

INSTRUCTION MANUAL

HF MARINE TRANSCEIVER IC-M710



IMPORTANT

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-M710.

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.	

DISPOSAL



The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated

collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

Icom, Icom Inc. and the Icom Iogo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries.

PRECAUTIONS

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

⚠WARNING! NEVER mount the transceiver overhead. The weight of the transceiver is approximately 7.8 kg. (17.4 lb), but its apparent weight will increase several fold due to wave shocks and vibration. The transceiver must be mounted on a flat hard surface only.

NEVER connect a power source of more than 16 V DC, such as a 24 volt battery. This connection will ruin the transceiver.

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

NEVER allow children to play with equipment containing a radio transmitter.

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

NEVER install the IC-M710 into a positive-grounding ship. Such a connection might blow fuses, and is not usable.

DO NOT use chemical agents such as benzene or alcohol when cleaning, as they can damage the transceiver's surfaces.

In maritime mobile operation, **KEEP** the transceiver and microphone as far away as possible (at least 1 m) from the magnetic navigation compass to prevent erroneous indications.

USE an Icom microphone and/or handset only (supplied or optional). Other brands may have different pin assignments and may damage the transceiver.

DO NOT use or place the transceiver in areas with temperatures below -20°C (-4°F) or above +60°C (+140°F).

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 place the transceiver in excessively dusty environments, or in direct sunlight.

DO NOT place the transceiver against walls, or putting anything on top of the transceiver. This will obstruct heat dissipation.

Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:

- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom transceivers with any equipment that is not manufactured or approved by Icom.

TABLE OF CONTENTS

PRECAUTIONS EXPLICIT DEFINITIONS DISPOSAL TABLE OF CONTENTS	••••••••••••••••••••••••••••••••••••••
1 OPERATING RULES AND GUIDELINES	1
2 PANEL DESCRIPTION	·····2–5
■ Front panel ······	2
■ Display ·····	5
3 SELECTING A CHANNEL/FREQUENCY	6–8
■ Selecting a channel ······	6
♦ Using the channel selector	6
Using the keypad	7
♦ Using scan function	7
■ Selecting a frequency	8
♦ Using the channel selector·····	88
Using the keypad	8
4 RECEIVE AND TRANSMIT	
■ Basic voice receive and transmit	9
■ Functions for transmit······	9
♦ Transmit frequency check···································	9
♦ Transmit power selection ····································	9
■ Functions for receive ······	
♦ Squelch function ·····	
♦ Noise blanker·····	
♦ AGC OFF function ······	
♦ RF gain setting	
♦ Clarity control	10
CW operation (Depends on versions)	11
■ FSK operation (Depends on versions) ······	11

5 USER CHANNEL PROGRAMMING	12
■ Programming a frequency	12
♦ Receive Frequency	12
♦ Transmit frequency	12
♦ Channel name	12
6 SET MODE13	
■ Set mode operation ······	
■ Set mode contents ·····	13
7 CONNECTIONS AND INSTALLATION16	_22
■ Connections on the rear panel ······	
■ Unpacking ······	16
■ Connector information ······	
■ Ground connection ·······	
Power source ······	
Antenna	
♦ MN-100/MN-100L ANTENNA MATCHERS	
♦ AT-130 AUTOMATIC ANTENNA TUNER	
♦ Non-Icom tuner ·······	
■ Mounting ······	21
♦ Mounting location······	
♦ Mounting example	
♦ Transceiver dimensions ······	21
■ Disassembling the transceiver ······	29
Opening the case	20
■ Fuse replacement ······	22
◆ DC power cable fuse······	22
Circuitry fuse	22
✓ Circuity luse	22
8 TROUBLESHOOTING	23
9 SPECIFICATIONS AND OPTIONS	24
Specifications	24
◆ GENERAL	
♦ TRANSMITTER	
♦ RECEIVER	
Options	
■ Ohiious	24

1 OPERATING RULES AND GUIDELINES

□ CALL PROCEDURES

Calls must be properly identified and time limits must be respected.

- ① Give your call sign each time you call another vessel or coast station. If you have no call sign, identify your vessel name and the name of the licensee.
- ② Give your call sign at the end of each transmission that lasts more than 3 minutes.
- ③ You must break and give your call sign at least once every 15 minutes. during long ship-to-shore calls.
- Weep your unanswered calls short, less than 30 seconds.
 - Do not repeat a call for 2 minutes.
- (5) Unnecessary transmissions are not allowed.

□ PRIORITIES

- Read all rules and regulations pertaining to priorities and keep an up-to-date copy handy. Safety and distress calls take priority over all others.
- 2 False or fraudulent distress calls are prohibited and punishable by law.

□ PRIVACY

- 1 Information overheard but not intended for you cannot be lawfully used in any way.
- 2 Indecent or profane language is prohibited.

□ LOGS

- All distress, emergency and safety calls must be recorded in complete detail. Log data activity is usually recorded in 24 hour time. Universal Time (UTC) is frequently used.
- ② Adjustments, repairs, channel frequency changes and authorized modifications affecting electrical operation of the equipment must be kept in the maintenance log; entries must be signed by the authorized licensed technician performing or supervising the work.

☐ RADIO LICENSES

(1) SHIP STATION LICENSE

You must have a current radio station license before using the transceiver. It is unlawful to operate a ship station which is not licensed.

Inquire through your dealer or the appropriate government agency for a Ship-Radiotelephone license application. This government-issued license states the call sign which is your craft's identification for radio purposes.

(2) OPERATOR'S LICENSE

A Restricted Radiotelephone Operator Permit is the license most often held by small vessel radio operators when a radio is not required for safety purposes.

The Restricted Radiotelephone Operator Permit must be posted or be kept with the operator. Only a licensed radio operator may operate a transceiver.

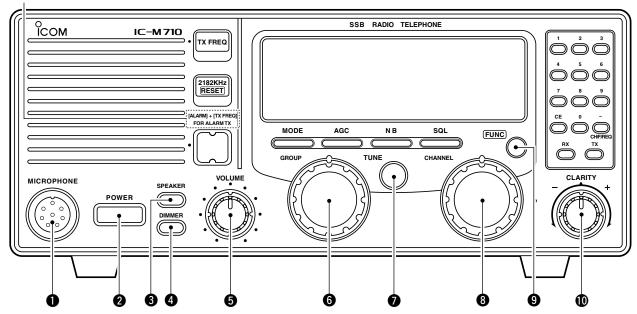
However, non-licensed individuals may talk over a transceiver if a licensed operator starts, supervises, and ends the call, and makes the necessary log entries.

Keep a copy of the current government rules and regulations handy.

1

■ Front panel

This function is not installed in the IC-M710.



1 MICROPHONE CONNECTOR (p. 17)

Accepts the supplied microphone or an optional handset.

NOTE: No audio is output to the speaker when the microphone or handset is not connected.

2 POWER SWITCH [POWER]

Turns power ON or OFF.

3 SPEAKER SWITCH [SPEAKER]

Turns the speaker ON or OFF.

- "je" appears in the display while the speaker is turned OFF.
- Any external speaker connected to the rear panel is not turned OFF.

4 DISPLAY INTENSITY SWITCH [DIMMER]

- Turns the display backlighting ON or OFF.
- → Push [FUNC], and then rotate the channel selector dial to set the intensity level while pushing and holding [DIMMER].

6 VOLUME CONTROL [VOLUME]

Adjusts the audio output level.

- No sound is output to the speaker when:
 - A microphone is not connected.
 - The [SPEAKER] switch is turned ON.
 - The [SQL] switch is turned ON and no signal is being received.

6 GROUP CHANNEL SELECTOR [GROUP]

Selects groups in 20 channels steps and ITU marine channel groups.

WNOTE: Some versions have no ITU channels.

ANTENNA TUNE SWITCH [TUNE] (p. 9)

Tunes the external tuner to the antenna.

 Activates only when an optional antenna tuner such as lcom's AT-130 is connected.

NOTE: When selecting "Automatic tuning" in the set mode, pushing this switch is not necessary to tune the antenna. (p. 13)

3 CHANNEL SELECTOR [CHANNEL] (p. 6)

- ➡ Selects an operating channel within the selected channel group.
 - User channels can be selected from 1 to 160 (max.) in sequence regardless of the channel group.
- Changes the operating frequency after [CE] is pushed (while "▶"appears).
 - The changed frequency is not programmed in this way.

9 FUNCTION SWITCH [FUNC]

After pushing activates the secondary functions of these switches:

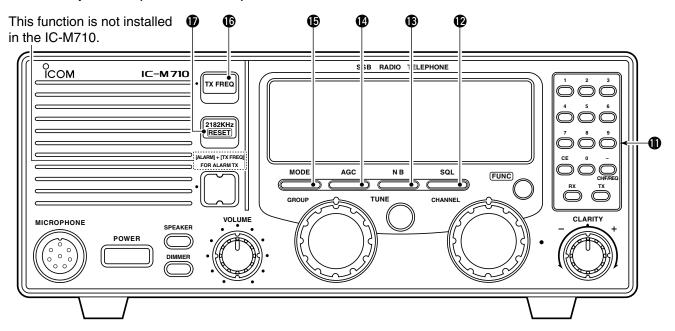
- [SQL] ······· Starts and stops scan (p. 7).
- [RX]----- Sets RF gain (p. 10).
- [TX] ······· Selects transmit power (p. 9).
- [CE].....Reprograms the channel name (p. 12).

WNOTE: Function availability depends on vesions.

© CLARITY CONTROL [CLARITY] (p. 10)

Shifts the receive frequency ±150 Hz for clear reception of an off frequency signal.

■ Front panel (Continued)



(1) KEYPAD



- Enters the selected channel number (or frequency) for direct channel selection. (p. 7)
- Stores a receive frequency into a user channel or ITU simplex channel when:
- pushing [CE] ("▶" appears)
- entering the desired frequency via the keypad
- pushing and holding [RX] (p. 12)
- Adjusts the RF gain after pushing [FUNC] to reduce the receiver sensivity. (p. 10)



- Stores a transmit frequency into a user channel (except General version) when:
- pushing [TX] ("TX" blinks)
- pushing [CE] ("▶" appears)
- entering the desired frequency via the keypad
- pushing and holding [TX] (p. 12)
- Selects the transmit output power after pushing [FUNC]. (p. 9)



- Toggles the channel number input or frequency input. (p. 8)
 - "▶" appears when frequency input is selected.
 - The channel selector and keypad changes the frequency while "▶" appears.
- Clears the entered digit and retrieves the previous channel (or frequency) while entering numbers. (p. 7)
- Enters the name programming condition after pushing [FUNC] for changing the channel name. (p. 12)



• Toggles the channel or frequency indications. (p. 6)

• Enters "–" for ITU simplex channels. (p. 7)



• Enter channel number with up to 4 or 5 digits when "▶" does not appear. (p. 7)



• Enter the frequency with up to 6 digits when "▶" appears. (p. 8)

Count on us!	