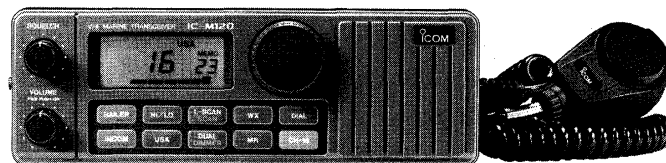




## INSTRUCTION MANUAL

# VHF MARINE TRANSCEIVER **IC-M120**



Icom Inc.

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## IMPORTANT SAFETY PRECAUTIONS

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Before using the transceiver, read all instructions carefully and completely.

**SAVE THESE INSTRUCTIONS** — This instruction manual contains important safety and operating instructions for the IC-M120.

**NEVER** connect the transceiver to more than a 16 V DC power source or an AC outlet. This will ruin the transceiver.

**NEVER** allow children to touch the transceiver.

**NEVER** put the transceiver in water. **AVOID** using in rain and snow.

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

**AVOID** placing the transceiver in direct sunlight.

**KEEP** the antenna cable and DC power cable as far away as possible from electrical pumps, generators and other electrical instruments to prevent instrument malfunctions.

**BE CAREFUL!** If the transceiver is not securely mounted with bolts and nuts, personal injury or transceiver damage could occur due to wave shock, vibrations, etc.

**BE CAREFUL!** The heatsink may become hot when the transceiver transmits continuously for a long time.

**DO NOT** use any object to push the front panel switches, as the switches could be damaged. Push the switches lightly with your fingertips only.

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## FOREWORD

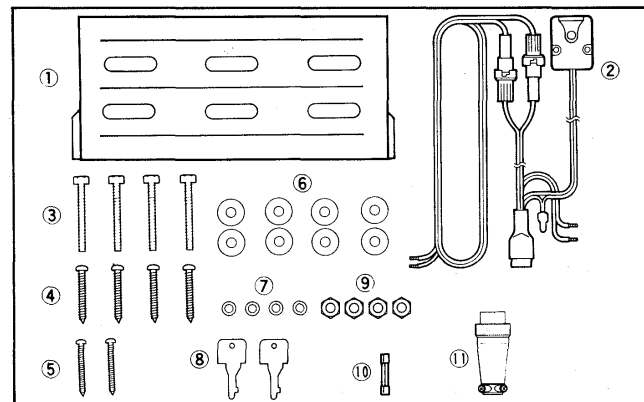
Thank you for purchasing the **IC-M120** VHF MARINE TRANSCEIVER. Icom has produced this state-of-the-art marine transceiver using the most advanced technology.

The **IC-M120** has the following advanced features:

- Strong weather-resistant, dust-tight design.
- **HAILER** and **INTERCOM** operations available.
- Large LCD display including S/RF indicator.
- All marine, 10 weather and 24 memory channels.
- Variety of scanning functions.
- Dual watch for monitoring Channel 16 during operation.
- 25 W stable output power with a large heatsink.
- High sensitivity and strength against intermodulation interference.
- Momentary high transmit output power on U.S.A. Channels 13 and 67.
- An optional handset is available for listening privacy.

To fully appreciate the capabilities of your new **IC-M120**, please read this instruction manual thoroughly. For further information, please feel free to contact your nearest Icom Dealer or Service Center.

## UNPACKING



①	Mounting bracket . . . . .	1
②	DC power and microphone cable* . . . . .	1
③	Mounting bolts (M6 x 50) . . . . .	4
④	Mounting screws (A0 6 x 30) . . . . .	4
⑤	Mic hanger screws (A0 3.5 x 30) . . . . .	2
⑥	Flat washers (M6) . . . . .	8
⑦	Spring washers (M6) . . . . .	4
⑧	Mounting bracket keys . . . . .	2
⑨	Nuts (M6) . . . . .	4
⑩	Fuse (10 A) . . . . .	1
⑪	ACC connector plug . . . . .	1

\* OPC-218 (gray) OPC-218A (white)

## (1) PRIORITIES

- 1) 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) You must monitor Channel 16 when you are not operating on another channel.
- 3) False or fraudulent distress signals are prohibited under law.

## (2) PRIVACY

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

## (3) RADIO LICENSES

### • 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 application. Your government-issued license states the call sign which is your craft's identification for radio purposes.

### • 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. You can usually obtain this permit by mail.

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, and ends the call, and makes the necessary log entries.

A current copy of the applicable government rules and regulations is usually required to be kept.

# 2

## PANEL DESCRIPTION

### 2-1 FRONT PANEL

#### SQUELCH CONTROL [SQUELCH]

Rotate clockwise to cut off audio noise. (p. 10)

When a signal is received, the squelch opens and audio is emitted from the speaker.

#### VOLUME CONTROL AND POWER SWITCH [VOLUME]

Push the control to turn ON and OFF power. (p. 9)

Rotate to adjust audio output level. (p. 10)

#### HAILER SWITCH [HAILER]

Selects and cancels the hailer function. (p. 18)

#### INTERCOM SWITCH [INCOM]

Selects and cancels the intercom function. (p. 19)

#### TRANSMIT POWER SWITCH [HI/LO]

Selects the high or low transmit output power. (p. 10)

HIGH: 25 W LOW: 1 W

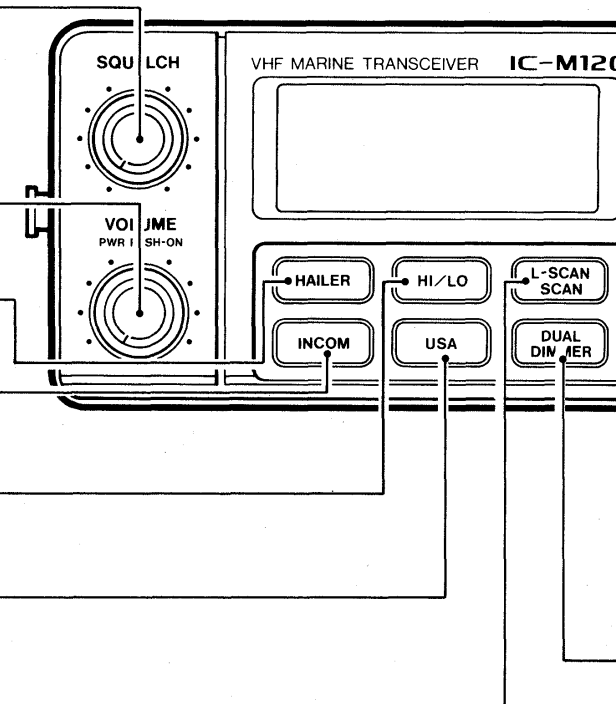
#### U.S.A. CHANNEL SWITCH [USA]

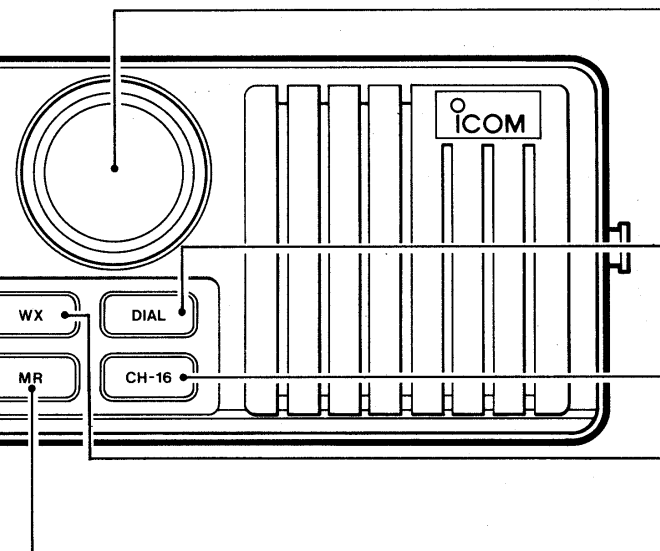
Selects U.S.A. or international marine channels. (p. 9)

#### SCAN SWITCH [L-SCAN SCAN]

Push to start lockout scan. (p. 15)

Push and hold to start full scan. (p. 14)





## CHANNEL SELECTOR

Selects an operating channel. (p. 9)

## DIAL SWITCH [DIAL]

Selects DIAL mode which includes all U.S.A. and international marine channels. (p. 9)

## CHANNEL 16 SWITCH [CH-16]

Selects Channel 16. This channel can be used as a call channel for ship-to-ship contact or as a marine distress and safety call channel. (p. 9)

## WEATHER CHANNEL SWITCH [WX]

Selects WEATHER mode which has 10 weather channels. (p. 9)

## MEMORY SWITCH [MR]

Push to select MEMORY mode. (p. 12)

Push and hold to select MEMORY WRITE mode. (p. 13)

## DUAL WATCH AND DIMMER SWITCH [DUAL DIMMER]

Push to start dual watch. (p. 16)

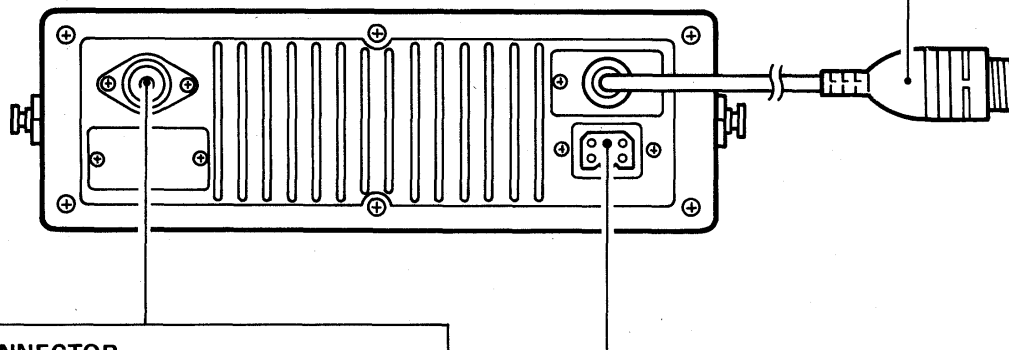
Push and hold to turn ON and OFF the backlight of the function display. (p. 17)

## 2 PANEL DESCRIPTION

### 2-2 REAR PANEL

#### ACC CONNECTOR CABLE

Connects speaker and switches for the hailer and intercom functions. Connect an optional UA-1 AUDIO AMPLIFIER to this connector, if desired. (pgs. 7, 8)



#### ANTENNA CONNECTOR

Connects an antenna with a PL-259 connector to the transceiver. (p. 7)

**CAUTION:** Transmitting without an antenna will damage the transceiver.

#### DC POWER CONNECTOR

Connect the supplied DC power cable from this connector to an external 12 V DC power source. (p. 7)

The mic hanger and external speaker outputs are also included in this connector.



**Count on us!**

A-5038S-1US-①

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