

VHF/UHF Wide-band FM Handheld Transceiver

**GP-888** 

In-built DCS/CTCSS/DTMF

# **USERS INSTRUCTIONS**

- Decree point that the handle is not allowed without permission in the governed area.
- Lawless operation will be catch up penalty or arrested.
- Service only for qualified technicians only.

### SAFETY

 It's important that the operator is aware of, understands, hazards common to the operation of any transceiver.

# **A**CAUTIONS

Do turn off the power of transceiver while fuelling or parking in a gasoline service station.

Pay more attention to the environment (gas, powder and smog).

# NOTICE BEFORE USING

Please observe the following precaution to avoid fire, personal injury, and damage of the transceiver:

We recommended when using this transceiver in transmitting for one minute, then receive for four minutes.

Continuously transmitting in high power may lead to the back of the transceiver become too hot.

- Do not place the hot back of transceiver in any surface of plastic:
- Do not modify or attempt to adjust this transceiver for any reason.
- Do not place the transceiver under direct sunlight for a long time.
- Do not place the transceiver close to the heating appliances.
- Do not place the transceiver in excessively dusty or humid areas, or on unstable surfaces.
- If an abnormal odor or smoke is detected coming from the transceiver, turn off the power immediately, and take off the battery pack and its case. Contact with local dealer.

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# UNPACKING AND CHECKING EUIPMENT

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

# SUPPLIED ACCESSORIES

	Item	Quantity
	136-174MHz	
Antenna	400-440MHz	THE RELEASE
Aitterina	400-470MHz	1
	440-480MHz	
Li-ion battery		1
Charger		1
Gallus		
Belt Clip		
Screw set		1
The state of the s		1
Instruction ma	nual	1







Li-ion battery



Belt Clip



Screw set



Instruction manual



Gallus

# PREPARATION

# CHARGE THE Li-ion BATTERY PACK

Please charge the Battery pack before you use it, because the battery pack was uncharged against delivery. The first charging after purchasing or keeping for more than two months without using can not achieve normal battery capacity. After repeating the charge/discharge cycle for two or three times, the operating capacity will increase to normal.

## HOW TO CHARGE THE BATTERY

- Plug the AC adaptor into the AC outlet, then plug the cable of adaptor into the socket at the back of charger the charger LED lights green.
- Slide the Li-ion battery pack or transceiver with a Li-ion battery pack into the charger.
  - a. Make sure the battery pack contacts are in contact with the charging terminals.
  - b. The charger LED lights and charging begins.
- 3. LED lights orange when it is 90% fully charged.
- 4. LED lights green when it is 100% fully charged.

# NOTE

- After charging the supplied battery pack for 6 hours, remove it or transceiver equipped with the battery from the charger.

  Please do not charger for over 8 hours; Please do not place it
- in charger for recharging; over-charging will shorten the life of the battery and effect its performance

## NOTICE FOR CHARGING LI-ION BATTERY

- Use the specific charger only for this model. Dont modify the battery and charger. We show no responsibility on the faulty causing by modifying freely without permission of our factory.
- ◆ The ambient temperature should be between 5 and 40°C, charge outside this temperature range may not fully charge the battery.
- Always switch OFF the transceiver equipped with a Li-ion battery pack before charging.
- Using the transceiver while charging its battery pack will effect correct charging.
- The battery pack life is over when its operating time decreases even though it is fully and correctly charged.
   Please replace the battery pack.
- Do not charge the Li-on battery with the charger for Ni-MH. Their charging ways are different. It is easy to cause overcharging.
- Also do not charge it with charger for other kinds of Li-on battery, or will enjoy the same risk of overcharging. Li-on battery can not release electricity greatly.
- When it is used to near the voltage, which is not allowed to release electricity. It should be taken out from transceiver.
- Do not press tightly to the used battery.
- ◆ Do not fire or remove it as well
- Do not use it outside the temperature range.

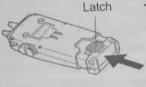
# HOW TO RESEARVE THE BATTERY

- 1. If the battery needs to be stored .the battery should keep in the status of 50% charging.
- 2. It should be keep in low temperature, dry environment.
- To keep away from hot places, include the place where the sunshine is too strong.

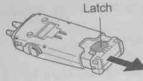
# INSTALL/REMOVE THE LI-ION BATTERY BATTERY PACK

# A CAUTION

- Do not short circuit the battery and put battery into fire.
- Do not try to removed the housing of battery pack.
- Do not install battery in the danger circumstance, it may cause explosion.
- Do not place them in hot place or put into the fire, in case explosion.



 Slide the battery pack along the back of the transceiver until the releases latch on the base of the transceiver locks.

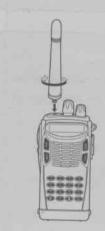


 To remove the Battery pack, press the release latch and slide the pack away from the transceiver. The transceiver performs best when the Li-ion battery pack is fully charged, especially for long-time transmitting or continuous use.

If there is no Li-ion battery pack, we suggest using alkaline battery, it should be packed in specific battery case.

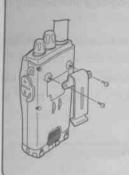
When installing or removing the battery. Please check the above mentioned "Install the battery in battery case" to operate.

### INSTALL THE ANTENNA



Screw the bottom of the antenna into the connector on the top of the transceiver, turn clockwise to be tightly fastened.

### INSTALL BELT CLIP

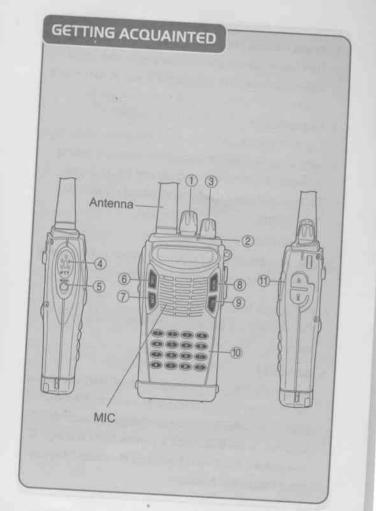


If necessary, attach the belt clip using the two supplied 3 X 4mm screws.

### INSTALL GALLUS



Interlude hand strap to the clasp on the right circle of the transceiver.



# 1. Power (on/off) / volume control

Turn clockwise to switch on the power and adjust volume control. Turn counterclockwise to turn off the power.

### 2. Led indicator

Lights red while transmitting, Lights green while receiving a signal. Flash orange when receiving setting squelch, choosing calling code and DTMF signal. Flashes red when the battery voltage is low while transmitting.

## 3. Circumrotate encoder

Circumrotate to select channels. When setting power level, also work with other functions.

# 4. PTT (push to talk)

Press, and then speak into the microphone to transmit.

# 5. MONI Key

According to how to program this key, press to monitor the choosing channel (refer to "Monitor"). Also work with FUNC key to change QT code of the channel, to set BCL, wide & narrow band and high & low power; Work with DIAL key to realize "Keypad input frequency" function.

## 6. Dial (dial-up) key

Use to memory/affirm/transmit and delete DTMF number (refer to "DTMF Calling"). Also work with FUNC key to lock up the transceiver keypad and scramble frequency function.

# 7. Func (function) key

Press or press continuously to unlock other functions.

# 8. Scan (scan) key

Work with FUNC Key to keep channels outside the scanning and to set the conditions of displaying screen light of the transceiver.

### 9. Low key

Under displaying mode. Press [ Low ] key to check year month date and hour minute week.

Also work with FUNC key to set squelch and VOX gain.

# DTMF (dual-tone multi-channel) keypad Use to store and transmit DTMF number.

### 11. Mic-sp jack

Connect loudspeaker/microphone bought by users.

### SCREEN DISPLAY

Icon	Instruction
_	Displays when monitoring the channels (Squelch open)
А	Displays when the selected channels are included in the scan list. It will not display when the channel is outside of the scanning.
888888	Displays the working frequency or channel number, menu settings and other functions selecting.
88	Displays all kinds of numbers as per selected functions.
R	Displays when the scramble frequency function is o
VOX	Displays when the VOX function is on.
	While receiving, it means signal strength (the more, the stronger), While transmitting, it means power (the more, the higher).
	Displays when pressing the FUNC key.
10	Display when the transmitting in low power.
+	Display when using Keypad lock funtion
Q	Display when alarm function is on
A	Display when using narrow band
DCS	Display when using DQT function
CT	Display when using QT function
	Display when using slip frequency function
75 50 .25	Mantissa of frequency

## **BASIC OPERATIONS**

### **SWITCH ON/OFF POWER**

Turn clockwise to switch on the transceiver and adjust volume control, turn counterclockwise to switch off the transceiver.

### **VOLUME CONTROL**

Turn clockwise to turn up the volume. Turn counterclockwise to turn down the volume.

 When communicating with others, you need to adjust the volume correctly.

# <u></u> NOTE €

 When adjusting the volume, press MONI key to monitor the background noise (refer to "Monitor")

### **CHOOSE DISPLAYING MODE**

This model enjoy four kinds of displaying mode: Channel, Clock plus channel, Frequency plus channel and Full range of frequency.

- ◆ Press [ DIAL ] key + [ LOW ] key for Channel
- ◆ Press [ DIAL ] key + [ FUCN ] key for Clock + channel
- ◆ Press [ DIAL ] key twice for Frequency + channel
- Press [ DIAL ] key + [ SCAN ] key for Full range of frequency

Press DIAL for 1 second until a prompt voive sounds "F" falshes on the screen, and then press LOW to dispaly channels.

# NOTE

 Press "LOW to view year, month, date and hour minute, week under the displaying mode of Clock + Channel

### **CHOOSE CHANNEL**

Under the display mode of Channel, Clock + channel and Frequency + channel

Circumrotate encoder to choose needed channel. Turn clockwise to increase the channel number, turn counterclockwise to decrease the channel number. Choosing number will display on the screen.

### CHOOSE FREQUENCY

Under the displaying mode of full range of frequency, Choose frequency is valid function. Circumrotate encoder to choose needed frequency, Turn clockwise according "stepping" to increase frequency; Turn counterclockwise, according "stepping" to decrease frequency. The frequency chose will display on the screen.

# **⚠** NOTE

 Please select the related "stepping" Circumrotate encoder to increase/decrease (Refer to setting of "stepping")

### KEYPAD INPUT FREQUENCY

Under frequency displaying mode, keypad input frequency is valid function, you can input frequency you need directly by digits keys.

When inputting, Press [ **Dial** ] key, then [ **MONI** ] key to enter the mode of inputting frequency. Then Input the frequency in keypad. Press any key to end the setting.

# **⚠** NOTE

- Frequency range is something to do with the frequency of the transceiver and stepping. When the Frequency is not within the frequency range of transceiver, and then cannot be input.
- Frequency input will display in the screen.

### ADJUST SQUELCH

When there is no signal, squelch function can mute loudspeaker. When squelch function is on, you will hear the background noise from the loudspeaker, while the squelch is closed, you will not hear the background noise. The squelch level you choose will decide when your squelch is open or off. If the level is too high, you cannot get weak signal; If the level is too low, the signal will appears in the background noise.

### How to adjust squelch:

Pressed FUNC key first and press LOW key.
It will display "—Sql" and the current squelch level.
Turn the encoder from 0 (open) to 9 (tightest) to select the squelch level.

Turn clockwise to increase the squelch level, turn counterclockwise to decrease the squelch level. Pressed any key to end the setting

Return to normal operation.

### TRANSMITTING

As per the different setting for the monitor function, press [ MONI ] Key to monitor the loudspeaker for a moment and confirm there are not broadcasting station is transmitting on the selected channel.

Press [PTT] switch, and then speak into the microphone. Please keep the transceiver about 3~4 cm far away from mouth. Speak in usual tone in order to get best performance, when pressing PTT switch, LED red. Release [PTT] switch to receive.

### RECEIVING

If the working channel is called and the LED green, you can hear the call.

If the signal is weak and you have set the higher squelch level, or you might miss the call.

Local dealer may program the QT/DQT. You only could receive calling from the station that selected the same QT/DQT as yours. Other calling cannot be heard.

# SCANING

### CHANNEL SCAN

Under the displaying mode of Channel, Clock + channel, Frequency +channel, Scan is valid function, which is used to monitor the signal from programmed channel in the transceiver. When scanning, transceiver will check all the channels and only stop in the channel with signal.

# **⚠** NOTE

- Scan will quit in the channel outside of scanning.
- When the frequency you set is not within the frequency range, it will alert you that "out of lock" when scan this frequency, then continue scanning.

Transceiver will keep in working channel until the signal disappears. Two seconds later, scanning will come back unless it scan new signal within these two seconds.

# **⚠** NOTE

You can only use the scan function when your local dealer program at least two channels, at the same time there are at least two memory channels that not to be set to be outside of the scanning. Press SCAN key to begin scan.

Scan starts from current channel, and channel number rise gradually.

Screen Display "SCAN"

Press any key except MONI to end the scanning.
When scan quit in a specific channel, the dot between "CH" and channel number will flash.

### **FREQUENCY SCAN**

Under displaying mode of Frequency, frequency scan is a valid function. It is used to monitor the signal in every frequency under the setting of stepping.

# **⚠** NOTE

- Full range of frequency scan will scan as per the frequency under the setting of stepping please refer the setting of stepping.
- When the frequency scanned is over the frequency range of transceiver it will turn to the lowest frequency to increase as per "stepping".

The transceiver will stay in the frequency with signal until the signal disappears. Scan will return four seconds after signal disappear, unless it scan new signal within these four seconds

Press SCAN key to begin scan.

Frequency increase as per the setting of stepping.

Screen Display "SCAN"

Press any key except MONI to end the scanning.

### **DELETE SCAN**

The user can choose a specific channel to be outside the range of scanning. Please do as following: Circumrotate encoder to choose the specific channel to set it outside of the range of scanning

Press [ FUNC ] key, and then [ SCAN ] key

Repeat this operation, channel will alternate between scan and non-scan

When the channel is in scanning, [A] will displays in the screen. The channel outside the range of scanning will never display [A] in screen.

#### RETURN TO THE STANDBY CHANNEL

Press [ PTT ] to end scanning when you are scanning at any time. Then return to standby channel.

When transmitting, you need to release [ PTT ], then press [ PTT ] again.

#### **CHANNEL STANDBY**

You can press [ PTT ] switch to end the scanning and return to the standby channel during the scanning.

You must release [ PTT ] switch, and press [ PTT ] switch again when transmitting.

# DTMF CALLING

### Manually calling

- There are two ways to dial manually, and this two ways only can be used when pre-set by local dealer.
   Press PTT, then enter the digits in the keypad. If the local dealer programmed it, you needn't to press PTT continuously.
  - Press PTT, then enter the first digit you needed, release it, the transceiver will keep transmitting within 2 seconds, you need not keep pressing PTT to dial.
  - When transmitting DTMF, micro speaker will be mute, you can monitor the frequency through loudspeaker.
- Enter the needed digits in the keypad first (16 digits maximum).
   When enter every digit in the screen, it will sound DTMF tone separately.

Press the DIAL key to transmitting after entering the needed digits

Digits scroll display in the screen and sound DTMF tone separately.

If programmed by the dealer, it will not sound DTMF tone when transmitting "D". "D" is used to pause, and the pause time programmed by the local dealer.

#### Save DTMF numbers

You might store DTMF number in nine automatically dialing DTMF memory unit (16 digits maximum)

Press DIAL to enter the dial-up mode

Screen displays "-----d"

Press [#] to select store mode

Enter the digits in the keypad.

If you input incorrect digit, press [ MONI ] key to clear it and enter the correct one.

Press [ **DIAL** ] key and enter digits of the memory channel numbers (1 to 9).

Return to the former display.

### **Confirming saved DTMF numbers**

When confirming:

Press DIAL key to enter dial-up mode

Screen displays "----d"

Press [ \* ] to enter confirmed mode

Enter the needed memory unit number (1 to 9).

The screen displays the saved number and sound

DTMF tone separately.

Return to former display automatically.

### Call saved DTMF numbers

Calling numbers in memory unit:

Press DIAL key to enter the dial-up mode

Screen displays "-----d".

Enter the memory unit number (1~9)

Display the saved numbers and transmit.

Return to former display automatically.

#### Delete stored DTMF numbers

To delete numbers in memory unit:

Press [ DIAL ] key to enter the dial-up mode

Screen displays "-----d"

Press [ D ] to enter the delete mode

Screen displays "Clr d"

Pressed any key except digit key form 1 to 9 to cancel the operation.

Input the memory unit numbers (1 to 9)

The selected memory unit is deleted

Return to former display automatically

#### Redial

Redial the last transmitted number (16 digits maximum)

Press the [ DIAL ] key to enter the dial-up mode

Screen displays "-----d"

Press [ D ] to dial the last transmitting number

# **⚠** NOTE

It will delete the redial memory to turn off the power of transceiver.

### QT/DQT

The local dealer might have programmed QT or DQT in your transceiver.

You only could hear the call from the broadcasting station with the same QT or DQT if the selected channel has been programmed these functions.

This function can help you to ignore some unnecessary callings. Although it seems that you have own channel when using QT/DQT function but if other transceivers set the same code as you do. The broadcasting station still can get your calling.

### **AUXILIARY FUNCTIONS**

### **LOCK-OUT KEYPAD**

Avoid operating transceiver without correct cooperation. To lock keypad, pressed [ FUNC ] key for more than 1 second and pressed [ DIAL ] key. Screen display "+". When keypad is locked, all the keys are valid except PTT, MONI and FUNC.

To unlock it, pressed [ FUNC ] key for more than 1 second and pressed [ DIAL ] key again.

### TOT (TIME-OUT TIMER)

#### Time-out timer

Time-out timer use to avoid a dial take up one channel for too long time.

If you transmit for more than setting time (the original setting time is three minutes), the transmitting will stop and alert. Release PTT key to stop alerting.

The local dealer can program TOT function.

- 1. It will alert when time surpasses the setting time.
- Pre-set the delay time after you finish transmitting in setting time. You can not transmit within this delay time.

3. Pre-set the return time of TOT function. When this function is valid, if your receiving time is less than the return time of TOT function, you can not transmitting. Only when it reach the return time of TOT function. You can transmit again.

#### LIGHTENING

You can set the lightening function to be automatism, connection or off.

When it is set to be automatism, the light in screen will lighten for 5 seconds.

When it is set to be connection, the light in the screen will lighten when the power of transceiver is on. When it set to be off. The light in screen will not work.

### **Setting of lightening**

- Press [ FUNC ] key for more than 1 second, then press [ SCAN ] key
- 2. Circumrotate Encoder to select the setting you need.

"A" for automatism

"On" for connection

"OF" for cutting off.

Pressed any key to end the setting.

### **SCRAMBLE FREQUENCY**

Transmitting frequency and receiving frequency will reverse when using the scramble function. It means to transmit with receiving frequency, to receive with transmitting frequency, to encode the transmitting signal with DECODE and to decode the receiving signal with ENCODE. The encode

And decode signal will also be interchanged.

Press [ FUNC ] key to switch on/off scramble, then pressed [ DIAL ] key.

Screen display "R".

The scramble frequency function will be canceled when changing the channel or scanning.

### **BATTERY AND VOLTAGE**

LED indicator lights red while voltage debase. You might continue to use for a short period of time, but transmit too much will use up the battery very soon. Then you will hear the error alert and cannot transmit any more. Please charge or change the Battery pack.

### **MONITOR**

You can press MONI to monitor the weak signal which it is difficult to hear under Normal operation, and you can adjust the volume even there is no signal in your selecting channel.

On the left of the screen, it displays "—" when monitor function is on.

There are four kinds of function about monitor. Original setting is "open the squelch" (refer to following details). The local dealer can program one of the following ways for you.

### Squelch open

Press [ MONI ] key to monitor the background noise. Release to return to normal operation.

Switch on Monitor

Press [ MONI ] key to close signal of transceiver. Release to return to normal operation.

### Monitor for a moment

Pressed, then release [ MONI ] key to close the signal of transceiver. Pressed MONI key again and release to return to usual operation.

### OFF

No functions.

#### STEPPING

When the screen is under the displaying mode of frequency, stepping is valid frequency. Circumrotate encoder or scan will increase/decrease the frequency as per the setting of stepping.

### **Adjust stepping**

- Under the displaying mode of frequency, press [FUNC] key, then press [0] key to enter the displaying mode of frequency.
- 2. Press [ Low ] key to choose "stepping" in circle.

5	means stepping is 5KHz
6.25	means stepping is 6.25KHz
12.50	means stepping is 12.50KHz
25	means stepping is 25KHz
50	means stepping is 50KHz
1.000	means stepping is 1MHz
10.000	means stepping is 10MHz
Press oth	er key to end the setting

VOX

When using VOX, if microphone's gain is higher than VOX gain, the transceiver switch to transmitting mode automatically; the transceiver will return to receiving mode after two seconds if microphone's gain is lower than VOX gain.

Because it switches between transmitting and receiving automatically, we suggest to set enough VOX gain to close the transmitting when the surrounding is too noisy.

### Adjust VOX gain

Press [ FUNC ] key for more than 1 second then pressed [ LOW ] key.

Screen displays "VOX" and the current VOX gain.

Circumrotate Encoder from CUTTING OFF status to

Volume 3 (high) to select the VOX gain.

Turn clockwise to increase VOX gain, turn counterclockwise to debase the VOX gain.

Screen displays "OF" when cut off VOX, "1" when select volume 1 (low), "2" when select volume 2 (middle) and "3" when select volume 3(high).

Press any key to end setting



 Screen displays "VOX" when selected the volume from 1 to 3 and it displays nothing when cutting off.

#### CHANGE QT & DQT

### Change the code for QT & DQT:

Press [ FUNC ] key for more than 1 second and pressed [ MONI ] key.

Screen display code for QT & DQT or "OFF" QT Frequency displays " q " before digits. DQT code displays " d " before digits.

Press [ LOW ] key to switch among QT, DQT and OFF Circumrotate encoder to select the new QT frequency or DQT code

Cut off power or press any key except [ PTT ] and [ MONI ] key to exit and save the amended data.

# **⚠** NOTE

 Screen will display "DCS" when you choose DQT code, display " CT" when you choose QT, display nothing when canceling DQT or QT.

When in DQT, you can press [ **DIAL** ] to choose "Normal" or "inverted". "---" display when it is "inverted", nothing display for "Normal"

#### CLOCK

Display current year, month, date and hour minute week.

### Time display

Press [ **DIAL** ] key, then press [ **FUNC** ] key, enter the displaying mode of Clock + channel.

Press [ **LOW** ] key to view year, month, date, time and week.

### Adjust clock

- Press [ FUNC ] key, then press [ # ] to enter the time set, the screen shows "year, month, date, hour, minute and week".
- 2. Press [ LOW ] to cycle, switch the code button to increase or reduce while the digit is lighting.
- 3. Press any other key to end the setting.

#### ALARM

Alarm is a valid setting; it will sound at your setting time.

#### Set Alarm ON:

- 1. Press [FUNC] key and [A] key, then press [SCAN] key to turn ON/OFF the Alarm, if screen shows "@", that means the Alarm function is ON.
- 2. Press any key expect [ LOW ] to end the setting.

### Set alarm time:

- 1. Press [ FUNC ] key, then press [ B ] to enter the setting.
- Press [ LOW ] key to adjust the "hour, minute" and circumrotate code button to increase or reduce.while digit is lighting.
- 3. Press any key expect "SCAN" to end the setting.

#### Tone selection:

12 chord music for free choice

- Press [FUNC] key, then press [ \* ] key to enter the setting
- 2. Press [ SCAN ] key to select the tones
- 3. Press [ LOW ] key to select the tone volume

# NOTE

- ♦ There are 4 grades of tone volume, shows as 1-4,
- 4. Press any key expect "DIAL" to end the setting.

#### **VOICE PROMPTING**

When you are choosing channel, voice prompt the current channel.

- 1. Press [ FUNC ], then press [ \* ] key.
- Press [ DIAL ] key to open/close voice prompting.OF means close, ON means open.
- **3.** Press any key except "SCAN" and "LOW" key to end setting.

#### **BUSY CHANNEL LOCK**

When this function is ON, you cannot transmit in busy channel.

When Press [ PTT ] key, if the channel is being used, your transceiver will alert, and it cannot transmit.

- 1. Press [ FUNC ] key, then press [ MONI ] key to enter wide/narrow band, low/high power and BCL mode.
- 2. Press [ DIAL ] key to open BCL.

"0" is carrier "1" is optional siganl.

"OF" means close.

OF: It can transmit any time.

Carrier: It can not transmit when choosing channel is busy.

Optional signal: When valid optional signal is matched. BCL functior of choosing channnel will be on, transceiver can transmit any time.

### HIGH/LOW POWER

For transmitting in high power, large waste in battery, while it need no high power in short distance communicating, so we can choose low power to save battery in short distance communication, while we use high power when in long distance communication.

- Press [ FUNC ] key, then press [ MONI ] key to enter wide/narrow band, low/high power and BCL mode.
   When it is low power, it will display LO, when it is high power, nothing displays in the screen.
- 2. Press [ LOW ] key to choose high/low power
- Press any key except "SCAN" and "LOW" key to end setting.

### WIDE/NARROW BAND

- 1. Press [ FUNC ] key, then press [ MONI ] key to enter Wide/Narrow band, low/high power and BCL mode.
- Press [ SCAN ] key to choose Wide/Narrow band.1 means wide band, 0 means narrow band.
- Press any key except "DIAL" and "LOW" key to end setting.

### SLIP FREQUENCY

Under the display mode of full range of frequency slip frequency is valid function.

- 1. Press [ FUNC ] key, then press [ D ] key.
- Press, "SCAN" to choose +/- slip frequency. When it is - slip frequency, There will be "□" before frequency.
- 3. Circumrotate encoder to increase/decrease frequency
- 4. Press other key to end setting.

### SAVE CHANNEL

Channel save is used to edit the frequency and signal of every channel when there is no external equipment.

### When editing:

- 1. Enter the displaying mode for full range of frequency to choose needed frequency and signal.
- 2. Press [ FUNC ] key, then press [ A ] key to enter channel saving
- 3. Circumrotate encoder to choose saved channel
- **4.** Press [ **PTT** ] to save and exit; Press other keys will exit and can not save the setting.

### **COPY FUNCTION WITH CABLE**

Copy Function with cable is that copying the data from a transceiver to another transceiver without any exterior equipment.

- 1. Turn off the power of the transceiver first.
- 2. Connect two transceivers with specified copying cable.
- Pressing "LOW" key and "MONI" key at the same time, and turn on the power, and enter into the copying stand-by status.
- 4. Pressing [ MONI ] key, the data will be copied from the base transceiver to another transceiver (another transceiver also in the copying stand-by status)

  When in stand-by status, "COPY" displays

  When in receiving status, "COPY-R" displays

  When in sending status, "COPY-T" displays

  When finish the copy, it will return back to the copying stand-by status, "COPY" displays.
- 5. Press the other keys to end the cable copy.

# COPY FUNCTION WITH CABLE

Frequency Range	136-174MHz
	400-440MHz
	400-470MHz
	440-480MHz
Using Temperature	-20°C to +55°C
Frequency Synthesization	PLL
D. C. d. Veller and	DC7.4V (2 rechargeable
Rated Voltage	Li-ion battery pack)
Memorial channel	128 channels
Antenna Collocation	Inductively loaded antenna
Antenna Impedance	50Ω
	Single-duplex in same channel
working way	Single-duplex in different channel
Grounding	Cathode
Size	116mm X 61mm X 31mm
Weight	230g

TRANSMITTER	
Power output	>4W <1W
Modulation	FM
Max. Freq. Deviation	Wide band≤±5KHz
	Narrow band≤±2.5KHz
Residual Ware Radiation	<-65dB
Pre-emphasis	6dB
Transmitting Current	≤1.5A

RECEIVER	
Sensitivity	<0.12 (12dB INAD)
Squelch Sensitivity	<0.12uV
Inter Modulation Interference	60 dB
Audio Power	≥1W
Receiving Current	≤200mA
Squelch standby	20mA

# ⚠ NOTE

• No further advice for changing specification.

# TROUBLE SHOOTING GUIDE

TROUBLE PHENOMENON	SHOOTING METHOD
No response after turn on the power	<ul> <li>The electricity of the battery maybe used up, please change a new one or charge it.</li> <li>The battery may be misinstalled, please take out and load again.</li> </ul>
The battery just can keep a short time use after chargin	◆ The using life of the battery is up, please change a new one.
Unable to talk with others in the same group	<ul> <li>The communication distance is out of the effective range of the walkie-talkie.</li> <li>The using frequency or CTCSS mute audio signal are different, please reset it</li> </ul>
There appears other's voice (not the some group member) in the channel.	<ul> <li>Please change the mute audio signal.</li> <li>At this time, make sure all the signal of the walkie-talkie in the same group have be changed.</li> </ul>