



INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER

IC-M502

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



icom inc.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL — This instruction manual contains important operating instructions for the IC-M502.

IN CASE OF EMERGENCY

If your vessel requires assistance, contact other vessels and the Coast Guard by sending a distress call on channel 16.

Or, transmit your distress call using digital selective calling on channel 70.

USING CHANNEL 16

DISTRESS CALL PROCEDURE

1. "MAYDAY MAYDAY MAYDAY."
2. "THIS IS" (name of vessel)
3. Your call sign or other indication of the vessel (AND 9-digit DSC ID if you have one).
4. "LOCATED AT" (your position)
5. The kind of the distress and assistance required.
6. Any other information which might facilitate the rescue.

USING DIGITAL SELECTIVE CALLING (Ch 70)

DISTRESS CALL PROCEDURE

1. While lifting up the switch cover, push and hold [DISTRESS] for 5 sec. until you hear 5 short beeps change to one long beep.
2. Wait for an acknowledgment from a coast station.
 - Channel 16 is automatically selected.
3. Push and hold [PTT], then transmit the appropriate information as at left.

TABLE OF CONTENTS

IMPORTANT	i
IN CASE OF EMERGENCY	i
TABLE OF CONTENTS	ii
CAUTIONS	iii

1 OPERATING RULES	1
2 PANEL DESCRIPTION	2–5
■ Panel description	2
■ Function display	4
■ Microphone	5
3 BASIC OPERATION	6–10
■ Channel selection	6
■ Microphone lock function	7
■ Receiving and transmitting	8
■ Call channel programming	9
■ Channel names	9
■ Optional voice scrambler operation	10
4 DUALWATCH/TRI-WATCH	11
■ Description	11
■ Operation	11
5 SCAN OPERATIONS	12–13
■ Scan types	12
■ Setting tag channels	13
■ Starting a scan	13
6 DSC OPERATION	14–28
■ MMSI code programming	14

■ Position and time programming	14
■ Position indication	15
■ Distress call	16
■ Transmitting DSC calls	17
■ Setting the distress information	21
■ DSC individual ID	22
■ Receiving DSC calls	23
■ DSC set mode	26
■ Receive messages	28

7 INTERCOM OPERATION 29

■ Intercom operation	29
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8 SET MODE 30–33

■ Set mode programming	30
■ Set mode items	31

9 CONNECTIONS AND

MAINTENANCE 34–39

■ Supplied accessories	34
■ Antenna	34
■ Fuse replacement	34
■ Cleaning	34
■ Connections	35
■ Mounting the transceiver	36
■ Optional unit installation	38
■ Dimensions.....	39

10 TROUBLESHOOTING 40

11 CHANNEL LIST 41

12 SPECIFICATIONS AND

OPTIONS 42–43

■ Specifications	42
■ Options	43

13 HM-127 REMOTE-CONTROL

MICROPHONE 44–56

■ Panel description	44
■ Function display	46
■ HM-127 supplied accessories	47
■ Installation	48
■ Channel selection	50
■ Receiving and transmitting	51
■ RF attenuator function	51
■ Lock functions	52
■ Display backlighting	52
■ Monitor function	52
■ Call channel programming	53
■ Optional voice scrambler operation	53
■ Starting a scan	54
■ Setting tag channels	54
■ Dualwatch/Tri-watch operation	54
■ Set mode programming	55
■ Intercom operation	56
■ Channel names	56

TEMPLATE

CAUTIONS

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

CAUTION: Changes or modifications to this device, not expressly approved by Icom Inc., could void your authority to operate this device under FCC regulations.

NEVER connect the transceiver to a power source of more than 16 V DC or use reverse polarity. This will ruin the transceiver.

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

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

KEEP the transceiver at least 3.3 ft (1 m) away from the ship's navigation compass.

DO NOT use or place the transceiver in areas with temperatures below -4°F (-20°C) or above $+140^{\circ}\text{F}$ ($+60^{\circ}\text{C}$) or, in areas subject to direct sunlight, such as the dashboard.

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

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

Place the transceiver in a secure place to avoid inadvertent use by children.

BE CAREFUL! The transceiver and optional HM-127 employ waterproof construction, which corresponds to JIS waterproof specification, grade 7 (1 m/30 min.). However, once the transceiver or microphone has been dropped, waterproofing cannot be guaranteed due to the fact that the case may be cracked, or the waterproof seal damaged, etc.

<p>CLEAN THE TRANSCEIVER AND MICROPHONE THOROUGHLY WITH FRESH WATER after exposure to water including fresh water, otherwise, the keys and</p>

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.
- You must monitor channel 16 when you are not operating on another channel.
- False or fraudulent distress signals are prohibited and punishable by law.

PRIVACY

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

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 kept with the operator. Only a licensed radio operator may operate a transceiver.

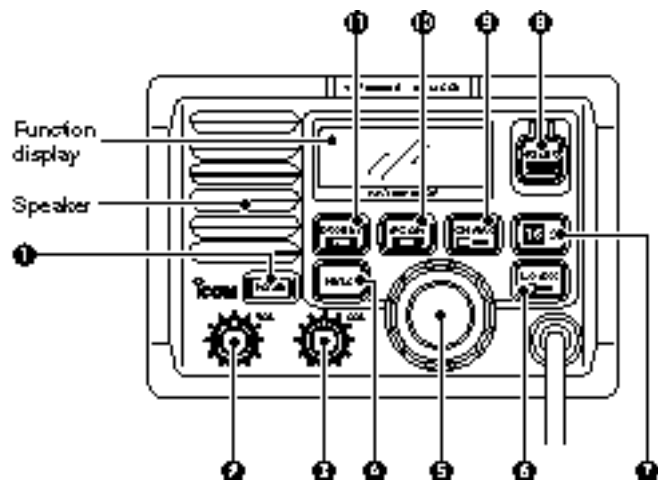
However, non-licensed individuals may talk over a transceiver if a licensed operator starts, supervises, ends the call and makes the necessary log entries.

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

Radio license for boaters (U.S.A. only)

The Telecommunications Act of 1996 permits recreational boaters to have and use a VHF marine radio, EPIRB, and marine radar without having an FCC ship station license. Boaters traveling on international voyages, having an HF single sideband radiotelephone or marine satellite terminal, or required to carry a marine radio under any other regulation must still carry an FCC ship station license. For further information, see the FCC Ship Radio Stations Fact Sheet.

■ Panel description



❶ POWER SWITCH [POWER]

Push to toggle the transceiver power ON and OFF.

❷ VOLUME CONTROL [VOL]

Adjusts the audio level. (p. 8)

❸ SQUELCH CONTROL [SQL]

Sets the squelch threshold level. (p. 8)

❹ TRANSMIT POWER SWITCH [HI/LO]

- ➔ Toggles high and low power when pushed. (p. 8)
 - Some channels are set to low power only.
- ➔ While pushing this switch, other switches perform secondary functions.

❺ CHANNEL SELECTOR [CHANNEL]

- ➔ Rotate [CHANNEL] to select the operating channels, set mode contents, etc. (p. 8)

- ➡ While pushing [HI/LO], rotate [CHANNEL] to adjust the brightness of the LCD and switch backlight.

⑥ ATTENUATOR/INTERCOM/SCRAMBLER SWITCH [LO/DX•IC•SCR]

- ➡ Toggles the attenuator function ON and OFF when pushed momentarily. (p. 8)
 - “LOCAL” appears when the attenuator is in use. The order of indication precedence is “LOCAL,” “SP OFF” and “CALL.”
- ➡ Activates an optional intercom function when pushed for 1 sec. (p. 29)
- ➡ Calls optional HM-127 REMOTE-CONTROL MICROPHONE when pushed and held while in intercom mode. (p. 29)
- ➡ While pushing [HI/LO], activates an optional voice scrambler function. (p. 10)
 - The optional voice scrambler function cannot be used on channel 16 and 70.

⑦ CHANNEL 16/CALL CHANNEL SWITCH [16•9]

- ➡ Selects channel 16 when pushed. (p. 6)
- ➡ Selects call channel when pushed for 1 sec. (p. 6)
 - “CALL” appears when call channel is selected. “LOCAL” and “SP OFF” indications have priority.
- ➡ Push for 3 sec. to enter call channel programming condition when call channel is selected. (p. 9)
- ➡ While pushing [HI/LO], enters memory name programming condition. (p. 9)
- ➡ Enters set mode when pushed while turning power ON. (p. 30)

⑧ DISTRESS SWITCH [DISTRESS]

- ➡ Transmits distress call when pushed for 5 sec. (p. 16)

⑨ CHANNEL/DUALWATCH/TRI-WATCH SWITCH [CH/WX•DW•U//C]

- ➡ Selects and toggles the regular channels and weather channel when pushed momentarily. (pgs. 6, 7)
- ➡ While pushing [HI/LO], selects one of 3 regular channels in sequence when pushed. (pgs. 6, 7)
 - International, U.S.A. and Canadian channels are available for regular channels.
- ➡ Starts dualwatch or tri-watch when pushed for 1 sec. (p. 11)
- ➡ Stops dualwatch or tri-watch when either is activated.

⑩ SCAN SWITCH [SCAN•TAG] (p. 13)

- ➡ Starts and stops normal or priority scan when tag channels are programmed.
- ➡ Push [SCAN•TAG] for 1 sec. to set the displayed channel as a tag (scanned) channel.
- ➡ While pushing [HI/LO], push for 3 sec. to clear all tag channels.

⑪ DSC/POSITION SWITCH [DSC/ENT•POS]

- ➡ Selects the DSC menu when pushed. (p. 14)
- ➡ Shows current position and time from an optional GPS receiver, etc. when pushed for 1 sec. (p. 15)

Count on us!

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