

Instructional Icons

This radio is not intended for use by general population in an uncontrolled environment. It is only for occupational use and only applied to work-related conditions.

The radio must be only used by users, who are fully aware of the hazards of the exposure and who are able to exercise control over their RF exposure to qualify for the higher exposure limits.

The radio should be not be using more than 50% duty factor in PPT and VOX function;

The following icons are available through this manual:

Notice to the User:

- * Government laws prohibit radio communication without permission in government districts.
- * Illegal operation is subject to punishment by fine and/or imprisonment.
- * Refer service to the well-trained professional technicians only.

Safety:

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

TO CUSTOMERS

Thanks for buying **TDK** series two-way radios. This transceiver is innovative in design, powerful, and stable in performance, and easy to operate. We are confident that the quality and functionality of this transceiver will satisfy you and meet all your communication needs.

Welcome to use **72XG** wireless two-way radio

Main functions

1. 128 memory channels, 20 FM radio channels
2. Voice compander
3. Voice Scrambler
4. Narrow bandwidth
5. CTCSS/DCS
6. Shift frequency setting
7. Offset direction setting
8. PTT ID
9. Tri-backlight colors selective
10. Auto keypad lock
11. Emergency alarm call
12. DTMF encoding&decoding
13. Selective call/group call/all call
14. Stun/skill



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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 disassemble the radio; 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 of "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 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 EQUIPMENT

Welcome to use TDX TD-Q5 transceiver. Please check if any damage happens to the package when you receive it. Carefully unpack the transceiver. We recommend you check the items listed in the following table. If any item is missing or damaged during shipment, please contact with your local dealer immediately.

Supplied items:



TD-Q5 body



Antenna



Desktop charger



Power adapter



Polymer Li-ion battery



Belt clip



Strap



User's manual

Note: The antenna frequency range pls refer to the antenna label at the bottom of antenna.

GETTING FAMILIAR

LCD Display

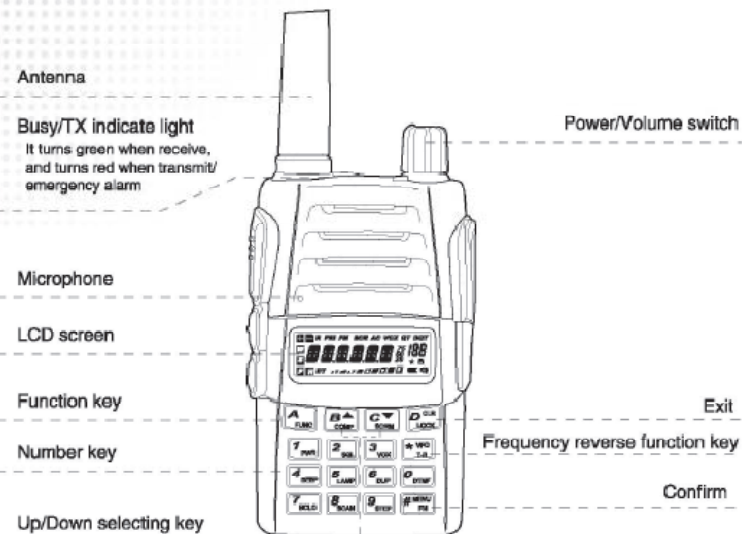
You will see various indicators on the display that show what function you have selected. Sometimes you may not recall what those indicators mean, or how to select them, in such case, you can refer to the table below.



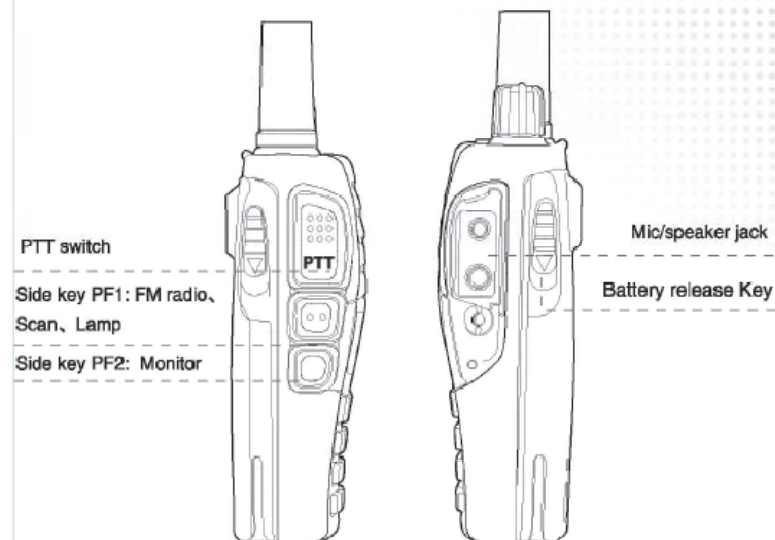
Icons	Description of functions
+/- :	Shift direction (plus or minus) setting
R:	Frequency reverse function is ON
PRI:	The current editing/transmitting channel is priority scan channel
FM:	FM radio activate
SCR:	Scrambler function activate
AC:	Voice compand function activate
VOX:	VOX activate
QT:	CTCSS activate

Icons	Description of functions
DQT:	DCS activate
S:	Scanning activate
F:	Function key is pressed
H:	High power activate
DT:	DTMF signaling activate
🔒	Keypad lock activate
★	Scan channel added
🔊	Beep tone activate
🔋	Battery voltage indicator
📶	Rx signal strength indicator, power meter
25/75:	Frequency mantissa indicator
188:	Channel number/Menu items number indicator

Radio Illustration



- 05 -



- 06 -



BASIC OPERATION

1.Power ON/OFF

Rotate right the Power/volume switch until a "ka" tone heard,the radio is turned on.

Rotate it left until power off

2.Frequency Selecting

Press  /  to increase or decrease frequency by frequency step.If your desired frequency can not be found, you can change the frequency step. Pls refer to "Frequency step setting".You can also input desired frequency directly by keypad. Pls refer to "Frequency direct input by keypad",

3.PTT Transmission

Press PTT then talk with normal tone (The indicator lights red when transmit) When transmission finishes, release PTT key to receive.

4.VOX Transmission

Vox level can be set through function setting. (Vox level 1—9, 1 is lowest level, 9 is highest level. The higher the level, the larger the volume should be to start Vox transmission)



Detailed operation pls refer to "Shortcut Operation"

5.Alarm Function

When the side key PF1 is defined as "alarm" function, press PF1 to start alarm call, press PTT to transmit alarm signal, press any key to exit alarm function. Long press PF1, the radio

sound alarm call and transmit alarm signal, release PF1 to exit alarm function.



6.Keypad lock

In standby, long press  for 2 seconds, keypad is locked. Long press  for 2 seconds again, keypad is unlocked. If the keypad lock mode is set as "Auto lock", the radio will be locked automatically when there is no operation for 6 seconds.









Press  for 2 seconds to unlock the radio.

More details, pls refer to "Keypad lock mode setting" in the "Menu Operation".



7. Display mode setting

Press  , you can switch the radio's display mode between frequency mode and frequency—channel mode. Under FM radio mode, press  to switch between FM radio frequency mode and FM radio channel mode.

SHORTCUT OPERATION

Press , then press number key 0-9, , ,  and  keys, shortcut operation can be made. Press  /  to select parameter, and press  to confirm.



1. Squelch level setting (+)

Press  +  to set squelch level, with levels 0-9 selectable.

2. VOX level setting (+)

Press  +  to enter vox level setting, with vox level of 1-9, and OFF.



3. Beep tone (+)

Press  +  to enter beep tone setting mode.
OFF/TONE/VOICE



4. Backlight lamp setting (+)

Press  +  to enter backlight lamp setting: OFF/ON/AUTO

5. Shift direction (S-D) setting (+)

Press  +  to enter shift direction setting. The function works only in full-frequency mode.

6. Busy channel lockout (BCL) (+)

Press  +  to enter busy channel lockout setting: ON/OFF



When BCL is on, if there is signal in the current channel, the radio is prohibited to transmit.

7. Scan function (+)

Press  +  to start scanning. And press any key to exit.



Press  /  to change scanning direction.

8. Frequency step (+)



Press  +  to select frequency step.

5K, 6.25K, 10K, 12.5K, 25K, 37.5K, 50K, 100K are selective



9. DTMF editing (+)

Press  +  to enter DTMF editing.









10. COMP (+)

Press  +  to enter voice compand function setting, ON/OFF Voice compander is to compress the transmitted signal efficiently, and decompress it when receiving, so that the environmental background noise will be reduced greatly and communication quality will be improved.

11. Scrambler (+)

Press  +  to turn scrambler on/off. Scrambler is a way of information encryption, the transmission spectrum will be scrambled during transmission, and will be restored when receiving, so as to achieve confidentiality of communication.



SHORTCUT OPERATION

Press , then press number key 0–9, , ,  and  keys, shortcut operation can be made. Press  /  to select parameter, and press  to confirm.

1.Power adjustable (+)

Press  + , power can be adjustable.

2. Squelch level setting (+)

Press  +  to set squelch level, with levels 0–9 selectable.

3.VOX level setting (+)

Press  +  to enter vox level setting, with vox level of 1–9, and OFF.

4. Beep tone (+)



Press  +  to enter beep tone setting mode.

OFF/TONE/VOICE



5.Backlight lamp setting (+)

Press  +  to enter backlight lamp setting: OFF/ON/AUTO

6 Shift direction (S–D) setting (+)

Press  +  to enter shift direction setting. The function works only in full–frequency mode.



7.Busy channel lockout (BCL) (+)

Press  +  to enter busy channel lockout setting: ON/OFF



When BCL is on, if there is signal in the current channel, the radio is prohibited to transmit.

8.Scan function (+)

Press  +  to start scanning. And press any key to exit.



Press  /  to change scanning direction.

9 Frequency step (+)



Press  +  to select frequency step.

5K, 6.25K, 10K, 12.5K, 25K, 37.5K, 50K, 100K are selective



10.DTMF editing (+)

Press  +  to enter DTMF editing.

11.COMP (+)

Press  +  to enter voice compand function setting, ON/OFF Voice compander is to compress the transmitted signal efficiently, and decompress it when receiving, so that the environmental background noise will be reduced greatly and communication quality will be improved.

12.Scrambler (+)


Press  +  to turn scrambler on/off. Scrambler is a way of information encryption, the transmission spectrum will be scrambled during transmission, and will be restored when receiving, so as to achieve confidentiality of communication.

12.Channel save (+)

Press  +  to enter channel save function

A. A small number flashes at the right side of screen, indicating the channel number for save.

B. Press  +  to select channel,or input by keypad directly.

C. Press  to save and exit

D. Press any key to exit without save.

13. Frequency reverse (+)



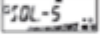





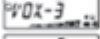
















































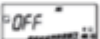



Press  +  to start frequency reverse function. It works only in full-frequency mode.

14. FM Radio function (+)

Press  +  to turn on FM radio. Press  +  to exit from FM radio mode.

When in FM radio, the current frequency or channel is still in standby, if transceiver receives a signal or PTT key is pressed to transmit, it will return to two-way radio., and an icon "FM" flashed on screen. After the signal disappears or PTT key is released for 15 seconds. It will return to two-way radio mode,

SHORTCUT OPERATION SHEET

Item No.	Item Name	Enter item	Screen Display	Select parameter	Parameter description	Confirm and return standby
1	Squelch level	 + 		Press  or  to select parameter.	Levels 0-9	
2	Vox level	 + 		Press  or  to select parameter.	Levels 1-9/OFF	
3	Beep tone	 + 		Press  or  to select parameter.	Voice/Tone/OFF	
4	Backlight lamp setting	 + 		Press  or  to select parameter.	On: Lamp keeps light Auto: Lamp will be closed after a certain time OFF: Lamp will not light	
5	Shift direction setting	 + 		Press  or  to select parameter.	+ To frequency reverse to the frequency plus shift frequency - To frequency reverse to the frequency minus shift frequency OFF	
6	Busy channel lockout	 + 		Press  or  to select parameter.	On: When there is signal in current channel, it can not transmit Off: When there is signal in current channel, it can still transmit	
7	Scan	 + 		Press  or  to change scan direction	Press  or  to change scan direction Press any key to exit	
8	Frequency step	 + 		Press  or  to select parameter.	5K, 6.25K, 10K ... 100K	
9	DTMF	 + 		Press  or  to select parameter.	Input the desired DTMF code you want to set Press PTT to transmit DTMF code, else if there is no key will be received, it will not be made	
10	Voice companding	 + 		Press  or  to select parameter.	ON/OFF	

Item No.	Item Name	Enter Item	Screen Display	Select parameter	Parameter description	Confirm and return standby
11	Scrambler	+		Press [F1] or [F2] to select parameter.	ON/OFF	
12	Channel save function	+		Press [F1] or [F2] to select parameter.	A error number flashes at the left of screen, indicating the number of channels for save. Press [F1]/[F2] to save your desired channel, and input display is turned.	
13	Frequency reverse	+			To frequency and to frequency are reversed. To enter any other frequency mode.	
14	FM radio	+		Press [F1] or [F2] to select parameter.	If radio is on, Press [F1] or [F2] again to exit. When PTT is pressed or when to sleep, the radio returns to TX/RX mode. If PTT is released, the radio returns to TX mode. If the signal disappears for 10 seconds, FM radio returns again.	

KEYPAD OPERATION

In full-frequency mode, input the desired frequency directly by keypad. If the input frequency is invalid, the radio indicates error operation. If the input frequency is valid, the radio works switches to the new frequency.










In channel mode, press number key to change channels. If the input channel is invalid or without frequency, the radio returns to present channel.

BRIEF MENU DESCRIPTION

Menu No.	Display&Description	Parameter setting
1	ID	The radio's self ID is shown
2	N	NARROW
3	TAIL	OFF/ON
4	R-DCTS	OFF/CTCSS/DCS
5	T-DCTS	OFF/CTCSS/DCS
6	DTMF	ON/OFF
7	SP UN(SP MUTE)	CARRIE/CA*DMF/CA/DMF
8	OFFSET	0-70.000MHZ
9	SCAN	ADD/DEL (Channel mode)
10	NAME	6 digits at most (Channel mode)
11	TX NAME	OFF/ON
12	TX ID	OFF/ON
13	PTT ID	OFF/ON
14	S NAME	OFF/ON
15	PRI	OFF, channels 1-128 (Channel mode)
16	TOT(Time out timer)	OFF/30s.....6000s
17	Color (Backlight color)	RED/BLUE/PURPLE
18	SAVE	OFF/1-1/1-2/1-3/1-4


Menu No.	Display&Description	Parameter setting
19	KEY LK	AUTO/MANUTO
20	SCANMD (Scan mode)	TO/CO/SE
21	SCANSPP(Scan speed)	50ms, 100ms, 150ms.....500ms
22	ACPALT (Accept alarm call)	ON/OFF
23	FM STP (FM radio step)	25K/50K/100K/200K
24	DC (Battery voltage)	X.XV

MENU OPERATION

Press , the screen displays "MENU", then press  again or press  /  to enter menu operation mode. Press  again to enter the parameter setting. Press  /  to select parameter, and then press  to confirm the setting and return to menu operation mode. Press  to exit.

DETAILED MENU FUNCTIONS DESCRIPTION

1. ID Code (ID)







ID function will display the radio's self ID , it can't be edited by keypad, and should be edited only by software. If ID code exceeds 6 digits ,press  to see the rest digits, press any key to exit.

2. narrow bandwidth

3. End-tone Elimination Function (TAIL)

End-tone elimination function will eliminate the "Ca" sound when transmission is over.
ON/OFF

4 / 5. Rx CTCSS/DCS (R-DCTS); Tx CTCSS/DCS (T DCTS)

- A. Press  to enter R-DCTS/ T DCTS setting
- B. Press  to switch OFF->CTCSS->DCS N->DCS I->OFF .
- C. Press  /  key to select desired CTCSS/DCS parameter.
- D. Press  to exit,press  key to confirm.

6. DTMF

With DTMF signal, the radio will receive and compare it with self ID setting, if they match, the speaker will be opened.

OFF/ON

7. Speaker Mute Mode (SP UN)

Speaker mute mode is the way to open the speaker.

There are 6 speaker mute modes to open the speaker.

CARRIE: When there is carrier, the speaker opens.

QT/DQT: When the CTCSS/DCS is decoded successfully, the speaker opens.

CA*DMF: When there is carrier and DTMF code is decoded, the speaker opens

CA/DMF: When there is carrier or DTMF code is decoded, the speaker opens

QT*DMF: When CTCSS/DCS and DTMF code are decoded, the speaker opens

QT/DMF: Either CTCSS/DCS or DTMF code is decoded, the speaker opens

8. Shift Frequency setting (OFF SET)

Offset is to decide the shift frequency between Tx frequency and Rx frequency.

Available ranges: 00.000MHz-70.000MHz

Press  /  to select or input your desired offset frequency directly by keypad.

9. Scan

Add the current channel to scan list or delete it from scan list .












This function works in the channel mode only.

10. NAME (Channel Name)

This function is used to edit channel name, it will display 10 numbers or letters at most .

This function works in channel mode only

- A. Put the radio in channel mode, enter the menu item 10 for channel name editing..

- B. When the first digit flickers ,press  /  to select “” ~ “”, “” ~ “”, “”。
- C. Press  to return to last digit and press  to go to next digit.
- D. Press  to delete present digit.
- E. Press  to save

11. Transmit Name (TX NAM)

When there is channel name in the current channel, press PTT to transmit channel name
This function works in channel mode only. OFF/ON

12. TX ID

Press PTT to transmit radio's self ID. OFF/ON

13. PTT ID

Press PTT to transmit PTT ID type. The PTT ID types can be defined by software.
OFF/ON

14. Channel Name Display/Show (S NAME)

The radio will display channel name of current channel under channel mode. OFF/ON
Notice: When channel name display turns on, if there is no channel name edited, the radio will show frequency automatically.

15. Priority Scan (PRI)

Can be used to set up a channel for priority to scan the channel.

16. Time-Out-Timer (TOT)

The purpose of time-out timer is to prevent the radio from continuously long-time transmission, when the continuous transmission time exceeds the pre-set time, transmission will be stopped and a prompt tone sounds.

TOT settings: OFF/30s/60s/90s.....600s

17. Backlight Color Setting

Three kinds of backlight colors are selective.

RED/BLUE/PURPLE

18. Save mode

Radio receiver status in no signal, by reducing the receiving circuit in order to extend the use time of battery.

OFF: It means exit to battery save mode

1-1: turn on 200ms, turn off 200ms。

1-2: turn on 200ms, turn off 400ms。

1-3: turn on 200ms, turn off 600ms。

1-4: turn on 200ms, turn off 800ms。

19. Keypad lock (KEY LK)

Keypad lock is used to set the way to lock the radio keypad.

AUTO:Auto lock. There is no activity for 8 seconds, locking the keypad

MANUTO:Manual control locked. Press  2 seconds, locking the keyboard

20.Scan Mode

To start scanning, you must set scanning mode first.

Three scanning modes are selective:

TO: Time scanning mode, when a signal received, after 5 seconds without any operation, continue to scan.

CO: Carrier scanning mode, when a signal received, scanning stops. 3 seconds after signal disappears, continue to scan

SE: Search scanning mode: when a signal received, the radio stays in the frequency and exit scanning

21.Scan Speed (SCANSP)

It is used to set the time period to scan from one channel to next channel. The following can be chosen:

50ms, 100ms, 150ms, 200ms, 250ms, 300ms, 350ms, 400ms, 450ms, 500ms

22.Accept Alarm Call (ACPALT)

It is used to decide whether the radio will sound alarm call when receiving alarm signal.

OFF: Turn off. Does not accept alarm signal

ON: Turn on. Receive alarm signal and sound alarm call.

This function work in the channel mode only. OFF/CH1-128

23.FM Step (FM STP)

Four steps for FM radio: 25 K, 50 K, 100 K, 200 K




24.DC (Battery Voltage)


The current battery voltage will be displayed in the screen.

Auxiliary Functions

Reset Function

The radio will restore to factory default setting after reset function.




Press and hold PTT +  to turn on the radio, the screen shows  and need a password. Input the password of "xxxxxx", and press  to confirm.





The radio sounds "Du" and enters into reset function, with the screen displays .

After reset finishes, the radio sounds "Du" again and enters into full-frequency working mode automatically.

Channel Deleting







Select the channel-frequency mode for radio first, then turn it off.

Press and hold PTT +  to power on, the radio screen shows , and a small number appears on the up right side of the screen, indicating current channel number. Press  /


 key to select your desired channel to delete, and press , the screen shows . press  again to confirm deleting, press any other key to cancel deleting.

After a channel is deleted, it turns to next available channel. When all channels are deleted, the radio exits from deleting mode and returns to full-frequency mode.

Wire Clone Function

Press and hold PTT +  of master radio and turn it on, it enters into wire clone mode, the screen indicates . Turn on the sub radio, and connects it to master radio with a program cable. Shortly press PTT of master radio to start cloning. In the process of cloning, master radio screen shows  and sub radio screen shows . If the cloning succeeds, the master radio screen shows  and returns to wire clone mode; if cloning fails, the master radio screen shows  and returns to wire clone mode.

Switching frequency mode and channel mode

Press and hold PTT +  to turn on the radio, it switches between frequency mode and channel mode.

DTMF Function Description

Receiving DTMF code

1. A decoder to decode up to 16 codes one time. 500ms after there is no code, the decoding is over. If DTMF code appears again, it is considered to a second string of DTMF code.

2. The radio identifies DTMF code as followed:

(1) ID code

When it decodes an ID code, the radio will respond to the code.

a. No: the radio do not respond.

b. Alarm call: the radio sounds alarm call

c. ID code: when signal disappears, the radio transmits ID code.



If not decoding an ID code, it decodes according to whether group call function is open. If group call function opens, it identify the group call Code, and respond to the according signal.

By this function, the radio will be able to make group call.



Meanwhile, speaker opens according to the Speaker mute setting way.

(2) Kill code (Kill function)

When it identifies a Kill code, the radio is killed, and locked, can not transmit or receive.

When it identifies Kill decode of   , radio releases from Kill function. If the radio has been stunned, it is re-activated.

3. DTMF code displaying

The radio displays the received DTMF code and flashes, but if it is Stun or Kill decode, the radio does not display. Press  +  to see the DTMF code. Press PTT code to clear



code and transmit. Press any key to stop flashing.

If the received code is more than 6 numbers, it displays rollingly. If less than or equals to 6 numbers, it displays all.

When the radio is under the keypad inputting status, if a DTMF code is received, the code is not stored.

Transmitting DTMF code

1. Real-time transmission operation. It can transmit any DTMF code.

Press  +  , the screen shows ----- then press needed DTMF code by keypad [0,1,2,3,4,5,6,7,8,9,A,B,C,D,*,#], then press and hold on PTT key to transmit.

Release to pause. 2 seconds after PTT is released, if PTT is not pressed again, DTMF transmission exits. When DTMF code is being transmitted, it still transmits even PTT is released.

2. Transmit BOT code/ EOT code

If the PTT ID is on in the current channel, it can be transmitted at the beginning of transmission (BOT) or end of transmission (EOT).

Four ways to be set by software:

OFF: PTT ID is not transmitted.





BOT: When PTT is pressed, the radio transmits PTT ID immediately after transmission begins..

EOT: When PTT is released, the radio transmits PTT ID after transmission is over.

BOTH: The radio transmits PTT ID both at the beginning and end of transmission.

It can be set through DTMF-->code setting.

3. DTMF code storage and transmission

Press  +  , enter the DTMF storage setting, input the codes (16 numbers in maximum) , and then press and hold on PTT to transmit the input DTMF code. Press  to delete last number, press  to exit. DTMF code can be set by program software.

4. Transmit channel name

The radio's ID code can be stored in channel name. If channel name transmission is ON, when PTT is pressed, the radio will transmit channel name after transmission.

5. Transmit self ID

There are two ways of it:

(1) When the radio is called by others, it receives and send self ID automatically.

(2) Press PTT key, if self ID transmission in the current channel is ON, the radio will transmit self ID after transmission.

6. A series of codes transmission

When PTT key is pressed, if there are some different codes to be sent, the sequence for them is:

BOT code -> Pre-stored code -> Channel name -> Self ID -> EOT code

The interval between different codes sending can be set by software 0, 600ms, 700ms, ----- 2000ms are selective.

Note: When the last code is transmitted, the interval will be extended. (In case the transmission is not finished.)

7 .Transmitting Codes display

When a series of codes are transmitted, it does not display.

In the real-time transmission, press PTT to display the code.

Note: DTMF code is transmitted only by pressing PTT key. (except Auto-response)

Transmissions caused by VOX , 1750Hz tone or alarm call etc, do not transmit DTMF code.

A "DT" sign is showed during transmission, and disappears after transmission is over.

Channel name display

When channel name display is turned ON, if there is a channel name, the LCD show it.

If the channel name is more than 7 numbers, Shortly press  to show the rest numbers.

(Long press and hold  to turn on/off keypad lock.)

Technical Parameter

General/Model	TD-Q5
Frequency range	VHF:136~174MHz
Channel Capacity	128
Channel Spacing	12.5KHz
Antenna Impedance	50 Ω
Microphone Impedance	600 Ω
Operating Voltage	7.4V DC
Frequency Stability	± 2.5 ppm
Size(without Antenna)	112mm(L) \times 61mm(W) \times 33mm(D)
Weight(With Battery)	200g
Battery	1800mAh(Polymer Li-Ion)

Transmitter

RF Power Output	2.5W
Modulation Type	FM
Modulation Sensitivity	<15mV

Modulation Distortion	$\leq 5\%$
Max Freq Deviation	$\leq 2.5\text{KHZ}$
Occupied Bandwidth	$\leq 12.5\text{KHZ}$
Modulation Feature	$\pm 3\text{dB}$
Spurious Radiation	$\leq 7.5\mu\text{W}$
Adjacent channel Power	$\leq -65\text{dB}$

Notice: Specification will be revised without notice due to technical improvement.
Thank you.

Please cut along with this line

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 following ways:
 - Go to the shop where you buy the machine.
 - Our local repairing agents.
 - Send back to our company.

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-93, MB-94, MB-96N and MB-96F), Rechargeable Li-ion Battery Pack (BP-232WP), Alkalies Battery Case (BP-240 and BP-261) and Speaker microphone (HM-184).



CAUTION

To ensure that your exposure 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 damage the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.
- **DO NOT** transmit for more than 50% of total radio use time (“50% duty cycle”). 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 “VOX/PTT” switch.
- **ALWAYS keep** the antenna at least 2.5 cm (1 inch) away from the body when transmitting and only use the Icom belt-clips listed on page 30 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 inches) 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.

Electromagnetic Interference/Compatibility

During transmissions, your Icom radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn OFF the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.