ICOM

INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER

IC-M91D
IC-M92D

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.

FOREWORD

Thank you for purchasing this Icom product. The IC-M91D and IC-M92D VHF MARINE TRANSCEIVER are designed and built with Icom's state of the art technology and craftsmanship. With proper care this radio 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-M91D and IC-M92D.

This instruction manual includes some functions which are usable only when they are pre-programmed by your dealer. Ask your dealer for details.
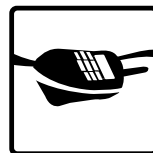
EXPLICIT DEFINITIONS

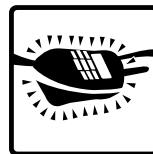| WORD	DEFINITION
⚠**DANGER!**	Personal death, serious injury or an explosion may occur.
⚠**WARNING!**	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

FEATURES

☞ **Floats on water**
The transceiver floats in fresh or salt water even when the supplied accessories are attached.
• When a third-party battery pack, strap, antenna, and so on is used, it may sink.

☞ **Floats and flashes**
When the transceiver detects that it has come in contact with water, the LCD backlight, keys and trim start to blink, making it easy to find the transceiver even at night or in a dark environment.

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. Say your call sign or other indication of the vessel (AND your 9-digit DSC ID, if you have one).
4. "LOCATED AT ...." (your position).
5. State the nature of the distress and assistance required.
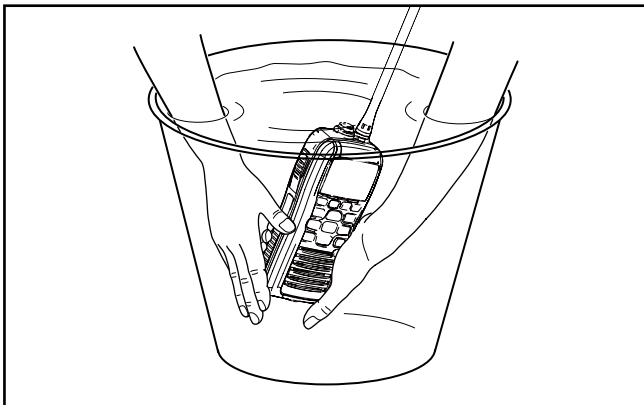6. Give any other information which might facilitate the rescue.

USING DIGITAL SELECTIVE CALLING (Ch 70)
DISTRESS CALL PROCEDURE

1. While lifting up the key cover, hold down [DISTRESS] for 3 seconds until you hear 3 short beeps and then one long beep.
2. Wait for an acknowledgment on Channel 70 from a coast station.
   • After the acknowledgement is received, Channel 16 is automatically selected.
3. Push and hold [PTT], then transmit the appropriate information as listed to the left.

RECOMMENDATION

CLEAN THE TRANSCEIVER THOROUGHLY WITH FRESH WATER after exposure to saltwater. Otherwise, the transceiver's keys, switches and controllers may become inoperable due to salt crystallization.

NOTE: DO NOT wash the transceiver in water if there is any reason to suspect the waterproofing may not be effective. For example, in cases where the battery pack rubber seal is damaged, the transceiver/battery pack is cracked or broken, or has been dropped, or when the battery pack is detached from the transceiver.

PRECAUTIONS

⚠ **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.

⚠ **WARNING! NEVER** operate the transceiver with other audio accessories at high volume levels. Hearing experts advise against continuous high volume operation. If you experience a ringing in your ears, reduce the volume level or discontinue use.

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

BE CAREFUL! The transceiver will become hot when operating it continuously for long periods of time.

KEEP the transceiver and microphone at least 1 m (3.3 feet) away from the vessel's magnetic navigation compass.

KEEP the transceiver out of the reach of children.

PRECAUTIONS

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.

DO NOT operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

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

DO NOT use or place the transceiver in direct sunlight or in areas with temperatures below –20°C (–4°F) or above +60°C (+140°F), and for the Australian version, below –10°C or above +55°C (+140°F).
The basic operations, transmission and reception of the transceiver are guaranteed within the specified operating temperature range. However, the LCD display may not be operate correctly, or show an indication in the case of long hours of operation, or after being placed in extremely cold areas.

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

BE CAREFUL! The IC-M91D and IC-M92D meet IPX7* requirements for dust-tight and waterproof protection. However, once the transceiver has been dropped, dust-tight and waterproof protection cannot be guaranteed because of possible damage to the transceiver's case or the waterproof seal.

* Only when the jack cover or the optional HM-167 is attached.

Even when the transceiver power is OFF, a slight current still flows in the circuits. Remove the battery pack or batteries from the transceiver when not using it for a long time. Otherwise, the installed battery pack or batteries will become exhausted, and will need to be recharged or replaced.

BE CAREFUL! Even if the volume level is set low, the beeps of the Float 'n Flash, DSC alarm and AquaQuake functions are very loud.

MAKE SURE to turn the transceiver power OFF before connecting the supplied/optional equipment.

For U.S.A. only:
CAUTION: Changes or modifications to this transceiver, not expressly approved by Icom Inc., could void your authority to operate this transceiver under FCC regulations.

FCC INFORMATION

FOR CLASS B UNINTENTIONAL RADIATORS

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

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1 OPERATING RULES

◇ 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

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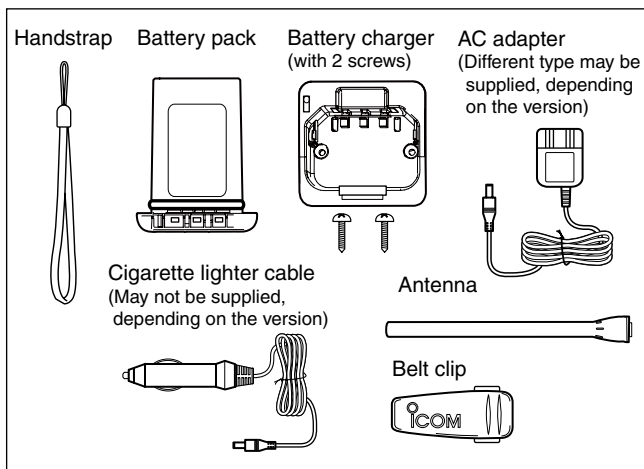
The Restricted Radiotelephone Operator Permit must be posted or kept with the operator. Only a licensed radio operator may operate a transceiver.

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

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.
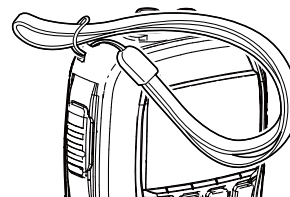
NOTE: Even though the IC-M92D is capable of operation on VHF marine channels 3, 21, 23, 61, 64, 81, 82 and 83, according to FCC regulations these simplex channels cannot be lawfully used by the general population in U.S.A. waters.

SUPPLIED ACCESSORIES AND ATTACHMENTS

■ Supplied accessories

Handstrap   Battery pack   Battery charger
(with 2 screws)

AC adapter
(Different type may be
supplied, depending
on the version)

Cigarette lighter cable
(May not be supplied,
depending on the version)

Antenna

Belt clip

ⁱCOM

■ Attachments

◇ Flexible antenna

Connect the supplied flexible antenna
to the antenna connector.

CAUTION:
• **NEVER** carry the transceiver by hold-
ing the antenna.
• Transmitting without an antenna may
damage the transceiver.

◇ Handstrap

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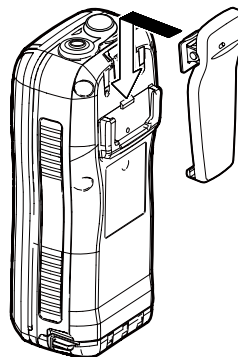the transceiver as illustrated
at right. This facilitates carry-
ing.

◇ Belt clip

Attach/detach the belt clip to the transceiver as illustrated
below.

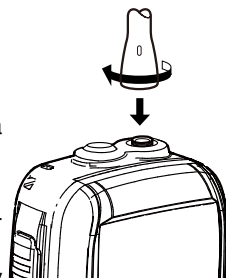To attach the belt clip   To detach the belt clip

Be careful!
Do not break
your finger
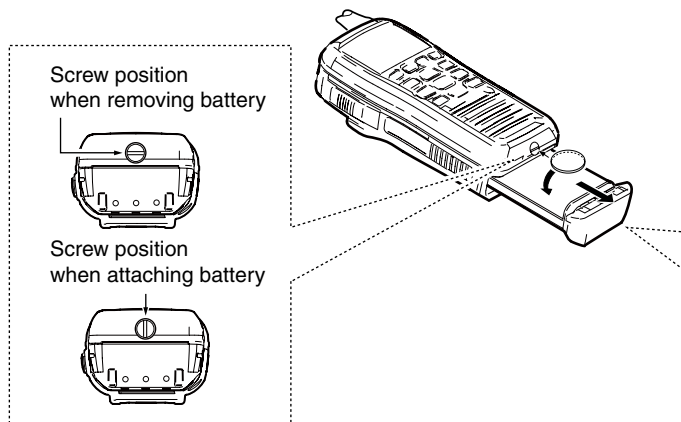nails.

◇ Battery pack

To remove the battery pack:
Turn the screw counter clockwise one quarter turn, then pull the battery pack in the direction of the arrow, as shown below.

To attach the battery pack:
Insert the battery pack completely into the transceiver, then turn the screw clockwise one quarter turn.

NEVER remove or insert the battery pack when the transceiver is wet or soiled. This may result water or dust getting into the transceiver or battery pack and may result in the transceiver being damaged.
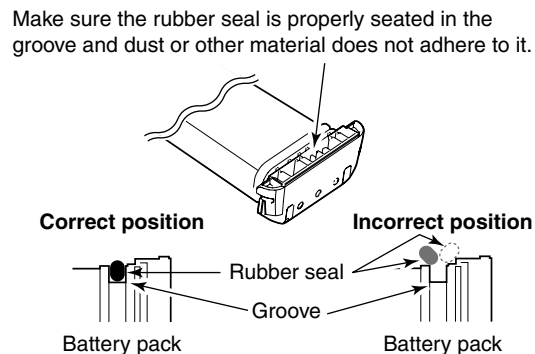
NOTE: When removing or attaching the battery pack, use a coin or standard screwdriver to loosen or tighten the bottom screw.
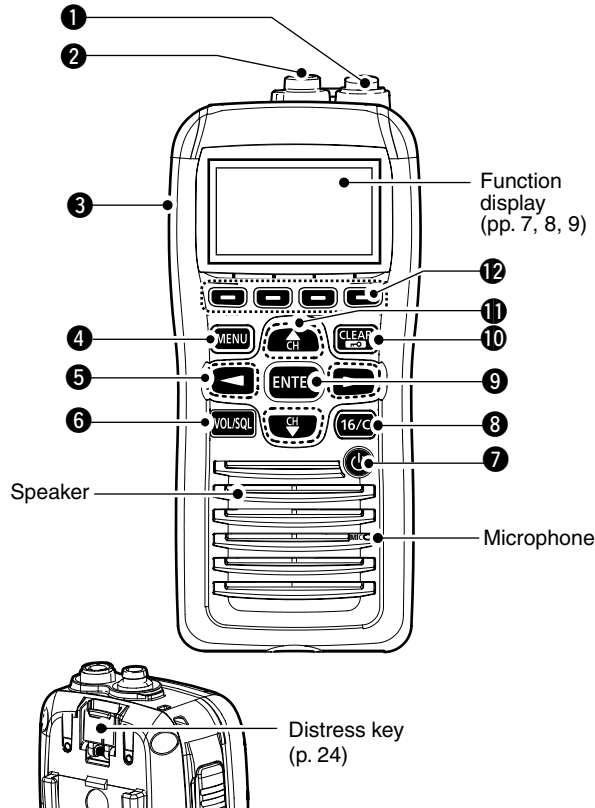
CAUTION:
When attaching or removing a battery pack, make sure the rubber seal is set in the groove of the battery pack correctly. If the seal is not correctly in the groove, it may be damaged when attaching the battery pack. If the seal is damaged, waterproof protection is not guaranteed.

NOTE:
When attaching a battery pack, make sure dust or other material does not adhere to the rubber seal. If dust or other material is on the seal when attaching a battery pack, waterproof protection may not be guaranteed.

Make sure the rubber seal is properly seated in the groove and dust or other material does not adhere to it.

Screw position when removing battery

Screw position when attaching battery

Correct position   **Incorrect position**

Rubber seal

Groove

Battery pack   Battery pack

■ Front, top, side and rear panels

Function
display
(pp. 7, 8, 9)

Speaker

Microphone

Distress key
(p. 24)

q ANTENNA CONNECTOR (p. 2)
Connects to the supplied antenna.

w SPEAKER-MICROPHONE CONNECTOR [SP MIC] (p. 94)
Connects to the optional external speaker-microphone.

~~~ **NOTE:** Attach the [SP MIC] cap when the optional
~~~ speaker-microphone is not used. Otherwise, water will
~~~ get into the transceiver.

e PTT SWITCH [PTT]
Hold down to transmit; release to receive. (p. 14)

r MENU KEY
Push to enter or exit the Menu screen.

t LEFT AND RIGHT KEYS [◄]/[►]
➥ Push to switch to the previous or next key function that
is assigned to the softkeys. (p. 9)
➥ Push to select the desired character or number in the
table while in the channel name, position, MMSI code
programming mode, and so on. (pp. 10, 16, 23)
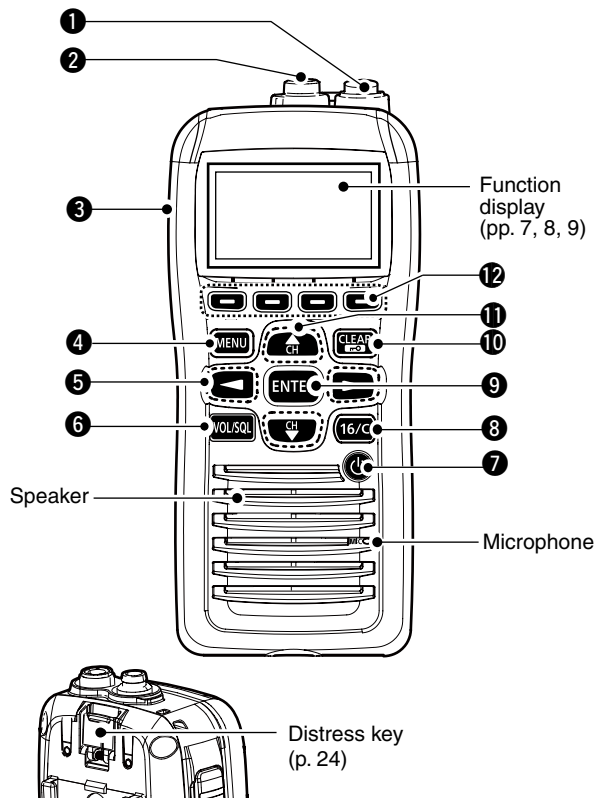
y VOLUME/SQUELCH KEY [VOL/SQL]
➥ Push to enter the volume level adjustment mode.
(p. 13)
➥ Push again while in the volume level adjustment mode
to enter the squelch level adjustment mode.
➥ Hold down for 1 second to activate the monitor function.
(p. 15)

u POWER KEY [⏻]
Hold down for 1 second to turn the power ON or OFF.

3 PANEL DESCRIPTION

■ Front, top and rear panels (Continued)

Function display (pp. 7, 8, 9)

Speaker

Microphone

Distress key (p. 24)

⑧ CHANNEL 16 KEY [16/C]
- ➡ Push to select Channel 16. (p. 11)
- ➡ Hold down for 1 second to select the Call channel. (p. 11)
- ➡ Hold down for 3 seconds to enter the Call channel programming mode when the Call channel is selected. (p. 13)

⑨ ENTER KEY

Push to set the input data, selected item, and so on.

⑩ CLEAR/LOCK KEY [⊶O]
- ➡ Push to cancel the entered data, or to return to the previous screen.
- ➡ Hold down for 1 second to turn the key lock function ON or OFF. (p. 15)

⑪ UP AND DOWN/CHANNEL SELECT KEYS [▲•CH]/[▼•CH]
- ➡ Push to select the operating channels, Menu items, Menu settings, and so on. (p. 82)
- ➡ Push to check Favorite (TAG) channels, change the scanning direction or manually resume a scan. (p. 18)

⑫ SOFTKEYS

Slide the menu by pushing the [◄]/[►] keys, then push either of the 4 softkeys to select a menu displayed at the bottom of the LCD display.
See Softkeys on the next page for more details. (p. 6)

Count on us!