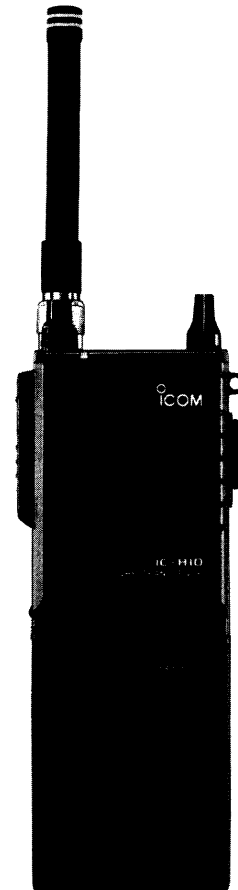


ICOM

INSTRUCTION MANUAL

VHF TRANSCEIVER
IC-H10

Icom Inc.



FOREWORD

Congratulations on your purchase of Icom's new **IC-H10 VHF TRANSCEIVER**.

The **IC-H10** incorporates state-of-the-art design concepts to meet the demanding needs of commercial, industrial, and public safety two-way communication users.

Please read this instruction manual carefully before operating. Also, visit your nearest authorized Icom Dealer if you have questions relating to the operation of the transceiver.

CAUTIONS

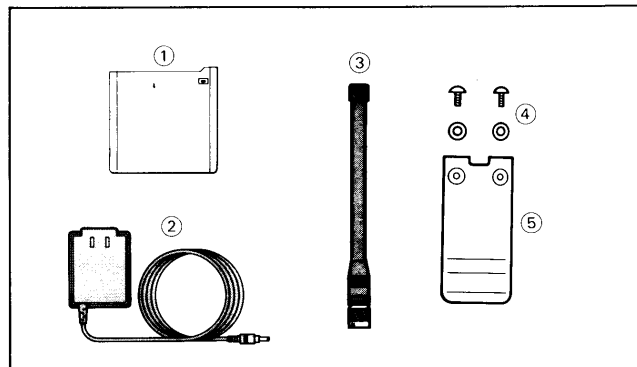
NEVER allow children to touch the transceiver.

AVOID using or placing the transceiver in areas with temperatures below -10°C ($+14^{\circ}\text{F}$) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$).

AVOID placing the transceiver in direct sunlight.

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

UNPACKING



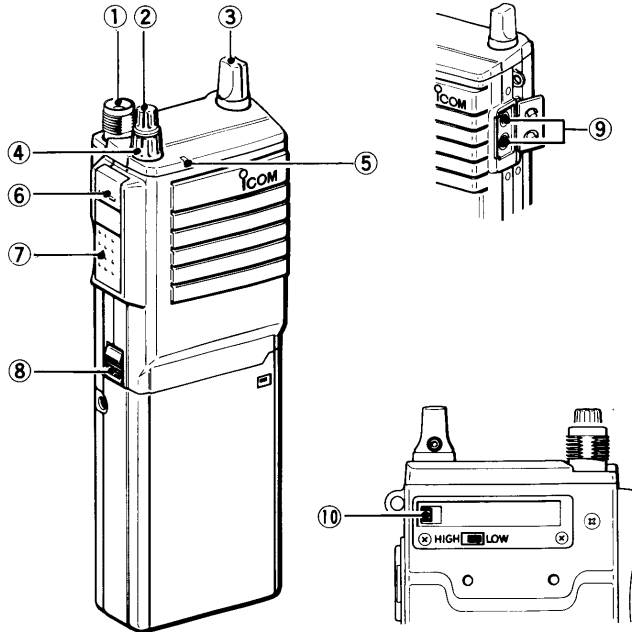
Accessories included with the IC-H10:	Qty.
① Battery pack or case* ¹	1
② Wall charger* ²	1
③ Flexible antenna	1
④ Screws and washers	1 set
⑤ Belt clip.	1

*¹ CM-23, CM-88 or CM-91 will be attached to the transceiver depending on the version.

*² Some versions do not include the wall charger.

CONTROL FUNCTIONS

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- ① **ANTENNA CONNECTOR**
Connect the supplied flexible antenna here.
- ② **POWER SWITCH/VOLUME CONTROL [PWR/VOL]**
Turns ON and OFF power and varies the audio level.
- ③ **CHANNEL SELECTOR**
Selects an operating channel.
- ④ **SQUELCH CONTROL [SQL]**
Rotate the control clockwise until noise is quieted.
- ⑤ **TRANSMIT/BUSY INDICATOR [TX/BUSY]**
Lights up in red while transmitting. Lights up in green when the selected channel is busy.
- ⑥ **MONITOR SWITCH [MONITOR]**
Opens the squelch manually to listen to a channel.
- ⑦ **PTT SWITCH**
Push to transmit and release to receive.
- ⑧ **BATTERY PACK RELEASE BUTTON**
Allows the battery pack to be removed from the transceiver.
- ⑨ **EXTERNAL MICROPHONE AND SPEAKER JACKS [MIC], [EXT SP]**
Accept an optional CM-9L or EM-46L SPEAKER-MICROPHONE.
- ⑩ **TRANSMIT POWER SWITCH [HIGH/LOW]**
Sets the transmit power to HIGH or LOW.

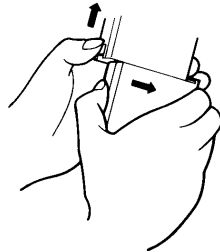
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PRE-OPERATION

■ BATTERY PACK REPLACEMENT

- 1) Rotate the [PWR/VOL] control fully counterclockwise until a click is heard to turn OFF power.
- 2) To remove the battery pack from the transceiver, push and hold the RELEASE button upwards. See the figure below.
- 3) Slide the battery pack to the right with the transceiver facing you.
- 4) To attach the battery pack to the transceiver, mate the notched ends between the battery pack and transceiver.
- 5) Slide the battery pack until a click sound from the latch is heard.

● Battery pack removal

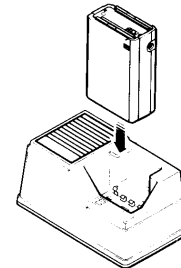


■ BATTERY PACK CHARGING

Prior to using the transceiver for the first time, the battery pack **MUST** be fully charged with the optional BM-71U/E AC BATTERY CHARGER.

- 1) Turn ON the optional BM-71U/E AC BATTERY CHARGER.
- 2) Put the battery pack in the CHARGING SLOT as shown in the figure below.
 - The CHG indicator on the BM-71U/E lights up while charging.
 - When the battery pack is attached to the transceiver, the [PWR/VOL] control **MUST** be OFF.
 - Normal charging time is about 1 hour. (with CM-23)

● Battery pack charging



■ BATTERY PACK CAUTIONS

NEVER throw the battery pack into a fire. Internal battery gas may cause an explosion.

NEVER put the battery pack in water. If the battery pack is wet, be sure to wipe it dry.

NEVER short the terminals of the battery pack. Internal components may be damaged. Current may flow into nearby metal objects.

NEVER replace the battery cells. The supplied battery pack can normally be recharged 300 times. After this, a new battery pack must be purchased.

AVOID charging the battery pack in extreme cold (under 0°C; +32°F) or extreme heat (over +40°C; +104°F). The battery pack may not charge fully in extreme temperatures.

■ LOW BATTERY CONDITION

When the [TX/BUSY] indicator goes out or does not light up during transmission, the battery should be charged.

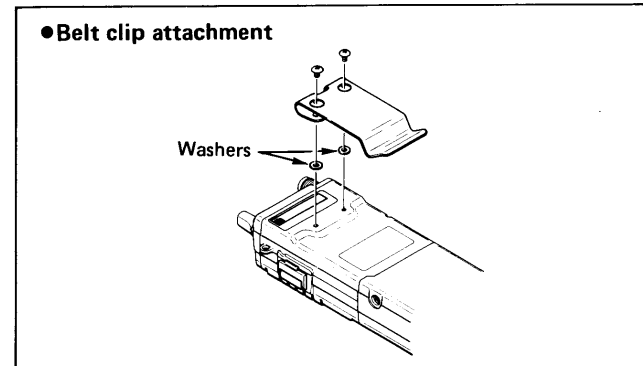
■ ANTENNA CONNECTION

Insert the connector on the supplied flexible antenna to the ANTENNA CONNECTOR on the top panel of the transceiver. Screw down securely.

■ BELT CLIP ATTACHMENT

The supplied belt clip is helpful for carrying the transceiver.

Attach the belt clip to the transceiver rear panel using the supplied 2 screws and 2 washers.



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OPERATION

■ RECEIVING

- 1) Rotate the [PWR/VOL] control clockwise to turn ON power.
- 2) Set the CHANNEL SELECTOR to the desired channel position.
- 3) Adjust the [PWR/VOL] control to a comfortable listening level when a call is received.
 - The [TX/BUSY] indicator lights up in green when the channel is busy.
- 4) To check the selected channel when the [TX/BUSY] indicator lights up in green but no audio is emitted, push and hold the [MONITOR] switch.
- 5) Rotate the [SQL] control clockwise when an unwanted noise is heard from the speaker.

■ TURNING POWER OFF

Rotate the [PWR/VOL] control fully counterclockwise until a click is heard.

■ TRANSMITTING

CAUTION: Transmitting without an antenna may damage the transceiver.

- 1) Turn ON power.
- 2) Select the output power with the [HIGH/LOW] switch on the rear panel.
 - HIGH : for long distance communications
 - LOW : for short distance communications
- 3) Select an operating channel.
- 4) When the [TX/BUSY] indicator lights up in green, wait until the channel is clear before transmitting.
- 5) Push and hold the PTT switch. Speak into the microphone.
 - The [TX/BUSY] indicator lights up in red.
 - **DO NOT** hold the transceiver too closely to your mouth or speak too loudly. This may distort the signal.
- 6) Release the PTT switch to receive.

OPTIONS AND SPECIFICATIONS

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■ OPTIONS

● BATTERY PACKS

	OUTPUT VOLTAGE	BATTERY CAPACITY	HEIGHT
CM-21	7.2 V	120 mAh	32.5 mm (1.3 in)
CM-23	8.4 V	600 mAh	70.5 mm (2.8 in)
CM-24	10.8 V	600 mAh	85 mm (3.3 in)
CM-87	7.2 V	1100 mAh	100 mm (3.9 in)
CM-88	12.0 V	600 mAh	80 mm (3.1 in)

● BM-71U/E AC BATTERY CHARGER

Desk top charger for CM-21, CM-23, CM-24, CM-87 and CM-88.

● CM-9L SPEAKER-MICROPHONE

Combination speaker and microphone. Heavy-duty type.

● EM-46L SPEAKER-MICROPHONE

Combination speaker and microphone. Equipped with an earphone jack. Clips to your pocket or lapel.

● UT-53 DTMF ENCODER UNIT

Provides repeater access and autopatch operation.

■ SPECIFICATIONS

GENERAL

- Frequency coverage : 150 ~ 174 MHz
- Mode : FM
(8K50F3E, 14K0F3E or 16K0F3E)
- Channel spacing : 12.5 kHz, 20 kHz or 25 kHz
- Usable temperature range : $-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ($-22^{\circ}\text{F} \sim +140^{\circ}\text{F}$)
- Frequency stability : $\pm 0.0005\%$
- Power supply requirement : Icom battery pack
(See options list.)
- Dimensions (with CM-23) : 58(W) x 155.5(H) x 29.5(D) mm
2.3(W) x 6.1(H) x 1.2(D) in
- Weight (with CM-23) : 405 g (14.3 oz)

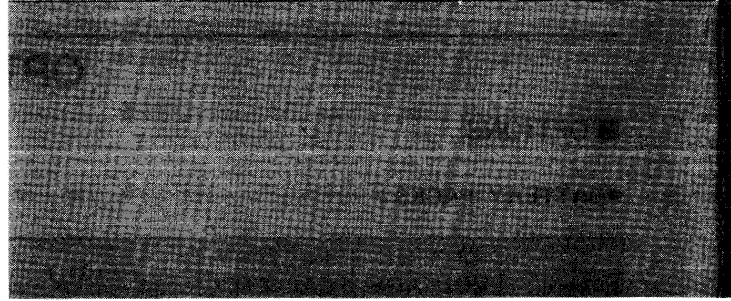
TRANSMITTER

- Output power :
Germany version : HIGH 2.0 W
Other versions : HIGH 2.5 W (with CM-23)
4 W (with CM-88)
All versions : LOW 1 W

RECEIVER

- Sensitivity :
U.K. and Germany versions : $0.35 \mu\text{V}$ for 12 dB SINAD
Other versions : $0.25 \mu\text{V}$ for 12 dB SINAD
- Squelch sensitivity : $0.18 \mu\text{V}$
- Audio output power : 250 mW at 5% distortion with an 8 Ω load

Count on us!



RECYCLING INFORMATION (U.S.A. only)

The product that you purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your dealer or local solid waste officials for details in your area for recycling options or proper disposal.



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