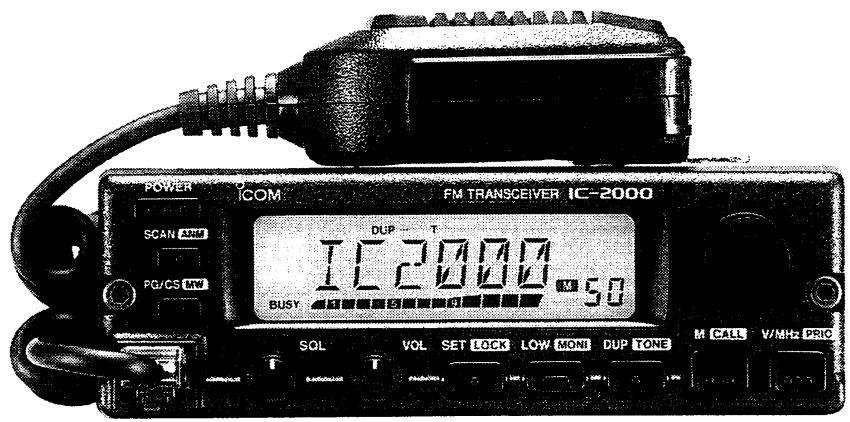
ICOM

INSTRUCTION MANUAL

144 MHz FM TRANSCEIVER

IC-2000
IC-2000H



Icom Inc.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL – This instruction manual contains important safety and operating instructions for the IC-2000 (10 W type) and IC-2000H (50 W type).

EXPLICIT DEFINITIONS

The explicit definitions described below apply to this instruction manual.

WORD	DEFINITION
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.

CAUTIONS

⚠ **WARNING! NEVER** connect the transceiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

NEVER connect a power source of more than 16 V DC. This connection will ruin the transceiver.

NEVER cut the DC cable between the DC plug and fuse holder. If an incorrect connection is made after cutting, the transceiver might be damaged.

NEVER place the transceiver where normal operation of the vehicle may be hindered or where it could cause bodily injury.

NEVER allow children to touch the transceiver.

NEVER expose the transceiver to rain, snow or any liquids.

USE Icom's microphone only (supplied or optional). Other manufacturers microphones have different pin assignments and may damage the transceiver.

DO NOT connect the transceiver to a power source using reverse polarity. This connection will not only blow fuses but may also damage the transceiver.

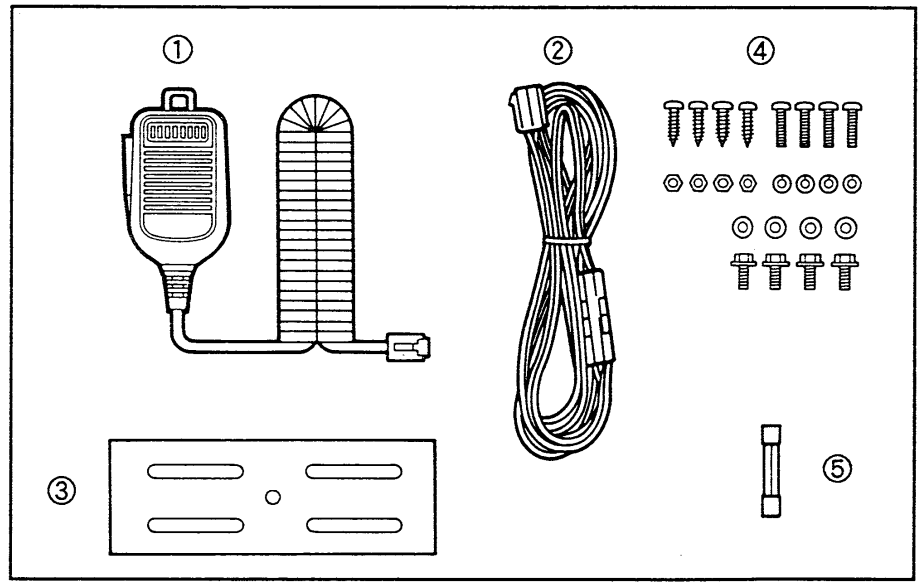
DO NOT use or place the transceiver in areas with temperatures below −10℃ (+14℉) or over +60℃ (+140℉) or, in areas subject to direct sunlight, such as the dashboard.

AVOID placing the transceiver against walls or putting anything on top of the transceiver. This will obstruct heat dissipation.

AVOID the use of chemical agents such as benzene or alcohol when cleaning, as they can damage the transceiver surfaces.

BE CAREFUL! The transceiver will become hot when operating continuously for long periods.

UNPACKING



Accessories included with transceiver: **Qty.**

① Microphone* ····· 1
② DC power cable (OPC-346) ····· 1
③ Mobile mounting bracket ····· 1
④ Mounting screws, nuts, and washers ····· 1 set
⑤ Fuse (20 A) ····· 1

*U.S.A. version : HM-95 DTMF MICROPHONE
Europe versions: HM-97 HAND MICROPHONE (with 1750 Hz encoder)
Australia version: HM-96 HAND MICROPHONE

TABLE OF CONTENTS

IMPORTANT i
EXPLICIT DEFINITIONS i
CAUTIONS i
UNPACKING ii
TABLE OF CONTENTS iii

1 PANEL DESCRIPTION 1–7
- ■ Front panel 1
- ■ Microphone 4
- ■ Function display 5
- ■ Rear panel 7

2 INSTALLATION 8
- ■ Location 8
- ■ Battery connection 8
  - ◇ Notes for fixed station use 8

3 BASIC OPERATION 9–11
- ■ Mode selection 9
- ■ Lock function 9
- ■ Frequency setting via front panel 9
- ■ Frequency setting via microphone 10
- ■ Tuning step selection 10
- ■ Receive and transmit 11
  - ◇ Monitor function 11
  - ◇ Output power selection 11
  - ◇ Other functions 11

4 SCRATCH PAD AND UP SWITCH REMOTE 12
- ■ Scratch pad memory 12
- ■ Up switch Remote 12

5 REPEATER OPERATION 13–14
- ■ Operation 13
- ■ Tone information 13
- ■ Subaudible tones 14
- ■ Offset frequency 14

6 MEMORY/CALL CHANNEL PROGRAMMING 15–18
- ■ General description 15
- ■ Programming during selection 15
- ■ Programming after selection 16
- ■ Moving a memory or call channel 16
- ■ Alphanumeric display 17
  - ◇ Notes for display switching 17
- ■ Programming a note 18
- ■ Memory area setting 18

7 SCAN OPERATION 19–21
- ■ Scan types 19
- ■ Scan resume 19
- ■ Full scan and programmed scan 20
- ■ Memory scan 21
- ■ Memory skip 21

8 PRIORITY WATCH **22**
■ General description 22
■ VFO/memory or VFO/call 22
■ VFO/memories 22

9 DTMF REMOTE **23–24**

10 TONE SQUELCH AND POCKET BEEP **25**
■ General description 25
■ Pocket beep function 25
■ Tone squelch function 25

11 PAGER AND CODE SQUELCH **26–29**
■ General description 26
■ Code programming 27
◇ Pre-operation 27
◇ Code channel information 27
◇ Programming 27
■ Code squelch 28
■ Pager function 29
◇ Calling a specific station 29
◇ Waiting for a call 29

12 MESSAGE TRANSMIT/RECEIVE **30–31**
■ General description 30
■ Message programming 30
■ Operation 31
◇ Message standby (receive) 31
◇ Memory transmission 31
◇ Manual transmission 31

13 OTHER FUNCTIONS **32–35**
■ Display backlight 32
■ Beep tones 32
■ Auto-repeater 33
■ Time-out timer 33
■ Auto power-off 34
■ Opening message 34
■ Repeater lockout 35
■ Demonstration display 35

14 OPTIONAL UNIT INSTALLATION **36**

15 MAINTENANCE **37–38**
■ Troubleshooting 37
■ Partial resetting 38
■ Resetting the transceiver 38

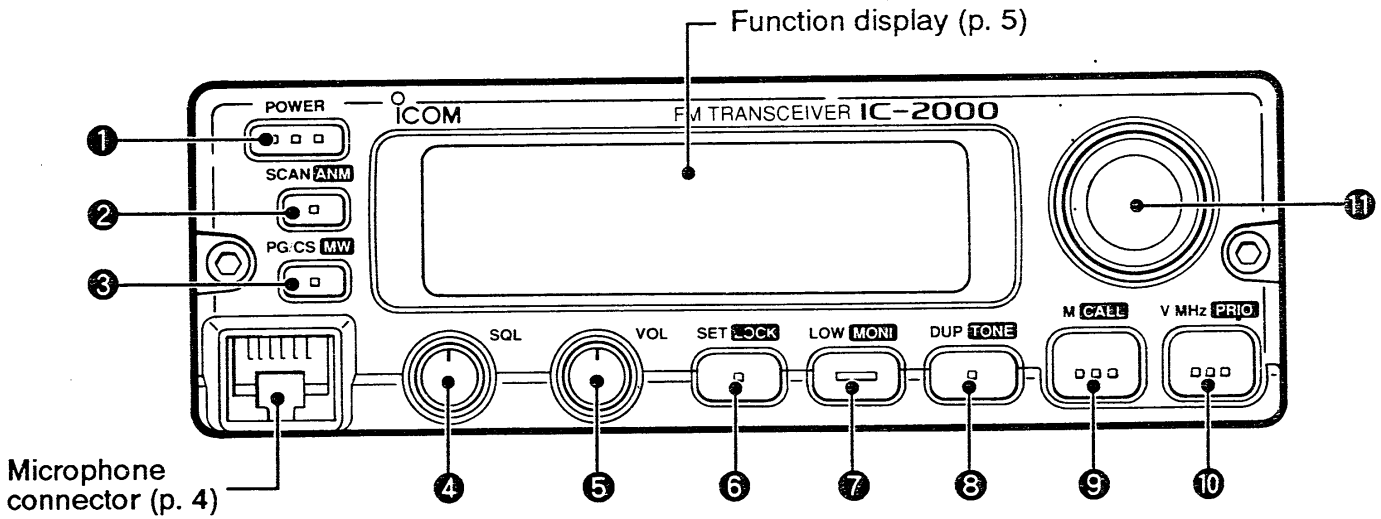
16 MODE ARRANGEMENT **39–40**

17 SPECIFICATIONS **41**

18 OPTIONS **42**

1 PANEL DESCRIPTION

■ Front panel



❶ POWER SWITCH [POWER]

- Push to turn power ON and OFF.
- Some settings can be performed at power ON when other switches are pushed simultaneously. (pgs. 12, 32, 35, 38)

❷ SCAN SWITCH [SCAN•ANM]

SCAN ANM *Push*

Starts and stops a scan. (pgs. 20, 21)

- Full scan, programmed scan and memory scan are available.
- Tone decode scan is also available when an optional tone squelch is in use. (p. 13)

SCAN ANM *Push and hold*

- Toggles frequency display and alphanumeric display in memory mode or call channel. (p. 17)
- No function in VFO mode.
- Turn the message function ON and OFF for sending or receiving messages when the optional pager or code squelch function is in use. (pgs. 30, 31)

❸ PAGER/CODE SQUELCH SWITCH [PG/CS•MW]

PG/CS MW *Push*

Selects pager (p. 29), code squelch (p. 28) and "DTMF Remote" function (p. 23) in sequence.

- An optional UT-101 DTMF UNIT is necessary to use the above functions.

PG/CS MW

Push and hold

- Programs the selected contents such as frequency, etc. into a memory channel (or call channel/VFO) (p. 16).
- The memory channel number which you want to program can be changed if this switch is released after hearing one short and long beep. (p. 15)
  - In this case, push the switch again after channel selection.

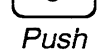
❹ SQUELCH CONTROL [SQL]

Varies the squelch threshold point for noise mute.

❺ VOLUME CONTROL [VOL]

Varies the audio output level.

❻ SET MODE SWITCH [SET·LOCK]

SET LOCK

Push

- Enters set mode and advances the set mode display. ([LOW] reverses selection.) (p. 40)
- Enters alphanumeric programming condition when an alphanumeric display is selected. Once entered, the switch moves the cursor to the left. (p. 18)
- Enters pager code setting display when pager or code squelch is in use. Once entered, the switch moves the cursor to the left. (p. 27)

SET LOCK

Push and hold

- Activates the lock function to prevent accidental frequency change. (p. 9)
- Enters initial set mode when pushed and held at power ON. (p. 40)

❼ LOW POWER SWITCH [LOW·MONI]

LOW MONI

Push

- Selects low (5 W), middle (10 W) and high power (50W*) (p. 11).
  - LOW★ appears when selecting middle* power and no indicator appears for high power.
  - *Thailand version has no middle power and high power is 10 W.
- Reverses the set mode display when entering set mode (p. 40) or moves cursor to the right when selecting an alphanumeric programming condition (p. 18) or pager setting display. (p. 27)

LOW MONI

Push and hold

Opens the squelch manually to check the operating frequency condition. (p. 11)
- Checks the transmit frequency simultaneously when selecting the duplex function.

⑧ DUPLEX SWITCH [DUP·TONE]

DUP TONE
Push

Selects −duplex, +duplex or cancels duplex (simplex) in sequence. (p. 13)
- An auto-repeater function is available to activate duplex with/without tone encoder automatically when selecting a repeater frequency (U.S.A. version only). (p. 33)

DUP TONE
Push and hold

- Turns the subaudible tone encoder ON and OFF. (p. 13)
- Selects tone encoder, pocket beep, tone squelch, and non-tone operation in sequence when an optional UT-85 TONE SQUELCH UNIT is installed. (pgs. 13, 25)

⑨ MEMORY SWITCH [M·CALL]

M CALL
Push

Selects memory mode. (p. 9)
- 50 memory channels with alphanumeric display and channel area restriction are available. (p. 18)

M CALL
Push and hold

Selects the call channel. (p. 9)
- After selecting the call channel, a scratch pad memory can be called with the tuning dial (or [UP]/[DN] switch). The scratch pad memories retain transmitted frequencies for both simplex and duplex. (p. 12)

⑩ VFO SWITCH [V/MHz·PRIO]

V/MHz PRIO
Push

- Selects VFO mode. (p. 9)
- Selects the MHz steps for quick tuning when pushed again. (p. 9)
  - Frequency below 100 kHz disappears at this time.

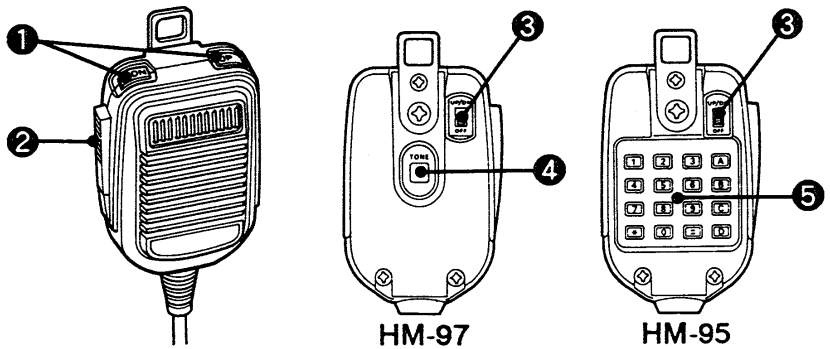
V/MHz PRIO
Push and hold

Starts and stops the priority watch. (p. 22)
- The priority watch checks the selected memory channel(s) or call channel once every 5 sec. during VFO operation.

⑪ TUNING DIAL

- Selects the operating frequency or memory channel in VFO or memory mode, respectively.
- Changes the contents of the selected item in set mode and initial set mode.
- Changes the alphanumeric contents when selecting the alphanumeric programming condition.

■ Microphone



HM-97
rear panel

HM-95
rear panel

❶ UP/DOWN SWITCHES [UP]/[DN]

- Change the frequency or memory channel in VFO or memory mode respectively.
- Selects scratch pad memory when selecting the call channel.
  - [UP] for simplex and [DN] for duplex.
- Starts and stops the scan function when pushed for 1 sec.
- When the "Up switch Remote" is assigned, [UP] activates the programmed function and [DN] starts scan.
- When the "DTMF Remote" is in standby*, [UP] activates the remote control function. (HM-95 only, since a DTMF encoder is necessary for control.)

*An optional UT-101 DTMF UNIT is necessary.

❷ PTT SWITCH

Push and hold to transmit; and release to receive.

❸ LOCK SWITCH [UP/DN OFF]

Deactivates the [UP]/[DN] switch function to prevent accidental input.

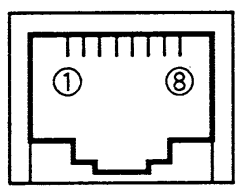
❹ TONE CALL SWITCH [TONE] (HM-97 only)

Push and hold to transmit a 1750 Hz tone burst signal for repeater access.

❺ DTMF KEYPAD (HM-95 only)

Sends a DTMF code while pushing the PTT switch.

◇ Microphone connector (front panel view)



① +8 V DC output
② Frequency up/down
③ AF detector output
④ PTT
⑤ GND (Microphone ground)
⑥ MIC (Microphone input)
⑦ GND
⑧ NC (No connection)

Count on us!

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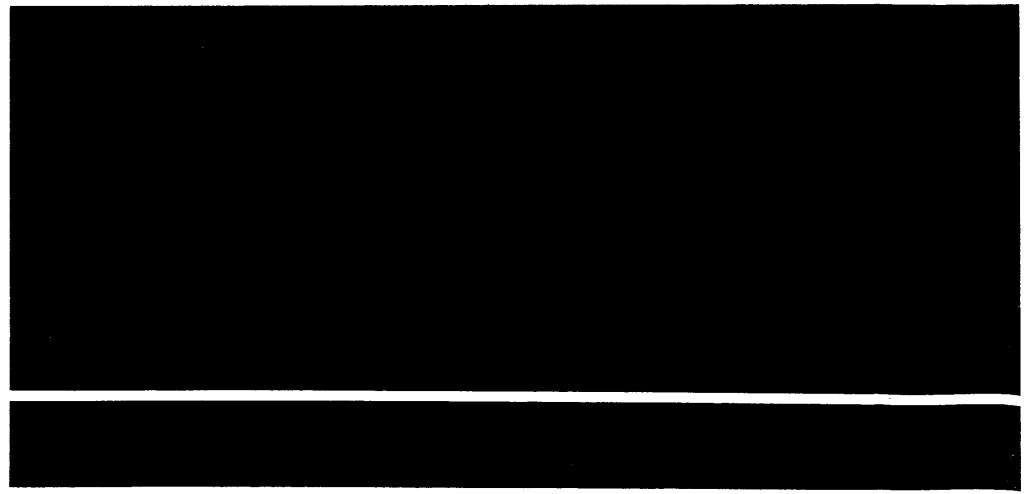

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