


To customers

Thank you very much for using  two-way radios.
This product has a newly developed function menu and humanism operation design, making it easy to use.
It will meet your requirement by the compact size and reasonable price.

Welcome to use **TYT** two-way radio

[Http://www.tyt888.com](http://www.tyt888.com)

Main Functions:

<http://www.tyt888.com>

- Dual band ,dual display and dual standby
- 256 groups of memory channels
- Wide/Narrow bandwidth selection (25kHz/12.5 kHz)
- Hand free VOX function
- Chinese/English voice prompt
- CTCSS/DCS encoding and decoding
- Non-standard CTCSS/DCS input
- Auto scan
- ANI function
- FM radio receiver and 25 memory radio stations
- PC program
- 1750 Tone
- DTMF decoding and encoding
- Remote stun、kill and activated
- Man down
- 1.77 inch Color Display
- Emergency alarm



Cotents

- 02 Using tips**
- 03 Unpacking and checking equipments**
- 05 Battery**
- 09 Installing and uninstalling of the accessories**
- 13 Getting familiar**
- 24 Working mode**
- 31 DTMF setting**
- 34 DTMF transmission**
- 36 Utilities Setting**
- 49 Optional Accessoriest**
- 50 Trouble shooting guide**
- 51 Specifications**
- 53 Warranty card**

Using tips

Unpacking and checking equipments

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Using tips

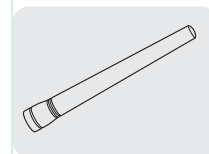
Please read the following brief instructions, non-compliance with these rules may cause danger or violate the law.

- Obey the local government regulation before using this radio, improper use may violate the law and be punished.
- Turn off the radio before entering flammable or explosive areas.
- Do not charge or change the battery in flammable or explosive areas.
- Turn off the radio before getting close to the blasting zone or detonator areas.
- Do not use radio whose antenna is damaged, touching of damaged antenna will cause heat injury.
- Do not attempt to open the radio; the maintenance work should be done by technical expert only.
- To avoid troubles caused by electromagnetic interference or electromagnetic compatibility, please turn off the radio in places where have the banner "Do not use wireless equipment", such as hospital and other healthcare places.
- In the car with an airbag, do not put the radio within the scope of the airbag deployment.
- Do not store the radio under the direct sunshine or in hot areas.
- When you transmit with the radio, do keep away from its antenna for 5cm at least.
- If the radio appears smelly or smoke, please shut off its power immediately and contact with your local dealer.
- Do not transmit too long, for the radio may heat and hurt the user.

Unpacking and checking equipments

Carefully unpack the radio. We recommend you check the items listed in the following table before discarding the package. If any item is missing or has been damaged during shipment, please contact us immediately.

Supplied accessories:



Antenna (1)



Li-ion battery (1)



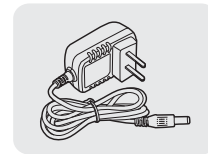
Belt Clip (1)



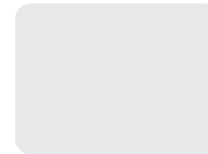
Charger (1)



Verification (1)



Charger Adapter (1)



User's Manual (1)

Note: The antenna frequency range please refers to the annular label at the bottom of antenna.

Battery Antenna

Installing and Uninstalling of supplied accessories

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Battery

Please use designated battery; other batteries can cause explosion and hurt people.

Notice: 1. Please do not short-circuit the battery terminals or expose of in fire. Do not disassemble the battery by yourself.

2. Charge the battery between temperature 0°C and 45°C. The battery can not be fully charged beyond this temperature range.

3. Please turn off the power when you charge the radio with battery. Transmit with the radio in charge will affect its correct charge.

4. Do not unplug the power or battery when it is charged.

5. The operating time becomes short even the battery is fully charged, the battery is exhausted, please replace battery.

6. Please do not charge when the battery or the radio is wet. Please dry it with a cloth before charging to avoid any danger.

Warning: When the conductive metals such as jewelry, key or decorative chains touch the battery terminals, all the batteries are likely to cause damage to the items or personal injury. These conductive metals may form a short circuit and generates much heat. Do deal with any battery carefully, especially when put it into pocket, wallet or other metallic containers.

Charging operations:

Charge the battery as follows:

- 1) Power off;
- 2) Insert the DC adaptor plug in the DC jack on the back of charger;
- 3) Insert the AC adaptor plug in the AC power output socket;
- 4) Insert the battery or radio with battery vertically in a charger, to check whether the battery and charger terminal is in normal contact;
- 5) Make sure the battery and charger terminal is in good contact, when the charging indicator light turns red, it starts charging.

- Note:**
1. Before inserting the battery, it is abnormal if the charging indicator blinks.
 2. To change the battery for charging, please wait until the indicator is stable.
 3. When the battery is well inserted, the indicator turns red and the charging is on the process, if the indicator blinks, then the battery is damaged or the temperature is too high or too low.

Self-testing

When the charger powers up, if the orange indicator lights for one second and then goes out, entering the standby mode, the charger passes the self-testing and can charge the battery. If the orange indicator blinks constantly, the charger fails to pass the self-testing, and can not charge the battery.

Normal charging indicator

When charging the battery, if the indicator light turns red, the battery is on the normal charge; if the red indicator light blinks constantly, the battery capacity is too low, and is on the trickling charge, and after the battery capacity reaches a certain level, it will switch to the normal charge.

Note: Trickle charge does not exceed 30 minutes, if the red indicator light blinks after 30 minutes, it means the charger can not charge battery, please check whether the battery or the charger has been damaged.

Charging precautions:

- 1) The battery is not fully charged in factory, please charge before using it.
- 2) Charge and discharge the battery for two or three times, the battery capacity will reach the best condition. When the battery capacity is low, please charge or change the battery.
- 3) The battery lasts shortly even if it is fully charged, the battery is exhausted, please contact your local dealer to buy a new authentic battery.

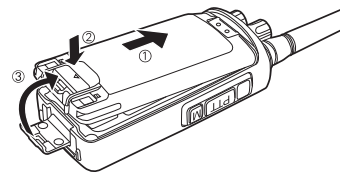
Antenna

- Short thick antenna is suitable for short-distance communication, while long thin antenna will offer you a better communication effect. Wearing the radio in your waist will not make you feel uncomfortable.
- The communication range will be shortened in bad weather or among the trees, please prepare in advance to avoid any inconvenience of your communication and security.

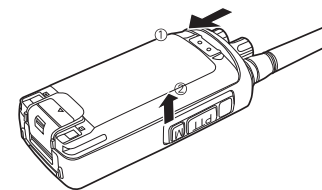
Installing and uninstalling of the accessories

Installing/Removing the battery

- 1) Align the two grooves of battery and the guide rail on the back of aluminum shell, ensuring full contact and in parallel, then push the battery up to the radio base along the rail on the back of aluminum shell, until the battery latch locks up. (picture 1)
- 2) To remove the battery, please make sure the radio is closed, push the battery latch down, and make sure the radio and battery is on the releasing state, and then push the battery out from the radio. (picture 2)



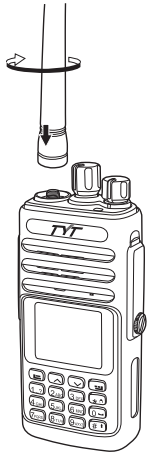
(picture 1)



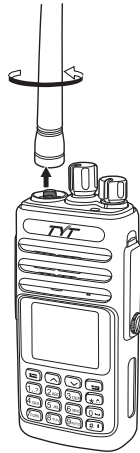
(picture 2)

Installing and removing the antenna

- 1) Align the threaded end of antenna and the threaded hole at the top of radio, rotate the antenna clockwise until it is tight. (picture 3)
- 2) To remove the antenna, rotate it counter-clockwise until the antenna spirals out. (picture 4)



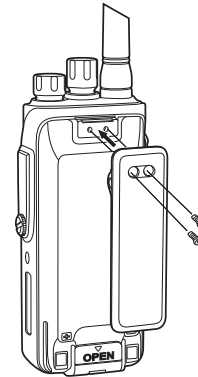
(picture 3)



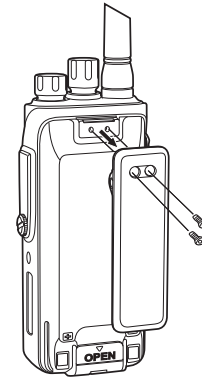
(picture 4)

Installing/removing the belt clip

- 1) Align the two holes of belt clip and the two holes of the radio, fix them with the supplied M2.5x5 screw. (picture 5)
- 2) Loosen the screw set to remove the belt clip. (picture 6)



(picture 5)

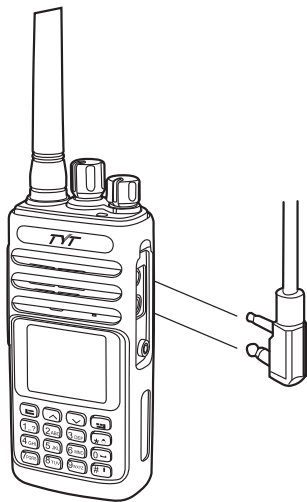


(picture 6)

Installing external headset

Insert the headset into the mic/speaker jack (picture 8).

Note: Using the external headset will affect the water-tightness performance of radio.

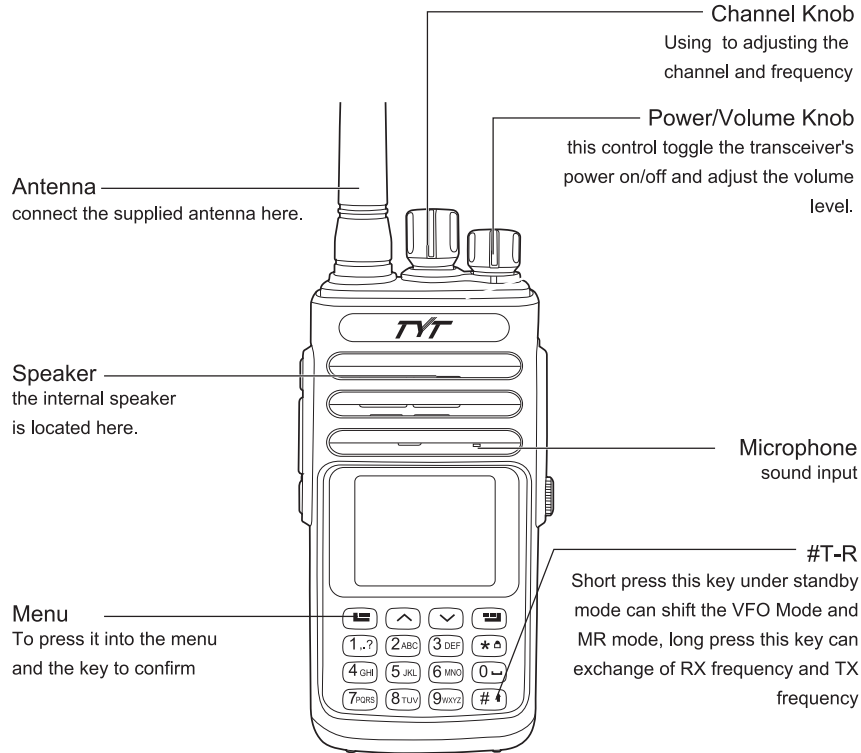


(picture 7)

Getting familiar

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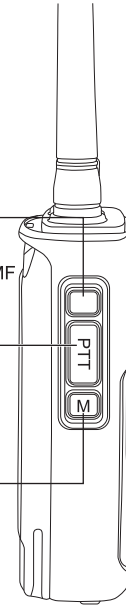
Getting familiar



CALL — Activate T-Call(1750Hz) for repeater access and transmit DTMF signaling.

PTT — press it to transmit and release it to receive after your transmission is completed.

MONI — Press and hold this key disables the noise squelching action ,allowing you to hear very weak signals near the back-ground noise level.



Belt clip — You can clip the radio in the belt and is easy to take.

Mic/speaker jack/ programming port — Used to connect headset or external programming cable. Programmable via PC programming software.

Li-ion battery — For charging the radio.



LCD DISPLAY

You will see various icons shown on the screen when power on, the following table can help you identify icons' meaning which display on LCD.



Icons	Description of functions
	Operating band signal & power meter
	FM radio is on
	Battery Saving function is on
	Beep and voice prompt is on
	Man down is activate
	DTMF message receiving
	GPS is activate
	Key lock is activate
	Battery power capacity

Icons	Description of functions
	Currently operating band
	Scan function is activate
	TX power is high and when it is low, it will show L
	Wide band mode activate and if u choose narrow, it will show N
	DCS activate and if you choose CTCSS, it will show C
	Offset direction, + is up and * is down
	VOX function is activate
	ID verification is on
	Busy channel lock function is activate
	End tone elimination is activate
	Reverse function is activate

SET MENU MODE

Menu in VFO mode

No.	LCD Display	Available Values	Description of Function
01	Tx priority	Busy/Edit	Priority transmission
02	Vox Level	Level 1-9	VOX level setting
03	TX power	Low/High	Low/High TX power
04	Squelch level	0-9	SQL level setting
05	Dual wait	ON/OFF	Dual wait/standby
06	Backlight	ON/5S/10S/15S	Backlight setting
07	Brightness	One/Two/Three/Four/Five/Six	Brightness setting
08	Beep	On/Off	Keypad beep setting
09	Voice	On/Off	Voice prompt setting
10	ID verification	On/Off	ID verification setting
11	PTT ID	Off/BOT/EOT/Both	PTT ID setting
12	TOT	Off/15S/30S/...600S transmitter	Time-out timer
13	Busy lock	On/Off	Busy lock setting
14	Vox function	On/Off	VOX function setting
15	Vox delay	0.5S/1.0S/1.5S/...5.0S	

No.	LCD Display	Available Values	Description of Function
16	Roger	On/Off	Transmitting over beeper setting
17	DW	On/Off	Dual watch/Monitor
18	RX save	On/Off	Receiving saving
19	Scan mode	CO/TO/SE	Scan mode setting
20	Lock mode	Manual/5S/10S/15S auto	Keypad lock
21	Tail	On/Off	End-tone elimination
22	Step	0.5K/2.5K/5.0K/6.25K/10.0K/ 12.5K/25K/37.5K/50K/100K	VFO step
23	S-D	Off/+/-	offset direction
24	Offset	0.000-99.995MHz	Repeater shift (Under VFO mode)
25	QT/DQT	None/67.0/D023N	TX/RX tone coder
26	RX QT/DQT	None/67.0/D023N	RX tone coder
27	TX QT/DQT	None/67.0-D023N	TX tone coder
28	DQT mode	Special/Normal	special DCS setting
29	W/N	Narrow/Wide	Bandwidth select
30	Power-on tone	None/tone/Voice	Power-on tone

No.	LCD Display	Available Values	Description of Function
31	Power-on Display	None/Voltage/Message/Picture	Power-on display
32	Power-on MSG	/	Power-on message editing
33	Voltage	/	Battery power voltage
34	Man down function	On/Off	Man down function setting
35	SEEK QT	/	CTCSS scanning
36	SEEK DQT	/	DCS scanning

Menu in MR and CH mode

No.	LCD Display	Available Values	Description of Function
01	Tx priority	Busy/Edit	Priority transmission
02	Vox Level	Level 1-9	VOX level setting
03	TX power	Low/High	Low/High TX power
04	Squelch level	0-9	SQL level setting
05	Dual wait	ON/OFF	Dual wait/standby
06	Backlight	ON/5S/10S/15S	Backlight setting
07	Brightness	One/Two/Three/Four/Five/Six	Brightness setting
08	Beep	On/Off	Keypad beep setting
09	Voice	On/Off	Voice prompt setting
10	ID verification	On/Off	ID verification setting
11	PTT ID	Off/BOT/EOT/Both	PTT ID setting
12	TOT	Off/15S/30S/...600S transmitter	Time-out timer
13	Busy lock	On/Off	Busy lock setting
14	Vox function	On/Off	VOX function setting
15	Vox delay	0.5S/1.0S/1.5S/...5.0S	

SET MENU MODE

No.	LCD Display	Available Values	Description of Function
16	Roger	On/Off	Transmitting over beeper setting
17	DW	On/Off	Dual watch/Monitor
18	RX save	On/Off	Receiving saving
19	Scan mode	CO/TO/SE	Scan mode setting
20	Scan list	/	Scan list editing
21	Scan priority	/	Scan priority list setting
22	Lock mode	Manual/5S/10S/15S auto	Keypad lock
23	Tail	On/Off	End-tone elimination
24	QT/DQT	None/67.0/D023N	TX/RX tone coder
25	RX QT/DQT	None/67.0/D023N	RX tone coder
26	TX QT/DQT	None/67.0-D023N	TX tone coder
27	DQT mode	Special/Normal	special DCS setting
28	W/N	Narrow/Wide	Bandwidth select
29	Power-on tone	None/tone/Voice	Power-on tone
30	Power-on Display	None/Voltage/Message/Picture	Power-on display

No.	LCD Display	Available Values	Description of Function
31	Power-on MSG	/	Power-on message editing
32	CH-Display	Channel NO. /Frequency/Name	Channel display
33	CH-Name	/	Channel name editing
34	Voltage	/	Battery power voltage
35	Man down function	On/Off	Man down function setting
36	SEEK QT	/	CTCSS scanning
37	SEEK DQT	/	DCS scanning

Working mode

Basic operations

Menu functions and operations

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Working mode

1. Frequency Mode "VFO"

Under this mode, you can use the [↶] or [↷] key to change the frequency or input the frequency by keypad directly, press sidekey [M] key to delete the last digit and [MENU] key to confirm.

2. Channel Mode "MR"

When you have stored a memory channel at least and under VFO model, press [BACK] to enter MR model, the frequency will be shown on the display and the channel No., will be shown at the right side.

3. Channel Mode (CH)

When you have stored one channel at least, press [↵] to power on to enter the CH mode. Channel No., will be indicated on the display and if the transceiver display name is on, it will show the name of channel. And you also can edit the channel name, please check menu 33 and menu 34.

Reset function

Press [PTT]+[MENU] to power on and you will find four values.

1. Reset

Full: initialize all setting.

VFO: initialize all setting under VFO mode.

CH: initialize all setting under CH mode.

2. Aging

This is only for factory use.

3. Frequency range

Choose it and press "OK" will show up a password input box , Press "OK" after input the password "558558" to begin to select the frequency range , The radio will list out several frequently-used frequency range ,Press [▲ or ▼] and press "ok" to select one ,It begins to initialize this working frequency range, then prompt "reset successful" after finished .

4.Custom range

If beyond the range in third point ,you can select the frequency range more flexible by this way . choose it and press "OK" will show up a password input box , Press "OK" after input the password "228228" to begin to select the frequency range , The radio will list out four kinds frequency ranges, for you to set, it means the user just can use the 4 kinds frequency ranges, Press [▲ or ▼] to select the input focus point, the frequency range for every group should be in the same maximum range and in the working range your radio support.

RDA1846S whose working range be : 400~520MHz,134~176 MHz,200~260 MHz.

RDA1846D whose working range be : 320~400MHz.

Press "ok" to store after finished, the radio can reset all the parameters if input meet the demand, and the working range can defined in the range which inputted by user; It will combine to one range when the range inputted same as before ; But if input with wrong way, the radio will prompt error and return to the input window again.

For example: If the radio's working range between 400~520MHz and 134~174MHz , So it's wrong to input 200~260MHz and 320~400MHz.

Note: Please kindly note that before using this function, you need to open the manual frequency operation via programming softarwe (TH-UV8200→Optional function→Manual frequency range→✓)

Emergency Alarm

Press [F] , then press [CALL] to active the emergency alarm function, radio will release the emergency tone for 10S and then stop 20S to receive, and then transmit the emergency tone again and press [PTT] to exit this function.

Basic operations

Switch on/off

Clockwise to turn on the radio volume/power knob, there will be a "KADA" sound , and the screen will lights up if the battery is full charged, Radio power on. Here, Anticlockwise with the knob until a "KADA" sound, radio power off .

Adjust Volume

After turning on the radio, Clockwise the volume knob to higher the volume or anticlockwise to lower.

Channel knob

Clockwise or anticlockwise to rotate the channel knob can positive or in the opposite direction to adjust the step frequency , It can also be used for other functions.

PTT key

Press "PTT" key , Then talk to the front microphone of the radio using your ordinary voice tone, while the indicator lights up and becomes red color . Release the"PTT"key to receive after your transmission is completed.

Keypad lock/unlock

Power on the radio and short press [*] key about 2 seconds to lock or unlock the keypad , and you can set automatic lock also.

Reverse frequency

Under standby mode, Long press [#] key to enable the reverse frequency function after a

"du" sound and "frequency reverse " voice prompt the same time , It will show an "R" letter in the upper left of this frequency band on the screen . At this time, radio's transmitting frequency is it's receiving one, and its receiving frequency is its transmitting one. And the code and decoder will also been exchanged if it is been set the CTCSS/DCS.

Monitor function

Press and hold "M" key disables the noise squelching action, allowing you can hear very weak signals near the back-ground noise level.

1750 Tone

To access a repeater, Firstly need to set the frequency or channel which will be used in the repeater, and long press "CALL" key to start to send 1750 tone. Once access to the repeater has been gained, you may release "CALL" key and use PTT for activating the transmission.

Change frequency or channel

When standby , Press [▲] and [▼] key can increase or reduce the frequency step by step, Also can choose next effective channel . And when you press the number [0,1,2,3,4,5,6,7,8,9], Frequency or channel selection window will pop up, now you input the frequency or channel you need and press [MENU] key to finish it .But if the frequency is inputted out of range or the frequency is nonexistent for the channel you input , It Will prompt "Caution: out of range!" and need you input again.

Notes:1. Press [*] refer to input decimal point "."

2. Press the side key [M] key means delete the number you input before .

A/B edit channel selection

Under dual standby mode, Press "back" key to select the A/B channel as you want.

Menu functions and operations

Turn on your radio and press "menu" to set it :

Press [▲] and [▼] key to choose menu item, Press [MENU] key to enter in the next level of menu, Press "back" key to back to the previous menu.

Settings

Settings includes the following contents:

- Model info
- Scan
- FM
- Channel storage
- DTMF
- Language
- Utilities

Model info (Menu+1)

- Model name
- software version
- Frequency range
- Serial number
- Write & Ship Date

Scan (Menu+2)

1. Press the [MENU] key to enter the menu mode.
2. Press [▲ or ▼] key to select scan and then press [MENU] to start to scan.
3. press [BACK] key to exit, the screen displays the last frequency been scanned just now.

DTMF setting

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FM (Menu+3)

- 1. Press the [MENU] key to enter the menu mode.
- 2. Press [▲ or ▼] key to select FM and then press [MENU] to start to listen to the FM.
- 3. Clockwise [▲ or ▼] anticlockwise to rotate the channel knob can positive or in the opposite direction to adjust FM.
- 4. press [BACK] key to exit and return to the main interface.

Channel storage (Menu+4)

You can save the present frequency into one channel which you appointed ,But only under the frequency mode .

- 1. Press the [MENU] key to enter the menu mode.
- 2. Press [▲ or ▼] key to select Save Channel and then press [MENU] to save .
- 3. "Storage CH ..." window will pop up, Input the channel number you want to save , and if the CH number exited , It shows a window including "CH Exist! replace it?", press ok , input another channel number.

Channel delete (Radio channel delete and FM channel deletion)

Under CH mode or MR mode, press [PTT] + 0 and hold on and open the radio, LCD will display Del? then press [MENU] to confirm.

DTMF (Menu+5)

- 1. Press the [MENU] key to enter the menu mode.
- 2. Press [▲ or ▼] key to select DTMF and then press [MENU] to start, Details will be introduced to you again as below.

Utilities (Menu+6)

Press the [MENU] key to enter the menu mode and Press [▲ or ▼] key to select Utilities to set , Details will be introduced to you again as below.

DTMF setting

Press the [MENU] key to enter the menu mode, Press [↶or↷] key to select DTMF and then press [MENU] to start as below.

ID Code:

It shows the ID code of your radio, which can be set by programming software (TH-UV8200 ->channel information->ID code) or by keypad. Press any number key to change ID code, press [MONI] to delete the last digit, press [MENU] to store, (Note: ID code must be 3 digits in minimum and 10 digits in maximum).

Keypad Input:

You can input the DTMF code, whose length is 16 digits(0,1,2,3,4,5,6,7,8,9,A,B,C,D,*,#), then press PTT to send out this DTMF code and this DTMF code should be the ID code of receiving party, If you want to send out your ID code, please add DTMF with #+your ID and when you press PTT to talk, you can see your ID is shown in the display of receiving party. And you also can input DTMF code +#+* to transmit, your ID code also can be shown. And you also can press PTT and hold in the standby mode, input receiving party+ #+your ID and your ID will be shown in the display of receiving party. And in the way, you can use to stand for your ID.

Pleased kindly note that before using this function, you should open then menu 10 of ID verification and "ID" will shown on the display.

Call list:

This radio can store 16 groups of DTMF call list. Press [↶or↷] key to select the list number which you prepare to edit or transmit, press [MENU] to edit then press [PTT] to transmit.

Note: press [M] to delete the last digit and press PTT to confirm the editing.

CH ID Code

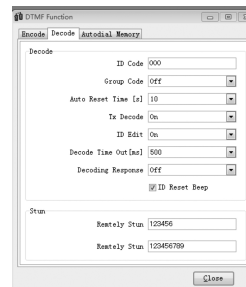
Every channel can store some ID code in advance and please kindly note that ID code should be 3 digits in minimum and 10 digits in maximum and during editing, press [MENU] to confirm and [BACK] to exit. When transmitting, the display of receiving party will show your ID code automatically.

Rx Message

Here you can check the last DTMF ID you received, if this DTMF ID is the one of transmitting party, you can press [PTT] directly to transmit and if the one is your DTMF ID # DTMF ID of others, you cannot press [PTT] directly to transmit.

Remote kill, stun and activate

Before using this function, you should program the remote stun and kill code in the programming software, (TH-UV8200 programming software->DTMF function->Decode-stunned/killed) and please kindly note the timing in default setting is the best one, it is better not to revise it. Then we set stun code as 123456 and kill code as 123456789.



And there are two ways to remote stun and kill other radios, please check following competing.

1. Press PTT and hold on, press 123456 or 123456789 to stun the radio, please kindly note that when you input 123456 or 123456789, the rapid should not be too slow, or it will fail. When the radio is stunned or killed, you will hear "DI".
2. Menu-> DTMF->Keypad input-> input 123456 or 123456789, then press PTT to transmit.
3. When the radio is stunned or killed, using stun code or kill code + # to activate it. When the radio is activated , you will hear "DIDI".
4. Press PTT and hold on, press 123456 +# or 123456789+# to activate radio, please kindly note that when you input 123456 +# or 123456789+#, the rapid should not be too slow, or it will fail.
5. Menu-> DTMF->Keypad input-> input 123456 +# or 123456789+#, then press PTT to transmit, then stunned/kill radio will be activated again.
6. You also can read the data from one normally working radio and write into the stunned / killed radio, which will work properly again.

Please kindly note that stunned radio cannot transmit but can receive, while the killed radio cannot transmit and receive.

DTMF transmission

1.Single call:

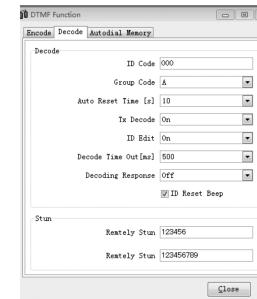
Open the menu 10 of ID verification and using following two ways to transmitting.

a. DTMF->Keypad input ->Input DTMF code and this DTMF code should be the ID code of receiving party, If you want to send out your ID code, please add DTMF with #+your ID and when you press PTT to talk, you can see your ID is shown in the display of receiving party. And in this way, you can use * to stand for your ID.

b. And you also can press PTT and hold in the standby mode, input receiving party+ #+your ID and your ID will be shown in the display of receiving party. And in this way, you cannot use * to stand for your ID.

2.Group call:

In the group call, you also can use following two ways to transmit, but before transmitting, you should set in the TH-UV8200 programming software->Group code as A/B/C/D.



a. Keypad input e.g., program group code as A, and your ID code is if you want to call the ID code as 111-119, you should keypad input 11A#+your ID code to transmit or 11A#+*.

ID operation	The radio you can call
11A#* or 11A#456	110~119(10 FM)
15A#* or 15A#456	150~159(10 FM)
1AA#* or 1AA#456	100~199(100 FM)
5AA#* or 5AA#456	500~599(100 FM)
AAA#* or AAA#456	000~999(1000 FM)

b. if you use another way, please kindly note that the * cannot stand for your own ID Press PTT and hold on and input 11A#+456 and 456 will be shown in the display.

ID operation	The radio you can call
A#456	110~119(10spcs radios)
15A#456	150~159(10spcs radios)
1AA#456	100~199(100spcs radios)
5AA#456	500~599(100spcs radios)
AAA#456	000~999(1000spcs radios)

Note: [MENU] stands for A, [↓] stands for B, [↑] stands for C and [BACK] stands for D.

Utilities Setting

Press the [MENU] key to enter the menu mode and Press [↶ or ↷] key to select Utilities to set , More radio parameters you can set in it ,Details as below:

Tx Priority (Menu1) (Priority transmit)

Function: Press Menu+6 to enter Utilities,and press 1 to enter TX priority function.It allows you to transmit on the sub band even if you are working on the operating band.

Busy: It will transmit on the band last talking used .

Edit: It will transmit on the operating channel.

Default: Edit.

Vox Level (Menu 2)

Function: Press Menu +6 to enter Utilities, and press 2 to enter VOX Level function.

With the VOX function on , you do not need to press PTT to transmit, and it is not necessary to use a VOX headset in order to utilize VOX operation. The higher level it is, the more sensitive it will be. And before using this function, you should enter 1+4 to open the VOX function.

Default:5.

Tx Power (Menu 3)

Function: Press Menu +6 to enter Utilities, and press 3 to enter Tx power function. You can select high/low Tx power according to your talking environment and your need.

When you select High/Low , The display will appear "H or L" icon .

Default:High.

Squelch Level (Menu 4)

Function: Press Menu +6 to enter Utilities, and press 4 to enter Squelch Level function.

The Squelch system allows you to mute the background noise when no signal is being received. Not only does the Squelch system "standby" operation more pleasant, but also significantly reduces battery current consumption. You can select the Squelch Level as your need.

Default: 5.

Dual Wait/Standby (Menu 5)

Function: Press Menu +6 to enter Utilities, and press 5 to enter Dual Wait/Standby function. It allows you to receive the sub band signal even if you are working on the operating band, it could monitor the signal under both master and sub band at the same time.

Default: On.

Backlight (Menu 6)

Function: Press Menu +6 to enter Utilities, and press 6 to enter Dual Wait/Standby function.

ON: When standby, the light are always light on .

5S/10S/15S: When standby, The light will light off after 5S/10S/15S

Default: 5S.

Brightness(Menu 7)

Function: Press Menu +6 to enter Utilities, and press 7 to enter Brightness function. It allows you to choose the brightness of backlight. The higher level it is, the brighter it is.

Default: Two.

Beep (Menu 8)

Function: Press Menu +6 to enter Utilities, and press 8 to enter Beep function. Select on/off to enable or disable the keypad beeper.

Default: On.

Voice (Menu 9)

Function: Press Menu +6 to enter Utilities, and press 9 to enter Voice function. Select on/off to enable or disable the voice prompt.

Default: On.

ID Verification (Menu 10)

Function: Press Menu +6 to enter Utilities, and press 10 to enter ID Verification function. While receiving , select on/off to select check itself ID code or not in order to implement group call or selective call.

Default: On.

PTT ID (Menu 11)

Function: Press Menu +6 to enter Utilities, and press 11 to enter PTT ID function. Before using tthis function, please set it in the programming software.

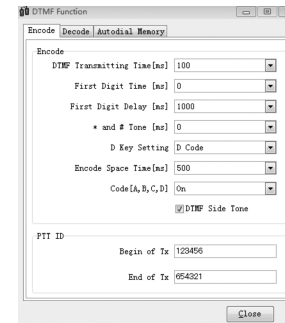
Off: PTT ID is off.

BOT: the PTT ID will be shown at the beginning
of transmission.

EOT: the PTT ID will be shown at the end of transmission.

Both: the PTT ID will be shown both the beginning and end
of transmission.

Default: Off.



TOT (Transmission Time-out Timer) (Menu 12)

Function: Press Menu +6 to enter Utilities, and press 12 to enter TOT function. To prevent your radio from transmitting too much long time ,It provides a safety environment to radio and battery. You can select off/15S/30S...585S/600S as the TOT time,when you transmit beyond the time you selected , it will cut off the transmitting to protect radio.

Default: 180S.

Busy Lock (Menu 13)

Function: Press Menu +6 to enter Utilities, and press 13 to enter TOT function, it prevents the radio's transmitter from being activated if a signal is strong enough to break through the "noise" squelch is present, on a frequency where station using different CTCSS or DCS code may be activated, it prevents you from interruption accidentally.

Default: Off.

Vox function (Menu 14)

Function: Press Menu +6 to enter Utilities, and press 14 to enter VOX function. Speak to the microphone in normal voice to transmit directly, no need to press PTT.

a.When VOX is on in your working channel.

Speak to the microphone directly, it will transmit directly.

The radio stops transmitting when there is no invoice, and waits for receiving.

b.When a headset with microphone is used.

Please adjust the VOX level to guarantee smooth communications

Default: Off.

Vox Delay (Menu 15)

Function: Press Menu +6 to enter Utilities, and press 15 to enter VOX delay function. The radio resumes to receiving mode soon after transmitting, your TX voice may sometimes not be sent out successfully. To avoid this problem, you can adjust VOX delay time after transmission.

Default: 3.0S.

Roger (Menu16)

Function: Press Menu +6 to enter Utilities, and press 16 to enter Roger function. Sending a beeper or not to inform the receiver TX is over.

Default: Off.

DW Dual watch/Monitor (Menu17)

Function: Press Menu +6 to enter Utilities, and press 17 to enter Dual watch/monitor function. It makes the radio can monitor the signal when FM radio is on and you wont miss any calling.

Default: On.

Rx save (Battery saving function)(Menu 18)

Function: Press Menu +6 to enter Utilities, and press 18 to enter Battery saving function. The radio will enter into saving mode if it didn*t receive any signal in 10S and you can choose different value, e.g.1:1, in working mode 200ms and in saving mode 200ms, 1:2, in working mode 200ms and in saving mode 400ms.

Default: 1:4.

Scan Mode (Menu 20)

Function: Press Menu +6 to enter Utilities, and press 19 to enter Scan Mode function and it allows you to change different scan mode as your requirement.

Default: CO.

Scan list (Menu 20 in CH and MR mode) This is function only for CH and MR mode

Function: in CH and MR mode, Press Menu +6 to enter Utilities, and press 20 to enter Scan list function and press [#] to choose the channels you want to add into scan list and press [MENU] to confirm.

Scan Priority (Menu 21 in CH and MR mode) This is function only for CH and MR mode.

Function: in CH and MR mode, Press Menu + 6 to enter Utilities, and press 21 to enter Scan Priority function, after you set the channels into scan list and you can set some channels to scan priority all the time.

Lock Mode (Menu 20 in VFO mode and Menu 22 in CH and MR mode)

Function: in VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 20 or 22 to enter Lock Mode function. When you select 5S/10S/15S in the menu, the keypad will be locked automatically if there is no key operation for corresponding 5S/10S/15S.

Default: Manual.

Tail/End-tone elimination (Menu 22 in VFO mode and Menu 23 in CH and MR mode)



Function: in VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 22 or 23 to enter Tail/End-tone elimination function, it can eliminate nasty sound when

transmission is finished. The benefit of this function is particularly evident for those using earphone.

Note: this function is only activated when other radios also turn on the Tail/End-tone elimination function.

Default: On.

Step (Menu 22 in VFO mode) This is function only for VFO mode.

Function: In VFO mode, Press Menu +6 to enter Utilities, and press 22 to enter Step function. Under VHF mode, select the step of 0.50K/2.50K...50.0K/100K to adjust the frequency band by pressing [ or ] or rotating by the switch knob.

Default: 5.0K.

S-D (Menu 23 in VFO mode) This is function only for VFO mode.

Function: In VFO mode, Press Menu +6 to enter Utilities, and press 23 to enter S-D function, after yet the shift frequency between TX one and RX one, this function is used to set the direction of this offset.

Default: Off.

Offset/Shift frequency (Menu 24 in VFO mode) This is function only for VFO mode.

Function: In VFO mode, Press Menu +6 to enter Utilities, and press 24 to enter Offset/Shift frequency function, you can set the shift frequency between TX one and RRX one.

Default: 0.0000MHz.

QT/DQT or CTCSS/DCS (Menu 25 in VFO mode and Menu 24 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 25 or 24 to enter QT/DQT function, it can prevent you from receiving the unwanted

call from the same frequency and you can keypad in out non-standard the CTCSS/DCS, press # first and you will see one popup to input the digit, and here "" stand for ".".

Default: None

RX QT/DQT or CTCSS/DCS (Menu 26 in VFO mode and Menu 25 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, , Press Menu +6 to enter Utilities, and press 26 or 25 to enter RX QT/DQT function, it can prevent you from receiving the unwanted call from the same frequency and you can keypad in out non-standard the CTCSS/DCS, press # first and you will see one popup to input the digit, and here "" stand for ".".

Default: None.

TX QT/DQT or CTCSS/DCS (Menu 27 in VFO mode and Menu 26 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, , Press Menu +6 to enter Utilities, and press 27 or 26 to enter TX QT/DQT function, it can prevent you from receiving the unwanted call from the same frequency and you can keypad in out non-standard the CTCSS/DCS, press # first and you will see one popup to input the digit, and here "" stand for ".".

Default: None.

DQT Mode (Menu 28 in VFO mode and Menu 27 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 28 or 27 to enter DQT mode function, when you choose special one, even you have the same DCS with other radio, you cannot hear others and others also cannot hear you, this function will guarantee privacy of your talk.

Default: Normal.

W/N band (Menu 29 in VFO mode and Menu 28 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, , Press Menu +6 to enter Utilities, and press 29 or 28 to enter W/N band function,It allows you to select Wide/Narrow band.

Default: Wide.

Power-on Tone (Menu 30 in VFO mode and Menu 29 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 30 or 29 to enter Power-on tone function, Select None/Tone/Voice to enable null/Beep/Voice when open the radio.

Default: Voice

Power-on Display (Menu 31 in VFO mode and Menu 30 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 31 or 30 to enter Power-on Display function, Set what shows on the display when open the radio.

None: Shows nothing.

Voltage: Shows the voltage values of the radio, such as "7.2V"

Message: Shows the character string user-defined.

Picture: Shows the stored picture.

Default: Voltage.

Power-on MSG (Menu 32 in VFO mode and Menu 31 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 32 or 31 to enter Power-on MSG function, you can edit desired message, 16 digits in maximum.

CH-Display (Menu 32 in CH and MR mode, this function is only for CH and MR mode)

Function: In CH and MR mode, Press Menu +6 to enter Utilities, and press 32 to enter CH-Display function, you can set display mode among channel number, frequency and channel name.

Default: Frequency.

CH-Name (Menu 33 in CH and MR mode, this function is only for CH and MR mode)

Function: In CH and MR mode, Press Menu +6 to enter Utilities, and press 33 to enter CH-Name function, you can edit the desired name, 8 digits in maximum.

Voltage (Menu 33 in VFO mode and Menu 34 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 33 or 34 to enter Voltage function, it will show the current voltage of radio.

Man down (Menu 34 in VFO mode and Menu 35 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 34 or 35 to enter Man down function, when you enable this function, if your wont stand vertically, your radio will release "Deng-Deng-Deng-Deng-Deng" then it will send out onetone and other radio will receive alarm. But the condition is that other radio didn't set the ID verification.

SEEK QT (Menu 35 in VFO mode and Menu 36 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and press 35 or 36 to enter SEEK QT function to scan CTCSS.

Default: Off.

SEEK DQT (Menu 36 in VFO mode and Menu 37 in CH and MR mode)

Function: In VFO mode or in CH and MR mode, Press Menu +6 to enter Utilities, and

press 36 or 37 to enter SEEK DQT function to scan CTCSS.

Default: Off.

The Operation for frequency band setting

Before using this function by manual, you should enable the manual operation via program software (TH-UV8200 programming software->Optional function->Manual frequency range), the details are as follows: working range for your radio press [PTT]+ [BACK] to power on, you will see two values, frequency range and customs range

1. frequency range

Input the password as 558558 and press [MENU] to enter and you will see five frequency ranges and please choose the frequency for your radio, please kindly note that the version for five version is different, and cannot exist in one radio, so when you choose the band, you should check with dealer which band is correct for your radio. If the range you choose is out of the band of your radio, the radio cannot use.

a. 136-174 & 400-520MHz

b. 144-146 & 430-440MHz

c. 136-174 & 220-260MHz

d. 220-260 & 400-520MHz

e. 320-400MHz

2. customs range for your radio

Input the password as 228228 and press [MENU] to enter, there are four ranges you can set. Because 136-174MHz, 220-260MHz, 320-400MHz and 400-520MHz cannot exist in the same radio, so you should make sure the right frequency for your radio, and there are five versions for TH-UV8200

- f.136-174 & 400-520MHz
- g.144-146 & 430-440MHz
- h.136-174 & 220-260MHz
- i.220-260 & 400-520MHz
- j.320-400MHz

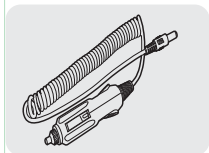
VOX temporarily disable setting

when a radio with enable VOX function works in the noisy environment, it will transmit all the time and press PTT is no use and now you can turn off the radio and press [PTT] +3 to tune on the radio, making VOX disable temporarily and now you enter into menu 2 to adjust the VOX level to make radio not so sensitive.

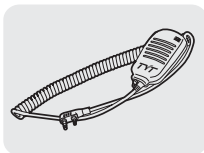
Optional Accessories
Trouble shooting guide
Specifications

<http://www.tyt888.com>

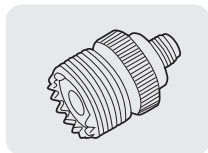
Optional Accessories



Vehicle Charger



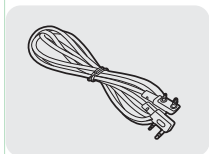
Speaker



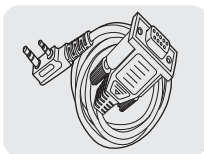
Antenna Adapter



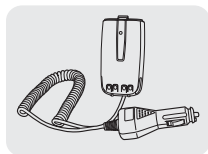
Earphone



Clone Cable



Program Cable



Eliminator



Software CD

Trouble shooting guide

<i>Troubles</i>	<i>Solution</i>
No Electrical Source	<ul style="list-style-type: none"> • The battery has been exhausted. Replace or recharge the battery. • The battery is installed incorrectly. Remove it and install again.
The operating time becomes short, even the battery is fully charged.	<ul style="list-style-type: none"> • Replace the battery.
Not able to communicate with the transceivers of the same group.	<ul style="list-style-type: none"> • Confirm the QT/DQT is the same. • The distance is outside of range.
The voice of another group can be heard.	<ul style="list-style-type: none"> • Change all QT/DQT of the group.
Other radios can not receive the TX signals or receive signals in a low volume.	<ul style="list-style-type: none"> • Switch the volume knob to the highest level • The microphone may be damaged, send it to the local dealer for check.
Noise is always heard.	<ul style="list-style-type: none"> • The distance is outside of range. Turn on the radio in nearer range and try again.

Specifications

General	
FrequencyRange	136-174MHZ & 400-520MHZ
FrequencyStability	± 2.5PPm
Channel Capacity	256 channels
Operating Voltage	DC 7.2V
Antenna	High gain antenna
Antenna Impedance	50Ω
Mode of operation	Same or different frequency simplex
Dimension*H x W x D*	120 x 55 x 33mm
Transmitter	
RF power	High ≤ 10W Low ≥ 5W
Modulation Type(Wide/Narrow band)	16K Φ F3E/11 K Φ F3E
Max. Fr. deviation(Wide/Narrow band)	≤ 5KHZ/ ≤ 2.5KHZ
Adjacent Ch. power(Wide/Narrow band)	≤ -65dB/ ≤ -60dB
Spurious Power	≤ 7uW
pre-emphasis character	6dB/Each frequency doubling the increment

Modulated noise	<-40dB
Current	≤ 2.8A(10W) ≤ 1.8A(5W)
DCS/CTCSS frequency deviation	0.6KHZ ± 0.15KHZ, 0.4KHZ ± 0.1KHZ
Intermediation sensitivity	8~12mV
Modulation distortion	<5%
Receiver	
Reference Sensitivity	-122dBm(12dB SINAD)
Audio power	1 W
Audio Distortion	<5%
Blocking	≥ 85
Inter-modulation(Wide/Narrow band)	≥ 60dB ≥ 55dB
Adjacent Ch.Selection	≥ 65dB ≥ 60 dB

Note: Specifications will be revised without notice due to technical improvement. Thank you.



Warranty card

Note:

1. This warranty card is only applicable to two-way radio of the above-listed model and serial number.
2. The warranty card is an important document for the end-user to enjoy warranty service, please keep it well.
3. The warranty card shall be filled and chopped by the dealer, or it is invalid.

Customer's name: _____ Gender: _____

Add and postal code: _____

Customer's Tel: _____

Model: _____

Serial number: _____

Purchasing date: _____

Invoice No.: _____

Dealer: _____ Stamp: _____

Add and postal code of the dealer: _____

Contact Tel: _____

Handling people: _____

Thank you for buying two-way radios, we will do our best to provide you with a stable, clear and efficient wireless communication services. In order for you to enjoy a better quality warranty service, please focus on the following information:

The products warranty period begins from the purchasing date, if product failure under normal use within warranty period occurs, according to the contents of this warranty, (the radio is guaranteed for 12 months, accessories 6 months), please carry the warranty card originals and purchase invoice to designated authorized warranty repair station for warranty service.

The following situations occur during warranty period will be implemented in paid service:

- (1) Failure to produce the warranty card
- (2) The card has altered traces or inconsistent with the product
- (3) Defect or damage caused by abnormal or non-normal use
- (4) Defect or damage caused by misuse, accident, water or negligence
- (5) Defect or damage caused by improper testing, operation, maintenance, installation, disassembly or adjustment
- (6) Defect or damage caused by unauthorized repair or disassembly
- (7) Defect or damage caused by force majeure
- (8) Wear and tear under normal use

When you are in need of repair, please send the radio, warranty card and purchase invoice together by post or take directly to designated authorized service stations, shipping costs should be borne by the user.

Maintenance record

Carry-in date			
Completion date			
Fault description			
Maintenance staff numbers			
Maintenance personnel No.			
Signature			

This warranty card to be kept by the user, no replenishment if lost