

Call

Transmitting a Group Call

You may transmit a Group Call through any of the following methods. When transmitting a Group Call, the icon  will appear.

● Transmitting a call to the preset contact

In standby mode, pressing **PTT** will transmit a Group Call to the contact (a Group Call number) preset for the current channel.

● Transmitting a call through Contact List

- 1) Go to Contact -> Contact List.
- 2) Use the **Up/Down** key to select the Group Call number you want to call.
- 3) Hold down **PTT** to transmit a Group Call to the selected contact.

Transmitting an All Call

Methods are the same as those in Transmitting a Group Call. When transmitting an All Call, the icon  will appear.

Note: You can transmit an All Call only when it is enabled by your dealer.

Receiving and Responding to a Call

● Receiving a Call

When a call is received, your radio will display the corresponding icon as follows:  for a Private Call,  for a Group Call and  for an All Call.

● Responding to a Private/Group Call

After a Private Call or Group Call is received, you may press the **PTT** key within the preset time period to call back.

If you do not respond to a received Private Call, the radio will display the missed call icon .

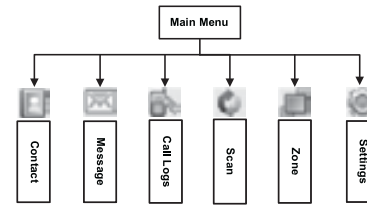
Note: You cannot respond to an All Call.

Calls on Analog Channels

To transmit on an analog channel, hold down the **PTT** and speak into the microphone. To receive, release the **PTT**.

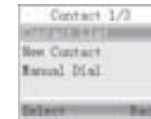
Note: To ensure an optimal volume for the receiving radio, hold the radio approximately 2.5 to 5 centimeters away from your mouth during transmission.

Menu Navigation



Contact

To access this item, press **Menu** key in idle mode and then select "Contact".



■ Contact List

You can save up to 200 entries in the list. To access this item, select "Contact -> Contact List" or press the shortcut key for Contact List.

Editing a Contact

You can edit the number and alias of each Private Call contact.

Viewing a Contact

You can view details of each contact.

Deleting a Contact

You can delete a Private Call contact. However, please note that you can not delete the contact when there is only one entry left in the list. In addition, the private contact preset on the digital channel cannot be deleted.

■ New Contact

You can add a Private Call contact to the contact list. The number and alias of each contact must be unique, and the available number range is 1-16776415.

■ Manual Dial

You can manually input the private call number for calling.

Message

To access this item, press the **Menu** key in idle mode and then select "Message", or press the shortcut key for Message directly.

Menu Navigation



■ New Msg

You can create your desired text message (256 characters at most) and send it to an individual user or to a talk group.

■ Quick Text

Under this option there are some text messages (10 entries at most) preset by your dealer. You can choose to edit and send any entry.

■ InBox

The InBox can save up to 20 received messages. When the InBox is full, the icon  will appear, and the oldest entry will be overwritten by the latest one automatically.

For each message, you can choose to perform any of these operations: Reply, Forward, View Details and Delete.

To delete all messages in the InBox, select "Message -> InBox -> Delete All".

■ OutBox

The OutBox can save up to 20 sent messages. When the OutBox is full, the oldest entry will be overwritten by the latest one automatically.

For each message, you can choose to perform any of these operations: Reply, Forward, View Details and Delete.

To delete all messages in the OutBox, select "Message -> OutBox -> Delete All".

Call Logs

To access this item, press the **Menu** key in idle mode and then select "Call Logs", or press the shortcut key for Call Logs directly.



This radio can save up to 10 entries in the Outgoing List, Incoming List and Missed List respectively. When the memory for call logs is full, the oldest entry will be overwritten by latest one automatically.

After accessing a list and selecting an entry, you can perform any of these operations: hold down the **PTT** key

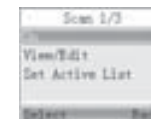
Menu Navigation

to initiate a call; add it to Contact List; or delete it.

To delete all entries in Outgoing List, Incoming List or Missed List at a time, select "Call Logs -> Outgoing / Incoming / Missed -> Delete All".

Scan

To access this item, press the **Menu** key in idle mode and then select "Scan".



■ Scan On/Off

The function "Scan" allows you to listen to communication activities on other channels so that you can keep a close track of your team members. This option is used to enable or disable the function.

■ Scan List

You can request your dealer to create a scan list for each channel. Each list may contain 32 channels at most (either digital channel or analog channel is OK). After accessing the list, you can perform any of the following operations:

Adding a Channel

To include a new channel into the active scan list.

Editing Priority Channel

To set the selected channel as a non-priority or as a priority channel. If you are interested in activities on a channel, you can set it as a priority channel, which will be scanned more frequently than a non-priority channel.

Each scan list may contain two priority channels at most.

 indicates priority channel 1, and  indicates priority channel 2.

Deleting a Channel

To remove a channel from the active scan list. However, the 1st channel in the list can not be deleted.

Zone

To access this item, press the **Menu** key in idle mode and then select "Zone".



This radio supports up to 32 zones. You can use this menu to select your desired zone.

Menu Navigation

Settings

To access this item, press the **Menu** key in idle mode and then select "Settings".



You can optimize your radio performance by customizing related parameters according to actual needs and your preferences.

■ Radio Set

Power Level

This option allows you to set transmit power level. Alternatively, you can change the power level by pressing the shortcut key for Adjust Power Level in idle mode. There are two levels available: High (indicated by ) and Low (indicated by ). High power level enables you to communication with farther team members.

Note: Power level should be set for each channel individually.

Squelch Level

This option allows you to select an appropriate squelch level. Alternatively, you can change the squelch level by pressing the shortcut key for Adjust Squelch Level in idle mode. There are three levels available: Tight, Normal and Open.

The default squelch level is "Normal", and generally used in low noise environment.

Generally, "Tight" is used in high noise environment. It requires stronger signal for the radio to unmute. If the squelch level is set to Open, the speaker will keep unmuted irrespective of the satisfaction of decoding conditions.

Language

To set the language in which all interface information is displayed. At the moment, this radio only supports two languages: Simplified Chinese and English.

Backlight

To set the backlight parameters. There are three options available: On, Off and Timer. The timer is programmed by your dealer. Available range: 5-60 seconds.

Brightness

To set the display brightness. You can increase or lower it using the **Up** or **Down** key.

Menu Navigation

Keypad Lock

To set whether to enable this function. When "Enable" is selected, you can use the Up or Down key to set the time range after which the keypad will be locked. Available range: 5-60 seconds.

LED

To set whether to enable LED indication.

Tone

To set tones for your radio. You can set the following tones:

Radio Silent: to set whether the radio will give tone indication. If Silent On is selected, all alerts will be off.

Talk Permit: to set whether the radio will give tone indication for transmission. The following options are available: Disable (the radio does not give any tone indication for transmission); Digital Only (the radio gives tone indication for transmission on the digital channel only), Analog Only (the radio gives tone indication for transmission on the analog channel only), and Enable (the radio gives tone indication for transmission on both analog and digital channels).

Private Ring: to set whether the radio will give tone indication when the radio receives a private call.

TextMsg Ring: to set whether the radio will give tone indication when the radio receives a message.

Keypad: to set whether the radio will give tone indication when you are making keypad operations.

■ Device Info

With this option, you can view the basic information of your radio, including serial number, radio model, frequency range, firmware version and etc.

Functions and Operations

Home Screen

The feature allows you to quickly return to the previous menu or the home screen.

Operation:

In the editing screen, press the programmed Home Screen key, and the radio exits the screen and returns to the previous menu immediately; in other screens, press the key, and the radio returns to the home screen immediately.

Scan

The feature "Scan" allows you to listen to communication activities on other channels so that you can keep a close track of your team members.

Operation:

- To enable the feature, you can select "On" from the menu "Scan"; or Press the programmed **Scan** key in standby mode; or Switch to a channel for which the feature "Auto Scan" is enabled via the programming software.
- After the feature is enabled, your radio will scan according to the scan list set for the channel on which scanning starts. The scanning process is as follows:
 - During scanning, LCD displays icon , and LED ashes orange.

- When activities are detected on a channel, the radio will stay on the channel to receive current activities. If your radio stays on a non-priority channel, LCD will display icon ; if on Priority Channel 1 or Priority Channel 2, LCD will display icon  or icon  respectively.

- If you don't want to hear activities on the channel, press the programmed **Nuisance Temporary Delete** key to remove the channel from the scan list temporarily.

- If you want to continue staying on the channel, press the programmed **Monitor** or **Squelch Off** key during scan stay.

To exit the scanning process, you can select "Off" from the menu "Scan", or press the programmed Scan key again.

Talk Around

You can continue to communicate in DM mode by pressing the programmed **Talk Around** key, when your repeater malfunctions, or when your terminal is out of the repeater's range but within talking range of other terminals.

Operation:

Press the programmed **Talk Around** key to switch between DM mode and RM mode.

Functions and Operations

Monitor

To adjust match conditions for signal receiving, you can enable the feature "Monitor".

Operation:

- Press the programmed **Monitor** key to enable the feature, and the radio displays icon . To disable the feature, press this key again.
- Hold down the programmed **Monitor Momentary** key to enable the feature, and the radio displays icon . To disable the feature, release this key.

Squelch Off

If the feature "Squelch Off" is enabled, your radio's speaker will keep unmuted no matter whether carrier is present.

Operation:

- Press the programmed **Squelch Off** key to enable the feature. Then the radio displays icon  and sounds background noise. To disable the feature, press this key again.
- Press the programmed **Squelch Off Momentary** key to enable the feature. Then the radio displays icon .

and sounds background noise. To disable the feature, release this key.

Emergency

In case of an emergency, you can use the feature to ask for help from your companion or control center. The Emergency process has the highest priority. You can make emergency operation even when your radio is transmitting or receiving.

To enable the feature on a channel, an emergency system must be assigned to the channel via the programming software. In addition, the Emergency type and Emergency mode are settable via the programming software.

Emergency Type

For each Emergency mode, there are four Emergency types available. You can select one of them via your dealer:

Advanced Operation

PC Programming

1. Log in HQT on-line service center and download programming software. (or contact your dealer for programming.)
2. Turn off the radio and connect it to PC with programming cable. (see figure on the right)
3. Run the software and turn on the radio. Press "[F1]" button and write parameter data to the radio. (see figure below)
4. For the setting of parameters, please refer to the help documents of the software.

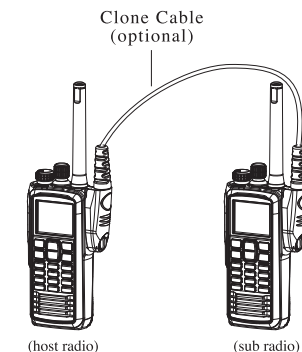


Programming Cable (optional)

Wired Clone

1. Connect host radio and sub radio with clone cable.
2. Hold down [SK2] key on host radio, then turn on the host radio. The indicator flashes red twice, which means the host radio is ready for cloning. Turn on sub radio as usual.
3. Press [PTT] key on host radio, clone function of sub radio is turned on if LED flashes green twice. Press [PTT] key on host radio again, clone function of sub radio is turned off if LED flashes red twice. Skip Step 3 is to forbid the clone function of sub radio.
4. Press [SK2] key to clone. The LED on the host radio flashes red and the LED on the sub radio flashes green. LED on sub radio goes out when the cloning is finished. If LED on host radio glows green, the clone is failed.
5. Replace with other "sub radio", and repeat step2~6 to continue cloning.

Tip: PC programming can prohibit the clone function of host radio.



Signaling

The radio supports CTCSS/CDCSS/2-Tone/5-Tone/QDC1200/DTMF. You can set the parameters by PC programming or contact your local dealer.

Optional Accessories

Optional accessories are available according to your requirements. All HQT accessories with good quality will ensure you clear communication and outstanding performance.



Antenna(VHF)
AH13615004
AH15017404



Antenna(UHF)
AF40043000
AF44047000



Earphone: ESN01



Earset: EHN01



Earphone (Air Tube):EAN01



Clone Cable: CC02



Programming Cable: PR03



Remote Speaker: HN01

Troubleshooting

Phenomena	Analysis	Solution
The equipment can not be powered on.	The battery may be improperly installed.	Remove the battery and attach it again.
	The battery may run out.	Recharge or replace the battery.
	The battery may suffer from poor contact caused by dirtied or damaged battery contacts.	Clean the battery contacts. If the problem can not be solved, contact your dealer or authorized service center for inspection and repair.
During receiving signals, the voice is weak, discontinuous or totally inactive.	The battery strength may be too low.	Recharge or replace the battery.
	The volume may be set to a low level.	Increase the volume.
	The antenna may get loose or may be improperly installed.	Power off the radio, and re-install the antenna.
	The speaker may be blocked or damaged.	Clean surface of the speaker. If the problem can not be solved, contact your dealer or authorized service center for inspection and repair.
You can not communicate with other members.	The frequency or signaling may be inconsistent with that of other members.	Set your TX/RX frequency and signaling to the same as that of other members.
	The channel type (digital/analog) may be set inconsistently.	Make sure all members are on the same digital / analog channel.
	You may be too far away from the group members.	Move towards other members.
Irrelevant communications or noises are heard on the channel.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio may not be set with any signaling.	Set signaling for all member radios to avoid interference at the same frequency.

The noise is too loud.	You may be too far away from other members.	Move towards other members.
	You may be at an unfavorable position. For example, your communication may be blocked by high buildings or frustrated in the underground areas.	Move to an open and flat area, and restart the radio.
	You may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.

Maintenance

Your radio is a product with excellent design and technology, please treat it with care. These recommendations can help you effectively use the radio.

- Keep the radio dry. Rain, moisture or other liquid may cause damage to the radio.
- Do not throw, hit or vibrate the radio. Brutal treatment may damage the inner IC or other elements.
- Do not hold the radio by the antenna or external MIC.
- Please use the original or standard antenna. Unapproved antenna or modifications of accessories may cause damage to the radio.
- Use lint-free cloth to clean the dust or stains on the radio.
- Cover the earphone/microphone pad when not using the radio.
- Use mild detergent (not corrosive chemicals) and cloth to clear the casing, control knob and keyboard after long-time use.



Note:
All recommendations above also refer to your battery, charger and accessories. If any of them works abnormally, please send it to nearest service center.

Service and Support

Shenzhen HQT Science & Technology Co., Ltd. provides long-time support for its products, including repair and supply of the radio and its parts.

Service Commitment

1. HQT two-way radio body has an 18-month guarantee; accessories (battery, charge adapter, charger and antenna) 6 months; earphone 3 months.
2. Replacement is available subject to the presentation of fully-filled warranty card or original purchasing invoice in case that the radio cannot work normally due to non-personal cause within the guarantee.
3. Replacement and repair is available subject to the presentation of fully-filled warranty card or original purchasing invoice in case that the radio or accessories cannot work normally within 30 days from the purchase date.
4. The repaired part has its own guaranty or 90-day guaranty from the repair date. The longer one is valid.

Warranty

1. The guaranty is only valid under normal use. And

guaranty is unavailable under such conditions: dissembling or modifications, damages caused by outside force, water let-in, fire burning, and usage of unapproved accessories or antenna, not according to the instruction manual and so on.

2. The guaranty is in effect from the purchase date on the invoice.
3. Free repair is unavailable if the HQT mark or Serial Number mark is torn off.
4. Only the fully-filled warranty card and original purchasing invoice with HQT's seal or dealer's seal affixed is valid for identifying the guarantee.

Cautions

1. Read the user manual before use.
2. Do not use the radio with damaged antenna. Use the radio only with standard antenna.
3. Turn off the radio in potential dangerous environment.
4. Avoid the contact between the battery and the metal, oily or corrosive objects.
5. Do not dip the radio or battery into water or throw them in fire.
6. Use the radio only with standard battery, adapter, charger and earphone.

Terms of Warranty

1. HQT two-way radio body has an 18-month guarantee; accessories (battery, adapter, charger and antenna) 6 months; earphone 3 months.
2. Only the fully-filled warranty card or original purchasing invoice with HQT's seal or dealer's seal affixed is valid for identifying the guarantee. (The invoice should give clear indication of accessories, radio, serial-number, purchasing date, purchasing price and other items.)
3. If the radio body went wrong within the guarantee, it should be ensured to work normally over 30 days after the repair.
4. Replacement and repair is available subject to the presentation of fully-filled warranty card or original purchasing invoice in case that the radio cannot work normally as the instruction says within 30 days from the purchase date. (Note that there must not be visible abrasion on radio body and accessories.)
5. Replacement of the same model is available subject to the presentation of 3-time repair receipt in case that the radio body still work abnormally after three-time-or-above repairs within the guarantee.
6. Repair of accessories (battery, adapter, charger and antenna) is available to the presentation of both fully-filled warranty card and original purchasing invoice.
7. The cost of materials and repair are covered during the time of guarantee.
8. Guarantee is unavailable in case that the HQT mark or the serial-number mark is torn off.
9. Guarantee is unavailable in cases below:
 - 1) Beyond the warranty period;
 - 2) Defects or damages under abnormal use;
 - 3) Defects or damages because of misoperation, accident, water penetration and carelessness;
 - 4) Defects or damages because of incorrect testing, operation, repair, installation, reconfiguration or adjustment;
 - 5) Defects or damages to antenna because of non-material or non-processing problems;
 - 6) Defects or damages because of unauthorized repair and disassembling;
 - 7) Product that the serial-number mark is torn off or unable to identify;
 - 8) Product with unclear purchasing date;
 - 9) Battery under such conditions:
 - a. Any damages or unsealing to the battery pack;
 - b. Defects or damages to battery because of charging with improper equipment or use beyond regulated maintain condition;
 - 10) Abrasion under normal use.

Note: The warranty ordinance, which is in accord with Chinese warranty regulations, will be modified properly according to marketing. If modified, the warranty ordinance is subject to our latest updating notice issued by HQT service center.

RF Energy Exposure Compliance

Your radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment and is authorized by the FCC for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your radio radiates measurable RF energy only while it is transmitting, not when it is receiving or in standby mode.

This radio is not intended for use by general population in an uncontrolled environment. It is only for occupational use and only applied to work-related conditions.

The radio must be only used by users, who are fully aware of the hazards of the exposure and who are able to exercise control over their RF exposure to qualify for the higher exposure limits.

RF Radiation Safety

In order to ensure user health, experts from relevant industries including science, engineering, medicine and health work with international organizations to develop standards for safe exposure to RF radiation.

These standards consist of:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J;
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992;
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999;
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998.

FCC Regulations

Federal Communication Commission (FCC) requires that all radio communication products should meet the requirements set forth in the above standards before they can be marketed in the U.S, and the manufacturer shall post a RF label on the product to inform users of operational instructions, so as to enhance their occupational health against exposure to RF energy.

Operational Instructions and Training Guidelines

To ensure the optimal performance and the compliance with occupational/controlled environment RF radiance limits in the above standards, please adhere to the following requirements:

- To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit no more than 50% of the time when in PTT mode;

Canada Regulations

The device complies with SAR and/or RF field strength limits of RSS-102 requirement.

EU Regulatory Conformance

The equipment is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC.