



INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER **IC-M2A**

This device complies with Part 15 of the FCC Rules. Operation is subject to the follow 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.



SAFETY TRAINING INFORMATION



Your Icom radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only”, meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only”. In addition, your Icom radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields— RF and Microwave.



To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- **DO NOT** operate the radio without a proper antenna attached, as this may damaged the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.

- **DO NOT** transmit for more than 50% of total radio use time (“50% duty cycle”). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the “TX indicator” lights red. You can cause the radio to transmit by pressing the “PTT” switch.
- **ALWAYS** use Icom authorized accessories (antennas, batteries, belt clips, etc.). Use of unauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded.
- **ALWAYS** keep the antenna at least 2.5 cm (1 inch) away from the body when transmitting and only use the Icom belt-clips which are listed on page 25 when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Icom radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

IN CASE OF EMERGENCY

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

○ **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.
4. "LOCATED AT" (your position)
5. The nature of the distress and assistance required.
6. Any other information which might facilitate the rescue.

RECOMMENDATION

CLEAN THE TRANSCEIVER THOROUGHLY WITH FRESH WATER after exposure to salt water.

Otherwise, the transceiver's keys, switches and controllers may become inoperable due to salt crystallization.



FOREWORD


Thank you for purchasing this Icom product. The IC-M2A VHF MARINE TRANSCEIVER is designed and built with Icom's superior technology and craftsmanship. With proper care this product should provide you with years of trouble-free operation.

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-M2A.

EXPLICIT DEFINITIONS

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.

FEATURES

Waterproof construction

Built tough to withstand the punishing marine environment, the IC-M2A meets JIS waterproof specification grade 7 while using BP-223 or BP-224.

Dual watch and tri-watch functions

Convenient functions which allow you to monitor the distress channel (Ch 16) while receiving a channel of your choice—dual watch; or monitor the distress channel and another channel while receiving a channel of your choice—tri-watch.

Large, easy-to-read LCD

With dimensions of 24(H) × 35(W) mm, the IC-M2A's function display is easy to read and shows operating conditions at a glance. Backlighting and contrast can be adjusted to suit your preferences.

Simple operation

Ergonomic design with a minimum number of switches and controls provides simple intuitive operation.

CAUTIONS

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

⚠ WARNING! NEVER hold the transceiver so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting. The transceiver will perform best if the microphone is 5 to 10 cm (2 to 4 inches) away from the lips and the transceiver is vertical.

NEVER connect the transceiver to a power source other than the BP-223 or BP-224. Such a connection will ruin the transceiver.

AVOID using or placing the transceiver in direct sunlight or in areas with temperatures below -20°C (-4°F) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$).

KEEP the transceiver out of the reach of children.

KEEP the transceiver at least 0.9 meter (3.0 ft) away from your vessel's magnetic navigation compass.

BE CAREFUL! The transceiver's right-side panel will become hot when operating continuously for long periods.

BE CAREFUL! The IC-M2A employs waterproof construction, which corresponds to JIS waterproof specification, grade 7 (1 m; 3 ft depth for 30 min.). However, once the transceiver has been dropped, waterproofing cannot be guaranteed due to the fact that the transceiver may be cracked, or the waterproof seal damaged, etc.

MAKE SURE the flexible antenna and battery pack are securely attached to the transceiver, and that the antenna and battery pack are dry before attachment. Exposing the inside of the transceiver to water will result in serious damage to the transceiver.

For U.S.A. only

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


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TABLE OF CONTENTS

SAFETY TRAINING INFORMATION	i	■ Operation	10
IN CASE OF EMERGENCY	ii	5 SCAN OPERATION	11–12
RECOMMENDATION	ii	■ Scan types	11
FOREWORD	iii	■ Setting tag channels	12
IMPORTANT	iii	■ Starting a scan	12
EXPLICIT DEFINITIONS	iii	6 SET MODE	13–16
FEATURES	iii	■ SET mode programming	13
CAUTIONS	iv	■ SET mode items	13
TABLE OF CONTENTS	v	7 BATTERY CHARGING	17–19
1 OPERATING RULES	1	■ Battery charging	17
2 PANEL DESCRIPTION	2–5	■ Battery cautions	17
■ Front, top and side panels.....	2	■ Installing batteries in the battery case	18
■ Function display	4	■ Optional battery chargers	19
3 BASIC OPERATION	6–9	8 SUPPLIED ACCESSORIES AND ATTACHMENTS	20–22
■ Channel selection	6	9 TROUBLESHOOTING	23
■ Lock function	7	10 CHANNEL LIST	24
■ Adjusting the squelch level	7	11 SPECIFICATIONS AND OPTIONS	25
■ Receiving and transmitting	8	■ Specifications	25
■ Call channel programming	9	■ Options	25
■ Automatic backlighting	9		
4 DUALWATCH/TRI-WATCH	10		
■ Description	10		

◇ 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 calls are prohibited under 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

When your craft is equipped with a VHF FM transceiver, 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. This license includes 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 near the transceiver 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, ends the call and makes the necessary log entries.

A current copy of the applicable government rules and regulations is only required to be on hand for vessels in which a radio telephone is compulsory. However, even if you are not required to have these on hand it is your responsibility to be thoroughly acquainted with all pertinent rules and regulations.

NOTE: Even though the IC-M2A is capable of operation on VHF marine channels 3, 21, 23, 61, 64, 81, 82 and 83, according to FCC regulations these simplex channels cannot be lawfully used by the general public in USA waters.

■ Front, top and side panels

① CHANNEL/WEATHER CHANNEL SWITCH [CH/WX•U/I/C]

- Selects and toggles the regular channels and weather channel when pushed. (pgs. 6, 7)
- Selects one of 3 regular channels in sequence when pushed for 1 sec. (p. 6)
 - International, U.S.A. and Canadian channels are available.

② CHANNEL UP/DOWN SWITCHES [▲]/[▼]

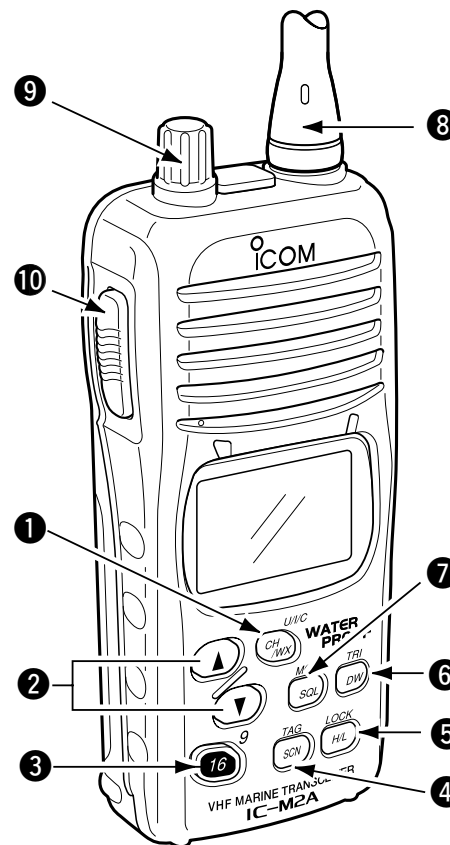
- Select an operating channel.
- Selects the SET mode condition of the item. (p. 13)
- Set the squelch level in the squelch set mode. (p. 7)

③ CHANNEL 16 SWITCH [16•9]

- Selects Channel 16 when pushed. (p. 6)
- Selects the call channel when pushed for 1 sec.
- Enters call Channel write mode when the call channel is selected and this switch is pushed for 3 sec. (p. 9)

④ SCAN/TAG SWITCH [SCN•TAG] (p. 12)

- Starts and stops normal or priority scan.
- Sets and clears the displayed channel as a tag (scanned) channel when pushed for 1 sec.



⑤ TRANSMIT POWER/LOCK SWITCH [H/L•LOCK]

- Selects high, middle or low power when pushed. (p. 8)
- Toggles the lock function ON/OFF when pushed for 1 sec. (p. 7)

⑥ DUALWATCH/TRI-WATCH SWITCH [DW•TRI] (p. 10)

- Starts dualwatch when pushed momentarily.
- Starts tri-watch when pushed for 1 sec.
- Stops dualwatch/tri-watch when either is activated.

⑦ SQUELCH SWITCH [SQL•MONI] (p. 7)

- Push this switch, then set the squelch level with [▲]/[▼].
- Manually opens the squelch for channel monitoring when pushed for 1 sec.

⑧ ANTENNA (p. 20)

Connects the supplied antenna.

⑨ VOLUME CONTROL [OFF/VOL]

Turns power ON and adjusts the audio level.

⑩ PTT SWITCH [PTT]

Push and hold to transmit; release to receive.

Count on us!