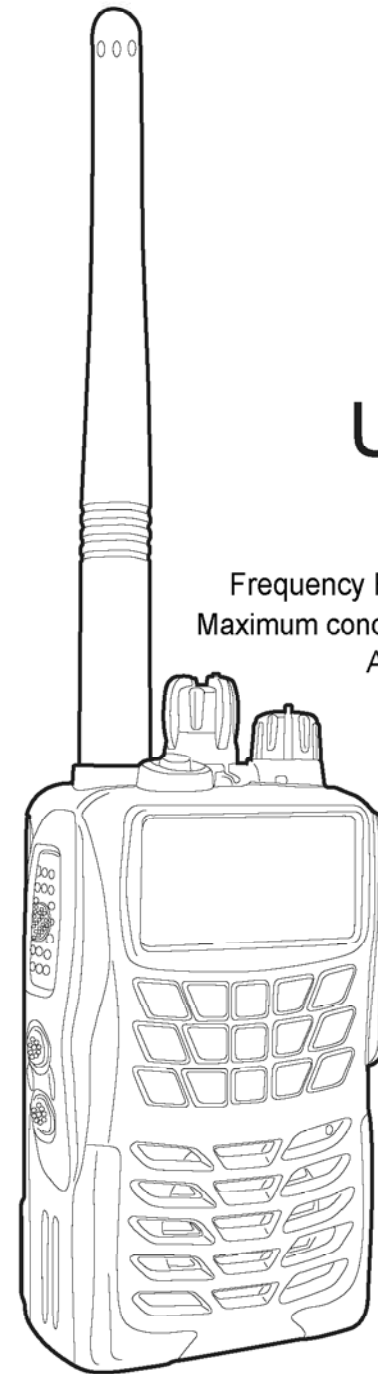




CHINA NEW CENTURY (QUANZHOU) COMMUNICATION ELECTRONICS CO.,LTD
ADD: NO.1 FENGSHOU ROAD, ZHAOFENG INDUSTRIAL DISTRICT, QUANZHOU CITY,
FUJIAN PROVINCE,CHINA.



USER'S MANUAL

FCC ID:VO6IP-VU1A

Frequency Range: 136MHz to 175 MHz & 420MHz to 520MHz
Maximum conducted power:35.79dBm for VHF , 36.65 dBm for UHF
Antenna : 0db for VHF, 2db for UHF

iP-VU1A

- 4/5 W
- 128CH
- 50 CTCSS
- 107 DCS
- 2300mA Li-ion
- PC Programmable

THE MAIN FEATURES

Dual band, Double display, double standby

VxV, VxU, UxU

128 Groups of Memory Channels,

25 Stored broadcasting Stations

Programmable

12.5kHz (Narrow) Channel Spacing

VOX

CTCSS / DCS

MSK / DTMF / 5TONE / 2 TONE (Optional)

FM Radio

8 groups of Scrambler code for choice

(7 fixed groups +1 editable group)

Three adjustable background colors

Chinese or English version programming

Software, can be programmed by PC

Channel naming

Power-on character display

ANI

COMP

Chinese(English)Pronunciation

Wired clone

Emergency call



TO USER

Thank you for purchasing our serial transceiver. We appreciate your trust in our products and believe that its easy operation function would well serve your diverse communication needs.

THIS MANUAL APPLY TO IP-VU1A

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1 SAFETY INFO



Your KYD 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. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only”. In addition, your KYD radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields— RF and Microwave.
- The following accessories are authorized for use with this product. Use of accessories other than those (listed in the instruction) specified may result in RF exposure levels exceed the FCC requirements for wireless RF exposure.



To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- **DO NOT** operate the radio without a proper antenna attached, as this may damaged the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.
- **DO NOT** transmits for more than 50% of total radio use time (“50%duty cycle”). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the “TX indicator” lights red. You can cause the radio to transmit by pressing the “PTT” switch.
- **ALWAYS** keep the antenna at least 2.5 cm (1 inch) away from the body or face when transmitting and only use the HYT belt-clip which is listed in instructions when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

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

Occupational/Controlled Use

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

2 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 items are missing or have been damaged during shipment, file a claim with the carrier immediately.

SUPPLIED ACCESSORIES

Item	Quantity
Antenna	1
Twin Charger	1
Adaptor	1
Li-Ion Battery Pack(2300mAh)	1
Belt clip	1
User manual	1
Hand Strap	1

Note:This product is with waterproof rated IP65, we will not undertake any compensation or warranty responsibility for watering or damage caused by using special accessories not sold by us (including related accessories like battery pack, earpieces and so on).

CHARGING WARNINGS:

Initially charging the battery pack after purchase or extended storage (longer 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. Please replace or charge the battery pack while low power alarm.

AVAILABLE BATTERIES

Please use our specified battery to charge transceiver, if using other brand batteries, it may explode and damage nearby subjects or people.

Notes:

1. Do not short the battery terminals or dispose of the battery by fire. Never attempt to remove the casing from the battery pack.
2. The ambient temperature should be between 5 and 40°C while charging is in progress. Charging outside this range may not fully charge the battery.
3. Always switch OFF the transceiver equipped with a battery pack before charging. Using the transceiver while charging its battery pack will interfere with correct charging.
4. Do not plug/unplug the AC adaptor and battery during charging, to avoid interfering the charging program.
5. The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Please replace the battery pack.
6. Do not recharge the battery pack if it is already fully charged. Doing so may cause the life of the battery pack to be shortened or the battery pack may be damaged.
7. Do not charge transceiver while the battery or any units were wet. Ought to dry it with cloth before charging, avoid damaging the unit.

Note: All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

CHARGE OPERATION

If a battery is in place while the transceiver lights red and there are three beeps sounding each 30 seconds, it means low in power, please start to charge the transceiver.

Please use our specified charger for battery charging, the charger LED indicates charging status at a glance.

LED appears	Status	Battery Type
Lights red	Charging	Li-ion battery
Lights green	Fully charged	Li-ion battery

TO CHARGE BATTERY PACK, PERFORM THE FOLLOWING STEPS:

1. Plug the AC adaptor cable into the adaptor jack located on the rear of the charger.
2. Slide the battery pack or transceiver with a battery pack into the charger.
3. Plug the AC adaptor into AC outlet.
4. Make sure the battery pack is in contact with the charging terminals, the charger LED lights red and charging begins.
5. When the supplied charger LED lights green, charging is completed. Remove it or the transceiver equipped with it from the charger.

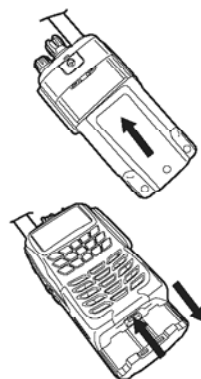
Notes:

1. The charger LED flashes before plugging in the battery pack, it is normal.
2. When replace a battery pack to the charger, please wait until after LED is steady.
3. The charger lights red while charging the battery, while if the LED flashing means the battery is damaged or the surrounding temperature is too high or low.

4 PREPARATION

INSTALLING/REMOVING THE BATTERY PACK

The battery pack is not charged at the factory; Charge it before use.



1. Match the two bulges of the battery pack with the corresponding guides on the back of the transceiver, then press the battery pack and transceiver firmly together until the release latch on the base of the transceiver locks.

2. While pressing the release latch, pull the battery pack away from the transceiver.

INSTALLING THE ANTENNA

Screw the antenna onto the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure.

Note: The antenna is neither a handle, a key ring retainer, nor a speaker/microphone attachment point. Using the antenna in these ways may damage the antenna and degrade your transceiver's performance.



INSTALLING THE BELT CLIP

If necessary, attach the belt clip using the two supplied screws.

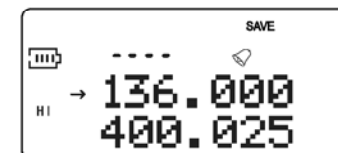
Caution: Do not use glue which is designed to prevent screw loosening when installing the belt clip, as it may cause damage to the transceiver. Acrylic ester, which is contained in these glues, may crack the transceiver's back panel.

5 YOUR FIRST QSO

FIRST QSO

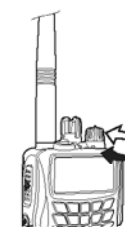
Are you ready to give your transceiver a quick try? Reading this chapter should get your voice on the air right away. The instructions below are intended only for a quick guide. If you encounter problems or there is something you would like to know more, read the detailed explanations given later in this manual.

1. Turn on the transceiver, example shown below.



- A high pitch double beep sounds and a Power-ON message appears momentarily. The various indicators and the current operating frequency appear on the LCD.
- The transceiver stores the current parameters when it is turned OFF and automatically recalls these parameters the next time you turn the transceiver ON.

2. Turn the **POWER/VOL** control clockwise.

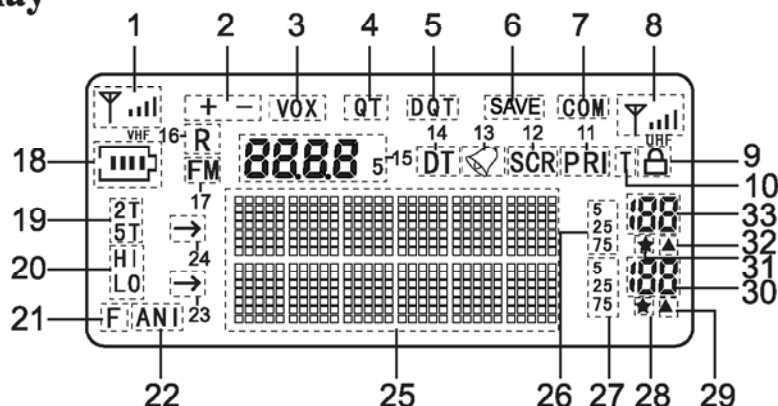


3. Turn channel selector to select a reception frequency.

- You may further turn the **PWR/VOL** control to adjust the volume level of the signal.
4. To transmit, hold the transceiver approximately 5 cm (2 inches) from your mouth.
 5. Press and hold **【PTT】**, then speak in your normal tone of voice.
 6. Release **【PTT】** to receive.
 7. Repeat steps 4, 5 and 6 to continue communication.

6 GETTING ACQUAINTED

Display



- | | |
|---|--|
| 1. Band A transmitting and receiving indication | 19. 2 tone / 5 tone activated |
| 2. Offset direction | 20. Power output indication |
| 3. VOX active | 21. Menu function is on |
| 4. CTCSS activated | 22. ANI |
| 5. DCS activated | 23. Working band or operated menu indication |
| 6. Power saving function activated | 24. Working band or operated menu indication |
| 7. Compander function activated | 25. Working frequency or operated menu indicating zone |
| 8. Band B transmitting and receiving indication | 26. Band A frequency mantissa indicating zone |
| 9. Keypad lockout | 27. Band B frequency mantissa indicating zone |
| 10. MSK | 28. Band B scan is activated |
| 11. Priority Scan | 29. Band B narrow band working mode |
| 12. Scrambler function active | 30. Band B channel no. indisplay |
| 13. Keytone | 31. Band A scan function is activated |
| 14. DTMF | 32. Band A narrow band working mode |
| 15. FM radio frequency and menu no. | 33. Band A channel no. display |
| 16. Reverse function | |
| 17. FM radio activated | |
| 18. Battery strength indication | |

7 BASIC OPERATION

TURNING THE POWER ON/OFF

■ To turn ON the transceiver by rotating the POWER & VOLUME CONTROL knob clockwise.

A high pitch double beep sounds, full display appears and a POWER ON message appears briefly followed by the frequency and other indicators.

■ To turn OFF the transceiver by rotating the POWER & VOLUME CONTROL knob anticlockwise.

The transceiver stores the current frequency and parameters when it is turned OFF and retrieves these parameters after the next time turning on.

ADJUSTING THE VOLUME

■ Rotating the POWER & VOLUME CONTROL knob clockwise to increase the audio output level while e to decrease the audio output level by rotating it anticlockwise.

■ If you have not received a signal, press and hold 【MONI】 key to unmute the speaker, then rotate the POWER & VOLUME CONTROL knob to get a suitable audio output level.

ADJUSTING THE SQUELCH

The purpose of squelch is to mute the speaker when there is no signal at present. With setting the squelch level correctly, you will hear sound only when actually receiving signals. The higher the selected squelch level, the stronger the signal must be in order to receiver it.

The appropriate squelch level depends on the ambient RF noises conditions.

TRANSMITTING

1. Before transmitting, please select the desired band A or B, then hold the transceiver about 5cm away from your mouth, then press and hold 【PTT】 , speak into microphone in your normal voice.

■ The LED lights red and the bar-graph meter appears in the display

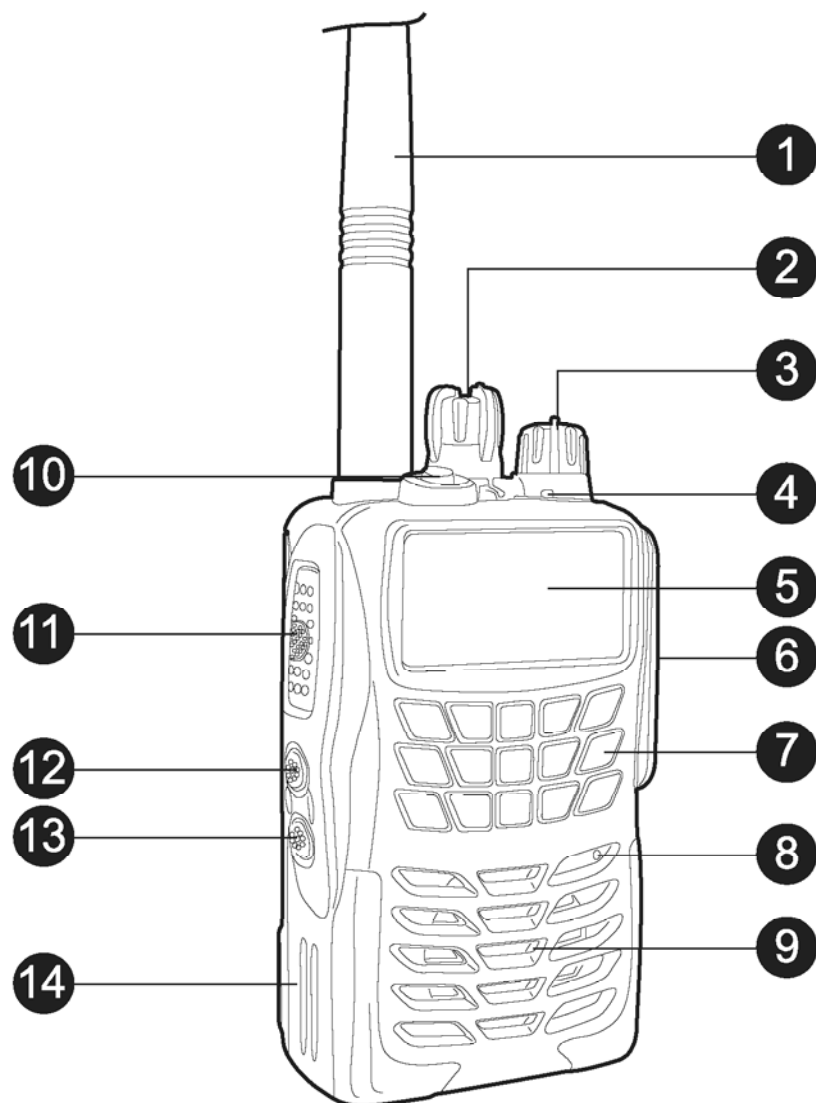
2. Release 【PTT】 when you finish speaking.

Note: When TOT function is activated, if the continuous transmitting is longer than the specified time, the internal time out timer will generate a warning beep and then the transceiver stops transmitting. In this case, release 【PTT】 to suspend the operation for a while, then press 【PTT】 again to resume transmitting.

SELECTING POWER OUTPUT

Selecting a lower transmitting power is the best way to reduce battery consumption, if the communication is stable and reliable. You can set different power output level for transmitting.

KEYS AND CONTROLS



1. Antenna (ANT)

For transmitting and receiving signals

2. Adjusting Knob (ENC)

For Channel/frequency adjustment, or coordinating with the other functions

3. Power & Volume Control Knob (POWER/VOL)

Turn clockwise to switch ON the transceiver. To switch OFF the transceiver, turn it counterclockwise until a click sounds. To adjust the volume level by rotating it.

4. LED indicator (LED)

The LED lights red during transmitting, and lights green on receiving.

LED flashes red when the battery voltage changed while transmitting.

5. LCD Display (LCD)

For displaying operation status and other function.

6. Speaker/ Microphone jack (SP/MIC)

7. Keypad

8. Microphone (MIC)

9. Speaker

10. Emergency alarm button

11. PTT button

Press and then speak into the microphone to call a station. Release it to receive.

12. Definable Key (PF1)

While selecting CALL function, it could transmit CTCSS+MSK, 2 tone or 5 tone etc optional signaling.

13. Monitor Key (MON)

Press and hold (MON) key, squelch function is turned off, and background noise is heard. Release it, the squelch function is turned on again.

14. Battery Pack

MENU FUNCTION LIST :

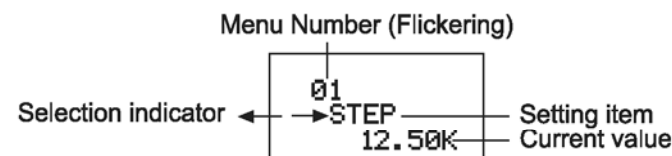
Menu No	On the display	Selection	Description
01	STEP	12.5K	Frequency Step
02	SQL-LE	0-9	Squelch Level
03	SAVE	ON/OFF	Receiving Power Saving
04	TXP	LOW/HIGH	Transmitting Power
05	ROGER	OFF/BOT/EOT/BOTH	Roger beep
06	TOT	15/30/45/.../600(Seconds)	Time-out Timer
07	VOX	OFF/1/2/.../10	VOX Level
08	W/N	WIDE/NARR	Wide/Narrow Band
09	VOICE	OFF/CHINES/ENGLISH	Warning Tone language
10	TOA	OFF/1/2/.../10(Seconds)	Transmit overtime Warning
11	BEEP	ON/OFF	Beep
12	PONMSG	OFF/BATT-V/MSC	Power-on Message Display
13	BCL	ON/OFF	Busy Channel Lockout
14	AUTOLK	ON/OFF	Auto-lock keypad
15	R-CTC	ON/67.0/.../254.1	RX CTCSS
16	T-CTC	ON/67.0/.../254.1	TX CTCSS
17	R-DCS	ON/D023N/.../D754I	RX DCS
18	T-DCS	ON/D023N/.../D754I	TX DCS
19	APRO	OFF/COMP/SCR	Audio Tones
20	SCR-NO	1-8	Scrambler
21	SC-REV	TO/CO/SE	Scan Mode
22	PF1	OFF/SCAN/LAMP/RADIO/CALL	Side Key definition
23	CH-MDF	FREQ/CH/CHFREQ/NAME	Operating Mode
24	ABR	ON/OFF	Automatic Backlight
25	COLOR	1-3	Three Backlight colors
26	OFFSET	-----	Offset Frequency
27	SFT-D	OFF/+/-	Offset Direction
28	SECOND	ON/OFF	Stopwatch Switch
29	CHNAME	-----	Channel Naming
30	MEM-CH	CH-001/CH-002/.../CH-128	Channel Memory
31	DEL-CH	CH-001/CH-002/.../CH-128	Channel Delete
32	RESET	VFO/ALL	Initialization
33	SCN CD	CTCSS/DCS	CTCS/DCS Scan
34	SOS-CH	CH-A/CH-B	SOS channel

WHAT IS A MENU?

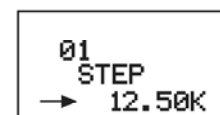
Many functions on this transceiver are selected or configured via a software-controlled Menu rather than through the physical controls of the transceiver. Once you become familiar with the Menu system, you will appreciate its versatility. You can customize the various timings, settings, and programming functions on this transceiver to meet your needs without using many controls and switches.

Modulating and setting the Step Frequency (Channel Spacing)

1. Press **【MENU】** key and then rotate the channel knob **【ENC】** to choose menu no. **【01】**, the LCD will display:



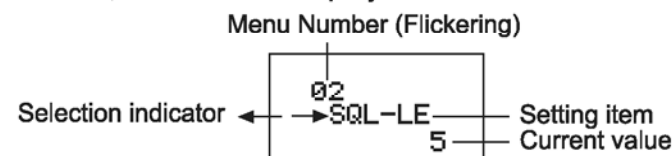
2. Press **【MENU】** again, the LCD will display as below:



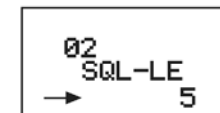
3. Rotate the channel knob **【ENC】** to set the desired step frequency (2.50K, 5.00K, 6.25K, 12.50K, 25.00K, 50.00K, 100.00K)
4. Press **【MENU】** key to confirm and store the current setting value and continue to other setting, or press **【EXIT】** to cancel the current setting value, and to exit the menu mode at the same time.

Modulating and setting the Squelch Level (SQL)

1. Press **【MENU】** and then rotate the channel knob **【ENC】** to menu no. **【02】**, the LCD will display:



2. Press **【MENU】** again, LCD will display:

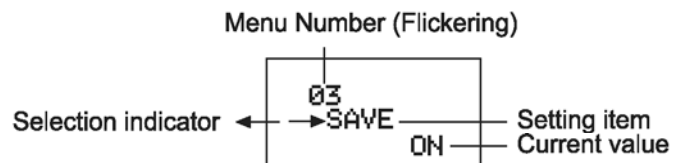


3. Rotate the channel knob **【ENC】** to set your desired Squelch Level. (0-normal, 1-Minimum . . . 9-maximum)
4. Press **【MENU】** to confirm and store the current setting value, and continue other setting, or press **【EXIT】** to cancel the current setting value and exit the menu mode at the same time.

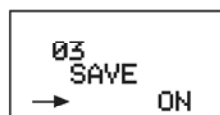
8 MENU SETUP

Setting Receiving Power Saving ON/OFF (SAVE)

1. Press **【MENU】** key and then rotate the channel knob **【ENC】** to choose menu no. **【03】**, the LCD will display:



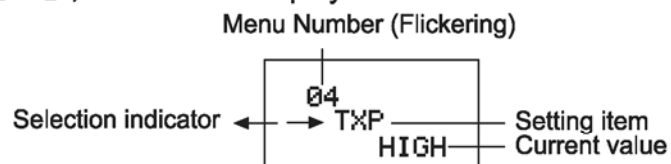
2. Press **【MENU】** again, the LCD will display as below:



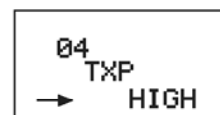
3. Rotate the channel knob **【ENC】** to set it ON or OFF.
4. Press **【MENU】** to confirm and store the current setting value and continue other setting, or press **【EXIT】** to cancel the current setting value and exit the menu mode at the same time.

Setting Transmitting Carrier Power Output rating (TXP)

1. Press **【MENU】** and then rotate the channel knob **【ENC】** to menu no. **【04】**, the LCD will display:



2. Press **【MENU】** again, LCD will display:

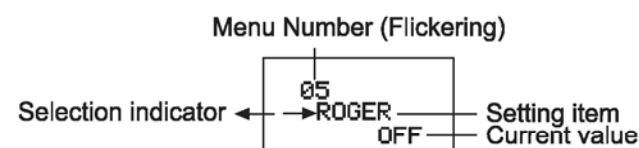


3. Rotate the channel knob **【ENC】** to set your desired transmitting power output rating. (High or Low)
4. Press **【MENU】** to confirm and store the current setting value, and continue other setting, or press **【EXIT】** to cancel the current setting and exit the menu mode at the same time.

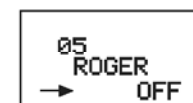
8 MENU SETUP

Setting Transmitting Roger Beep (Roger)

1. Press **【MENU】** key and then rotate the channel knob **【ENC】** to choose menu no. **【05】**, the LCD will display:



2. Press **【MENU】** again, the LCD will display as below:

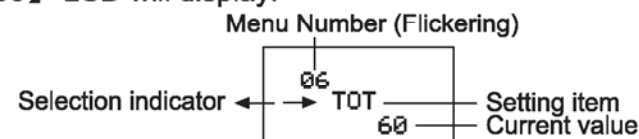


3. Rotate the channel knob **【ENC】** to set your desired transmitting roger beep mode. (OFF, BOT---beep for pressing PTT, EOT---beep for releasing PTT, BOTH)
4. Press **【MENU】** to confirm and store the current setting value and continue other setting, or press **【EXIT】** to cancel the current setting value and exit the menu mode at the same time.

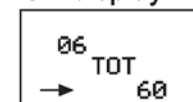
Setting transmitting Time Out Timer (TOT)

Notice: When you set this function, the radio will terminate transmitting automatically.

1. Press **【MENU】** and then rotate the channel knob **【ENC】** to menu no. **【06】** LCD will display:



2. Press **【MENU】** again, LCD display:



3. Rotate the channel knob **【ENC】** to select your desired maximum transmitting time. (15 minutes, 30, 45, 60, 75,)
4. Press **【MENU】** to confirm and store the current setting value and continue other setting, or press **【EXIT】** to cancel the setting and exit the menu mode at the same time.