: www.fjhd.com and then download CD-528 program software in my website



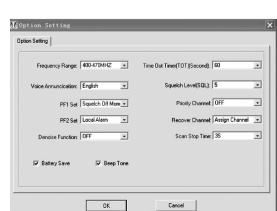
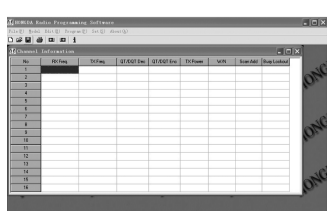
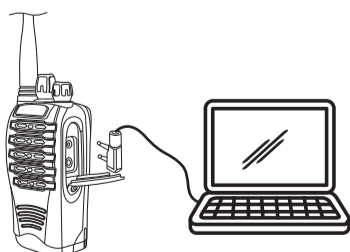
- ① **Antenna**
Transmit/Receive signal.
- ② **Channel Knob**
choose the Channel Number you want after turn on your Radio, meanwhile it have sound of Channel's Number.
- ③ **Power Knob/Volume Knob**
turn on the Radio, and regulate the volume of sound.
- ④ **Indication Light (LED)**
It is red when transmitting, green when receiving. The red light will flash on and off when the capacity of battery is very less. the green light will flash on and off when scanning.
- ⑤ **Eyelet for string**
- ⑥ **PTT Key**
press the key when transmitting, otherwise, releases the key when receiving.
- ⑦ **Middle key-PF1 key: Be set up by Menu <Edit>→<Option Setting (0)> of Programming Software.**
- ⑧ **PF2 key: Be set up by Menu <Edit>→<Option Setting (0)> of Programming Software.**
- ⑨ **MIC-SP jack/Data Port**
Connect earphone or programming cable.
- ⑩ **Speaker**
Sound Output.
- ⑪ **Microphone**
Sound Input
- ⑫ **Belt Clip**
it is very convenient for wearing belt clip to radio
- ⑬ **Li-ion battery**

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