

User's Manual

PROFESSIONAL TWO-WAY RADIO



FCC ID:VO6IP-607

IP-607

- 5 W
- 16CH
- 50 CTCSS
- 107 DCS
- PC Programmable
- Li-ion Battery Pack 2300mA

Frequency Range:400MHz to 480MHz

TO USER —————

Thank you for purchasing our company serial transceiver. We appreciate your trust in our products and believe that this easy to operate and state of the art 2-way transceiver would well serve your diverse communication needs.

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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
Charger (with AC adaptor)	1
Li-ion Battery Pack	1
Belt clip	1
User's manual	1
Hand Strap	1

3 BATTERIES

CHARGING WARNINGS:

Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal. Please replace or charge the battery pack while low power alert.

AVAILABLE BATTERIES

Please use our special battery to charge transceiver, it may happen explode and damaged body if using other brand batteries.

Notice :

1. Do not short the battery terminals or dispose of the battery in 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 interference charging program.
5. The battery pack life is over when its operating time decrease even though it is fully and correctly charged. Replace the battery pack.

3 BATTERIES

6. Do not recharge the battery pack if it is already fully charged. Doing so may cause the life of the battery pack to shorten or the battery pack may be damaged.
7. Do not charge transceiver while the battery or units were wet. Ought to dry it with cloth before charging, avoid to damage the unit.

Notice: All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touch 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 installing battery, the transceiver lights red and three beeps sound each 30 seconds, it means low power, please start to charge the transceiver.

Please use our special charger for battery charging, the charger LED display charger cause.

LED appears	status
Lights red	charging
Lights green	Fully charging

3 BATTERIES

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 contacts are in contact with the charging terminals, the charger LED lights red and charging begins.
5. The supplied charger LED lights green complete charged. Remove it or the transceiver equipped with it from the charger.

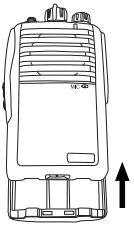
Notice:

1. The charger LED lights before unplug battery pack, it is normal.
2. When replace a battery pack to charge, please charging after LED is steady.
3. The charger lights red while charging after plug the battery, brights mesns damage battery or the degree is too high or low.

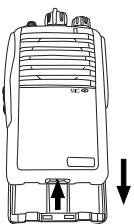
INSTALLING/REMOVING THE BATTERY PACK

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

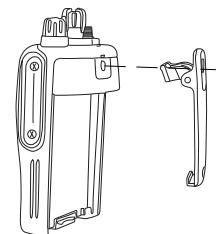
Note: The antenna is neither a handle, a key ring retainer, nor a speaker/microphone attachment point. Using the antenna in these ways may damage the antenna and degrade your transceiver's performance.

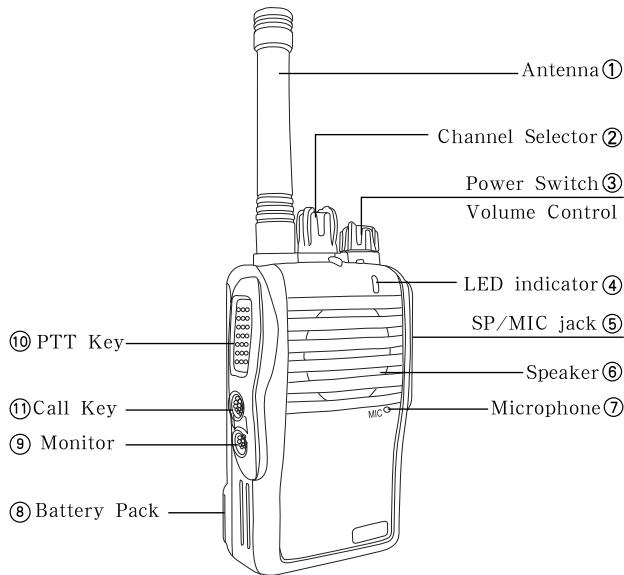
**INSTALLING THE BELT CLIP**

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 back panel.



**1. Antenna****2. Channel selector**

Rotate to select channels 1–16

3. Power switch/Volume control

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. LED indicator

Lights red while transmitting. Lights green while receiving a signal. Flashes red when the battery voltage is low while transmitting.

5. SP/MIC jack**6. Speaker****7. Microphone****8. Battery pack****9. Monitor****10. PTT(Push-To-Talk) switch**

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

11. Call key

6 BASIC OPERATIONS

1. Turn the Power switch/Volume control clockwise to switch the transceiver power ON.

- A beep sounds if enabled by your dealer.

2. Press the key programmed with the Monitor or Squelch Off function to hear background noise, then rotate the Power switch/Volume control to adjust the volume.

3. Rotate the Channel selector to select your desired channel.

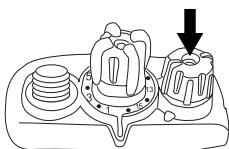
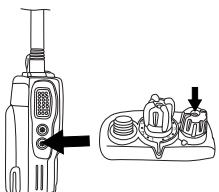
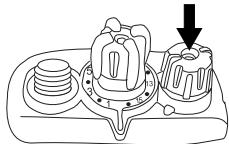
- When you receive an appropriate signal, you will hear audio from the speaker.

4. To make a call, press and hold the **【PTT】** switch, then speak into the microphone using your normal speaking voice.

- Hold the microphone approximately 1.5 inches (3 to 4 cm) from your lips.

5. Release the **【PTT】** switch to receive.

Note: When the battery strength becomes too low , transmission will stop and an alarm tone will sound. See “Low Battery Warning” introduce.



7 AUXILIARY FUNCTIONS

MONITOR/SQUELCH OFF

You can use the Monitor key to listen to weak signals that you cannot hear during normal operation, to deactivate channel signaling , and to adjust the volume when no signals are present on your selected channel.

- Squelch Off Momentary: Press and hold to hear background noise.

- Release the key to return to normal operation.

Monitor Momentary: Press and hold to deactivate QT or DQT signalling. Release the key to return to normal operation.

CALL TONE

Calling tones are used to identify yourself to your party, you can set up a calling tone to one of 16, perform the following steps.

1. Turn OFF power
 2. Press and hold **【CALL】** key, turn ON power
- A calling tone sounds.
 - Adjust channel selector to select desired call tone, select each calling tone, the new tone sounds.
 - Press **【PTT】** key to store new setting and a beep sounds to confirm.
 - Currently channel number appears, please turn the channel selector to adjust appropriate channel number.

SELECTIVE CALL

1. Press and hold 【MON】 key to make sure the channel is not in use.
2. Press and then release 【CALL】 key to alarm other parties that you are making a call.
 - A configured calling tone sounds and the LED lights red. Your party members receive call alarm singal, the speaker
 - sound same call alarm tone and the LED light green.
 - Stop to transmit while call alarm tone OFF, wait for your party member response.

VOX operation allows you to transmit hands-free. and can only be used if you are using a supported headset.

When operating VOX, or you must set a VOX Gain level. This setting allows the transceiver to recognize sound levels. If the microphone is too sensitive, it will begin transmitting when there is noise in the background. If it is not sensitive enough, it will not pick up your voice when you begin speaking. Be sure to adjust the VOX Gain level to an appropriate sensitivity to allow smooth transmission.

To activate VOX and set the VOX Gain level, perform the following steps:

1. Turn OFF power

2. Press and hold 【CALL、PTT】 keys and then turn ON power. a double beep sounds.
- Adjust channel selector to set desired VOX gain level, a beep sounds while adjust each level.
- Press 【PTT】 switch to store new setting and activate VOX transmission ON.
- Currently channel number sounds, turning channel selector to select desired channel number.
- Press 【PTT】 switch to cancel VOX transmission.

VOX GAIN LEVEL INSTRUCTION

Adjust desired VOX sensitivity by turning channel selector, and the number is higher, the sensitivity is higher; Vice versa.

Channel Number:

- 1 — Least sensitive
- 8 — Mid sensitive
- 16 — Highest sensitive

Note: If the VOX Gain level is configured to a higher, louder received signal may cause the transceiver to start transmission.

ACTIVATE VOX TRANSMISSION OPERATION

If you configured to a appropriate VOX gain level, and activate VOX transmission, perform the following steps.

1. Turn OFF power

2. Press and hold **【PTT】** switch and then turn ON power.
3. A double-beep sound, and then release the **【PTT】** switch, the transceiver appear currently channel number.
4. Press **【PTT】** switch to cancel VOX transmission; press **【PTT】** switch to transmit.

CHANNEL SCAN

You can scan all the channels what you stored the desired frequencies.

1. put the channel selector into last channel.
2. turn OFF the power.
3. press and hold **【MON】** key and then turn ON the power.
 - Transceiver is in automatically scanning.
 - Press **【MON】** key to pause scanning, release **【MON】** key to resume scanning.
4. press **【PTT】** switch to transmit or turn OFF the power to cancel scanning function.

Note: Stop 3 seconds when the transceiver receives the signal and without any operation,It will continues to scan.

PRIORITY SCANNING

Sometimes you need to check activities of some priority frequency while monitoring other frequencies. In this case, you can use the Priority Scan function. Priority Scan checks the activities of the Priority Channel every 3 seconds. If the transceiver detects the signal on the Priority Channel, and it will stop 3 seconds,If you do not operate any control or key for 3 seconds, the transceiver returns to the original frequency and continues Priority Scan.

USE PRIORITY SCANNING

1. Put the channel selector into the 16th channel.
2. Turn OFF the power.
3. Press and hold **【CALL】** key and turn ON the power.
 - Transceiver is in the priority scanning.
4. Cancel priority scanning functions, first you should turn OFF the power and then turn ON the power again.

Note: if you don't select a channel as of priority scanning channel while you program the radio by PC, you cannot activity this function.

NARROW/WIDE FM OPERATION (Optional)

In the default, radio usually works under FM ($\pm 5\text{KHz}$) mode, it also can works under narrow band FM ($\pm 2.5\text{KHz}$). User and dealer can set up narrow or wide band in each channel by PC.

WIRED CLONE

1. Connect the transceivers with cloning cable, and turn on the cloned transceiver.
2. Rotate the main transceiver's channel to be NO. 8 at first, and turn on the radio with pressing and holding the 【Moni】 key till a beep sounds. The LED lights orange (red and green at the same time) that means the main transceiver is under cloning mode.
3. Press main transceiver's 【CALL】 key, the cloned transceiver clones data from the main transceiver. The main transceiver flashed red, meanwhile the cloned transceiver flashes green. The data cloned is finished when the main transceiver lights orange.
4. If the transceiver's LED flash abnormally when transmitting the data, it means the cloning fails. Check the cloning cable is well connected or not. Press the 【CALL】 key of main transceiver again when the main transceiver lights orange.
5. If you have to clone many transceivers. Turn off the cloned transceiver and take it out from the cloning cable. And plug the cloning cable into the next cloned item. Then press the 【CALL】 key of the main transceiver again for cloning.
6. Turn on the transceiver again after exiting the wired clone. Then it would resume to daily operation.