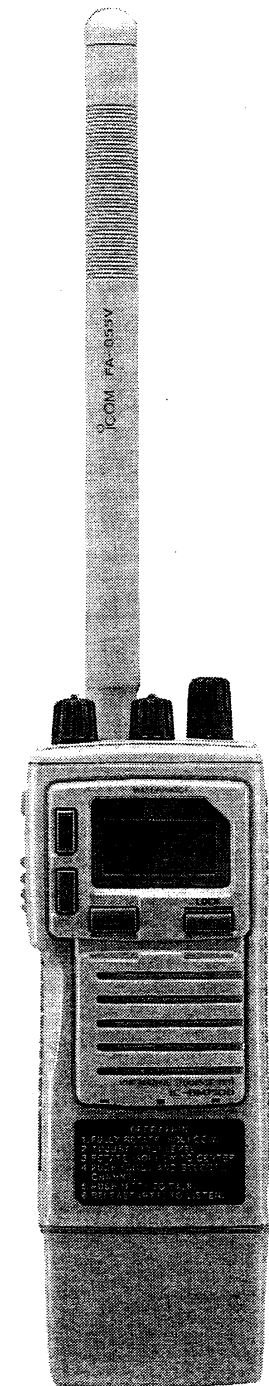# iCOM

INSTRUCTION MANUAL

SURVIVAL CRAFT 2-WAY RADIO

IC-GM1500
IC-GM1500E

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.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL – This instruction manual contains important safety and operating instructions for the IC-GM1500 and IC-GM1500E.

CAUTIONS

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

KEEP the transceiver at least 1 m away from the ship's compass and **AVOID** exposing the transceiver to direct sunlight for long periods of time or using in areas with temperatures below −20°C or above +60°C.

BE CAREFUL! The IC-GM1500/E is water-proof to a depth of 1 m only. At greater depths, damage may result.

After exposure to saltwater, clean the transceiver thoroughly with fresh water to avoid corrosion.

TABLE OF CONTENTS

• 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 calls are prohibited under law.

• PRIVACY

1) Information overheard but not intended for you cannot lawfully be used in any way.

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

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

■■ 2 PANEL DESCRIPTION
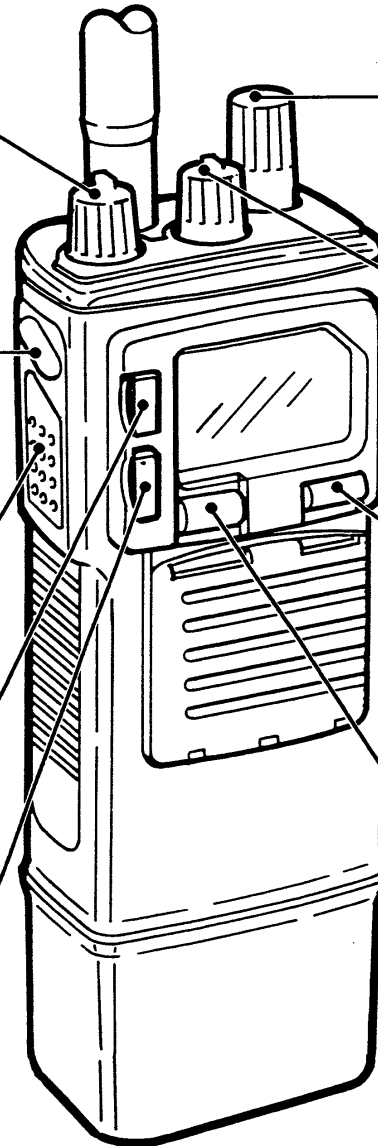
■ Switches and controls

SQUELCH CONTROL [SQL] (p. 8)
Sets the squelch threshold point for audio mute.

TRANSMIT POWER SWITCH [HI/LOW] (p. 8)
Selects high or low output power. Also activates the secondary function of other switches.

PTT SWITCH [PTT] (p. 8)
Push and hold to transmit; release to receive.

CHANNEL 16 SWITCH [16] (p. 7)
Selects channel 16 mode.

CALL SWITCH [C] (p. 7)
Selects call channel mode.
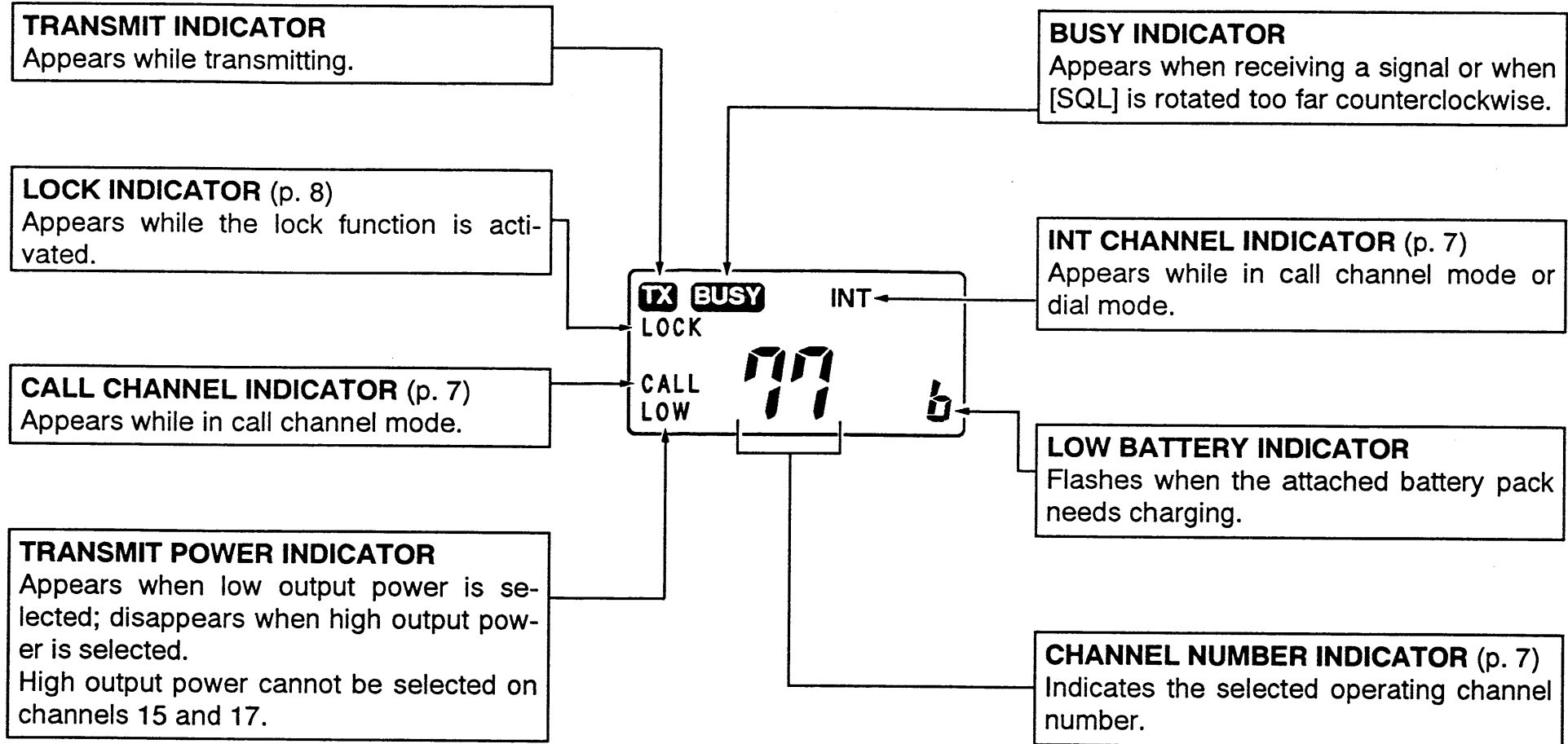While pushing [HI/LOW], selects call channel write mode. (Not available in some versions.)

CHANNEL SELECTOR [CHANNEL] (pp. 7–8)
Sets an operating channel while in dial mode.

VOLUME CONTROL [OFF/VOL] (p. 8)
Turns power ON and OFF and adjusts the audio level.

LIGHT SWITCH [LIGHT·LOCK] (p. 8)
Turns the function display lighting ON and OFF.
While pushing [HI/LOW], toggles the lock function ON and OFF.

DIAL SWITCH [DIAL] (p. 7)
Selects dial mode.

■ Function display

TRANSMIT INDICATOR
Appears while transmitting.

LOCK INDICATOR (p. 8)
Appears while the lock function is activated.

CALL CHANNEL INDICATOR (p. 7)
Appears while in call channel mode.

TRANSMIT POWER INDICATOR
Appears when low output power is selected; disappears when high output power is selected.
High output power cannot be selected on channels 15 and 17.

BUSY INDICATOR
Appears when receiving a signal or when [SQL] is rotated too far counterclockwise.

INT CHANNEL INDICATOR (p. 7)
Appears while in call channel mode or dial mode.

LOW BATTERY INDICATOR
Flashes when the attached battery pack needs charging.

CHANNEL NUMBER INDICATOR (p. 7)
Indicates the selected operating channel number.

TX BUSY INT
LOCK
CALL
LOW

3 ACCESSORIES AND CHARGING

■ Accessories

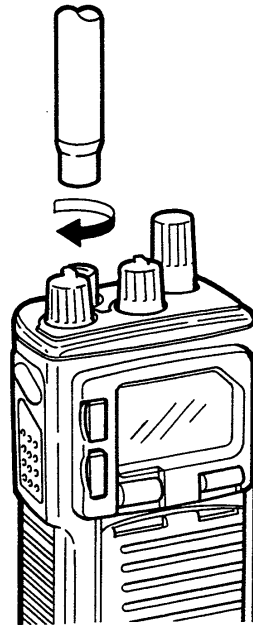### ◇ Supplied accessories

The following are supplied with the **IC-GM1500**:

① Battery pack (CM-165)
② Flexible antenna (FA-S55V)
③ Battery charger*[1]
④ AC adapter*[1]
⑤ Belt clip and screws
⑥ Handstrap
⑦ Spare battery pack (CM-176)*[2]

*[1]AD-49 + BM-95U or AD-53 + BM-111E depending on version.
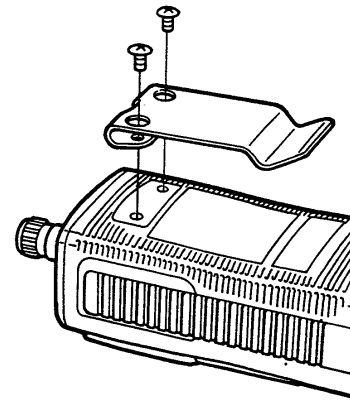*[2]CM-176 is supplied with some versions only.

◇ Flexible antenna

Insert the base of the flexible antenna into the antenna connector; then rotate the flexible antenna in a clockwise direction until it is securely fastened to the transceiver.
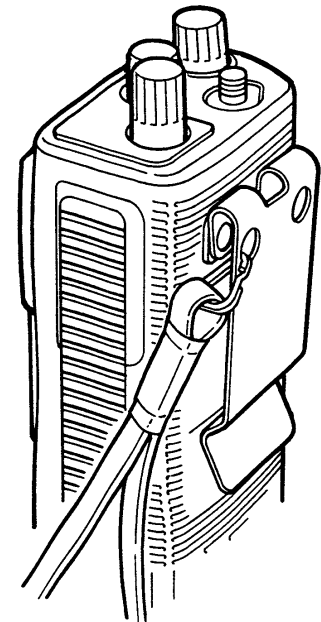
◇ Belt clip

Attach the belt clip using the supplied metal screws. Conveniently attaches to your belt.

////**CAUTION:** Use //// supplied screws only.

◇ Handstrap

Attach the handstrap to the belt clip as indicated in the diagram below. Facilitates carrying.

■ Cautions

NEVER incinerate used battery packs. Internal battery gas may cause an explosion.

NEVER immerse the battery pack in water. If the battery pack becomes wet, be sure to wipe it dry BEFORE attaching it to the transceiver.

NEVER short terminals of the battery pack. Internal components may become damaged. Also, current may flow into nearby metal objects so be careful when placing battery packs in handbags, etc.

■ CM-176 cautions

- The CM-176 is a lithium battery and therefore, cannot be charged.
- The storage life of the CM-176 is about 5 years. Once the expiration date on the back of the battery pack expires, a new battery pack **must** be purchased.
- For safety reasons, once the CM-176 is used, a spare one should be purchased. The original battery pack can be continued to be used for regular communications; **save** the spare one for emergency situations.
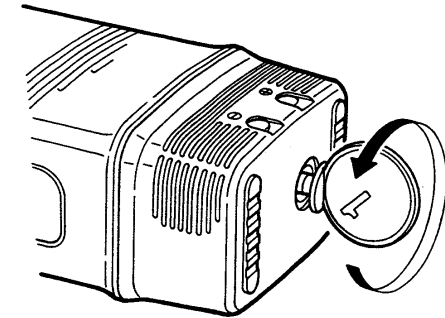
■ Battery pack removal

The IC-GM1500's water-proof construction is only maintained when the battery pack is securely attached to the transceiver body.

To remove: use a coin or flat-head screwdriver to loosen the bottom screw, then slide the battery pack free of the transceiver.
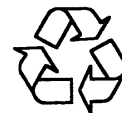
To attach: reverse the above process.

CAUTION:
- Gently attach the battery pack to avoid damage to the speaker.
- To ensure water-tightness, the bottom screw must be securely attached to the transceiver.
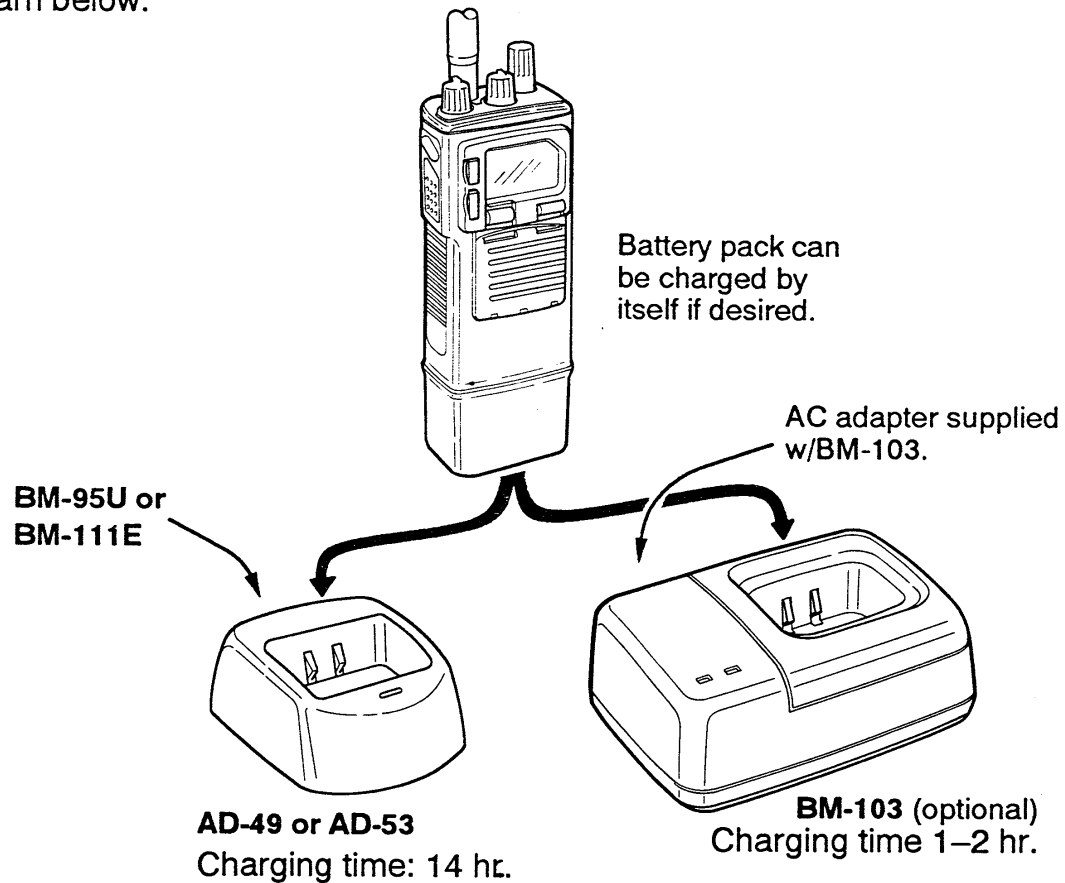

◇**Recycling information** (U.S.A. only; for CM-165)

The product that you have purchased contains a rechargeable battery. The battery is recyclable battery. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your dealer or local solid waste officials for details in your area for recycling options or proper disposal.

Ni-Cd

■ Battery charging (CM-165 only)

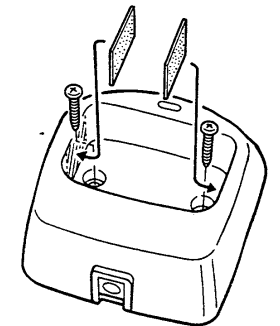Charge the CM-165 by itself or attached to the transceiver as illustrated in the diagram below.

Battery pack can be charged by itself if desired.

AC adapter supplied w/BM-103.

BM-95U or BM-111E

AD-49 or AD-53
Charging time: 14 hr.

BM-103 (optional)
Charging time 1–2 hr.

An optional CM-1 CIGARETTE LIGHTER CABLE is available to use battery chargers with a 12 V cigarette lighter socket in place of an AC outlet.
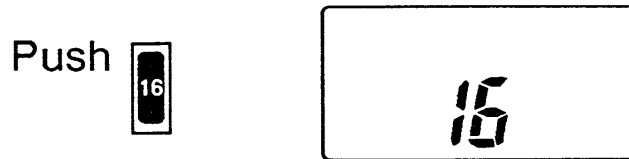
■ Charging notes

● The transceiver must be turned OFF when charging a battery pack attached to the transceiver. Failure to do so may damage the transceiver.

● Charging may not be successful in extreme cold (under 10℃ ; +50°F) or extreme heat (over +40℃; +104°F).

● When a battery pack can no longer retain a charge (or very little), a new battery pack must be purchased.

● When charging in unstable places such as aboard a ship, use the supplied self-tapping screws, or nuts and bolts, plus the inserts to stabilize the AD-49 or AD-53 to a solid, flat surface and prevent the transceiver from popping out of the AD-49 or AD-53.
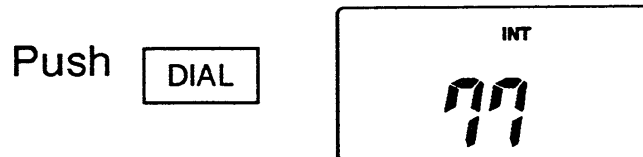
Channel selection

◇ Channel 16 mode

Channel 16 is the distress channel. It is used for establishing initial contact with another station and for emergency communications. While standing by you are required to monitor channel 16.

Push

- Channel 16 mode is automatically selected when turning power ON.
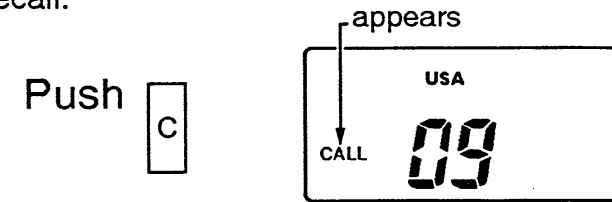
◇ Dial mode

Dial mode allows you to select one of the 19 available international channels for communciations. After establishing initial contact on channel 16, use dial mode to select a channel for continued contact.

Push DIAL

- Rotate the channel selector to set the desired channel.
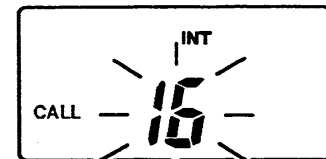- Available channels vary according to version.

◇ Call channel mode

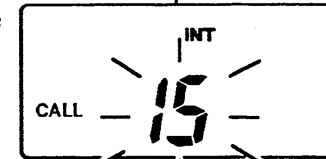The call channel is used to store your most often-used channel for quick recall.

Push C

appears

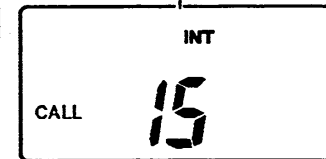- Default call channel number differs depending on version.

◇ Call channel programming*

① Select call channel mode.
② While pushing [HI/LOW], push [C].
- Channel 16 indication flashes.

③ Rotate [CHANNEL] to select the desired channel.

④ While pushing [HI/LOW], push [C] to program the selected channel.
- Flashing stops.

*Call channel programming is not available in some transceiver versions.
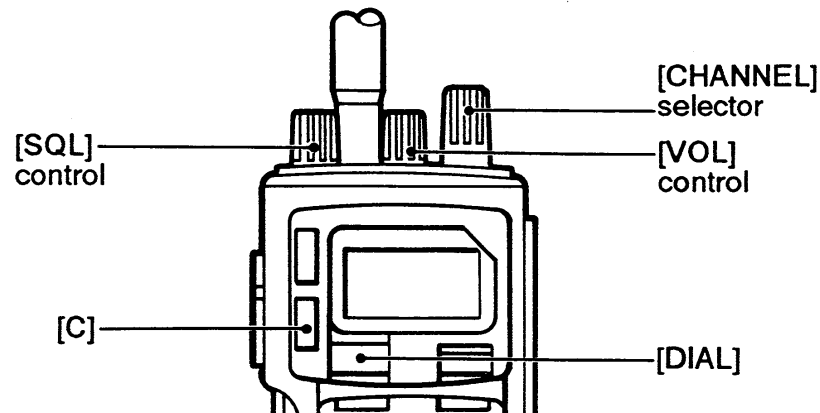
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■ Receiving and transmitting

> **CAUTION:** Transmitting without an antenna may damage the transceiver.

① Rotate [VOL] clockwise to turn power ON.
② Rotate [SQL] fully counterclockwise.
③ Adjust the audio to a suitable level using [VOL].
④ Rotate [SQL] clockwise until audio noise is just muted.
⑤ Push and hold [PTT] to talk.
  • DO NOT hold the transceiver too close to your mouth or speak too loudly, this may distort the signal.
  • Push [HI/LOW] to toggle between high and low power, if desired.
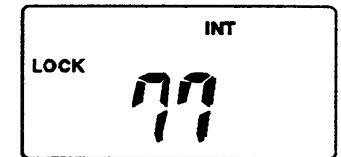⑥ Release [PTT] to listen.

NOTE: Channel 16 mode is automatically selected when turning power ON. To select a channel other than ch 16, push [C] or push [DIAL], then rotate [CHANNEL] to select the desired channel. (See p. 7)

[CHANNEL] selector
[VOL] control
[SQL] control
[C]
[DIAL]

■ Lock function

This function electronically locks all keys and switches to prevent accidental frequency changes and function access.

① While pushing [HI/LOW], push [LIGHT•LOCK].
  • Only [PTT], [HI/LOW] and [LIGHT] are functional.
② To cancel the function, repeat step ① above.
  • "LOCK" disappears from the function display.

INT
LOCK

■ Function display backlighting

Backlighting automatically turns ON and stays ON for 5 sec. when:

•any switch is pushed
•[CHANNEL] is rotated
•a signal is received.

To turn the backlighting OFF before the 5 sec. have elapsed, push [LIGHT].

■ Specifications

Output power : High 2 W Low 0.8 W
Sensitivity (20 dB SINAD) : 0.35 μV
Squelch sensitivity : Less than 0.3 μV (at threshold)
Audio output power : 500 mW with an 8 Ω load
Current drain : TX High 1.0 A max.
(at 7.5 V) Max. audio 500 mA max.
Power saved 15 mA typical
Frequency stability : 0.0005% (−20°C to +60°C)
Usable temperature range : −20°C to +60°C; −4°F to +140°F
Dimensions (with CM-165) : 62(W) × 165(H) × 44(D) mm
2.4(W) × 6.5(H) × 1.7(D) in
Weight (with CM-165) : 515 g (18.2 oz)
Modulation system : Variable reactance phase modulation
Max. frequency deviation : ± 5.0 kHz

◇ AVAILABLE CHANNEL LIST (varies according to version)

Channel number	Frequency (MHz)	Channel number	Frequency (MHz)	Channel number	Frequency (MHz)
06	156.300	13	156.650	67	156.375
08	156.400	14	156.700	68	156.425
09	156.450	15*	156.750	69	156.475
10	156.500	16	156.800	71	156.575
11	156.550	17*	156.850	72	156.625
12	156.600			73	156.675
				74	156.725
				77	156.875

*Low power only.

■ Options

◇ BATTERY PACKS
● **CM-165** Ni-Cd BATTERY PACK
(7.2 V/1200 mAh)
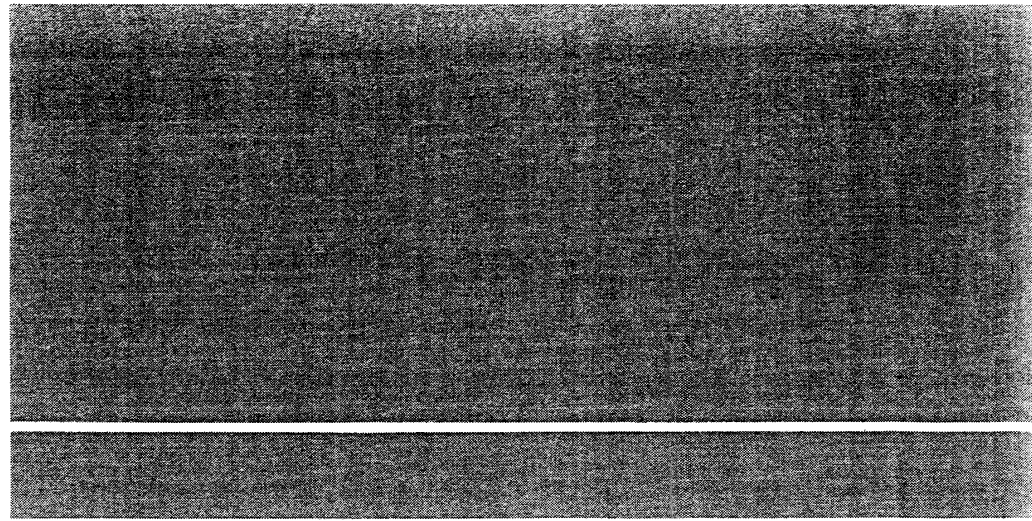● **CM-176** LITHIUM BATTERY PACK
(12 V/3600 mAh)

◇ CHARGERS
● **AD-49** BATTERY CHARGER + **BM-95U** AC ADAPTER
For regular charging of battery packs; has a 14 hr. timer function.
● **AD-53** BATTERY CHARGER + **BM-111E** AC ADAPTER
For regular charging of battery packs; has a 14 hr. timer function and the battery charger is water-resistant.
● **BM-103** DESKTOP CHARGER
Used for rapid charging of battery packs. An AC adapter comes with the charger.
● **CM-1** CIGARETTE LIGHTER CABLE
Connects to a ship's or vehicle's cigarette lighter socket for use with the BM-103, AD-49 or AD-53 in place of an AC adapter.

◇ OTHERS
● **FA-S55V** FLEXIBLE ANTENNA
Same type as supplied with the transceiver.
● **MB-24** MOUNTING BRACKET
Hanger-type for mounting the transceiver in a vehicle.
● **MB-25** MOUNTING BRACKET
Wall-type for mounting on a wall or bulkhead.

Count on us!

Icom Inc.
6-9-16, Kamihigashi, Hirano-ku, Osaka 547, Japan