

Galaxy

USER MANUAL



UHF Professional Transceiver
G-8108S

THANK YOU

We are grateful you chose for your land mobile radio **Galaxy** applications. We believe this easy-to-use transceiver will provide dependable communications to keep personnel operating at peak efficiency.

Transceivers incorporate the latest in advanced technology. As a result, we feel strongly that you will be pleased with the quality and features of this product.

MODELS COVERED BY THIS MANUAL

G8108U: 16-channel UHF FM Transceiver

G8108V: 16-channel VHF FM Transceiver

PRECAUTIONS

- Refer service to qualified technicians only.
- Do not operate the transceiver or charge a battery pack in an explosive atmosphere (gases, dust, fumes, etc.).
- Turn OFF the transceiver while taking on fuel or while parked in a gasoline service station.
- Do not modify or attempt to adjust this transceiver for any reason.
- Do not expose the transceiver to long periods of direct sunlight, nor place it close to heating appliances.
- Do not place the transceiver in excessively dusty, humid, and/or wet areas, nor on unstable surfaces.

Safety: It is important that the operator is aware of, and understands, hazards common to the operation of any transceiver.

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UNPACKING AND CHECKING EQUIPMENT

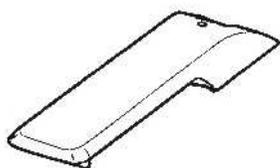
Carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

SUPPLIED ACCESSORIES

Fittings	Quantity
Transceiver	1
Inductively loaded antenna	1
Lithium re-chargeable battery pack	1
Screw	1
User Manual	1
Speaker/microphone jack cover	1
Charger	1
Belt clip	



Antenna



Belt clip



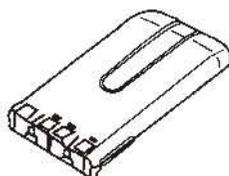
Speaker/microphone
jack cover



Screw set



Battery charger



Battery

PREPARATION

CHARGING THE LITHIUM BATTERY PACK

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

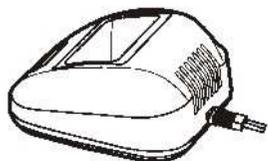
Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal.

CAUTION

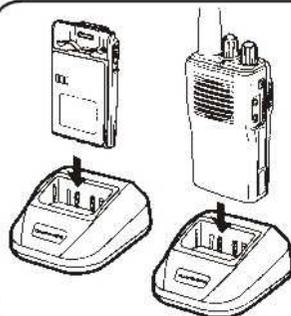
- ◆ Do not recharge the battery pack use another model charger otherwise, it may cause the life of the battery pack to shorten or the battery pack may be damaged.
- ◆ After recharging the battery pack, disconnect it from the charger. Charging the battery pack for more than 5 day reduce the battery pack life due to overcharging.

Note:

- ◆ Always switch OFF the transceiver equipped with a Lithium battery pack before charging. Using the transceiver while charging its battery pack will interfere with correct charging.
- ◆ The lithium battery pack cannot put on high temperature place and also cannot put into fire, otherwise, it will cause explosion.



Plug the AC adaptor cable into the adaptor jack located on the rear of the charger.



Slide the Lithium battery pack or transceiver with a Lithium battery pack into the charger.

- Make sure the battery pack contacts are in contact with the charging terminals.
- The charger LED lights and charging begins.

After charging the supplied battery pack for 8 hours, remove it or the transceiver equipped with it from the charger.

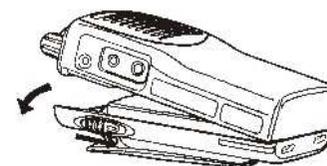
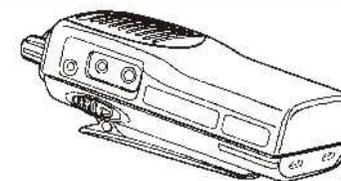
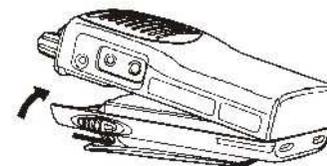
- The charger does not turn OFF automatically after charging is completed.

INSTALLING REMOVING THE BATTERY PACK

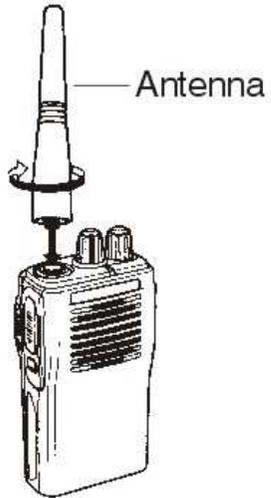
The average life of the supplied Lithium battery pack is 8 hours. Average times are calculated using 5% transmit, 5% receive time, and 90% standby time.

⚠ CAUTION

- ◆ Do not short the battery terminals or dispose of the battery by fire.
- ◆ Never attempt to remove the casing from the battery pack.



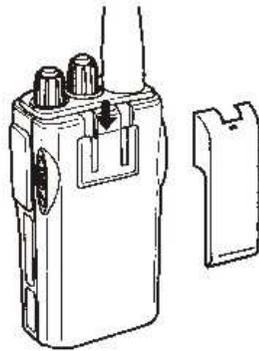
INSTALLING THE ANTENNA



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

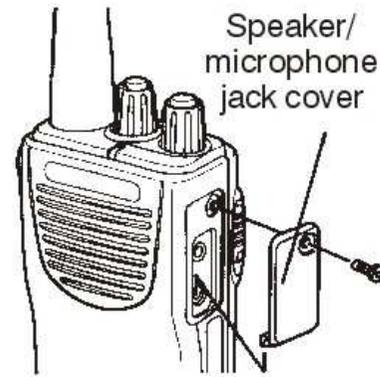


Belt clip

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.

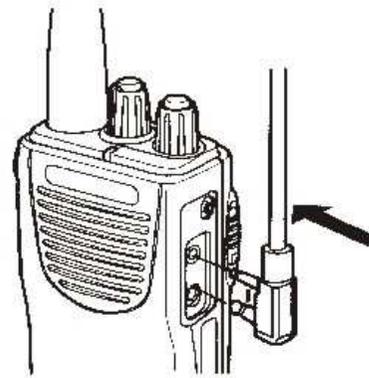
INSTALLING THE COVER OVER THE SPEAKER/MICROPHONE JACKS



If you are not using a speaker/microphone, install the cover over the speaker/microphone jacks using the supplied 3x6 mm screw.

Note: To keep the transceiver water resistant, you must cover the speaker/microphone jack with the supplied cover.

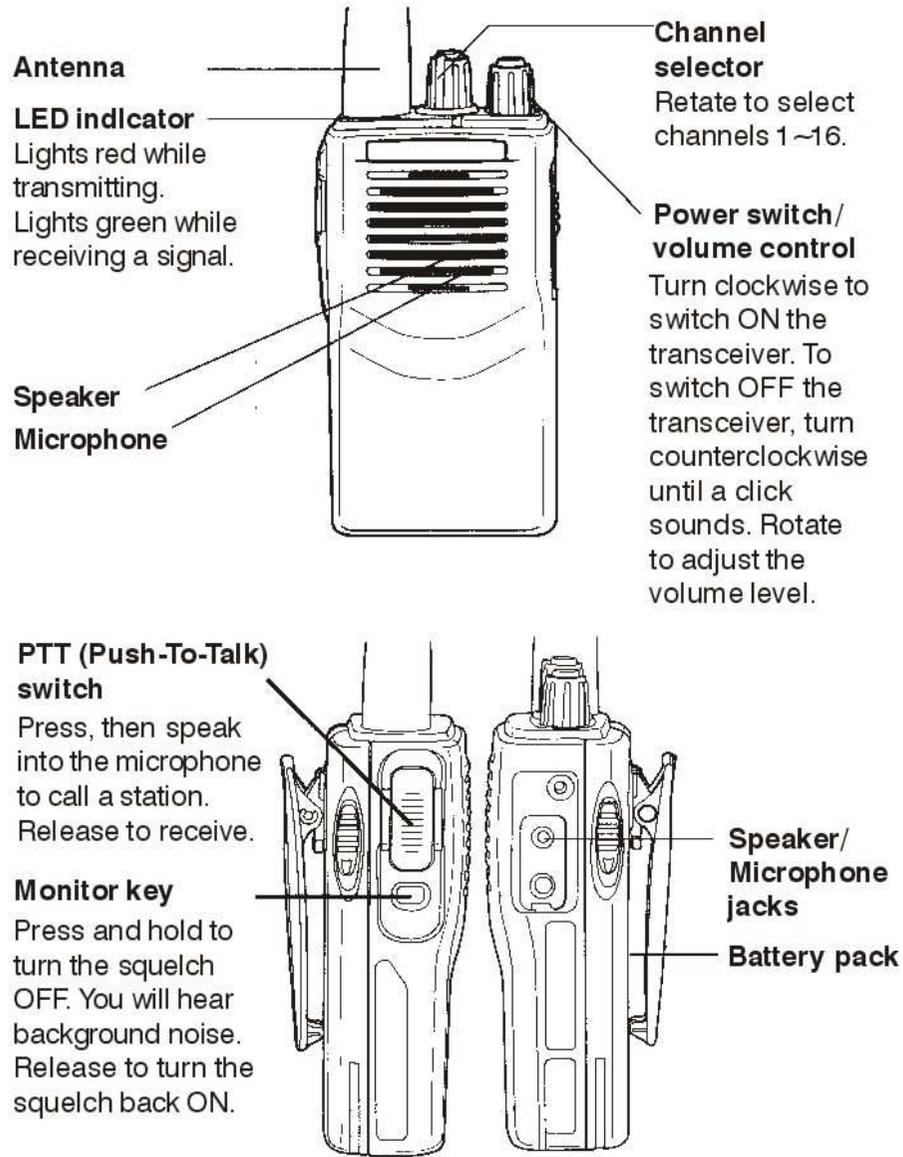
INSTALLING THE OPTIONAL SPEAKER/MICROPHONE



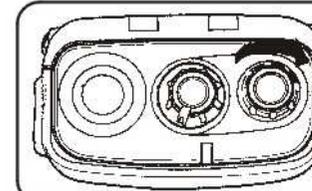
Insert the speaker/microphone plugs into the speaker/microphone jacks.

Note: The transceiver is not fully water resistant while using the speaker/microphone.

GETTING ACQUAINTED G-8108V AND G8108U

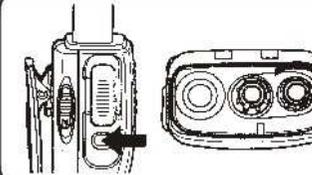


G-8108V AND G8108U OPERATION

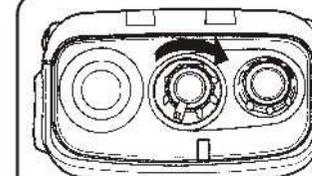


Switch ON the transceiver by turning the **Power** switch/**Volume** control clockwise.

- A beep sounds



Adjust the volume by pressing and holding the **Monitor** key, then rotating the **Power** switch/**Volume** control



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

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



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.

Release the **PTT** switch to receive.

Note: When the battery pack voltage becomes too low, transmission will stop and the LCD will blink red. See "Low Battery Warning" on page 12.

AUXILIARY FUNCTIONS

TIME-OUT TIMER

The purpose of the Time-out Timer is to prevent any single person from using a channel for an extended period of time. If you continuously transmit for 10 minutes, the transceiver will stop transmitting and a tone will sound.

To stop the tone, release the **PTT** switch. You can press the PTT switch again to resume transmitting.

BATTERY SAVE

The Battery Save function decreases the amount of power used when a signal is not being received and no operations are being performed (no keys are being pressed, and no switches are being turned).

While the channel is not busy and no operation is performed for 10 seconds, Battery Save turns ON.

LOW BATTERY WARNING

Low Battery Warning alerts you when the battery need to be recharged.

While transmitting, if the battery power goes below a pre-determined value, the LCD will blink red. When a tone sounds, the transceiver stop transmitting.

Replace or recharge the battery pack.

MONITOR

When no signals are present, the squelch on the transceiver automatically mutes the speaker so you will not hear background noise. To manually deactivate the squelch, press and hold the Monitor key. This is useful when you want to adjust the volume level, or when you need to hear a weak signal.

- The LED indicator lights green while the Monitor key is pressed.

QULET TALK (QT) AND DIGITAL QULET TALK (DQT)

Some channels may have pre-programmed QT/DQT tones. A QT/DQT tone is a subaudible tone which allows you to ignore (not hear) calls from other parties who are using the same channel.

When you receive a signal that has a tone different from the one set up in your transceiver, you will not hear the signal. Likewise, signals that you transmit will only be heard by parties whose QT/DQT tone matches the tone set up in your transceiver.

Note: Although using channels set up with QT/DQT tones relieves you from listening to unwanted calls, it does not mean your calls will be private..

VOX

Voice activate the transmittre, it has 1-10 sensitive level, for your selection, you can enable or disable this feature by programming software through PC.

SCAN

Scan each channels signal, when receiving signal, the channel will be stop until signal disappear, Channels can will started again

TROUBLESHOOTING GUIDE

Problem	Solution
No power.	<ul style="list-style-type: none"> ● The battery pack may be dead. Recharge or replace the battery pack. ● The battery pack may not be installed correctly. Remove the battery pack and install it again.
Battery power dies shortly after charging.	<ul style="list-style-type: none"> ● The battery pack life is finished. Replace the battery pack with a new one.
Cannot talk to or hear other members in your group.	<ul style="list-style-type: none"> ● Make sure you are using the same frequency and Quiet Talk tone as the other members in your group. ● Other group members may be too far away. Make sure you are within range of the other transceiver.
Other voices (besides group members) are present on the channel.	<ul style="list-style-type: none"> ● Change the Quiet Talk tone. Be sure to change the tone on all transceivers in your group.

SPECIFICATIONS

General	
G-8108S	440 ~ 470MHz
Rated Voltage(DC)	DC7.2V
Memory channel	16 channels
Channel Separation	12.5KHz
Antenna ordonnance	Inductively loaded antenna
Antenna impedance	50Ω
Working manner	Same frequency simplex operation or different frequency simplex operation
Ground method	negative pole
Volume	85x50x28mm
Transmit	
Output power	≤1W
Modulation deviation	Frequency modulation
Maximum frequency deviation	≤+2.5KHz
Reband radiaion	<-60dB
Preemphasis character	Per fold frequency patch 6dB
Emission current	≤1500mA
Receive	
Sensitivity	<0.2 μ V(12dB SINAD)
silent sensitibility	<0.2 μ V
Inter modulation interference resistance	50dB
Sound frequency power	≥300mW
Receiving current	≤100mA
Silent waiting	20mA

Specifications are subject to change For improvements without notice.

Radio Frequency Energy Safety Information

This Hong Kong Communication Co Ltd transceiver has been tested and complies with the standards listed below, in regards to Radio Frequency (RF) energy and electromagnetic energy (EME) generated by the transceiver.

FCC RF exposure limits for Occupational Use Only. RF Exposure limits adopted by the FCC are generally based on recommendations from the National Council on Radiation Protection and Measurements, & the American National Standards Institute.

Warning

This Hong Kong Communication Co Ltd transceiver generates RF EME while transmitting. RF EME (Radio Frequency Electric&Magnetic Energy) has the potential to cause slight thermal, or heating effects to any part of your body less than the recommended distance from this radio transmitter's antenna. RF energy exposure is determined primarily by the distance to and the power is used or transmission time is kept to the minimum required for consistent communications, and the greatest distance possible from the antenna to the body is maintained. The transceiver has been designed for and is classified for Occupational Use Only. Occupational/consequence of their employment, and such persons have been made aware of the potential for exposure and can exercise control over their exposure. This means you can use the transceiver only if you are aware of the potential hazards of operating a transceiver and are familiar in ways to minimize the hazards. This transceiver is not intended for use by the general public in uncontrolled environment. Uncontrolled environment exposed to RF energy, or in which the persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

The following list provides you with the information required to ensure that you are aware of RF exposure and of how to operate this transceiver so that the FCC RF exposure limitations are not exceeded.

While transmitting (holding the PTT switch or speaking with VOX enabled), always keep the antenna and the radio at least 3 cm (1 3/16 inches) from your body or face, as well as from any bystanders. A LED on the top of the radio shows red when the transmitter is operating in both PTT and VOX modes.

Do not transmit for more than 50% of the total transceiver use time; transmitting over 50% of the total use operation is 5% transmission time, 5% reception time, and 90% stand-by time.

Use only Hong Kong Communication Co Ltd authorized accessories (antenna, battery packs, belt clips, Speaker/Mics or headsets etc.). When worn on the body, always place the radio in a Hong Kong Communication Co Ltd recommended clip or carrying case meant for this product. The use of other than recommended or approved body-worn environment RF exposure limits.

Caution

To ensure that your exposure to RF EME is within the FCC limits for occupational use, you must observe and adhere to the above points.

Electromagnetic Interference Compatibility

Electronic devices are susceptible to electromagnetic interference (EMI) if they are not adequately shielded or designed for electromagnetic compatibility. Because this transceiver generates RF energy, it can cause interference to such equipment.

TURN OFF your transceiver where signs are posted to do so. Hospitals and health care facilities use equipment that is sensitive to electromagnetic radiation.

TURN OFF your transceiver while on board an aircraft when so instructed, Use of the transceiver must be in accordance with airline regulations and/or crew instructions.