# 

# INSTRUCTION MANUAL

**UHF FM TRANSCEIVER** 

# IC-449A IC-449E

Icom Inc.



# **IMPORTANT**

- (1) READ THIS INSTRUCTION MANUAL CARE-FULLY before attempting operation. If you have any questions regarding operation, feel free to contact your nearest authorized Icom Dealer or Service Center.
- (2) SAVE THIS INSTRUCTION MANUAL. This instruction manual contains important safety and operating instructions for the IC-449A/E.

## **FOREWORD**

Thank you for choosing the IC-449A/E UHF FM TRAN-SCEIVER.

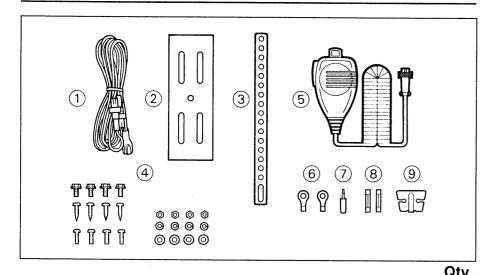
This compact transceiver has numerous advanced functions and a vivid front panel with modern design that allows you easy operation while driving.

In this instruction manual, the display diagrams use the 440 MHz band frequencies of the U.S.A. version. Please note that 430 MHz band frequencies appear for other versions.

# **CAUTIONS**

- (1) **NEVER** connect the transceiver to an AC outlet. This will ruin the transceiver.
- (2) **NEVER** connect more than 16 V DC power to the transceiver. Check the source voltage before connecting the power cable.
- (3) **NEVER** place the transceiver where normal operation of the vehicle may be hindered or where it could cause bodily injury.
- (4) **NEVER** allow children to touch the transceiver.
- (5) **DO NOT** install the transceiver where hot or cold air blows directly on it.
- (6) **DO NOT** use or place the transceiver in areas with temperatures below  $-10^{\circ}\text{C}$  (+14°F) or over +60°C (+140°F), or in areas of direct sunlight, such as on the dashboard.
- (7) **BE CAREFUL!** The heatsink may become hot when operating the transceiver for long periods.

# **UNPACKING**



	· · · · · · · · · · · · · · · · · · ·	
1	DC power cable (OPC-044B)	1
2	Mobile mounting bracket (MB-27)	1
	Support bracket	
4	Screws, washers and nuts1	set
(5)	Microphone*	1
6	Cable lugs	2
	External speaker plug	
8	Fuses (15 A)	2
9	Microphone hanger	1

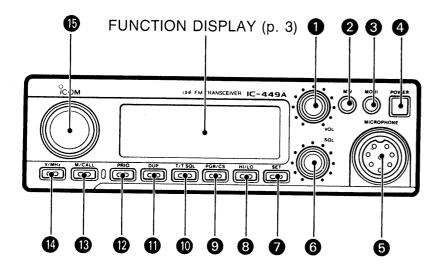
\* U.S.A. version : HM-56 Australia version : HM-58 Europe version : HM-59

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# PANEL DESCRIPTION

# Front panel



### **1** VOLUME CONTROL [VOL]

Adjusts the audio output level. (p. 13)

### **2** MEMORY WRITE SWITCH [MW]

- Programs a memory channel. (p. 17)
- Programs a call channel. (p. 20)
- Transfers the contents of a memory or call channel to the VFO. (p. 18)

### **6** MONITOR SWITCH [MONI]

- Opens the squelch while being pushed. (p. 13)
- During repeater operation, receives repeater input frequency while being pushed. (p. 15)

### **4** POWER SWITCH [POWER]

Turns the transceiver power ON and OFF. (p. 12)

### **5** MICROPHONE CONNECTOR [MICROPHONE]

Connects the supplied microphone or another suitable microphone. (p. 4)

The optional SM-6, SM-8 DESKTOP MICROPHONES, HS-15 FLEXIBLE MOBILE MICROPHONE and HS-15SB SWITCHBOX are available. (p. 44)

### 6 SQUELCH CONTROL [SQL]

Adjusts the squelch threshold level. (p. 13)

### **7** SET MODE SWITCH [SET]

- Selects SET mode and advances SET mode displays. (p. 29)
- Deactivates the tuning control and some switches when pushed and held. (p. 13)

### 3 TRANSMIT POWER SWITCH [HI/LO]

- Selects transmit output power. (p. 14)
- Reverses the SET mode display. (p. 29)

### PAGER/CODE SQUELCH SWITCH [PGR/CS]

Activates the optional pager or code squelch function. (pgs.  $38 \sim 40$ )

### TONE SWITCH [T/T.SQL]

- Activates the subaudible tone encoder function.\* (pgs. 15, 36)
- Activates the optional pocket beep or tone squelch function. (pgs. 35, 36)

\*U.S.A. version : Built-in Other versions : Optional

### **1** DUPLEX SWITCH [DUP]

- Selects simplex, -duplex or +duplex. (p. 15)
- Selects the memory split function. (p. 19)

### PRIORITY SWITCH [PRIO]

Activates and cancels priority watch. (pgs. 23, 24)

### **®** MEMORY/CALL CHANNEL SWITCH [M/CALL]

- Selects MEMORY mode. (p. 17)
- Selects CALL CHANNEL mode. (p. 20)

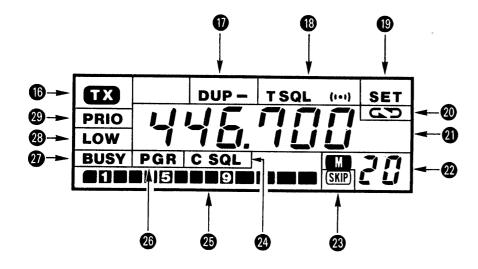
### **(b)** VFO/MHz SWITCH [V/MHz]

- Selects VFO mode. (p. 12)
- Selects 1 MHz tuning steps. (p. 12)

#### **15** TUNING CONTROL

- Changes the operating frequency. (p. 12)
- Changes the memory channel. (p. 17)
- Changes contents of SET mode displays. (pgs. 29 ~ 33)

# **■** Function display



### **16** TRANSMIT INDICATOR

Appears while transmitting. (p. 14)

#### **1** DUPLEX INDICATOR

- "DUP-" appears when -duplex is selected. (p. 15)
- "DUP" appears when + duplex is selected. (p. 15)

#### **13** TONE INDICATOR

- "T" appears when the subaudible tone encoder function is activated. (pgs. 15, 35)
- "T SQL (1-1)" appears when the optional pocket beep function is activated. (p. 35)
- "T SQL" appears when the optional tone squelch function is activated. (p. 36)

\*U.S.A. version : Built-in Other versions : Optional

#### **19** SET INDICATOR

Appears when SET mode is selected. (p. 29)

#### **MEMORY SPLIT INDICATOR**

Appears when a memory channel with the memory split function is selected. (p. 19)

#### **4** FREQUENCY READOUT

Displays the operating frequency.

# **MEMORY INDICATOR AND MEMORY CHANNEL**READOUT

- A memory channel number or small "c" appears while in VFO mode.
- "L" appears when the lock function is activated. (p. 13)
- "M" and memory channel number appear while in MEMORY mode. (p. 17)
- Large "C" appears while in CALL CHANNEL mode. (p. 20)

#### **3** SKIP CHANNEL INDICATOR

Appears when a memory channel is programmed as a skip channel. (p. 32)

### **2** CODE SQUELCH INDICATOR

Appears when the optional code squelch function is activated. (p. 40)

#### **3** S/RF INDICATOR

- Shows signal strength when receiving. (p. 13)
- Shows which output power for High or Low is selected when transmitting. (p. 14)

#### **10** PAGER INDICATOR

Appears when the optional pager function is activated. (pgs.  $38 \sim 40$ )

#### **3** BUSY INDICATOR

Appears when the squelch opens. (p. 13)

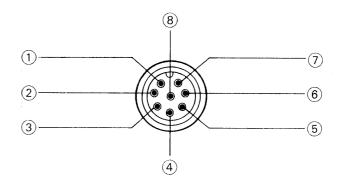
#### **100** LOW POWER INDICATOR

Appears when Low output power is selected. (p. 14)

#### **49 PRIORITY INDICATOR**

Appears during priority watch. (pgs. 23, 24)

# **■** Microphone connector

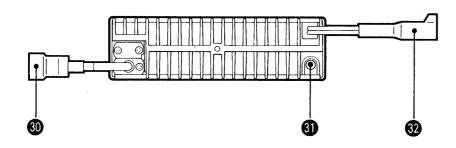


(Front panel view)

- 1 MIC (Microphone input)
- 2 +8 V (8 V DC output)
- 3 MIC UD (Up/down input)
- 4 NC (No connection)

- ⑤ PTT
- 6 GND (PTT ground)
- GND (Microphone ground)
- **8** AF DETECTOR OUTPUT

# Rear panel



### **30** ANTENNA CONNECTOR [ANT 430 MHz]\*

Connects a 50  $\Omega$  antenna with a type-N connector. (p. 9) \*U.S.A. version: [ANT 440 MHz]

### **3 EXTERNAL SPEAKER JACK [SP]**

Connects a  $4 \sim 8 \Omega$  speaker, if required.

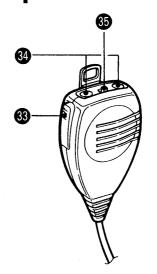
The optional SP-7, SP-10 and SP-12 EXTERNAL SPEAK-ERS are available. (p. 44)

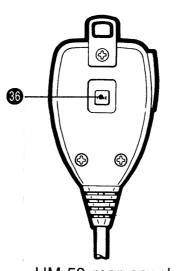
### **30** DC POWER CONNECTOR [DC 13.8 V]

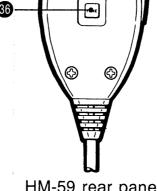
Connects 13.8 V DC using the supplied DC power cable. (p. 8)

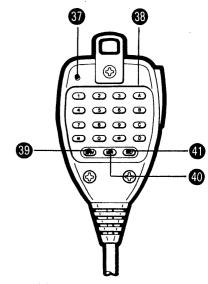
The optional IC-PS30 AC POWER SUPPLY is available. (p. 44)

# Microphone





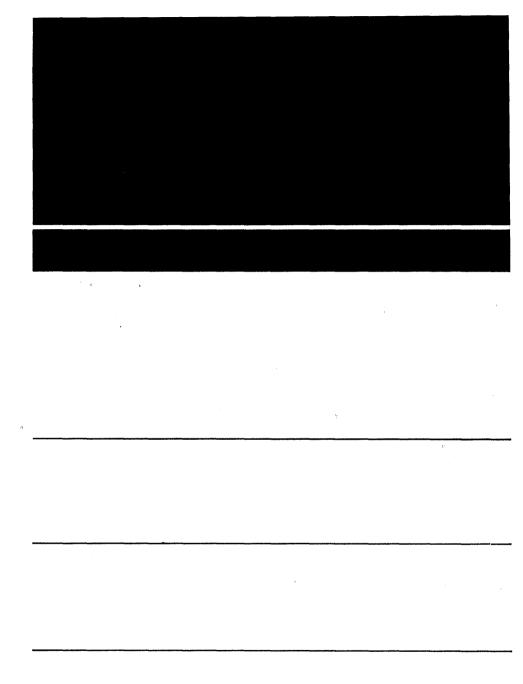




HM-59 rear panel

HM-56 rear panel





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