ICOM

INSTRUCTION MANUAL

VHF TRANSCEIVER

IC-V82 IC-V82-T

UHF TRANSCEIVER

IC-U82

This device complies with Part 15 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.

Icom Inc.



FOREWORD

Thank you for purchasing this Icom product. The IC-V82/U82 VHF/UHF TRANSCEIVERS are designed and built with Icom's superior technology and craftsmanship. With proper care, this product should provide you with years of trouble-free operation.

We want to take a couple of moments of your time to thank you for making the IC-V82/U82 your radio of choice, and hope you agree with Icom's philosophy of "technology first." Many hours of research and development went into the design of your IC-V82/U82.

♦ FEATURES

○ 7 W*— high transmit output power *7 W: IC-V82 except [THA] version,

5.5 W: IC-V82 [THA] version,

5 W : IC-U82

O CTCSS and DTCS encoder/decoder standard

Optional digital modulator/demodulator

O Optional DTMF decoder

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL— This instruction manual contains important operating instructions for the IC-V82/U82.

EXPLICIT DEFINITIONS

WORD	DEFINITION
△ WARNING!	Personal injury, fire hazard or electric shock
A WARNING!	may occur.
CAUTION	Equipment damage may occur.
NOTE	Recommended for optimum use. No risk of
NOTE	personal injury, fire or electric shock.

Icom, Icom Inc. and the ICOM logo are registered trademarks of Icom Incorporated (Japan) in the United States, the United Kingdom, Germany, France, Spain, Russia and/or other countries.

PRECAUTIONS

⚠WARNING! 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 5 to 10 cm (2 to 4 inches) away from the lips and the transceiver is vertical.

⚠ WARNING! NEVER operate the transceiver with a headset or other audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume or discontinue use.

NEVER connect the transceiver to a power source that is DC fused at more than 5 A. Accidental reverse connection will be protected by this fuse, but higher fuse values will not give any protection against such accidents and the transceiver will be ruined.

NEVER attempt to charge alkaline or dry cell batteries. Be aware that external DC power connections will charge batteries inside the battery case. This will damage not only the battery case but also the transceiver.

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

Place the unit in a secure place to avoid inadvertent use by children.

DO NOT operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

AVOID using or placing the transceiver in direct sunlight or in areas with temperatures below -10°C (+14°F) or above +60°C (+140°F).

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

Even when the transceiver power is OFF, a slight current still flows in the circuits. Remove the battery pack or case from the transceiver when not using it for a long time. Otherwise, the battery pack or installed rechargeable batteries (Ni-Cd: BP-222N, BP-209N, Ni-MH: BP-210N, Li-Ion: BP-211N) will become exhausted.

For USA only:

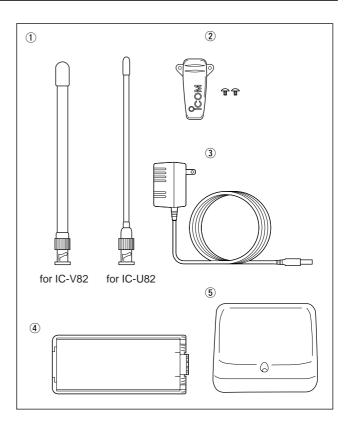
Caution: Changes or modifications to this transceiver, not expressly approved by Icom Inc., could void your authority to operate this transceiver under FCC regulations.

SUPPLIED ACCESSORIES

■ Supplied Accessories

① Antenna*	
② Belt clip* (with screws)	. 1
③ AC Adapter*	
4 Battery pack*/Battery case*	. 1
⑤ Battery charger*1 s	е

*Not supplied with some versions.



SAFETY TRAINING INFORMATION

CAUTION

To ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits, 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 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" appears. You can cause the radio to transmit by pressing the "PTT" switch.
- ALWAYS use Icom authorized accessories (antennas, batteries, belt clips, speaker/mics, etc.). Use of unauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded.

• ALWAYS keep the antenna at least 2.5 cm (1 inch) away from the body when transmitting, and only use the Icom belt-clips which are listed in this manual when attaching the radio to your belt, etc. To provide the recipients of your transmission the best sound quality, hold the transceiver at least 5 cm (2 inches) from your mouth, and turned slightly 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 Icom 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.

TABLE OF CONTENTS

IM EX PF SU SA	OREWORD MPORTANT XPLICIT DEFINITIONS RECAUTIONS UPPLIED ACCESSORIES AFETY TRAINING INFORMATION ABLE OF CONTENTS	 i ii
Q	UICK REFERENCE GUIDE ■ Preparation ■ Your first contact ■ Repeater operation	 II IV
1	ACCESSORIES ■ Accessory attachment	
2	PANEL DESCRIPTION ■ Switches, controls, keys and connectors ■ Function display	3
3	BATTERY PACKS	8 9 9
4	BASIC OPERATION	13

	■ Setting a frequency ■ Setting audio/squelch level ■ Receive and transmit ■ Display type ■ Key lock function	. 15 . 15 . 16
5	REPEATER OPERATION	. 17 . 17 . 18 . 18
	MEMORY/CALL OPERATION	. 21 . 21 . 22 . 23 . 23 . 25
,	DTMF MEMORY	. 27 . 28

8	SCAN OPERATION Scan types Programmed scan Memory scan Skip channels Priority watch Scan resume condition	30 30 31 32
9	SUBAUDIBLE TONES ■ Tone squelch	34
	PAGER/CODE SQUELCH (Requires Optional UT-108) ■ Pager function ■ Code programming ■ Pager operation ■ Code squelch DIGITAL MODE OPERATION	38 38 40
	Requires Optional UT-118) Digital mode operation Call sign programming Digital voice mode operation When receiving a digital call Break-in communication EMR communication Pocket beep operation Digital squelch functions Digital monitor	

■ Low-speed data communication	50
■ About D-STAR system	51
■ Repeater call sign programming	52
■ Setting other items	53
■ GPS operation	57
12 OTHER FUNCTIONS	59–70
■ SET MODE	59
■ INITIAL SET MODE	
■ Weather channel operation	
(IC-V82 [USA]/[CSA] versions only)	69
■ CPU reset	
■ Partial reset	70
13 CLONING	71–72
■ Transceiver-to-transceiver cloning	
■ Cloning using a PC	
14 OPTIONAL UNITS	
■ Optional UT-108/118 installation	
Optional MB-86 installation	
15 SPECIFICATIONS	
■ IC-V82	
■ IC-U82	76
16 OPTIONS	77–78
17 MODE ARRANGEMENT	79–81
18 CE	82_83

5

■ Preparation

♦ Battery pack replacement

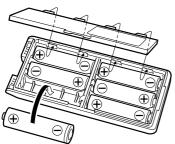
Before replacing the battery pack, push and hold **[PWR]** for 1 sec. to turn the power OFF.

• Slide the battery release forward, then pull the battery pack upward with the transceiver facing away from you.



♦ Battery case— optional for some versions

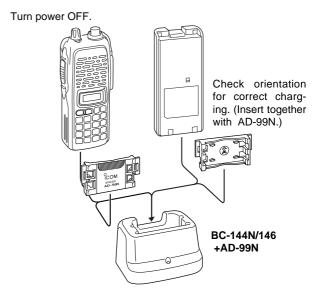
When using a BP-208N BATTERY CASE attached to the transceiver, install 6 AA (LR6) size alkaline batteries as illustrated below.



♦ Charging with the BC-144N/146

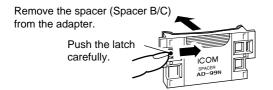
The optional BC-144N provides rapid charging, and the BC-146 provides regular charging of an optional battery pack with or without a transceiver attached. The following is additionally required:

 An optional AC adapter. (An AD-99N is supplied with BC-144N or BC-146.)



♦ About AD-99N

The adapter (Spacer A) only is required for the IC-V82/U82 series. When removing the spacer (Spacer B/C), push the latch carefully with your finger to remove the spacer (Spacer B/C) from the adapter (Spacer A).



% △ CAUTION!

- DO NOT push or force the latch with a screw driver, etc., to remove it.
- DO NOT bend the latch when the adapter and spacer are not joined together. This will cause weakening of the latch plastic.
- Both cases may break the latch and it may not be able to be reattached.

♦ Antenna

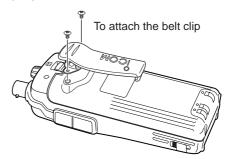
Attach the antenna to the transceiver as illustrated at right.



♦ Belt clip

Conveniently attaches to your belt.

Attach the belt clip with the supplied screws using a phillips screwdriver.



■ Your first contact

Now that you have your IC-V82/U82 ready, you are excited to get on the air. We would like to walk you through a few basic operational steps to make your first "On The Air" use an enjoyable experience.

♦ About default setting

The **[VOL]** control function can be exchanged with **[△]/[▼]** keys function in INITIAL SET MODE. However, in this QUICK REFERENCE, the factory default setting (**[VOL]** controls audio output level) is used to simplify instructions.

♦ Basic operation

1. Turning ON the transceiver

Although you have purchased a brand new transceiver, some settings may be changed from the factory defaults because of the Quality Control process. Resetting the CPU is necessary to start from factory default.

While pushing [MONI] and [D•cLR], push and hold [PWR] for 1 sec. to reset the CPU and turn power ON.

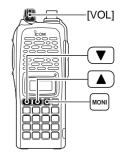


2. Adjusting audio output level

→ Rotate [VOL] to set the desired audio level.

3. Adjusting the squelch level

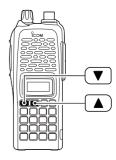
While pushing and holding [MONI], push [▲] or [▼] to set the squelch level.



4. Tune the desired frequency

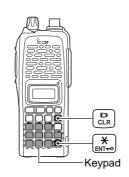
The up/down keys, [▲]/[▼], will allow you to tune to the frequency that you want to operate on. Page 14 will instruct you on how to adjust the tuning step size.

→ Push [▲] or [▼] to adjust the frequency.



Direct frequency input from the keypad is also available.

- To enter the desired frequency, enter 6 digits starting from the 100 MHz digit.
 - Entering three* to five digits then pushing [**ENT -0] will also set the frequency. (*Some versions only requires two digits.)
 - When a digit is mistakenly input, push [D.cLR] to abort input.



• Example 1— when entering 145.525 MHz



• Example 2— when entering 144.800 MHz



5. Transmit and receive

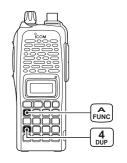
→ Push and hold [PTT] to transmit, then speak into the microphone; release to receive.

■ Repeater operation

1. Setting duplex

- ► Push [A•Func], then [4•DuP] several times to select minus duplex or plus duplex.
 - The USA/CSA versions have an auto repeater function, therefore, setting duplex is not required.



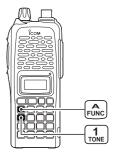


2. Repeater tone

→ Push [A•Func], then [1•Tone] several times until ""

¬" appears, if required.





■ Programming memory channels

The IC-V82/U82 has a total of 207 memory channels (including 6 scan edges and 1 call channel) for storing often used operating frequency, repeater settings, etc.

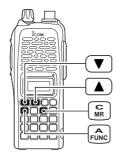
1. Setting frequency

In VFO mode, set the desired operating frequency with other desired settings, such as repeater and subaudible tone.

2. Selecting a memory channel

- Push [A•Func] and [C•mR] then push [▲] or [▼] several times to select the desired memory channel.
 - "Mag" indicator and memory channel number blink.

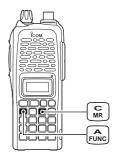




3. Writing a memory channel

- → Push [A•Func], then push and hold [C•mR] for 1 sec. to program.
 - 3 beeps sound.





 Continue to push and hold [C•mr] for 1 sec. after 3 beeps are emitted, to increment the displayed memory channel number.

Count on us!

IC-V82

#02 Europe #12 Europe-1 #22 Europe-2 #42 Europe-3 #10 Eu

IC-U82

#02 Europe #12 Europe-1 #22 Europe-2 #42 Europe-3 #40 Eu

A-6413D-1EX-3a Printed in Japan © 2004–2007 Icom Inc.

Icom Inc.

1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan