



**SHENZHEN HQT SCIENCE & TECHNOLOGY CO., LTD.**

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*User Manual*  
**TH-368**

*Professional Two-way Radio*

# Welcome

Thank you for your purchase. We are confident that the function and quality will bring you stable, reliable, and clear communication. Please read this manual before operating the radio.

- Ergonomic & Light Design
- 16 Channels
- LED Indicator Light
- Voice Prompts
- VOX
- Time-out-Timer



- Scan
- CTCSS/DCS
- Programmable Key
- Auto Battery Save
- Wired Cloning
- PC Programming

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## Safety Information

Please read the following safety guidelines. Nonobservance of these guidelines may cause danger or violation of law.



Warning

Don't transmit with antenna detached from the radio or don't damage or change antenna type. Strong electronic waves are emitted from the radio and damages or changes to the antenna may effect the performance of the radio, and it may cause the radio to be defective and not covered under warranty.



Warning

Don't use other manufacturers' accessories. Unknown or unauthorized accessories may cause the radio to be defective and not covered under warranty.



Warning

Don't disassemble the radio. Disassembly of the radio may cause a serious defect or malfunction and not be covered under warranty.



Warning

Don't give an excessive shock to the radio.  
Don't place the radio where the direct sunlight or high temperature occurs.  
Don't make a damage to the battery pack by sharp substance or an excessive shock.



Warning

Turn off the radio before boarding on an airplane.  
Don't use the radio in the hospital without any pre-approval.  
Don't use the radio at the place of where computer of other electronic devices are being used.



Warning

- Please keep the radio at least 1 inch away from the human body.
- Don't give any damage to antenna.
- When using earphone, please reduce the volume to a low level. If not, unexpected high sound may have harmful effect to your ear.
- Don't touch the conductive metal of the battery radio with wet hands. It may cause damage on your hands.
- Please be careful when putting the battery in a pocket or a bag.

#### FCC RF EXPOSURE COMPLIANCE REQUIREMENTS FOR OCCUPATIONAL USE ONLY

The Federal Communications Commission (FCC), with its action in General Docket 93-62, November 7, 1997, has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated equipment. Proper operation of this radio will result in user exposure far below the Occupational Safety and Health Act (OSHA) and Federal Communications Commission limits.

- **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.
- This radio is **NOT** approved for use by the general population in an uncontrolled environment. This radio is restricted to occupational use, work related operations only where radio operator must have the knowledge to control the user's exposure conditions for satisfying the higher exposure limit allowed for occupational use.
- When transmitting, hold the radio in a vertical position with its microphone 1 inch (2.5cm) away from your mouth.
- The radio is transmitting when the red LED on the front of the radio is illuminated. You can cause the radio to transmit by pressing the PTT bar on the radio.
- These are required operating configurations for meeting FCC RF exposure compliance. Failure to observe these restrictions mean violation.

#### Caution

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

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Product Inspection

Thanks for choosing the HQT TH-368 Series radio. Before use, please check that the following contents are included:

### Items



Radio TH-368  
Qty: 1



Antenna  
Qty: 1



Li-Ion battery  
Qty: 1



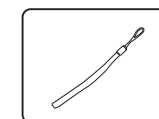
Charger  
Qty: 1



Adaptor  
Qty: 1



Belt Clip with screws  
Qty: 1




Lanyard Strap  
Qty: 1



User Manual  
Qty: 1

For any damage or lost contents, please contact your Authorized HQT Dealer.

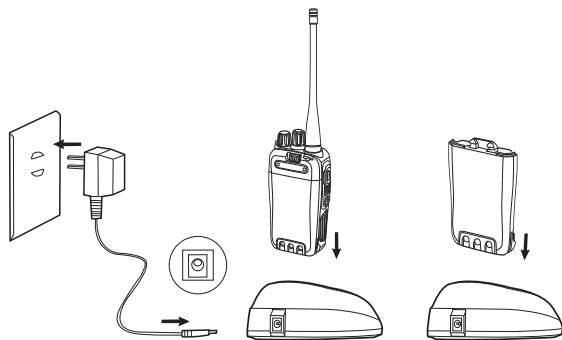
 **Note:** For antenna identification, the frequency is marked on the color circle at the bottom of the antenna.

## Getting Started

### Charging the Battery

Please charge the battery as follows:

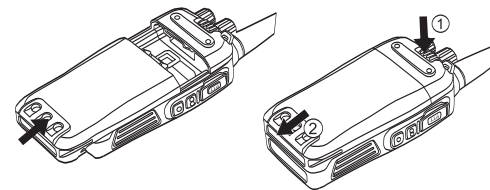
1. Turn off the radio for optimum charging.
2. Plug the AC connector of the adaptor into an AC (110~240V) outlet.
3. Insert the battery or radio equipped with battery into the charger.
  - Red LED indicates battery is charging. Green LED indicates charging is complete.
  - The battery is not charged at the factory.



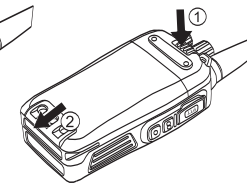
## Attaching & Removing

### Attaching & Removing the Battery

1. For attaching, slide the battery up from the bottom until it locks securely into place. (figure 1)
2. Before removing, make sure the radio is turned off. For removal, push the battery lock and slide the battery downwards. (figure 2)



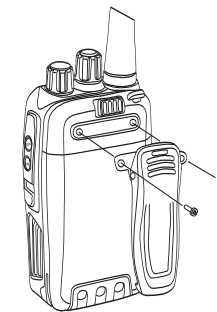
(figure 1)



(figure 2)

### Attaching & Removing the Belt Clip

To attach the belt clip, secure the belt clip with the 2 screws provided (Phillips head screwdriver required). To remove, reverse the screws and the belt clip can be removed. (figure3). Note: the belt clip does not need to be removed to remove the battery.



(figure 3)

## Attaching & Removing the Antenna

1. To attach, insert the antenna into the connector on the top of the radio by holding the antenna at its base and rotate the antenna clockwise to fasten it. (figure 4) **IMPORTANT: Do not over tighten antenna as it will cause damage to the radio.**

2. To remove, hold the antenna at its base and rotate the antenna counter clockwise until you can remove it. (figure 5)



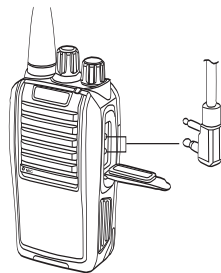
(figure 4)



(figure 5)

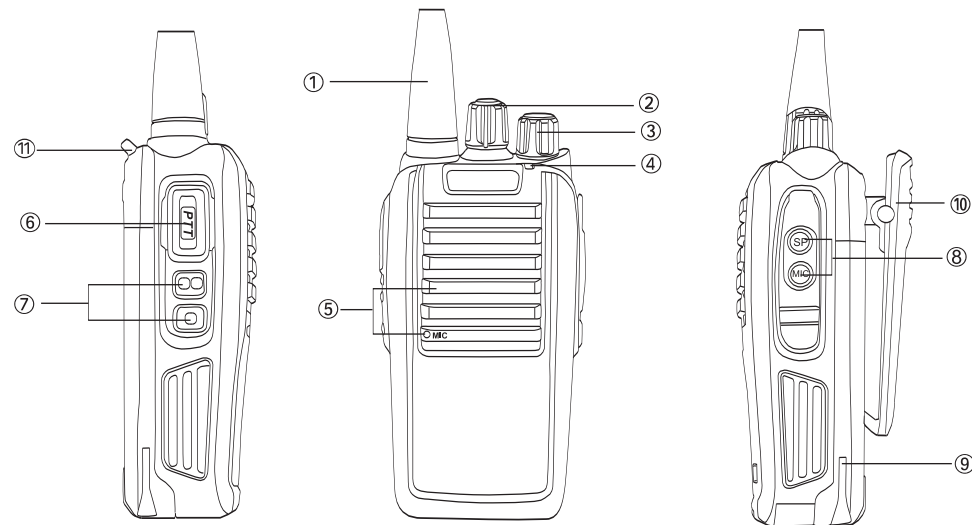
## Attaching External Audio Accessories

Pull down the cover of earphone/microphone jack and insert the correct audio accessory into the jack. Please make sure that the proper audio accessory is being used and that it is properly seated in the jack. (figure 6)



(figure 6)

## Radio Overview



**① Antenna**

Antenna with screwed connector is required for proper transmit and receive of radio.

**② Channel Selector**

Rotate clockwise or counter clockwise to select operating channel.

**③ Power Switch/Volume Control**

Rotate the knob clockwise until a click sounds to turn on the radio. Keep turning clockwise to increase volume. Turn counter clockwise to decrease volume. Keep rotating counter clockwise until a click sounds to turn off radio.

**④ LED Indicator**

LED glows red during transmitting; glows green during receiving; flashes red when battery power is insufficient; flashes green during scanning.

**⑤ Speaker/Microphone****⑥ Push-To-Talk (PTT)**

Press PTT key to transmit; release it to receive.

**⑦ Programmable Keys**

Default of top button provides condition of battery power and low button is monitor function.

**⑧ Audio Jack/Data Port****⑨ Li-Ion Battery****⑩ Belt Clip****⑪ Strap Hole****Basic Operation****1. Turn On/Off**

Turn on the radio by rotating Power Switch/Volume Control knob clockwise until a click is sounded. Turn off the radio by rotating Power Switch/Volume Control knob counter clockwise until a click is sounded.

**2. Adjust Volume**

Rotate Power Switch/Volume Control knob to adjust volume when the radio is on.

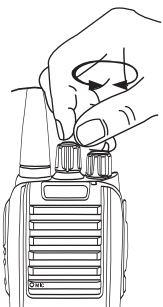


**Note:** The volume can also be adjusted in accordance with background noise during monitoring.



### 3. Channel Selection

Rotate the channel knob to select operating channel from 1-16 or (15+Scan), according to the numbers and symbols on the bottom of channel selector knob or channel annunciation.



### 4. Make a Call

To make a call, press PTT key and speak into the microphone with a normal voice. Keep the radio/microphone area 2" (5 cm) away from your mouth.

### 5. Receive a Call

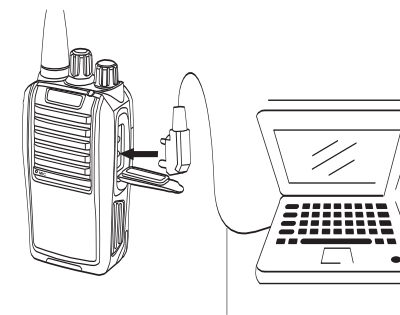
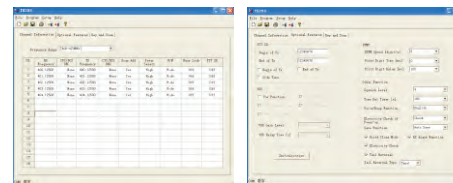
Calls can be received when PTT is released and the radio is in standby mode.

## Advanced Operation

Certain functions can be made possible through programming software as programmed by an Authorized TecNet Dealer.

### PC Programming

1. Turn off the radio and connect the programming cable between the radio and PC. (See figure 7)
2. For the setting of parameters and writing to the radio, please refer to the Help documents of the software.



Programming Cable (optional)

(figure 7)

## Monitoring

- 1.The receiving status of the selected channel can be checked by a long press of the side button located below the PTT (programmable key). This allows the squelch to open on the radio so any received audio can be heard. Default Mode: Press and hold of the monitor button for up to 2 seconds to monitor the channel for activity.
- 2.When this function is on, the volume can be adjusted with the Volume Control.

## Battery Power Check

- 1.The battery level/condition can be checked by a short press of the side button located below the PTT (programmable key). Default Mode: Press momentary and release. The radio will announce the power level as “high battery power”, “battery middle power”, “low battery power” or “please charge”.
- 2.This function is disabled/enabled through the programming software (default is on).

## CTCSS/DCS

- 1.With this function, users can receive calls in

corresponding channels only with the same CTCSS/DCS; without this function, users can receive calling from all corresponding channels using the same frequency.

- 2.This function is disabled/enabled through the programming software.

## Busy Channel Lockout (BCL)

1. When BCL is activated, it prohibits transmitting on the channel if occupied by other users. This is indicated by an audio alarm when pressing the PTT.
2. When the channel becomes unoccupied, users can resume talk.
3. This function is disabled/enabled through the programming software (default is off).

## DTMF Encode

- 1.This function is disabled/enabled through the programming software (default is off).
- 2.If enabled, users can send DTMF code at start or the end of transmission.

## Voice Prompts

- 1.Channel Voice: the radio would report the channel information when you change the channel.
- 2.Low Power Prompt: the radio would report low battery information when the voltage reaches the minimum operating voltage.
- 3.Scan Operation Prompt: the radio would report the information when the channel sets to the designated scanning channel.
- 4.These prompts can be disabled/enabled through the programming software.

## Time Out Timer (TOT)

1. The TOT function prevents extended periods of transmitting, which can cause possible damage to the circuitry of the radio.
2. If transmitting occurs longer than the set time, the radio will stop transmitting and an alarm will sound. Cease pressing the PTT. Press PTT again to resume transmitting.
- 3.Default is 180 seconds. The time duration can be changed through the programming software.

## Squelch Levels

- 1.Through adjusting squelch level, the radio with a lower squelch level allows weak signals to be received.
- 2.Default level is 4. Levels can be changed through the programming software, which ranges from 0-9. When you choose 0, the squelch is open. Higher numbers tighten the squelch reducing the noise and interference.

## VOX

- 1.VOX can be enabled to transmit without pressing the PTT key when the voice signal is transmitted through the microphone of the radio.
- 2.This function is disabled/enabled through the programming software (default is off).

## Scan

- 1.This function is disabled/enabled through the programming software (default is off).
2. When the scan function is enabled, channel 16 becomes the scan channel. The LED flashes green and the radio will scan those channels assigned to scan. If a signal is received, the radio will cease