To customers

Thank you very much for using our 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 our two-way radio

Professional FM Transceiver

Frequency band:

UHF:400-470MHz

1024 channels

Remote kill/stun/activate

Voice prompt

Flashlight

Encryption function

Built-in CTCSS/DCS

Six keypad operate

Priority scan

Complying with digital protocol ETSI TS 102 361-1, -2, -3

Compatible with Mototrbo Tier I& II

DTMF decoding and encoding

Private call, group call, all call in digital mode.

Operate in both Digital & Analogue mode,

allows easily migrate from analog to digital.

Provide clearer voice communications in

digital mode, throughout the coverage area.

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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.
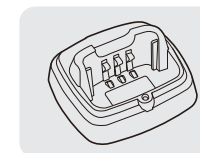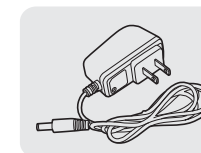
Supplied accessories:

| Li-ion battery (1) | Belt Clip (1) | Charger (1) | Adapter(1) |

| Verification (1) | User's Manual (1) |

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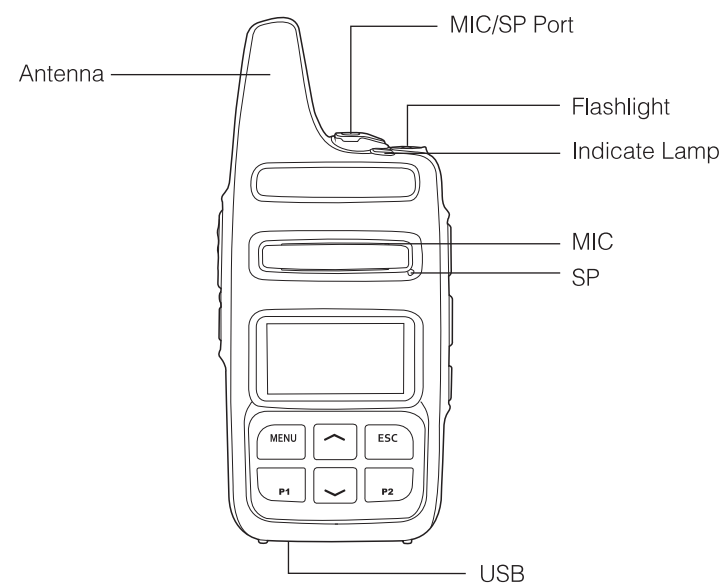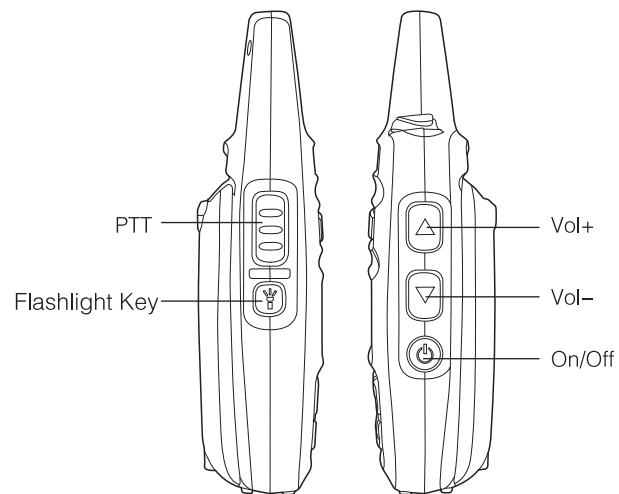
Getting familiar

Safety and Overview

Overview

Professional FM Transceiver

Getting familiar

Antenna

MIC/SP Port

Flashlight

Indicate Lamp

MIC

SP

MENU   ⌃   ESC

P1   ⌄   P2

USB

PTT

Flashlight Key

Vol+

Vol−

On/Off

Noted: Sidekey 1.sidekey 2. P1/P2 can setting long/short function .
As follow: 1. None 2. prompt voice on /off 3.Emergence mode on 4.Emergence mode off. 5. high /low power select   6.monitor 7.delecting useless channels   8.PTT1 9.PTT2 10.PTT3 11. PTT4 12.PTTS 13.PTT6 14.Talkaround/ Repeater 15.scan on/off 16.normal squelch 17.encryption on/off 18.VOX 19.zone selection 20.single call operate 21.lone work

Safety and Overview

Product safety and RF Exposure for handheld two way radio .

> ⚠ Before using this two way radio ,please read the manual which contains important operating instructions for safe usage,RF Energy Awareness, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards Also read the operational instructions for safe use.

Overview

Switch On

Kindly find the sidekey on the right Click ⏻ 3 seconds and switch on radio.

Display will show TYT logo and the light w ill turn red.

Switch Off

Kindly find the sidekey on the right Click ⏻ 3 seconds and switch off radio.

Adjust Volume

Find the sidekey on the right ▲ Key and ▼ Key Adjust Volume.

Launch And Receive Calls

Emergency Function

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Launch And Receive Calls

Zone Selection

Zones is a channel group.Each radio can set 64 zones and each zone with max 16 channels
The menu function:
1. Press [MENU] key to enter the menu.
2. Press [⌃or ⌄] key to choose,after that with [MENU] key to confirm.
3. Screen shows the chosen zone and named by it .
4. Press [⌃or ⌄] key to chose,after that press [MENU] key to confirm.
5. Screen shows the chosen zone and named by it.

Selection Of Channels , User ID Or Group ID

Select the needed zone (if there are more than one zone),using the channel knob to select
the channel ,user name or ID,group name or ID.

Receive And Reply Group Call

The radio must be under a group , then can receive the group call .
When received the group call:
1. LED indicator is green color.
2. On the top of the middle screen will show RSSI mark:First line will show the group name,
   income call ID will be in the middle ,group call ICON will be the last (this happens only
   under Digital mode)

3. Hold the radio and place it between your lip within 2.5~3cm
4. Press[PTT]key to answer the call,LED indicator light change to red color.
5. Release[PTT]key to receive next call
6. If there are not any voice activity, the call end.
Notice: When the radio out of the home page and if there is a group call income , it will be
        show all the time on the screen before you answer it .
Press [ESC] key to receive the call ,and check the income ID before reply.

Receive And Reply The Single Call

Single call means one on one call. Only with two types: One is testing presence of radio
before call, and another one is to call immediately.
When Receive The Single Call:
1. LED indicator is green color.
2. On the top of the middle screen will show RSSI mark, follows shows single call, user name
   or ID in the middle,single call mark at the end (Only for analogue mode).
3. Hold the radio and place it between your lip with 2.5~3cm
If on the "free channel message sound" function,let go [PTT] key, you can hear a message
sound,means this channel is free for you to answer .
4. Press[PTT]key to answer the call,LED indicator light change to red color.
5. Release [PTT]key to receive .
6. If there are not any voice activity, the call end.
7.You will hear a message sound and screen shows the call finished .

Receive all calls

All call means a walkie talkie call up all other users in a channel to public an important information

When receive the all calls:

1. LED indicator becomes green.

2. On the top of the middle screen will show RSSI mark,follows shows all call,User name or ID in the middle,all call mark at the end (Only for analogue mode)

3. End of the all call,radio back to receive all call screen. If under the "free channel message sound" function, when release the PTT key, you will hear a message sound, means this channel is free to use (but cant reply it)

Notice: when receive the all call, if you turn over to another channel, the radio stop to receive all call. During the all call, You can use any re-programmed key until the call finished.

Launch a radio call

You can choose a channel , user ID or group call with following methods

- Channel Knob
- Pre-programmed key
- Contacts
- Manual dialing (only for single call)

Single Call

1. Turn over channel knob , use the name or user ID to choose channel.

2. Hold the radio and place it between your lip with 2.5~3cm.

3. On the top of the middle screen will show RSSI mark, follows shows single call. User name or ID in the middle, single call mark at the end (Only for analogue mode).

4. Release [PTT] key to receive, when target radio is replying, LED indicator becomes green

5. If on the "free channel message sound" function, Release [PTT] key, you can hear a message sound (means it channel is free for you to answer)
If there are not any transmitter within the time limited , the call failed .

6. you will receive a message sound and screen shows call finished .

You can make a single call with contacts or use keyboard to search the target walkie talkie to make a call.

All Call

Walkie talkie must be programmed with this function , so that you can send information to every user who are under the channel .

1. Turn over channel knob , use the name or user ID to choose channel.
2. Hold the radio and place it between your lip with 2.5~3cm.
3. Press [PTT] key to release a call , LED indicator becomes to red color .Screen shows Group name or ID with all call mark .

User under the channel can not reply the call .

Use A Key To Make A Group Call Or Single Call

Single key call function is convenient for you to set a name or ID for group call or single call with long-press or short-press the program key. Set a name or ID for a key there are more than one single call key

1. Press pre-programmed call key.
2. Hold the radio and place it between your lip with 2.5~3cm
3. Press [PTT] key to call , LED indicator becomes to red color .Screen shows name or ID with a mark .

4. Release [PTT] key to reveive, when target walkie talkie is replying ,LED indicator changes to green .
5. If on the "free channel message sound" function , Release [PTT] key,you can hear a message sound, means it channel is free for you to answer .
If there are not any voice activity, the call end.
6. Walkie talkie back to before call screen.

Emergency Function

Emergency alarm only use to transfer emergency situations, you can release a emergency call at anytime and anywhere . Even the walkie talkie is busy in transferring or receiving Radio support 3 types of emergency call:

- Emergency Call
- Call follow emergency alarm
- A voice follow emergency alert

Moreover: alarm has the following types:

- Prohibit: radio can not send emergency call but can receive .
- Local + Remote: An emergency call with voice or notice .
- Remote: an emergency call without any voice or notice. Before press [PTT]key to call , local radios will not receive any voice or notice .
- Remote + Voice : radio sending an emergency call while accept to receive calls. Before press the [PTT] key to transmitter or reply , there are not any notice

Only one part of above emergency situations can be set as pre-programmed key.

Receive Emergency Call

1. When receiving emergency call, number of emergency calls and alarms received ,exch-ange the sender name or ID .
2. With a message sound and LED indicator becomes red
3. If the radio have activated, then will confirm the emergency alarm automatically .When the radio receive the emergency alarm, screen shows the emergency alarm warning mark, until send with a confirm message then can Exit .　While , you will not receive any calls and notices from other radios during this situation .

Notice:short-press [ESC] key, then with the pre-programmed off key, delect all received emergency call and logout the emergency mode .

Reply the emergency call

When received the emergency call:

1. Press any key to stop the emergency call alarm
2. Hold the radio and place it between your lip with 2.5~3cm . If on the "free channel message sound" function, Release [PTT] key, you can hear a message sound, means it channel is free for you to answe.
3. Press [PTT]key to have a call. LED indicator becomes red. walkie talkie under the emer-gency call mode .
4. Release [PTT] key to receive, when reply the emergency call, LED indicator becomes green. The screen shows group mark or ID and call ID
5. After the call, short-press [ESC] key, then press pre-programmed emergency key to off , delect all the emergency call and logout.
6. Radio back to home screen.

Emergency Alarm

This function called speech signal and allows to send emergency alarm and will trigger on another radio .

1. Press pre-programmed power on key.
2. Screen shows sending emergency call, exchange ID with other walkie talkie .LED indicator changes to red and emergency call mark will down on the home screen .
3. When receive the emergency call, the radio issues the emergency call and LED indicator changes to green , screen shows emergency call send out successfully .

Or , if the radio does not receive any confirm with the emergency call and out of the sending times, the radio will with a message sound and screen shows the emergency call failed .

4. Radio logout the emergency mode and back to home screen .If the radio under silence mode, there will not any sounds or reminder during the emergency mode .

Emergency Alarm call

This function allows you to send emergency call to other radio .After confirmed by the radio , the two radios can contact by a pre-programmed channel .

1. Press pre-programmed key to switch on
2. Screen shows sending emergency alarm call,exchange ID . LED indicator becomes red, emergency call mark will down on screen .
3. when the radio confirm with the sending emergency,screen will show emergency call successful and LED indicator change to green .

4. Hold the radio and place it between your lip with 2.5~3cm .
5. Press[PTT]key to call,LED indicator light changes to red, screen shows the group mark.
6. Release [PTT] key to receive.
7. If on the "free channel message sound" function, Release [PTT] key, you can hear a message sound (means it channel is free for you to answer)

Or press pre-programmed emergency call to off and logout the mode.

8. Radio back to home screen. If the radio is under the silence mode ,there are not any sounds or notices during the emergency mode, not receive calls from target walkie talkie ,until press the [PTT] key .If the radio under "with voice mute" mode ,there are not any sounds or notices during the emergency mode ,not receive calls from target walkie talkie .Until press the [PTT]key to call or receive, then the screen will show up .

Voice emergency Alarm

This function allows you to send emergency call to others ,after confirm with you, your radio microphone activate, allows you to call other radios with press the [PTT] key. This called "Emergency microphone".If press [PTT] key during pre-programmed emergency microphone. radio without ignore the [PTT] and stay on emergency mode .

Notice: If press[PTT]key during the emergency microphone ,hold the key before duration within limits, let go [PTT]key to transfer .

1. Press the pre-programmed emergency start key .
2. Screen shows sending emergency call, LED indicator becomes red color and emergency call Mark will show on Screen .

3. Screen will show emergency call successful, then speak clearly .When under activated emergency microphone, radio transfer automatically without press [PTT] key before duration within limits

4. During transfer , LED indicator becomes red and emergency alarm mark will show on screen.

5. After the time of emergency microphone, radio stop to transmit .Press [PTT] key to transmit again If the radio under the "Silence" mode, there are not any sounds or notices during the emergency mode, not receive calls from target walkie talkie, until pass the pre-programmed emergency microphone limited time and press with [PTT] key .If the radio under "with voice mute" mode ,there are not any sounds or notices during the emergency mode ,not receive calls from target walkie talkie .Until press the [PTT]key to call or receive, then the screen will show up .

Notice: If the emergency call failed , then the walkie talkie will back to home screen .

Menu operation

Settings

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Menu Application

1. Press [MENU] to enter Menu, then press left or right [⌃or⌄] to access the menu function
2. Press [MENU], select a function or go into a sub menu
3. Press [ESC] to return the higher level menu
Note: After a period of time not activity radio will automatically exit and return to the main
   menu screen.

Radio Chcek

If there are any activation, this feature allows you to determine whether there is other two
way radio active inside the system, and does not disturb the walkie-talkie users, none-voice
or visual notice appears on the target two way radio

Send Radio Check

Using Menu:
1. Press [MENU] to enter Menu
2. Press [⌃or⌄] button to select Contacts, then press [MENU] to select.
3. Press [⌃or⌄] toThe required user alias or ID,then press [MENU] to select
Or press [⌃or⌄] key to manual dialing, and then press [MENU] key to select. If there are
before calling ID, show ID and along with the flashing cursor, using the keyboard editing ID,
press [MENU] .
4. Press [⌃or⌄] to radio detection, and then press [MENU] to select

5. When Screen displays radio detection: < user alias or ID >, it is indicating the ongoing of
   radio detection. The LED indicator light is red.
6. Waiting for confirmation
7. If the target radio is active in the system , then it makes a prompt sound, screen will show
   that target two way radio has responded shortly.
Or if the target radio in the system is not active, then it makes a prompt sound, screen will
show that target two way radio has no answer shortly.
8. Two way radio returns to user alias or ID screen. If you press [ESC] when waiting for con-
   firmation, made a prompt sound, two way radio will end all retry and exit the two way radio
   detection mode.

Monitor

Using monitoring function to open the target two way radioís microphone (only the user alias
or ID). You can use the function to monitor any sound around target two way radio.
Your must allow your two way radio to use this function by programming it.

Start Monitor

Using the Menu:
1. Press [MENU] to enter the Menu
2. Press [⌃or⌄] to Contacts,then press [MENU] to select
3. Press [⌃or⌄] to The required user alias or ID, then press [MENU] to select

Or press [⌃or⌄] key to manual dialing, and then press [MENU] key to select

If there are any calling ID remains before, radio shows the ID and along with the flashing cursor, using the keyboard to edit the ID, press [MENU] key to choose.

Or press [⌃or⌄] key to manual dialing, and then press [MENU] key to select. Inputting the user alias or ID, and then press [0k] key to select.

4. Press [⌃or⌄] to select Remote Monitor then press [MENU] to select

5. When two way radio makes a prompt sound, LED light turns green.

6. Waiting for confirmation.

7. Screen displays Monitor successed,

Or screen displays Monitor failed

If success: two way radio began to receive voice signals from the radios which are being monitored voice and screen displays two way radio are moniting, until the end of the duration of the preprogrammed, two way radio made a prompt sound, and the LED light puts out, screen display that monitoring ends.

If failed: two way radio Repeats until reach the preprogrammed attempts.

Contacts setting

Contacts is "address book" for handheld two way radio. Each entry corresponds to an alias or ID used to start the call. In addition, each item, according to the different content setting, relate to three types of call: group calling, single call, all call. Your radio support digital address book. The Contactsí entries display in the following information

- Call type
- Call the alias
- Call the ID

Note: you can add, delete, edit Contacts person in the digital address book(contacts)

Group Call With Contacts

1. Press [MENU] to enter Menu

2. Press [⌃or⌄] to contacts, then press [MENU] to choose, entries arrange in alphabetical order.

3. Press [⌃or⌄] to required calling group's alias or ID.

4. Holding the radio and let it in a vertical position and keep mouth 1 to 2 inches (2.5 to 5.0 cm) with radio.

5. Press [PTT] to start calling, the LED turns red. The screen displays the calling group's alias or ID,as well as icon of group call.

6. Releasing (PTT) button to receive, when any user response within the group, the LED light turns green. You will see on the screen group call icon of user's ID

7. if you enable the "channel Free prompt " function: when the target radio release the (PTT) button, you will hear a short beep, said this channel is idle, waiting for your answer. Press the call key (PTT) to answer. If in a preprogrammed group called hang time without voice activity, the call is ended.

Single Call With Contacts

1. Press [MENU] to enter Menu
2. Press [▲or▼] to Contact,then press [MENU] to choose, entries arrange in alphabetical order.
3. Press [▲or▼] to required calling group's alias or ID.
   Or press [▲or▼] key to manual dialing, and then press [MENU] key to choose. If there is a user alias or ID called before, radio shows ID and along with the flashing cursor, using the keyboard editing this ID.
   Or press [▲or▼] key to manual dialing, and then press [MENU] key to choose, using the keyboard to enter a new ID
4. Holding the radio and let it in a vertical position and keep mouth 1 to 2 inches (2.5 to 5.0 cm) with radio.
5. Press [PTT]to start calling, the LED turns red. The screen displays the calling group's alias or ID,as well as icon of group call.
6. Release (PTT) button to receive, when any user response within the group, the LED light turns green. You will see on the screen group call icon of userís ID
7. if you enable the "channel Free prompt " function: when the target radio release the (PTT) button, you will hear a short beep, said this channel is idle, waiting for your answer. Press the call key (PTT)to answer. If in a preprogrammed group called hang time without voice activity, the call is ended.
8. You will hear a sound short, screen shows the call ended

Note:

If you release(PTT) button when you are setting up the call, and when it will exit and return to the previous screen without any remind. Radio can be preprogrammed executive two way radio are testing before establishing single call. If the target radio did not reply, you will hear a short beep, and screen shows the other radios did not reply. Two way radio return to menu before starting the radios around test.

Call Log

Your radio can record all the recent dialed, received, and not answered call. Use the calling record function view and manage the recent calls.

Checking New Call's Number

Menu items can show the not answer call ,received calls and dialed call.
1. Press [MENU] key to enter the menu mode.
2. Press the [▲or▼] key to the Call Log, and then press [MENU] key to choose.
3. Press [▲or▼] to the required list, and then press [MENU] key too choose.
4. The screen on the top of the list shows the recent entries.
5. Press [or]check list, press (PTT) at the current selected aliases or ID to start a call.

Missed Call

Whenever you miss call, two way radio will display a not answered call, select view or view later.

Note:

If you press (PTT),when you're viewing missing call number, radios will exit the missing call screen and establishing a single call again.

1. The screen shows the missing call, and the missing call's number and view.

2. Press [MENU] view missing call's ID, missing call's record list displayed on the screen.
   Press [MENU] to store or delete this entry; Or press [⌃or⌄] key to view later, and then press [MENU] key choice, return to the main screen.

Storing Missed call's Alias Or ID

1. Press [MENU] key to enter Menu.

2. Press the [⌃or⌄] key to Call Log, and then press [MENU] key to choose.

3. Press the [⌃or⌄] key to missed call, and then press [MENU] key to choose.

4. Press [⌃or⌄] key to missed call's alias or ID, and then press [MENU] key to choose

5. Press the [⌃or⌄] key to store, and then press [MENU] key to choose

6. Radio Shows flashing cursor, if needed, enter the ID alias, and then press [MENU] ey.

7. The screen contacts have been saved.
   You can also enter ID without alias.

Deleting Calling Log's Record

1. Press [MENU] key to enter the Menu.

2. Press the [⌃or⌄] key to Call Log and then press [MENU] key to choose.

3. Press the [⌃or⌄] key to missed call, and then press [MENU] key to choose.

4. Press [⌃or⌄] key to missed call's alias or ID, and then press [MENU] key to choose

5. Press [⌃or⌄] key to delete the entries,then press [MENU] key to select if you need to delete this entry.

6. Select "yes" ,then press [MENU] key to delete the entries, screen appears entry deleted;
   Or select "no" ,press [MENU] key to return to previous screen.

When you select a call list but there is no entry in, the screen will display the list is empty, if the keyboard is open at this time, will be a low tone hint sound.

Call Alert Operation

Call alert makes you can suggest a specific radio users in the possible time to call you back.

This feature applies only to the user alias or ID, and can be used through the menu by address book or manual dialing.

Receiving And Checking Call Alert

When you receive a call alert, screen shows call prompt, alternating transmit radio's alias or ID

1. YOU will hear sound of repeat, LED light turn and shine red.

2. Then press and release [PTT] to confirm the prompt, or press [MENU] to select "neglect" to exit the call reminder.

Starting Call Alert From Contact List

1. Press [**MENU**] key to enter the Menu.
2. Press the [⌃or⌄] key to Contacts, and then press [**MENU**] key to choose.
3. Press [⌃or⌄] key to missed call's alias or ID, and then press [**MENU**] key to choose
   Or press [⌃or⌄] key to manual dialing, and then press [**MENU**] key to choose, a flash-
   ing cursor appears,then enter the user ID you want to call, and then press [**MENU**] key.
4. Press [⌃or⌄] key to Call Alert, the screen display Call Alert:< user s alias or ID >,and
   then press [**MENU**] key and instructions have been sent Call Alert.
5. When the radio send call alert, the LED indicator for the red light.
6. If you receive calls prompt confirmation, issued a prompt, and display the call alert succ-
   ess.

Or prompt confirmation if not received a call, send a hint sound, and the screen call failure.

Messages Function

Your radio can receive data, such as from another radio sent text messages, message of a
maximum length of 144 characters, whole message is not longer than 50 lines.

Edit And Send SMS

Using the Menu
1. Press [**MENU**] to enter the Menu.
2. Press the [⌃or⌄] key to Messager, and press [**MENU**] to choose.
3. User can only edit the message .

4. Select the message you want and send it or save it.
5. Choose the [⌃ or⌄] key to the alias name or ID, and then press [**MENU**] key to select .
Or press [⌃ spending] key to manual dialing, and then press [**MENU**] button, enter your user
ID and press [**MENU**] key.
6. The screen shows message: < user/group name or ID > call, sending message are being
   confirmed
   If the messages sent successfully, issued a prompt sound, and the screen displays text
   message has been sent.
7. Or if the message was not sent, issued a high tone hint sound, and screen displays text
message sent failure. If message sent failure, radio will return to chance to return to the
retransmission selection screen

Using the Menu

1. Press [MENU] key to enter the Menu.

2. Press the [▲or▼] key to Messages, and then press [MENU] key to choose.

3. Press [▲or▼] key to Quick Text, press [MENU] key to choose

4.Press[▲or▼] key to the required quick text,press [MENU] key to choose

5. A flashing cursor appears, using the keyboard to input messages, press [▲] key to move to the left one, press[▼]button to the right one, when editing area have content ,press the [ESC] key to delete any useless character, otherwise when editing area without content to return to the higher level menu.

6. After writing the text message, press [MENU] to choose to send or save.

7. If the messages sent successfully, issued a prompt sound, and the screen displays text message has been sent.

Or if the message was not sent, issued a high tone hint sound, and screen displays text message sent failure. If message sent failure, radio will return to chance to return to the retransmission selection screen.

8.After Choose send press [▲or▼] to the alias or ID, and then press [MENU] key to choose.

Or press [▲or▼] key to manual dialing, and then press [0 k] key choice. Enter the user alias or ID, then Press [MENU].

9. The screen shows message: < user/group name or ID > call, text messages were a being sent to confirm.

10. If the messages sent successfully, issued a prompt sound, and screen display text

message has been sent. Or if the message can't send, send out a high tone hint sound, screen display message sent failure, failure if the SMS messages, intercom chance to return to the retransmission selection screen.

Send Quick Text With A Key

1. Press Preprogrammed,single bond calls to a predefined alias or ID sends a prefabricated text messages.

2. The screen displays a text message: < user/group name or ID > call, to confirm text messages were being sent

3. If the messages sent successfully, issued a prompt sound, and the screen display text message has been sent.

Or if you cannot send text messages, screen display text message sent failure. If message sent failure, intercom chance to return to the retransmission selection screen.

Manage The Failed SMS

In retransmission selection screen, you can choose the following options:

• Resend,

• Forward,

• Edit

Resending message

1. Press [MENU] to resend same message to same user/group name or ID.

2. If the messages sent successfully, issued a prompt sound, and display messages sent or

if you cannot send text messages, screen display text message sent failure.

Resending message

1. Press [MENU] to resend same message to same user/group name or ID.
2. If the messages sent successfully, issued a prompt sound, and display messages sent or
   if you cannot send text messages, screen display text message sent failure.

Forwarding message

Choose to forward message to another User/group name or ID.
1. Press the [▲ or ▼] key to forward, and then press [MENU] key choose.
2. Press [▲ or ▼] to the alias name or ID, and then press [MENU] key to choose.
Or press [▲ or ▼] key to manual dialing, and then press [MENU] button to choose, enter
your user ID and press [MENU] key.
3. The screen display a text message: < user/group name or ID > call, to confirm text mes-
   sages were being sent
4. If the messages sent successfully, issued a prompt sound, and the screen display text
   message has been sent.
Or if the message was not sent, issued a high tone hint sound, and screen displays text
message sent failure.

Editing messages

Choosing edit to edit message before you edit.
Note: if you have a subject line (receive text messages from from email program), you can't

Editing messages

1. User needs to edit the messages .
2. Select the message which want to be sent.
3. Choose after [▲ or ▼] button to send the required alias or ID, and then press [MENU] key
   to choose
Or press [▲ or ▼] key to manual dialing, and then press [MENU] button, enter your user ID
and press [MENU] key.
4. Screen displays message: < user/group name or ID > call, to confirm text messages were
   being sent.
5. If the messages sent successfully, issued a prompt sound, and the screen display text
   message has been sent.
Or if the message was not sent, issued a high tone hint sound, and screen displays text

Manage The Sent SMS

Once a message is sent to another radio, it will be saved in the "sent items". Send after se-
nding a text message has always been to "sent items" at the top of the list. The sent items
folder can store up to 50 recently send text messages. After the folder is full, the next send
text messages will automatically replace the earlier messages in this folder.
Note: at any time pressing the [ESC] key can return to the previous screen.

Check the sent messages

Using the menu function:

1. Press [MENU] button to enter the Menu.

2. Press the [▲or▼] key to Messages , and then press [MENU] key to choose

3. Press [▲or▼] to sent items, and then press [MENU] key to choose

4. Press the [▲or▼] key to the SMS, and then press [MENU] key choose. If the message from the email program, a subject lines, will appear in the top right corner of the screen icon indicates state of SMS.

Sending the sent messages

When the view sent messages, you can choose the following options:
• Resend
• Forward,
• Edit
• Delete

1. Check the message, press [MENU] key again

2. Press the [▲or▼] key to resend, then press [MENU] key to choose.

3. The screen displays: < user/group name or ID > call, confirm that it is preparing to send the same message to the same target radio

4. If the messages sent successfully, issued a prompt sound, and the screen display text message has been sent.

Or if the message was not sent, issued a high tone hint sound, and screen displays text message sent failure. If message sent failure, intercom chance to return to the retransmission options screen. Press the [MENU] key to send SMS weight to the same user/group name or ID.

Note: Except for Pessing the [MENU] , [▲or▼] key, if you change the volume and the press any other key, will return to this message. When you press [PTT] for a single call or group call, or as a response to the group calling,radio will exit exit the retransmission selection screen. If received text messages or remote sensing remote sensing information, emergency call, or call the police, or call reminder, radio will exit the retransmission selection screen. If you press [PTT]in response to a single call (in addition to the radio in the show did not answer the call screen), or at the end of all call, the screen will return to resend selection screen. Press [MENU] key, enter the forwarding, edit, or delete selection screen.

• choose forward, will choose the SMS sent to speak to other groups/user alias or ID.

• choose to edit, to edit the selected text messages before sending

• choose delete, delete the selected text.

Note: if you screen out SMS messages when send text messages, so radios will be in the "sent items" folder for SMS status updates, not the tip or by voice prompt. If the messages in the sent items folder state before update, walkie-talkie pattern changed or blackout, walkie-talkie will not be able to complete the ongoing message processing, and automatically start tag to the icon of failure. This radio can handle 5 text messages at the same time. At this stage, the radio can't send a new message, and automatically start tag icon to send failure.

Deleting all Sent Messages In the "sent items"

Using the Menu Function
1. Press the [![MENU]] button to enter the Menu.
2. Press the [![] or ![]] key to Messages, and then press [![MENU]] key choice.
3. Press [![] or ![]] to Sent Items, and then press [![MENU]] key choice.
4. Press the [![] or ![]] key to delete all, and then press [![MENU]] key choice.
5. When it appears to delete messages ,press [![MENU]] button, select "yes" project has clear screen display has been sent.
Or delete the text, press [![] or ![]] to no, and click [![MENU]] key to return to the previous screen. When you select the "sent items" but not one of them text messages, the screen will display the list is empty, if the keyboard is open at this time, will be a low tone hint sound.

Receive SMS

When your radio are receiving SMS, the left of the screen shows the sender alias or ID

ICONS and text messages.
When receive text messages, you can choose the following options:

• reading?
• Reading Later
• delete
Note: when the radio shows tip on the screen, please press (PTT), two way will exit and to establish a single call or text message screen group call.

Check the SMS

1. Press the [![] or ![]] key to Read, And then press [![MENU]] key to choose
2. the selected text messages on the inbox opened, if the message is from the email program, it will appear a subject line.
3. Click [![MENU]] key to return to your inbox.
Or press [![MENU]] to reply,forward or delete messages.
Press [![] or ![]] key to enter later view or delete selection screen:
Later, select view screen before returning to receive messages.
Choose delete, delete receive text messages.

Manage Received SMS

Use your inbox to manage messages. inbox can store up to 50 text messages at Most.
Two way radio supports the following text options:

• Reply

• Forward

• delete

• Delete all

store the message in the inbox in the order of received time .

Note: at any time according to the [ESC] key can return to the previous screen.

Check The Inbox SMS

1. Press the [ESC] button to enter the Menu.

2. Press the [▲or▼] key to Messages, and then press [ESC] key to choose

3. Press [▲or▼] to the inbox, and then press [ESC] key to choose.

4. Press the [▲or▼] key to check the message. If the messages are from the email pr-
ogram, it will appaer a subject line.

5. Press the [ESC] key to choose the current text, then press [ESC] key again to reply, delete,
or forward this message.

Unread messages: ✉ , Already read message: ✉

Reply The Inbox SMS

Use the menu function:

1. Press [MENU] button to enter the Menu.

2. Press the [▲or▼] key to message, and then press [MENU] key to choose

3. Press [▲or▼] to the inbox, and then press [MENU] key to choose

4. Press the [▲or▼] key to the SMS, and then press [MENU] key to choose. If the mess-
ages are from the email program, it will appear a subject line.

5. Press again [MENU] button to enter submenu.

6. Press [▲or▼] to reply, and then press [MENU] key to choose.

7. Press [▲or▼] to select the message,a flashing cursor,uset can edit the message by
the programming software. Or press [▲or▼] to the Quick Text and choose the quick
text which need to be sent.

8. Press [MENU] to send the message.

9. The screen displays message : < user/ call group name or ID >, to confirm. text messages
were being sent

10. If the messages sent successfully, issued a prompt sound, and screen display text me-
ssage has been sent.

Or if you cannot send text messages, screen display text message sent failure. If message
sent failure, radio return to the retransmission selection screen.

Deleting the inbox messages

Use the menu function:

1. Press the [MENU] button to enter the Menu.
2. Press the [▲ or ▼] key to message, and then press [MENU] key to choose
3. Press [▲ or ▼] to the inbox, and then press [MENU] key to choose
4. Press the [▲ or ▼] key to the SMS, and then press [MENU] key choice. If the messages
   are from the email program, it will appaer a subject line.
5. Press again [MENU] button to enter submenu.
6. Press the [▲ or ▼] key to delete, and then press [MENU] key to choose.
7. Delete messages, press [▲ or ▼] key to "yes", then press [MENU] key to choose.
8. Screen appears short message has been deleted.
9. The screen back to inbox.

Deleting all messages in the inbox

Use the menu function:

1. Press the [MENU] button to enter the Menu.
2. Press the [▲ or ▼] to the Message, and then press [MENU] key to choose.
3. Press [▲ or ▼] to the inbox, and then press [MENU] key to choose.
4. Press the [▲ or ▼] key to delete all, and then press [MENU] key to choose.
5. When it appears Deleting the messages, press [▲ or ▼] select yes, and then press
   [MENU] key to choose
6. Then The screen inbox was empty already.

When you select the "inbox" but not one of them text messages, the screen will display the list is empty, if the keyboard is open at this time, will be a low tone hint sound.

Encryption

If you enable this feature, which is beneficial to prevent other users on the channel by using the method of software encryption for unauthorized eavesdropping. The launch of signaling and user identification part unencrypted. Your radio must be enabled on the channel encr-yption function, can send encrypted, even if the receiving transmission is not must request to do so.

Basic encryption

Two way radio can only be assigned more than one type of encryption. If users Call for en-cryption or decryption of data transmission, must make to be preprogrammed walkie-talkies and launch radio has the same "encryption keys" (suitable for basic encryption).
If your radio to receive different encryption keys or key values and key encryption call ID, you will hear the sound of the transport chaos encryption (basic).
Press the preliminary programming encryption keys on or off.

DTMF

Dual Tone Multi-Frequency (DTMF) function allows to operate radio when there is interfer-ence in the radio system.
To initiate a DTMF call
1. Press and hold [PTT] key.

2. Enter number you need.

You can disable DTMF tone by turning off all radio tone and prompts.

Secrecy

You can activate or kill any radio in the system. For example, you might want to disable a stolen radio, to prevent thieves use it, and enable it when you get it back.

Note: radio kill or activation is limited to activate the radios with these functions.

Radio Disable

Use menu mode

1. Press [MENU] key to enter the menu mode.
2. Press [▲or ▼] key to Contacts, and then press [MENU] key to select, entries are in alphabetical order.
3. Press [▲or ▼] key to the required alias or ID, and press [MENU] key to select.
Or press [▲or ▼] key to Manual Dial, then press twice [MENU] key to enter a user alias or ID, and press [MENU] key to select.
4. Press [▲or ▼] key to radio disable, and then press [MENU] key to select.
5. The display shows the radio disable: <user alias or ID> and the LED indicator light is red.
6. Wait for confirmation.
7. If successful, emit a beep and the screen displays radio disable successfully.
Or if it fails, emit a beep and the screen displays radio fail to disable.
During radio disable operation, do not press the [MENU] key, because you will not get a confirmation message.

Radio Enable

Use menu function:

1. Press [MENU] key to enter the menu mode.
2. Press [▲or ▼] key to Contacts, and then press [MENU] key to select, entries are in alphabetical order.
3. Press [▲or ▼] key to the required alias or ID, and press [MENU] key to select.
Or press [▲or ▼] key to Manual Dial, then press twice [MENU] key to enter a user alias or ID, and press [MENU] key to select.
4. Press [▲or ▼] key to radio enable, and then press [MENU] key to select.
5. The display shows the radio enable: <user alias or ID> and the LED indicator light is red.
6. Wait for confirmation.
7. If successful, emit a beep and the screen displays radio enable successfully.
Or if it fails, emit a beep and the screen displays radio fail to enable.
During radio enable operation, do not press the [ESC] key, because you will not get a confirmation message.

Scaning List

Create a scan list and assign to a single channel / talkgroup, your radio can support up to 250 scan lists, each up to 16 members. Each scan list support mixed analog and digital channels. You can edit the scan list to add / delete channels or set the priority channel.

Check members of list

1. Use the channel knob to select a channel with pre-programmed scan list;
2. Press the [MENU] key to enter the menu mode;
3. Press [⌃or ⌄] key to scan, and then press the [MENU] key to select;
4. Press [⌃or ⌄] key to Viewlist the list, and then press the [MENU] button to select;
5. Use [⌃or ⌄] key to see members of list.
If you set the priority, the priority icon is displayed in the left of member alias, indicating that the member is the Priority ① or Priority ② channel; if the priority is set to Ⓝ , no priority icon.
In a scan list, you can not have more than one Priority ① or Priority ② channel.

Scanning Instruction

When scanning, your radio can view if there is a voice activity in current channel through circulating pre-programmed scan list. LED lights flashing for a red light, and the scan icon ▷ appears on the screen.
When scanning in dual mode, if you're in a digital channel and your radio locking an analog channel, radio will switch automatically from digital mode to analog mode throughout the duration of the call. And vice versa.

There are two scanning methods
● Manual Scan: According to a pre-programmed scan on / off key or menu function to start the scan, when you start scanning, radio will detect all channels / contact groups on pre-programmed scan list.
● Auto Scan: When you select an already activated auto scan channels / contact groups, radio scans from the activated auto scan channel.

Start/Stop Scan

Press Pre-programmed Scan On / Off KeyOr Enter The Scan Menu Function
1. Using the channel knob to select a channel of pre-programmed scan list;
2. Press [MENU] to enter menu mode;
3. Press [⌃or ⌄] to scan, and then press [MENU] to select;
4. If the scan is disabled, the screen displays on or if the scan is activated, the screen displays off.
5. Press [MENU] to select
6. When the scan is activated, LED indicator flashes red and displays scan icon ▷ ; or when scanning is disabled, LED light goes out and does not display the scan icon.

Scanning reply

Radio detect active channel/contact group when scanning, at this time radio will stay in the channel/ contact group, which is called "Scan hang time" pre-programmed time.

Procedure:

1. Hold the radio in a vertical position and keep one to two inches (2.5 to 5.0 cm) distance from the mouth. If you enable the "channel idle tone" function, when transmitting radio release [PTT] key, you will hear a short beep, indicating that the channel is idle, waiting for your respond.
2. Within the hang time by pressing [PTT] button, LED indicator light is red.
3. Release [PTT] key to respond.
4. If you do not respond within the hang time, radio will continue down the scan

Utilities

Utilities includes the following contents:
- Radio settings
- Radio Info
- Program Radio

Radio Settings

Radio Setting includes:

- Talkaround
- Tones/Alerts
- Power
- Squelch
- LED Indicator
- VOX
- Clock
- Mode

Talkaround

When the transponder does not work, or when the radio located outside the range of the transponder but located within the range of other radios call, you can continue to communicate. This is called "talk around."

Press Pre-programmed repeater / talk around button, you can switch between repeater / talk around mode.

Use the menu function

1. Press [MENU] key to enter the menu mode.
2. Press [▲or▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or▼] key to radio settings, and then press the [MENU] key to select.
4. Press [▲or▼] key to talk around, and then press [MENU] key to select.
5. If radio is currently in repeater mode, you can see the open, or if radio is currently in talk around you can see the close.
6. Press [MENU] key to select.
7. Screen showing turn on talk around [MENU] or turn off talk around.
8. The screen automatically returns to the previous menu.

Even after the shutdown, still remains talk around.

Tones/Alerts

including the following contents:
• All Tones   •   Talk Permit   •   Keypad Tones

All Tones

If desired, you can enable or disable all radio tone and prompts (except emergency incoming tone).

Press pre-programmed all Beep ON / OFF to turn on or off all radio tones.

Use the menu function:

1. Press [MENU] key to enter the menu mode.
2. Press [▲or▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or▼] key to radio settings, and then press the [MENU] key to select.
4. Press [▲or▼] key to tones/alerts, and then press [MENU] key to select.
5. Press [▲or▼] key to all tone, and then press [MENU] key to select.
6. Press [MENU] key to select on, then enable all tone and prompts, screen displays all tone is open.

Or press [MENU] key to select Off, then turn off all tones and prompts, screen displays all tone is off.

Keypad Tones

If desired, you can activate and deactivate call admission tone.

1. Press [MENU] key to enter the menu mode.
2. Press [▲or▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or▼] key to radio settings, and then press the [MENU] key to select.
4. Press [▲or▼] key to tones/alerts, and then press [MENU] key to select.

5. Press [⌃or⌄] key to keyboard tone, then press [MENU] key to select.

6. Press [MENU] key to select Open, then enable the keyboard tone, the screen shows keyb-
    oard tone is turned on.

Press [MENU] key to select off, then turn off the keyboard sound, the screen shows keyboard
tone is turned off.

Power

You can set each channel power level to high or low. Setting: High-power radio implement
communications with relatively far distance radios. Low-power radio implement communi-
cations with relatively close distance radios.

 Press pre-programmed high / low power selection key, you can switch high / low transmit
power.

Using the menu function:

1. Press the [MENU] key to enter the menu mode.

2. Press [⌃or⌄] key to utilities, and then press [MENU] key to select.

3. Press [⌃or⌄] key to radio settings, and then press the [MENU] key to select.

4. Press [⌃or⌄] key to power, and then press [MENU] key to select.

5. Follow the on-screen instructions to change the current settings.

6. Press [MENU] key to select the new power level.

7. Return to the previous menu screen.

Press [ESC] to return to the main screen, the screen displays the power level icon.

Squelch

You can adjust radio squelch level, thus filtering low signal intensity useless call or channel
higher than normal value. Setting: Normal is the default, strict filtering (useless) call or bac-
kground noise. However, a call from a remote location may also be filtered out.

Press pre-programmed strict / normal squelch button to switch between normal and strict
squelch level.

Using the menu function:

1. Press [MENU] key to enter the menu mode.

2. Press [⌃or⌄] key to utilities, and then press [MENU] key to select.

3. Press [⌃or⌄] key to radio settings, and then press [MENU] key to select.

4. Press [⌃or⌄] key to squelch, and then press [MENU] key to select.

5. Select strict or normal, and then press [MENU] key to select.

6. The screen returns to the previous menu.

LED Indicator

If desired, you can activate and deactivate the LED.

1. Press [MENU] key to enter the menu mode.
2. Press [▲or ▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or ▼] key to radio settings, and then press [MENU] key to select.
4. Press [▲or ▼] key to LED indicator, and press [MENU] key to select.
5. The screen displays open, press [MENU] button to enable LDE light, screen shows to turn on the LED light.
Or The screen displays off, press [MENU] button to turn off the LED light, screen shows to turn off the LED light.
If you disable the LED light, buttons and keyboard backlight automatically turns off.

VOX

This function allows you to initiate voice-activated hands-free calls on pre-programmed ch-annels. Whenever a microphone with VOX function detect voice, radio will automatically transmit signals within pre-programmed period of time.

During radio operation press [PTT] key will disable VOX function, to re-enable the VOX fu-nction, do one of the following:

• Turn off and return on radio
• Through the channel knob to change the channel, or
• Perform the following procedure:

Note: Enabling or disabling this function is limited to activate radios of these function.
Press pre-programmed VOX on / off key, to turn on or off this function.
Using the menu function:

1. Press [MENU] key to enter the menu mode.
2. Press [▲or ▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or ▼] key to radio settings, and then press the [MENU] key to select.
4. Press [▲or ▼] key to VOX, and then press [MENU] key to select.
5. Screen shows VOX off and VOX level 1-10S, if you choose to turn off, press [MENU] key to disable the VOX function, emitting a beep and the screen displays VOX off. If you choose 1-10S, VOX function is enabled, and the voice transmit sensitivity is on the corresponding level. If you activate the call allowing sound, you can initiate a call using a trigger word. Waiting sound end (if activated), and then speak clearly into the microphone.

Clock

Clock settings are divided into:

• Time

• Date

Time

1. Press [MENU] key to enter the menu mode.
2. Press [⌄ or ⌄] key to utilities, and then press [MENU] key to select.
3. Press [⌄ or ⌄] key to radio settings, and then press [MENU] key to select.
4. Press [⌄ or ⌄] key to clock, and then press [MENU] key.
5. Press [⌄ or ⌄] key to time, and then press [MENU] key to display the current time.
6. Press [MENU] key to enter time setting interface.
7. Press [⌄ or ⌄] key to move left and right to select the desired number, the selected number will reverse video display,then enter the corresponding numbers to change the time via the numeric keypad.
8. Press [MENU] key to save, the screen displays the time has been saved.

Date

1. Press [MENU] key to enter the menu mode.
2. Press [⌄ or ⌄] key to utilities, and then press [MENU] key to select.
3. Press [⌄ or ⌄] key to radio settings, and then press [MENU] key to select.
4. Press [⌄ or ⌄] key to clock, and then press [MENU] key.
5. Press [⌄ or ⌄] key to date, and then press [MENU] key to display the current date.
6. Press [MENU] key to enter the time setting interface.
7. Press [⌄ or ⌄] key to move left and right to select the desired numbers, the selected numbers will reverse video display,then enter the corresponding number to change the date via the numeric keypad.
8. Press [MENU] key to save, the screen displays the date has been saved.

Mode

Mode settings are divided into:

• CH Mode

• MR Mode

1. Press [MENU] key to enter the menu mode.
2. Press [⌄ or ⌄] key to utilities, and then press [MENU] key to select.
3. Press [⌄ or ⌄] key to radio settings, and then press [MENU] key to select.
4. Press [⌄ or ⌄] key to mode and then press [MENU] key.
5. Press [⌄ or ⌄] key to select CH mode or MR mode, then press [MENU] key to select the

corresponding mode, the screen displays this mode is selected.

6. The main screen will show channel name or frequency (receiving frequency) according to the selected mode.

Radio Info

Radio contains the following information:
• My Number
• Versions

Note: At any time you can return to the previous screen by pressing the [ESC] key.

My Number

1. Press [MENU] key to enter the menu mode.
2. Press [∧or∨] key to utilities, and then press [MENU] key to select.
3. Press [∧or∨] key to radio information, and press [MENU] key to select.
4. Press [∧or∨] key to my number, then press [MENU] key.
5. The display shows radio ID and name.

Versions

Display radio firmware version.
1. Press [MENU] key to enter the menu mode.
2. Press [∧or∨] key to utilities, and then press [MENU] key to select.
3. Press [∧or∨] key to radio information, and press [MENU] key to select.

4. Press [∧or∨] key to radio versions, and then press [MENU] key.
5. The screen will display the current firmware version, Codeplug version.

Program Radio

Radio configuration mainly includes editing the channel contents
Channel contents can be edited include:
• RX Frequency
• TX Frequency
• Channel Name
• Time out Timer
• CTC/DCS
• Color Code
• Repeater Slot

Rx Frequency

1. Press [MENU] key to enter the menu mode.
2. Press [∧or∨] key to utilities, and then press [MENU] key to select.
3. Press [∧or∨] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password, and then press [MENU] key to select.
5. Press [∧or∨] key to receiving frequency, and then press [MENU] key to select.
6. The screen displays receiving frequency of the current channel, and then press [MENU] key

to select.

7. Press the number keys to enter the corresponding number, press [⌃] key to delete the last number, press [ESC] to return to the previous menu.

8. After finish the change, press [MENU] key, the screen displays receiving frequency has been saved.

Tx Frequency

1. Press [MENU] key to enter the menu mode.

2. Press [⌃ or ⌄] key to utilities, and then press [MENU] key to select.

3. Press [⌃ or ⌄] key to program radio, and then press [MENU] key to select.

4. Use the keypad to enter the correct Program radio password , and then press [MENU] key to select.

5. Press [⌃ or ⌄] key to transmitting frequency, and then press [MENU] key to select.

6. The screen displays transmitting frequency of the current channel, and then press [MENU] key to select.

7. Press the number keys to enter the corresponding number, press [MENU] key to delete the last number, press [MENU] to return to the previous menu.

8. After finish the change, press [MENU] key, the screen displays transmitting frequency has been saved

Channel Name

1. Press [MENU] key to enter the menu mode.

2. Press [⌃ or ⌄] key to utilities, and then press [MENU] key to select.

3. Press [⌃ or ⌄] key to program radio, and then press [MENU] key to select.

4. Use the keypad to enter the correct Program radio password , and then press [MENU] key to select.

TOT

1. Press [MENU] key to enter the menu mode.
2. Press [▲or▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or▼] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password，and then press [MENU] key to select.
5. Press [▲or▼] key to TOT, and then press [MENU] key to select.
6. The screen displays infinite, 15S, 30S ... 555S and other options (increasing 15S each time), press [▲or▼] key to the corresponding option, then press [MENU] key to select; if you choose infinite, the screen displays transmit time close, if you select others, the screen display corresponding time selected.

CTC/DCS

CTCSS/DCS can only be set on analog mode, including:
• CTCSS/DCS encoding
• CTCSS/DCS decoding

Encode

1. Press [MENU] key to enter the menu mode.
2. Press [▲or▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or▼] key to program radio, and then press [MENU] key to select.

4. Use the keypad to enter the correct Program radio password，and then press [MENU] key to select.
5. Press [▲or▼] key to CTCSS/DCS, and then press [MENU] key to select.
6. Press [▲or▼] key to CTCSS/DCS encoding, and then press [MENU] key to select.
7. Screen display off and a set of CTCSS/DCS encoding value, press [▲or▼] key to off, and then press [MENU] key to select, and there will be no CTCSS/DCS encoding value, screen displays CTCSS/DCS encoding value off; press [▲or▼] key to CTCSS/DCS encoding value, and then press [MENU] key to select, then set the corresponding value, screen displays the corresponding CTCSS/DCS encoding value.

Decode

1. Press [MENU] key to enter the menu mode.
2. Press [▲or▼] key to utilities, and then press [MENU] key to select.
3. Press [▲or▼] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password，and then press [MENU] key to select.
5. Press [▲or▼] key to CTCSS/DCS, and then press [MENU] key to select.
6. Press [▲or▼] key to CTCSS/DCS decoding, and then press [MENU] key to select.
7. Screen display off and a set of CTCSS/DCS decoding value, press [▲or▼] key to off, and then press [MENU] key to select, and there will be no CTCSS/DCS decoding value, screen displays CTCSS/DCS decoding value off; press [▲or▼] key to CTCSS/DCS decoding value, and then press [MENU] key to select, then set the corresponding value, screen displays the corresponding CTCSS/DCS decoding value.

Color Code

Color code only can be set on digital channels.

1. Press [MENU] key to enter the menu mode.
2. Press [⌃or⌄] key to utilities, and then press [MENU] key to select.
3. Press [⌃or⌄] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password , and then press [MENU]
   key to select.
5. Press [⌃or⌄] key to color code, then press [MENU] key to select.
6. Press [⌃or⌄] key to select color code values, and then press [MENU] key to select.
   Screen shows X(the selected color code value) is selected.

Repeater Slot

Repeater slot only can be set on digital channels.

1. Press [MENU] key to enter the menu mode.
2. Press [⌃or⌄] key to utilities, and then press [MENU] key to select.
3. Press [⌃or⌄] key to program radio, and then press [MENU] key to select.
4. Use the keypad to enter the correct Program radio password , and then press [MENU]
   key to select.
5. Press [⌃or⌄] key to repeater slot, and then press [MENU] key to select.
6. Press [⌃or⌄] key to select repeater slot values, and then press [MENU] key to select.
   Screen shows X(the selected repeater slot value) is selected.

Specifications

General Specifications

Frequency range	UHF: 400-470MHz
Channel	1024 Channels
Channel Spacing	12.5KHz
Operating Voltage	3.7V
Battery Type	Li-ion
Operating Temperature	-10℃+40℃
Store Temperature	-40℃+85℃
Antenna Impedence	50Ω
Audio Output Power	≤1000mW@16Ω
Battery capacity	2600mAh standard Li-ion battery
Dimension (H*W*D)	115*50*32mm
Weight	148g

Transmitter

Output power	High: ≤2W Low: ≤ 1 W
Frequency Stability	+-1.0PPM
Adjacent Channel Power	≤-60dB
Free Time Slot Power	TDMA: ≤57dBm
Hum and Noise	-40dB@12.5KHz
Spurious Radiation	Antenna: 9KHz-1GHz ≤-36dBm 1GHz-12.75GHz ≤-30dBm
FM Modulation Mode	12.5KHz: 11K0F3E
4FSK Digital Mode	12.5KHz(data only):7K60FXD 12.5KHz(data +voice): 7K60FXE
Modulation Maximum Deviation	2.5KHz@12.5KHz
Nonactive Slot Power	-57dBm
Digital Protocol	ETSI TS 102 361-1 -2 -3
Vocoder Type	AMBE+2TM
Audio Response	+1dB~-3dB
Modulation BER(Bit Error Rate)	≤5%

Receiver

Analog sensibility	0.35uV/-116dBm(20dB SINDA) 0.22uv/-120dBm(Type)
Digital sensibility	0.3uV/-117.4dBm (BER 5%) 0.22uv/-110dBm (BER 1%)
Co-channel Rejection	≥-12dB
Adjacent Channel Selectivity	TIA603C:65dB ETSI:60dB
Spurious Response	TIA603C:75dB ETSI:70dB
Rated audio power	1W
Audio response	=1dB~-3dB
Rated audio distortion	3%(Type)
Spurious Radiation	Antenna: 9KHz-1GHz ≤-57dBm 1GHz-12.75GHz ≤-47dBm

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

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 coufirm 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

SAFETY TRAINING INFORMATION

our TYT Electronics Co., Ltd. radio generators RF electromagnetic 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 Popul -lation" in an uncontrolled environment. This radio has been tested and complies with the FCC RF exposure linits for "Occupational Use Only".Inaddition, our TYT Electronics Co., Ltd   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:

--IEEE Std. 1528:2013 and KDB447498, 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 information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to asÿsure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions,   TYT Electronics Co., Ltd.   radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in ares where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electronmagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

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

Attention:

This radio complieswith IEEE and ICNIRP exposure limits for occupational/controlled RF exposure emvir-onment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only. An appropriate warning lable is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original acessories (belt clip). Do not use this device when antenna shows obvious damages

This product is compliance to FCC RF Exposure requirements and refers to FCC website

https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm search for(Model:MD-430 &MD-668 & MD-558

FCC ID :PODDMR2W)   to gain further information include SAR Values.

DMR
DIGITAL TWO-WAY RADIO

TYT ®

Digital Transceiver
—— USER'S MANUAL ——