This device complies with Part 18 two conditions: (1) This device n must except any interference recoperation.	may not cause harmful interfe	erence, and (2) this device

SAFETY TRAINING INFORMATION



Your Quansheng radio generates RF electromagnetic en-ergy 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, Warning 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 Quansheng 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 Potential y Hazardous Electromagnetic Fields— RF and Microwave.



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

CAUTION guidelines:

• **DO NOT** operate the radio without a proper antenna attached, as this may damage 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 an antenna specifically authorized by the manufacturer for use with this radio.

- **DO NOT** transmit 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 use Quansheng authorized accessories (antennas, batteries, belt clips, speaker/mics, etc). Use of unauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded. Body-worn operations are restricted to belt-clips, holsters or similar accessories that have no metallic component in the assembly and that provide at least 1.5 cm separation between the device, including its antenna, and the user's body. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from 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 assure that this radio operates within the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Quansheng 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.

FOREWORD

Thank you for purchasing the TG-UV transceiver.

READ ALL INSTRUCTIONS carefully and completely before using the transceiver. **SAVE THIS INSTRUCTION MANUAL**—This instruction manual contains important operating instructions for the transceiver.

INSTALLATION NOTES

- Body-worn operations are restricted to belt-clips, holsters or similar accessories that have no metallic component in the assembly and that provide at least 1.5 cm separation between the device, including its antenna, and the user's body
- If you wear a portable two-way radio on your body, ensure that the antenna is at least 2.5 centimeters (1 in.) from your body when transmitting.

IMPORTANT

RF CAUTION! NEVER hold the transceiver so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting. The transceiver will perform best if the microphone is 2 to 4 in. (5 to 10 cm) away from the lips and the transceiver is vertical.

RF **CAUTION! NEVER** operate the transceiver with a headset or other audio accessories at high volume levels.

RF CAUTION! NEVER short the terminals of the battery pack.

DO NOT push the PTT when not actually desiring to transmit.

AVOID using or placing the transceiver in direct sunlight or in areas with temperatures below +14°F (-10°C) or above +122°F (+50°C). The basic operations, transmission and reception of the transceiver, are guaranteed within the specified operating temperature range (depending on version). However, the LCD display may not be operate correctly, or show an indication in the case of long hours of operation, or after being placed in extremely cold areas.

DO NOT modify the transceiver for any reason.

KEEP the transceiver from the heavy rain, and **never** immerse it in the water. The transceiver construction is **water resistant**, not waterproof.

The use of non Quansheng battery packs/chargers may impair transceiver performance and invalidate the warranty.

CONTENTS

EXPLODED VIEW28	PACKING29	PCB SCHEMATIC DIAGRAM30	PCB CIRCUIT DIAGRAM31-34	PCB BLOCK DIAGRAM35
PARTS LIST16-26 EASY MALFUNCTION ELIMINATION27	Ť	DESCRIPTION	DESCRIPTION	DESCRIPTION
16	16	UNCTION ELIMINATION	UNCTION ELIMINATION	UNCTION ELIMINATION
		UNCTION ELIMINATION	UNCTION ELIMINATION	UNCTION ELIMINATION
		· VIEW	VIEW	VIEW
MATIC DIAGRAM31. IT DIAGRAM31.	31	31-		
MATIC DIAGRAM	PCB SCHEMATIC DIAGRAM30 PCB CIRCUIT DIAGRAM31-34 PCB BLOCK DIAGRAM35 CONTROL BOARD SCHEMATIC DIAGRAM36	PCB CIRCUIT DIAGRAM31-34 PCB BLOCK DIAGRAM35 CONTROL BOARD SCHEMATIC DIAGRAM 36	PCB BLOCK DIAGRAM35 CONTROL BOARD SCHEMATIC DIAGRAM 36	CONTROL BOARD SCHEMATIC DIAGRAM 36



FCC INFORMATION

This device complies with Part 15 and Part 90 of the FCC rules.

Operation is subject to the following two conditions: (1) This device

may not cause harmful interference, and (2) This device must

accept any interference received, including interference that may

cause undesired operation.

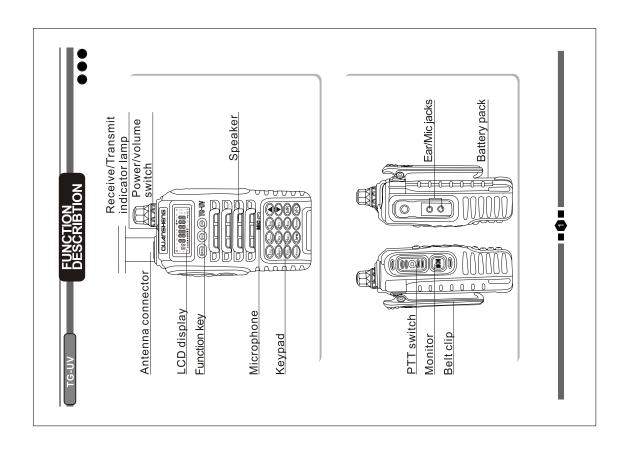
FCC ID: XBPTG-UV

SCOPE OF THIS MANUAL

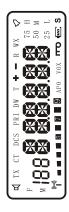
This manual is intended for use by experienced technicians familiar with similar types of commercial grade communications equipment. It contains all required service information for the equipment and is current as of publication data.

NOTE BEFORE USING

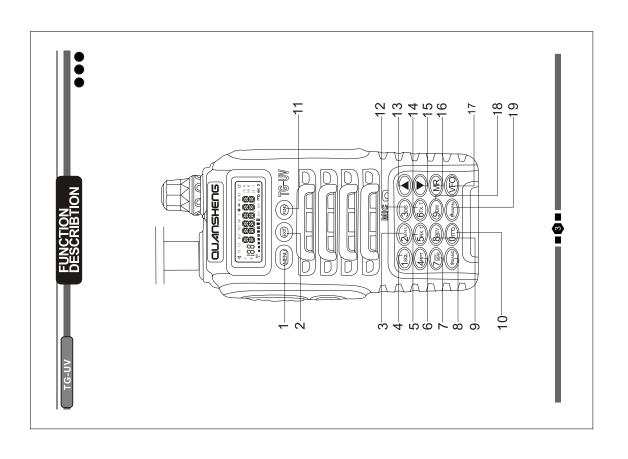
- Do NOT transmit until all RF connectors are verified secure and any open connectors are properly terminated.
- SHUT OFF and DO NOT operate this equipment near electrical blasting caps or in an explosive atmosphere.
- This equipment should be serviced by a qualified technician only.



• On the LCD display, you can see various indicative symbol. The following is the signification of the symbols.



П	Function key
6 I I I I I I I I I I I I I I I I I I I	Signal indicator
Þ	Keypad beep
[32]	Battery capacity indicator
£	Keypad lock
** * * * * * * * * * * * * * * * * * *	Frequency display
H/W/L	Output power indicator
VOX	Vox
တ	Scan
PRI	Priority scan
88/×	Memory channel indicator
TX	Transmitting indication
CT	CTCSS
DCS	DCS
DW	Dual-watch operation
+	Repeater shift direction
R	Reverse frequency function
WX	Dual-watch channel operation
Τ	Priority scan channel



- Menu/confirm
 Exit
 High/medium/low power adjust
 Squelch adjust
 CTCSS/DCS receive
 Repeater shift direction
 VOX search

- 8. Frequency band switch 9. Reverse frequency function
 - 10. Keypad lock
- 11. Function key
- 12. Channel/frequency display 13. Up key 14. CTCSS/DCS transmit
- 16. Channel mode

15. Down key

- 17. Frequency mode Channel scan
- LFrequency scan
- 18. Dual-watch operation 19. Emergency alarm

BASIC OPERATIONS

- will diaplay on the LCD, the LCD backlight shows. When you turn it on, it will beep and the channel Switch the Power/Volume clockwise to turn the
 - clockwise to turn off the radio's power supply. Switch power volume controller counter-





power/volume switch to turn up or down the radio. PS: Pressing and hold the Monitor, then rotating the

P-3

- To make a call, press and hold the "PTT switch", then speak into the microphone in normal speaking voices. 0
 - PS: Hold the microphone approximately 1.5 inches (3-4cm) from your lips.



Release"PTT" to receive signals.

0



key"lacktriang" to choose it from $0{\sim}9$, press"lacktriang" to V Press key "euto" + " (sou", set the squelch level, press

LCD display as picture: confirm and save.

55QL.

♦ Press key "@m" + "Qm", set the High/Medium/Low power, operation repeat, choose it from H/M/L (LCD display)

LCD display as picture:

Version Press P nnel+frequency mode.

LCD display as picture:

01: channel number U2: frequency band

00: memory channels

00 -20 10

01400750

operation repeat, choose it from OFF/+/-, press " V Press key " to the set repeater shift direction of the set repea to confirm and save. ♦ Press key "two" + "5m", set CTCSS/DCS receive, show "rc OFF", press" change the CTCSS/DCS mode:

rc OFF: no CTCSS/DCS

rc CT: CTCSS rc N(I): DCS

press key To roose CTCSS code or DCS code, and then press we to save.