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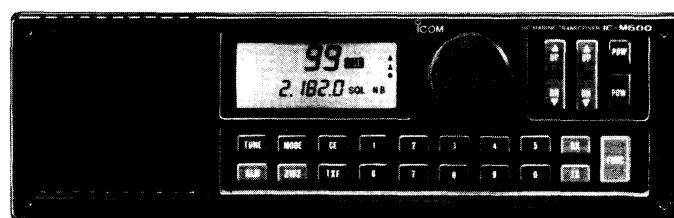
HF MARINE TRANSCEIVER

Instruction Manual

INSTRUCTION MANUAL

HF MARINE TRANSCEIVER
(EUROPE VERSION)

IC-M600



Icom Inc.

FOREWORD

Thank you for purchasing the **IC-M600** HF MARINE TRANSCEIVER. The **IC-M600** is a compact, easy-to-operate transceiver designed with Icom's state-of-the-art technology.

To fully appreciate the capabilities of your new **IC-M600**, please read this instruction manual thoroughly before attempting operation. If you have any questions regarding the operation of the **IC-M600**, feel free to contact your nearest authorized Icom Dealer or Service Center.

EXPLICIT DEFINITIONS

The following explicit definitions 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 personal injury, risk of fire or electric shock.

IMPORTANT SAFETY PRECAUTIONS

READ THIS INSTRUCTION MANUAL CAREFULLY before attempting to operate the transceiver.

SAVE THIS INSTRUCTION MANUAL — This instruction manual contains important safety and operating instructions for the **IC-M600**.

IMPORTANT: The Operating Rules and Guidelines are described in Section 6 (p. 14).

WARNING: Mount the transceiver securely with the supplied bolts and nuts. If the transceiver is mounted without these, personal injury or transceiver damage could occur due to wave shock, vibrations, etc.

NEVER connect the transceiver via the [DC 13.6 V] connector to an AC outlet or to a power source of more than 16 V DC. **NEVER** connect the transceiver to a power source using reverse polarity. These connections will ruin the transceiver.

NEVER allow children to touch the transceiver.

KEEP the transceiver, microphone and an external speaker at least 1 m (3.3 ft.) away from the ship's magnetic navigation compass.

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

AVOID using the transceiver in excessively dusty environments.

AVOID placing the transceiver in direct sunlight for long periods.

BE CAREFUL! The heatsink may become hot when operating the transceiver continuously for long periods.

During maritime mobile operations, **DO NOT** operate the transceiver without running the boat's engine.

FEATURES

- Built-in floating type power supply.
- One-touch emergency frequency access capability.
- Alarm signal transmission.
- 160-m band transmission.
- Full 150 W (PEP) of output power.
- Excellent frequency stability of ± 20 Hz in the $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$ range.
- DDS (Direct Digital Synthesizer) system for a rapid lockup time and high quality frequency oscillation.
- Convenient frequency selection via keyboard entry or rotation of the main dial.
- Clarity control for up to ± 150 Hz in 10 Hz steps.
- 99 user-programmable memory channels.
- 314 ITU channels.
- Cross channel operation.
- General coverage receiver.
- Splash-resistant front panel.
- Keyboard and function display backlighting.
- Audio activated squelch.
- Noise blanker circuit.
- AGC (Automatic Gain Control) circuit.
- 7-step RF gain control.
- Accepts an optional AT-120E HF AUTOMATIC ANTENNA TUNER.

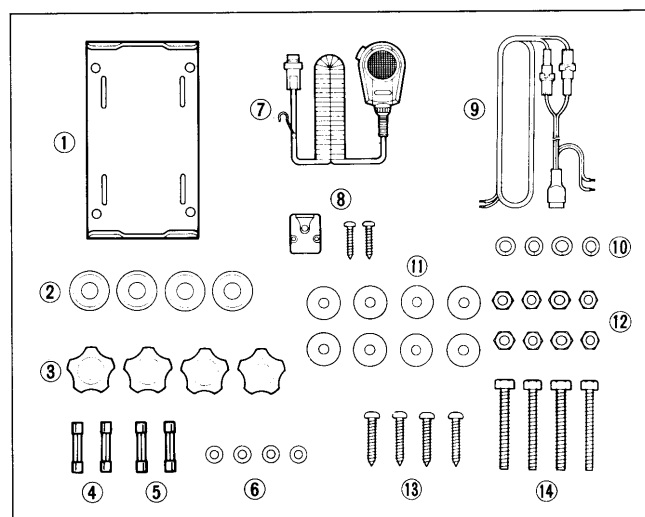
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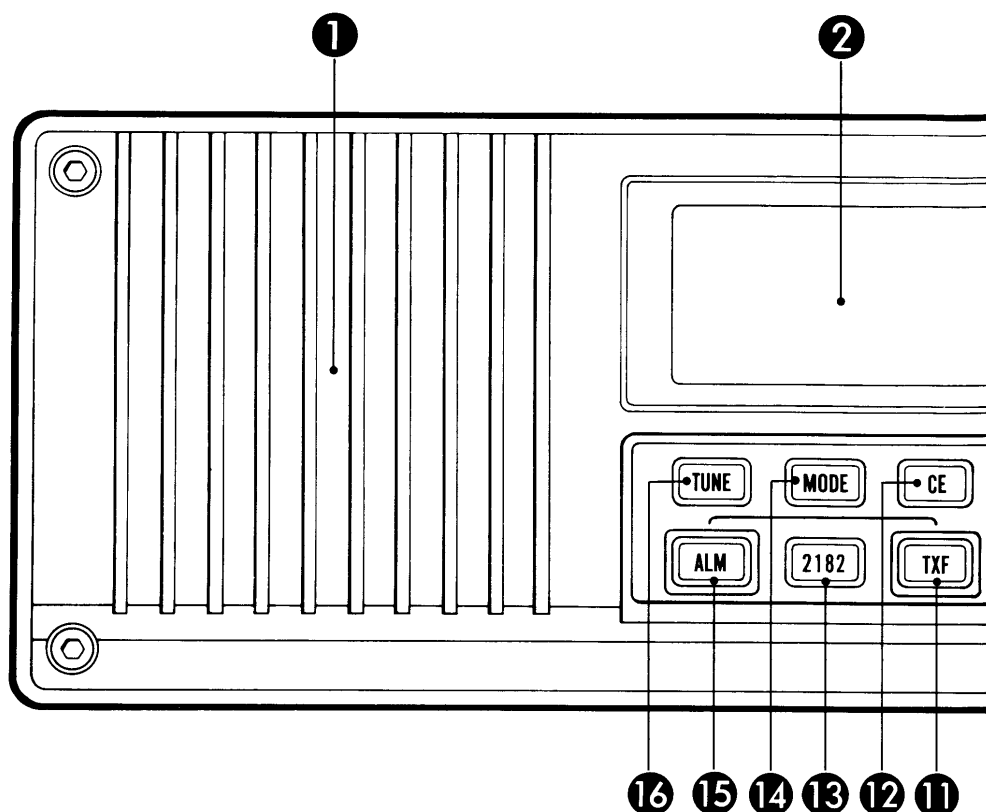
UNPACKING

Accessories included with the IC-M600:

	QTY.
① Mounting bracket	1
② Rubber feet	4
③ Mounting knobs	4
④ Spare fuses (30 A)	2
⑤ Spare fuses (4 A)	2
⑥ Flat washers (for mounting knobs)	4
⑦ Microphone (EM-48)	1
⑧ Microphone hanger and screws	1 set
⑨ DC power cable (OPC-077)	1
⑩ Spring washers	8
⑪ Flat washers	8
⑫ Nuts	8
⑬ Self-tapping screws	4
⑭ Hex head bolts	4



Switches and controls



1 INTERNAL SPEAKER

Operates while the transceiver is receiving and “JG” is not displayed.

2 FUNCTION DISPLAY (p. 4)

Indicates the current operating frequency, channel, mode and additional information.

3 MAIN DIAL

Selects an operating channel (pgs. 11, 12) or operating frequency (p. 13).

Selects an operating band after pushing [FUNC]. (p. 12)

4 CLARITY SWITCHES [CLAR] (pgs. 15, 16)

Shifts only the receive frequency ± 150 Hz in 10 Hz steps.

- Clarity indicator appears and shows the shifting level.
- Clears the shift frequency when both [▲] and [▼] are pushed simultaneously.

5 VOLUME SWITCHES [VOL] (p. 15)

Adjusts the audio level.

- The volume level is displayed by the S/Rf indicator while adjusting the volume level.
- When both [▲] and [▼] are pushed simultaneously, audio is muted.

6 POWER SWITCHES [POW]

Turn power ON and OFF.

- Turns power ON when either switch is pushed.
- Turns power OFF when both switches are pushed simultaneously.

7 FUNCTION SWITCH [FUNC] (pgs. 15, 16)

Activates the secondary functions of the switches and main dial.

KEY	SECONDARY FUNCTION (After pushing [FUNC])
[1]	Dimmer switch [DIM] • Turns backlighting ON and OFF.
[2]	Squelch switch [SQL] • Turns the squelch function ON and OFF.
[3]	Noise blanker switch [NB] • Turns the noise blanker function ON and OFF.
[4]	Speaker-off switch [SP] • Mutes received audio and the beep tone from the internal speaker.
[5]	AGC switch [AGC] • Turns the AGC (Automatic Gain Control) circuit ON and OFF.

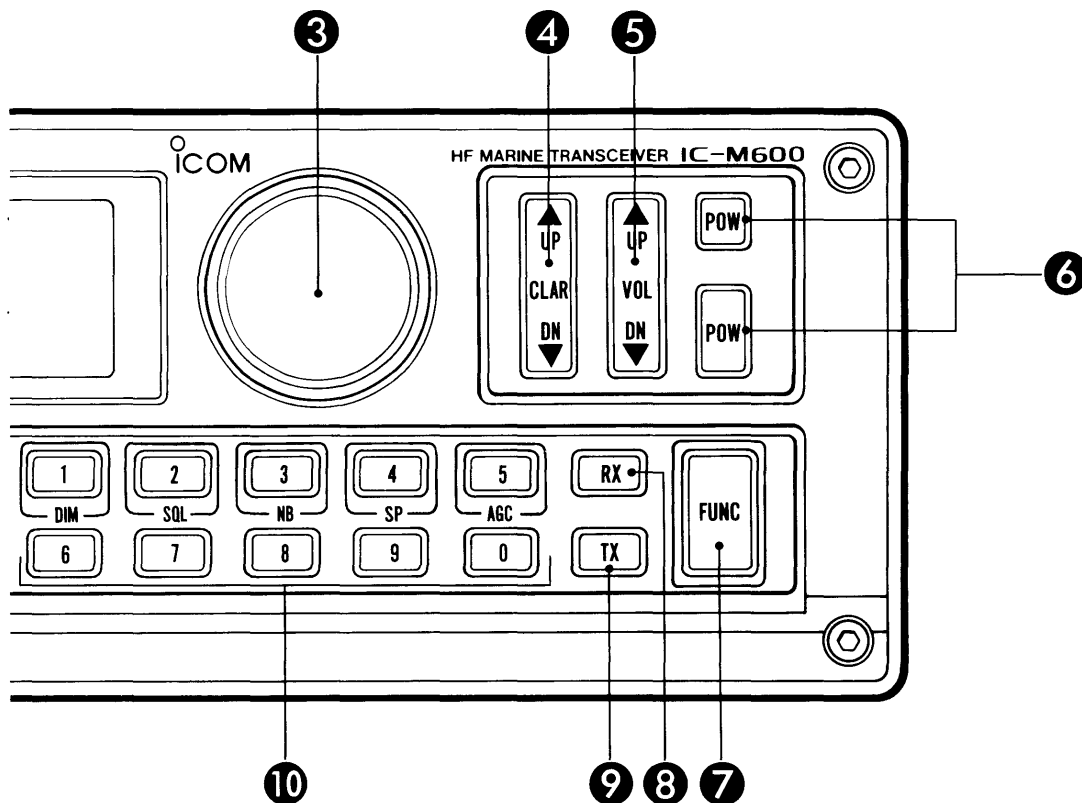
8 RECEIVE FREQUENCY ENTER SWITCH [RX]

Stores a duplex ITU channel or memory channel after keyboard entry. (pgs. 11, 12)

Enters a receive frequency. (p. 13)

Stores a receive frequency in a memory channel. (p. 18)

Sets the transceiver to select RF gain after pushing [FUNC]. (p. 15)



9 TRANSMIT FREQUENCY ENTER SWITCH [TX]

Allows entry of the transmit channel for cross channel operation. (p. 20)

Sets the transceiver for writing of a transmit frequency. (p. 18)

Stores a transmit frequency in a memory channel. (p. 18)

Sets the transceiver to select RF output power after pushing [FUNC]. (p. 17)

10 KEYBOARD

Numeral keys perform tuning and activate functions. Some numeral keys have secondary functions as shown in the table at left. To activate the secondary function of the keys, push [FUNC] before pushing the keys.

See pgs. 11~13 for tuning operation, or see the page at left for a description of secondary functions.

11 TRANSMIT FREQUENCY CHECK SWITCH [TXF]

(p. 17)

While pushing this switch, the operating frequency changes from the receive frequency to the transmit frequency to check whether the transmit frequency is busy or not.

12 CLEAR SWITCH [CE]

Clears input digits and retrieves the previous key input.

Sets the transceiver for the 100 Hz tuning step. (p. 13)

Sets the transceiver to store a frequency.

13 2182 kHz SWITCH [2182] (p. 11)

Accesses the 2182 kHz emergency and distress call frequency instantly during any operating condition.

14 MODE SWITCH [MODE]

Selects the desired operating mode.

15 ALARM SWITCH [ALM] (p. 19)

Selects the 2182 kHz emergency frequency; also turns ON and OFF the alarm function.

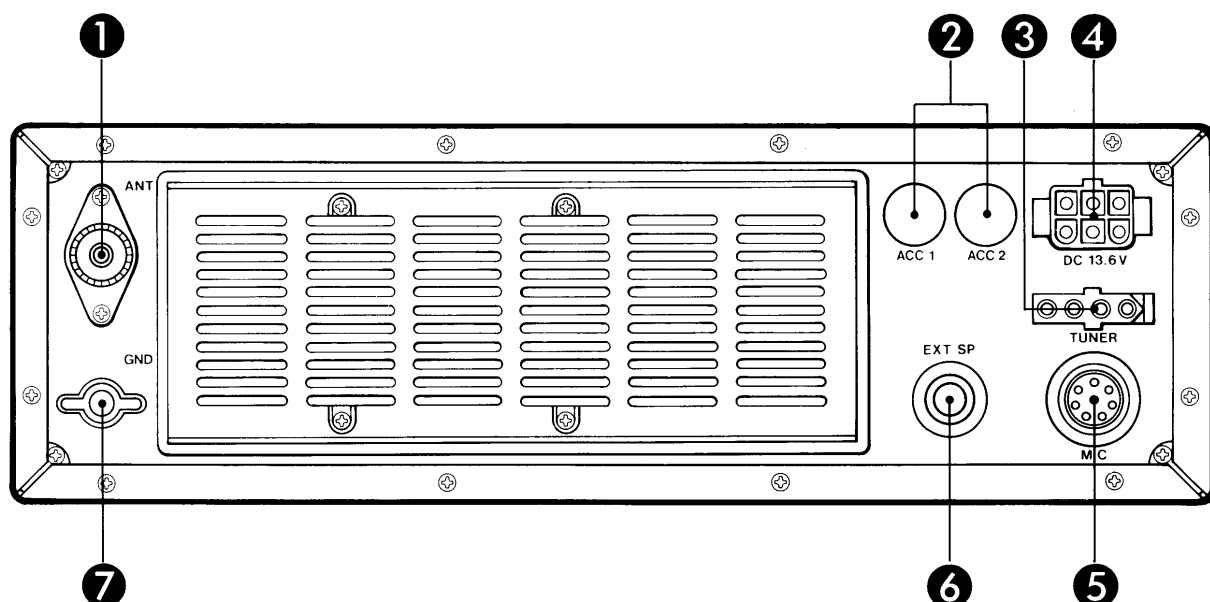
Transmits alarm signals on 2182 kHz when pushing this switch together with [TXF].

16 ANTENNA TUNER SWITCH [TUNE]

Starts the tuning of an optional AT-120E HF AUTOMATIC ANTENNA TUNER.

1 PANEL DESCRIPTION

■ Rear panel



❶ ANTENNA CONNECTOR [ANT] (p. 8)

Connects an antenna cable. A PL-259 plug must be used.

CAUTION: Transmitting without an antenna may damage the transceiver.

❷ SPARE HOLES [ACC1], [ACC2] (p. 10)

Optional ACC cables, OPC-302 and OPC-303, can be installed here. External equipment may require sockets with ACC cables.

❸ ANTENNA TUNER CONNECTOR [TUNER] (p. 9)

Connects the control cable of an optional AT-120E HF AUTOMATIC ANTENNA TUNER.

❹ DC POWER CONNECTOR [DC 13.6 V] (pgs. 6, 8)

Connects the supplied DC power cable to an external 13.6 V DC power source.

❺ MIC CONNECTOR [MIC]

Connects the supplied microphone or an optional HS-50 HANDSET.

- The internal speaker does not function when the microphone is not connected to [MIC].

❻ EXTERNAL SPEAKER JACK [EXT SP]

Connects a 4~8 Ω speaker, if desired.

- The internal speaker can be turned OFF using the speaker-off function (Push [FUNC], then [4]).

❼ GROUND TERMINAL [GND] (p. 8)

To prevent electrical shocks, interference from other electronic equipment and other problems, be sure to ground the transceiver to a good earth point.

(See p. 8 for ground connection examples.)

Count on us!

