

FOREWORD

Thank you for purchasing our FM two way radio. This easy to use radio will always offer you reliable, clear and high efficiency communication services.









Please read this manual carefully before using this radio, the information presented herein will help you to find the maximum performance, operating method and maintenance of your radio.







CONTENTS

Safety Information-----	
Unpack and check products-----	
Battery Information-----	
Accessories Assembly and Disassembly-----	
Radio Overview-----	
Basic Operations-----	
Operation Mode-----	
Menu Settings-----	
Troubleshooting-----	
CTCSS/DCS Table-----	

Safety Information

Please read the following safety information in order to offer you security and high efficiency during operation.

-  Please turn off the radio before entering and inflammable and explosive area.
-  Do not replace the battery or charging when you are in an inflammable and explosive area.
-  Please turn off the radio when you are close to the blast area or detonator zone.
-  Do not use any radio which has a damaged antenna. It may cause a minor burn when the damaged antenna touches your shins.
-  Do not attempt to dismantle the radio unless professional technical person.
-  To avoid the problems which caused by EMI and EMC, turn off your radios in any places where posted notices "Please turn off your radios". For example, the hospital or other health care places.
-  Turn off your radio before boarding an aircraft. Any use of the radio must be in accordance with airline regulations or flight crew's instructions.
-  If the vehicles have carried with an air bag, do not put your radios within the air bag expand coverage.

-  Do not try to dismantle the machine, and maintained by non-professional people who may do harm to the machine.
-  Do not expose the machine to direct sunshine or lay the machine on over-hot place. High temperature will reduce life span of the electronic components and cause distortion of plastic.
-  Do not lay the transceiver at dusty or dirty place.
-  Please keep the transceiver dry. Raindrop or moist air will erode the circuit.
-  When the portable radio is transmitting, please hold the radio in a vertical position and speak to the microphone.
-  If you carry a radio on your body, please keep the antenna away from your body 2.5cm at least when the radio is transmitting.

FCC Warning Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference including received interference that may cause undesired operation.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

RF Exposure Statement

Our radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only" meaning it must be used only during the course of employment by individuals aware of the hazards and the ways to Minimize Such hazards.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unpack and Check Products

Thank you for purchasing our radio. Before using, we recommend you as below:
Please check the package. Carefully unpack the transceiver to identify the items listed in the table below. If any items are missing or have been damaged during shipment, please contact the suppliers immediately.

Accessories:

Items	Quantity
Transceiver	1
Antenna	1
Li-ion Battery Pack	1
Charger	1
Adapter	1
Belt Clip	1
Screws for Belt Clip	2
Hand Strap	1
User's Manual	1

Main Accessories Images



Antenna



Main Unit



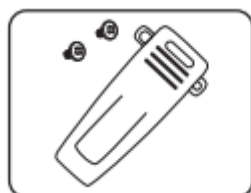
Li-ion Battery Pack



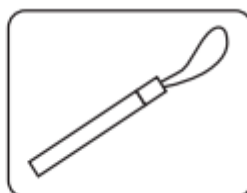
Charger



AC Power Supply



Belt Clip



Hand strap



User's Manual

Note:

Pictures are only for your references; please take the real objects as standard.

Battery Information

Initial Use

New batteries are not charged fully in the factory. Please charge it before using. In general, the battery should charge 4 hours at initial use. The maximum battery capacity and performance is achieved after three times fully battery charge-discharge cycle. When the battery power runs out, please recharge the battery or replace one.

Applicable Battery Pack

Please only use the battery which specified by the manufacturer. Unauthorized batteries may cause the failure of Ex-protection or bodily injury and property damages.

Safety Information

1. Do not throw the battery into fire!
2. Do not abandon the battery as the household garbage, it should be recycled and disposed correctly.
3. Never attempt to disassemble the battery pack.

Notices:

- ◆ When charging your battery, please keep the ambient temperature among 5°C - 40°C.
- ◆ Please turn off the radio when the battery is charging. Using the radio during charging will affect the battery pack to be charged normally.
- ◆ During charging, do not plug in/pull out the power supply or the battery frequently, it would affect battery charging.
- ◆ Do not charge when the battery or radio is wet. Please dry it with a soft cloth before charging.
- ◆ The battery life is over when the operating time is obviously shorter than normal even if it's fully and correctly charged. Please replace a new battery.

To Prolong Battery Life

- ◆ Battery performance will degrade when the current temperature is below 0°C. A spare battery is necessary in cold weather. Please keep the cold batteries, these batteries may work under room temperature.
- ◆ If the battery contact is dusty, it may influence its normal use or normal charge.

Battery Storage

- ◆ Fully charge a battery before you store it for a long time, to avoid battery damage caused by over-discharge.
- ◆ Recharge the battery after several months' storage (Li-Ion/Li-polymer battery: 6 months, NiMH battery: 3 months), to avoid battery capacity reducing caused by over-discharge.
- ◆ When storing your battery, keep it in a cool and dry place under room temperature.

Charging the Battery

Only use the charger which specified by supplier. The charger's LED indicator would show you the charging status.

Please follow these steps to charge the battery:

1. Before charging, please plug the adaptor's cable into the charger's input jack.
2. Connect the adaptor with the AC Power socket. You will see a red light flash then go out.
3. Insert the radio or battery into the cradle of the charger. The LED glows red light and start to charge.
4. The battery charging will last about 4 hours. When the LED glows green, the battery is fully charged.
5. Please cut the power and take out the radio or battery.

Note:

1. Make sure the radio is switched off during charging.
2. Overcharging may affect the battery performance.

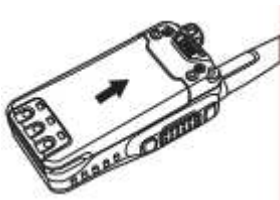


Accessories Assembly and Disassembly

Install & Remove the Battery

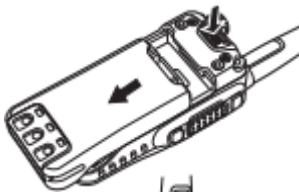
Install the Battery

1. Align the battery pack with the grooves on the chassis of transceiver.
2. Handhold the transceiver, and press the battery pack via thumb and forefinger.
3. Slide the battery pack upward until it is slid into grooves with a 'click'.



Remove the Battery

1. Push the battery pack latch downward to unlock it.
2. When the battery pack is loosened from the groove of transceiver, take out the battery pack.



Installing/Removing the Antenna

Hold the bottom end of the antenna and clockwise screw it onto the mating connector on the transceiver until it is tight. And counter-clockwise screw it off the mating connector on the transceiver.



CAUTION:

Never hold the antenna, and sway the transceiver.

Installing/Removing the Belt Clip

Installing the Belt Clip

1. Line up the holes and insert 2pcs screws.
2. Use the correct fit of screwdriver to tighten clockwise.

Removing Belt Clip

Unscrew 2pcs screws from the holes.



Installing & Removing the Optional Speaker/ MIC/Programming Cable

Install the Optional Speaker / MIC / Programming Cable

1. According to arrowhead direction ① to screw out the screws and take out the SP/MIC Cover ②.
2. Insert the SP/MIC plugs ③ into the corresponding sockets. Refer to the image.



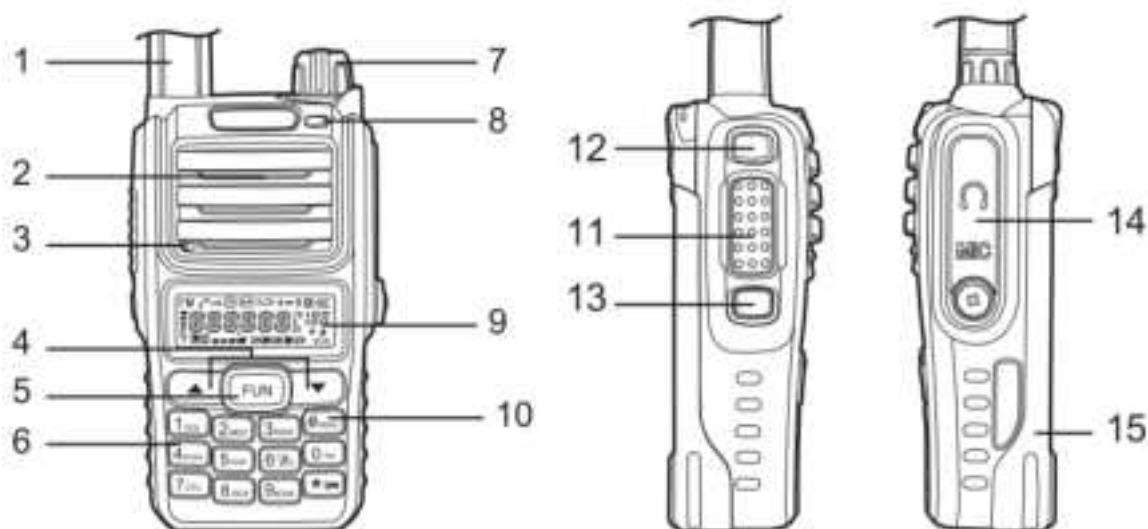
Remove the optional Speaker / MIC/Programming Cable


Take out the SP/MIC plugs.

Note: When using an external SP/MIC, will affect the transceiver's waterproof.



Radio Overview



No.	Unit	Remarks
1	Antenna	Transmit/Receive signals, deliver wider communication coverage
2	Speaker	Broadcast signals and prompt tones
3	MIC	Microphone
4	Up/Down Key	Choose channels/frequencies in the menu status, it can be used in cooperation with other functions
5	FUN key	The key is used with other keys or use for shortcut key functions and exit the menu after finished the operation
6	Numeric key	Press numeric key to change frequency or channel or menu
7	Power supply switch/Volume adjustor	Turn clockwise to turn on the transceiver and turn counterclockwise to turn off the transceiver until a click sounds. Rotate it to adjust the volume level.
8	Status Indicator Light	Receiving: Green Light bright Transmitting: Red Light bright
9	LCD Display Screen	Show some settings of this unit
10	Confirmation/  key	Use to confirm the operation and return standby in the menu status
11	PTT(push to talk) Key	Press and hold the PTT key to transmit, and release it to receive
12	Lamp(Backlight)key	Turn on/off the LCD backlight
13	Monitor key	Press this key to monitor the background noise
14	SP/MIC jack	Dustproof and Rainproof
15	Battery	Supply voltages

LCD Display



	Keyboard lock indicator
	CTCSS receiving/transmitting signal indicator
	DCS receiving/transmitting signal indicator
	Different frequency direction indicator
	Display when reverse frequency function is on
	Save power indicator
	Battery capacity indicator
	Indicator of scanning channels
	Narrow bandwidth indicator
	Display when VOX function is on
	Strong receiving field indicator(The more bars, the stronger signals)
	Low transmitting power indicator
	High transmitting power indicator
	Transmitting power indicator (The more bars, the greater transmitting power)
	Indicator when be in radio status

Basic Operations

Turn on/off Power Supply of Transceiver

Rotate Power Supply Switch / Volume adjustor clockwise to turn on the transceiver with a “Click” sound, and rotate it counter-clockwise to turn off the transceiver with a “Click” sound. Rotate it to adjust the volume.

Adjusting Volume

While press and hold MONI key, rotate Power Supply Switch / Volume Adjustor to adjust volume of transceiver.

Transmission

While press and hold PTT key, speak into the microphone in your normal tone of voice. Please hold the microphone approximately 3-4cm from your mouth.


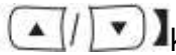



Note:

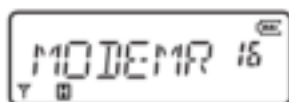
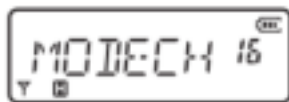
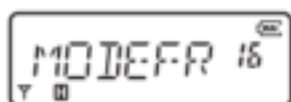
- ◆ When in VOX mode, you don't need to press PTT key and speak into the microphone.
- ◆ When the battery voltage is too low, the transmission will stop and the speaker utter Low Battery Alarm. (See Page 36 for details of “Low Battery Alarm”)

Receiving

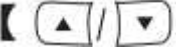
Release PTT key to receive the signals. For getting the best voice, please adjust the proper volume.

Switching Channels


Press  key to enter menu mode. Press  key to choose the tenth menu item, the LCD will show **"MODE"**. Press  key to enter this item, then press  key to choose operation mode **FR/MR/CH**. Press  key to confirm your choice and return to previous menu.



1、Channel (CH) /Memory Mode (MR)



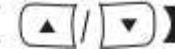
While under Channel / Memory mode, press  key to choose the channels you desired. If the channel you desired is far from the current channel, you can press numeric keys to input the channels NO. you desired directly.

2、Frequency Mode (VFO)

While under frequency mode, press  key to choose frequency, or press numeric keys to input the frequency you desired directly. (This transceiver defaults the frequency step of 25KHz. If you want to change the frequency step, refer to the "STEP" function of page 25.)


Storing the Channels


While under frequency mode, input the frequency you want to store.

Press  +  key, the LCD will show "SAVE?", then press  key or numeric keys to change the flickering number on the top right corner (If you store the frequency in 21th channel, input 21. The maximum channel number is 199.).



Press  key to confirm (will show OK) and return to standby status.


Deleting the Channels



When you want to delete a channel, for examples: 15th channel, turn back memory mode and choose the 15th channel, then turn off the supply power of transceiver. Hold on  key and turn on the supply power, the LCD will show **"DEL? 15"**.

Press  key to confirm, the radio will speak out an alarm and return to standby status. It means this channel is deleted successfully.

Scanning

In channel / memory mode, press  +  key to scan the channels which be set **"SCN.ADD"**(See page 27. Refer to the details of **Scan ADD/DEL** function.).



Press  key to adjust the direction of scanning. If you want to use the Priority Channels function, refer to page 28.

In frequency mode, press  +  key to scan the frequencies according




to the frequency step (see page 25) and scan mode (see page 31).

Press  /  key to adjust the direction of scanning.

Reverse frequency


Press  +  to active this function. This function will reverse the transmission frequency and receiving frequency, including the CTCSS/DCS encode and decode.








Cloning

Use clone cable to connect two transceivers via SP/MIC jack. First turn on supply power of SUB unit (cloned one). Then hold on **MONI** key of MAIN unit and turn on supply power. The LCD of MAIN unit will show “**CLONE?**”. Press  key of MAIN unit, the LCD will show “**CLONE**”. It means MAIN unit is transferring the data to SUB unit. If the data transfer is successful, the LCD will show “**SUCCESS**”. Here press any key (except PTT/MONI/LAMP/ key) to exit clone status. If the data transfer is defeated, the LCD will show “**ERROR**”. Please check the all operation steps and cable connections, then press  key to clone again.

Operation Mode

Shortcut Key Operation

Press  key, then press numeric keys to enter corresponding items. The functions operated by shortcut key are same as menu function. But the operation is more simple and convenient.

Shortcut Key	LCD Screen Display	Function Description	Parameter Settings / Selection	Ref. Page
	SQL	Squelch Levels Settings	00, 01, 02.....09	
	MEM	Use the saved frequency	001-199	
	MODE	Operation Mode Switch	FR/MR/CH	
	POW	High / Low Power Settings	H/L	
	VOX	Voice-operated Transmission Levels Settings	OFF,1,2,3.....9	
	C	CTCSS/DCS Encode /Decode Settings	OFF, 51CTC/107DCS	
	R	CTCSS/DCS Decode Settings	OFF, 51CTC/107DCS	

	T	CTCSS/DCS Encode Settings	OFF, 51CTC/107DCS	
	Nothing	Scan Mode	Nothing	
	RADIO	FM radio	Nothing	
	REV	Reverse frequency	Nothing	
Hold on 		Keyboard Unlocking	Lock/Unlock	
	SAVE	Storing Channels	001-199 Channel	

Menu Mode

Press key to enter menu mode, then press key to choose menu.

Press the key to confirm operation and return to previous state.

Menu NO.	LCD Screen Display	Function Description	Parameter Settings / Selection	Ref. Page
1	SCAN	Scan modes setting	CO/TO	
2	VOX	Voice-operated Transmission Levels Settings	OFF, 1,2,3...9	
3	BEP	Beep Sound Settings	OFF/ON	
4	KY	Keyboard Lock Mode Settings	AUTO/MANU	
5	MEM	Memory channel settings	001-199	
6	LED	Backlight Settings	AUT/ON/OFF	
7	POW	High/Low Power Settings	H/L	
8	SQL	Squelch Level Settings	OFF,1,2,3...9	
9	SAV	Power Saver ON/OFF	OFF/ON	
10	MODE	Operation Mode Switch	FR/MR/CH	
11	C	CTCSS/DCS Decoder & Encoder Settings	51CTS/107DN S	
12	R	CTCSS/DCS Decoder Settings	51CTS/107DN S	
13	T	CTCSS/DCS Encoder Settings	51CTS/107DN S	
14	OFFSET	Offset Value Settings	OKHz-70MHz	
15	SFT	Offset Direction Settings	OFF/+/-	
16	STEP	Frequency Step Settings	5K/6.25K/10K/12.5K/25K	
17	FMR	FM Radio Monitor Transceiver Signals	OFF/ON	
18	SCN	Scan Addition / Deletion	ADD/DEL	
19	NAM	Naming Channels Switch	OFF/ON	

FM Radio Mode

Under the standby status, press **[FUN] + [0]** key, the radio will

enter FM radio mode. Press **[▲/▼]** key or numeric keys to input the broadcasting station frequencies you desired. The radio can receive the broadcasting station frequency band from 76.00MHz to 108.00MHz. If you don't know which stations are in action, you can press **[*]** key to scan the stations. When scan and find any one station frequency, it will stop scanning and rest on current station frequency. If you want to scan other stations, press **[*]** key again to continue scan. For you are simple and convenient to listen in the radio, you can press **[#]** key + 1-9 any one numeric key to store this station frequency (The radio can store maximum 9 station frequencies.). When you want to listen in the station you stored, press

[FUN] key+ corresponding numeric key to take out this station. If you want to exit the FM radio mode, repeat to press **[FUN] + [0]** key.

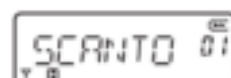
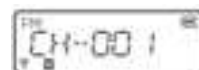
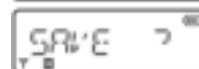
Note: If you turn on the “**FMR**” function (see the page 32 for details) under transceiver mode, the transceiver can transmit / receive the signals under FM radio mode. No matter what transmitting / receiving, it will switch to transceiver mode, but the top left corner of LCD will show “**FM**”. When the transmitting and receiving is finished for 10s, and haven't any operation to keyboard during the 10s, the transceiver will automatically return to FM radio mode.


Menu Settings

Under the standby status, press **[#]** key to enter menu mode. Press **[▲/▼]** key to choose menu item, and press **[#]** key to enter this item. press **[▲/▼]** key to choose settings or parameter. Lastly, press **[#]** key to confirm settings or parameter and return to previous menu. Or press **[FUN]** key (except CTCSS/DCS function) to confirm settings or parameter and return to standby status.


SCAN: Scan Mode Settings

Under the menu mode, press **[▲/▼]** key to choose the first menu item, the LCD will show “**SCAN**”. Press **[#]** key to enter, then press **[▲/▼]** key to choose scan mode **CO/TO**. Press




 key to confirm your choice and return to previous menu.

TO (Time Scan): In this mode, press  +  key to start the scan function.

Press any key (except  key) to stop scan and return to standby status.

When scan and find a signal, the scan will rest on this channel 5 seconds. Here, press PTT key to stop scan and rest on this channel to transmit. Or else after 5 seconds, if you don't make any operation, it will continue to scan other channels.

CO (Carrier Scan): In this mode, press  +  key to start the scan function.

Press any key (except  key) to stop scan and return to standby status.

When scan and find a signal, the scan rest on this channel. Here, press PTT key to stop scan and rest on this channel to transmit. Or else when the signal disappears 5 seconds, it will continue to scan other channels.

VOX: Voice-operated Transmission Levels Settings

Under the menu mode, press  key to choose the

second menu item, the LCD will show “VOX”. Press  key to

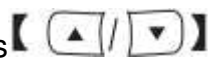
enter, then press  key to choose VOX levels

(**OFF,1,2,3.....9**) . Press  key to confirm your choice and return to previous menu.





Note: VOX function causes the unit to transmit without using the PTT key by simply speaking into the microphone. The higher VOX level, the less voice you need to speak into. But it is easier to be affected by background noise.

BEP: Beep Sound Settings

Under the menu mode, press  key to choose the third menu

item, the LCD will show “BEP”. Press  key to enter, then

press  key to choose beep sound **OFF/ON**. Press

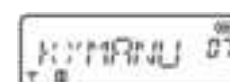
 key to confirm your choice and return to previous menu.


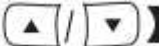



Note: This function is not only key-press beep sound, but also support the alarm sound when the transmission is abnormal

KY: Keyboard Lock Mode Settings

Under the menu mode, press  key to choose the fourth



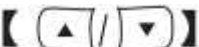

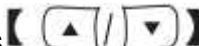

menu item, the LCD will show “KY”. Press  key to enter, then press  key to choose keyboard lock mode **AUTO/MANU**. Press  key to confirm your choice and return to previous menu.

AUTO: In this mode, the keyboard automatically is locked when it has not any operation within 30s.



MANU: In this mode, the keyboard isn't automatically locked, except lock it by manual.

Note: When the keyboard is locked, **PTT/MONI/LAMP/EMER** key can be used availably.

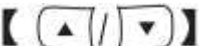


MEM: Emergency Channel Settings

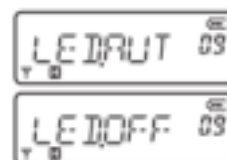
Under the menu mode, press  key to choose the fifth menu item, the LCD will show “MEM”. Press  key to enter, then press  key to choose channel1-199. Press  key to confirm your choice and return to previous menu.




Note: Press shortcut key  +  can use the already set channels.

LED: Backlight Settings

Under the menu mode, press  key to choose the sixth menu item, the LCD will show “LED”. Press  key to enter, then press  key to choose backlight mode **AUT/OFF/ON**.





Press  key to confirm your choice and return to previous menu.

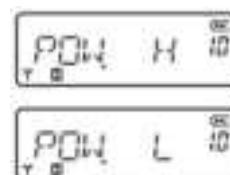
AUT: In this mode, press any key, the LCD / keyboard backlight will illumine automatically.

OFF: In this mode, backlight will not illumine under any operation or status, except you press LAMP key.

ON: In this mode, backlight still illumine even though haven't any operation. If you want to turn off, press LAMP key.

POW: High / Low Power Settings

Under the menu mode, press  key to choose the seventh menu item, the LCD will show “POW”. Press  key to

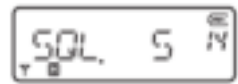


enter, then press **【▲/▼】** key to choose power **H/L**. Press **【#MENU】** key to confirm your choice and return to previous menu.

Note: The higher power, the farther communication distance. But waste more battery capacity.

SQL: Squelch Levels settings

Under the menu mode, press **【▲/▼】** key to choose the eighth menu item, the LCD will show “SQL”. Press **【#MENU】** key

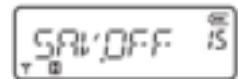
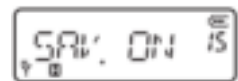


to enter, then press **【▲/▼】** key to choose squelch levels (0, 1, 2.....9,). Press **【#MENU】** key to confirm your choice and return to previous menu.

Note: The higher level, the lower squelch noise you can receive.

SAV: Power Saver ON/OFF

Under the menu mode, press **【▲/▼】** key to choose the ninth menu item, the LCD will show “SAV”. Press **【#MENU】** key to enter, then press **【▲/▼】** key to choose power saver **ON/OFF**.



Press **【#MENU】** key to confirm your choice and return to previous menu.

MODE: Operation Mode Switch

Under the menu mode, press **【▲/▼】** key to choose the tenth menu item, the LCD will show “MODE”. Press **【#MENU】** key to enter, then press **【▲/▼】** key to choose operation mode **FR/MR/CH**.



Press **【#MENU】** key to confirm your choice and return to previous menu.

FR: Frequency mode.







CH: Channel mode.

MR: Memory mode.

C: CTCSS/DCS Decoder & Encoder Settings

Under the menu mode, press **【▲/▼】** key to choose the eleventh

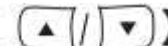








menu item, the LCD will show “C”. Press  key to enter, and press  key to switch OFF/CTCSS/DSC. Press  key to confirm your selection, and when you confirm the CTCSS or DCS item, press  key to choose the coder (When in DCS status, press  key to switch N/I.) Press  key to confirm your choice and return to previous menu.

Note:





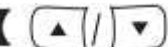


1. There are 51 CTCSS and 107 DCS and non-standard 67.0-232.5/023N/I-754N/I CTCSS/DCS for your choice.
2. CTCSS (Continuous Tone Coded Squelch System) / DCS (Digital Coded Squelch) allows you to ignore unwanted calls from other persons who are using the same frequency with different CTCSS/DCS. When you receive the signal with different CTCSS/DCS, you can't hear the calls, but the status indicator light will be green. Your transmission can only be received by the transceiver with same CTCSS/DCS.
3. The CTCSS/DCS decoder settings allow you to ignore unwanted calls.

R: CTCSS/DCS Decoder Settings

Under the menu mode, press  key to choose the twelfth menu item, the LCD will show “R”. Press  key to enter, and press  key to switch OFF/CTCSS/DSC. Press  key to confirm your selection, and when you confirm the CTCSS or DCS item, press  key to choose the decoder (When in DCS status, press  key to switch N/I.) Press  key to confirm your choice and return to previous menu.



T: CTCSS/DCS Encoder Settings

Under the menu mode, press  key to choose the thirteenth menu item, the LCD will show “T”. Press  key to enter, and press  key to switch OFF/CTCSS/DSC. Press  key to confirm your selection, and when you confirm the CTCSS or DCS item, press  key to choose the encoder (When in DCS status, press  key to switch N/I.) Press  key to confirm your choice and return to previous menu

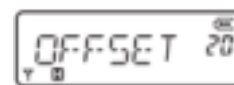


Note: Using the CTCSS/DCS encoder can prevent your calls to be heard, but it does

mean your calls will be private.

OFFSET: Offset Value Settings

Under the menu mode, press **【▲/▼】** key to choose the fourteenth menu item, the LCD will show “**OFFSFT**”. Press **【#MENU】** key to enter, then press the key or numeric keys to choose offset value (**0KHz-70MHz**) .



Press **【#MENU】** key to confirm your choice and return to previous menu.

Note: This function just is operated under the frequency mode. If the offset value you setting is too big, it may result in the transmission frequency go beyond the frequency range of transceiver. So that the transceiver will be forbidden to transmit, and utter “du” sounds.

SFT: Offset Direction Settings

Under the menu mode, press **【▲/▼】** key to choose the fifteenth menu item, the LCD will show “**SFT**”. Press **【#MENU】** key to enter, then press **【▲/▼】** key to choose offset direction OFF/+/- . Press



【#MENU】 key to confirm your choice and return to previous menu.

+: Positive offset direction.

-: Negative offset direction.

Note: This function only work under VFO mode.

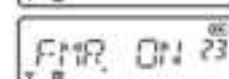
STEP: Frequency Step Settings

Under the menu mode, press **【▲/▼】** key to choose the sixteenth menu item, the LCD will show “**STEP**”. Press **【#MENU】** key to enter, then press **【▲/▼】** key to choose frequency steps (**5K/6.25K/10K/12.5K/25K unit:Hz**) . Press **【#MENU】** key to confirm your choice and return to previous menu.



FMR: FM Radio Monitor Transceiver Signals

Under the menu mode, press **【▲/▼】** key to choose the seventeenth menu item, the LCD will show “**FMR**”. Press **【#MENU】** key to enter, then press **【▲/▼】** key to choose this function **OFF/ON**.



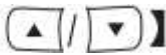


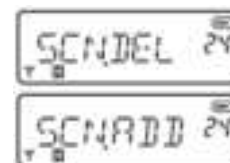
Press **【#MENU】** key to confirm your choice and return to previous menu.


OFF: Under the FM radio mode, transceiver cannot receive / transmit the signals.

ON: Under the FM radio mode, transceiver can receive / transmit the signals.

SCN: Scan Addition / Deletion

Under the menu mode, press  key to choose the eighteenth menu item, the LCD will show “SCN”. Press  key to enter, then press  key to choose scan **ADD/DEL**.






Press  key to confirm your choice and return to previous menu.


ADD: Add the current channel into scan group.

DEL: Delete the current channel from the scan group.

NAM: Naming Channels ON/OFF

Under the menu mode, press  key to choose the nineteenth menu item, the LCD will show “NAM”. Press  key to enter, then press  key to choose naming channels



ON/OFF. Press  key to confirm your choice and return to previous menu.

Note:

1. If you don't turn on this function, even though you edit the name into channels, the LCD still don't show naming.
2. You can edit the channel name via programmable software.

TROUBLESHOOTING

Symptom	Possible Cause and Solvent
No power supply	<ul style="list-style-type: none">•The battery pack is exhausted. Please replace or recharge the battery pack.•The battery pack isn't installed correctly. Remove and re-install the battery pack.
The battery pack is exhausted soon, even though it just is recharged.	The life of battery pack is over, please replace it.
The transceiver can't communicate with others in your group.	<ul style="list-style-type: none">•Please check and confirm your settings of frequency and CTCSS/DCS whether they are same as other users in your group.•May other users far away from you. Please check and confirm your transceiver is within available range with others or not.
Hear the calls from other	Please reset the CTCSS/DCS of all transceiver in your

users who are in different groups with you.	group.
The transceiver tweet continually.	The current channel is nothing frequency. Please choose other channels, or store a frequency into this channel.