

Instructions for functions list

Single Tone Impulse Frequency (ALERT) ---- MENU 28

Some of the relay systems used for single-tone pulse transmission need a single-tone pulse signal to activate, if a repeater is already active, however, this signal is not needed. The following pulse signal frequencies can be selected: 1750Hz, 2100Hz, 1000Hz and 1450Hz.

In standby, press **MENU** + **2** **SOL** **8** **1405**, the screen displays 

Press **MENU** to access, press **▲** / **▼** to select the parameter you desire and then press **MENU** to confirm, press **EXIT** to return to standby.

In transmission mode, press PF2 to transmit the selected single-tone pulse frequency.

PTT ID Transmit Delay (PTT-DLY) ---- MENU 29

In standby, press **MENU** + **2** **SOL** **9** **100**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select the time you want. And then press **MENU** to confirm, and press **EXIT** to return to standby.

This delay time can be set 100~3000ms, total 30 levels with 100ms each.

PTT ID Transmit Modes (PTT-ID) ---- MENU 30

In standby, press **MENU** + **3** **TXP** **□**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select the mode you want. And then press **MENU** to confirm, and press **EXIT** to return to standby.

This can be set three methods, BOT (begin), EOT (end), BOTH (begin /end).

Ring Time (RING) ----- MENU 31

In standby, press **MENU** + **3** **TXP** **1** **STEP**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select the parameter you want. And then press **MENU** to confirm, and press **EXIT** to return to standby.

This ring time can be set 10 seconds, total 10 levels with 1 second. OFF:Deactivate the function.

Repeater Tone (RPT-TONE) ---- MENU 32

In standby, press **MENU** + **3** **TXP** **2** **SOL**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select the parameter,. And then press **MENU** to confirm, and press **EXIT** to return to standby.

ON: Activate the function

OFF: Deactivate the function

Instructions for functions list

Scanning Tone Save Modes (SCAN-QT) ---- MENU 33

When the transceiver is in CTCSS/DCS scanning, there are 3 saving types to save the detected CTCSS/DCS from the others to your transceiver:

1. Save as your transceivers decoder and encoder(ALL).
2. Save as your transceiver encoder(ENCODER)
3. Save as your transceiver decoder(DECODER)

When the transceiver is in standby, press **MENU** + **3** **TXP** **3** **TXP** keys and the screen will display . Press **▲** / **▼** press **MENU**, and then press **EXIT**.

Mute Mode in Sub Area (SP-MUTE) ---- MENU 34

Mute function is very practical, especially when the transceiver is in dual receiving mode.

In standby, press **MENU** + **3** **TXP** **4** **WIN**, the screen displays .

Press **MENU** to access and then press **▲** / **▼** to select the parameter you desire, and then press **MENU** to confirm.

OFF: Deactivate the function

TX: Transmission on master frequency, the receiving volume of sub-frequency is off.

RX: Receiving on master frequency, the receiving volume of sub-frequency is off.

TX/RX: Both receiving and transmission on master frequency, the receiving volume of sub-frequency is off.

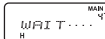
Reset (RESET) Scanning Tone Save Modes (SCAN-QT) ---- MENU 35

Functional Parameter Reset(VFO): resets all functional settings to factory default values, but channel parameters are not reset.

Total Parameter Reset(ALL): resets all of the transceiver's functional settings and channel parameters to factory values.

In standby, press **MENU** + **3** **TXP** **5** **BCL**, the screen displays .

Press **MENU** to access, press **▲** / **▼** to select the parameter you desire and then press **EXIT** to confirm

The screen will display .

After the transceiver resets(VFO/ALL), it will restart and return to standby mode.

Backlight in Activate mode (BRT-ACTV) ---- MENU 36

In standby, press **MENU** + **3** **TXP** **6** **ACTV**, screen display .

Press **MENU** to enter the function, then press **▲** / **▼** to select the parameter and then **MENU** to confirm, while press **EXIT** to return back to the standby.

Level selectable for baklight setting: 01 to 10

Instructions for functions list

Backlight in Standby mode (BRT-STBY) ---- MENU 37

In standby, press **MENU** + **3** **TXP** **7** **STBY**, screen display 

Press **MENU** to enter the function, then press **▲** / **▼** to select the parameter and then **MENU** to confirm, while press **EXIT** to return back to the standby.

Level selectable for baklight setting: 01 to 10

FM Radio mode (FM RADIO) ---- MENU 38

FM Radio Read: In the RADIO mode, enter the menu and select the READ option. There are 20 groups for options.

FM Radio Memory: In the RADIO mode, enter the menu and select the MEMORY option. There are 20 groups for options.

In RADIO mode, please press **MENU** + **3** **TXP** **8** **MEMO**, screen displays 

Press **MENU** to confirm, and press **▲** / **▼** to select the parameter then press **MENU** to confirm, and press **EXIT** to back to standby.

Theme (DISY MODE) ---- MENU 39

It supports to select different theme(including the Background color and Text color) for the display

screen. Default is White-1.

In standby, please press **MENU** + **3** **TXP** **9** **103**, screen displays 

Press **MENU** to confirm, and press **▲** / **▼** elect the parameter then press **MENU** to confirm, and press **EXIT** to back to standby.

White-1: White Background, Black Text and Red Icons

White-2: Light Blue Background, Heavy Blue Text and Red Icons

Black-1: Black Background, Golden Text and Green Icons

Black-2: Black Background, White Text and Green Icons

Customize 1: The colors for background, text and icons could be programmed by software.

Customize 2: The colors for background, text and icons could be programmed by software.

Customize 3: The colors for background, text and icons could be programmed by software.

Customize 4: The colors for background, text and icons could be programmed by software.

Time (TIME DSP) ---- MENU 40

In standby, please press **MENU** + **4** **WH** **□**, screen displays 

Press **MENU** to confirm, and press **▲** / **▼** to select the parameter then press **MENU** to confirm, and press **EXIT** to back to standby.

Instructions for functions list

Options: ON, OFF

NOTE

» The time displays when the GPS is ON.

Time Zone (TIME/ZONE) ---- MENU 41

In standby, please press **MENU** + **4_{WIN}** **1_{STEP}**, screen displays 

Press **MENU** to confirm, and press **▲** / **▼** to select the parameter then press **MENU** to confirm, and press **EXIT** to back to standby.

Location (LOCATION) ---- MENU 42 (Optional)

In standby, please press **MENU** + **4_{WIN}** **2_{SOL}**, screen displays 

Press **MENU** to confirm, and press **▲** / **▼** to select the parameter then press **MENU** to confirm, and press **EXIT** to back to standby.

GPS SW (GPS-SW) (Optional): Turn On or OFF for GPS function.

Location Display (DSP POS) (Optional): Display the location when GPS is ON.

NOTE

- » Press **MENU** to switch to map scale in display mode, while press **#_{GO}** to display the location.
- » Press numeric keys from 1 to 8 to select the received contacts and then press PF1 button to make the selective calls for the contact.

Location Sending Type (SEND TYPE) (Optional):

Settings for the sending types for the location information.

OFF: Not sending.

PTT SEND: Release PTT to send out.

Timing: 1 to 10 minutes for sending

Detailed Guide for some functions

All calls, Group calls and Selective calls

There are Caller ID code transmission, Caller ID code edit and DTMF decoding functions. Without the assistance of the other communication equipments, the all calls, group calls and selective calls are available between the groups.

Before using all calls, group calls and selective calls function, you need to set as followings:

1. Caller ID CODE edit

Each transceiver in the same group should be edited a unique ANI ID code.

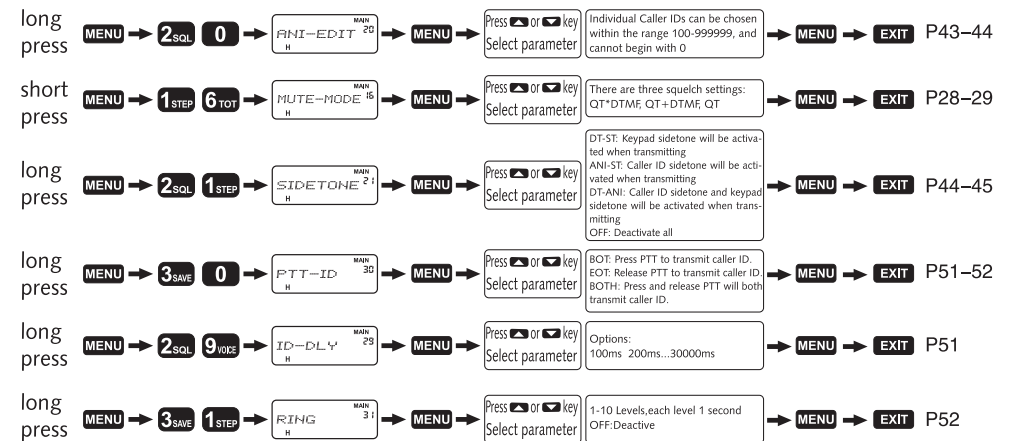
Caller ID CODE: ID -- XXX(3 digits) ID -- XXXX(4 digits) ID--XXXXX(5 digits) ID-- XXXXXX(6digits)

| ID | X | XXXXX |
|---------------------|---|---|
| Caller ID CODE mark | Group NO. mark | Unique Caller ID CODE |
| | From 1 to 9 group, Maximum: 9 groups | From 00000~99999, Maximum:1000000 digits |

This is how to set Caller ID CODE.

NOTE: Caller ID Codes should be different for the transceivers in the same group.

Steps are as followings:



NOTE

» Any transceiver in the same group should be with the same frequency point and parameter.

Detailed Guide for some functions

a. How to use all calls function:

Hold on PTT key to transmit. After transmitting Caller ID Code, input ***SCAN** + **#LOCK** keys directly.

b. How to use group calls function:

Hold on PTT key to transmit. After transmitting Caller ID Code, input "Group NO." ***SCAN** + **#LOCK**

c. How to use selective calls function:

Hold on PTT key to transmit. After transmitting Caller ID Code, input the Caller ID Code of the selective transceiver that you want to speak to.

Note: Selective call is available via selective call key. Selective call code is programmed via supplied software. Programming the same selective call code of the selective transceiver and Caller ID code of the selected transceiver.

For example, Caller ID Code for the selected transceiver is 123456, selective call code for the selective transceiver should be 123456 too.

Repeater Usage

1.Repeater PTT Switch (RPT-PTT)

When the transceiver is in standby, press **MENU** + **2** **SOL** **7** **KCP** keys and the screen displays 


Press **MENU** to access the settings, and after pressing the **▲** / **▼** keys to activate (ON) the PTT transmission, Press **MENU** to confirm, and press the **EXIT** key to return to standby.

2.Repeater speaker switch (RPT-SPK)

When the transceiver is in standby, press **MENU** + **2** **SOL** **6** **KCP** keys and the screen will display 

Press **MENU** to access the settings, and after pressing **▲** / **▼** to activate (ON) the speaker, press to confirm, and press **EXIT** key to return to standby.

3.Repeater Setting (RPT-SET)

Accessing cross-band repeater mode: when the transceiver is in standby, press **MENU** + **2** **SOL** **5** **BCL** and the screen will display 

Press **MENU** to access, press **▲** / **▼** to select two-way cross-band repeater mode (X-TWRPT) or directional cross-band repeater mode (X-DIRPT). Press **MENU** to confirm. And then press **EXIT** to return to standby mode, hold on **RPT** key for 2seconds, the transceiver is to access cross-band repeater.

Detailed Guide for some functions

Exit Cross-Band Repeater: In standby, hold **RPT** for 2seconds, the transceiver exit the cross-band repeater mode and access transceiver communication mode.

(1) When "RPT-PTT" is ON, pressing PTT to stop receiving or transmission in cross-band repeater mode.

The transmission frequency is the frequency of the master band, release PTT key to access Two-way cross-band repeater mode.

(2) When "RPT-SPK" is ON, any transceiver in cross-band repeater mode can receive the effective signals, and then the repeater receipt tone will be heard.

(3) The difference between directional cross-band repeater and two-way cross-band repeater modes is the transmitter and receiver is unfixed under two way cross-band repeater mode.

Directional cross-band repeater: The master frequency area A is the receiving frequency of the receiver in cross-band repeater mode, the sub-frequency area B is the transmitting frequency.

Two-way cross-band repeater mode: In standby, both master and sub areas are receivers, whichever area receives an effective carrier wave signal, the other area will be the transmitter and start transmitting.

Trouble Shooting


Before assuming your transceiver is broken, please check your transceiver according to the following table; if the problem persists, you can reset the transceiver, which sometimes.

| <i>Fault</i> | <i>Solution</i> |
|--|---|
| Reception prompt remains but speaker is silent | » Check that the volume knob has been set to maximum. » Please reset CTCSS/DCS to check whether different channels from other group members have been set. » Check whether mute settings are correct. |
| Keypad is unresponsive | » Check whether keypad has been locked. » Check whether other keys have been pressed. |
| Other voices (not from group members) appear in the channel. | » Please change the CTCSS / DCS code. |
| In standby, automatic transmission without pressing PTT key | » Please check if VOX function is active or VOX level is too low. |

Trouble Shooting

| Fault | Solution |
|---------------------------------------|--|
| Can not enter scanning mode | » Please see if the scan group channel, Scan Add function is turned on. |
| Cannot set up the cross-band repeater | » Please make sure A/B area is on the cross-band repeaters operating frequency. |
| Cannot transmit in repeat mode | » Please check to see if the receivers squelch and CTCSS / DCS settings are correct. |

Announcement

 endeavors to achieve the accuracy and completeness of this manual, but it is still not perfect for any possible omissions or printing errors. All the above is subject to be updated without prior notice.