ICOM

INSTRUCTION MANUAL

VHF/UHF DUAL BAND FM TRANSCEIVER

IC-E7

Icom Inc.

FOREWORD

Thank you for purchasing this Icom product. The IC-E7 VHF/UHF DUAL BAND FM TRANSCEIVER is 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 your IC-E7 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-E7.

◇ *FEATURES*

- ❍ *Covers the 0.495–999.990 MHz* frequency range*
  *Some frequency bands are disabled according to version
- ❍ *CTCSS and DTCS encoder/decoder standard*
- ❍ *1250 memory channels* with 18 banks available*
  *200 auto write and 50 scan edge channels are included.
- ❍ *1800 mAh large capacity Li-Ion battery standard*

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-E7.

EXPLICIT DEFINITIONS

WORD	DEFINITION
⚠**DANGER!**	Personal death, serious injury or an explosion may occur.
⚠**WARNING!**	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

DISPOSAL

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

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PRECAUTIONS

⚠**DANGER! NEVER** short the terminals of the transceiver or battery pack.

⚠**DANGER!** Use and charge only specified Icom battery packs with Icom radios or Icom chargers. Only Icom battery packs are tested and approved for use with Icom radios or charged with Icom chargers. Using third-party or counterfeit battery packs or chargers may cause smoke, fire, or cause the battery to burst.

⚠**WARNING RF EXPOSURE!** This device emits Radio Frequency (RF) energy. Caution should be observed when operating this device. If you have any questions regarding RF exposure and safety standards please refer to the Federal Communications Commission Office of Engineering and Technology's report on Evaluating Compliance with FCC Guidelines for Human Radio Frequency Electromagnetic Fields (OET Bulletin 65)

⚠**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. The continuous high volume operation may cause a ringing in your ears. If you experience the ringing, reduce the volume level or discontinue use.

⚠**WARNING! NEVER** operate the transceiver while driving a vehicle. Safe driving requires your full attention—anything less may result in an accident.

⚠**WARNING! NEVER** operate or touch the transceiver with wet hands. This may result in an electric shock or may damage the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids. The transceiver may be damaged.

DO NOT operate or touch the transceiver with wet hands. This may result in an electric shock or damage the transceiver.

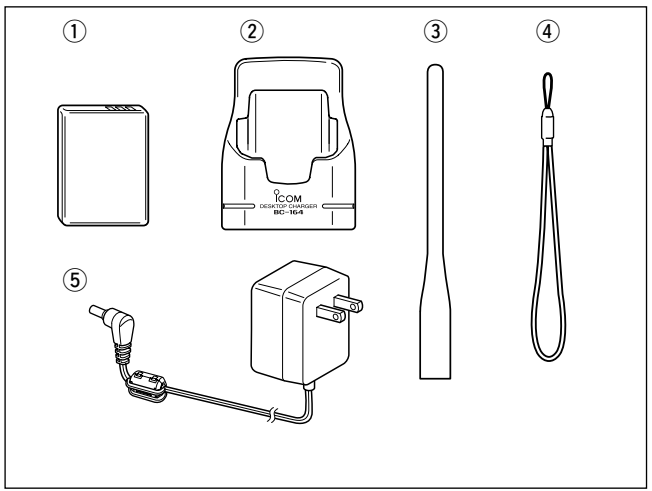
DO NOT push the PTT when not actually desiring to transmit.

DO NOT operate or place the transceiver in direct sunlight or in areas with temperatures below –10°C (+14˚F) or above +60°C (+140˚F).

DO NOT use harsh solvents such as benzine or alcohol when cleaning, as they will damage the radio surfaces.

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

SUPPLIED ACCESSORIES



①Battery pack (BP-243) 1
②Battery charger (BC-164) 1
③Antenna 1
④Handstrap 1
⑤AC adapter* (BC-145LE/LUK) 1
(The shape of the BC-145LE and BC-145LUK are different.)
*Depending on versions. Not supplied with some versions.

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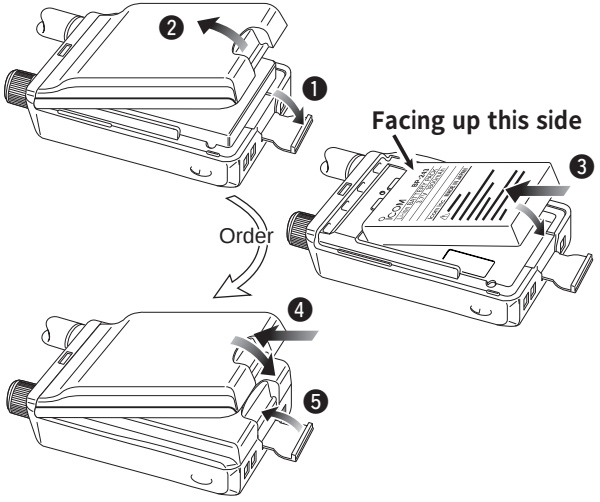
QUICK REFERENCE GUIDE

■ Preparation

◇ Battery installation

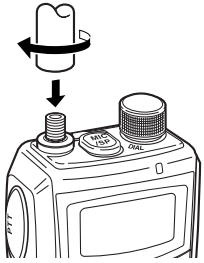
①Remove the battery cover from the transceiver.
②Install the BP-243 (Li-Ion battery pack).
• Be sure to observe the correct polarity.
③Replace the battery cover to the transceiver.



Keep the battery contacts clean. It's a good idea to clean the battery terminals once a week.

◇ Antenna

Insert the supplied antenna into the antenna connector and screw down the antenna as shown at right.



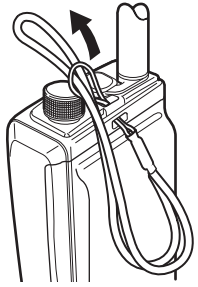
NEVER hold the antenna when carrying the transceiver.

Keep the jack cover attached when jack is not in use to protect the connector from dust and moisture.

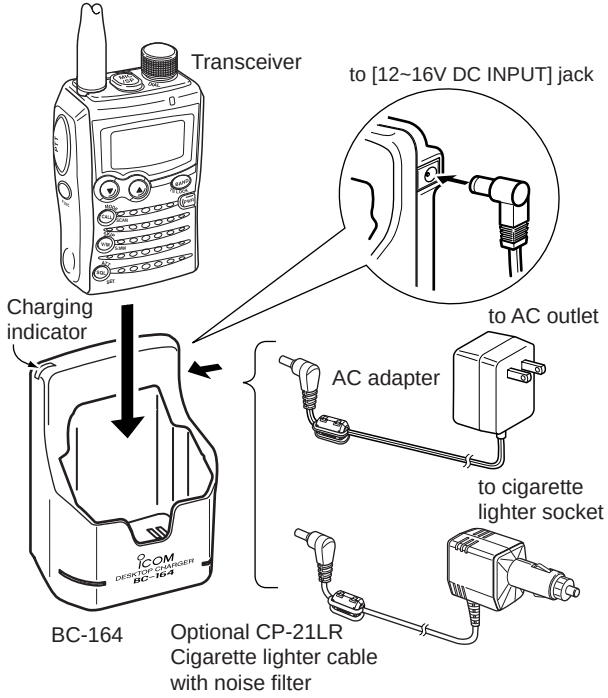
✔For your information
Third-party antennas may increase transceiver performance. An optional AD-92SMA ANTENNA CONNECTOR ADAPTER is available to connect an antenna with a BNC connector.

◇ Handstrap

Slide the handstrap through the loop on the top of the rear panel as illustrated at right. Facilities carrying.



◇ Charging the battery



⚠WARNING!:
NEVER charge any other than the specified battery pack.

◇ Charging description

①Plug the AC adapter into an AC outlet; or the optional CP-21LR into a cigarette lighter socket.
②Insert the adapter plug into **[12~16V DC INPUT]** of the BC-164 BATTERY CHARGER.
③Install the BP-243 BATTERY PACK (see left page) to the transceiver.
④Be sure to turn OFF the transceiver, then charge the battery with transceiver.

- Takes approximately 3 hours for fully charge with the supplied BP-243 battery pack.
- Charging indicator of BC-164 lights or blinks as follows.

Charging indicator status	Charging status
Lights orange	Charging
Lights green	Charging is completed
Blinking red	Charging error*

* It may be charging outside of the specified temperature range: +5˚C to +35˚C (+41˚F to +95˚F). Restore the specified temperature range and reinsert the transceiver.

NOTE: The transceiver has battery indicator to show the following information.

- No indicator appears when the installed battery pack has ample capacity.
- "▭" (battery indicator) appears when the battery pack is nearing exhaustion.
- "▭" blinks when the battery pack must be charged.
- "▭" and "LOW" indicator appear just before the battery pack is completely discharged and display turns OFF.

■ Your first contact

Now that you have your IC-E7 ready, you are probably excited to get on the air. We would like to take you through a few basic steps to make your first experience “On The Air” enjoyable.

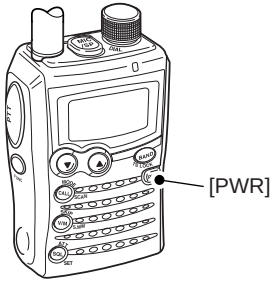
◇ About default settings

The **[DIAL]** control function can be exchanged with the **[▲]/[▼]** key functions by pushing and holding **[FUNC]** then push **[▲]** or **[▼]**. However, in this QUICK REFERENCE GUIDE, the factory default setting (**[DIAL]** sets operating frequency) is used to simplify the instructions.

◇ Basic operation

1. Turning ON the transceiver

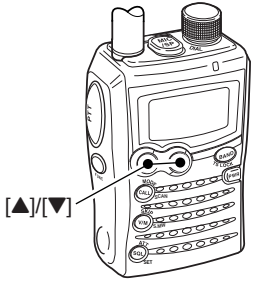
➥ Push and hold **[PWR]** for 1 sec. to turn the power ON.
- Opening indication passes through, then frequency indication appears.



The opening indication can be skipped. While pushing and holding **[FUNC]**, push and hold **[PWR]** for 1 sec. to shortcut the opening indication.

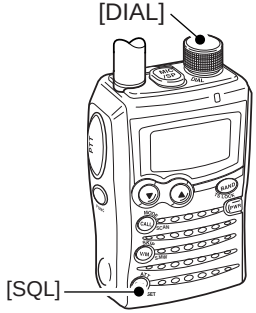
2. Adjusting audio level

➥ Push **[▲]/[▼]** to set the desired audio level.



3. Adjusting squelch level

➥ While pushing and holding **[SQL] (ATT•SET)**, rotate **[DIAL]** to set the squelch level.

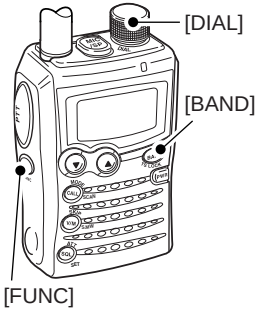


4. Tune the desired frequency

The tuning dial will allow you to dial in the frequency you want to use. Pages 11 and 17 will instruct you on how to set the tuning step size.

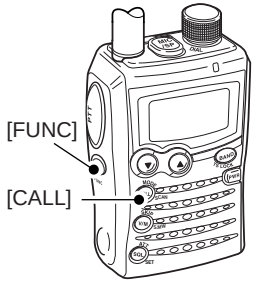
①Push **[BAND] (TS•LOCK)** several times to select the desired frequency band.
- While pushing and holding **[BAND] (TS•LOCK)**, rotating **[DIAL]** also selects frequency band.

②Rotate **[DIAL]** to set the desired frequency.
- While pushing and holding **[FUNC]**, rotate **[DIAL]** to select frequency in 1 MHz steps.



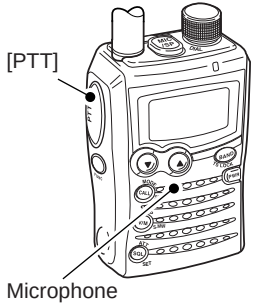
5. Operating mode selection

➥ While pushing and holding **[FUNC]**, push **[CALL] (MODE•SCAN)** several times to select the desired operating mode.
- FM, WFM and AM modes are selectable.
- WFM mode is not selectable below 30 MHz band.



6. Transmit and receive

➥ Push and hold **[PTT]** to transmit then speak into the microphone; release to receive.
- Transmission is available on the 144 MHz/430 MHz (FM mode) amateur bands only.



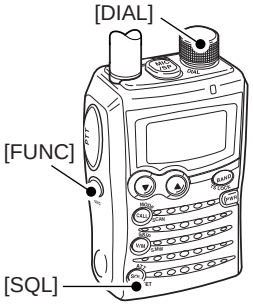
■ Repeater operation

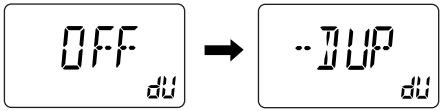
1. Setting duplex

①While pushing and holding **[FUNC]**, push and hold **[SQL] (ATT•SET)** for 1 sec. to enter *set mode*.

②Rotate **[DIAL]** to select "DUP."

③While pushing and holding **[FUNC]**, rotate **[DIAL]** to select minus duplex or plus duplex.





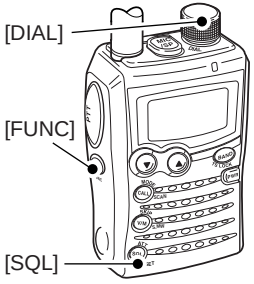
④Push **[SQL] (ATT•SET)** to exit *set mode*.

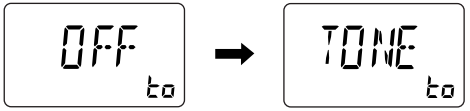
2. Repeater tone

①While pushing and holding **[FUNC]**, push and hold **[SQL] (ATT•SET)** for 1 sec. to enter *set mode*.

②Rotate **[DIAL]** to select "T/TSQL."

③While pushing and holding **[FUNC]**, rotate **[DIAL]** to select the repeater tone activation.





④Push **[SQL] (ATT•SET)** to exit *set mode*.

NOTE: The transceiver can transmit a 1750 Hz tone burst. Push **[PTT]** briefly, then push and hold **[PTT]** for 1 to 2 sec. to transmit a 1750 Hz tone burst. (p.23)

■ Memory programming

The IC-E7 has a total of 1250 memory channels (including 200 auto write channels and 50 scan edges) for storing often used operating frequency, mode, etc.

1. Setting frequency

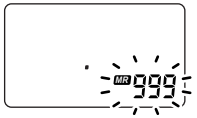
In *VFO mode*, set the desired receive frequency mode.

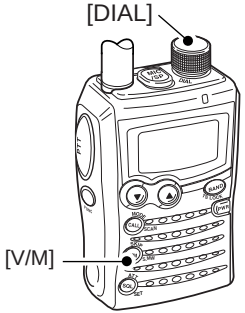
• When "MR" indicator is displayed, push **[V/M] (SKIP•S.MW)** to select the *VFO mode*.

2. Selecting a memory channel

Push **[V/M] (SKIP•S.MW)** for 1 sec. to enter *select memory write mode* (1 short and 1 long beep sound), then rotate **[DIAL]** to select the desired memory channel.

• "MR" indicator and memory channel number blink.



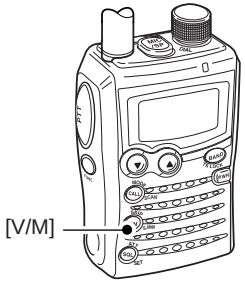


• To cancel and exit *select memory write mode*, push **[V/M] (SKIP•S.MW)** momentarily.

3. Writing a memory channel

Push and hold **[V/M] (SKIP•S.MW)** for 1 sec. until 3 beeps sound.

• Memory channel number automatically increases when continuing to push **[V/M] (SKIP•S.MW)** after programming.



Count on us!

#02 Europe

<Intended Country of Use>			
■ GER	□ FRA	■ ESP	■ SWE
■ AUT	■ NED	■ POR	■ DEN
■ GBR	■ BEL	□ ITA	■ FIN
■ IRL	■ LUX	■ GRE	□ SUI
□ NOR			

#03 Italy

<Intended Country of Use>			
□ GER	□ FRA	□ ESP	□ SWE
□ AUT	□ NED	□ POR	□ DEN
□ GBR	□ BEL	■ ITA	□ FIN
□ IRL	□ LUX	□ GRE	□ SUI
□ NOR			

#10 France

<Intended Country of Use>			
□ GER	■ FRA	□ ESP	□ SWE
□ AUT	□ NED	□ POR	□ DEN
□ GBR	□ BEL	□ ITA	□ FIN
□ IRL	□ LUX	□ GRE	□ SUI
□ NOR			

#11 UK

<Intended Country of Use>			
□ GER	□ FRA	□ ESP	□ SWE
□ AUT	□ NED	□ POR	□ DEN
■ GBR	□ BEL	□ ITA	□ FIN
□ IRL	□ LUX	□ GRE	□ SUI
□ NOR			

A-6468D-1EU-0a
Printed in Japan
© 2005–2015 Icom Inc.

Icom Inc.
1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan