

To Customers

Thank you very much for using our TWO WAY RADIO. This radio of modern design is a reasonable structure with stable functions. It is designed to meet different customers' need for high quality with easy operations and perfect capability. We believe you are pleased with its shape and multi functions.

This manual is suitable for using the model of TH-UVF1.

SAFETY TRAINING INFORMATION



WARNING

Your Icom radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". In addition, your Icom radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields—RF and Microwave.
- The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.; Belt Clip (MB-115), Rechargeable Li-Ion Battery Pack (BP-254), Alkaline Battery Case (BP-237) and Speaker-microphone (HM-184).



CAUTION

To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- **DO NOT** operate the radio without a proper antenna attached, as this may damaged the radio and may also exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by Icom Inc. or antenna specifically authorized by Icom Inc. for use with this radio.
- **DO NOT** transmit for more than 50% of total radio use time ("50% duty cycle"). "50% duty cycle" is also applicable to PSTN (Public Switched Telephone Network) mode and VOX Mode. Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the TX indicator lights red. You can cause the radio to transmit by pressing the "PTT" switch.
- **ALWAYS keep** the antenna at least 2.5 cm (1 in.) away from the body when transmitting and only use the Icom belt-clips listed on p. 24 when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 in.) from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

Main Functions

- Dual-band, Dual-display, Dual-standby
- 128 channels, 25 radio receiver memories
- ANI code
- Emergency alert
- FM radio receiver
- <http://www.ty888.com>
- 1750Hz Tone (optional)
- 8 groups of scrambler (optional)
- MSK/DTMF/2Tone/5Tone (optional)
- CTCSS/DCS
- VOX function / VOX grade selectable
- Multi and priority channel scan function
- Channel name setting
- Group calls
- Power on message display
- Voice prompt
- PC programmable
- Channel No. report
- COMP function
- Wired clone function

Welcome to use TYT two-way radio

<http://www.ty888.com>

CONTENTS

- 01 Unpack and checking equipments
- 02 Using tips
- 04 Radio illustration
- 06 LCD icons introduction
- 08 Work modes
- 10 Menu illustration
- 12 Menu settings
- 28 Optional signalings
- 37 Optional accessories
- 38 Specification
- 40 Trouble shooting guide
- 42 Guarantee

Unpack and checking equipments

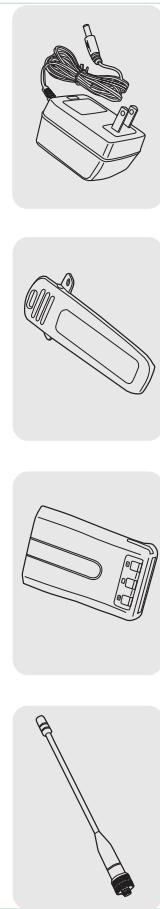
Using tips

<http://www.ty888.com>

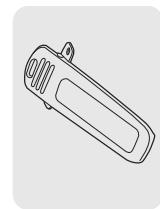
Unpack and checking equipments

Carefully unpack the transceiver. We recommend you check the items listed in the following table before discarding the packing. If any items are missing or have been damaged during shipment, please contact us as soon as possible.

Supplied Accessories



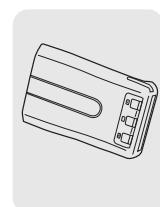
Antenna



Battery Pack



Charger Adapter



User's Manual



Charger

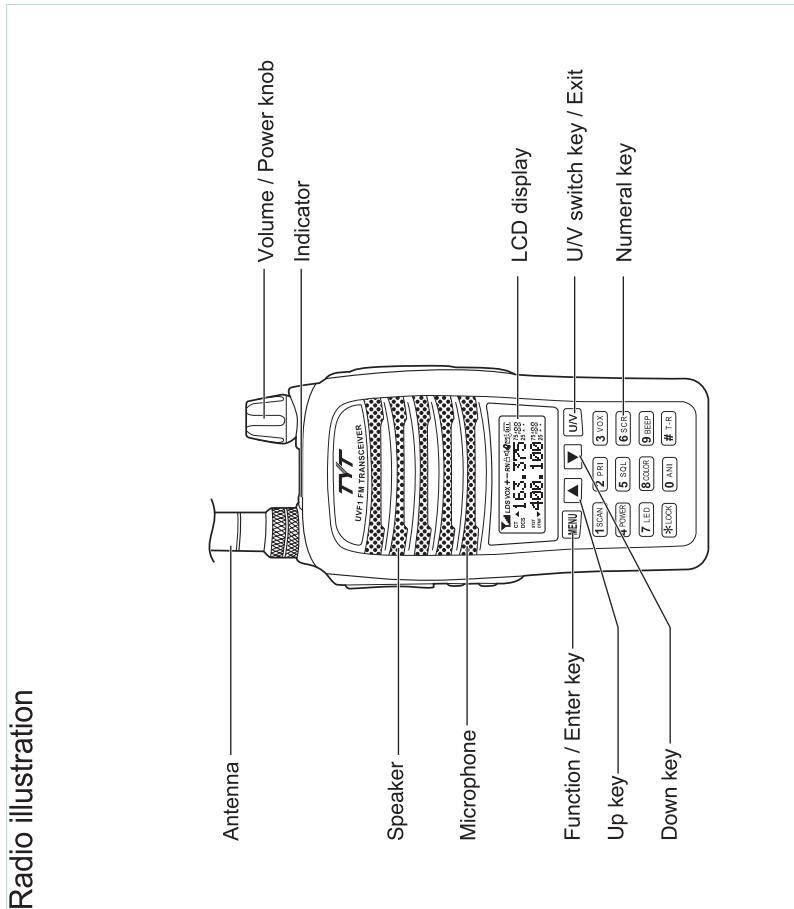
Using tips

Your Two Way Radio is an electronic product of exact design and should be treated with care. The suggestions below will help you fulfill warranty obligations and keep radio using for many years.

- Do not attempt to open the unit. Non-expert operations may cause damage.
- When using regulated power supply, take notice of power voltage and it must be between 6V and 8V to avoid damaging the unit.
- Do not store radio under the sunshine or in hot areas. High temperature can shorten the life of radio, and warp or melt certain plastics.
- Do not store radio in dusty, dirty areas.
- Keep the Radio dry. Rainwater or damp will corrode electronic circuits.
- If radio appears smelly or smoke, please shut off its power immediately and take off charger or battery and contact our agents.
- Do not transmit without antenna.

User's Manual

Radio illustration



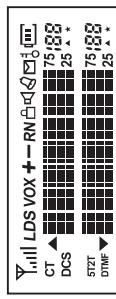
Radio illustration

LCD icons introduction

<http://www.tyt888.com>

LCD icons introduction

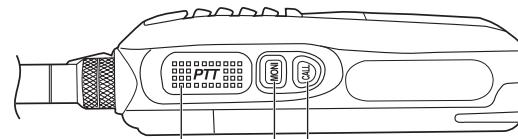
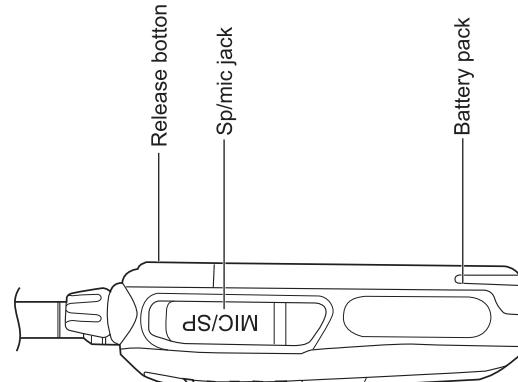
You can see various icons are shown on the screen when radio powers on. The following table can help you to identify icons' meaning which display on LCD.



Y.all	Received signal strength, power indicator
L	Low power
D	Dual- standby opening
S	Power saving
VOX	VOX on
+ -	Frequency offset direction under full frequency mode
R	Reverse frequency
N	Narrow band
□	Keypad locked
SQL	SQL turned on
Beep	Beep on

106

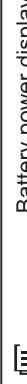
05 |



Monitor key –
CALL key –
Call key use for transmitting
signals with MSK/DTMF/
2 tone/5 tone code.

05 |

User's Manual

0	Current frequency is with scrambler function
	Battery power display
CT	CTCSS turned on
DCS	DCS turned on
5T	5Tone turned on
2T	2Tone turned on
DTMF	DTMF turned on
◀	Indicating current channel when standby / selected operation
▼	Indicating current channel when standby / selected operation
75	Frequency mantissa indicating
25	Frequency mantissa indicating
	Channel NO. /Menu indicator
▲	Channel is busy
★	Scan function is available under channel mode

Work modes

Menu Illustration

Menu Settings

<http://www.ty888.com>

Work modes

CH mode

Press and hold [▲] key to turn on the radio, enter CH mode, use [▲] / [▼] key to choose channels or input the channel NO. directly.

Note: Radio should store two channels at least.

Press and hold [▲] key again to turn on the radio, enter FR mode. Press [uv] key to select the frequency band, use [▲] / [▼] key to change TR priority frequency.

CH-FR mode

Under FR mode, hold [uv] key two second or more, radio changes into CH-FR mode.

Press and hold [uv] key two second or more, radio changes into FR mode.

Press [uv] key to switch current displaying frequency to edit or transmit.

Menu Illustration

No.	LCD Icons	Optional Setting	Menu Illustration
01	SCAN	/	scanning
02	TX.SEL	EDIT/BUSY	Dual standby priority TX channel select
03	VOX	1-8	VOX level setting
04	POWER	LOW/HIGH	Current channel transmit power
05	SQL	0-9	SOL Level
06	SCR.NO	1-8	Scrambler groups
07	LED	ON/AUTO / OFF	LED setting
08	LIGHT	BLUE/ORANGE/PURPLE	LED colors
09	BEEP	ON/OFF	Beep on/off
10	ANI	ON/OFF	ANI code
11	D.WAIT	ON/OFF	Dual-standby on/off
12	APRO	OFF/COMP/SCRA	Voice mode
13	TOT	OFF/30/60/../270	Time-out timer
14	BCL	OFF/WAVE/CALL	Busy channel lock
15	VOX.SW	ON/OFF	VOX switch

16	ROGER	ON/OFF	Transmit end tone voice prompt on/off
17	DW	ON/OFF	Monitoring
18	RX.SAV	ON/OFF	Receive power saving
19	SCAN S	TIME/CARRY/SEEK	Scan mode
20	AUTOLK	ON/OFF	Auto keypad lock
21	VOICE	ON/OFF	Voice prompt on/off
22	OPNSET	OFF/DC/MSG	Power on display
23	VLT	/	Battery voltage indicate
24	PON.MSG	/	Power on message
25A	OFFSET	0.000-99.995MHz	Shift frequency setting
25B	DIS.NM	ON/OFF	Display channel name (under CH mode)
26	CHNAME	-1A, @	Channel name setting
27	C-CDC	OFF/67.0/D023N	RX/TX CTCSS/DCS
28	R-CDC	OFF/67.0/D023N	Receiving CTCSS/DCS
29	T-CDC	OFF/67.0/D023N	Transmitting CTCSS/DCS
30	S-D	+/-OFF	Shift direction
31	STEP	5K6.25K.../100K	Frequency spacing
32	N/W	WIDE/NARROW	Wide/narrow band

Menu Settings

Scan Mode [**MENU**] + [**1 SCAN**]

- Under FR mode, press [**MENU**] key first, then press [**▲**] key, LCD displays "SCAN", press [**MENU**] key to confirm scan. Under scanning, frequency will increase or decrease bases on current frequency space.
- Use [**▲**] / [**▼**] key to change scan direction.

2) If operation follows step1, scanning bases on current CH No./FR frequency under FR/CH mode .
Press [**uv**] key to exit.

Priority Scan [**MENU**] + [**2 PRI**]

- Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 2, priority scan setting. LCD displays "TX.SEL EDIT" or "TX.SEL BUSY", choose any and press [**MENU**] key to confirm.
- Use [**▲**] / [**▼**] key to select the "TX.SEL EDIT" or "TX.SEL BUSY",

1) When "EDIT" selected, confirmed by [**MENU**] key, radio transmits on current edited channel. When "BUSY" has selected, confirmed by [**MENU**] key, radio transmits on last talked channel.
2) When standby and press PTT key, there is a "▲" displaying on the right bottom of channel. Press [**uv**] key twice to exit.

VOX grades setting [**MENU**] + [**3 vox**]

- 1) Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 3 VOX grades setting. Press [**MENU**] key enter grade selecting (1-8), 1 is the lowest, should talk loudly. 8 is the highest, talk with normal voice. Use [**▲**] / [**▼**] key to select the grade, confirm by [**MENU**] key. Press [**uv**] key to exit.
- 2) Press [**MENU**] key, use [**▲**] / [**▼**] to select NO.15, with "VOX.SW" / "OFF", confirm by [**MENU**] key. Then use [**▲**] / [**▼**] key to choose "ON" and confirm by [**MENU**] key again. VOX function set successful. It is available for earphone VOX. Press [**MENU**] key twice to exit.

 cr LBS VOX N G 33
1

- High/LOW power setting [**MENU**] + [**4 power**]
Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 4 High/LOW power setting.

- Press [**MENU**] key again, cursor indicates to "HIGH", "LOW", use [**▲**] / [**▼**] key to choose desired one. "POW/HIGH" means radio works with high power, "POW/LOW" means radio works with low power.

Note: Press [**uv**] key twice to exit.

Squelch grade setting [**MENU**] + [**5 sqx**]
Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 5, show current

- squelch grade.
Press [**MENU**] key, cursor indicates to grade No., use [**▲**] / [**▼**] key to choose desired one, confirm by [**MENU**] key.
Press [**uv**] key twice to exit
- Scrambler group setting [**MENU**] + [**6 SCR**]
1) Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 6, will show current scrambler group. Press [**MENU**] key again, cursor indicates to group No. (total 8 groups), use [**▲**] / [**▼**] key to choose desired group, confirm by [**MENU**] key.

- 2) After confirming, Press [**MENU**] key, use [**▲**] / [**▼**] key to select NO.12, LCD displays "APRO/OFF", press [**MENU**] key, cursor indicates to "SCRA", confirm by [**MENU**] key, Scrambler function is available.

Note: There are three options: OFF/SCRA/COMP. When choose "SCRA" means scrambler is on. When choose "COMP" means voice commander is on.

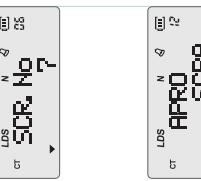
NOTE: More options please refer to software operations.

Squelch grade setting [**MENU**] + [**5 sqx**]

- Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 5, show current squelch grade.
Press [**MENU**] key, cursor indicates to grade No., use [**▲**] / [**▼**] key to choose desired one, confirm by [**MENU**] key.

Press [**uv**] key twice to exit

 cr LBS SCR N G 35
1

 cr LBS SCR N G 35
7

 cr LBS SCR N G 35
12

LCD Display [**MENU**] + [**7 LED**]

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 7, displays "LED/AUTO", press [**MENU**] key to change keypad light or LCD setting No., If choose "AUTO", LCD light will be off automatically after seconds. When choose "ON", LCD light lights all the time. If choose "OFF", LCD light is off.



Beep setting [**MENU**] + [**9 BEEP**]

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 9, LCD displays "BEEP/ON". Press [**MENU**] key to enter beep setting, use [**▲**] / [**▼**] key to select "ON" / "OFF". Confirm by [**MENU**] key, press [**unv**] key twice to exit.



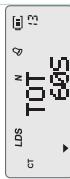
ANI code setting [**MENU**] + [**0 ANI**]

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 10, LCD displays "ANI/OFF". Press [**MENU**] key enter ANI setting, use [**▲**] / [**▼**] / [**▶**] key to select "ON" / "OFF". Confirm by [**MENU**] key, press [**unv**] key twice to exit.

Dual standby ON/OFF

Press [**MENU**] key, use [**▲**] / [**▼**] / [**▶**] key to select menu 11, LCD displays "D/WAIT/ON". Press [**MENU**] key enter setting, use [**▲**] / [**▼**] / [**▶**] key to select "ON" / "OFF". Confirm by [**MENU**] key, press [**unv**] key twice to exit.
When select "ON", radio works on both CH display on LCD, there is a "D" shows on the left top. When select "OFF", radio works on current CH. "D" icon disappears. How long the time you set, radio will stop transmitting after setting time.
Confirm by [**MENU**] key, press [**unv**] key twice to exit.

TOT setting
Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 13, LCD displays "TOT/OFF". Press [**MENU**] key to enter setting, use [**▲**] / [**▼**] / [**▶**] key to set transmit time, they are 30S.60S.....270S/OFF. If choose "OFF", there is no time limitation on transmitting. Confirm by [**MENU**] key, press [**unv**] key twice to exit.



Busy Channel lock

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 14, LCD displays "BCL/OFF". Press [**MENU**] key to enter setting, use [**▲**] / [**▼**] key to select "WAVE" / "CALL".

When select "WAVE", radio will stay on the CH which receiving carrier wave signal till signal disappears. When select "CALL", radio stays on the CH which receiving carrier wave and signal both should be the same. Confirm by [**MENU**] key, press [**UV**] key twice to exit.

Transmit end tone on/off

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu16, LCD displays "ROGER/OFF". Press [**MENU**] key to enter setting, use [**▲**] / [**▼**] key to select "ON" / "OFF".

When select "ON", will hear beep "didi" when you press PTT key. Confirm by [**MENU**] key, press [**UV**] key twice to exit.

Monitoring

Press [**MENU**] key, then use [**▲**] / [**▼**] key to select menu 17, LCD displays "DW/OFF". Press [**MENU**] key to enter the setting, through [**▲**] / [**▼**] key to choose "ON" / "OFF", confirm by [**MENU**] key, press [**UV**] key to exit.

If select "ON", signal will be received when radio is under radio receiver mode. After talking, radio back to radio receiver mode. If select "OFF", radio stays in radio receiver mode, can't receive any signal.

RX Power saving

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 18, LCD displays "RX SAV". Press [**MENU**] key to enter the setting, through [**▲**] / [**▼**] key to choose "ON" / "OFF", confirm by [**MENU**] key, press [**UV**] key to exit. If select "ON", there is an "S" displays at the top of LCD. If select "OFF", RX power saving function isn't available.

Scan mode setting

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 19, LCD displays "SCAN.S/TIME". Press [**MENU**] key to enter scan mode setting, through [**▲**] / [**▼**] key to choose "TIME", "CARRY", "SEEK" three modes, confirm by [**MENU**] key, press [**UV**] key to exit.

If select "TIME", it is time scan, if select "CARRY", it is carrier wave scan.

If select "SEEK", it is time exactly scan, including carrier wave, signaling.

Auto keypad lock

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 20, LCD displays "AUTOLK/OFF". Press [**MENU**] key to enter the setting, through [**▲**] / [**▼**] key to choose "ON" / "OFF", confirm by [**MENU**] key, press [**UV**] key to exit. If select "ON", keypad will be auto locked when there is without any operation.

Voice prompt ON/OFF

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 21, LCD displays "VOICE/OFF". Press [**MENU**] key to enter the setting, through [**▲**] / [**▼**] key to choose "ON" / "OFF", confirm by [**UV**] key, press [**UV**] key to exit.

If select "ON", voice prompt function is available.

If select "OFF", voice prompt function is unavailable.

Setting displaying when power on

1) Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 22, LCD displays "OPENSET/OFF". Press [**MENU**] key to enter the setting mode, use [**▲**] / [**▼**] key to choose voltage or message, confirm by [**MENU**] key, press [**UV**] key to exit.

If select "DC", battery voltage will be displayed. If select "MSG", message will be displayed on LCD.

2) There is no message displays when no message has been set or select "OFF". About message setting, please refer to menu 24.

Battery voltage

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 23, LCD displays current battery voltage.

Setting power on message

- 1) When standby, press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 24, LCD displays "PON. MSG".
- 2) Press [**MENU**] key to enter the setting mode, power on message blinks.
- 3) Press [**▲**] / [**▼**] key to select the desired letters.
- 4) Press [# **UV**] key to switch to the next editable letter, press [**UV**] to cancel current letter, and return to the last editable letter.
- 5) Confirm by [**MENU**] key and press [**UV**] key twice to exit.

Setting shift frequency

- When standby, press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 25, LCD displays "OFFSET/0.000".
Press [**MENU**] key to enter the setting mode.
Input desired shift frequency. It can be set from 0.000-99.995MHz.
Confirm with [**MENU**] key.
Press [**▲**] / [**▼**] key to select "ON/OFF", confirmed by [**MENU**] key.
Note: Make sure open increase/decrease frequency function before setting shift frequency.



Channel name setting

- 1) When standby, press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 26, L CD displays "CH NAME".
 - 2) Press [**MENU**] key to enter the setting mode, message is blinking.
 - 3) Press [**▲**] / [**▼**] key to select the desired letters. Press [**#~R**] key switch to the next editable letter, press [***LOCK**] key to cancel current letter, and return to the last editable letter.
 - 4) Confirm by [**MENU**] key and press [**UNV**] key twice to exit.
- Setting TX/RX CTCSS/DCS [**MENU**] + [***LOCK**]
- 1) When radio standbys, Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 27, LCD displays "C-CDC/OFF".
 - 2) Press [**MENU**] key to enter the setting mode.
 - 3) Press [***LOCK**] key radio shows 67.0(QT), use [**▲**] / [**▼**] key to choose QT groups.
 - 4) Repress [***LOCK**] key radio will show D023N(DCS), use [**▲**] / [**▼**] key to choose DCS groups. Continue pressing [***LOCK**] key to switch signalling mode. OFF—QT—DCS---OFF
 - 5) When choose DCS, press [**#~R**] key to choose DCS direction, like D023I.....Confirmed by [**MENU**] key.

Setting TX/RX CTCSS/DCS

If only set RX with CTCSS/DCS, TX without CTCSS/DCS, or RX without CTCSS/DCS, TX with CTCSS/DCS. You can press [**MENU**] key into setting mode, use [**▲**] / [**▼**] key to select menu 28,29. Operation is the same as setting TX/RX CTCSS/DCS.

Keypad lock ON/OFF

When radio standbys, press and hold [***LOCK**] key not less than 2 second to turn on/off the keypad lock. When keypad lock function is on, " **□** " will be displayed on the top of LCD, there will have voice prompt like "Keypad locked!"

Reverse frequency ON/OFF

When radio standbys, press and hold [**#~R**] key not less than 2 second to turn on/off the reverse frequency. When reverse frequency function is on, " **N** " will be displayed on the top of LCD, at this time, radio's transmit frequency is its receive frequency, radio's receive frequency is its transmit frequency.

Setting Frequency Deviation direction [**MENU**] + [**# F-R**]

- 1) Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 30.LCD display "S-D/OFF".
- 2) Press [**MENU**] key to confirm the setting.

- 3) Use [**▲**] / [**▼**] key to select "+" / "-" (increase/ decrease), there is "+" / "-" display on LCD, confirm by [**MENU**] key.

- 4) The frequency difference of Transmit/Receive operation is the same as the frequency you have set in menu 25. When Frequency Deviation function is on and no frequency difference, radio will transmit and receive on the same frequency.

Frequency space setting

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu31, LCD displays current frequency space, like "STP/25".

Press [**MENU**] key to enter the setting, use [**▲**] / [**▼**] key to choose frequency spaces, there are (5,6,25,10,12.5,,,..., confirm by [**MENU**] key, press [**UV**] key to exit.

Wide/Narrow band selecting

Press [**MENU**] key, use [**▲**] / [**▼**] key to select menu 32, LCD displays "NWW WIDE".

Press [**MENU**] key to enter the setting, through [**▲**] / [**▼**] key to choose "WIDE" / "NARROW", confirm by [**MENU**] key, press [**UV**] key to exit.

Memory channel storage

Under CH mode, input frequency and other parameters (such as CTCSS/DCS, offset frequency, offset direction, etc). Press [**MENU**] first, then press [**UV**] key, the channel No. for storage will be displayed at the right of the screen. Press [**▲**] / [**▼**] key to select the desired channel for storage, and then press [**UV**] key to finish the storage.

If the channel is blinking, means radio has stored frequency, if isn't blinking, the current channel is null, without any frequency message.
Example; input frequency: 465.025 T/R CDCSS 71.9 store in CH 9.

Operation:

- 1) Input the NO. like : [**4 POWER**] [**6 STEP**] [**5 SQL**] [**0 ANI**] [**2 FRI**] [**5 SQL**]
- 2) Press [**MENU**] and [***LOCK**] keys again.
- 3) Press [**MENU**] key to confirm, use [***CONF**] key to choose 67.0. Press [**▲**] / [**▼**] key to select 71.9, confirm by [**MENU**] key. "C7" is displaying at the right of LCD
- 4) Re-press [**UV**] key to exit. Use [**MENU**] and [**UV**] key, then input 010 directly and confirm by [**UV**] key to complete channel store. Also can press [**▲**] / [**▼**] key to select No.10 and confirm by [**UV**] key to complete channel storage.

Radio receiver setting

- 1) Open: When radio standbys, press [] with [MONI] keys, radio receiver is working.
- 2) Input directly four broadcasting no. or press [] / [] key to select the broadcast channel (step is 100K).
- 3) Under radio receiver mode, press [] + [] keys, then repress [] key, radio scans all the radio receiver memories. Radio stops scanning when there has radio receiver frequency. Press [] / [] key to select the scan direction.
- 4) OFF: Under radio receiver mode, press [] and [MONI] keys, radio receiver is off.

Store radio receiver channels

Under radio mode, input the memories you want to save, press [] + [] keys, select channel to store (you can directly enter channel no., you can press [] or [] key to select channels), then press [] key to confirm. MAX storage is 25 channels. Store operations is the same as radio channel.

Delete CH or radio receiver channel

Under CH mode, press [] key to turn on the radio, enter delete menu, use [] / [] key to choose the desired deleted channel. LCD displays "DEL", current channel NO. is blinking at the top right of LCD. Confirm by [] key to delete the channel.

Low Battery Alert

[] key to delete the channel.

When radio voltage less than 6V, radio will prompt "Low voltage".
Battery icon shows blank.

Battery power display

The battery icon "  " at the right top of LCD indicates battery power.

User's Manual

Optional signalings (programmed by TH-UVF1 software)

This transceiver supports four optional signalings (MSK, DTMF, 2-Tone, 5-Tone), DTMF signaling only supports encoding.

DTMF:

Edit DTMF message

1) Edit the fast calling signal, radio can store up to 10 groups of fast calling list.

The position of DTMF signal table in the program software:

click [Edit] → [Optional Features] → [Optional Signal] → [DTMF]

- 2) Input the desired code (16 characters in maximum) in the corresponding list, click [save] after finishing it, then exit.

<http://www.tyt888.com>

- 3) Set the optional signal of the desired channel to be DTMF
The position of channel optional signal in the programming software:
Click [More], then select "MSK" in the [Option signal] to set the edited MSK
DTMF signal into the radio.

Make DTMF call with the transceiver

- 1) Power on, then select the channel with DTMF signal.
- 2) Press [CALL] key, LCD displays "CALL/DTMF?", press [**0 ANI**] - [**9 BEEP**] keys to make call with the desired call list message. If the corresponding call list has not been edited (blank), it will sound "Du".

MSK Part:

Edit the MSK message of the transceiver (ID code for receiving,
calling list message for transmitting)

- 1) Edit the fast calling signal via programming software, radio can store up to 10 groups of fast calling list.

The position of MSK signal in the programming software:

- click [Edit] → [Optional Features] → [Option Signal] → [MSK]
- 2) Input the desired codes (4 characters in maximum) in the corresponding list, click [save] after finishing it, then exit.
- 3) Input the corresponding decoding ID in [ID Code] setting.
- 4) Set the optional signal of the desired channel to be MSK.

The position of channel optional signal in the programming software:
Click [More], then select "MSK" in the [Option signal] to set the edited MSK
signal into the radio.

Make MSK call with the transceiver

- 1) Power on, then select the channel with MSK signal.
- 2) Press [CALL] key, LCD displays "CALL/MSK?", press [**0 ANI**] - [**9 BEEP**] keys to make call with the desired call list message. If the corresponding call list has not been edited (blank), it will sound "Du".

2-Tone Part:

Edit 2-Tone message

- 1) Edit the fast calling signal via programming software, the radio can store up to 10 groups of fast calling list.

The position of 2-Tone in the programming software:

click [Edit] → [Optional Features] → [Option Signal] → [2-Tone]

- 2) Input the encoding-requested A-Tone (the first tone), B-Tone (the second tone) and the Gap Time between A-Tone and B-Tone in your required call list.

In encoding, A-Tone sounds 1 second, B-Tone sounds 3 second; but when it only has A-Tone in the call list, A-Tone will sound 5 second. (As the Group call tone in real use)

- 3) Edit the decoding-requested A, B, C Tones frequencies.

4) Edit decoder call mode, 6 modes optional A-B, C-B, C-A, B-C, B-A, A-C.
E.g.: if select C-B, when decoding, it requires the first tone to be C-Tone, the second tone to be B-Tone.

- 5) Select [Group Call] to be "None" or A-Tone, B-Tone, C-Tone, to turn on the group call function, click "save" after finishing it, then exit.

- 6) Set the optional signal of the desired channel to be 2-Tone

The position of channel optional signal in the programming software:

Click [More], then select "2-Tone" in the [Option signal], to set the edited 2-Tone signal into the radio.

1750Hz Tone

Edit 1750Hz via programming software.

Click [Edit] → [Optional Features] → [Option Signal] → [2-Tone]

- A: 1-9groups: choose any group.
- B: Input 1750 in "ATone(Hz)" only.
- C: Decoder Call shouldn't begin from "A".
- D: Group Call select "ATone".
- E: Save and input the data to radio.

5-Tone part:

Edit 5-Tone message

click [Edit] → [Optional Features] → [Option Signal] → [5-Tone]

- 1) Select the desired standard item in [Standard], 8 international common standards is selectable; the programming software displays the corresponding codes that match the specific international standard.
- 2) Input the 5-Tone ID of this radio in [ID] setting, 5 digits in maximum.
- 3) Set the optional signal of the desired channel to be 5-Tone.
The position of channel optional signal in the programming software:
Click [More], then select "MSK" in the [Option signal] to set the edited 5-Tone signal into the radio

Make 5-Tone with the transceiver

- 1) Power on, select the channel with 5-Tone signal.
- 2) Press [Call] key, LCD display "ALL/----"
- 3) Input the 5-Tone ID of the radio that you want to call. E.g.:12345
- 4) Press [PTT] to transmit.

E.g.: Here are 2 transceivers, the 5-Tone ID of transceiver A is: 12345, transceiver B is: 67890, the steps are followed for transceiver A to call transceiver B: Press [CALL], press number keys [**6**_{SCR}] [**7**_{LED}] [**8**_{COLR}] [**9**_{BEEP}] [**0**_{ANL}] in sequence, and then press PTT to transmit.

TH-UVF1 wireclone

Prepare 2sets of TH-UVF1, 1pc specific wireclone cable

Master radio (Sending messages when in wire-clone)

Deputy radio (Receiving and storing messages when in wire-cloning)

Steps of wire-clone operation

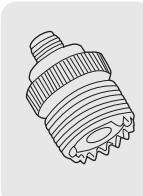
- 1) The deputy radio normally powers on, the master radio turns off.
- 2) Press [PTT] and [**▲**] to turn on the master radio, enter the wire-clone state, LCD displays "LONE" connect master radio to deputy radio with wire-clone cable.
- 3) Press [MONI] key of the master radio to start wire-clone. During cloning, the master radio shows "ending" and red light flickers, the deputy radio light flickers in green but no update information of cloning. When cloning succeeded, the master radio shows "END". When cloning failed, the master radio shows "ERROR". To wire-clone next radio, you only need to connect master radio with wire-clone cable to next deputy radio, then press [MONI] key of the master radio to start cloning.

User's Manual

- Optional accessories**
- Specification**
- Trouble shooting guide**
- Guarantee**

<http://www.ty888.com>

Specification	
General	
Item No.	TH-UVF1
Frequency range	70-108MHz (FM Receive only) 136-174MHz (RX/TX) 400-470MHz (RX/TX) 350-390MHz (RX)
	470-520MHz (RX) 245MHz (RX/TX) (Optional) 350-390MHz (RX-TX) (Optional) 470-520MHz (RX-TX) (Optional)
Frequency stability	5ppm
Operating voltage	DC 7.2V(Rechargeable Li-ion battery)
Channel No.	128
Antenna	High gain antenna
Antenna impedance	50Ω
Mode of operation	Simplex or semi-duplex
Dimensions (W x H x D)	115mm X 55mm X 31mm

Optional accessories		
	Earphone	
	Antenna Adapter	
	Speaker	
	Eliminator	Software CD
	Program Cable	
	Clone Cable	

Trouble shooting guide		
	Troubles	Solution
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.

Transmitter		
Output power	$\geq 5W(H)$	$\geq 0.5W(L)$
Modulation mode (Wideband / Narrow band)	16KF C 3E / 11K C F3E	
Maximum deviation (Wideband / Narrow band)	$< 5\text{kHz} / < 2.5\text{kHz}$	
Adjacent channel power (Wideband / Narrow band)	$\geq 65\text{dB} / \geq 60\text{dB}$	
Spurious radiation	$< 7\mu\text{W}$	
Pre-emphasis characteristics	6dB	
Current	$\leq 1.6A(5W)$	
CTCSS/DCS deviation (Wideband / Narrow band)	$0.5\text{kHz} \pm 0.1\text{kHz}, 0.3\text{kHz} \pm 0.1\text{kHz}$	
Intermediation sensitivity	8-12mV	
Intermediation distortion	$< 10\%$	
Receiver		
RF sensitivity	-122dBm (12dB SINAD)	
Audio power	>0.5W	
Audio distortion	<10%	
Blocking	≥ 85	
Intermediation (Wideband / Narrow band)	$\geq 60\text{dB} \geq 55\text{dB}$	
Selectivity (Wideband / Narrow band)	$\geq 65\text{dB} \geq 60\text{dB}$	
Spurious rejection	$\geq 65\text{dB}$	

Guarantee

Model Number: _____
Serial Number: _____
Purchasing Date: _____
Dealer: _____ Telephone: _____
User's Name: _____ Telephone: _____
Address: _____ Post Code: _____

Remarks:

- 1 This guarantee card to be kept by the user, no replenishment if lost.
- 2 This guarantee card to be filled & chopped by the dealer, or it is invalid.
- 3 Don't alter the guarantee card, please confirm the serial number on the guarantee card is same as that on the machine.
- 4 One-year guarantee, charger, battery, ear-phone, antenna and cable are not under guarantee.
- 5 The user can get repairing service from the followingways:
 - Go to the shop where you buy the machine.
 - Our local repairing agents.
 - Send back to our company.

— — — — — Please cut along with this line — — — — —

