



INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER **IC-M88**

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Icom Inc.



Thank you for choosing this Icom product.

This product is designed and built with Icom's state of the art 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-M88 VHF MARINE TRANSCEIVER.

EXPLICIT DEFINITIONS

WORD	DEFINITION
⚠ DANGER!	Personal death, serious injury or an explosion may occur.
⚠ 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

👉 **22 free channels for land use**

The IC-M88 has 22 free channels reserved for Land use (146 ~ 174MHz). Wide/narrow channel spacing is setable for each channel, and CTCSS and DTCS signaling is included.

*Appropriate license will be required.

👉 **Tough waterproof construction**

The IC-M88 is built tough to withstand hazardous and un-hospitable environments at sea and on land. Even if the IC-M88 is dropped into water, it's waterproofing* will protect it from harm. The compact and durable body meets the military specifications (MIL-STD).

* Equivalent to IPX7 of the corresponding International Standard IEC 529 (1989). (1m depth for 30 minutes)

👉 **Simple operation**

6 clearly labelled buttons on the front panel and the volume/power knob maximize simplicity of operation. Even when wearing gloves, the large buttons are easy to operate. A large, clear LCD with backlighting and backlit buttons make night time operation simple.

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RECOMMENDATION

CLEAN THE TRANSCEIVER THOROUGHLY WITH FRESH WATER after exposure to saltwater, and dry it before operating. Otherwise, the transceiver's keys, switches and controllers may become unusable, due to salt crystallization, and/or the charging terminals of the battery pack may rust.

NOTE: If the transceiver's waterproof protection appears defective, carefully clean it with a soft, wet (fresh water) cloth, then, dry it before operating.

The transceiver may lose its waterproof protection if the case, jack cover, or the battery pack is cracked or broken, or the transceiver has been dropped.



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.

SAFETY TRAINING INFORMATION



WARNING

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 and IC 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.
- The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC and IC requirements for wireless RF exposure: Belt Clip (MB-79), Swivel Belt Clip (MB-86), Rechargeable Li-ion Battery Pack (BP-227), Alkaline Battery Case (BP-226) and Speaker-microphone (HM-138).



CAUTION

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

- **DO NOT** operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed FCC and IC 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 and IC RF exposure compliance requirements to be exceeded. The radio is transmitting when the transmit icon is displayed. You can cause the radio to transmit by pressing the “PTT” switch.
- **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 35 when attaching the radio to your belt, etc., to ensure FCC and IC 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 within the FCC and IC 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.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

PRECAUTIONS

⚠ DANGER! NEVER short the terminals of the battery pack. Also, current may flow into metal objects such as a key, so be careful when placing the battery packs (or the transceiver) in bags, and so on. Simply carrying with or placing near metal objects such as a key, and so on, may cause shorting. This may damage not only the battery pack, but also the transceiver.

⚠ DANGER! Use and charge only specified Icom battery packs with Icom transceivers or Icom chargers. Only Icom battery packs are tested and approved for use with Icom transceivers or charged with Icom chargers. Using third-party or counterfeit battery packs or chargers may cause smoke, fire, or cause the battery to burst.

⚠ DANGER! NEVER operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

⚠ WARNING! NEVER hold the transceiver so that the antenna is closer than 2.5 cm (1 inch) from exposed parts of the body, especially the face or eyes, while transmitting.

CAUTION: NEVER connect the transceiver to a power source other than the products specified by Icom. Such a connection will ruin the transceiver.

CAUTION: MAKE SURE the flexible antenna, battery pack and jack cover are securely attached to the transceiver, and that the antenna and battery pack are dry before attachment. Exposing the inside of the transceiver to dust or water will result in serious damage to the transceiver. After exposure to water, clean the battery contacts thoroughly with fresh water and dry them completely to remove any water or salt residue.

DO NOT place or leave the transceiver in direct sunlight or in areas with temperatures below -20°C (-4°F) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$): Marine, below -30°C (-22°F) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$): LMR.

DO NOT use harsh solvents such as Benzine or alcohol when cleaning, as they will damage the transceiver surfaces.

DO NOT push [PTT] when not actually intending to transmit.

DO NOT modify the transceiver. The transceiver warranty does not cover any problems caused by unauthorized modification.

PRECAUTIONS (Continued)

KEEP the transceiver out of the reach of unauthorized persons.

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

BE CAREFUL! The transceiver meets IPX7* requirements for waterproof protection. However, once the transceiver has been dropped, waterproof protection cannot be guaranteed because of possible damage to the transceiver's case or the waterproof seal.

* Only when the battery pack, flexible antenna, [SP MIC] jack cover is attached.

MAKE SURE to turn OFF the transceiver before connecting or disconnecting the supplied or optional accessory.

Icom is not responsible for the destruction or damage to the Icom transceiver, 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.

FCC INFORMATION

• FOR CLASS A UNINTENTIONAL RADIATORS:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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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◇ 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-M88 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.

■ Supplied accessories

The following accessories are supplied:

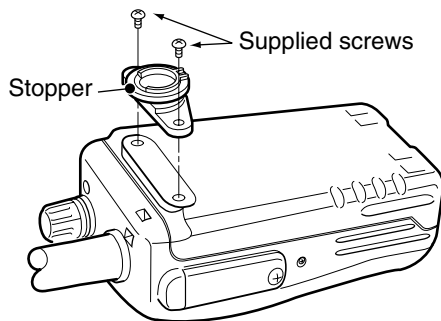
	Qty.
• Swivel belt clip.....	1
• Stopper for the swivel belt clip.....	1
• Screws for the swivel belt clip	2
• Flexible antenna.....	1
• Handstrap.....	1
• Battery pack	1
• Power adapter.....	1
• Battery charger.....	1

■ Attachments

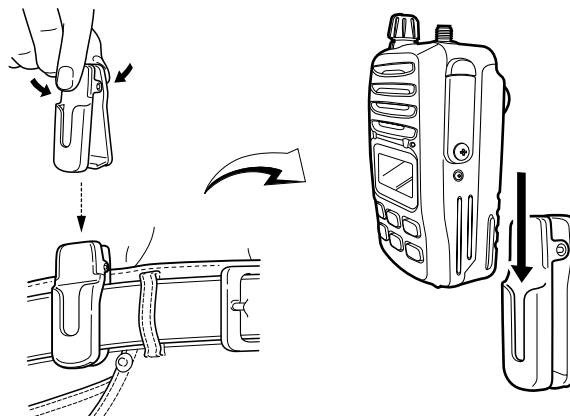
◇ Swivel belt clip

To attach:

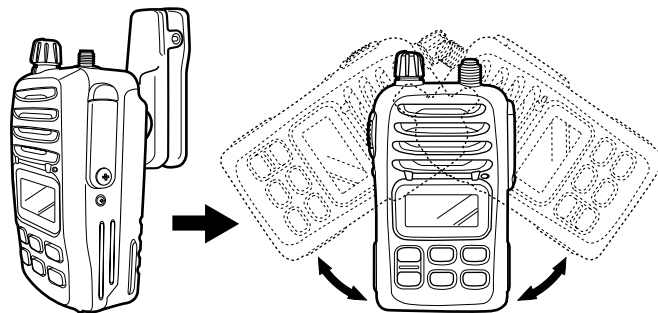
- ① Attach the stopper to the back of the transceiver.



- ② Clip the belt clip to a part of your belt and insert the stopper to the belt clip.

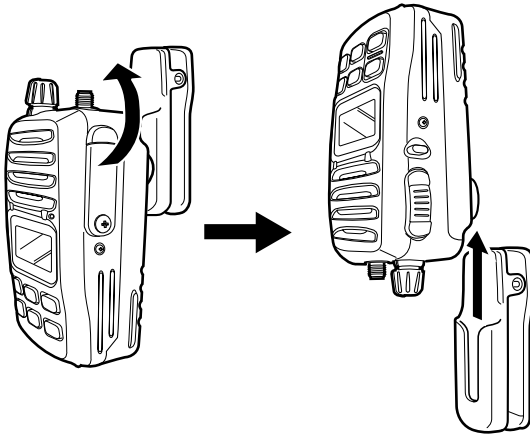


- ③ Once the transceiver is locked in place, it will swivel 360 degrees.



To remove:

Turn the transceiver upside down, and then lift up to release the transceiver from the belt clip.



CAUTION:
HOLD THE TRANSCEIVER TIGHTLY, WHEN ATTACHING OR REMOVING THE TRANSCEIVER FROM THE BELT CLIP.

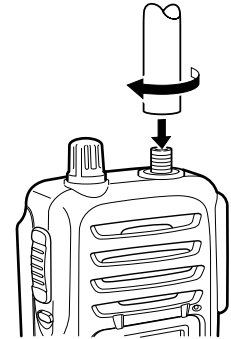
If the transceiver is accidentally dropped and the swivel belt clip's stopper is scratched or damaged, the swivel belt clip may not work properly.

◇ Flexible antenna

Connect the supplied flexible antenna to the antenna connector.

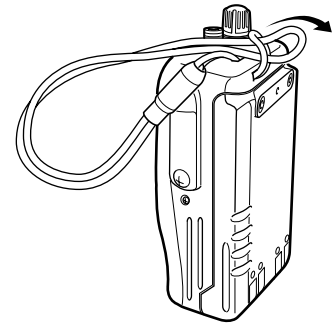
CAUTION:

- **NEVER** carry the transceiver by holding only the antenna.
- **DO NOT** connect the antenna other than the supplied one.
- Transmitting without an antenna will damage the transceiver.

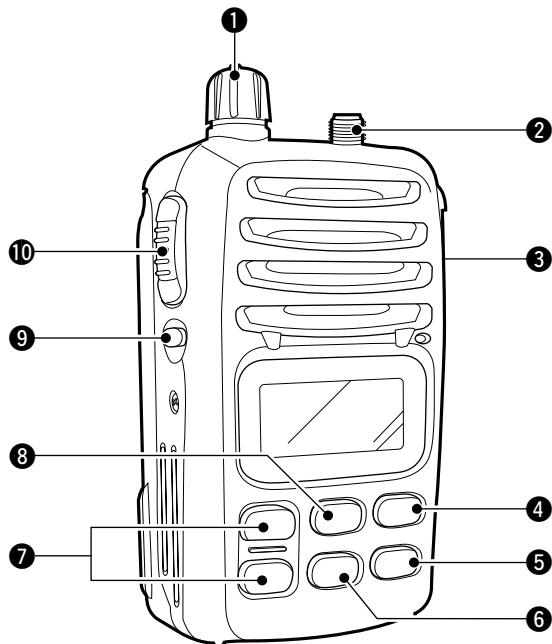


◇ Handstrap

Pass the handstrap through the loop on the back side of the transceiver as illustrated at right. This facilitates carrying.



■ Front, top and side panels



❶ VOLUME CONTROL [VOL]

Push to turn ON the power and adjusts the audio level.

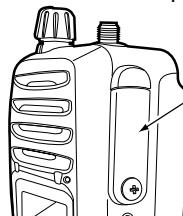
❷ ANTENNA CONNECTOR (p. 3)

Connects the supplied antenna.

❸ SPEAKER-MICROPHONE CONNECTOR [SP MIC]

(p. 29)

Connects the optional speaker-microphone.



[SP MIC] jack cover

NOTE: KEEP the [SP MIC] jack cover attached to the transceiver when the speaker-microphone is not in use.

❹ SCAN KEY [SCN•DUAL] (pp. 14, 15)

- Push to start or stop the Normal or Priority scan.
- Hold down for 1 second to start Dualwatch or Tri-watch.

❺ TRANSMIT POWER/LOCK KEY [H/L•LOCK]

- Push to select the High, Mid or Low power level. (p. 10)
- Hold down for 1 second to turn the Lock function ON or OFF. (p. 12)

❻ CHANNEL 16 KEY [16•9]

- Push to select Channel 16. (p. 8)
- Hold down for 1 second to select the Call channel. (p. 8)
- When the Call channel is selected, hold down for 3 seconds to enter the Call channel entry mode. (p. 12)

Count on us!

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