Preface

Thank you for your purchase of the HYT TC-300 Business Radio. TC-300 is unique for its

compact and delicate body. The customized wrist strap will give you exceptional

experience of portability, which especially suits for drivers and hotel staff.

This easy-to-use radio will deliver you secure, instant and reliable communications at

peak efficiency. Please read this manual carefully before use. The information presented

herein will help you to derive maximum performance from your radio.

MODELS COVERED IN THIS MANUAL

TC-300 UHF Two-way Radio

Contents

Safety and General Information

SAFETYTRAINING INFORMATION

Your **HYT** 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 **HYT** 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 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 **HYT** 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°C (+140°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-HYT** battery packs/chargers may impair transceiver performance and invalidate the warranty.

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

Product Inspection

Please unpack the package box carefully and check that all items shipped were received; report any missing or damaged items to your dealer.
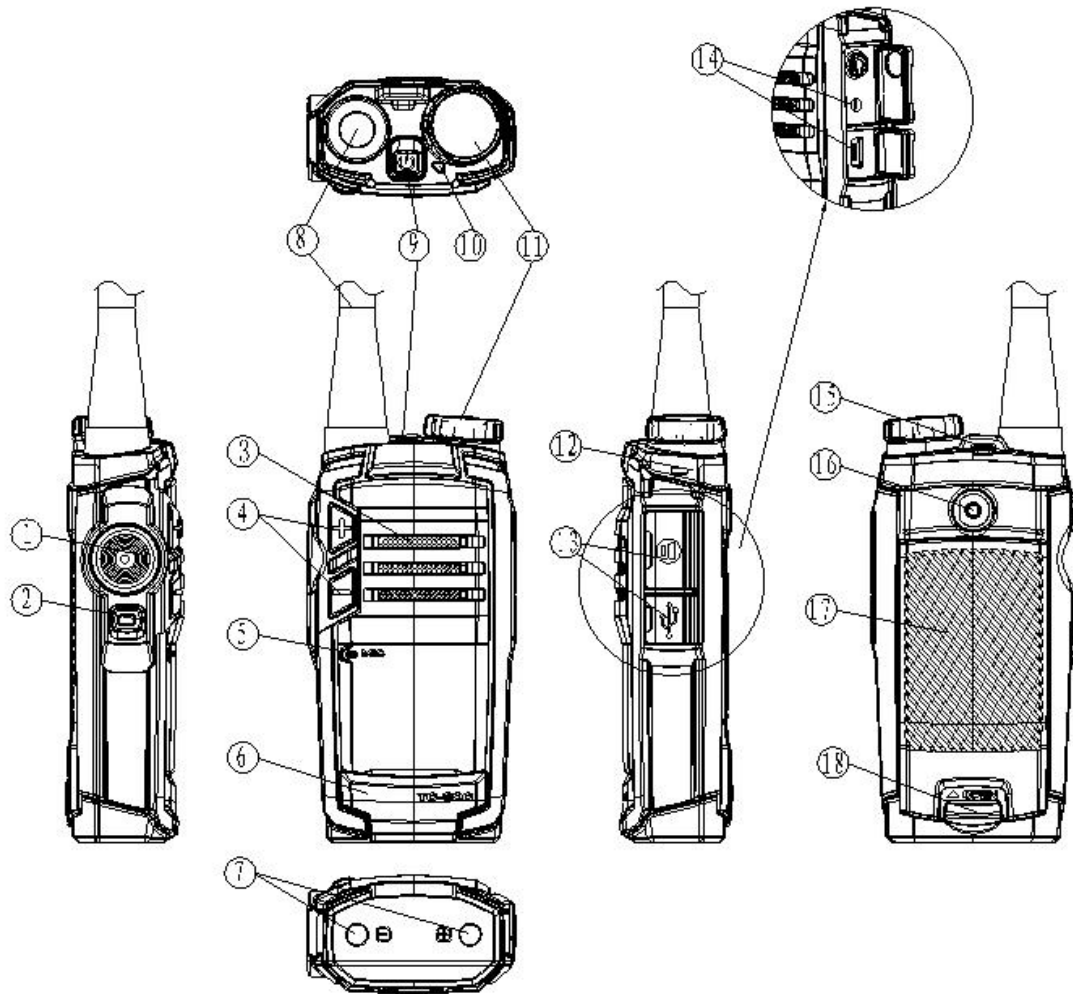
Accessories

Item	Qty. (PCS)
Antenna	1
Strap	1
Li-Ion Battery	1
Switching Power	1
Owner's Manual	1

Antenna	Li-Ion Battery	Switching Power (varying in different countries and regions)	Strap RO01

Note: Frequency band is marked on the label of antenna, if not, identify the frequency band according to the color circle. Please refer to the label on the radio unit for detailed frequency band information.

Radio Overview

(1) PTT (Push-to-Talk) Key	(2) SK (Side Key)	(3) Speaker	(4) Volume Adjust Keys $[+]/[-]$
(5) Microphone	(6) Nameplate	(7) Charging Terminal	(8) Antenna
(9) Power Switch	(10) LED Indicator	(11) Channel Selector Knob	(12) Charge Indicator
(13) Accessory Jack Cover	(14) Accessory Jack	(15) Strap Hole	(16) Screw (Belt Clip)
(17) Back Cover	(18) Battery Latch		

＊PTT (Push-to-Talk) Key

Press and hold down the **PTT** key to transmit, and release it to receive.

＊SK (Side Key)

Side Key 1 is a programmable key that can be assigned with long press function and short press function by your dealer.

See Glossary for definitions of short press and long press.

＊LED Indicator

Status of LED indicator and alert tone see table below:

Power up in user mode	When the radio is turned on, the power up alert tone is heard. When the current channel is a blank channel, the radio sounds beep tone continuously.
Low battery alert	LED flashes red, and a low-pitched tone sounds at intervals of 10 seconds.
Transmitting	LED glows red when transmitting. When TOT timer expires, the radio sounds beep tone continuously. TOT pre-alert: a beep is heard.
Receiving	LED glows green when carrier is present.
Scanning	Green LED flashes at every 1 second, while scanning is in process. Scan Start Alert Tone (programmable by your dealer): a beep is heard. Scan Exit Alert Tone (programmable by your dealer): a beep is heard.
Power adjust	A low-pitched tone is heard when transmit power is switched from high power to low power. A high-pitched tone is heard when transmit power is switched from low power to high power.
VOX	A high-pitched tone is heard when the VOX feature is activated. A low-pitched tone is heard when the VOX feature is disabled.

∗ **Channel Selector Knob**

Rotate the knob to select from channels 1 to 16.

∗ **Power Switch**

Long press the **Power Switch** until an alert tone is heard to turn the radio on.

To turn the radio off, do the same as you turn it off.

∗ **Volume Adjust Keys** [＋]/[－]

You may adjust the volume level through keys [＋]/[－].

∗ **Battery Latch**

Used to secure or remove the battery.

∗ **Accessory Jack**

The upper jack is used to connect audio accessories, and the lower jack is used to connect accessories such as programming cable, cloning cable and power cord.

Battery Information

Initial Use

New batteries are shipped uncharged from the factory. Charge a new battery for 5 hours before initial use. The maximum battery capacity and performance is achieved after three full charge/discharge cycles. If you notice the battery power runs low, please recharge the battery.

Applicable Battery Packs

To reduce the risk of injury, charge only the battery specified by the manufacturer. Other batteries may burst, causing bodily injury and damage.

Caution:

1. To avoid risk of personal injury, do not dispose of batteries in a fire!

2. Dispose of batteries according to local regulations (e.g. recycling). Do not dispose as household waste.

3. Never attempt to disassemble the battery.

Battery Tips

1. When charging your battery, keep it at a temperature among 5℃ - 40℃. Temperature

out of the limit may cause battery leakage or damage.

2. When charging a battery attached to a radio, turn the radio off to ensure a full charge.

3. Do not cut off the power supply or remove the battery when charging a battery.

4. Never charge a battery that is wet. Please dry it with soft cloth prior to charge.

5. The battery will eventually wear out. When the operating time (talk-time and standby time) is noticeably shorter than normal, it is time to buy a new battery.

To Prolong Battery Life

1. Battery performance will be greatly decreased at a temperature below 0℃. A spare battery is necessary in cold weather. The cold battery unable to work in this situation may work under room temperature, so keep it for later use.

2. The dust on the battery contact may cause the battery cannot work or charge. Please use clean dry cloth to wipe it before attaching the battery to the radio.

Battery Storage

1. Fully charge a battery before you store it for a long time, to avoid battery damage due to over-discharge.

2. Recharge a battery after several months' storage (Li-Ion & Li-polymer batteries: 6 months), to avoid reducing battery capacity due to over-discharge.

3. Store your battery in a cool, dry place under room temperature, to reduce self-discharge.

Charging the Battery

When the charge indicator flashes red and an alert tone sounds at intervals of ten seconds indicating the battery power runs low, please recharge the battery. Use only the charger specified by the manufacturer. The charger's LED indicates the charging progress.
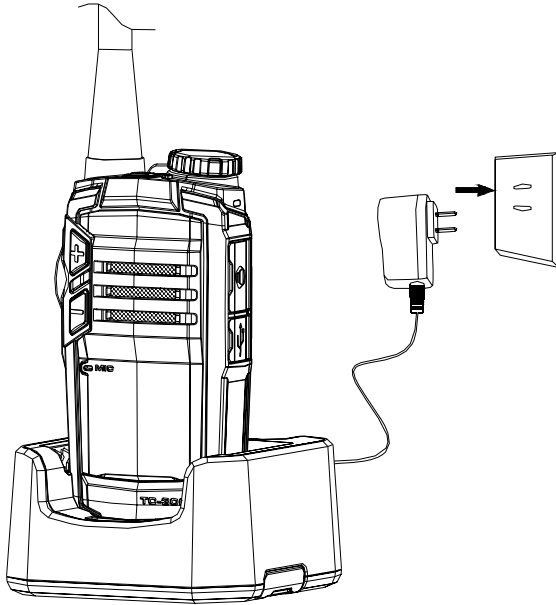
Please follow these steps to charge your radio using the switching power:
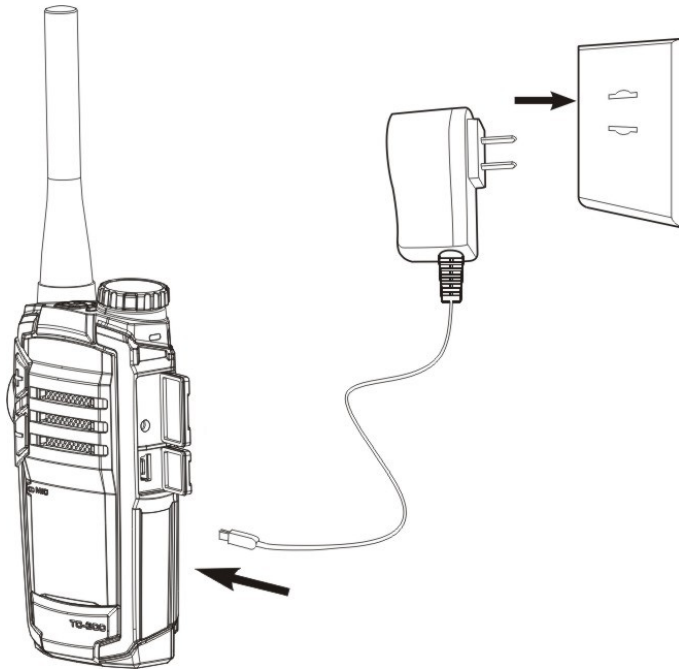
1. Plug the AC connector of the switching power into the AC outlet socket.

2. Plug the Mini USB connector of the switching power into the Mini USB jack of the radio.

3. Make sure the radio is in well contact with the switching power. The charging process initiates when the charge indicator glows red.

4. The charge indicator glows green when the battery is fully charged. Please remove the radio then.

| Status	Charge Indicator
Battery is charging.	Charge indicator solidly glows red.
Battery is fully charged.	Charge indicator solidly glows green.

Please follow these steps to charge your radio using the desktop charger:

1. Plug the AC connector of the switching power into the AC outlet socket.

2. Plug the Mini USB connector of the switching power into the Mini USB jack of the charger.

3. Place the radio with the battery attached in the charger.

4. Make sure the radio is in well contact with the charger. The charging process initiates when the charge indicator of the radio glows red.

5. The charge indicator of the radio glows green when the battery is fully charged. Please remove the radio then.

Status	Charge Indicator
Battery is charging.	Charge indicator solidly glows red
Battery is fully charged.	Charge indicator solidly glows green.

Please follow these steps to charge a battery using the desktop charger:
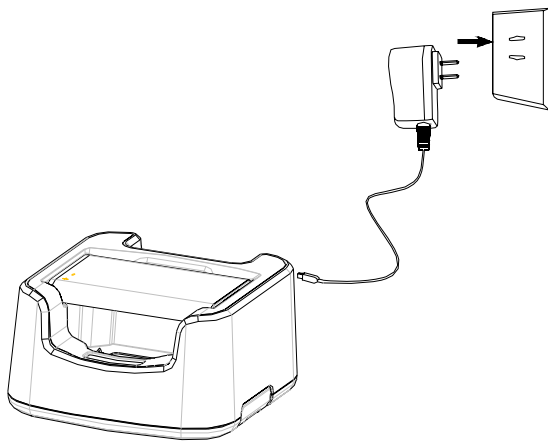
1. Plug the AC connector of the switching power into the AC outlet socket.

2. Plug the Mini USB connector of the switching power into the Mini USB jack of the charger.

3. Place the battery in the charger.

4. Make sure the battery is in well contact with the charging terminals. The charging process initiates when the orange LED lights.

5. The greed LED lights about 3 hours later indicating the battery is fully charged. Please remove the battery then.

Status	Charge Indicator
Battery is charging.	Orange LED solidly glows.
Standby or Battery is fully charged	Green LED solidly glows.

Antenna Information

- Stubby antenna is ideal for communication within limited range. Thin and long antenna optimizes communication coverage, and its flexible and soft characteristic makes it ideal for wearing your radio on the belt.

- Communication range may vary with terrain and your operating conditions. Rainy days or forest locations may narrow your communication range, please make preparation in advance to avoid potential inconvenience.

Assembly and Disassembly

Attaching/Removing the Battery Attaching the Battery

1. Hold the top part of the radio's body, and slide the battery latch in the direction of arrow ①, as shown in figure 1.
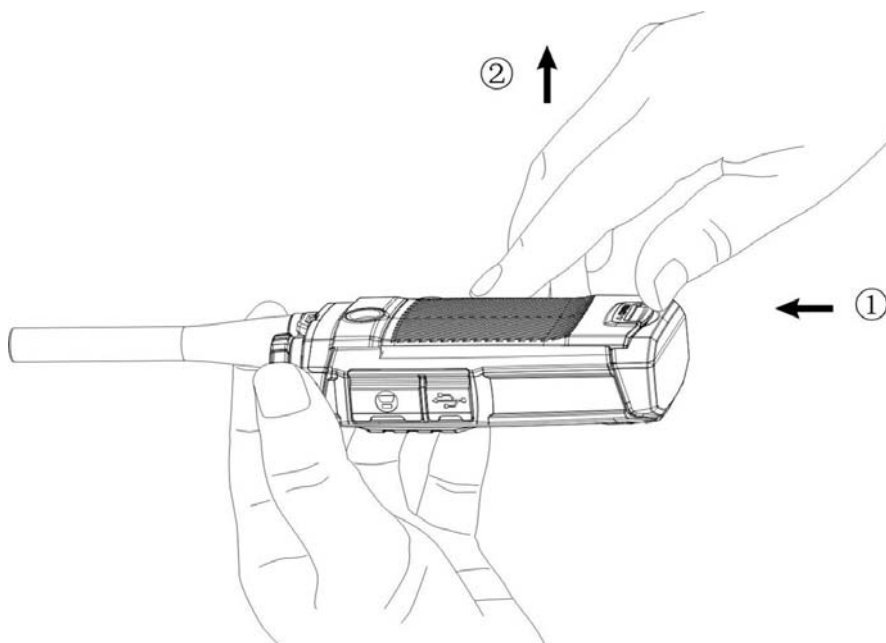

Figure 1

2. When the rear cover tilts with its bottom up, release the battery latch and lift the rear cover from the radio's body, as shown in figure 2.
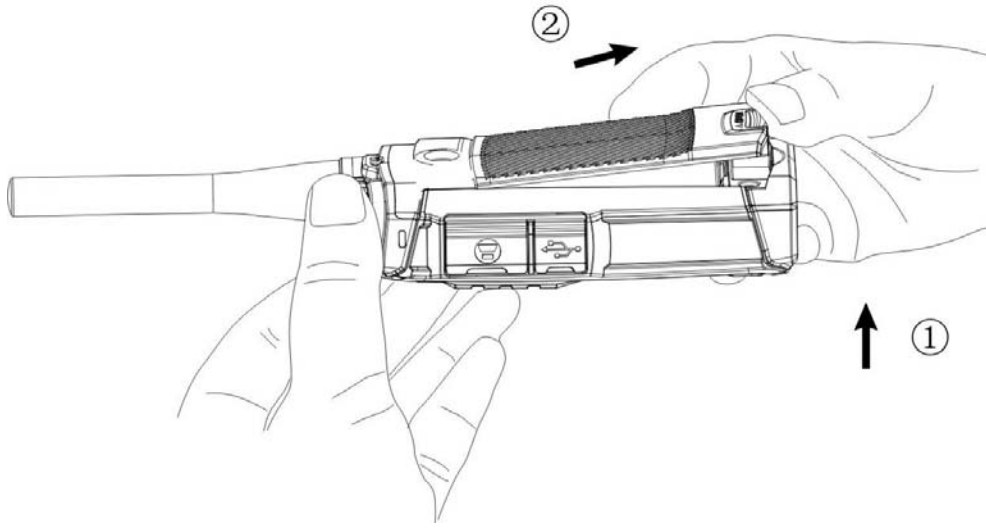
Figure 2

3. Hold the battery with the Logo side facing upwards, and insert the tab at the top of the battery into the slots at the top of the radio's body, as shown in figure 3. Note: Align the discharging terminal of the battery with the radio's charging piece.
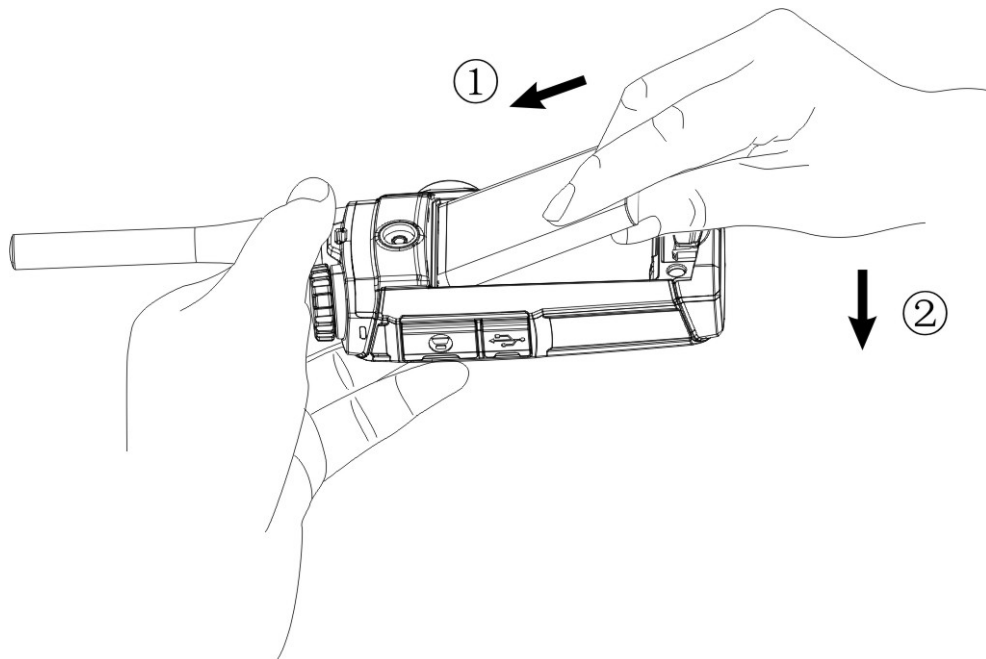

Figure 3

4. Press the bottom of the battery towards the radio, until the battery is securely inserted into the battery slot, as shown in figure 4.

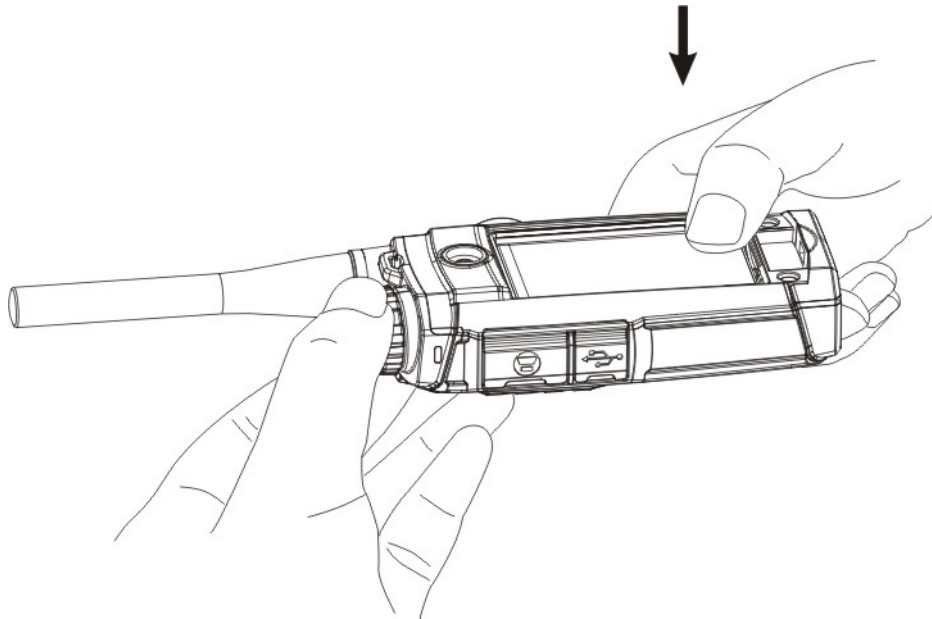Note: if the battery is not well locked, please remove the battery and attach it again.

Figure 4

5. Fit the extensions at the top of the rear cover into the slots at the top of the radio's body, as shown in figure 5.
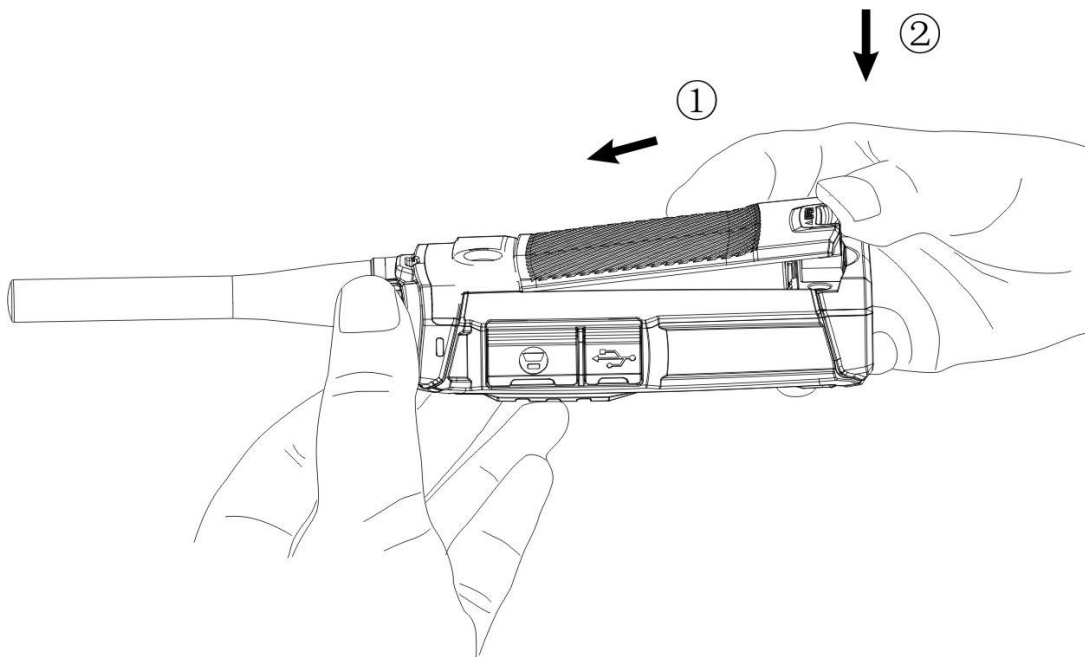

Figure 5

6. Slightly press the bottom of the rear cover towards the radio until a click is heard.

Note: if the rear cover is not well locked, please remove the rear cover and attach it again.
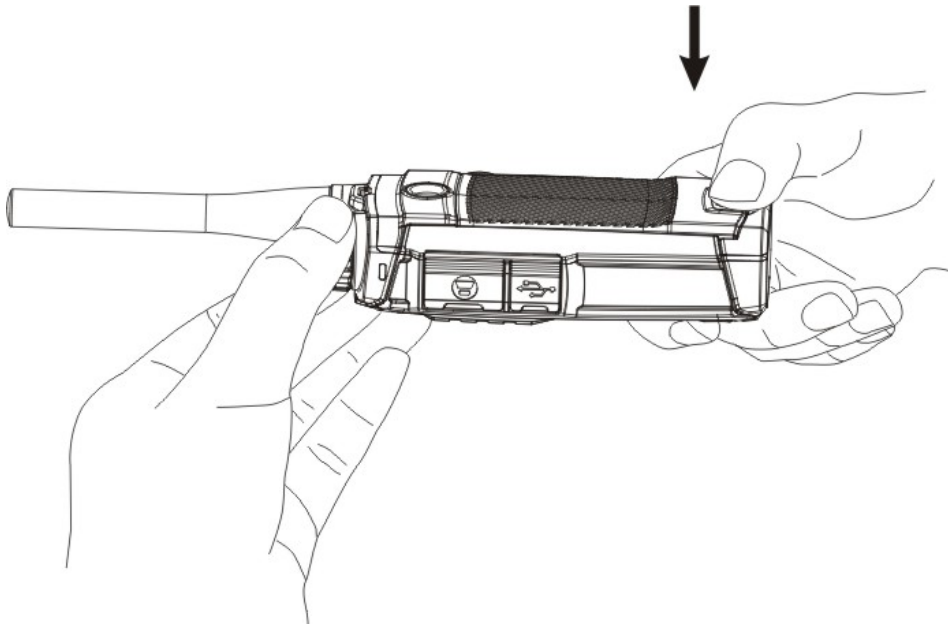
Figure 6

Removing the Battery

1. Turn off the radio, if it is turned on. Then follow steps 1 and 2 in the section "Attaching the Battery" to remove the rear cover.

2. Hold the top part of the radio's body, and lift the battery by the notch at its bottom, and then remove the battery from the radio's body, as shown in figure 1.
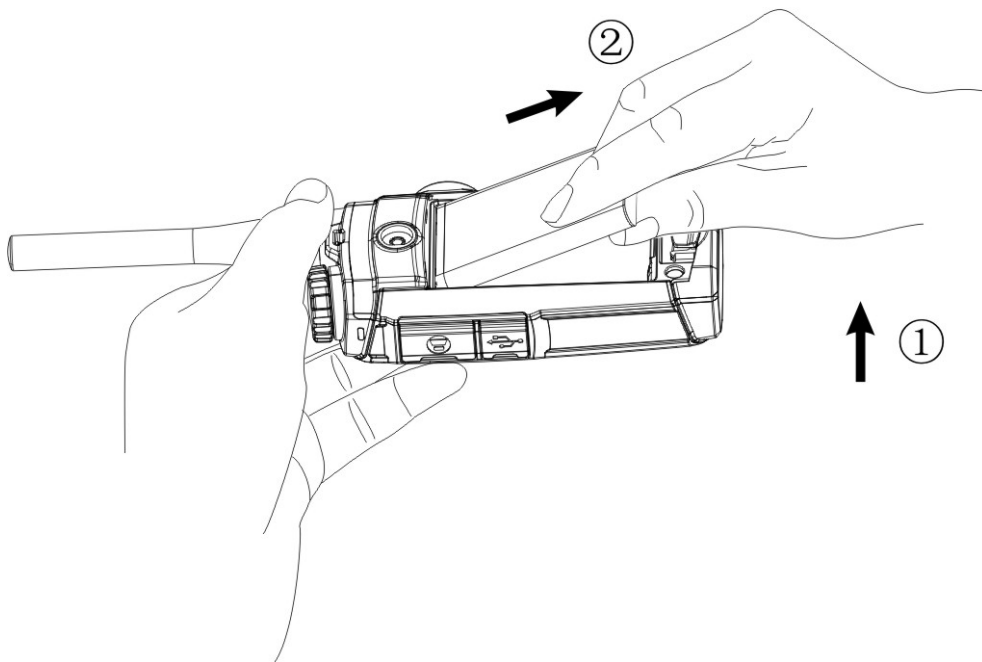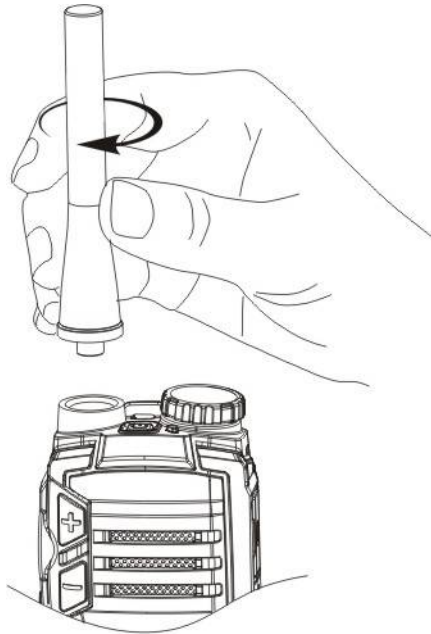

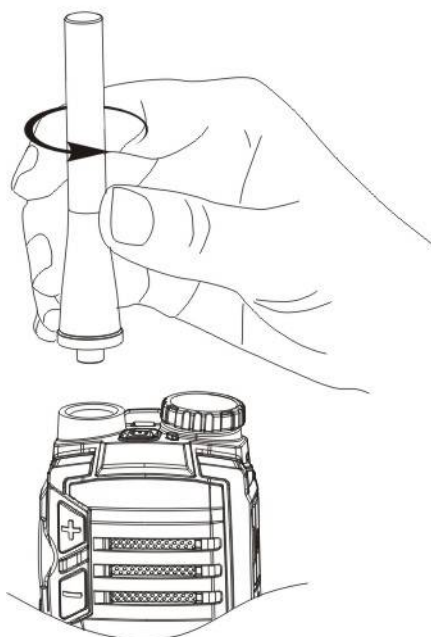**Figure 1**

Attaching/Removing the Antenna

Attaching the Antenna

1. Align the threaded end of the antenna with the radio's antenna connector.

2. Turn the antenna clockwise to fasten it.

Removing the Antenna

Turn the antenna counter-clockwise until you can remove it.

Attaching/Removing the Belt Clip

Attaching the Belt Clip

1. Align the D-tab at the bottom of the belt clip with the D-slot at the back of the radio's body. Then secure the belt clip on the back of the radio's body (rotate the belt clip if necessary), as shown in figure 1. Align the belt clip screw with the threaded hole on the radio, and then secure the screw.
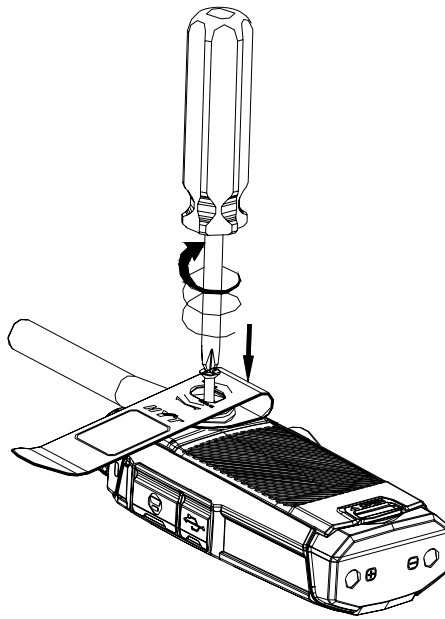

Figure 1

2. Rotate the belt clip 90 degrees to a normal use position, as shown in figure 2.
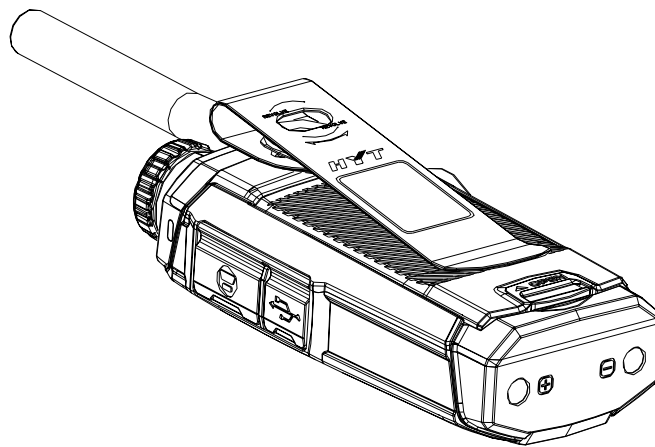
Figure 2

Removing the Belt Clip

Rotate the belt clip 90 degrees, and turn the screwdriver counter-clockwise to loosen the screw. Please refer to the operations for attaching the belt clip, as shown in figure 3.
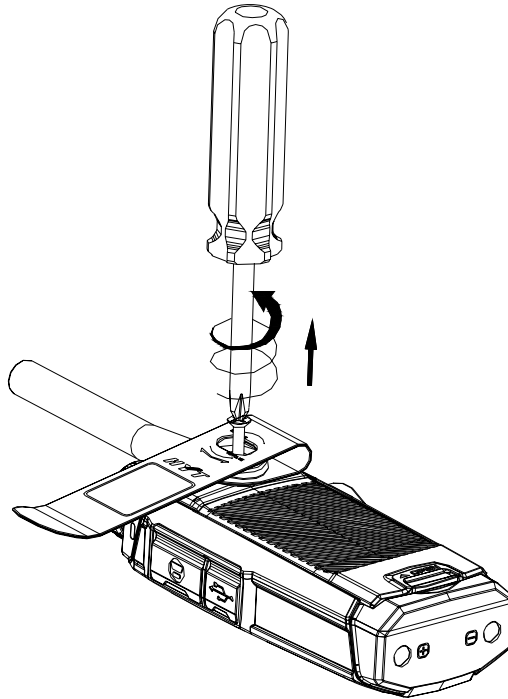
Figure 3

Attaching/Removing the Battery When the Belt Clip is Attached

When the belt clip is attached to the radio, please first rotate the belt clip 90 degrees (as shown in figure 1 and 2), and then attach/remove the rear cover and battery by the steps mentioned above.
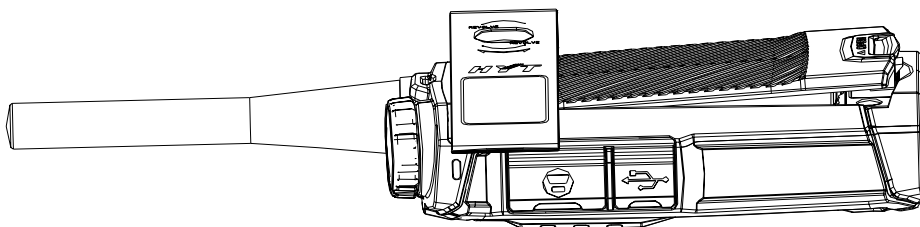
Figure 1
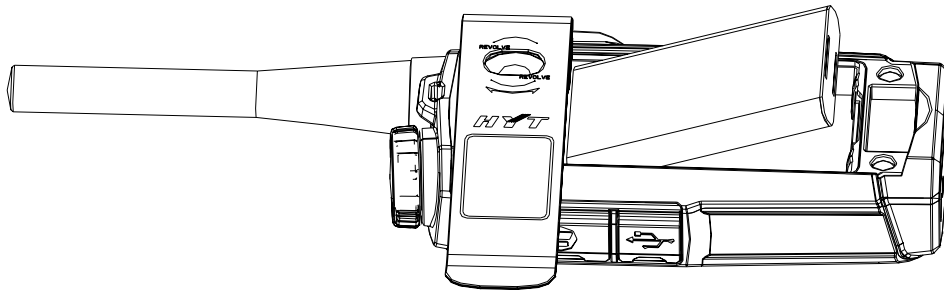
Figure 2

Attaching/Removing the Earpiece/Microphone

Attaching the Earpiece/Mini USB

1. Open (not remove) the accessory cover, as shown in figure 1.
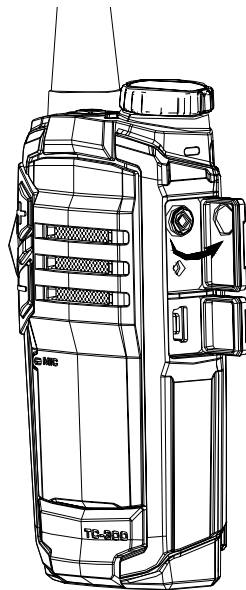
Figure 1

2. Plug the audio accessory firmly into the accessory jack, and plug the Mini USB into the USB jack, as shown in figure 2.
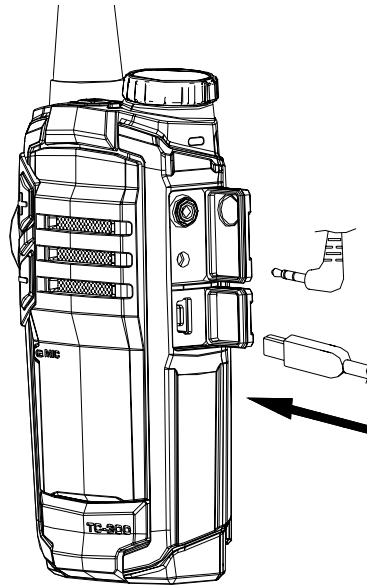
Figure 2

Removing the Earpiece/Mini USB

Open the accessory cover, and then remove the earpiece or Mini USB.

Note: Using the radio with audio accessory may affect the waterproof performance of the radio.

General Radio Operations

Turning the Radio On/Off

Long press the **Power Switch** until an alert tone is heard to turn the radio on.

To turn the radio off, do the same as you turn it off.
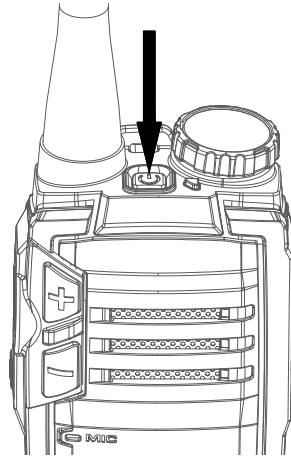
Figure 1

Adjusting the Volume

You may adjust the volume level through keys ﹇+﹈/﹇−﹈.Press the **[+]** key to increase the volume, or press the ﹇−﹈ key to decrease the volume.

音量″+″

音量″−″
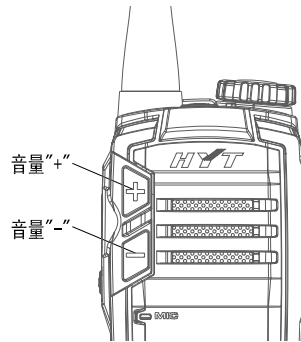
Figure 2

Selecting a Channel

Turn the **Channel Selector Knob** to select a channel.

Figure 3

Transmitting

To transmit, press and hold down the **PTT** key, speak into the microphone at your normal voice level. Hold the radio about 2.5 to 5 centimeters away from your mouth.

Receiving

Release the **PTT** key to receive.

Programmable Auxiliary Functions

The **SK** key is a programmable function button. Your dealer may assign any of the following auxiliary functions to a short or long programmable key-press.

- None
- Power Adjust
- Monitor
- Monitor Momentary
- Scan
- Scrambler
- VOX (Voice-Operated Transmit)
- Compandor

- Squelch Off

- Squelch Off Momentary

- Battery Strength Indicator

- Channel Lock

Note See Glossary for definitions of **Momentary**, **Monitor and Scan.**

Advanced Operations

The following functions are programmable by your dealer.

CTCSS/CDCSS

Set up talkgroups with unique CDCSS/CTCSS to prevent unwanted conversations on the same frequency. If CTCSS/CDCSS is set on the current channel, CTCSS/CDCSS match is required for the radio to unmute to an incoming signal. If CTCSS/CCSS is not set, the radio can receive calls from all users operating on the same frequency. Your dealer may set CTCSS/CDCSS for some channels.

This feature does not mean that your conversation will not be heard by others. Radios that set with the same CTCSS/CDCSS, or no CTCSS/CDCSS, can receive from you.

Note: See Glossary for definitions of CTCSS and CDCSS.

Battery Save

The Battery Save feature is automatically activated once no activity on the channel and no operation performed (no key press and no knob selection), for extended operation time.

Once the radio detects no activity on the channel and no operation performed (no key press and no knob selection) during radio standby time, it shall automatically enter sleep mode ten seconds later. Pressing any key or receiving a signal will restore the radio to normal operation and exit from Battery Save.

Note: See Glossary for the definitions of Battery Save and Standby.

Power Adjust

A press of the programmed Power Adjust key switches the transmit power level between high and low power.

Time-out Timer (TOT)

Limits the amount of time the radio user can continuously transmit on a channel. This can also protect your radio from damage due to excessive transmission. If the user holds down the PTT longer than the preprogrammed limit, the radio automatically stops transmitting, and generates a warning tone until the **PTT** is released.

Your dealer may program the alert tone that sounds before the TOT timer nearly expires.

Note: See Glossary for the definition of Time-out Timer.

Battery Strength Indicator

The TC-300 allows you to simply press one button to illuminate the LED batter gauge, which emits different indications representing battery strength levels until the key is released.

The LED glows different colors to represent battery strength levels:

Battery Strength	LED Indication
70%-100%	Green LED solidly glows
50%-70%	Orange LED solidly glows
30%-50%	Red LED solidly glows
10%-30%	No indication is shown when programmable key is pressed; LED flashes red while radio is operating.
Less than 10%	No indication is shown when programmable key is pressed. While the radio is standby, LED flashes red and a low-pitched tone sounds at intervals of ten seconds. Pressing the PTT then shall cause the radio to emit transmission prohibit tone.

Monitor

Holds down the programmed Monitor key to enter Monitor mode, and release it to exit.

Scan

The Scan feature enables a two-way radio to continuously scan each channel for activity. Press the programmed **Scan** key to initiate scanning channels in the order as they appear in scan list. Green LED flashes during the scan process, and solidly glows when activity is detected and signaling condition is satisfied on a channel. Press the key again to exit scanning.

When scanning is active, the radio continuously scans for activity on scan list members. Once activity is detected on a channel, scanning pauses on the active channel for you to receive activity. Your dealer can choose channels that you wish to scan and list them in a scan list.

No Priority Channel

Assuming a scan list with 6 channels, if all the channels are non-prioritized, the normal scan operation would proceed in the following sequence, as shown in figure 1.
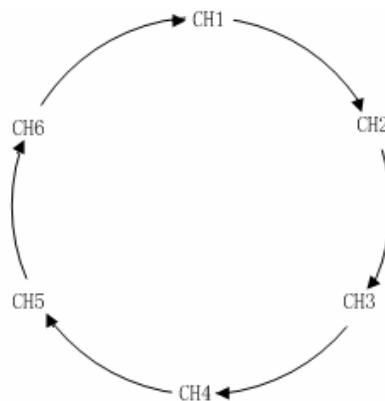

Figure 1 Normal Scan Sequence

Priority Channel Scan

If you prioritize Channel 2 as Priority 1, the scan operation would proceed in the following sequence, as shown in figure 2.
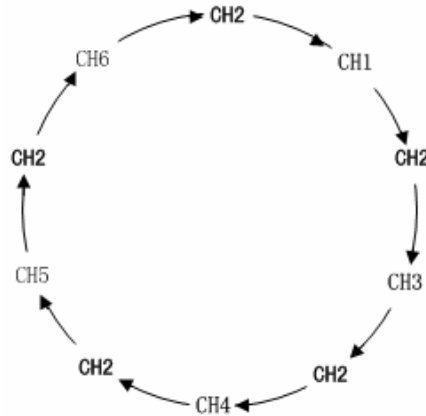
Figure 2 Priority Scan Sequence

- **Scan On/Off**

You can enter scan mode through any of the following two methods:

（1） Key operation

Press the programmed **Scan** key to enter scan mode, provided that there're no less than 2 members in the scan list.

（2） Auto

When Auto Scan is enabled for a channel, the radio shall automatically enter scan mode when it is switched to this channel.

You can exit scan mode through any of the following three methods:

（1） Key operation

Press the programmed **Scan** key to exit scan mode.

（2） Auto

The radio automatically exits from scan mode when it is switched to another channel.

（3） Turn the radio off.

- **Talk Back**

Defines whether the user is able to PTT the radio and talk back on the channel on which the radio currently stops.

When checked, if the radio stops on a channel, the radio user is able to PTT the radio and talk back on that channel. If the radio does not stop on any channel, the user is able to PTT the radio and talk back on the predefined channel.

- **Priority Channel Scan**

Enable you to constantly monitor & keep an update on the activities on the most commonly used channel so that messages will not be missed. Your dealer may program priority channel via the programming software. Check with your dealer for details.

When scanning remains on a non-priority channel, the radio continues to monitor activities on the priority channel, and jumps to the priority channel if activity is detected.

Busy Channel Lockout (BCL)

Avoid interference with the users using the same channel by preventing transmission if another talk group is already on the air. The radio will generate a continuous tone upon **PTT** press if a transmission is not allowed. Release the **PTT** to cancel the tone.

Note: See Glossary for the definition of BCL

Low Battery Alert

Should the battery level run low, LED flashes red and a low-pitched tone sounds at every ten seconds to alert users to recharge the battery.

VOX (Voice-Operated Transmit)

You can transmit hands free with the use of optional accessories. The radio will automatically begin transmitting when you speak, and terminate transmitting when you stop talking.

Before you can transmit hands free,

1. Select the PTT/VOX switch on the earpiece to VOX.
2. Plug the earpiece into the accessory jack of the radio.
3. Press the programmed **VOX** key to activate the VOX feature.
4. Two seconds later (green LED goes out and no audio is output from the speaker), speaker into the earpiece microphone and your voice will be transmitted.

Operation Instruction:

1. Press the programmed **VOX** key to activate/disable the VOX feature, with corresponding alert tone.
2. The VOX feature is disabled automatically after the radio is turned off or

programmed.

3. VOX earpiece is necessary.

4. You dealer may set VOX sensitivity or disable the VOX feature through the programming software. The **VOX** key is null when the VOX feature is disabled.

Note:

1. If you select the PTT/VOX switch on the earpiece to PTT, you are able to transmit by press of the external PTT, no matter whether the VOX feature is enabled.

2. If you select the PTT/VOX switch on the earpiece to PTT, you are disallowed to push the switch from PTT to VOX, this action shall cause the radio to continuously transmit.

3. You can select VOX sensitivity according to the surrounding noise level. Activating the VOX feature in high noise environment shall cause the radio to continuously transmit.

4. When continuous transmission occurs, push the PTT/VOX switch from VOX to PTT, or turn on the radio again to restore the radio to operational use.

Note: to order accessories, please contact your dealer.

Troubleshooting

Symptom	Solution
Cannot power on the radio.	● The battery has run out. Please recharge the battery or replace it with a new one. ● The battery is not properly installed. Please remove the battery and attach it again.
The operating time is noticeably shorter than normal, even though the battery is properly charged.	● The battery has worn out, and it is time to buy a new battery. ● The battery is not fully charged. Make sure that you remove the battery from

	charger after the charger LED glows green.
Cannot talk to or hear group members.	● Make sure radios have the same channel, and CTCSS/CDCSS settings. ● Make sure you are within their communication range.
Hear non-group members	● Send the radio to your dealer to change your CTCSS/CDCSS settings, and so as your group members.
No voice or low voice while transmitting	● Make sure the volume control knob is positioned at the maximum volume. ● Send the radio to your dealer for microphone detection.
Noise always on	● Group members are too far away to receive their call. Please go within the communication range and re-power on the radio to try.

Care and Cleaning

● Do not handle the radio by its antenna or external earpiece directly.

● Do not place the radio in a dusty or dirty environment.

● Clean the radio with a lint-free cloth to remove dirt or grease, to avoid poor contact due to excessive dust.

● Clean the radio using a lint-free cloth moistened with clean water and a mild dishwashing liquid.

● Avoid subjecting the radio to corrosives, solvents or spirits.

Optional Accessories

Earbud with in-Line PTT & VOX ESS09	Earset with in-Line MIC & PTT & VOX EHS09	Earset with Boom MIC & in-Line PTT & VOX EHS10	Li-Ion Battery (1700mAh) BL1715
Rapid-Rate Charger (for Li-Ion Battery) CH05L01	Vehicle Power Adapter PV1001	Remote Ring PTT Switch (Mini USB port) POA18	Belt Clip BC15
PU Carrying Case (non-swivel) (blue) PCN002	Waterproof Bag (yellow grinding PVC) LCYY02		

Note: Pictures are for reference only. Image may vary from actual product. And description shall remain the same.

Glossary

Name	Description
Short Press	Key press shorter than 1 second.
Long Press	Key press longer than 1 second.
Standby	In normal mode, no key operation is made on the

	radio and the radio is in receiving status.
CTCSS/CDCSS	CTCSS/CDCSS is transmitted along with the carrier and at a sub-audible frequency. The Tx CTCSS/CDCSS of the transmitting party must match the Rx CTCSS/CDCSS of the receiving party, for the receiver to unmute speaker and output audio.
Battery Save	This function can save battery power and prolong radio operation time. Once no activity on the channel and no operation performed, the radio shall be on and off alternately.
Time-out Timer (TOT)	Limits the amount of time the radio user can continuously transmit on a channel. This can also protect your radio from damage due to excessive transmission.
Squelch	Eliminates noise from the radio's speaker. If the incoming signal is not strong enough to produce a clear transmission, then it should not be heard. This helps to filter out unwanted noise. If the incoming signal strength satisfies the squelch threshold, the radio shall open squelch and unmute its speaker.
Squelch Off	Always unmute speaker to receive audio as well as background noise.
Monitor	Carrier condition must be satisfied for the radio to unmute to an incoming call, regardless of CTCSS/CDCSS condition.
Momentary	Holds down a function key to activate the status, and release it to exit. Non-momentary: Press a function key to activate the status, and press it

	again to exit.
Scan	The Scan feature enables a two-way radio to continuously scan each channel for activity.
Busy Channel Lockout (BCL)	Avoid interference with the users using the same channel by preventing transmission if another talk group is already on the air.
VOX (Voice-Operated Transmit)	The radio will automatically begin transmitting when you speak.

HYT endeavors to achieve the accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the above specifications and design are subject to change without notice due to continuous development.

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