

SoonTone[®]

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ST-3108

Working Frequency:

136~174MHz/400~470MHz etc.

In-built VOX function, hands-free talking,

In-built CTCSS code/decode



USER'S MANUAL

Wide-band, High Performance Professional FM Handheld Transceiver

SAFETY TRAINING INFORMATION



Your **3108** 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 **3108** 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 exceeding the FCC requirements for wireless RF exposure.



To ensure that your exposure 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 damage 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** transmit 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 5188 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 **3108** 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.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver

SAVE THIS INSTRUCTION MANUAL- This instruction manual contains important operating instructions for the Two-Way Radio

EXPLICIT DEFINITIONS

WORD	DEFINITION
WARNING	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

OPERATING NOTES

- When transmitting with a portable radio, hold the radio in a vertical position with its microphone 5 to 10 cm (2 to 4 inches) away from your mouth. Keep the antenna at least 2.5 cm (1 inch) from your head and body.
- If you wear a portable two-way radio on your body, ensure that the antenna is at least 2.5 centimeters (1 inch) from your body when transmitting.

PRECAUTIONS

- **WARNING! NEVER** hold the transceiver so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting. The transceiver will perform best if the microphone is 5 to 10 cm (2 to 4 inches) away from the lips and the transceiver is vertical.
- **WARNING! NEVER** operate the transceiver with a headset or other audio accessories at high volume levels.
- **CAUTION! NEVER** short the terminals of the battery pack.
- **NEVER** connect the transceiver to a power source other than the Battery listed below. Such a connection will ruin the transceiver.
- **DO NOT** push the PTT when not actually desiring to transmit.
- **AVOID** using or placing the transceiver in direct sunlight or in areas with temperatures below -30°C (-22°F) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$).
- **DO NOT** modify the transceiver for any reason.
- **MAKE SURE** the flexible antenna and battery pack are securely attached to the transceiver, and that the antenna and battery pack are dry before attachment. Exposing the inside of the transceiver to water will result in serious damage to the transceiver.
- **BE CAREFUL!** The series transceivers employ waterproof construction, which corresponds to IPX7 of the international standard IEC 60529 (2001), 1 m depth for 30 minutes. However, once the transceiver has been dropped, waterproofing cannot be guaranteed due to the fact that the transceiver may be cracked, or the waterproof seal damaged, etc.

The use of **non-5188** battery packs/chargers may impair transceiver performance and invalidate the warranty.

FCC CAUTION:

Changes or modifications to this device, not expressly approved by **3108**, could void your authority to operate this transceiver under FCC regulations.

THANK YOU!

We are grateful for your purchase this transceiver. We believe this easy-to-use transceiver will provide you with dependable and reliable communications.

This transceiver is a wide-band professional FM transceiver with high quality, it will provide you reliable communication from 136-174MHz or 400-470MHz with advanced technology and workmanship, for better performance, please read the manual before use.

MODELS COVERED BY THIS MANUAL

16-channel VHF FM Transceiver 136-150MHz
16-channel VHF FM Transceiver 150-174MHz
16-channel UHF FM Transceiver 400-440MHz
16-channel UHF FM Transceiver 450-470MHz

The transceiver apply for the software of QXPG-36D

Note: For avoiding mistakes, should read the data first, then program.

QUICK-OPERATION GUIDE

Function	Operation	Page
High Power	Press [PTT] to switch ON and pressing for 5 seconds more. Turn the channel selector to channel 1 and save by pressing [PTT] then switch OFF and reboot.	12
Low Power	Press [PTT] to switch ON and pressing for 5 seconds more. Turn the channel selector to channel 2 and save by pressing [PTT] then switch OFF and reboot.	12
OFF Reporting Number	Press [PTT] to switch ON and pressing for 5 seconds more. Turn the channel selector to channel 3 and save by pressing [PTT] then switch OFF and reboot.	11
Reporting Number in Chinese	Press [PTT] to switch ON and pressing for 5 seconds more. Turn the channel selector to channel 4 and save by pressing [PTT] then switch OFF and reboot.	11
Reporting Number in English	Press [PTT] to switch ON and pressing for 5 seconds more. Turn the channel selector to channel 5 and save by pressing [PTT] then switch OFF and reboot.	11
VOX	Press [MONI] to switch ON and pressing for 5 seconds more. Turn the channel selector to select VOX gain.1(L)-16(H). Save by pressing [PTT] while cancel by pressing [MONI]. Switch OFF and reboot.	11

PROMPT GUIDE

"Da da" sounds at intervals.	Out of lock, programmable frequency over the frequency range of the transceiver.
The red flashes when transmitting and keep communicating.	The voltage of battery is low. Please charge!
The transmitting will stop when the red flashes and "du" sounds.	The voltage of battery is too low. Please charge at once!
The transmitting (last a little while) will stop when hear constant "du" from speaker.	Time-out timing warning Release [PTT] and retransmit.
When receive signal, the kelly light on, Press [PTT] to transmit and "du" sounds. It will back to receive and cannot be transmitted.	Busy channel lock has been set.
When receive signals, the kelly light on, but the speaker cannot voice.	QT or DQT has been set.
It will transmit automatically when talking without press [PTT].	VOX has been set.

SAFETY

It is important that the operator is aware of, and understands, hazards common to the operation of any transceiver.

PRECAUTIONS

- Refer service to qualified technicians only.
- Do not operate the transceiver or charge a battery pack in explosive atmosphere (gases, dust, fumes, etc.).
- Do not modify or attempt to adjust this transceiver for any reason.
- Do not expose the transceiver to long periods of direct sunlight, nor place it close to hot appliances.
- Do not place the transceiver in excessively dusty, humid, and/or wet areas, nor on unstable surface.
- If you find the transceiver with strange smell or smoking, please turn it off and move the batteries.



WARNING

Turn OFF the transceiver while taking on fuel or while parked in a gasoline service station.

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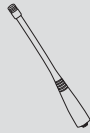
UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the transmitter. We suggest that you confirm the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

■ Standard Accessories

ITEM	QUANTITY	
Antenna	136-174MHz	1
	350-390MHz	
	400-470MHz	
	470-512MHz	
Li-ion Desktop charger	1	
Adaptor	1	
Li-ion battery pack 7.4V 1100mAh	1	
Belt clip	1	
Instruction manual	1	

Standard Accessories



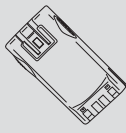
Antenna



Li-ion Desktop charger



Adaptor



Li-ion battery pack



Belt clip

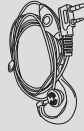


Instruction manual

Optional Accessories



Headset



Speaker/Mic (QME-01)



Speaker/Mic (QME-02)



Programming Software



Programming Cable



ST-6.5-150V-1



ST-8.5-150V-2

High gain antenna

PREPARATION

Charging the Li-ion Battery Pack

The battery pack is not charged at the factory; charge it before use. Initially charge the battery pack after purchase or xetended storage (over 2 months) will not bring the battery pack to its normal operating capacity. After repeated charge/discharge cycle two or three times, the operating capacity will increase to normal.

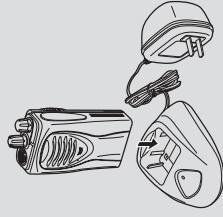
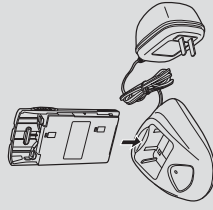


WARNING

- PLEASE USE THE SPECIFIED CHARGER, DO NOT DISASSEMBLY THE BATTERY PACK. ALL RESULT CAUSED BY DISASSEMBLY WITHOUT PERMISSION MUST BE BEAR BY THE USER ITSELF.
- DON'T SHORT CIRCUIT THE BATTERY TERMINALS OR DISPOSE OF IN FIRE.
- DON'T INSTALL THE BATTERY IN DANGEROUS SURROUNDING, SPARK WILL CAUSE EXPLOSION.

HOW TO CHARGE

- 1 Plug the desktop charger into an AC outlet Charging -----Green
- 2 Slide the Li-ion battery pack or transceiver with Li-ion battery pack into the charger slot, confirm the good touch between battery pack and charger.
Charging indicator-----Red
- 3 90% charged, the charging indicator will turn to Light Green.
- 4 Fully charged, the charging indicator will turn to Green.



After charging the supplied battery pack for 9 hours, remove it or the transceiver equipped with it from the charger.

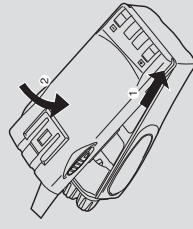
! WARNING

- DO NOT RECHARGE THE BATTERY PACK IF IT IS ALREADY FULLY CHARGED, DOING SO MAY SHORTEN THE LIFE OF THE BATTERY PACK OR THE BATTERY PACK MAY BE DAMAGED.

NOTE:

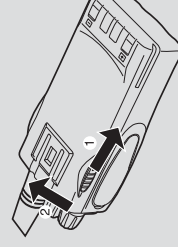
- The temperature of the charging surrounding shall be between 5°C to 40°C, or the battery pack can't be fully charged.
- Before charging, please turn off the transceiver, operating transceiver when it is on charging will affect the charging efficiency.
- The battery pack life is over when it's operating time still not increase even though it correctly fully charged.
Replace the battery pack.

INSTALLING/REMOVING THE BATTERY PACK



1. Match the two grooves of the battery pack with the corresponding guides on the transceiver bottom.

2. Slide the battery pack along the back of the transceiver until the release latch on the base of the transceiver locks.

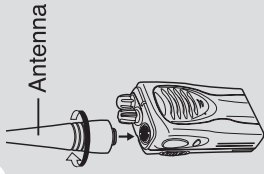


3. To remove the battery pack, pull back on the release latch and slide the pack away from the transceiver.

INSTALLING THE ANTENNA

Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure.

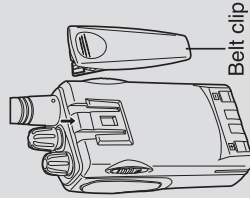
Note: Do not hang anything around the antenna. It may damage the antenna and effect transceiver's performance.



INSTALLING THE BELT CLIP

If necessary, please install the belt clip supplied together with transceiver to the back of the transceiver, it is more convenient for carrying.

- Slide down the belt clip into the slots on the back of the transceiver till it is tied.
- To remove the belt clip, please press the latch, then slide up.



GETTING ACQUAINTED

Antenna

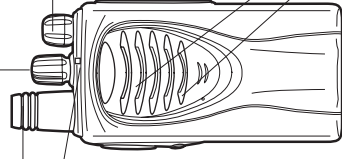
LED Indicator
Lights Red while transmitting, it is high power output. Lights **OPANGE** while transmitting, it is low power output. (Red and kelly light on at the same time), lights **GREEN** while receiving signal, Red flashes while transmitting under low battery volume.

Channel switch
Toggle this switch to select channels 1-16.

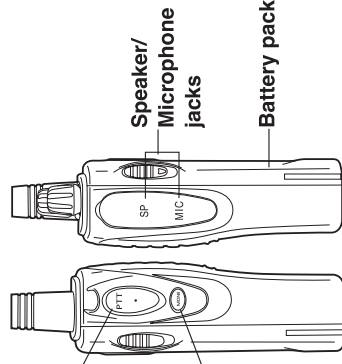
Power switch/volume control

Turn clockwise to switch **ON** the transceiver. To switch **OFF** the transceiver, turn counter clockwise until a click sounds. Rotate to adjust the volume level.

Speaker
Microphone

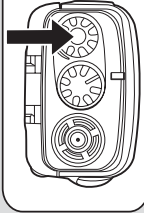


PTT (Push-To-Talk) switch
Press, then speak into the microphone to call a station. Release to receive.



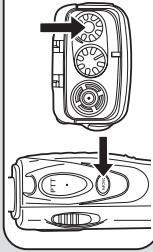
Monitor key
Press **[MONI]** key to hear background noise.

BASIC OPERATION

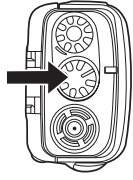


Switch **ON** the transceiver by turning the **Power switch/Volume control** clockwise.

- A "bi" sounds if the prompting voice has been set.

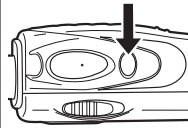


Adjust the volume by pressing and holding the **Monitor** key, then rotating the **Power switch/Volume control**.



Rotate the **Channel** selector to select your desired channel.

- When you receive an appropriate signal, you will hear audio from the speaker and the kelly lights on.



To make a call, press and hold the **PTT** switch, then speak into the microphone using your normal speaking voice.

- Hold the microphone approximately 1.5 inches (3 to 4 cm) from your lips, to ensure perfect communication.

Release the **PTT** switch to receive.

NOTE:

1. When it is in low power, press [**PTT**], the transmitting indicator flashes.
Please charge in time!
2. When the power is too low, press [**PTT**], the transmitting indicator ON and hear the alarm sound, it flashes continuously after releasing [**PTT**].
Please change the battery or charge.

ADVANCED OPERATION

VOX function

VOX function can support handsfree communication. 16 levels for free choice to get used to different environment.

1. Switch ON VOX

Turn the Power/Volume switch to OFF, press **[MONI]** more than 5 seconds and turn off the transceiver, you will hear prompt sounds, now VOX function is ON when you release it. VOX sensitivity is the same as that set last time.

Set VOX sensitivity:

When VOX function is ON, turn the channel switch to the necessary value (different sensitivity step according to different surroundings); Press **[PTT]** to save the setting value (1L~16H) while VOX is OFF by pressing **[MONI]**.

2. Switch OFF VOX

Turn Power/Volume switch to OFF, Press **[MONI]** more than 5 seconds, you will hear the prompt sounds then release the key. And press again to set off the VOX function. If you want to set on the function again, please repeat the procedure.

Voice Prompting Function

The transceiver provides with the Voice Prompting function. The speaker will sound for the current channel you choose.

1. Function option

Turn Power/Volume switch to ON, Press **[PTT]** for more than 5 sec-onds. Release **[PTT]** when hear the prompting, then enter the status of function option.

ADVANCED OPERATION

2. Voice prompting setting:

Enter the function status: turn the channel selector to choose the function you need. (1. High power: the red light ON; 2. Low power: the orange light ON; 3. Turn off the voice prompting function; 4. Voice prompting in Chinese; 5. Voice prompting in English). You can choose among 3, 4, 5 and save by pressing **[PTT]**.

Note: The functions can be chosen circularly.

3. Power off and restart then it will enter the finished setting.

High/Low power switch function

The transceiver spends a lot of battery capacity when it is in high power output. Choose low power output to save battery when in close communication. If the communicating distance is too far to choose high power output to transmit.

1. Enter the function status: switch OFF by turning the power/volume selector and press **[PTT]** to switch ON for more than 5 seconds then release it.

2. Choose High/Low power in function status: turn the channel selector to choose the function you need (1. High power: the red light ON; 2. Low power: the yellow light ON; 3. Turn off the voice prompting function; 4. Voice prompting in Chinese; 5. Voice prompting in English). You can turn the channel selector to choose between 1-2 for High/Low power and save by pressing **[PTT]**.

Note: The function can be chosen circularly.

3. Power off and restart then it will enter the finished setting.

AUXILIARY OPERATION

Adopt OXPG-36D (software) and OXPL-01 (program cable) to program.

How to set on/ set off scan and prior scan function.

Set "Scan/Shift" of CH1 to CH15 to be YES (at least one channel), then scan and prior scan is ON, these channels will be in scan list. Set "Scan/Deviation" of CH1 to CH15 to be NO, then scan and prior scan is OFF, and kick these channels out of scan list.

How to set

1. Please set "Scan/Shift" of CH1 to CH15 to be YES, then scanfunction is ON.
2. If you set "Scan/Shift" of CH 16 to be YES, then alert function is ON.
3. The superior prior channel: "Scan/Shift" of channel CH1 to CH15 (at least one channel) was set to be YES, at this time if CH16 is programmed with frequency, then it is the most prior channel.

Scan

When CH16 is not programmed with frequency, turn the channel switch to be in CH16, it will scan CH1 to CH15 which is in scan list automatically, when receiving signal, then begin communication. Function: when receiving the efficient signal, open squelch automatically to receive signal, within the power-saving duration (about 5 seconds), you can communicate with users under same channel, now the receiving party stay in CH16 to monitor all channels which "Scan/Shift" has been set to YES. As illustrate in the figure, CH4, CH5 and CH6 have been set to be YES, at this time if CH16 is empty, it will scan CH4, CH5 and CH6 in turn; When "Scan/Shift"

AUXILIARY OPERATION

of CH1 to CH15 are all set to be YES, it will scan CH 1 to CH15 in turn; When "Scan/Shift" of CH 1 to CH 15 are all set to be NO. Then CH16 will sound a long "Du....." to remind you that scan function is OFF.

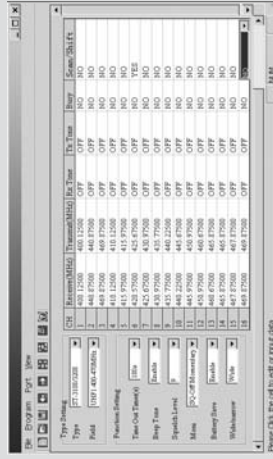
CH	Receiver(MHz)	Transmitter(MHz)	Bk Tone	Tx Tone	Busy	Scan/Shift
1	400.12500	400.12500	OFF	OFF	NO	NO
2	440.87500	440.87500	OFF	OFF	NO	NO
3	465.87500	465.87500	OFF	OFF	NO	NO
4	410.12500	410.12500	OFF	OFF	NO	NO
5	415.97500	415.97500	OFF	OFF	NO	NO
6	420.87500	420.87500	OFF	OFF	NO	NO
7	425.67500	430.67500	OFF	OFF	NO	NO
8	430.97500	435.75000	OFF	OFF	NO	NO
9	435.75000	440.25000	OFF	OFF	NO	NO
10	440.25000	445.67500	OFF	OFF	NO	NO
11	445.67500	450.87500	OFF	OFF	NO	NO
12	450.87500	460.87500	OFF	OFF	NO	NO
13	460.87500	465.87500	OFF	OFF	NO	NO
14	465.87500	465.87500	OFF	OFF	NO	NO
15	467.87500	467.87500	OFF	OFF	NO	NO
16	468.87500	468.87500	OFF	OFF	NO	NO

Prior Scan

1. When CH16 is programmed with frequency, and "Scan/Shift" of CH16 is set to be NO, then CH16 become prior scan channel, it will scan from CH1 to CH15 which have been set to be YES, and then scan CH16, work like the following: CH16, CH4, CH16, CH5, CH16 and CH6.
2. When CH16 is programmed with frequency, and "Scan/Shift" of CH16 is set to be NO, then no matter which channel from CH1 to CH15 which "Scan/Shift" have been set to be YES you are in, it will scan CH16 and the channel which the user stay in alternatively.

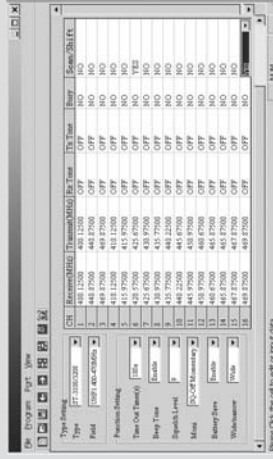
AUXILIARY OPERATION

While not scanning the channel which "Scan/Shift" have been set to be NO. Function: When the user is in CH16, he can press PTT to talk with other users whose "Scan/Shift" have been set to be YES, as well as monitor them.



Prior Alert

When CH16 is programmed with frequency, and "Scan/Shift" of CH16 is set to be YES, then when it receive signal, it will alert, press [MONI] key to exit, and communicate in the frequency of CH16.



AUXILIARY OPERATION

How to set off alert and scan

If alert and scan functions is ON, and often get disturbance, the users can set off alarm & scanning as following: Set the "Scan/Shift" of CH1 to CH16 to be NO, and enter the frequency and CTCSS.

Group Users

E.g. Divide 50 people into five groups A,B,C,D and E. and the corresponding channels from CH1 to CH5. The "Scan/Shift" of all five channels have been set to be YES(prior channels), set "Scan/Shift" of CH16 to be NO. Then we can operate as following: Group talk:Any member of the groups just switch to CH16, then press PTT to talk with all other members successfully. Talk to one channel:Any member of the groups just switch to corresponding channels of group A, B, C, D and E, then you can talk with one specific groups. E.g.: If group A wants to talk with group D, then just switch to the same channel as group D, then can talk with each other.

Note:

When programming the transceiver, CH 16 should set with CTCSS, especially when "Scan/Shift" is set to be YES. In order not to get disturbance from same channels.

Time Out Time(s)

The purpose of the time-out timer is to prevent any signal person from using a channel for an extended period of time. If you continuously transmit more than the programmed time set by dealer, the transceiver will stop transmitting and a tone of "bi" will sound. Release the [PTT] to stop the tone. When you press it again, it will resume to transmit. (The length of the time is set by the software of dealer.)

AUXILIARY OPERATION

Battery save

The battery save function decreases the amount of power used when a signal is not being received or no operations are being performed (without pressing the switch). The function will be started up when the channel is not engaged or no operation for more than 5 seconds. When receiving signals and operating, the function will be turned off automatically. (set **ON/OFF** the function by the software of dealer)

Low battery warning

Low battery warning alerts you when the battery needs to be recharged. While transmitting, if the battery power goes below a predetermined value, the indicator will flash. When a tone of "bi" sounds, the transceiver will stop transmitting. Please change the battery or recharge it.

Busy channel locked (Busy)

It can prevent from the interference with other radio used the same channel when switch on the function. When the channel is occupied, press [PTT], a warning tone will be heard and back to receiving status.

Squelch

It can make speaker mute. The squelch level decide when the squelch should be **ON/OFF**. If squelch level is too high, then you can not get weak signal; if the squelch level is too low, the user will get noise and keep receiving squelch level can be set from 1 to 9.

AUXILIARY OPERATION

Wide/Narrow Band

You can set wide/narrow band of the transceiver.

Note: The communication between the transceiver with wide band and the transceiver with narrow band, the voice volume is great with distortion. The squelch RF is easy to turn off according to the increasing voice. The communication between the transceiver with narrow band and the transceiver with wide band, the voice volume is low with great noise.

Prompt

Switch ON/OFF of the function. (The function covers all the prompt of the transceiver.)

CTCSS/DCS

Some channels may have pre-programmed **CTCSS** tones by dealer. a **CTCSS** tone is a subaudible tone which allows you to ignore (not hear) calls from other parties who are using the same channel. When you receive a signal that has a tone different from the one set up in your transceiver, you will not hear the signal. Likewise, signals that you transmit will only be heard by parties whose **CTCSS** tone matches the tone set up in your transceiver.

Note: Although using channels set up with **CTCSS** tones relieves you from listening to unwanted calls, it does not mean your calls will be confidential.

SPECIFICATION

Frequency Range	136-174MHZ
	350-390MHZ
	400-470MHZ
	470-512MHZ
Using Temperature	-20℃ to +55℃
Frequency Synthesisization	PLL
Rated Voltage	DC 7.4V Li-ion battery pack)
Memorial Channel	16 channels
Antenna Collocation	Wide Band 8 High Gain Antenna(Special)
Antenna Impedance	50Ω
Working Way	Single-duplexe in same channel
	Single-duplex in different channel
Grounding	Cathode
Size	51X100X28 (including battery pack)
Weight	215g including battery pack and antenna

SPECIFICATION

Transmitter	
Power output	Hlth Power:4W
Modulation	FM
Max. Freq. Deviation	≤ ±5KHz
Residual Wave Radiation	≤ -65dB
Pre-emphasis	6dB
Transmitting Current	< 1400mA

Receiver	
Sensitivity	Wide Band: <0.18μV Narrow Band: <0.25μV (12dB SINAD)
	<0.18μV
Squelch Sensitivity	<0.18μV
Inter Modulation Interference	60dB
Audio Power	> 400mV
Receiving Current	< 200mA
Squelch Standby	20mA

Note: No further advise for changing specification.

TROUBLE SHOOTING GUIDE

Trouble phenomenon	Shooting method
No power	<ul style="list-style-type: none"> • Maybe out of battery, please charge or replace new battery. • Maybe the battery is not correctly installed, try again.
Unable to talk with others in the group	<ul style="list-style-type: none"> • Check whether the Frequency and CTCSS is same as that of other members • Whether other members are in valid communication distance of transceivers
There is disturbance from other members	<ul style="list-style-type: none"> • Please modify CTCSS, also signal order of other members. • Modify to work in other frequency.
The battery life is short even after correctly charged.	<ul style="list-style-type: none"> • The battery's life is over, replace with a new one.
The transceiver can't scan	<ul style="list-style-type: none"> • The channels are not in scan list (set by professional staff)
Noisy after being programmed	<ul style="list-style-type: none"> • Squelch is open when programming, non-professional users please do not modify parameters causally.
Some regulated"da da da"sounds after being programmed	<ul style="list-style-type: none"> • Some errors happen when program it. Maybe it is out of working frequency range.

TROUBLE SHOOTING GUIDE

Trouble phenomenon	Shooting method
There is no sound after using the earphone for a period	<ul style="list-style-type: none"> • Something wrong with ear bud (Send it to distributor for reparation)
Communication distance closer and sensitivity weaker.	<ul style="list-style-type: none"> • Whether the antenna and its connector is complete. • Whether set to be in low power. (Send it to distributor for reparation)
It can receive but not transmit	<ul style="list-style-type: none"> • Check PTT key. (Send it to distributor for reparation)
Power off often	<ul style="list-style-type: none"> • Check whether the connector of battery is complete
The voice is too low, and often cut off	<ul style="list-style-type: none"> • Check whether the MIC jack is block with something.(Send it to distributor for reparation)
Receiving signal unconsciously, and with big noise	<ul style="list-style-type: none"> • Out of communication distance. • Block with high buildings. • Use it in the underground building (Send it to distributor for reparation)
Speaker with "ka ka" sound after using for a period of time.	<ul style="list-style-type: none"> • Check whether there is something on the cover of speaker.(Send it to distributor for reparation)
No sound from speaker	<ul style="list-style-type: none"> • Check whether it is in Min volume (Send it to distributor for reparation)

FREQUENCY CHART

Model Name: _____

Serial Number: _____

CH	Receive (MHz)	Transmit (MHz)	Rx Tone	Tx Tone	BCL (busy)	Scan/Shift
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						