



INSTRUCTION MANUAL

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## VHF TRANSCEIVER **IC-H10**

Icom Inc.



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## FOREWORD

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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.

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## FEATURES

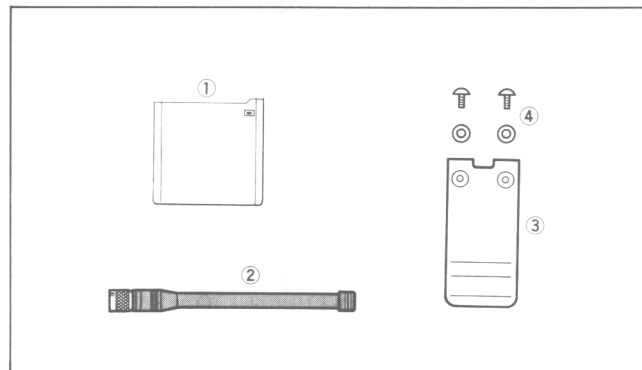
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- Convenient, compact size
- Easy-to-operate
- Wide band capability
- Long-term reliability

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## UNPACKING

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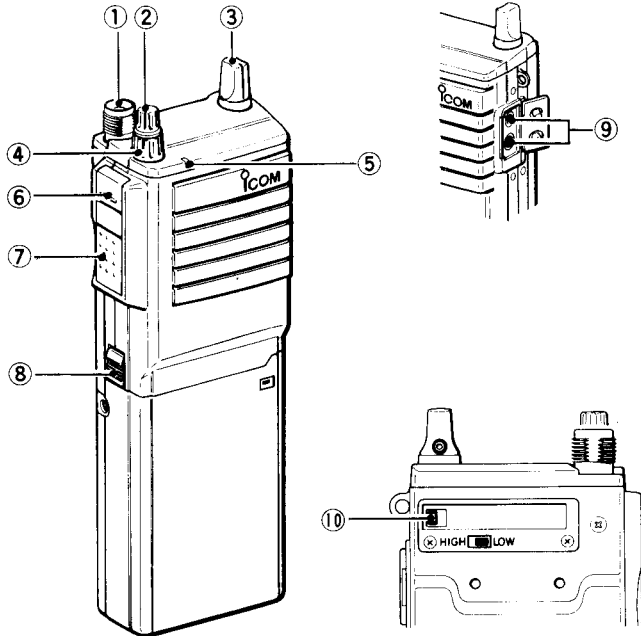


### Accessories included with the IC-H10:

	Qty.
① Battery pack (CM-23) . . . . .	1
② Flexible antenna . . . . .	1
③ Belt clip. . . . .	1
④ Screws and washers . . . . .	1 set

# CONTROL FUNCTIONS

1



- 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.

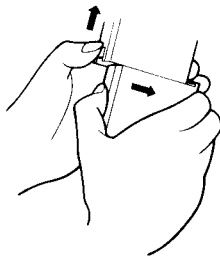
# 2

## 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

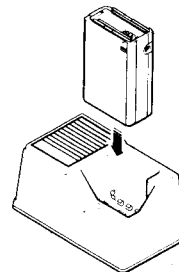


### ■ BATTERY PACK CHARGING

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.

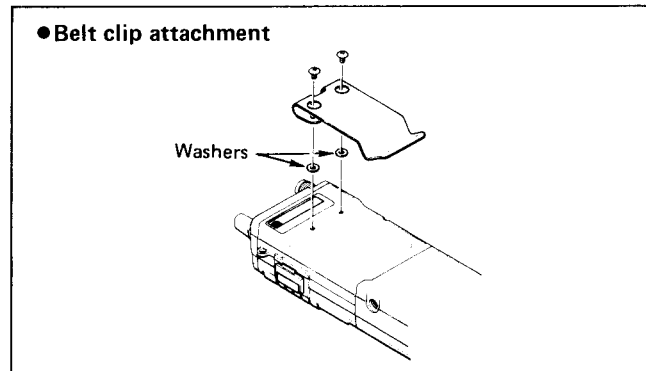
## ■ ANTENNA CONNECTION

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.



### ■ 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

# 4

## ■ 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 (16K0F3E)
- Channel spacing : 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)

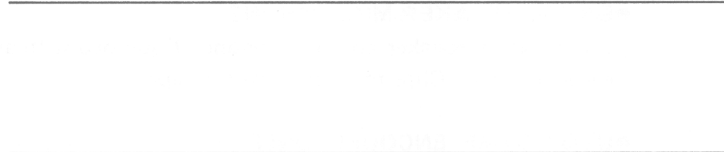
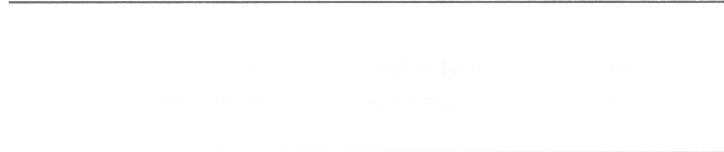
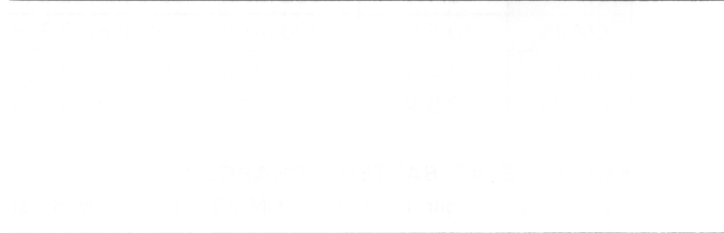
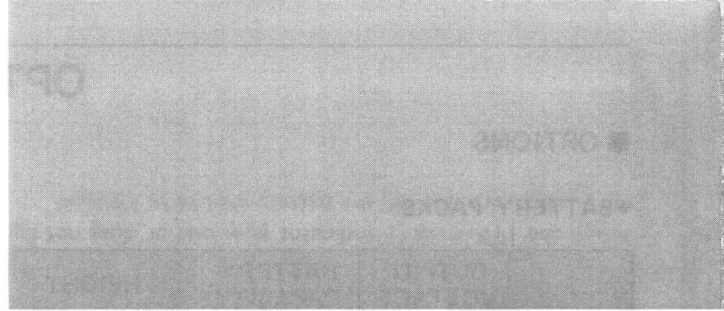
### TRANSMITTER

- Output power : HIGH 2.5 W (with CM-23)  
4 W (with CM-88)  
LOW 1 W (with CM-23)

### RECEIVER

- Sensitivity :  $0.25 \mu\text{V}$  for 12 dB SINAD
- Squelch sensitivity :  $0.18 \mu\text{V}$
- Audio output power : 250 mW at 5% distortion with an  $8 \Omega$  load

**Count on us!**



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