#### **THANK YOU!**

We are grateful for your purchase of HYT product. We believe this easy—to-use radio will provide you with clear and reliable communications at peak efficiency. 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

TC700 VHF Two-way Radio

TC700 UHF Two-way Radio

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### **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
   Industry Canada RSS-102 Exposure of Humans to RF Fields.

### **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: <a href="http://www.hyt.com.cn">http://www.hyt.com.cn</a>

# **FCC Compliance**

#### Part 15 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.

#### **FCC Licensing Requirements**

Your radio must be properly licensed Federal Communications Commission prior to use. Your HYT Wireless 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.

#### **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 for any reason.
- 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, nor on unstable surfaces.
- Hold the radio in one to two inches (2.5 to 5 cm) away from your lips.
- If the ambient temperature is over-high to the degree that PCB board reaches 85°C during transmitting process, the transmitting power of the radio will decrease.

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

### **Product Inspection**

Please carefully unpack the radio. Before use, it is recommended that you inspect the product as follows.

First check the shipping carton for any signs of damage. Confirm the supplied product against the packing slip to assure accuracy. If any items are missing or have been damaged during shipment, please file a claim to the carrier immediately.

#### **Supplied Accessories**

Item	Qty. (PCS)
Antenna *	1
Belt Clip	1
Screw (belt clip) *	2
Strap	1
Battery	1
Desktop Charger	1
Power Adapter	1
Power Cable	1
Owner's Manual	1
Declaration of Conformity *	1

#### \*Note:

- 1. Frequency is marked on the color circle of the antenna. Red circle indicates UHF and green indicates VHF. If frequency is not marked on the color circle, please refer to the label on the main unit for details.
- 2. The screws (belt clip) have been fixed on the main unit at leaving the factory.
- 3. Only for European market.

### **Battery Information**

#### **Battery Charging Information**

The battery is not charged at the factory. Batteries must be fully charged before initial use or if they have not been used for some period of time. The battery capacity will be optimum only after being charged / discharged for two or three times. When the battery power is low, it needs either to be charged or replaced with a new one.

#### **Applicable Battery Packs**

Charge only the HYT approved battery packs. Other batteries may burst and cause personal injury.

#### Notes:

- 1. Do not short the battery terminals or dispose of the battery by fire.
- 2. Never attempt to disassemble the battery.
- 3. Charge the battery in  $5^{\circ}$ C to  $40^{\circ}$ C temperature, otherwise the battery can't be fully charged.
- 4. Turn off the radio equipped with batteries before charging. Using the radio while charging its battery will interfere with correct charging.
- 5. Do not pull/plug the adaptor and the battery in the charging process to avoid interfering with the charging phase.
- 6. When the battery operating time decreases even though it is fully and correctly charged, that means the battery life is over, please replace it with a new one.
- Do not recharge the optional Ni-MH battery if it is already fully charged, otherwise, the battery life will be shortened or damage may be caused.

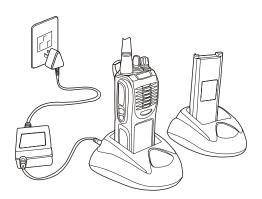
**WARNING**: Conductive metals including jewelry, key, decorating lace may result in short circuit and generate a large quantity of heat when coming into contact with battery electrodes. To avoid damage to articles or human injury, treat any battery with care, especially when placing it into pocket, wallet or other mental containers.

#### **Charging the Battery**

When radio LED flashes red and three Beeps sound every 30 seconds after the battery is installed, that means battery power is low. Please charge the battery.

You are recommended to use HYT-approved, supplied charger; Charger LED will indicate the charging status.

LED	Status		
Glow red	Charging		
Glow green	Fully charged		



- 1. Plug the power cable into the adapter.
- 2. Plug the DC socket of adapter into the DC jack on the rear of the charger.
- 3. Insert the battery or the radio with battery into the charger cup.
- 4. Plug the AC socket of adapter into an AC outlet.
- Make sure that the battery connectors are in contact with the charging terminals; the charger LED glows red and charging begins.
- 6. The charger LED glows green when the battery is fully charged in about 3 hours, please remove the battery or the radio with battery from the charger.

#### \*Notes:

\*Charger LED may flash if you connect the charger to power source before inserting the battery.

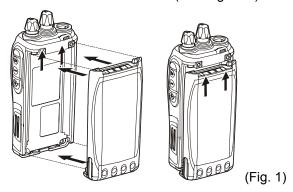
\*After removing the battery from charger, do not insert the battery or another one into charger until charger LED glows green.

\*If battery is properly inserted into the charger, charger LED will solidly glow red in charging mode and flashes when the battery is damaged or ambient temperature is over high or over low.

### **Accessory Installation**

#### **Attaching the Battery**

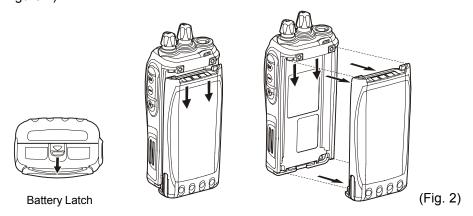
 In attaching the battery, make sure the full contact and parallel between the battery and aluminum chassis. Push the battery along the guide on back of the radio until the battery latch at the bottom of the radio locks. (See Figure 1)



#### **Removing the Battery**

- 1. Turn off the radio.
- 2. Pull back the battery latch.
- 3. Slide the battery away from the radio.

#### (See Figure 2)

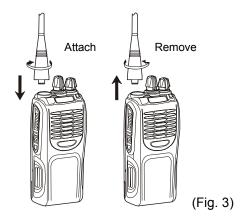


### **Attaching the Antenna**

- Screw the antenna into the connector on the top of radio by holding the antenna at its base.
- 2. Turn the antenna clockwise to fasten it. (See Figure 3)

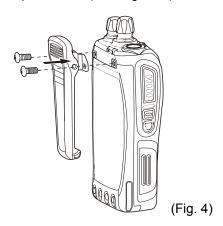
#### **Removing the Antenna**

1. Turn the antenna counter-clockwise until you can remove it. (See Figure 3)



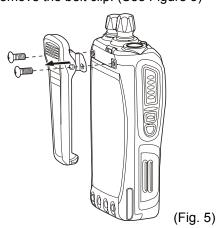
### **Attaching the Belt Clip**

- 1. Loosen the screws of belt clip from the main unit.
- 2. Align the screw eyelets of belt clip holder with those of radio chassis.
- 3. Use the screws of belt clip to lock it. (See Figure 4)



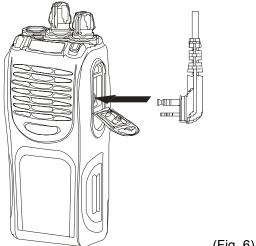
### **Removing the Battery Clip**

1. Loosen the screw to remove the belt clip. (See Figure 5)



### **Attaching Remote Earphone/Microphone**

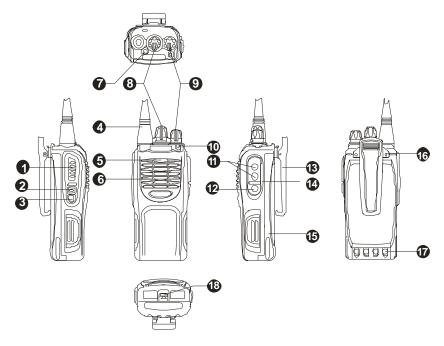
- 1. Unclose the cover of the earphone/microphone jack (no need to remove it);
- 2. Insert the earphone/microphone plug into the jack. (See Figure 6)



(Fig. 6)

**Note**: The radio is not fully water resistant while using remote earphone/microphone.

### **Radio Overview**



- (1) PTT Key
  - •To transmit, hold down the [PTT] key and speak into the microphone; Release it to receive.
- (2) SK1 (Side Key 1)
  - •This is a programmable function key.
- (3) SK2 (Side Key 2)
  - •This is a programmable function key.
- (4) Antenna
- (5) Microphone
- (6) Speaker
- (7) TK (Top Key)
  - •This is a programmable function key.
- (8) Channel Selector Knob
  - Rotate the knob to select channel from 1 to 16.
- (9) Power/Volume Control Knob
  - Rotate the knob clockwise until a "click" sounds to turn on the radio; rotate it counter

clockwise to turn off the radio. When the radio is on, turn the knob to adjust the volume.

### (10) LED Indicator

Radio status is indicated by LED state/color or alert tone.

	Source radio is turned on while holding down [PTT+SK2]; directly turn the target radio on.	LED flashes orange twice after entering User Wired Clone Mode.  LED solidly glows red during		
User Wired Clone	Source radio (after the starting of the target radio and the installation of the cloning cable, push PTT on the source radio to begin cloning.)	cloning; LED goes out in case of successful cloning; Flash red once every second in case of cloning failure;		
	Target radio	Solidly glow green during cloning; Go out when cloning is completed;		
Wireless Clone	Adjust the source and target radios to the same channel. Turn the source and target radios on while holding down [PTT+SK1].	Flash orange once after entering Wireless Clone Mode.		
	Source radio (After the source and target radios are turned on and stay in the same channel, hold down PPT on the source radio to begin cloning.)	Solidly glow red during cloning.		
	Target radio	Solidly glow green during cloning; LED flashes green and two Beeps are heard in case of successful cloning; Flash red in case of cloning failure;		
Power on in User Mode	Flash green once			
Low Battery Alert	Solidly glow red; three Beeps every 30s;			

Transmit	Glow red		
Receive	Glow green when carrier is received;		
Scan		Flash green once every second	
Read/Write	Read	Glow red	
Reau/Wille	Write	Glow green	
DTMF/PTT ID/2Tone	Transmitting	Glow red	
/5Tone/HDC2400 <sup>™</sup>	Dono	Glow orange	
Transmit	Done		
2Tone/5Tone/HDC2400 <sup>™</sup>	Deceding is completed	Flash orange	
Decode	Decoding is completed		
High/Middle/Low Power	1W	One Beep	
	2W	Two Beeps	
	4W/5W	Three Beeps	
Programmable Key	Enter	One Beep	
Frogrammable Key	Exit	Two Beeps	

- (11) Speaker/Microphone Jack
- (12) Screw of Speaker/Microphone Jack Cover
- (13) Belt Clip
- (14) Speaker/Microphone Jack Cover
- (15) Battery
- (16) Screws (belt clip)
- (17) Charging Connector
- (18) Battery Latch

### **Programmable Auxiliary Functions**

Each of the TK, SK1, SK2 keys can be programmed to access one of the following auxiliary functions with the preset type of key pressing (short press or long press). Please refer to their descriptions in "Advanced Operation".

- None
- Call1/Call2
- Emergency
- Emergency Cancel
- Lone Worker
- Man Down (optional)
- Monitor
- Monitor Momentary
- Nuisance Channel Temporary Delete
- Nuisance Channel Delete
- Squelch level Check
- Adjust Squelch level
- Scan
- Scrambler
- Scrambler Backup
- Squelch Off
- Squelch Off Momentary
- Talkaround
- Output Power Check
- Adjust Power Level
- Whisper
- VOX
- Battery Power Indicator
- Rental Time Indicator
- Channel Announce Temporary Enable

- Channel Announce Enable
- External Scrambler(optional)
- External Scrambler Backup(optional)
- Communication Range Alert

### **Basic Operations**

#### 1. Turn On the Radio

Rotate the Power/Volume Control knob clockwise to turn on the radio; green LED flashes one time.

• A Beep sounds if alert tone is set by your dealer.

#### 2. Adjust the Volume

If your dealer has programmed Monitor or Squelch Off feature to a programmable key, you can press that key to hear the background noise while adjusting the volume to a comfortable level by rotating the Power/Volume Control Knob.

#### 3. Select a Channel:

Rotate Channel Selector Knob to select your desired channel; the radio will report the current channel number when the channel is selected.

#### 4. Transmit

Hold down the [PTT] key, speak into the microphone with normal voice.

• Keep microphone about 2.5 to 5cm away from your lips.

#### 5. Receive

Release the [PTT] key, the radio returns to receive mode.

### **Advanced Operations**

The following functions are programmable by your dealer, as described above.

#### Call1/Call2

Press the preprogrammed Call1/Call2 key to transmit the stored DTMF code, 2-tone /5-tone code/HDC2400<sup>TM</sup>.

#### **Emergency**

Press the preprogrammed Emergency key, the radio will emit emergency alarm or send ENI (Emergency Number Identity) / background tone to companions or system (selectable by user via programming software). Two modes are configured to cancel the feature:

	Activate Emergency Cancel Emergency			
Mode 1	Long press	Short press		
Mode 2	Short press	Long press		

#### **Lone Worker**

The Lone Worker feature enables user to work alone with added safety. Press the preprogrammed Lone Worker key to activate the feature. If user has not pressed any keys within a preset time, the radio will emit an alert tone. Press any key to respond and cancel the alert, otherwise, the radio will automatically enter emergency mode.

#### Man Down (optional)

Press the preprogrammed Man Down key to activate the feature. The radio will emit an alert tone if it remains horizontally or inversely positioned within certain time. If it keeps such status within the pre-set time, it will automatically enter emergency mode. Place the radio in vertical position to cancel the alert.

#### Monitor/Squelch Off

#### Monitor

Press the preprogrammed Monitor key to open the signalling squelch; press the key again to exit.

#### Monitor Momentary

Long press the preprogrammed Monitor Momentary key to open the signalling squelch; release the key to exit.

#### Squelch Off

Press the preprogrammed Squelch Off key to open the noise squelch; press the key again to exit.

#### Squelch Off Momentary

Long press the preprogrammed Squelch Off Momentary key to open the noise squelch; release the key to exit.

### Squelch Level Check / Adjust Squelch Level

Long press the preprogrammed Squelch Level Check key to hear the squelch level of the current channel.

Short press the preprogrammed Adjust Squelch Level key to adjust the squelch level. Each time when you press the key, a Beep tone sounds, squelch will be increased by one level  $(9\sim0)$  and the adjusted level is saved.

#### Scan

Press the preprogrammed Scan key, scan starts from the current channel and ascends through the channel numbers in scan list. Green LED flashes in scan mode and solidly glows when a signal is received on a channel and signalling matches. Press the Scan key again to exit from scan mode.

#### Nuisance Channel Temporary Delete

When scanning stops on a channel, press the preprogrammed Nuisance Channel Temporary Delete key to temporarily remove that channel from the scan list.

- A priority channel can't be permanently deleted.
- You cannot delete a channel if there will be less than 2 channels available for scanning.
- To restore the deleted channel back to the scan list, simply exit from scan mode or switch the radio off and back on.

#### Nuisance Channel Delete

Press the preprogrammed Nuisance Channel Delete key to permanently remove the channel from the scan list. The deleted channel can't return to the scan list even though the radio exits from scan mode or is powered on again.

■ A priority channel can't be permanently deleted even though you have pressed the Nuisance Channel Delete key.

You cannot delete a channel if there will be less than 2 channels available for scanning.

#### **Voice Encryption**

The voice encryption feature includes scrambler and scrambler backup.

Usually both the calling and called parties activate the scrambler feature to prevent other parties using the same frequency from interception.

#### ■ Scrambler

Press the preprogrammed Scrambler key, the radio scrambles your voice so that any other party listening in on your channel will be unable to understand your conversation. The Scrambler ON/OFF status is not memorized when the radio is powered off and back on.

#### ■ Scrambler Backup

Press the preprogrammed Scrambler Backup key to activate the scrambling feature. The Scrambler ON/OFF status is memorized when the radio is powered off and back on.

#### ■ External Scrambler (optional)

Press the preprogrammed External Scrambler key to control the external scrambler.

The status is not stored when the radio is powered off and back on.

#### **■** External Scrambler Backup (optional)

Press the preprogrammed External Scrambler key to control the external scrambler.

The status is stored when the radio is powered off and back on.

#### **Talkaround**

Press the preprogrammed Talkaround key, the radio will transmit on the RX frequency.

#### **Output Power Check / Adjust Power Level**

Long press the preprogrammed Output Power Check key, Beep tone sounds to indicate the corresponding power level, a Beep indicates Low power; two Beeps indicate Middle power and three Beeps indicate High power.

Short press the preprogrammed Adjust Power Level key to adjust the power level; The output power will toggle among low/middle/high  $(L \sim M \sim H)$  and the adjusted power level is saved each time when you press the key.

#### Whisper

Press the preprogrammed Whisper key, you would be clearly heard even if you speak with low voice.

Press the key again to exit.

#### VOX

Press the preprogrammed VOX key to activate the VOX feature. User can transmit without holding down [PTT].

#### **Battery Power Indicator**

Press the preprogrammed Battery Power Indicator key, the radio will report the battery status by audible indication ("1", "2", "3", "4").

#### **Rental Time Indicator**

In rental mode, the radio is restricted to be used for a preset period of time. Press the preprogrammed Rental Time Indicator key, the radio sounds an audible tone ("1", "2", "3", "4", "5") to indicate the remaining time that the user is allowed to use the radio before the preset time expires. The remaining time can be set by your dealer.

#### **Channel Announce Temporary Enable**

When you press the preprogrammed Channel Announce Temporary Enable key, two modes can be programmed:

Mode 1 (report the current channel number at the beginning)

- Two Beeps sound indicating that the Channel Announce feature is temporarily inactivated; turn on the power again to activate this feature, the radio reports the current channel number.
- A Beep sounds indicating that the Channel Announce feature is temporarily activated; this feature remains activated even if the radio is powered on again.

Mode 2 (not report the current channel number at the beginning)

- Two Beeps sound indicating that the Channel Announce feature is temporarily inactivated; this feature remains inactivated even if the radio is powered on again.
- A Beep sounds indicating that the Channel Announce feature is temporarily activated; turn on the power again to inactivate this feature.

#### **Channel Announce Enable**

When you press the preprogrammed Channel Announce Enable key, two modes can be programmed:

Mode 1

Two Beeps sound indicating that the Channel Announce feature is inactivated; the radio won't report the current channel number even if it is powered on again.

Mode 2

A Beep sounds and the radio reports the current number; the Channel Announce feature remains activated even if the radio is powered on again.

### **Communication Range Alert**

### **Background Operations**

#### Time-Out-Timer (TOT)

Time-Out-Timer is used to prevent someone from using the same channel for a long time.

If the transmission exceeds the preset time (set by your dealer), transmission will be inhibited and an alert tone will sound. To stop the alert tone, release the [PTT] key.

Your dealer can program a TOT Pre-Alert feature to alert you just before the TOT elapses.

Note: The maximum TOT time is 3 minutes.

#### Busy Channel Lockout (BCL) and Busy Tone Lockout (BTL)

When activated, the BCL and BTL feature will prevent you from talking on a channel that is already in use. Press the [PTT] key while the channel is in use, the radio will generate an alert tone and transmission will be inhibited. Release the [PTT] key to stop the alert tone.

#### ■ Carrier:

The radio will not transmit when a carrier is detected.

#### ■ CTCSS/DCS:

The radio will not transmit while detecting a carrier with wrong CTCSS/DCS code. Alternately, the radio can transmit only when the received CTCSS/DCS code matches the preset code on the selected channel.

#### Opt signalling:

The radio can transmit only when the received Opt Signalling code (2-Tone/5-Tone/DTMF/HDC2400<sup>TM</sup>) matches the preset code on the selected channel.

#### **Battery Save**

The Battery Save feature is enabled by your dealer to minimize the power consumption. When there is no activity on the channel and no operation (no key is being pressed, and no switch is being turned) is performed for 12 seconds, Battery Save is automatically activated. When a signal is received or an operation is performed, Battery Save is automatically turned off.

#### **Low Battery Warning**

Low Battery Warning alerts you to recharge or replace the battery. When the battery voltage becomes low, radio LED will flash red and three Beeps sound every 30 seconds, indicating to recharge or replace the battery with a new one.

#### Safety Check

When receiving a safety check call, the radio will emit an alert tone in preprogrammed time. Press any key to respond and cancel the alert, otherwise, the radio will automatically enter emergency mode.

#### **CTCSS/DCS Signalling**

CTCSS/DCS may have been programmed on a channel to ignore unwanted calls from other parties on the same channel. When CTCSS/DCS signalling is set, the squelch will be opened only when signals containing the matching tone or code are received. This allows you to ignore (not hear) these calls. Likewise, your signals will be received only by parties using the same CTCSS/DCS signalling.

Although it may seem like you have a private channel while using CTCSS/DCS signalling, other parties can still hear your calls if they use the same tone or code.

#### **DTMF Signalling**

DTMF Signalling is enabled/disabled by your dealer. When DTMF signaling is programmed on a channel, press the programmable key (Call 1, Call 2) to transmit DTMF code.

•LED glows red during transmission and goes out when transmission ends.

## 2-Tone/5-Tone/HDC2400<sup>™</sup> Signalling

2-Tone/5-Tone/HDC2400<sup>TM</sup> signalling is enabled/disabled by your dealer. When 2-Tone/5-Tone/HDC2400<sup>TM</sup> signalling is programmed on a channel, press the programmable key (Call 1, Call 2) to transmit 2-Tone/5-Tone/HDC2400<sup>TM</sup> signal.

When 2-Tone/5-Tone/HDC2400<sup>TM</sup> is set on a channel, the preset functions will be

activated only when the matching 2-Tone/5-Tone/HDC2400<sup>™</sup> signals are received. Likewise, your signals will be received only by parties using the same 2-Tone/5-Tone/HDC2400<sup>™</sup> signals.

- The LED glows red during transmission; when the transmission is completed, the LED solidly glows orange until the preset time elapses.
- The LED glows green during decoding, and flashes orange until the preset time elapses to indicate successful decoding.

### Signalling AND / OR Logic

Signalling "AND"/"OR" sets the audio unmute condition for any channel programmed with CTCSS/DCS or Opt Signalling (2-Tone/5-Tone/HDC2400<sup>™</sup>).

#### CTCSS/DCS AND 2-Tone/5-Tone/DTMF/HDC2400<sup>TM</sup>:

The squelch opens only when both CTCSS/DCS and Opt Signalling (2-Tone/5-Tone/DTMF/HDC2400<sup>TM</sup>) are received and matches the preset one on selected channel.

### CTCSS/DCS OR 2-Tone/5-Tone/DTMF/HDC2400<sup>TM</sup>:

The squelch opens when either CTCSS/DCS or Opt Signalling (2-Tone/5-Tone/DTMF/HDC2400<sup>TM</sup>) is received and matches the preset one on selected channel.

#### PTT ID

PTT ID (BOT/EOT/Both) is used to access and release repeaters and telephone systems.

#### **BOT ID (Beginning of Transmission):**

The radio transmits the ID code (2-Tone/5-Tone/HDC2400<sup>TM</sup>) immediately after it begins transmission, when the [PTT] key is pressed.

### **EOT ID (End of Transmission):**

The radio transmits the ID code (2-Tone/5-Tone/HDC2400 $^{\text{TM}}$ ) just before it ends transmission, when the [PTT] key is released.

#### Both:

The radio transmits the ID code when it begins/ ends transmission.

### **Troubleshooting Guide**

Trouble	Solution			
No power	*Battery may be used up. Please recharge or replace			
	the battery.			
	*The battery may not be properly installed. Remove			
	the battery and attach it again.			
Power doesn't last long even if	*Battery life is over, please replace it with a new one.			
fully charged				
Can't talk to or hear group	*Make sure you are using the same frequency and			
members	same CTCSS/DCS as your group members.			
	*Your group members may be out of the			
	communication range.			
Other voice (non-group	*Change CTCSS/DCS tone. Make sure your group			
members) are present on the	members all change to the same tone.			
channel				

# **Care and Cleaning**

- \* Do not carry your radio by the antenna or remote microphone;
- \* Wipe the battery contacts 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 microphone (with tube) EHM01



Earholder style ear microphone EHM02



Earbud style ear microphone ESM01



Remote speaker microphone SM06M1





A R. A. Land

Transparent water-proof bag LCBY03



Receive-only Earpiece with Transparent Audio Tube

Leather Carry Case LCBN11

ESS04

# **Frequency Chart**

Model:	
Serial Number:	

Observat	Transmit	Transmit	Transmit	Transmit	Receive	Receive	Receive
Channel	Frequency	CTCSS/DCS	2-Tone/5-Tone	ANI/DTMF	Frequency	CTCSS/DCS	2-Tone/5-Tone
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

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