



INSTRUCTION MANUAL

VHF TRANSCEIVER

IC-F3161T/S/DT/DS
IC-F3163T/S

UHF TRANSCEIVER

IC-F4161T/S/DT/DS
IC-F4163T/S

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Icom Inc.





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-F3161T/S/DT/DS, IC-F3163T/S VHF TRANSCEIVERS** and **IC-F4161T/S/DT/DS, IC-F4163T/S UHF TRANSCEIVERS**.

See the operating guide for details of Digital, BIIS, MDC and LTR® system operations. Ask your dealer for details.

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.

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LTR is a registered trademark of the E.F.Johnson Company.


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PRECAUTIONS

 **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.

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

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

 **CAUTION! NEVER** use non-Icom battery packs/chargers to prevent the loss of the transceiver's good performance and warranty.

DO NOT push [PTT] when not actually desiring to transmit.

DO NOT use or place the transceiver in direct sunlight or in areas with temperatures below +22°F (−30°C) or above +140°F (+60°C).

The basic operations, transmission and reception of the transceiver are guaranteed within the specified operating temperature range. However, the LCD display may not 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. The transceiver warranty does not cover any problems caused by unauthorized modification.

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

Icom optional equipment is designed for optimal performance when used with this transceiver. We are not responsible for the transceiver being damaged or any accident caused when using non-Icom optional equipment.

For U.S.A. 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.

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VOICE CODING TECHNOLOGY

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form. U.S. Patent Nos.

#5,870,405, #5,826,222, #5,754,974, #5,701,390, #5,715,365, #5,649,050, #5,630,011, #5,581,656, #5,517,511, #5,491,772, #5,247,579, #5,226,084 and #5,195,166.

FCC INFORMATION

• **FOR CLASS B UNINTENTIONAL RADIATORS:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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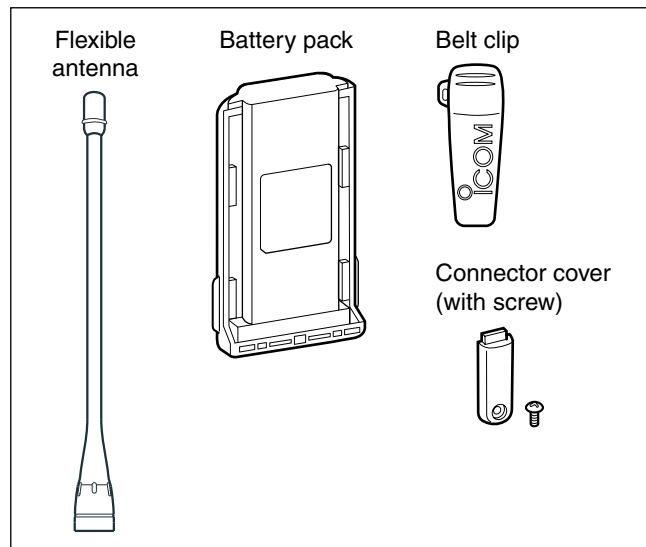
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■ Supplied accessories

The following accessories are supplied.



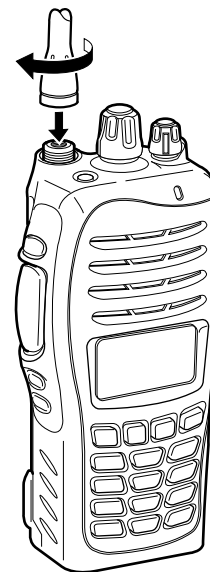
■ Accessory attachments

◇ Flexible antenna

Connect the supplied flexible antenna to the antenna connector.

CAUTION:

- **NEVER HOLD** the antenna when carrying the transceiver.
- Transmitting without an antenna may damage the transceiver.



◇ Battery pack

To attach the battery pack:

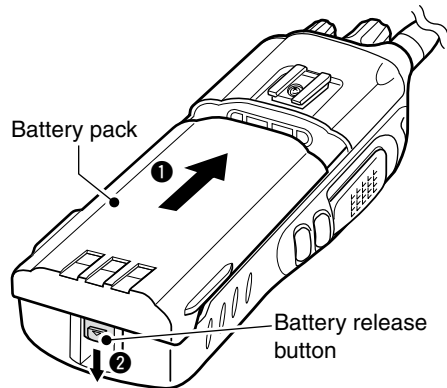
Slide the battery pack on the back of the transceiver in the direction of the arrow (①), then lock it with the battery release button.

- Slide the battery pack until the battery release button makes a 'click' sound.

To release the battery pack:

Push the battery release button in the direction of the arrow (②) as shown below. The battery pack is then released.

NEVER release or attach the battery pack when the transceiver is wet or soiled. This may result water or dust getting into the transceiver/battery pack and may result in the transceiver being damaged.

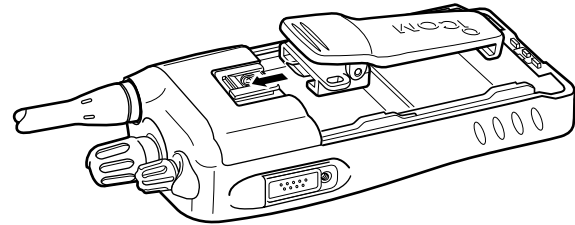


NOTE: Keep the battery pack terminals clean. It's a good idea to clean the battery pack terminals once a week.

◇ Belt clip

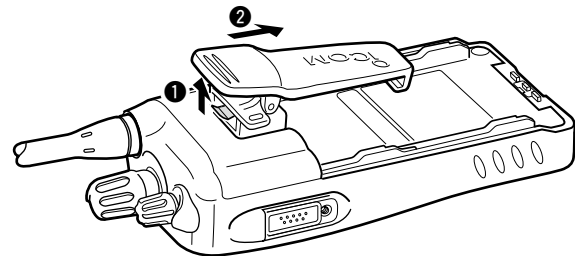
To attach the belt clip:

- ① Release the battery pack if it is attached.
- ② Slide the belt clip in the direction of the arrow until the belt clip is locked and makes a 'click' sound.



To detach the belt clip:

- ① Release the battery pack if it is attached.
- ② Pinch the clip (①), and slide the belt clip in the direction of the arrow (②).



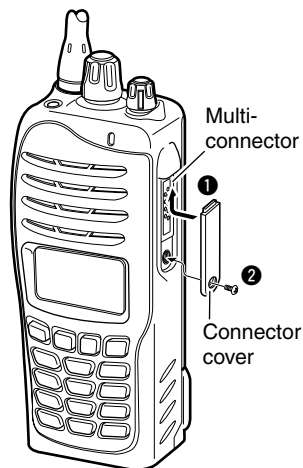
1 ACCESSORIES

◇ Connector cover

Attach the connector cover when the optional equipment is not used.

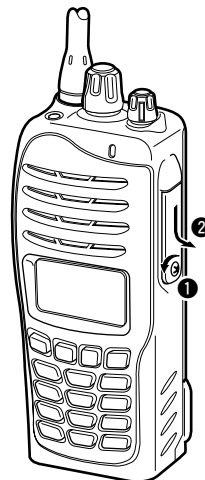
To attach the connector cover:

- ❶ Insert the connector cover into the multi-connector.
- ❷ Tighten the screw.



To detach the connector cover:

- ❶ Unscrew the screw using a phillips screwdriver.
- ❷ Detach the connector cover for the optional equipment connector.



CAUTION:

Attach the connector cover when the optional equipment is not used. Otherwise the terminals of the multi-connector may be shorted by metal object, etc., and this could damage the transceiver.

■ Front panel



① ROTARY SELECTOR

Rotate to select the pre-programmed memory channels or the operating zone. (Depending on the pre-setting)

② ANTENNA CONNECTOR

Connects the supplied antenna. (p. 1)

③ DEALER-PROGRAMMABLE KEY [EMR]

Desired function can be programmed by your dealer. (p. 6)

④ DEALER-PROGRAMMABLE KEY [Side1]

Desired function can be programmed by your dealer. (p. 6)

⑤ PTT SWITCH [PTT]

Push and hold to transmit; release to receive.

⑥ DEALER-PROGRAMMABLE KEYS [Side2]/[Side3]

Desired function can be programmed independently by your dealer. (p. 6)

⑦ 10-KEYPAD (Depending on version)

The keypad allows you to enter digits to:

- Select memory channels
- Select tone channels
- Select DTMF codes (during transmit)
- Set TX codes
- Start up with the password

⑧ DEALER-PROGRAMMABLE KEYS [P0] to [P3]

Desired function can be programmed independently by your dealer. (p. 6)

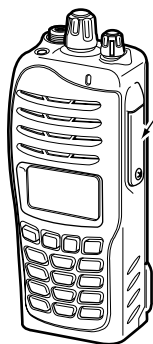
⑨ FUNCTION DISPLAY (p. 5)

Displays a variety of information such as an operating channel number/name, Set mode contents, DTMF code, selected function, etc.

2 PANEL DESCRIPTION

10 MULTI-CONNECTOR

Connect an optional equipment.



Connector cover

NOTE: Attach the connector cover when the optional equipment is not used. See p. 3 for details.

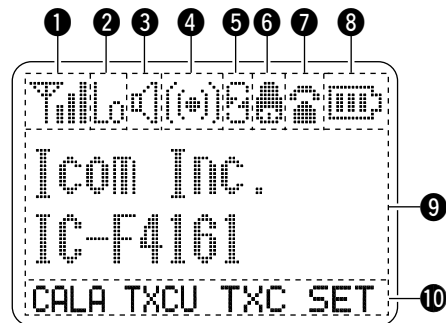
11 BUSY/TRANSMIT INDICATOR

- ➔ Lights green while receiving a signal, or when the squelch is open.
- ➔ Lights red while transmitting.

12 VOLUME CONTROL [VOL]

Rotate to turn the power ON/OFF and adjusts the audio level.

■ Function display



1 SIGNAL STRENGTH INDICATOR

Indicates relative signal strength level.

2 LOW POWER INDICATOR

Appears when low output power is selected.

3 AUDIBLE INDICATOR

- ➔ Appears when the channel is in the 'audible' (unmute) condition.
- ➔ Appears when the matched signal is received.

4 COMPANDER INDICATOR

Appears when the compander function is activated.

5 SCRAMBLER INDICATOR

Appears when the voice scrambler function is activated.

Count on us!

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