

Thank You

Thank you for your purchase of HYT portable two-way radio. HYT portable radios will provide you with clear and reliable communications in high efficiency. Please read this manual before your operation.

Models covered in this manual:

TC-265 VHF: 136MHz-150MHz

146MHz-174MHz

TC-365 UHF: 400MHz-430MHz

440MHz-470MHz

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User Safety Information

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR HYT RADIO.

Do not modify this radio for any reason. Only qualified technicians are allowed to maintain this product.

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio in any place where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy. When on aircraft, turn off your radio when airline crew instruct you to do so.

If you use any personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy and turn off the radio immediately if you have any reason to suspect that interference is taking place.

Turn off your radio prior to entering any area with a potentially explosive atmosphere. Do not remove, install, or charge batteries in such areas.

To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps.

When in vehicles with an air bag, do not place a portable radio in the area over an airbag or in the airbag deployment area.

When using a radio during driving, give full attention to driving, use hands-free operation (if available) and pull off the road and park before making or answering a call.

Never short circuit the battery terminals to avoid property damage and/or bodily injury.

Use the charger to charge only approved batteries to reduce the risk of injury. Do not operate nor disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way. Never alter the AC cord or plug provided with the radio. If the plug does not fit the AC outlet well, have proper outlet installed by a qualified technician to avoid an electric shock. Unplug the charger from the AC outlet before any maintenance or cleaning. Make sure the cord will not be stepped on, tripped over or subject to damage or stress. Never expose the charger to rain or snow.

Always use approved antennas and accessories. Unauthorized antennas, modifications or attachments could damage the radio. Do not hold the antenna during operation. Holding the antenna will affect call quality and may cause the radio to operate at a higher power level than needed. Do not use any portable radio

that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn may result.

Do not expose the radio in direct sunlight for a long time nor place it close to a heating source. Do not place the radio in excessively dusty, humid, or wet areas, nor on unstable surfaces.

When transmitting with a portable radio, hold the radio in a vertical position with its microphone about 5 centimeters away from your mouth.

If you wear a portable two-way radio on your body, ensure that the antenna is at least 2.5 centimeters from your body when transmitting.

Preparation

Please carefully take the radio out of the box. You are recommended to check the items listed in the following table. If any item is missing or has been damaged during shipment, file a claim to the carrier immediately.

Supplied Accessories

Item	Qty. (pcs)
Antenna (*)	1
Rapid Charger	1
Rapid Charger AC Adapter	1
Battery	1
Belt Clip	1
Owner's Manual	1
Declaration of Conformity Card	1
Strap	1

* Antenna mark: TC-265 (1) (136-150MHz): shamrock;

TC-265 (3) (146-174MHz): grass green;

TC-365 (5) (400-430MHz): dark red;

TC-365 (7) (440-470MHz): milk white.

Battery Information

Charging the Battery

The battery is not charged in factory, charge it before use. When first charging the battery

after purchase or extended storage (more than 2 months), battery capacity is lower than its normal capacity. Repeating the charge/discharge cycle two or three times, its capacity will recover to normal.

Notes:

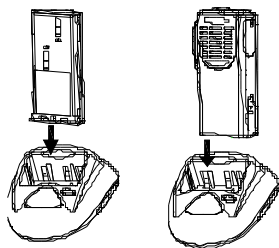
Do not continue charging the battery if it is already fully charged and take the battery away from the charger, otherwise, the battery life will be shortened or damage may be caused.

Turn the radio power OFF before charging. Using the radio while charging its battery will interfere with charging process.

When the battery operation time decreases even though it is fully and correctly charged, that means the battery life is over, please replace it with a new battery.

Do not complete the battery terminals (short circuit) or dispose of the battery by fire.

Never disassemble the battery cover.

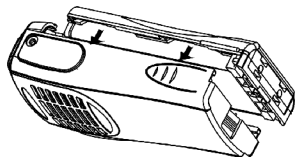


*Place the battery or the radio with a battery into the charger.

* Make sure the battery is well connected with the charger connectors.

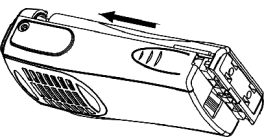
* When rapid charging starts, red LED glows; when charging is complete, green LED glows.

Accessory Information



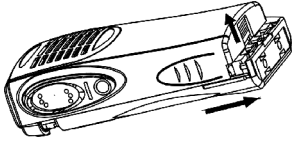
Attaching/Removing the Battery

To attach the battery, match the four grooves on the battery with the corresponding guides on the radio.



Push the battery along the guides of the radio until the battery latch at the bottom of the radio locks.

To remove the battery, release the battery latch and slide the battery away from the radio.



Attaching the Antenna

Align the threaded end of the antenna with the antenna connector; screw the antenna to fasten it.

Attaching/Removing the Belt Clip

Align the grooves of the belt clip with those of the battery. Press the belt clip downwards until the belt clip tab locks.

To remove the belt clip, press the belt clip tab and then slide the belt clip upwards to remove it.

Attaching Remote Speaker/Microphone

Remove the cover of the speaker/microphone jacks, and then insert the speaker/microphone plugs into the speaker/microphone jacks.

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

Rapid Charger

General

1. Smart IC controls charge/discharge process, automatically adjusting its current according to the battery state.
2. Performance is stable, not susceptible by the environment. Multi protection features prevent the battery from over-charge.
3. Charge/discharge process is indicated with corresponding LED colors and states.

Features

For battery: 7.2V Ni-Cd & Ni-MH rechargeable battery

Operation temperature: 10 -40

Input Voltage: 230V, 50Hz

Fast charge current: 720mA

Top-off charge current: 90mA

Pulse-Trickle charge current: 25mA

Discharge current: 350mA

Discharge termination voltage: 6.0V

Operation:

Charge: Connect the charger to an electrical outlet and place battery in the charger cup, making sure they connect well. Red LED flashes for 3 seconds and then solidly glows indicating that fast charge begins. When the charging is over, green LED glows.

Discharge: In order to avoid battery burning and memory effect, this charger is designed with discharge feature. Discharge procedure is the following:

Place the battery in the cup, red LED glows. Press the discharge button, red LED flashes and discharge begins. Charge begins at the end of discharge.

Notes:

HYT adapter is recommended to use to avoid damage to the charger circuit.

Do not operate in high temperature or corrosive conditions.

Do not pull/plug the adapter or the battery in the charge process to avoid interfering with the charge phase.

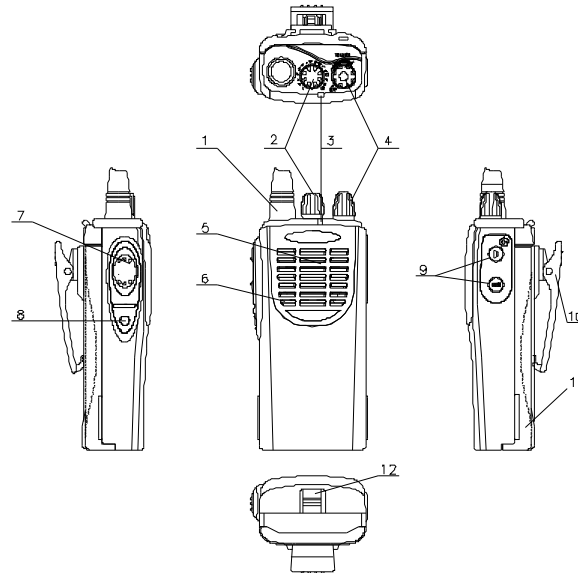
The battery is recommended to take out after the green LED glows for 120 minutes to protect the battery chemical materials.

To eliminate battery memory effect, Ni-Cd battery is recommended to discharge twice per month.

Additional Remarks:

It's a normal phenomenon that the red LED flashes without pressing the discharge button after the battery is placed in the cup. This is a protection in the condition of too low battery voltage or too high temperature, and now the pulse-trickle current is 25mA. When the voltage or temperature recovers to normal level, red LED stops flashing and fast charge begins.

Getting Acquainted



1. Antenna

2. Channel Selector knob

Turn the selector knob to select channels 1-S (channel S can be programmed by dealer as scan function).

3. LED Indicator

Used to indicate operation status of the radio. Different LED status indicates different operation status of the radio. (See the following table).

LED Status	Meaning
Red LED glows	Transmit
Red LED flashes	Low battery voltage
Green LED glows	Monitor or receive
Orange LED glows	Transmit two/five-tone signaling
Orange LED flashes	Two/five-tone standby

4. Power/Volume control knob

Turn the knob clockwise to switch the power on. To switch off the power, turn counterclockwise until a click sounds. After the power is turned on, turn the knob to adjust the volume.

5. Speaker

6. Microphone

7. PTT (Push to Talk)

Press and hold PTT to talk, release to receive.

8. MONI key (Programmable Key)

Your dealer can program MONI key as one of the following functions:

- 1 OFF. No function.
- 2 Monitor: Press MONI key to monitor activities on the current channel.
- 3 Power Selection: Short press MONI key (less than 300ms) to toggle between high and low power (When the power is switched to high power, two beeps sound; when the power is switched to low power, one beep sounds). Hold down (more than 300ms) MONI key to monitor activities on the current channel.
* In the above three conditions, hold down PTT key and then press MONI key to transmit 2-Tone/5-Tone signaling. (If 2-Tone/5-Tone signaling is set on the current channel.)
- 4 2-Tone/5-Tone Transmission: Short press MONI key to transmit 2-Tone/5-Tone. Hold down MONI key to monitor activities on the current channel.
* In the above conditions, press MONI key to exit selective call.

9. Speaker/microphone jacks

10. Belt clip

11. Battery

12. Battery latch

Basic Operation

1. To turn on the power, turn the Power/Volume control knob clockwise until a click sounds.
2. To adjust the volume level, turn the Power/Volume control knob while holding down the Monitor key.
3. To select the channel, turn the channel selector knob to select your desired channel.
4. To transmit, press and hold PTT, speak into the microphone with normal voice.
Keep microphone about 5cm away from your mouth.
5. To receive, release PTT.
6. To monitor, press MONI key.
7. To transmit two/five tone signaling, hold down PTT and MONI key simultaneously.

Note: When the battery voltage becomes too low, transmitting stops and red LED flashes.
Please refer to auxiliary feature "Low Battery Warning" for more details.

Auxiliary Feature

Monitor

If your dealer has programmed MONI key as monitor function, press and hold "MONI" key to monitor activities on the current channel. This operation is especially useful for adjusting volume level or receiving a weak signal.

The green LED glows while the "MONI" key is held down.

Channel Scan

Turn channel selector knob to the position "S", the radio will automatically detect those channels that have been programmed as scan items in channel 1-15 (your dealer can set any channel as scan item or non-scan item). When any activity is detected on one channel, the radio will stop on the active channel for communications.

Scan operation

When the radio stops on a busy channel, the scan function can be restarted according to the restart mode, which can be programmed by the dealer as carrier-operated scan or time-operated scan.

Priority Channel Scan

Any programmed channel may be set as the priority channel. The radio will detect the priority channel periodically while stopping on a non-priority channel. When there is any activity on the priority channel, the radio will turn to the priority channel for communications.

Scan TX Channel

The Scan TX Channel feature sends you to the right channel while initiating a call during channel scan. Press [PTT], the radio stops scanning and transmits on the TX channel.

Scan TX channel can be programmed by your dealer.

Squelch Level

Higher squelch level makes it harder for the radio to receive signals and avoid interference of noises and/or unwanted signals; if squelch level is low, the radio will be apt to receive weak signals and be interfered in by noises and/or unwanted signals.

Time-out Timer

Time-out Timer is used to prevent one from using the same channel for a long time and to prevent the radio from damage due to continuous transmission.

If the transmission exceeds preset time (it's set by your dealer, max. time is 10 minutes), transmission will be stopped and a beep will sound. To stop the alert tone, release PTT.

Press PTT again to transmit.

TOT (Time-out Timer) Alert Time

This timer can be set from 10 to 180 seconds in 10 seconds step. When this feature is enabled, the radio will call an alert at the set time before TOT is time out and then call an alert every 10 seconds. Transmission will be prohibited by TOT after this time.

TOT (Time-out Timer) Rekey Time

The feature is used to set the duration until transmission is allowed after the radio returning to receive mode by TOT. When enabled, transmission will be prohibited until preset time elapses. OFF is 0.

TOT (Time-out Timer) Reset Time

When this feature is disabled, TOT is immediately reset after transmission stops. When enabled, TOT won't reset until preset time elapses, even if transmission has stopped.

Battery Save

This function minimizes the amount of power used when no signal is being received and no operation is being performed (no key is being pressed and no switch is being turned).

When there is no activity on the channel and no operation is performed for 30 seconds, Battery Save is turned ON. When a signal is received or an operation is performed, Battery Save is turned OFF.

Beep

This radio provides different beep tones to indicate operation status of the radio. Your dealer may enable/disable the beep tone through programming software.

Low Battery Warning

Low Battery Warning alerts you to recharge or replace the battery.

During transmission, when the battery voltage goes below a preset value, red LED will flash. When the alert tone sounds, the radio stops transmitting. Please replace or recharge the battery.

CTCSS & CDCSS

CTCSS/CDCSS allows you to ignore unwanted calls from other parties using the same channel.

When CTCSS/CDCSS is set, the user can only receive the calls on the same channel with same CTCSS/CDCSS.

Note: Although using CTCSS/CDCSS enables you to avoid hearing unwanted calls, it does

not mean your calls will be private.

Busy Channel Lockout

If the channel you choose is set by your dealer as "busy channel lockout" and this channel is being used by other users, press PTT, the radio sounds a beep and will not transmit the signal. To stop the beep, release PTT. When this channel is free, press PTT to transmit.

Two/Five-Tone Signaling

Two/Five-Tone Signaling is used to open or close the squelch. It includes Two-Tone call, Five-Tone call and group call, which are programmed by the dealer.

Receive

If a signal containing the correct tones is received, the squelch is opened and you can hear the call. And the following events happen:

Orange LED flashes in standby mode; green LED glows in receive mode; red LED glows in transmit mode.

The receiver responds according to the settings of your dealer.

- 1) **No alert tone sound; no 5-Tone signalling is returned to the caller;**
- 2) **An alert tone sounds;**
- 3) **5-Tone signalling is returned to the caller (It's set by your dealer).**

Press PTT key to stop the alert tone and begin communication. Red LED glows.

Press MONI key to close the squelch and a reset tone sounds at the same time. The speaker is muted.

If signalling reset time is enabled and no receive/transmission is performed within the reset time, two/five-tone selective calling will reset automatically.

Transmit

Holding down PTT and MONI key simultaneously to transmit preset tones.

Orange LED glows during transmission.

The radio will keep transmitting until the tones are completely sent. When the tones are sent, the squelch is opened. If no signal is received, orange LED will flash.

Pressing MONI key will close the squelch and a reset tone sounds at the same time. The speaker is muted.

If signalling reset time is enabled and no receive/transmission is performed within the reset time, two/five-tone selective calling will reset automatically.

Optional Accessories

TB-89: Ni-MH battery (7.2V/1500mAH)

TB-97: Ni-Cd battery (7.2V/1100mAH)

TDC-28: Rapid Charger

Leather Case

Metal Belt Clip

Remote Speaker/Microphone

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 fully charged.	*Battery life is over, please replace it with a new battery.
Can't talk to or hear group members.	*Make sure you are using the same frequency and same CTCSS/CDCSS/TTS/Five-Tone Signaling as your group members. *Your group members may be out of the communication range.
Other voice (non-group members) is present on the channel.	*Change CTCSS/CDCSS/TTS/Five-Tone Signaling tone. Make sure your group members all change to the same tone.

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 jack covered with the protective cap.
- 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.

Frequency Chart

Model: _____
Serial Number: _____

Channel	Transmit frequency	Receive frequency	CTCSS/CDCSS	Two/Five-Tone Signaling
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

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 by HYT without notice.

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