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.

MODEL COVER BY THIS MANUAL:

IP-609
Brand:KYD\SYD

FCC ID:VO6IP-609

Frequency Range: 400MHz to 480MHz

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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.

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 belongs to rated IP65 item, we will not take any compensation or warranty responsibility for watering or demage 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 jewelery, 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.

INSTALLING/REMOVING THE BATTERY PACK

The battery pack is not charged at the factory；Charge it before use.
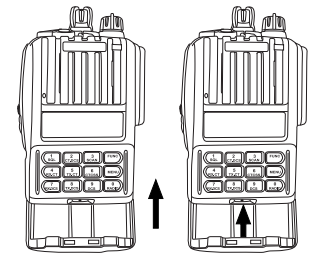
1. Match the two bulges of the battery pack with the corresponding guides on the back of the transceiver, then press the battery pack and transceiver firmly together until the release latch on the base of the transceiver locks.

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.
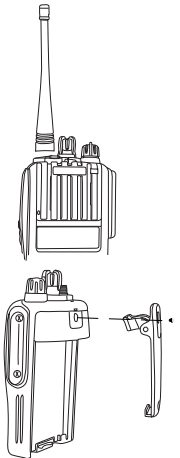
INSTALLING THE BELT CLIP

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.

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.

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HI  150.000        HI  450.000
    5      9            5      9
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- ■ 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.
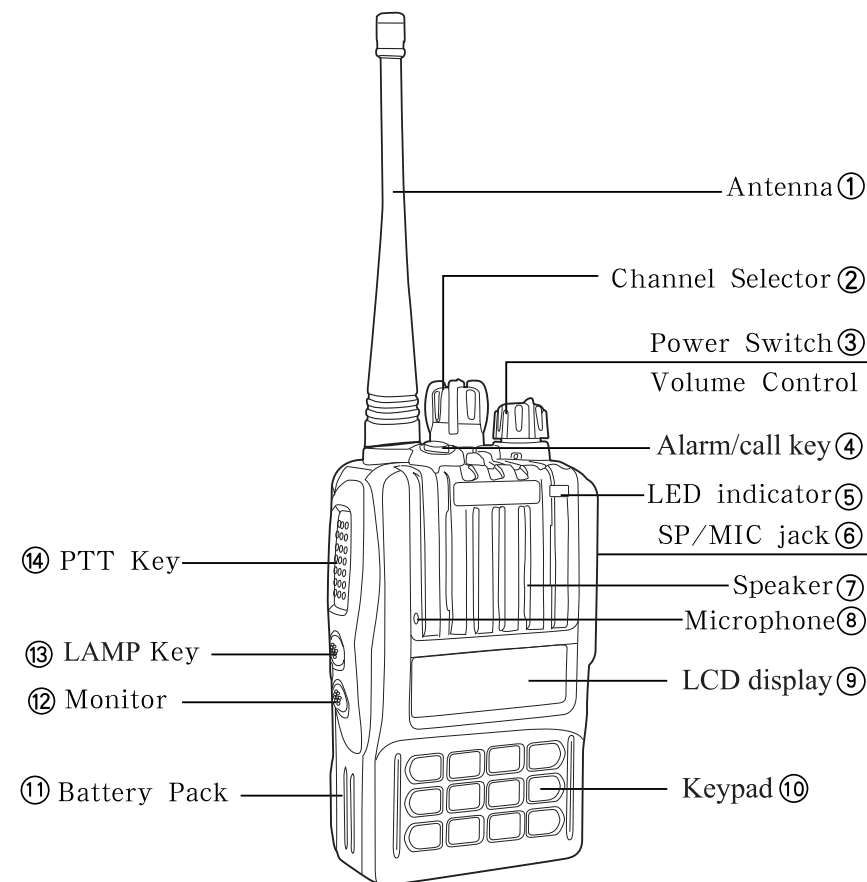
2. Turn the **POWER/VOL** control clockwise.

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 steps4 , 5 and 6 to continue communication.

KEYS AND CONTROLS

Antenna ①
Channel Selector ②
Power Switch ③
Volume Control
Alarm/call key ④
LED indicator ⑤
SP/MIC jack ⑥
Speaker ⑦
Microphone ⑧
LCD display ⑨
Keypad ⑩
⑭ PTT Key
⑬ LAMP Key
⑫ Monitor
⑪ Battery Pack

1. Antenna
2. Channel Selector
   Rotate Channel selector to select channel no. 01-199
3. PWR/VOL knob.
   Turn clockwise to switch ON the transceiver. To switch OFF the transceiver, turn counterclockwise until a click sounds. Rotate to adjust the volume level.
4. Alarm/call key
   Defined by programmable software
5. LED indicator
   Lights red white transmitting. Lights green white receiving a signal. Flashes red when the battery voltage is low white transmitting.
6. Speaker/Microphone
   Acts as a speaker and microphone
7. SP Jack
   For connecting the hand free microphone set
8. MIC jack
   For connecting the hand free microphone set.
9. LCD display
   For displaying operation status and other function
10. Keypad
    For entering specified frequencies and other funcitonal data.
11. Battery pack
12. MONI (monitor) key
    Press and hold 【MONI】 key, squelch function is turned off. You will hear background noise. Release 【MONI】 key, squelch function is turned on again.
13. LAMP key.
14. PTT
    Press and then speak into the microphone to call a station. Release to receive.

DISPLAY
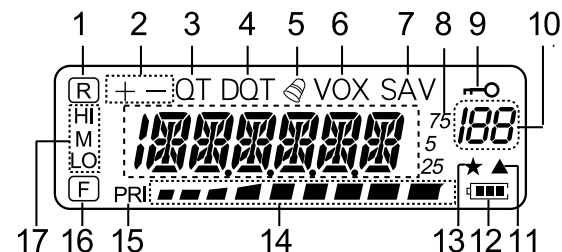
1. Appears when the Reverse function is activated.
2. Appears when the repeater shift function is activated.
3. Appears when the CTCSS function is activated.
4. Appears when the DCS function is activated.
5. Appears when the call alarm tone is activated.
6. Appears when the VOX function is ON.
7. Appears when set the unit in saving mode.
8. Displays the frequencies, Menu settings and other information.
9. Appears when the Lock function is ON.
10. Displays the Menu number, memory channel number, and status
11. Appears when the displayed memory channel has data.
12. Displays the battery power level.
13. Appears when the memory channel lockout function is ON.
14. S-meter (RX) and TX Power Output indicator when the transceiver transmits.
15. Appears when a Priority Scan function is activated.
16. Appears when press "FUNC"
17. H appears when high power transmission is selected, M appears when medium power is selected, and L appears when low power is selected.

SWITCHING THE POWER ON/OFF

Switch ON the transceiver by turning the POWER & SWITCH/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 switch the transceiver OFF by turning the POWER SWITCH/VOLUME CONTROL knob anticlockwise.

The transceiver stores the current frequency and parameters when it is turned OFF and recalls their parameters the next time you turn the transceiver ON.

ADJUSTING THE VOLUME

■ Turn the POWER & SWITCH/VOLUME CONTROL knob clockwise to increase the audio output level and anticlockwise to decrease the output level.

■ If you are not receiving a signal, press and hold 【MONI】 key to de-mute the speaker, then adjust the POWER & SWITCH/VOLUME CONTROL to a comfortable audio output level.

ADJUSTING THE SQUELCH

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

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

1. Press 【MENU】 key, and then press【MENU】again.
   The current squelch level appears.

2. Turn channel selector to adjust the level.

■ Select the level at which the background noise is just eliminated when no signal is present.

■ The higher the level, the stronger the signals must to be received.

■ 9 different levels can be set（0: minimum, 9: Maximum, Default value: 5）.

3. Press【MENU】key to store the new setting and continue to set other functions. Or press【FUNC】key to store the new setting and exit Menu mode.

TRANSMITTING

1. To transmit, hold the transceiver approximately 5 cm (2 inches) from your mouth, then press and hold【PTT】and speak into the microphone in your normal tone of voice.

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

2. When you finish speaking, release【PTT】.

Note: If TOT function is activated, continuously transmit for longer than the specified time, the internal time out timer generates a warning beep and the transceiver stops transmitting. In this case, release 【PTT】and let the transceiver stop for a while, then press【PTT】again to resume transmission.