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CE 0678

BAOFENG
PORTABLE TWO-WAY RADIO

VHF/UHF
ULTRA-COMPACT DUAL-BAND
TRANSCIVER WITH
WIDE BAND COVERAGE

USER'S MANUAL



DSP
DIGITAL SIGNAL
PROCESSING SYSTEM

EWC PASSED ISO9001:2008 INTERNATIONAL QUALITY SYSTEM CERTIFICATION

GUANGZHOU INTERNATIONAL DRAGON-BOAT TOURNAMENT APPOINTED COMMUNICATION EQUIPMENT

GENERAL DESCRIPTION

The transceiver is a micro-miniature multiband FM transceiver with extensive receive frequency coverage, providing local-area two-way amateur communications along with unmatched monitoring capability.

We appreciate your purchase of our transceiver, and encourage you to read this manual thoroughly, and learn about many exciting features.

SAFETY TRAINING INFORMATION



warning

Your UV-3R 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 UV-3R 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 Safely Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300GHz.
- 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 exceeding the FCC requirements for wireless RF exposure.



caution To ensure that your exposure 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 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 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** keep the antenna at least 60cm away from the body when transmitting.

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 UV-3R 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 a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

The maximum duty cycle in VOX mode is 50%.

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PRECAUTIONS

- ◆ Refer service to qualified technicians only.
- ◆ Do not disassemble or modify the transceiver for any reason.
- ◆ Do not expose the transceiver under direct sunlight long or to extremely hot conditions.
- ◆ Do not place the transceiver on an unstable surface.
- ◆ Keep the transceiver out of dust, moisture, water.
- ◆ Do not operate the transceiver or charge the battery pack under explosive conditions.

SAFETY

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



WARNING

Please turn off the transceiver at the following locations:

- ▶ In explosive atmospheres (flammable gas, dust particles, metallic powders, grain powders, etc.).
- ▶ While taking on fuel or while parking at gasoline service stations.
- ▶ Near explosives or blasting sites.
- ▶ In medical institutes or aircrafts.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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UNPACKING AND CHECKING EQUIPMENTS

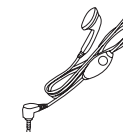
Carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, please contact the dealers immediately.

Standard Accessories

ITEM		QUANTITY
Antenna	UHF(short)	1
	VHF(long)	1
Drop-in Charging Tray		1
AC Adapter		1
Li-ion Battery		1
Belt Clip		1
Hand Strap		1
SP.&MIC.		1
Instruction Manual		1



Antenna



SP.&MIC.



AC Adapter

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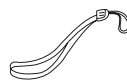
Li-ion Battery



Drop-in Charging Tray



Belt Clip

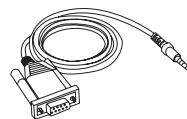


Hand Strap

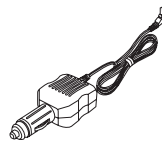
Optional Accessories



UHF/VHF Antenna



Data Cable



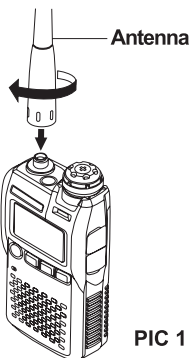
Cigarette-Lighter Adapter

INSTALLATION OF ACCESSORIES

ANTENNA INSTALLATION

The supplied antenna provides good results over the entire frequency range of the transceiver. However, for enhanced based station medium-wave and shortwave reception, you may wish to connect an external antenna, as the supplied antenna is very small and can not be expected to provide high performance at these frequencies.

To install the supplied antenna, hold the bottom end of the antenna and screw it onto the mating connector on the transceiver until it is snug. Do not over-tighten by use of extreme force. (See PIC 1)



PIC 1

02

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Note:

Never transmit without having an antenna connected.

When installing the supplied antenna, never hold the upper part of antenna while screwing it onto the mating connector on the transceiver.

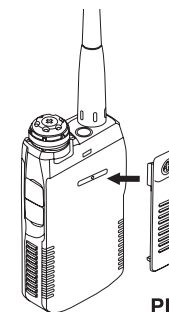
If using an external antenna for transmission, ensure that the SWR presented to the transceiver is 1.5:1 or lower, to avoid excessive feed line loss.

BELT CLIP INSTALLATION

If necessary, install the belt clip into the location on the back of the battery. (See PIC 2)

Note:

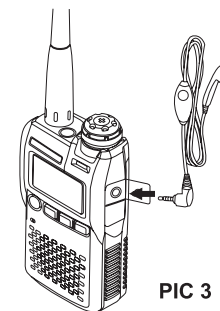
Do not use the glue to fasten the screw, while installing the belt clip. Otherwise, the acrylic acid of the glue may damage the battery panel.



PIC 2

SP.&MIC. INSTALLATION

Insert the speaker/microphone plugs into the SP.&MIC. Jacks of the transceiver. (See PIC 3)



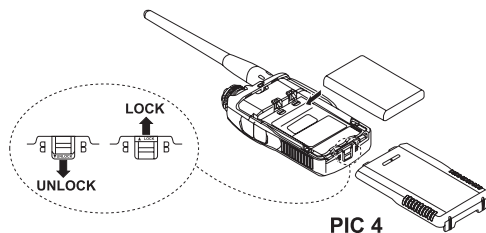
PIC 3

03

BATTERY PACK INSTALLATION

The battery pack is a high-performance Li-ion battery providing high capacity in a very compact package. Under normal use, the battery may be used for approximately 400 charge cycles, after which operating time may be expected to decrease. If you have an older battery that is displaying diminished capacity, you should replace the battery with a new one. Installation of the battery is easy and quick:

1. Slide the Battery Cover to the Unlock position and then slide the Battery Cover toward the bottom to remove it.
2. Install the battery into the Battery Compartment.
3. Replace the Battery Cover and then slide the Battery Cover Latch into the Lock position.



PIC 4

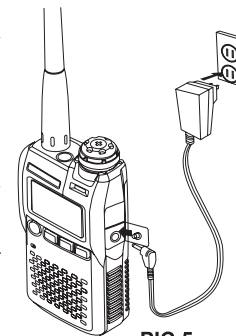
BATTERY CHARGING

If the battery has never been used, or its charge is depleted, it may be charged by connecting the Battery Charger, as shown in the illustration, to the EXT DC Jack. If only 12-16 Volt DC power

is available, the optional DC Adapter (with its cigarette lighter plug) may also be used for charging the battery.

While the battery is being charged, the display will indicate (See PIC 5), this S-meter will deflect according to the charging status, and the TX/BUSY indicator will glow red. When the charging is finished, the TX indicator will glow green.

The charger is only designed for the charging of our battery, and is not suitable for other purposes. Please be advised that the charger may contribute noise to TV and radio reception in the immediate vicinity, so we do not recommend its use adjacent to such devices.

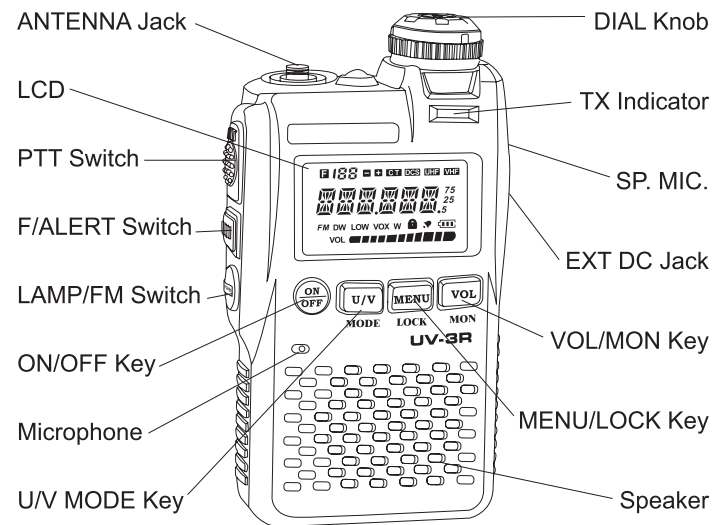


PIC 5

Important Note:

- 1) Perform the battery charging where the ambient temperature range is 41°F~95°F (+5°C~+35°C). Charge out of this range could cause damage to the battery pack.
- 2) If the charge is not completed in several hours, the battery may be deteriorated. Do not attempt to forcibly charge the battery, please contact the dealer.
- 3) If you do not use the transceiver for a long time, remove the battery pack from the transceiver, as battery leakage could cause damage to the transceiver and the battery pack.
- 4) While in storage, the charge will drain slightly over time and the battery should be recharged 50% each six months.

GETTING ACQUAINTED

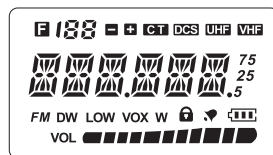


THE DEFINITION OF THE CONTROL

[DIAL]Knob	The main tuning Dial is used for setting the operating frequency, and is used for audio volume level, menu selections, and other adjustments. To rotate this Dial knob, pull the knob to unlock the mechanical dial lock, and then rotate the Dial knob.
[PTT]Switch	Press this switch to transmit, and release it to receive, after your transmission is completed.
[VOL/MON]Key	Press and Hold the key to disable the noise squelching action, allowing you to hear very weak signals near the background noise level. Just press the key, then rotate the DIAL knob to adjust
[ON/OFF]	Press and hold this key for two seconds to toggle the transceiver's power on and off.
[F/ALERT]	Just press to activate the 'Alternate' key function, such as setting Scanning, Memory Write Mode etc. Press and hold the switch to activate the Alarm function.
[MENU/LOCK]	Just press the key, entering into the MENU. Rotate the DIAL knob, will see different functions setting under the MENU. Press and Hold the key, activate the Key Lock or disable the Key Lock. (Note: After the keypad is locked, the operations of the [F/ALERT], [UV MODE], [LAMP/FM] will be invalid.)
[UV/MODE]	Just press to switch the VFO UHF Mode and VHF Mode. Press and Hold to switch frequency control between VFO and Memory Systems.
[LAMP/FM]	Just press to light the Torch. Press and Hold to activate the FM Radio Function.
F+[MENU/LOCK]	Press the [F/ALERT], then press [MENU/LOCK], to Activate the Scanning Function.
F+[UV/MODE]	Press the [F/ALERT], then press [UV/MODE], to Activate the 'Memory Write' mode (for memory channel storage).
F+[DIAL]	Press [F/ALERT], then rotate the [DIAL] knob, to increase or decrease the frequency at $\pm 1\text{MHz}$.
[VOL/MON]+[DIAL]	Press [VOL/MON], then rotate the [DIAL] knob, to adjust the volume level.

LCD DISPLAY

The display icons appear when certain operations are performed or certain specific features are activated. It will help you to know the meaning of the indicator and know how to set functions.



ICON	DESCRIPTION
	Secondary Keypad Active (Press [F/ALERT])
188	Operating Band Number or Memory Channel Number
CT	CTCSS Operation
DCS	DCS Operation
UHF	UHF 400-470MHz
VHF	VHF 136-174MHz
FM	FM Radio(87-108MHz)
LOW	Low/High Output Power
VOX	VOX Function Active
W	Wide/Narrow Bandwidth
	Keypad Lock Active
	Keypad Beeper ON
	Battery Indicator
	Repeater Shift Direction
DW	Dual Watch Active
	Audio Volume Level

COMBINATION KEY FUNCTION

Tone Calling

Press and hold in the button [PTT] and [VOL/MONI] to enter the Tone Calling Mode(1750Hz). The transceiver send out the signal (1750Hz). Release the button [VOL/MONI] to exit.

Restore to Default Factory Setting

Press and hold the key [ON/OFF] + [F/ALERT] , then Power ON, the transceiver will restore to the default factory setting.

Factory Default Setting as:400.000MHz, No CTCSS/DCS, Low Output power, Battery Save, Volume Level 5, SQ 5, Key Tone ON, other settings OFF.

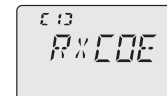


MENU DESCRIPTION

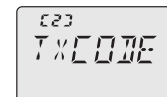
Menu Item	Description	Settings
1	RXCODE	OFF/CTCSS, DCS
2	TXCODE	OFF/CTCSS, DCS
3	SQL (Squelch)	0---9
4	LIGHT (LCD Illumination)	OFF/ON /Key
5	K TONE (Keypad Beeper)	OFF--ON
6	VOX	OFF/1---9
7	POWER (RF Output Power)	HIGH/LOW
8	DW(Dual Watch/UHF&VHF)	ON/OFF
9	STEP	12.5 KHz
10	OFFSET	0---37.995/0---69.995M
11	SHIFT	0/-/+
12	STE (Tail Tone Elimination)	ON/OFF
13	W/N (Wide Band/Narrow Band)	WIDE/NARROW
14	SAVE (Battery Saver)	ON/OFF
15	TOT (Time out Timer)	OFF/30/60/90/120/150/180S
16	SCANM (Scan Mode)	TO/CO
17	RELAYM (Repeater Sound Response)	ON/OFF
18	BCLO (Busy Channel Lock-out)	ON/OFF

MENU SETTING

Press [MENU/LOCK], come to MENU [01]RXCODE



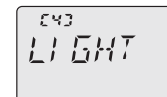
Press [MENU/LOCK], turn clockwise or counterclockwise [DIAL], come to MENU [02] TX CODE.



Press [MENU/LOCK], turn clockwise or counterclockwise [DIAL], come to MENU [03] SQL.



Press [MENU/LOCK], turn clockwise or counterclockwise [DIAL], come to MENU [04] LIGHT.



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Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [05] K TONE.

053
K TONE

Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [06] VOX.

063
VOX

Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [07] POWER.

073
POWER

Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [08] DW.

083
DW

12

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Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [09] STEP.

093
STEP

Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [10] OFFSET.

103
OFFSET

Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [11] SHIFT.

113
SHIFT

Press 【MENU/LOCK】 , turn clockwise or counterclockwise
【DIAL】 , come to MENU [12] STE.

123
STE

13