THANK YOU!

We are grateful for your purchase of HYT product. We believe this easy-to-use radio will provide you with dependable and reliable communications. This HYT portable two-way radio is a precision device. Treat it with care, and you will enjoy years of reliable operation.

MODELS COVERED IN THIS MANUAL TC3600-KU (6) Two-way Radio

Content

User Safety, Training, and General Information Compliance with RF Energy Exposure Standards

FCC Compliance

Precautions

Product Inspection

Battery Information

Accessory Installation

Getting Started

Features and Operation

Chinese/English Menu

Troubleshooting Guide

Care and Cleaning

Optional Accessories

Specification

Frequency Chart

User Safety, Training, and General Information

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR HYT PORTABLE TWO-WAY RADIO.

Compliance with RF Energy Exposure Standards

Your **HYT** two-way 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 (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environment at duty cycles of up to 50% talk-50% listen and should be used 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 (during talking), not when it is receiving (listening) or in standby mode.

Note: The approved batteries supplied with this radio are rated for a 5-5-90 duty cycle (5% talk-5% listen-90% standby), even though this radio complies with the FCC occupational RF exposure limits at duty cycles of up to 50% talk.

Your HYT two-way radio complies with the following of RF energy exposure standards and guidelines:

- 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 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

Operational Instructions and Training Guidelines

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 and always adhere to the following procedures:

Transmit and Receive

To transmit (talk), push the Push-To-Talk (PTT) button; to receive, release the PTT button.

Hand-held radio operation

Hold the radio in a vertical position with the microphone one to two inches (2.5 to 5 cm) away from the lips.

Body-worn operation

 Always place the radio in an HYT approved clip, holder, holster, case, or body harness for this product. Use of non-HYT-approved accessories may exceed FCC RF exposure guidelines.

Antennas & Batteries

- Use only HYT approved, supplied antenna or HYT approved replacement antenna.
 Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.
- Use only HYT approved, supplied batteries or HYT approved replacement batteries.
 Use of non- HYT -approved batteries may exceed FCC RF exposure guidelines.

Approved Accessories

For a list of HYT approved accessories, see the accessories page of this user manual or visit the following website which lists approved accessories: http://www.HYT.com.cn

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not authorized by the manufacturer may void users authority to operate this device.

FCC Requirements

Your radio must be properly licensed by the Federal Communications Commission prior to use. Your HYT dealer can assist you in meeting these requirements. Your dealer will program each radio with your authorized frequencies, signaling codes, etc., and will be there to meet your communications needs as your system expands.

Note

The term "IC": before the certification / registration number only signifies that the Industry Canada technical specification were met.

SAR Information

SAR:

THIS MODEL DEVICE MEETS THE GOVERN-MENTS REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

For body worm operation, this phone has been tested and meets the FCC RF exposure guidelines when used with an accessory that contains no metal, and that positions the antenna of the two-way radio a minimum of 2.5cm from the body. The SAR values of this two-way radio are 0.93 w/kg (Face Hold) and 1.74 w/kg (Body Worn). Use of other accessories may not ensure compliance with the FCC RF exposure guidelines

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on files with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid.after searching on FCC ID: R74TC3600KU6. In the U.S. and Canada, the SAR limit for mobile two-way radio used by the pulic is 5 Watts/kg(W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in usage

Precautions

- Only qualified technicians are allowed to maintain this product.
- Do not use the radio or charge a battery in explosive areas such as coal gas, dust, steam, etc.
- Switch OFF the radio while refueling or parking at gas station.
- Do not modify or adjust this radio without permission.
- Do not expose the radio to direct sunlight over a long time nor place it close to heating source.
- Do not place the radio in excessively dusty, humid areas, or on unstable surfaces.

Safety: It is important that the operator is aware of and understands hazards common to the operation of any radio.

Product Inspection

Thank you for your use of HYT portable two-way radio TC3600. Before use, you are recommended to inspect the product as follows.

First check the shipping carton for any signs of damage. If any damage has occurred, please contact your dealer immediately. Confirm the supplied product against the packing slip to assure accuracy.

Available Accessories

Item	Qty. (pcs)
Antenna	1
Belt Clip	1
Strap	1
Battery	1
Desktop Charger	1
AC Adapter	1
Owner's Manual	1

Battery Information

Battery Charging Information

The battery is not charged by the manufactory. Charge the newly purchased battery or out of use for more than 2 months battery before use. The battery capacity will be optimum only after being charged/discharged for two or three times. When the battery power is lower, please charge it or replace it with a new one.

Notices:

Do not short out the battery terminals or dispose of the battery by fire.

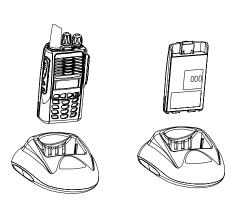
Turn off the radio when charging the battery inside the radio.

Remove the radio and the battery from the charger when charging cycle is over. Overcharging will shorten the battery life.

Do not continue charging the battery if it is already fully charged. Or the battery life will be shortened.

Store the battery in a place about 25° C. Charging the battery in less than 10° C temperature will cause the electrolyte leakage and damage the battery.

Charging the battery in over 35°C temperature will affect the battery capacity.



Charging the Battery

You are recommended to use HYT authorized charger. Charger LED will indicate the charging status.

LED	Meaning
Red LED flashes	Power voltage
	too low
Red LED glows	Charging
Green LED glows	Done

Accessory Installation

Battery

Attach the battery

Insert the two tabs on bottom of the battery into the slots at the bottom of the radio. Push top of the battery towards the radio until a click is heard. (See figure 1)



Fig. 1

Remove the battery

Turn off the radio. Push the battery latch on the middle of the radio to remove the upper side of the battery away from the radio. And then remove the battery. (See figure 2)

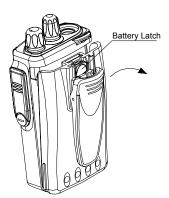
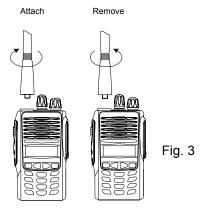


Fig. 2

Antenna

Insert the threaded end of the antenna into the connector on top of the radio. Rotate the antenna clockwise to fasten it.

Rotate the antenna counterclockwise to remove it. (See figure 3)



Belt Clip

Attach Belt Clip

Align the slot of the belt clip with the T-slot at the battery cover and press the belt clip downwards until it is locked. (See figure 4)



Fig. 4

Remove the belt clip

Press the disassembly release upwards with a key until it releases and then push the belt clip upwards with your thumb to remove it. (See figure 5)

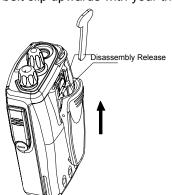


Fig.5

Earplug Cover

Rotate the screw at the bottom of the cover counter clockwise by a screwdriver until it is out of the nut to remove the Earphone/Microphone jack cover. (See figure 6)

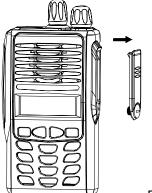


Fig. 6

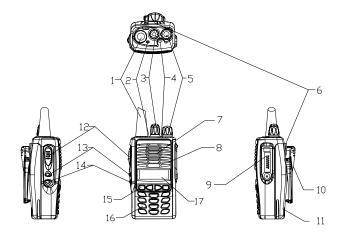
External Earphone/Microphone (Optional)

Insert the tab at the bottom of the earphone/microphone into the slot on the radio. (See figure 7). Align the nuts at top of the earphone/microphone with the holes on the radio and then turn them clockwise to fasten.



Fig. 7

Getting Started



(1) Antenna

Used to transmit/receive signals.

(2) LED

Following table indicates LED indication and corresponding radio status.

LED	Status
No display	Standby
Green	Receive
Red	Transmit
Flashing green	Scan
Flashing red	Low battery voltage
Flashing orange	Call waiting

(3) Channel Selector

Used to select wanted channel.

(4) Programmable key [A]

(5) Power/Volume Control Knob

Rotate the Power/Volume Knob clockwise until a "click" is heard to turn the radio on, fully counter clockwise to turn the radio off. When the radio is on, turn the knob to adjust volume.

(6) Battery Latch

Used to fasten the battery.

(7) Speaker

Used to output sounds.

(8) Microphone

Used to input sounds.

(9) External Jack

Used to connect with external earphone or programming cable.

(10) Belt Clip

Used to clip the radio on your belt.

(11) Battery Pack

(12) PTT key

Press and hold PTT, radio operates in transmit mode. Release PTT, radio returns to receive mode.

(13) Programmable Key [B]

(14) Programmable Key [C]

The following table shows the key function when

- Briefly press
- Press and hold

Key Function	Briefly Press	Press and Hold
Emergency Siren	Enable emergency siren	Disable emergency siren
Monitor	Disable monitor	Monitor
Scan	Enable/Disable scan	Enable/Disable scan
Nuisance Delete	Delete nuisance channel in scan	Delete nuisance channel in scan
Select High/Low Power	Select High/Low Power	Select High/Low Power
Repeater/Talk Around	Select Repeater or Talk Around Mode	Select Repeater or Talk Around Mode
Repeater/Reverse Frequency	Select Repeater or Reverse Frequency Mode	Select Repeater or Reverse Frequency Mode
Call	Transmit a Call	Transmit a Call
Selective Call	Transmit Selective Call	Transmit Selective Call
Group Call	Transmit Group Call	Transmit Group Call

Please contact your dealer for more details about programmable key.

(15) Function Keyboard (See figure 8)

Exit: Used to return to the upper menu

Up key

Down key

Menu/Select Key: Used to enter menu mode. In menu mode, this key is used to select options.

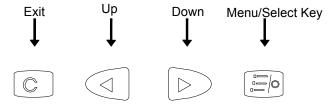


Fig. 8

(16) Numeric Keyboard (See figure 9)

Used to input information to the program menu of the radio. (Only for radio with a numeric keyboard.)



Fig. 9

(17) LCD Display

Used to indicate operation status of the radio.

Features and Operation

Turn On/Off the Radio

Rotate "Power/Volume" knob clockwise. An alert tone indicates that the self-test of the radio has been completed satisfactorily. LED glows green at the same time. If self-test fails and/or the selected channel is not programmed, you will hear another alert tone.

Rotate "Power/Volume" knob counterclockwise until a click is heard to turn the radio off.

Adjust the Volume

Rotate "Power/Volume" knob to adjust the volume.

Password (Only for radio with a numeric keyboard.)

This radio offers password protection feature. "Password" will appear on LCD after power on if password is set in your radio. The radio enters conventional mode after entering 1-8 digit password.

Keypad Lock/Unlock (Only for radio with a numeric keyboard.)

Hold down key and then press "*" key in 2 seconds to lock the keypad. When the

keypad is locked, holding down key and then pressing *** key in 2 seconds can unlock the keypad. LCD displays *\hat{\textsigma} icon when keypad is locked.

Select Channel

This radio provides 128 conventional channels (8 zones, 16 channels in each zone). Some of the channels may be not programmed and can't be used. Please contact your dealer for more details.

Rotate "Channel Selector" knob to select wanted channel.

- 1. Select an appropriate zone. (Refer to "select zone" in Chinese/English Menu).
- 2. Rotate "Channel Selector" knob until your wanted channel is selected.

Transmit

- 1. Turn on the radio.
- 2. Rotate "Channel Selector" knob to select wanted channel.
- 3. Press PTT and speak into the microphone with your mouth 2.5-5 centimeters away from the radio. LED glows red during transmission.
- 4. Release PTT key to finish speaking.

Receive

- 1. Turn on the radio.
- 2. Rotate "Channel Selector" knob to select wanted channel.
- 3. Adjust the volume.

- 1. Then you can receive a valid call. LED glows green during receiving.
- 2. 1) If CTCSS/CDCSS and squelch tail elimination feature are enabled by your dealer, noise will be removed by the end of a conversation.
- 2) Beep tone sounds by the end of a conversation if roger tone is enabled by your dealer;

Please contact your dealer for more details.

Monitor

- 1. Press MONI key to monitor the current channel.
- 2. Press MONI key again to exit.
- Your dealer can set three monitor modes: Selective call monitor, CTCSS monitor and Carrier monitor.

Selective call monitor: To prohibit selective call squelch;

CTCSS monitor: To prohibit all signaling squelch and open the speaker when carrier is detected.

Carrier monitor: To prohibit all squelch and open the speaker.

Repeater/Talk Around

When the repeater doesn't work or you are out of the communication range of the repeater and within the communication range of your group member, you can bypass the repeater and talk directly to your group member.

Press programmed "Repeater/Talk Around" key to select between repeater and talk around mode. An alert tone indicates that the radio operates in talk around mode. A different alert tone indicates that you are talking via a repeater.

Repeater/Reverse Frequency

When you are out of the communication range of the repeater and within the communication range of your group member, you can talk with your group member by reverse frequency if your group member is within the communication range of the repeater.

Press programmed "Repeater/Reverse Frequency" key to select between repeater and reverse frequency. An alert tone indicates that the radio operates in reverse frequency mode. A different alert tone indicates that you are talking via a repeater.

Note: "Repeater/Talk Around" and "Repeater/Reverse Frequency" can't be set simultaneously in one radio.

Power Level

Each channel of the radio is set as different power levels that are user selectable. (High power is forbidden in certain channels).

- 1. High power allows your talk to be heard from further distance.
- Low power helps to save battery power.

Press programmed "power select" key to select high/low power. An alert tone indicates that the radio operates at high power and another alert tone indicates low power.

Scan

Scan feature allows you to monitor all channels for activity.

When scan feature is enabled, the radio will detect all channels. If an active channel is detected, the radio will remain on that channel and you will be able to hear the conversation. (The dealer can program a channel as scan item or non-scan-item).

Disable/Enable Scan Feature

- 1. Press scan key, scanning begins.
- 2. Press scan key again, scanning ends.

LED flashes green in scan mode.

Callback

Pressing PTT during scanning can callback on the callback channel. Please contact your dealer for more details.

Nuisance Delete

Nuisance delete feature allows you to temporarily delete an unwanted channel from the scan list

When the radio stops on the nuisance channel, press the programmed "nuisance delete" key until an alert tone sounds to delete this channel.

When scan feature is enabled again, the deleted channel will return to the scan list.

Note: Priority channel can't be deleted.

Priority Channel Scan

This feature allows you to scan important channels frequently. The dealer can program a channel as priority channel through the programming software. Please contact your dealer for more details.

Channel Scan: Ch1→Ch2→Ch3→Ch4→Ch5···Ch1

Priority Channel Scan (Ch2 is priority channel):

 $Ch2\rightarrow Ch1\rightarrow Ch2\rightarrow Ch3\rightarrow Ch2\rightarrow Ch4\rightarrow Ch2\rightarrow \cdots Ch1$

Note: The radio will constantly monitor the priority channel when it stops on a non-priority channel. If an activity is detected on the priority channel, the radio will move to and remain on the priority channel.

Call

Press the programmed call key, the radio will sound a series of rings to call and wake the radio that has the same channel and signaling to draw the user's attention.

Selective Call

The radio can call selected radios if selective call feature is set. It includes selective call and group call. Selective call is used to call a selected radio and group call will call a group of radios.

Transmit

- 1. Hold down PTT key and then press the programmable key [B], the radio will transmit a series of programmed selective call signaling code. (The user can edit selective call list through the menu. Please refer to Chinese/English menu.)
- 2. Hold down PTT and then press the programmable key [C], the radio will transmit a series of programmed group call signaling code.
- 3. When transmission ends, the radio enters call waiting mode. When the called radio receives the signaling, it will send a confirmation tone to your radio.
- 4. Then press PTT to talk.
- 5. When the call waiting reset time elapses, MONI key is pressed or channel selector knob is rotated, the radio will exit the call waiting mode.

Receive

1. When your radio receives a selective call signaling code or group call signaling code

that is the same as your preset one, it will send a confirmation tone to the caller.

- 2. After transmitting the confirmation tone, the radio enters call waiting mode.
- 3. Then pressing PTT can talk.
- 4. When the call waiting reset time elapses, MONI key is pressed or channel selector knob is rotated, the radio will exit the call waiting mode.

Note: LED flashes orange in call waiting mode.

Emergency Siren

The radio can be programmed to sound emergency siren. When the emergency siren is enabled, the radio will transmit emergency ANI and then sound continuously at highest volume. (Emergency ANI can be disabled by your dealer. Once disabled, the Emergency ANI will not be transmitted).

- 1. Press Emergency Siren key to activate Emergency Siren feature.
- 2. Press Disable Emergency Siren key to disable Emergency Siren feature.
- 3. Press Emergency Siren key again to activate Emergency Siren feature.

VOX Feature

Plug an earphone with VOX feature into the radio to enable VOX feature.

- 1. VOX feature enables you to transmit automatically by speaking into the microphone.
- 2. Transmission stops automatically when you stop speaking.
- 3. Press PTT to disable VOX feature.
- 4. Turn the radio on again, VOX feature will be activated.

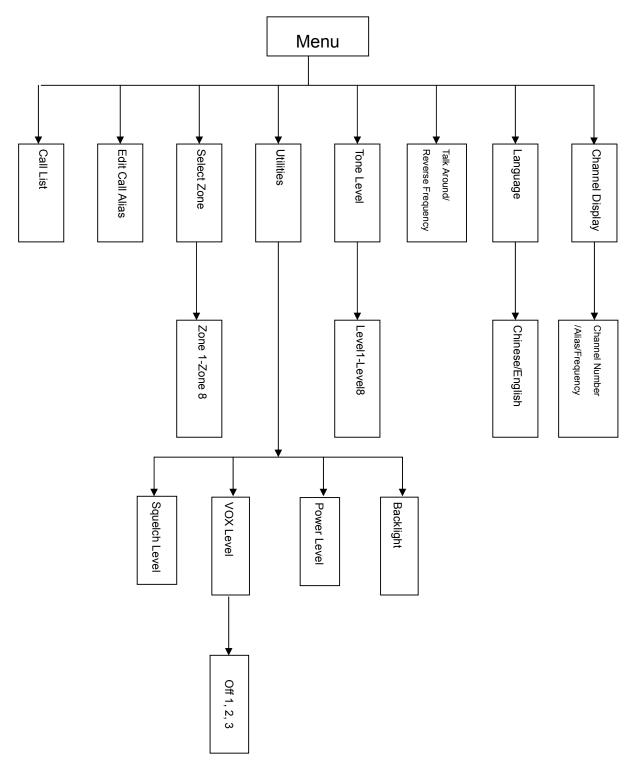
Built-in Modem

The built-in 1200/2400bit/s MSK modulator offers data transmission function. Please contact your dealer for more details.

Low Battery Alert

When the battery voltage becomes low, the red LED will flash and beeps sound. You need to recharge or replace the battery.

Chinese/English Menu



Call List

1. Press $\stackrel{\stackrel{\longleftarrow}{\text{lim}}}{\text{poly}}$ key in standby mode to enter the main menu and go to the "call list"

item. Press [C] key to exit the menu mode.

Call List

2. Press key to enter call list and then press √ key to select upwards/downwards. Press key to save the change and exit the menu. Press [C] key to return to the upper menu without saving the change.

Simon

Edit Call Alias

1. Press in standby mode to enter the main menu and then press key to enter "edit call alias" item.

Edit Call Alias

2. Press key to enter selective call list and then press key to select a call alias. Press key again to edit the selective call alias. Input characters through the numeric keyboard and press key to move. Press key to save the change and return to the selective call list. Press [C] key to return to the selective call list without saving the change. Press key to continue the above operation and [C] to return to the main menu.

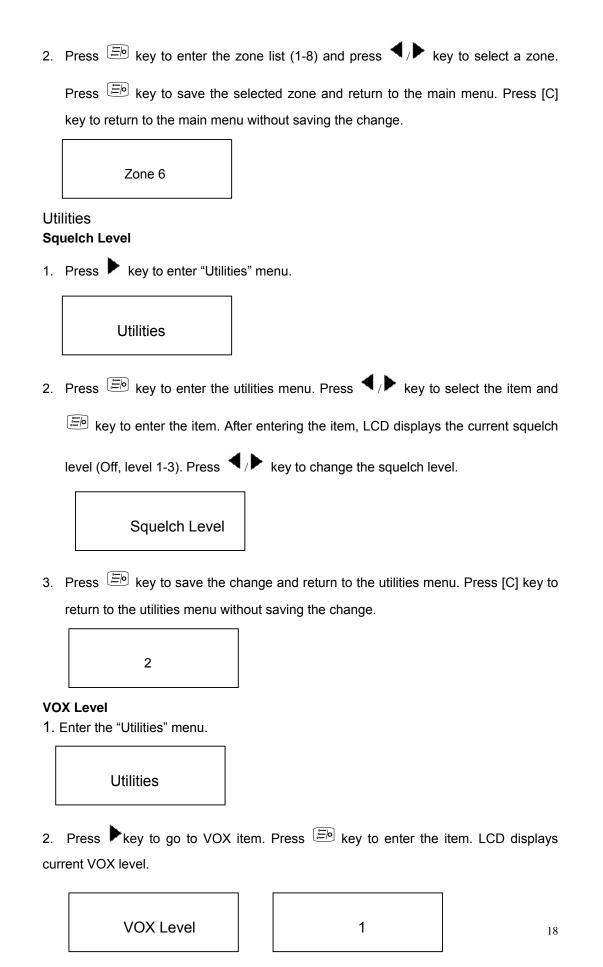
Call1

Note: Only English character can be entered when editing call alias. To enter Chinese character, you can program via the programming software.

Select Zone

1. Press key to enter "select zone" item.

Select Zone



4 5
3. Press 4/ key to change the VOX level (off, level 1-3). VOX feature is disabled
when OFF. Press key to save the change and return to the utilities menu. Press [C]
key to quit without saving the change.
2
Power Level
1. Enter the "Utilities" menu.
Utilities
2. Press key to go to "power level" item. Press key to enter the item. LCD
displays power level option.
Power Level Power High
3. Press ★/▶ key to toggle the power level (High/Low). Press ♣/▶ key to save the
change and return to the utilities menu. Press [C] key to quit without saving the change.
D
Power Low
Backlight
Enter the "Utilities" menu.
Utilities
2. Press key to go to "backlight" item. Press key to enter the item. LCD
displays backlight option.
Backlight Off
3. Press key to turn the backlight on/off. Press key to save the change and

return to the utilities menu. Press [C] key to quit without saving the change. On **Tone Level** 1. Press key to go to "tone level" item. Tone Level 2. Press key to enter "tone level" (level 1-8) item. LCD displays current tone level. Press key to change the tone level. You will hear a 1000Hz confirmation tone at the same time. Press key to save the change and return to the utilities menu. Press [C] key to quit without saving the change. 6 Talk Around/Reverse Frequency 1. Press key to go to "talk around/reverse frequency" item. TalkAround/Reverse 2. Press 🗐 key to enter this item. LCD displays the current transmit mode. Press key to change the transmit mode. Press key to save the change and return to the utilities menu. Press [C] key to return without saving the change. **Talkaround** Reverse Language 1. Press key to go to "language" item. Press to enter "language" item and LCD displays the current language. Press 4/4 key to toggle the language interface.

Language

2. Press key to save the change and return to the utilities menu. Press [C] to return without saving the change.

Chinese

English

Channel Display

1. Press key to go to "channel display" item.

Channel Display

2. Press key to enter channel display item. LCD displays the current channel display mode. Press key to toggle the display mode. Press key to save the change and return to the utilities menu. Press [C] to return without saving the change. Channel display mode can be switched among channel number, channel alias and receiving frequency.

Alias

Note:

- 1. Press \(\frac{1}{\infty}\) key in the main menu to toggle the setting item in the above order.
- In the menu mode, the radio will return to the standby mode automatically without saving the setting if the display is kept for over 20 seconds or the channel selector knob is turned.
- 3. Chinese/English interface.
- 4. Support English input.

Appendix 1 LCD Display

Description				
Signal Strength Indicator	Keypad Lock	Battery Power Indicator	Carrier Indicator	Speaker on
Тий		III)	Ŷ	4
High/Low Power	Transmitting	Monitoring	Scanning	Call Waiting
Hi Lo	H	~	ťì	ъ

Appendix 2 Character Input

Key	Number of times key is pressed								
Key	1	2	3	4	5	6	7	8	9
0	0	+	-	*	1	()	<	^
1	Space	1	,		,	"	:	!	?
2	Α	В	С	2	а	b	С		
3	D	Е	F	3	d	е	f		
4	G	Н	I	4	g	h	I		
5	J	K	L	5	j	k	I		
6	M	N	0	6	m	n	0		
7	Р	Q	R	S	7	р	q	r	S
8	Т	U	V	8	t	u	٧		
9	W	Х	Υ	Z	9	w	Х	у	Z
*	*	&	%						
#	#	@	\$	~					

Appendix 3 Alert Tone

High pitched tone	Low pitched tone
-------------------	------------------

Operation	Description	Audible Tone
Turn on the radio	Power on-Ready	
Turn on the radio	Power on-Failure	
Repeater/Talk Around	Repeater	
Repeater/Talk Around	Talk Around	
Repeater/Reverse	Repeater	
Frequency		
Repeater/Reverse	Reverse Frequency	
Frequency		
Select Power	High Power	
Select Power	Low Power	
	 Low Battery Alert Tone 	

Idle Channel Tone	
PLL Unlock Tone	

Troubleshooting Guide

Trouble	Solution
No power	 Battery may be used up. Please recharge or replace the battery. Battery may not be attached properly. Remove the battery and attach again.
Power doesn't last long even if fully charged.	Battery life cycle is over. Please replace it with a new one.
Can't talk to or hear other users in your group.	 Make sure you are using the same frequency and CTCSS tone as other users in your group. Other users may be too far away. Make sure you are within the communication range.
Voice of other users (non-group user) appears on the channel.	Please change your CTCSS tone. Be sure to change the tone on all the other radios in your group.

Care and Cleaning

- ♦ Do not carry your radio by the antenna or remote microphone;
- ♦ Wipe the battery with a lint-free cloth to remove dirt, grease, or other material that may prevent good electrical connection;
- ♦ When not in use, keep the accessory jacks covered with the protective caps;
- ♦ Clean the shell, controls and keys of your radio with neutral detergent and warm water after a long period of usage. Avoid using strong chemicals.

Optional Accessories

Earholder style ear microphone158Z-G
Earbud style ear microphone 158Z-S
Headset 158Z-H
Vertical Leather Case PT-20
Horizontal Leather case PT-23
Handhold Microphone SM-05/SM-06Z
Antenna UHF/VHF

HYT endeavor to achieve the accuracy and completeness of this manual, but cannot

guarantee its accuracy at all times. All the above specifications and design are subject to change without notice.

All the reproduction and translation of this manual without authorization of HYT is not allowed.