

THANK YOU!

We are grateful you chose **LINTON** for your land mobile radio applications. We believe this easy-to-use transceiver will provide dependable and reliable communication to personnel operating at peak efficiency.

LINTON transceivers incorporate the latest in advanced technology. As a result, we feel strongly that you will be pleased with the quality and features of this product!

CONTENT

FOR YOUR SAFETY	1
UNPACKING AND CHECKING EQUIPMENT	3
Packing Lists	3
PREPARATION.....	4
Charging the Battery Pack	4
Installing/Removing the Battery Pack.....	6
Attaching/Removing the Antenna	7
Installing the Belt Clip.....	8
Installing the Earphone	8
Installing Hand Strap.....	8
GETTING ACQUAINTED.....	9
Orientation	9
Programmable Auxiliary Functions.....	12
Working Band.....	14
■Change Main Working Band.....	14
■Change Working Band.....	14
■Dual Frequency/Dual Display/Dual Standby(DW)	15
Basic Transceiver Modes	16
■VFO Mode(VFO)	16
■Memory Recall Mode(MR).....	16
■Channel Display Mode(CH).....	17
■Channel Name Mode(NM).....	17
Keypad Description	18

LCD Display	20
BASIC OPERATION	23
Turning Transceiver ON/OFF	23
Adjusting the Volume	23
Frequency/Channel Selection	23
Transmitting	23
Transmitting and Receiving works at the same time	24
Receiving	24
MENU OPERATION	25
Menu Access.....	25
Menu Configuration.....	26
OPERATING THRU REPEATERS	29
Use this radio as repeater	30
The condition of Enable Repeater.....	31
When as repeater, also monitor RX signal	32
Selecting Offset Direction and Frequency.....	32
Talk Around	33
Reverse Function.....	34
1750 Hz Tone	35
CTCSS/DCS.....	36
Set Receiving with CTCSS/DCS	36
Set Transmitting with CTCSS/DCS	37
Standard CTCSS Tones Table	38
Standard DCS Codes Table	38
MEMORY CHANNEL	39
Storing Data in Memory Channels	39

Naming Memory Channels.....	40
■Switching/Setting/Amending/Clearing Memory Channel Name.....	40
Channel Display Function	41
Clearing Current One Memory Channel.....	42
Clearing All Memory Channels	43
Initializing Memory	44
■Partial Initialization (VFO).....	44
■Full Initialization (MR)	45
SCAN	46
Scan Resume Method.....	46
Scan Operation	48
Locking Out Memory Channels.....	48
Priority Scan.....	49
PTT ID	50
Switch PTT ID On/Off when receiving.....	50
Switch PTT ID On/Off when transmitting.....	51
Transmit PTT ID directly.....	52
Transmit PTT ID from Memory	53
DTMF	54
Switch DTMF function On/Off.....	54
Transmit a DTMF code directly	55
Transmit a DTMF code from DTMF memory.....	56
Remote Stun/Remote Kill.....	56
AUXILIARY FUNCTIONS	57

Adjusting Squelch Level.....	57
Transmit Output Selection.....	58
Changing Frequency Step Size	58
Hands-Free Operated (VOX)	59
FM Radio	60
■Switch ON/OFF FM Radio Function	61
■Scan FM Radio Channel.....	61
■Set Up FM Radio Memory Channels	62
■Recall FM Radio Memory Channel.....	62
TROUBLESHOOTING	64

FOR YOUR SAFETY

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user manual for further information.



SWITCH ON SAFELY

Do not switch the device on when transceiver use is prohibited or when it may cause interference or danger.



ROAD SAFETY COMES FIRST

Obey all local laws. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.



INTERFERENCE

All wireless devices may be susceptible to interference, which could affect performance.



SWITCH OFF IN HOSPITALS

Follow any restrictions. Switch the device off near medical equipment.



SWITCH OFF IN AIRCRAFT

Follow any restrictions. Wireless devices can cause interference in aircraft.



SWITCH OFF WHEN REFUELING

Do not use the device at a refueling point. Do not use near fuel or chemicals.



SWITCH OFF NEAR BLASTING

Follow any restrictions. Do not use the device where blasting is in progress.



USE SENSIBLY

Use only in the normal position as explained in the product documentation. Do not touch the antenna unnecessarily.



QUALIFIED SERVICE

Only qualified personnel may install or repair this product.



ENHANCEMENTS AND BATTERIES

Use only approved enhancements and batteries. Do not connect incompatible products.



WATER-RESISTANCE

Your device is not water-resistant. Keep it dry.



BACK-UP COPIES

Remember to make back-up copies or keep a written record of all important information.



CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user manual for detailed safety instructions. Do not connect incompatible products.

UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any item is missing or has been damaged during shipment, file a claim with the carrier immediately.

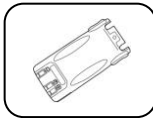
Packing Lists



Radio x1



Antenna x1



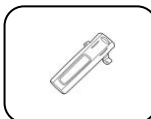
Battery Pack x1



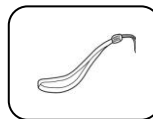
Adapter x1



Desktop Stand x1



Belt Clip x1



Handstrap x1



User Manual x1

PREPARATION

Charging the Battery Pack

1. Using the Battery Pack.

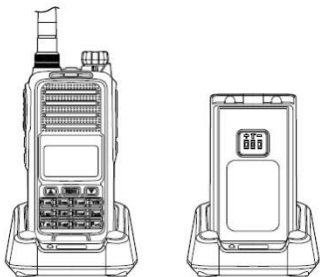
The battery pack is not charged at the factory, please charge it before use. To extend the battery pack lifetime, please power off the transceiver and remove the battery pack when not in use and leave the battery in hot or cold place.

2. Battery Pack Characteristics.

The battery will slowly wear out even not in use. After charging and recharging, it's normal that the talk and standby times are noticeably shorter than normal times. If leaving the battery in very hot place or conditions, it will reduce the capacity and lifetime of the battery. Overcharging may also shorten its lifetime.

3. Charging the Battery Pack.

Please charge your battery only with approved **LINTON** charger. Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal level.

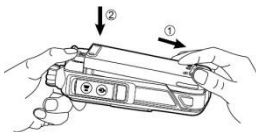


Please charge the battery pack as follows:

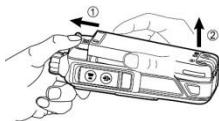
1. Make sure the battery pack contacts are in contact with the charging terminals.
2. Slide the battery pack or transceiver with a battery pack into the desktop charger.
3. The charging LED lights red and charging begins.
4. After charging about 4 hours, when the light turns to green, it means the battery pack is fully charged.
5. Then you can take off the battery pack or transceiver with the battery pack and use it.

Installing/Removing the Battery Pack

To install the battery pack, Fit the extensions at the bottom of the battery into the slots at the bottom of the transceiver's body. Press the top part of the battery towards the transceiver until a "click" sound is heard.

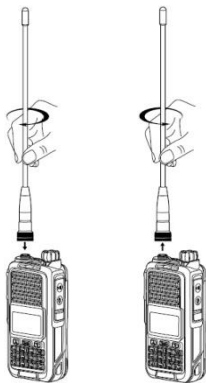


To remove the battery pack, Slide the battery latches, on both sides of the battery, downwards. Pull the top part of the battery away from the transceiver's body, and lift the battery from the transceiver's body.



Attaching/Removing the Antenna

1. Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure (**Figure 1**).
2. Turn the antenna counter clockwise until you can remove it (**Figure 2**).



(Figure 1)

(Figure 2)

Installing the Belt Clip

If necessary, insert the belt clip at the back of battery pack.



Installing the Earphone

Insert the speaker/ microphone plug into the speaker /microphone jacks.



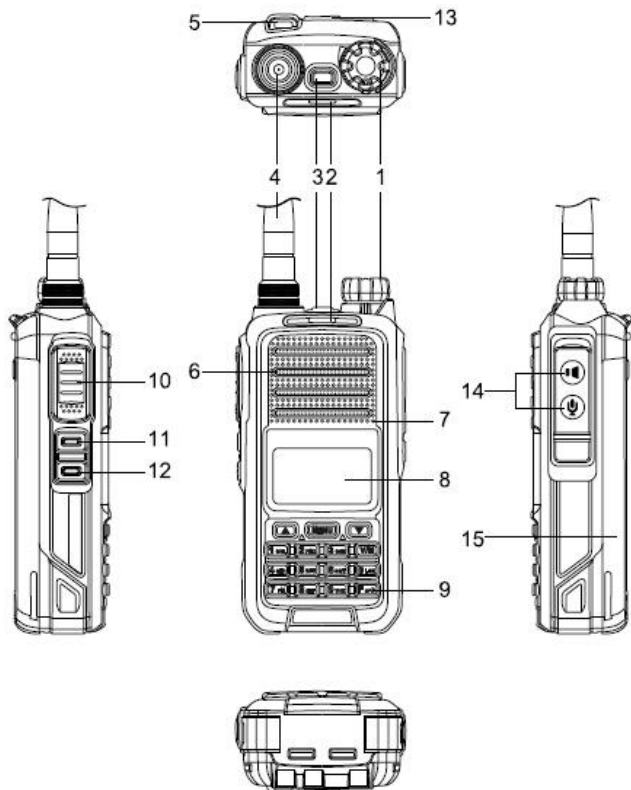
Installing Hand Strap

If necessary, you can install the hand strap in the back of transceiver in order to easy carry.



GETTING ACQUAINTED

Orientation



1.Power Switch/Volume Control

Rotate clockwise to switch power On or to increase the audio output level; Rotate counter-clockwise to switch power Off or to reduce the audio output level.

2.TX/RX Indicator

Lights red while transmitting; Light green while receiving a signal.

3.Programming Key (P1)

The default setting of long key is **Emergency Alert** function. Long press to switch the emergency alert function ON, press [PTT] to switch OFF.

The default setting of short key is **Null** function.

4. Antenna

Rubber antenna using for receiving or transmitting a signal.

5. Hand Strap Hook

The loop on the top of belt clip, it is facilitated to carrying the transceiver.

6. Speaker

Output the audio.

7. Internal Microphone

Input the audio signal while you talk.

8.LCD Display

On the display you will see various indicators which show what function you have selected.

9.Keypad

Input frequency, memory channel or function selection etc.

10.PTT Switch

Push and hold to transmit, release to receive.

11.Programming Key (P2)

The default setting of short key is **Lamp** function. Push to light the LCD backlight, re-push to turn **OFF** the backlight.

The default setting of long key is **Null** function.

12. Programming Key (P3)

The default setting of short key is **Squelch ON/OFF** function. In receiving mode, press this key to monitor the operating frequency or memory channel.

The default setting of long key is **Null** function.

13.Battery Lock Button

Use to lock/unlock the battery pack

14.Earphone/ Data Cable Jack

Connects an earphone; or connects a data cable for PC software programming.

15.Li-ion Battery Pack

Supply the power to the transceiver.

Programmable Auxiliary Functions

Your dealer may program the [P1]/[P2]/[P3] (long press) as long keys and the [P1]/[P2]/[P3] (short press) as short keys with one of the following auxiliary functions respectively.

No.	Indicator	Description
1	NONE	No function.
2	SQ OFF	Press the programmed Squelch Off key to open noise squelches. Press it again to close.
3	CALL	When already switch DTMF feature ON, press and hold the programmed Call feature key, then press one number from 0~9 via keypad to transmit the stored DTMF code signaling.
4	SCN SW	Press the programmed Scan feature key to star scanning, press any other than [UP]/[DOWN] key to quit scan.
5	LAMP	Press the programmed Lamp feature key to turn ON/OFF the background lamp of keypad or LCD display.
6	ALARM(*)	Press the programmed Emergency feature key to emit emergency alarm.

7	1750Hz(*)	Press and hold the programmed 1750Hz feature key to transmit a 1750Hz signal; release to stop transmitting.
8	RPT MIC(*)	When in repeater mode, press and hold this key to transmit the current microphone signal.
9	AUX PTT(*)	Press and hold this key to transmit the frequency or channel of auxiliary working band.
10	SQ MOM	Press the programmed Squelch Off Momentary key to open noise squelch. Release it to close.

Note:

- You can set the time of pressing long key from 0.5-2.5 seconds (default: **1 second**) with programming software, when you press anyone of [P1]/[P2]/[P3] keys, the time of pressing is over your setting time, then it's a long time key, otherwise, it's a short key.
- For marked items with (*), these functions only to be programmed when it's a long key.

The default programmed feature:

Key	Short Press	Long Press
P1	NONE	ALARM
P2	LAMP	NONE
P3	SQ OFF	NONE

Working Band

There are two main working band and four working band for selection, choose the correct working band is essential in order to operate smoothly.

■Change Main Working Band

Press **[F]+[0]** key to change **Band A** and **Band B**.

- **A** or **B** will appear on LCD display and show you the current main working band.

■Change Working Band

After confirmation of main band, you can select the current working bank. In VFO mode, press **[F]+[MENU]** key to change between **B1**, **B2**, **B3** and **B4** orderly, press many times to select your desired working bank.

- The current main working band and working bank will appear on LCD display.
- You can change the working bank only in VFO mode, in MR/CH/NM mode, you can't change working band.
- You can't change working band when scan function is enable, if you would like to change working band, please press **[PTT]** button to stop scan.

Band(Abbr.)	Indicator	TX(MHz)	RX(MHz)
The First Band(B1)	b-1	No	87.500~108.000
The Second Band(B2)	b-2	136.000~174.000	136.000~174.000
The Third Band(B3)	b-3	No	200.000~260.000
The Fourth Band(B4)	b-4	400.000~470.00	400.000~470.000

■Dual Frequency/Dual Display/Dual Standby(DW)

In order to monitor dual frequency or dual channels, you can use DW function.

1.After confirmation of main working band, press [Menu] key to access menu system, use [UP]/[DOWN] key to select Menu No.13 and press [F] key to confirm selection.

●The menu appears.



2.Use [UP]/[DOWN] key to switch DW function ON/OFF.

3.Press [F] key to finish and press [PTT] button to exit setting mode.

●When “DW” appears on LCD display, it means the DW function is already switched ON, otherwise, the DW function is switched OFF.

Note:

When switch DW function ON, your transceiver will automatically scan the current two working band, when detecting a signal, remains for approximately 3 seconds, and then continues to scan.

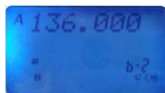
Basic Transceiver Modes

This section introduces you to the basic modes you can select on this transceiver.

■VFO Mode(VFO)

VFO is an abbreviation of Variable Frequency Oscillator. Frequencies for both transmitting and receiving are generated and controlled by the VFO.

Switch the power ON, in this mode you can change the desired operating frequency by using [UP]/[DOWN] key or via numeric keypad direct input.



■Memory Recall Mode(MR)

Memory recall mode is used for operation on memory channels which store programmed frequencies.

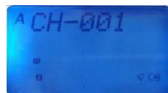
Press [V/M] key to select, in this mode you can change memory channels, using [UP]/[DOWN] key or numeric keypad, where you stored frequencies or related data.

Note: You can't access this mode unless you program one memory channel at least.



■Channel Display Mode(CH)

Channel display mode is used for programming infrequently changed values or conditions of functions. In MR mode, press [F]+[0] key to access menu system, then use [UP]/[DOWN] key to select Menu No.2 for **Band A** or Menu No.3 for **Band B**, then press [F] key to confirm selection, use [UP]/[DOWN] key again to select “**CHANNEL**” and press [F] key to confirm your selection, at last press [PTT] switch to quit menu system and press [V/M] key to select CH mode.



***Note:** You can't access this mode unless you program one memory channel at least.*

■Channel Name Mode(NM)

Channel display mode is used for programming infrequently changed values or conditions of functions. In MR mode, press [F]+[0] key to access menu system, then use [UP]/[DOWN] key to select Menu No.2 for **Band A** or Menu No.3 for **Band B**, then press [F] key to confirm selection, use [UP]/[DOWN] key again to select “**NAME**” and press [F] key to confirm your selection, at last press [PTT] switch to quit menu system and press [V/M] key to select NM mode.



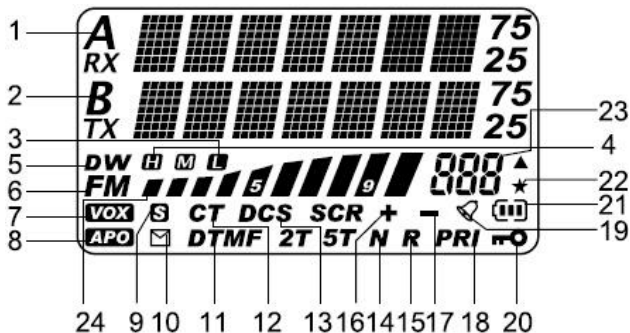
Keypad Description

Key	Band	What You Operate
1 SQL	B2/B3/ B4	In VFO/MR/CH/NM mode, press [F]+[1] key to adjust the squelch level.
2 PWR	B2/B4	In VFO/MR/CH/NM mode, press [F]+[2] key to switch between the high/low power output level.
3 SCN	B1/B2/ B3/B4	In VFO/MR/CH/NM mode, press [F]+[3] key to activate scanning of frequencies and memory channels.
4 STP	B1/B2/ B3/B4	In VFO/MR/CH/NM mode, press [F]+[4] key to select the channel step size as follows: 5, 6.25, 10, 12.5, 25, 50, 100KHz and 1MHz.
5 REV	B2/ B4	In MR/CH/NM mode, press [F]+[5] to switch Talk Around/Reverse function ON/OFF.
6 SQT	B2/B4	In VFO/MR/CH/NM mode, press [F]+[6] key to switch CTCSS/DCS function ON/OFF.
7 FM	B1/B2/ B3/B4	In VFO/MR/CH/NM mode, press [F]+[7] key to switch FM radio function ON/OFF.
8 SHF	B2/B4	In VHO mode, press [F]+[8] key to select offset direction.
9 VOX	B2/B4	In VFO/MR/CH/NM mode, press [F]+[9] key to switch VOX function ON/OFF.
0 SET	B1/B2/ B3/B4	In VFO/MR/CH/NM mode, press [F]+[0] key to change current main working band.





































V/M	B1/B2/ B3/B4	<p>1)In VFO/MR/CH/NM mode, press [V/M] key to change the transceiver working mode between VFO and MR/CH/NM modes.</p> <p>2)In VFO mode, press [F]+[V/M] key to save memory channel.</p> <p>3)When access menu system to edit open message or channel name, press [V/M] key to clear all the content which already input and return back re-input mode.</p>
F	B1/B2/ B3/B4	<p>1)In VFO/MR/CH/NM mode, press and hold [F] key for 3 seconds to lock/unlock the keypad.</p> <p>2)In VFO/MR/CH/NM mode, press [F] key to activate the second function with other keys in 10 seconds.</p> <p>3)When access menu system, press [F] key to access menu or confirm your setting.</p> <p>4)Press [F]+Power On to initialize settings or delete memory channel.</p>
MENU	B1/B2/ B3/B4	<p>1)In VFO/MR/CH/NM mode, press [MENU] key to access Menu System.</p> <p>2)In VFO mode, press [F]+[MENU] key to change working band.</p>
UP	B1/B2/ B3/B4	Press [UP] key to select an operating channel, menu value or others.
DOWN	B1/B2/ B3/B4	Press [DOWN] key to select an operating channel, menu value or others.








LCD Display

On the LCD display you will see various indicators show what functions you have selected. Sometimes you may not recall what these indicators mean or how to select them. In such a case, you will find the following description very useful.



No.	Indicator	Description	Band	Operation
1		Display various alphanumeric information of Band A, such as: frequency, an operating channel or menu selection.	---	---
2		Display various alphanumeric information of Band B, such as: frequency, an operating channel or menu selection.	---	---

3		Low Output Power	B2/B4	Press  + 
4		High Output Power	B2/B4	Press  + 
5		Dual Watch Receiving Signal	B1/B2/ B3/B4	Use Menu No.13
6		FM Radio	B1	Press  +  key many times to make sure select "  " as current working band.
7		Hands-Free Vox	B2/B4	Press  + 
8		Automatic Power Off	B1/B2/ B3/B4	Use Menu No.1
9		Power Saving	B1/B2/ B3/B4	Use Menu No.32
10		Signaling Decoding Success Indicator	---	---
11		DTMF	B2/B4	Use Menu No.11
12		CTCSS	B2/B4	Press  + 
13		DCS	B2/B4	Press  + 
14		Narrow Band	B1/B2/ B3/B4	Use Menu No.47
15		Reserve function	B2/B4	Press  + 
16		Plus Offset Direction	B2/B4	In VFO mode, press  + 
17		Minus Offset Direction	B2/B4	In VFO mode, press  + 
18		Priority Scan	B1/B2/ B3/B4	In MR/CH/NM mode, user Menu No. 25
19		Keypad Beeper	B1/B2/ B3/B4	Use Menu No.4

20		Appear when the key lock function is activated.	B1/B2/ B3/B4	Press and hold [F] key for 3 seconds
21		Battery Gauge Indicator	---	---
22		Lock/Unlock Memory Channel when scan.	B2/B4	Through one of Menu No.34, 35, 36, 37, 39, 40 to program the long press or short press programmed feature of [P1]/[P2]/[P3] key is: SCN SW (Current Channel Scan Add/Del), then in MR/CH/NM mode, press the programmed key.
23		Display the current memory channel or menu No.	---	---
24		<ul style="list-style-type: none"> •While transmitting, show the relative power output level: :HI :LOW •While receiving, show the relative strength of received signal. 	---	---

BASIC OPERATION

Turning Transceiver ON/OFF

1. Turn the [**Power**] switch clockwise to turn **ON** the transceiver.
 - *A music tone sounds.*
2. To turn **OFF** the transceiver, turn the [**Power**] switch counter-clockwise.

Adjusting the Volume

Turn the [**Volume**] control clockwise to increase the audio output level and counter-clockwise to decrease the audio output level.

- *If background noise is inaudible because of the squelch function, press and hold [**P3**] key (the default setting is **SQ OFF**), then turn [**Volume**] control to adjust the audio level you desire.*

Frequency/Channel Selection

Press [**UP**] key to increase the frequency/channel, press [**DOWN**] key to decrease the frequency/channel.

- *You can input number directly to select the frequency and memory channel you desired.*

Transmitting

1. When ready to begin transmitting, press and hold [**PTT**] switch and speak in a normal voice level.
 - *The TX/RX indicator on the top panel lights red and S/Rf meter shows the output power level.*
 - *Speaking too close to the microphone, or too loudly, may*

increase distortion and reduce intelligibility of your signal at the receiving transceiver.

2. When you finish speaking, release [PTT] switch to receive.

Transmitting and Receiving works at the same time

When TX in UHF band and RX in VHF band (or TX in VHF band and RX in UHF band) and switch this feature on, if you press [PTT] to transmit a signal, meanwhile, the radio can also receive signal in different band.

1. Press [MENU] key to access menu system, use [UP]/[DOWN] key to select Menu No.42 and press [F] key to access setting mode.

2. Use [UP]/[DOWN] key to select ON or OFF.

3. Press [F] key to confirm setting and return back menu system.

4. Press [PTT] to quit menu system and return back working mode.

Receiving

Your dealer may have programmed CTCSS/DCS, Scrambler signaling in your transceiver. If your selected channel is programmed with one of these features, you will hear calls only when another party in your system transmits. All other calls will not be heard.

If your selected channel is not set up with a signaling type, you will hear calls made by any party (not just those in your system).

MENU OPERATION

Menu Access

1. In VFO/MR/CH/NM mode, press [MENU] key to access menu system.

- The menu appears.



2. Use the [UP]/[DOWN] key to select the desired Menu Number.

3. Press [F] key to confirm the selection

4. Then use the [UP]/[DOWN] key to switch ON/OFF or select numeric values.

5. Press [F] key again to complete the setting.

6. Press [PTT] button to exit menu mode.

Note:

In this manual, when you enter and use menu system to select, or want to activate the second function when press [F] key with other keys, Please make sure the operation in 10 seconds after pressing [F] key. Otherwise, the transceiver will turn back to original working mode.

Menu Configuration

No.	Display	Description	Setting Contents	Default
1	APO	Automatic Power Off	OFF, 1-15H	OFF
2	A.DISP	Select Working Mode of A Band	FREQ/CHANNEL/NAME	FREQ
3	B.DISP	Select Working Mode of B Band	FREQ/CHANNEL/NAME	FREQ
4	BEEP	Keypad Beeper	ON/OFF	ON
5	BCLO	Busy Channel Lock Out	OFF/ON	OFF
6	CHA.SQ	Squelch Mode of Band A	AND/OR/QT/SIG	AND
7	CHA.VOL	Adjust the volume of Band A when Receiving	1-12	10
8	CHB.SQ	Squelch Mode of Band B	AND/OR/QT/SIG	AND
9	CHB.VOL	Adjust the volume of Band B when Receiving	1-12	10
10	DC VOLT	Current Battery Indicator	---	---
11	DTMF	Dual Tone Multi Frequency	OFF/ON	OFF
12	DTMF ST	Dual Tone Multi Frequency Prompt Tone	ON/OFF	ON
13	DW	Dual Band/Dual Display/Dual Receiver	OFF/ON	OFF
14	FM STRO	Only receive the stronger FM radio program.	ON/OFF	ON
15	LAMP MD	Backlight Control	KEY/CONT/OFF	KEY
16	LAMP T	Light Time of Backlight	1S-10S	5S
17	LAMP C	Color of Backlight	LAMP1/LAMP2/LAMP3	LAMP1

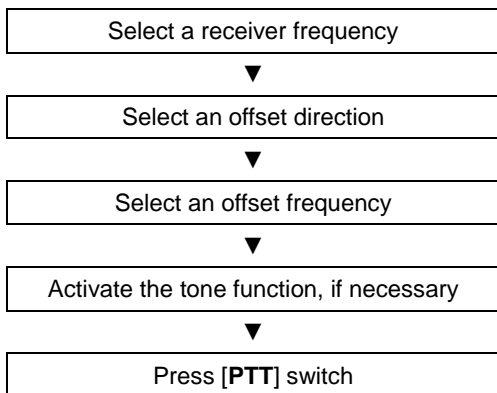
18	LOCK MD	Transceiver Lock Mode	K+S/ ALL /PTT/KEY	K+S
19	MSG SET	Open Message Setting	Edit by user	---
20	NM SET	Set-up Name of Memory Channel	Edit by user	---
21	OPN MSG	Open Message	LOGO/MESSAGE/OFF/D C VOLT	LOGO
22	OPN TON	Star-up Tone	ON/OFF	ON
23	PASSWORD	Password Protection	OFF/ON	OFF
24	PSWDSET	Program the Password	Edit by user	---
25	PRI SET	Priority Channel setting	OFF, CH-001~CH-200	OFF
26	PTT-ID	Push-To-Talk ID	OFF/ON	OFF
27	ROGER	Roger Tone	OFF/ON	OFF
28	RPTCONT	Squelch Mode of Repeater	QT/SIG/AND/OR	QT
29	RPTMONI	When as repeater, also monitor RX signal	ON/OFF	OFF
30	RPT SW	Repeater Working Mode	OFF/R.M. T.A/R.F. T.O	OFF
31	RX ANI	Display the Sender's ID when Receiving	OFF/ON	OFF
32	RX SAVE	Battery Saver	ON/OFF	ON
33	SCAN MD	Scan Method	TO/CO/SE	TO
34	SK1 LOG	Select the default function of [P2] when long press.	NONE/SQ OFF/SQ MOM/ CALL/ ALARM/1750Hz/SCN SW/LAMP/RPT MIC/AUX PTT	NONE
35	SK1 SHT	Select the default function of [P2] when short press.	LAMP/NONE/ SQ OFF/CALL/SCN SW	LAMP
36	SK2 LOG	Select the default	NONE/SQ OFF/SQ MOM/	NONE

		function of [P3] when long press.	CALL/ ALARM/1750Hz/SCN SW/LAMP/RPT MIC/AUX PTT	
37	SK2 SHT	Select the default function of [P3] when short press.	LAMP/NONE/ SQ OFF/CALL/SCN SW	SQ OFF
38	STE	Squelch Tail Elimination	ON/OFF	ON
39	TK LOG	Select the default function of [P1] when long press.	NONE/SQ OFF/SQ MOM/ CALL/ ALARM/1750Hz/SCN SW/LAMP/RPT MIC/AUX PTT	ALARM
40	TK SHT	Select the default function of [P1] when short press.	LAMP/NONE/ SQ OFF/CALL/SCN SW	NONE
41	TOT	Time-Out Timer	OFF, 1-7MIN	3M
42	TX MONI	TX & RX works at the same time.	OFF/ON	OFF
43	TX STOP	Transmitting Inhibit	OFF/ON	OFF
44	VOX BCL	VOX Busy	OFF/ON	OFF
45	VOX LVL	VOX Sensitivity	LEVEL 1 - LEVEL 4	LEVEL 2
46	VOX DLY	Select Hands-free VOX delay time	1S-4S	3S
47	WID/NAR	Wide/Narrow Band Selection	WIDE/NARROW	WIDE

OPERATING THRU REPEATERS

Compared to simplex communication, you can usually transmit over much farther distances by using a repeater. Repeaters are typically located on a mountain top or other elevated location. Often they operate at higher **ERP** (Effective Radiated Power) than a typical station. This combination of elevation and high ERP allows communications over considerable distances.

Flow Chart for Repeater Access



Use this radio as repeater

This radio can be used as repeater to enlarge communication range.

1. Please switch DW function on firstly.

• Please reference to “**Dual Frequency/Dual Display/Dual Standby(DW)**” in Page 15.

2. Press [MENU] key to access menu system, then use [UP]/[DOWN] key to select Menu No.30 and press [F] key to confirm selection.

3. Use [UP]/[DOWN] key to circularly select from the following 3 modes:

OFF: switch repeater function off, can't be as repeater.

R.M T.A: main working band as receiving channel, subsidiary working band as transmitting channel.

R.F T.O: current receiving working band as receiving channel, the other working band as transmitting channel.

• When select “**OFF**”, it means you switch repeater function off; if you select “**R.M T.A**” or “**R.F T.O**”, it means you switch repeater function on.

4. After your selection, press [F] key to confirm and return back working mode.

5. Press [PTT] button to quit menu system.

The condition of Enable Repeater

This feature is similar like CTCSS/DCS, if switch repeater function on, the repeater will only transfer the signal when the tone match or no any tone, otherwise, the signal will not be transferred. The default setting is **QT**.

1. Press **[MENU]** key to access menu system, use **[UP]/[DOWN]** key to select Menu No.28 and press **[F]** key to confirm selection.

2. Use **[UP]/[DOWN]** key to circularly select from the following 4 modes:

QT: When the transceiver receives the correct CTCSS tones or DCS codes, then the system will open the squelch.

SIG: When the transceiver receives the correct DTMF or 2-Tone, then the system will open the squelch.

AND: When the transceiver receives the correct signal for both CTCSS/DCS and DTMF/2-Tone, then the system will open the squelch.

OR: When the transceiver receives the correct signal for CTCSS/DCS or DTMF/2-Tone, then the system will open the squelch.

3. Press **[F]** key to confirm setting and return back menu

system.

4. Press [PTT] button to quit menu system.

When as repeater, also monitor RX signal

When DW function is switched on, the radio can also monitor the signal which is received.

1. Press [MENU] key to access menu system, use [UP]/[DOWN] key to select Menu No.29 and press [F] key to confirm selection.

2. Use [UP]/[DOWN] key to select ON or OFF.

3. Press [F] key to confirm setting and return back menu system.

4. Press [PTT] button to quit menu system.

Selecting Offset Direction and Frequency

1. In VFO mode, press [F]+[8] key to access setting mode.

• "OFFSET" will appear on LCD display.

2. Use [UP]/[DOWN] key to circularly select from the following 3 modes:

OFF: no offset frequency;

PLUS: plus direction;

MINUS: minus direction.

3. Press [F] key to confirm selection of offset direction and

enter next menu setting mode.

- If you select **OFF**, no offset frequency will be selected and the transceiver will exit setting mode.
- If you select **+**, plus direction will be selected and **000.000** will appear on LCD, now you can input frequency via keypad (000.000~399.999).
- If you select **-**, minus direction will be selected and **000.000** will appear on LCD, now you can input frequency via keypad (000.000~399.999).

Note: The combined frequency between offset frequency and transceiver's current working frequency must be in the range of your transceiver, if not, a **"ERROR"** sign will show when you press **[PTT]**.

4. Press **[F]** key again to finish setting mode and exit VFO mode.

Talk Around

This function is used in trunking system. When your transceiver is out of trunking system, but closely with the other transceivers, then you can talk around the trunking system and communicate with these transceivers directly.

1. In MR/CH/NM model, press **[F]+[5]** key to access setting

mode.

- "RPT MD" will appear on LCD display.
- You can only switch talk around function in MR/CH/NM mode.

2. Use [UP]/[DOWN] key to circularly select the menu **TALK AROUND**.

OFF: without Talk Around/Reverse function;

TALK AROUND: switch Talk Around function on;

REVERSE: switch Reverse function on.

3. Press [F] key to confirm your setting.

4. Press [PTT] button to exit setting mode.

5. If you want to switch talk around function OFF, please select the menu "OFF" in Step 2.

Reverse Function

While monitoring a repeater, the reverse function allows you to manually check the signal strength of a station accessing the repeater.

1. In MR/CH/NM mode, press [F]+[5] key to access setting mode.

- "RPT MD" will appear on LCD display.
- You should have to set offset direction and frequency in VFO firstly, and save the setting as Memory Channel, Otherwise, you can use

this reverse function.

2. Use [UP]/[DOWN] key to circularly select the menu **REVERSE**.

OFF: without Talk Around/Reverse function;

TALK AROUND: switch Talk Around function on;

REVERSE: switch Reverse function on.

3. Press [F] key to confirm your setting.

4. Press [PTT] button to exit setting mode.

5. If you want to switch talk around function OFF, please select the menu "**OFF**" in Step 2.

1750 Hz Tone

Some European repeaters require a 1750 Hz tone burst to be accessed. For such European repeaters, perform the following.

1. Program any one of [P1],[P2],[P3] long key to be "**1750HZ**" function key via programming software.

2. In VFO/MR/CH mode, press the long key you programmed, a 1750 Hz tone will be transmitted.

• *You will hear a tone when you press and hold the long key you programmed.*

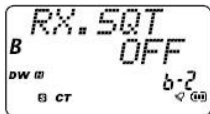
3. Release this long key to receive.

CTCSS/DCS

You may sometimes want to hear calls from only specific persons or groups. The CTCSS/DCS allows you to ignore (not hear) unwanted calls from other persons who are using the same frequency. Simply select the same CTCSS/DCS as selected by the other persons in your group. A CTCSS tone is sub-audible tone and is selectable from among the 51 tone frequencies and a DCS tone is from among the 214 normal and reverse codes.

Set Receiving with CTCSS/DCS

1. In VFO/MR/CH/NM mode of B2/B4, use [UP]/[DOWN] key or keypad to select the frequency or memory channel.
2. Press [F]+[6] key to switch CTCSS /DCS function ON/OFF.
 - "RX.SQT" will flash on LCD display.



3. Use [UP]/[DOWN] key to select circularly from the following:

RX.SQT OFF: receiving without CTCSS/DCS.

RX.CTC 63.0: receiving with CTCSS tone.

RX.NDCS 017: receiving with normal DCS code.

RX.IDCS 017: receiving with invert DCS code.

4.Then press **[F]** key to enter setting mode and use **[UP]/[DOWN]** key to select CTCSS/DCS code.

5.Press **[F]** key to finish setting receiving with CTCSS/DCS, you can set transmitting with CTCSS/DCS.

- **"TX.SQT"** will appear on LCD.

Set Transmitting with CTCSS/DCS

The operation of setting transmitting with CTCSS/DCS is the same as receiving, except press **[F]+[6]** key to switch CTCSS/DCS function ON/OFF and **"TX"** instead of **"RX"** on LCD.

Note:

- **"CT"** will appear on LCD when CTCSS function is activated.
"DCS" will appear on LCD when DCS function is activated.
Both **"CT"** & **"DCS"** will appear on LCD when CTCSS & DCS function is activated.
- All operation should be done in 10 seconds, otherwise, the transceiver will return to current working mode, you have to re-operate from the beginning.

Standard CTCSS Tones Table

1 - 63.0	14 - 100.0	27 - 156.7	40 - 196.6
2 - 67.0	15 - 103.5	28 - 159.8	41 - 199.5
3 - 69.3	16 - 107.2	29 - 162.2	42 - 203.5
4 - 71.9	17 - 110.9	30 - 165.5	43 - 206.5
5 - 74.4	18 - 114.8	31 - 167.9	44 - 210.7
6 - 77.0	19 - 118.8	32 - 171.3	45 - 218.1
7 - 79.7	20 - 123.0	33 - 173.8	46 - 225.7
8 - 82.5	21 - 127.3	34 - 177.3	47 - 229.1
9 - 85.4	22 - 131.8	35 - 179.9	48 - 233.6
10 - 88.5	23 - 136.5	36 - 183.5	49 - 241.8
11 - 91.5	24 - 141.3	37 - 186.2	50 - 250.3
12 - 94.8	25 - 146.2	38 - 189.9	51 - 254.1
13 - 97.4	26 - 151.4	39 - 192.8	

Standard DCS Codes Table

017	054	132	212	263	346	445	523	654
023	065	134	223	265	351	446	526	662
025	071	143	225	266	356	452	532	664
026	072	145	226	271	364	454	546	703
031	073	152	243	274	365	455	565	712
032	074	155	244	306	371	462	606	723
036	114	156	245	311	411	464	612	731
043	115	162	246	315	412	465	624	732
047	116	165	251	325	413	466	627	734
050	122	172	252	331	423	503	631	743
051	125	174	255	332	431	506	632	754
053	131	205	261	343	432	516	645	

MEMORY CHANNEL

In memory channels, you can store frequency and related data which you often use. Then you don't need re-program these data each time. Just by simple operation to recall the channels you needed. There are total 200 memory channels for selection.

Storing Data in Memory Channels

1. In VFO mode, select the desired frequency.
2. Press [**F**]+[**V/M**] key.
 - *A memory channel number appears.*
3. Input 3 digits channel number via keypad.
 - *If the channel selected in the previous step already contained data, the channel number will flash, otherwise, this channel number is not used.*
4. Press [**V/M**] key to complete and return to VFO working mode.
 - *The selected frequency and related data are stored in the memory channel.*
 - *If the channel selected in the previous step already contained data, the new data will overwrite the old one.*

Naming Memory Channels

You can name memory channels using up to 7 alphanumeric characters. When you recall a named memory channel, its name appears on the LCD instead of the channel number. Names can be callsigns, repeater names, names of people, ect. Of cause, this naming can also to be operated by programming software.

■Switching/Setting/Amending/Clearing Memory Channel Name

- 1.In MR/CH/NM mode, use [UP]/[DOWN] key to select your desired memory channel.
- 2.Press [MENU] key to enter menu system.
- 3.Use [UP]/[DOWN] key to select Menu No.20, then press [F] key to confirm.

- The first digit blinks.



- 4.Use [UP]/[DOWN] key to select first alphanumeric character.

- You can choose: "0"- "9", "A"- "Z", "a"- "z", "!", " ", " ", "#", "\$", "%", "&", "(", "(", ")", "*", "+", ",", "-", ".", "/", ":", ";", "<", "=", ">", "?", "@", "[", "]", "^", "_", "`", "{", "|", "}" or a blank.

5. Press [MENU] key to input the next character.
 - *The second digit blinks.*
6. Repeat **Step 4** and **Step 5** to input up to 7 digits.
7. After inputting the 7th digit, press [F] key to finish and exit setting mode.
 - *If want to amend/clear the memory channel name which you just input, press [MENU] key when finish to input the 7th digit, the cursor will move to the first digit, at this time, please operate from **Step 4**.*
 - *If want to set the next memory channel's name, please operate from **Step 1**.*
8. Press [PTT] switch to exit menu system.

Channel Display Function

When this function is switched ON, the transceiver displays only a memory channel number instead of a frequency.

1. In MR/CH/NM mode, use [UP]/[DOWN] key to select a memory channel.
 - *You can't enter this mode unless you program one memory channel at least.*
2. Press [MENU] key to access menu system.
3. Use [UP]/[DOWN] key to select to select Menu No.2 for **Band A** or Menu No.3 for **Band B**, and press [F] key to

confirm selection.

- "NAME" will flash on LCD display.

4. Use [UP]/[DOWN] key to select working mode.

FREQ: display frequency and memory channel number.

CHANNEL: only display memory channel number.

NAME: display memory channel name edited by user.

5. If want to switch this function OFF, please operate from **Step 3~Step 4**.

6. Press [PTT] button to exit setting mode.

Clearing Current One Memory Channel

1. In MR/CH/NM mode, use [UP]/[DOWN] key to select a memory channel which will be erased.

2. Switch OFF the power of the transceiver. Then press and hold [F] key, meanwhile, switch the power ON.

- A confirmation message "RESET ALL 001" appears.



3. Use [UP]/[DOWN] key to select "RESET CURCH 003" menu.



4. Then press [F] key to confirm, the memory channel will be cleared and return back to previous working mode.

Clearing All Memory Channels

1. In MR/CH/NM mode, user [UP]/[DOWN] key to select anyone memory channel which will be erased.

2. Switch OFF the power of the transceiver. Then press and hold [F] key, meanwhile, switch the power ON.

- A confirmation message "**RESET ALL 001**" appears.



3. Use [UP]/[DOWN] key to select "**RESET ALLCH 004**" menu.



4. Then press [F] key to confirm, the memory channel will be cleared and return back to previous working mode.

Initializing Memory

If your transceiver seems to be malfunctioning, initializing the transceiver may resolve the problem. Remember that you need to re-program memory channels after initialization. On the other hand, initialization is a quick way to clear all memory channels.

Note:

While using the Channel or Transceiver Lock function, you can't do Partial Reset nor Full Reset.

■Partial Initialization (VFO)

Use to initialize all settings except the Memory Channels and Memory Channel Lockout.

1. Press [**F**]+Power On.

- A confirmation message appears.



2. Then use [**UP**]/[**DOWN**] key to select "**RESET VFOSET 002**".

- A confirmation message appears.



3. Press [F] key to finish setting and return to VFO mode.

■ Full Initialization (MR)

Use to initialize all settings.

1. Press [F]+Power On.

- A confirmation message "RESET ALL 001" appears.



2. Press [F] key to finish setting.

SCAN

Scan is a useful function for hands-off monitoring of your favorite channels. By becoming comfortable with all types of scan, you will increase your operating efficiency.

Scan Resume Method

Before using scan, it's necessary to decide under what condition you want your transceiver to continue scanning after detecting and stopping for a signal. You can choose one of the following modes.

1. In VFO/MR/CH/NM mode, press [MENU] key to access menu system, and use [UP]/[DOWN] key to select Menu No.33.
2. Press [F] key to choose one of the scan modes.
 - "TO" will flash on LCD display.



3. Use [UP]/[DOWN] key to select circularly from the following 3 modes:

TO(Time-Operated Mode)

Your transceiver stops scanning when detecting a signal, remains for approximately 5 seconds, and then continues to scan even if the signal is still present.

CO(Carrier-Operated Mode)

Your transceiver stops scanning when detecting a signal and remains on the same channel until the signal drops out. There is a 2 seconds delay between signal drop-out and scan resumption to allow time for any responding stations to begin transmitting.

SE(Search-Operated Mode)

Your transceiver stops scanning and remains the current signal when detecting a signal.

4. Press **[F]** key to finish setting and return back to menu system.
5. Press **[PTT]** button to exit menu system and return back to previous working mode.

Scan Operation

Scan allows you to scan all frequencies from the lowest to the highest frequency on the band. The current frequency step size is used.

1. In VFO/MR/CH/NM mode, Press [F]+[3] key to star scan.
 - Scan starts at the frequency currently displayed.
 - To reverse the scan direction, use [UP] (upward scan) or [DOWN] (downward scan) key.
- 2 To quit Scan, press any key other than [UP]/[DOWN] key.

Note:

- In MR/CH/NM mode, there must be 2 memory channels at least.
- The squelch function must be close before scan.

Locking Out Memory Channels

You can lock out memory channels that you prefer not to monitor during Memory Channel Scan.

1. Through one of Menu No.34, 35, 36, 37, 39, 40 to program the long press or short press programmed feature of [P1]/[P2]/[P3] key is: "SCN SW"(Current Channel Scan Add/Del).
2. In MR/CH/NM mode, use [UP]/[DOWN] key to select the memory channel to be lock out/unlock out.

3. Then press the programmed “**SCN SW**” feature key to lockout/unlock out.

- When “**■**” appears on LCD display, it means the current memory channel is not locked out, otherwise, the memory channel is locked out.

Priority Scan

This feature will automatically check a primary channel for activity while receiving a call on a non-priority channel.

1. In MR/CH/NM mode, press [Menu] key to access menu system, use [UP]/[DOWN] key to select Menu No.25.

2. Press [F] key to access setting mode.

3. Use [UP]/[DOWN] key to select your desired priority scan channel.

- You can select **CH-001~CH-200** or **OFF**.

4. Press [PTT] button to save and exit menu system.

PTT ID

PTT ID is a generic term for an ANI-like system used in Two-way radio systems. It provides identification of the transmitting radio over the air, and is commonly used in selective calling/signaling systems.

Note:

Only the DTMF function is switched off, then you can use PTT ID function; if you switch DTMF function on, you can't use PTT ID function even you already switch PTT ID function on.

Switch PTT ID On/Off when receiving

1. In VFO/MR/CH/NM mode, Press [MENU] key to access menu system, and use [UP]/[DOWN] key to select Menu No.31.

2. Press [F] key to access setting mode.

- The menu appears on LCD display.



3. Use [UP]/[DOWN] key to select "ON" or "OFF".

4. Press [F] key to confirm your setting and exit menu system.

Switch PTT ID On/Off when transmitting

1. In VFO/MR/CH/NM mode of B2/B4, use [UP]/[DOWN] key or keypad to select the frequency or memory channel.
2. Press [MENU] key to access menu system, and use [UP]/[DOWN] key to select Menu No.26.
3. Press [F] key to access setting mode.

• The menu appears on LCD display.



4. Use [UP]/[DOWN] key to select circularly from the following 4 types:

OFF(Off): when you press and release [PTT] switch, the transceiver will not transmit PTT ID code.

BOT(Begin of TX) : when you press [PTT] switch, the transceiver will transmit PTT ID code.

EOT(End of TX) : when you release [PTT] switch, the transceiver will transmit PTT ID code before ending of transmitting.

BOTH(Both): when you press [PTT] switch, the transceiver will transmit PTT ID code, when you release [PTT] switch, the transceiver will transmit PTT

ID code before ending of transmitting.


5. Press [F] key to finish setting and return back to menu system.
6. Press [PTT] button to exit menu system and return back to previous working mode.

Transmit PTT ID directly

1. In VFO/MR/CH/NM mode of B2/B4, use [UP]/[DOWN] key or keypad to select the frequency or memory channel.
2. Press and hold [PTT] switch to transmit, when pushing, input ID code via keypad to transmit the relative PTT ID code.

• There are 16 keys, including 0~9, *, #, A, B, C, D.

UP	MENU	DOWN	P2
1	2	3	V/M
4	5	6	0
7	8	9	F



A	B	C	D
1	2	3	*
4	5	6	0
7	8	9	#

3. To finish transmitting, just need to release [PTT] switch.

• After pressing the [PTT] switch or releasing the [PTT] switch, the transmitted tone will be heard, the quantity of transmitted tone is the same as the one of PTT ID code you programmed in

software.

- *If you don't want to hear the transmitted tone, please switch OFF through Menu No.8.*

Transmit PTT ID from Memory

There is a PTT ID code memory. You can transmit it quickly. This function is only operated by programming software.

1.Program the PTT ID code memory by programming software.

- *You can input at most 16 digits PTT ID code, include: A, B, C, D, *, #, 0~9.*

2.Select the desired type of PTT ID.

3. Select the desired frequency/memory channel.

- *Please make sure the PTT ID function is switched on.*

4.Press [**PTT**] switch or release [**PTT**] switch, the PTT ID code will be sent out.

- *After pressing the [**PTT**] switch or releasing the [**PTT**] switch, the transmitted tone will be heard, the quantity of transmitted tone is the same as the one of PTT ID code you programmed in software.*

- *If you don't want to hear the transmitted tone, please switch OFF through Menu No.12.*

DTMF

Using this function, you can select these transceivers which you would like to call.

Switch DTMF function On/Off

1. In VFO/MR/CH/NM mode of B2/B4, use [UP]/[DOWN] key or keypad to select the frequency or memory channel.

- In MR/CH/NM mode, each separate memory channel can be switched on/off DTMF function.

2. Press [MENU] key to access menu system.

3. Use [UP]/[DOWN] key to select Menu No.11.

4. Press [F] key.

- The menu appears "OFF"(default).



5. Use [UP]/[DOWN] key to switch DTMF function ON/OFF.

6. Press [F] key to confirm your setting and return back to menu system.

7. Press [PTT] button to exit menu system and return back to previous working mode.

Transmit a DTMF code directly

1. In VFO/MR/CH/NM mode of B2/B4, use [UP]/[DOWN] key or keypad to select the frequency or memory channel.

2. Press [F]+[DOWN] key.

- The menu appears on LCD display.



3. Input your desired DTMF code via keypad.

- Please input per code in 10 seconds, if over 10 seconds, the system will exit the input mode and return back to previous working mode.
- You can input at most 15 digits DTMF code, include: A, B, C, D, *, #, 0~9.

4. When finish to input the code, press [PTT] button to transmit.

- The transmitted tone will be heard, the quantity of transmitted tone is the same as the one of DTMF code you programmed in software
- If you don't want to hear the transmitted tone, please switch OFF through Menu No.8.

Transmit a DTMF code from DTMF memory

There are 16 DTMF memories. You can select and transmit the desired DTMF quickly. This function is only operated by programming software.

1. Program DTMF memory by programming software.

- You can input at most 15 digits DTMF code in 1~16 separately, include: A, B, C, D, E, F, *, #, 0~9.

2. Select the desired frequency/memory channel.

- Please make sure the DTMF function is switched on.

3. Through one of Menu No.34, 35, 36, 37, 39, 40 to program the long press or short press programmed feature of [P1]/[P2]/[P3] key is: **CALL**(Call function).

4. Short or long press [P1]/[P2]/[P3] key which already programmed Call function, then use **UP**/[**DOWN**] key or keypad to select the Call number.

Remote Stun/Remote Kill

This feature is only operated by programming software or your local dealer.

AUXILIARY FUNCTIONS

Adjusting Squelch Level

The purpose of the squelch is to mute the speaker when no signals are present. With the squelch level correctly set, you will hear sound only while actually receiving signals. The higher the selected squelch level, the stronger the signals must be when receive. The appropriate squelch level depends on the ambient RF noise conditions.

1. In VFO/MR/CH/NM mode, press **[F]**+**[1]** key to switch ON.

- *The current squelch level appears.*



2. Use **[UP]**/**[DOWN]** key to select a squelch level from 0 to 9 (default: **SQL 2**).

- *“Level 0” indicates continuously open setting, “Level 1” is loose squelch (for weak signals) and “Level 9” is tight squelch (for strong signals).*
- *Select just the level at which the background noise eliminated when no signal is present.*

3. Press **[F]** key to complete the setting.

Transmit Output Selection

The transceiver has two output levels to suit your operating requirements. Low output power during short-range communications may reduce the possibility of interference to other stations and will reduce current consumption.

1. Press [F]+[MENU] key to make sure current working band is B2/B4.

2. In VFO/MR/NM mode, press [F]+[2] key to switch ON.

- *The current power output level appears.*



3. Use [UP]/[DOWN] key to select High/Low output power level.

- *If H appears on LCD display, it means the current output is Low, Otherwise.*
- *If L appears on LCD display, it means the current output is Low, Otherwise.*

4. Press [F] key to complete the setting.

Changing Frequency Step Size

Choosing the correct step size is essential in order to select your exact receive frequency.

1. In VFO mode, press [F]+[4] key to enter changing

frequency step size menu.



2. Use [UP]/[DOWN] key to select the step size desired.

- There are 5, 6.25, 10, 12.5, 25, 50, 100KHz and 1MHz for selection.

3. Press [PTT] button to complete the change.

Hands-Free Operated (VOX)

VOX allows you to transmit hands-free with the transceiver or thru a headset. When you stop speaking, VOX will automatically stop transmitting.

1. Press [F]+[MENU] key to make sure the current working band is B2/B4.

2. In VFO/MR/CH/NM mode, press [F]+[B] key to switch ON/OFF.

- The menu appears.



3. Use [UP]/[DOWN] key to select OFF(default)/ON.

- When switch VOX function ON, **VOX** will appear on LCD display.

4. Press **[F]** key to finish setting and return back to previous working mode.

Use VOX function by transceiver itself:

a. Speak to microphone directly and what you said will be transmitted.

b. Stop to speak, then the system will automatically stop transmitting.

Use VOX function by earphone:

a. You must set a VOX gain level firstly. This setting allows the transceiver to recognize sound levels.

b. If the microphone is too sensitive, it will begin transmitting when there is noise in the background.

c. If it is not sensitive enough, it will not pick up your voice when you begin speaking. Be sure to adjust the VOX gain level to an appropriate sensitivity to allow smooth transmission.

FM Radio

Sometimes, you would like to listen to FM broadcast, then you can use this function.

Note: Make sure that the antenna is installed when use FM radio

function, otherwise, the FM radio will not receive any signal.

■ Switch ON/OFF FM Radio Function

1. In VFO/MR/CH/NM mode, press [F]+[MENU] key to select “B1” as current working band. The FM radio function will be turned ON.

- The current FM Radio Frequency will appear on the LCD display.

2. Use [UP]/[DOWN] key to select a frequency, or input digits directly via the keypad (87.500~108.000MHz).

- When use [UP]/[DOWN] key to select a frequency, the frequency will add or reduce according to the current frequency step per your press the [UP]/[DOWN] key.

3. You can use the [Volume] Control to adjust the volume.

4. If you want to switch FM radio function OFF, press [F]+[MENU] key to change working band.

■ Scan FM Radio Channel

Sometimes, you don't know the frequency of broadcast in your location, under this condition, you will find the scan function is quick to find out a broadcast.

1. In VFO/MR/CH/NM mode, press [F]+[MENU] key to select “B1” as current working band. The FM radio function will be turned ON.

2. Press [F]+[3] key. The transceiver will start to scan.

- When a channel to be scanned, the transceiver will stop scanning and show the current broadcast frequency.
- You can only search the stronger FM radio program via Menu No. 14.

3. Use [UP]/[DOWN] key to scan next channel.

4. To exit scanning mode, just press [PTT] button.

■ Set Up FM Radio Memory Channels

1. In VFO/MR/CH/NM mode, press [F]+[MENU] key to select “B1” as current working band. The FM radio function will be turned ON.

2. Select a memory channel number via keypad or use scan function to select a channel, then press [F]+[V/M] key.

3. Input memory channel number via keypad.

- If the channel selected in the previous step already contained data, the channel number will flash, otherwise, this channel number is not used.

4. Press [V/M] key to save and return back to VFO working mode.

■ Recall FM Radio Memory Channel

1. In VFO/MR/CH/NM mode, press [F]+[MENU] key to select “B1” as current working band. The FM radio function will be

turned ON.

2. Press [V/M] key to access FM radio memory recall mode.

- *The FM radio memory channel used last is recalled.*

3. Use [UP]/[DOWN] key to select the desired memory channel.

- *You can not recall empty memory channels.*
- *To return FM radio VFO mode, press [V/M] key again.*

TROUBLESHOOTING

Phenomena	Analysis	Solution
The equipment can not be powered on.	The battery may be improperly installed.	Remove the battery and attach it again.
	The battery may run out.	Recharge or replace the battery.
	The battery may suffer from poor contact caused by dirtied or damaged battery contacts.	Clean the battery contacts. If the problem can not be solved, contact your dealer or authorized service center for inspection and repair.
During receiving signals, the voice is weak, discontinuous or totally inactive.	The battery strength may be too low.	Recharge or replace the battery.
	The volume may be set to a low level.	Increase the volume.
	The antenna may get loose or may be improperly installed.	Power off the radio, and re-install the antenna.
	The speaker may be blocked or damaged.	Clean surface of the speaker. If the problem can not be solved, contact your dealer or authorized service center for inspection and repair.
You can not communicate with other members.	The frequency or signaling may be inconsistent with that of other members.	Set your TX/RX frequency and signaling to the same as that of other members.
	The channel type (digital/analog) may be set inconsistently.	Make sure all members are on the same digital/analog channel.
	You may be too far away from the group members.	Move towards other members.
Irrelevant communications or noises are heard on the channel.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio may not be set with any signaling.	Set signaling for all member radios to avoid interference at the same frequency.

Phenomena	Analysis	Solution
The noise is too loud.	You may be too far away from other members.	Move towards other members.
	You may be at an unfavorable position. For example, your communication may be blocked by high buildings or frustrated in the underground areas.	Move to an open and flat area, and restart the radio.
	You may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.

If the above solutions can not fix your problems, or you may have some other troubles, please contact us or your local dealer for more technical support.