ICOM

INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER

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.

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 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, push and hold **[DISTRESS]** for 3 seconds until you hear 3 short beeps change to 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 above.

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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.
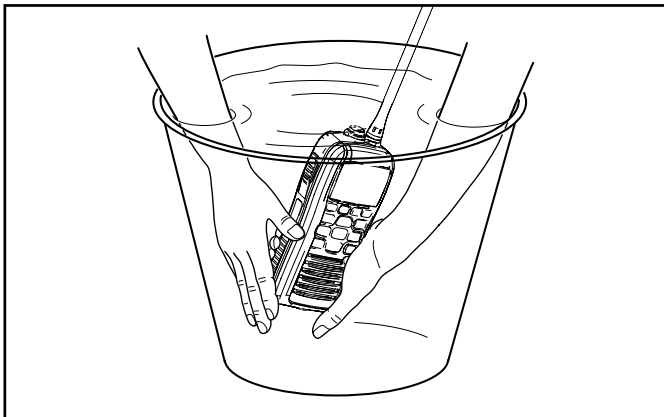
FOREWORD

Thank you for purchasing this Icom product. The IC-M92D VHF MARINE TRANSCEIVER is 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-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

☞

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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 away from the vessel's magnetic navigation compass.

KEEP the transceiver out of the reach of children.

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).
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.

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PRECAUTIONS (Continued)

BE CAREFUL! The IC-M92D meets 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.

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.

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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.

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

TABLE OF CONTENTS

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.

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■ Supplied accessories

Handstrap   Battery pack   Battery charger   AC adapter
                           (with 2 screws)   (Different type is
                                              supplied depending
                                              on the version)

Antenna   Cigarette lighter cable

Belt clip

ĬCOM

■ 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

❷ **Be careful!**
Not to break
your nails.

❶

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◇ Battery pack

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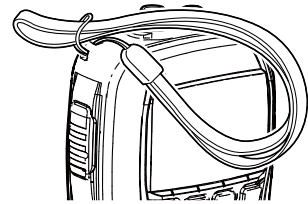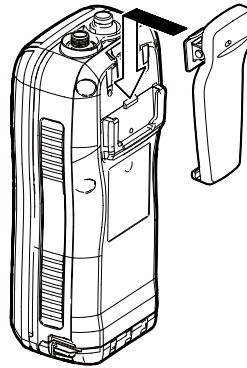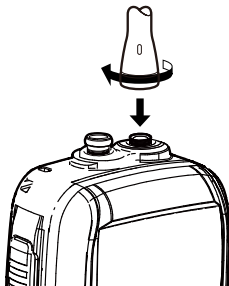Turn the screw counter clockwise one quarter turn, then pull the battery pack in the direction of the arrow as shown below.

To attach the battery pack:
Insert the battery pack in the transceiver completely, 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/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

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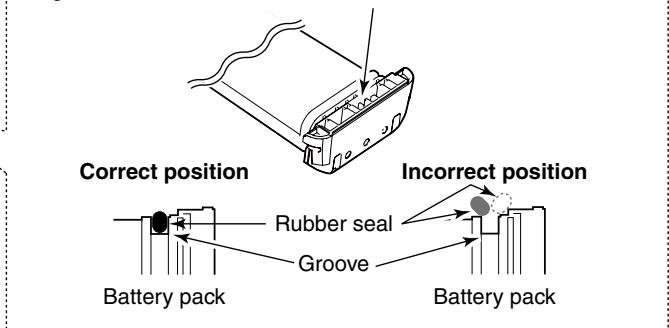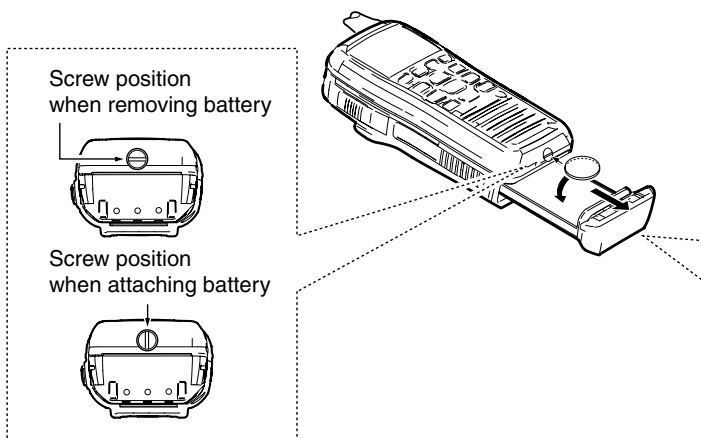
■ Front, top, side and rear panels

Function display (pp. 6, 7)

Speaker

Microphone

Distress button (p. iii)
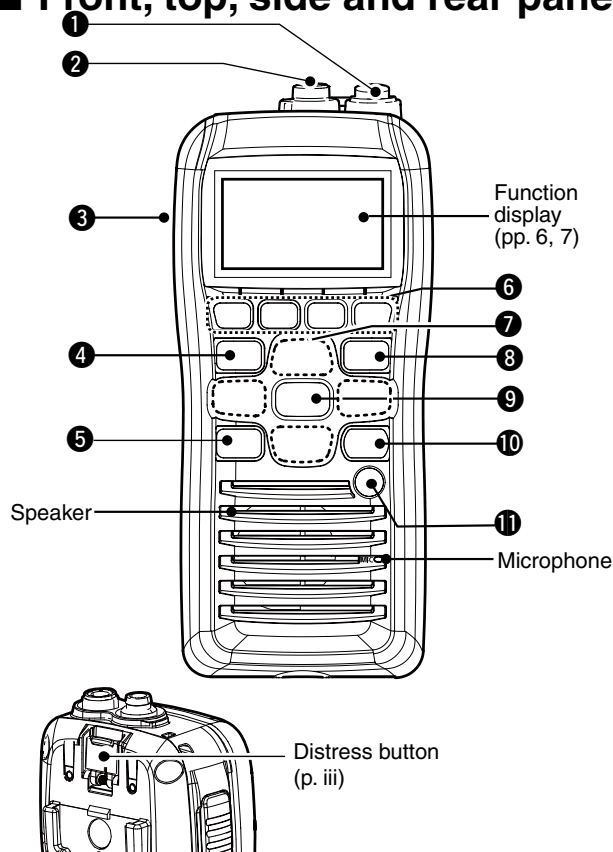
❶ ANTENNA CONNECTOR (p. 2)
Connects the supplied antenna.

❷ SPEAKER-MICROPHONE CONNECTOR [SP MIC] (p. 25)
Connects 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.

❸ PTT SWITCH [PTT]
Push and hold to transmit; release to receive. (p. 10)

❹ MENU KEY
Push to enter the Menu mode to select from the following menus: Adjustment Mode, Inspection Mode, DSC Calls, DSC Settings, Radio Settings, Configuration, MMSI/GPS Info, MOB, Waypoint or GPS Status.

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3 PANEL DESCRIPTION

■ **Front, top and rear panels**
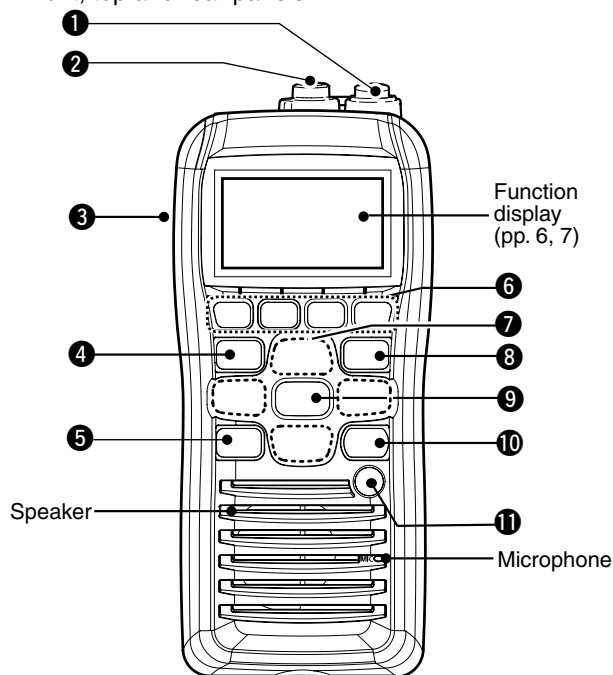
➎ VOLUME/SQUELCH KEY [VOL/SQL]
- ➥ Push to enter the volume adjustment mode. (pp. 11, 12)
- ➥ Push again while in the volume adjustment mode to enter the squelch level adjustment mode.

➏ SOFT MENU KEYS [1]/[2]/[3]/[4]
Slide menu by pushing **[◀]/[▶]** keys, then push either of the 4 keys to select a menu displayed above on the lower side of the monitor.

➐ CHANNEL UP/DOWN [▲]/[▼] AND LEFT/RIGHT [◀]/[▶] KEYS
- ➥ Push **[▲]/[▼]** to select an operating channel. (p.)
- ➥ While in the set mode, selects the setting or value of an item.

➑ CLEAR/LOCK KEY [🔒]
- ➥ Push to clear the selected page and return to the previous screen.
- ➥ Hold down for 1 second to turn the key lock function ON or OFF. (p. 13)

➒ ENTER KEY
Push to select a function, enter the input channel comment, select an item, etc.

➓ CHANNEL 16 KEY [16/C]
- ➥ Push to select Channel 16. (p. 8)
- ➥ Hold down for 1 sec. to select the call channel. (p. 8)
- ➥ When the call channel is selected, hold down for 3 sec. to enter the call channel programming mode. (p. 11)
- ➥ While in the set mode, push to return to the normal condition. (p. 17)

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

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■ Function display
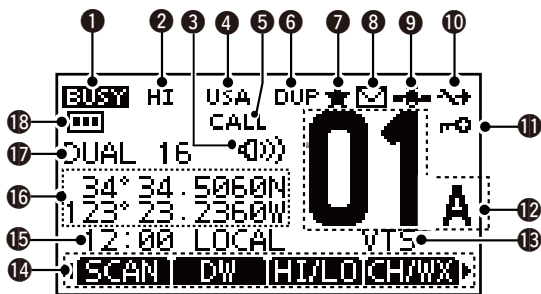
① BUSY/TRANSMIT INDICATOR (p. 2)
➡ "BUSY" Appears when receiving a signal or when the squelch opens. (p. 10)
➡ "TX" appears while transmitting.

② POWER ICON (p. 2)
➡ "HI" appears when high power is selected.
➡ "LOW" appears when low power is selected.

③ VOLUME LOUD/VOLUME MUTE ICON (p. 12)
➡ Volume loud or volume mute icon appears when the functions are set.

④ CHANNEL GROUP ICON/ WEATHER CHANNEL (p. 9)
➡ Selected channel group icon appears between U.S.A. "USA," International "INT," Canadian "CAN".
➡ "WX" appears when the weather channel is selected.
➡ The icon blinks while the weather alert function is activated; blinks when the alert tone is received.

⑤ CALL CHANNEL ICON (p.)
Appears when call channel is selected.

⑥ DUPLEX ICON (p. 2)
Appears when a duplex channel is selected.

⑦ TAG CHANNEL ICON (p.)
The icon appears while a TAG (favorite) channel is selected.

⑧ MAIL ICON (p.)
The icon appears when a message is received.

⑨ GPS ICON (p.)
➡ Stays ON when the GPS receiver is activated and a valid position data is received.
➡ Blinks when an invalid position data is being received.

⑩ AUTO SW ICON (p.)
Blinks when both the Auto Switch function and Auto Tune-timer are turned OFF.

⑪ LOCK ICON (p.)
Appears while the lock function is activated.

⑫ CHANNEL NUMBER READOUT (p. 2)
Indicates the selected operating channel number.

⑬ CHANNEL NAME INDICATOR (p. 2)
Indicates the channel name of the selected operating number if programmed.

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⓮ **KEY INDICATOR** (p.)
Shows the programmed function of the soft keys on the front panel.

⓯ **TIME ZONE INDICATOR** (p. 2)
➥ Shows the current time data when a GPS receiver is connected, or the time data is manually programmed.
  • When the GPS current time data is invalid, ?? may blink every 2 seconds instead of current time data. After 23.5 hours have passed, "No Time" will appear.
  • ?? may blink every 2 instead of current time data, after 4 hours have passed from the time when the time data was manually programmed. The manually programmed data is held for only 23.5 hours, and after that, "No Time" will appear.
➥ "Local" appears when the offset time data is set. (p. 44)
➥ "No Time" appears when no GPS receiver is connected and no time data is manually input.

⓰ **POSITION INDICATOR** (p. 2)
➥ Shows the current position data when a GPS receiver is connected, or the position data is manually programmed.
  • When the GPS position data is invalid, "??" may blink every 2 seconds instead of position data. The last position data is held for only 23.5 hours, and after that, "No Position" will appear.
  • "??" may blink every 2 seconds instead of position data, after 4 hours have passed from the time when the position data is manually programmed. The manually programmed position data is held for only 23.5 hours, and after that, "No Position" will appear.
➥ "No Position" appears when no GPS receiver is connected and no position data is input manually.

⓱ **SCAN INDICATOR** (p. 2)
➥ "SCAN 16" appears during a Priority scan; "SCAN" appears during a Normal scan. (p. 17)
➥ "DUAL 16" appears during Dualwatch; "TRI 16" appears during Tri-watch. (p. 18)

⓲ **BATTERY INDICATOR**
Indicates the battery's remaining power.

Indication	(■■■)	(■■)	(■)	( )
Battery level	Full	Middle	Charging required	No battery

(■■■) blinks when the battery is over charged.

■ MMSI code programming

The 9 digit MMSI (Maritime Mobile Service Identity: DSC self ID) code can be programmed at power ON.

NOTE:
- This initial code programming can be performed only the first time to turn the power ON.
- The programming can only be done once.
- After the programming is completed, it can be re-programmed only by your dealer or distributor.

① First, push **[⏻]** turn ON the power.
   - The opening display appears.
   - "MMSI" display appears and warning alarm sounds for 2 seconds.

② "Push [**ENT**] to Register Your MMSI" appears.
   - Do not push [**CLEAR**] while this screen is displayed.

③ Push **[▲]/[▼]/[◄]/[►]** to select and input with **[ENTER]**.

④ Select "FINISH" and push **[ENTER]** to register.

⑤ When "MMSI CONFIRMATION" screen appears, input the previously registered 9 digited code to confirm the registration. Then, push **[ENTER]** to register.
   - Automatically enters the functional mode if the registration is valid.

◇ MMSI code check

The 9 digit MMSI code can be checked.

① Push **[MENU]**.

② Push **[▲]/[▼]** several times to select "MMSI/GPS Info", then push **[ENTER]** to enter.

③ Select "EXIT" to return to the main menu screen or "BACK" to return to the previous screen.

5 BASIC OPERATION
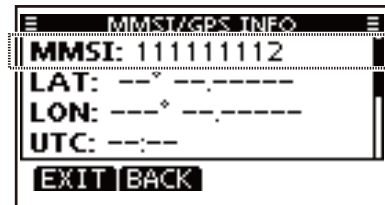
■ Channel selection

IMPORTANT: Prior to using the transceiver for the first time, the battery pack must be fully charged for optimum life and operation. To avoid damage to the transceiver, turn the power OFF while charging.

◇ Channel 16

Channel 16 is the distress and safety channel. It is used for establishing initial contact with a station and for emergency communications. Channel 16 is monitored during both Dual-watch and Tri-watch. While in the standby condition, you must monitor Channel 16.

① Push **[16/C]** to select Channel 16.
  • "CALLING" appears.
② Select **[CH/WX]** to return to the selected channel before Channel 16, or push **[▲]/[▼]** to select an operating channel.

Push [16/C] key

◇ Call channel

Each regular channel group has separate leisure-use call channels. The call channel is monitored during Tri-watch. The call channels can be programmed (p. 11) and are used to store your most often used channel in each channel group for quick recall.

① Hold down **[16/C]** for 1 second to select Call channel.
  • "CALLING" and the call channel number appear.
  • Call channel can be re-programmed. See the "Call channel programming" on page 10 for details.
② Select "**CH/WX**" to return to the selected channel before the call channel, or push **[▲]/[▼]** to select the operating channel.

Hold down [16/C] key
for 1 second

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◇ U.S.A., International and Canadian channels

The transceiver is pre-programmed with 59 U.S.A., 59 International and 63 Canadian channels. These channel groups may be specified for the operating area.

① Push [**MENU**].
② Push **[▲]/[▼]** to select "Radio Settings".
  • U.S.A., International and Canadian channel groups can be selected in sequence.
③ Push **[▲]/[▼]** to select "CHAN Group".
④ Select between "USA", "INT" and "CAN".
⑤ Select "**EXIT**" while the desired channel group is selected to return to the home screen.
  • "DUP" appears for duplex channels.
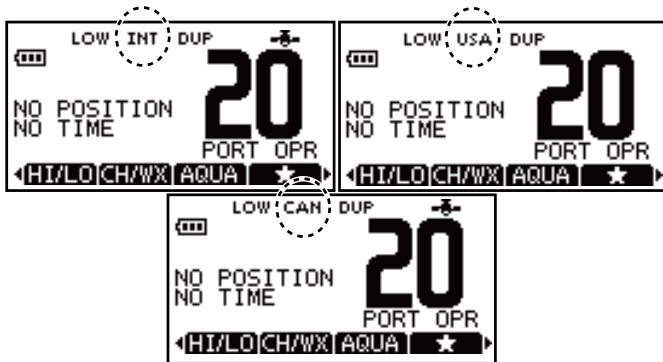
◇ Weather channels

The IC-M92D has 10 pre-programmed weather channels. These are used for monitoring broadcasts from NOAA (National Oceanographic and Atmospheric Administration.)

The transceiver can automatically detect a weather alert tone on the selected weather channel while receiving on another channel, during standby on a regular channel or while scanning. (p. 44)

To Select a Weather channel:
Select "**CH/WX**" to select a weather channel.
  • "WX" appears when a weather channel is selected.
  • Weather channel alert icon appears when the alert function is turned ON.

To set the Weather Alert:
① Push **[MENU]**.
② Push **[▲]/[▼]** to select "Radio Settings".
③ Push **[▲]/[▼]** to select "WX Alert".
④ Select "ON" to set the Weather Alert. .
⑤ Select "**EXIT**" while "ON" is selected to return to the home screen.
  • WX Alert icon appears.

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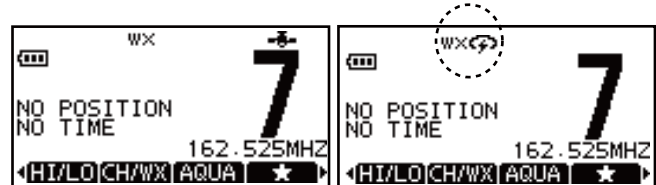
5 BASIC OPERATION

■ Receiving and transmitting

CAUTION: Transmitting without an antenna may damage the transceiver.

① Hold down [⏻] for 1 second to turn power ON.
② Set the volume and squelch levels with **[VOL/SQL]**.
➥ Set the volume by pushing **[▲]/[▼]** to adjust the volume.
➥ Set the squelch level by pushing **[VOL/SQL]** while the volume adjustment mode is selected.
• While in the squelch adjustment mode, pushing **[▲]** will make the noise disappear.
③ Push **[▲]/[▼]** to select the desired channel.
• Further adjustment of the audio may be necessary at this point.
④ Select "HI/LO" to select the output power if necessary.
• "HI" appears when high power is selected; "LOW" when high power is selected.
• Choose low power for short range communications, choose high power for longer distance communications.
• Some channels are for low power only.
⑤ Hold down **[PTT]** to transmit, then speak into the microphone.
• Channel 70 cannot be used for transmission.
⑤ Release **[PTT]** to receive.

IMPORTANT: To maximize the readability of your transmitted signal, pause a few seconds after pushing [**PTT**], hold the microphone 5 to 10 cm (2 to 4 inches) from your mouth and speak into the microphone at a normal voice level.

NOTE: The transceiver has a power save function to conserve the battery power. The power save function activates automatically when no signal is received for 5 seconds.

For U.S.A. version: To prevent accidental prolonged transmission, etc., the transceiver has a time-out timer function. This timer cuts a transmission OFF after 5 minutes of continuous transmission.

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■ Call channel programming

Call channel is used to access the Call Channel 9 (default), however, you can program the call channel with your most often-used channels in each channel group for quick recall.

① Select the desired channel group (U.S.A, International or Canada) to be programmed. (p.)

② Hold down **[16/C]** for 1 second to select the call channel of the selected channel group.
 • "**CALLING**" and call channel number appear.

③ Hold down **[16/C]** again until long beep stops with two short beeps. The channel programming mode screen is displayed.

④ Push **[▲]/[▼]** to select the desired channel.

⑤ Push [**ENTER**] to program the selected channel as the call channel.
 • The display automatically returns to the main menu screen.

■ Adjusting the volume level

The volume level can be adjusted with **[VOL/SQL]** and **[▲]/[▼]** keys.

① Push **[VOL/SQL]** once to enter the volume adjustment mode, then adjust the volume level with **[▲]/[▼]**.
 • The transceiver has 20 volume levels and OFF.
 • With no key operation is performed for 5 seconds, it returns to the main menu.

② Push **[VOL/SQL]** twice to exit the volume adjustment mode.

■ Adjusting the squelch level

The squelch level can be adjusted with **[VOL/SQL]** and **[▲]/[▼]** keys.

In order to receive signals properly, as well as for the scan to function effectively, the squelch must be adjusted to its proper level.

① Push **[VOL/SQL]** twice to enter the squelch adjustment mode, then adjust the squelch level with **[▲]/[▼]**.
 • The transceiver has 11 squelch levels: OP is completely open; 10 is tight squelch; 1 is loose squelch.
 • With no key operation is performed for 5 seconds, the transceiver returns to the main screen.

② Push **[VOL/SQL]** again to exit the adjustment mode and return to the main menu screen.

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■ Volume loud function

The volume loud function can be activated temporarily by pushing **[VOL/SQL]** and **[▲]**.

The function does not work when the volume level is already set to the maximum 20.

① Hold down **[VOL/SQL]** first, and then while holding it down, push **[▲]** to activate the volume loud function.
  • The volume level is set to the maximum level (level 20).
  • The volume icon appears.

② Push **[ENTER]** to turn the volume function OFF.

■ Volume mute function

The volume mute function can be activated temporarily by pushing **[VOL/SQL]** and **[▼]**.

The function does not work when the volume level is already OFF.

① Hold down **[VOL/SQL]** first, and then while holding it down, push [▼] to activate the volume loud function.
  • The volume level is set to the minimum level (OFF).
  • Volume mute icon appears.

② Push **[ENTER]** to turn the volume mute function OFF.

The volume mute or volume loud icon appears.
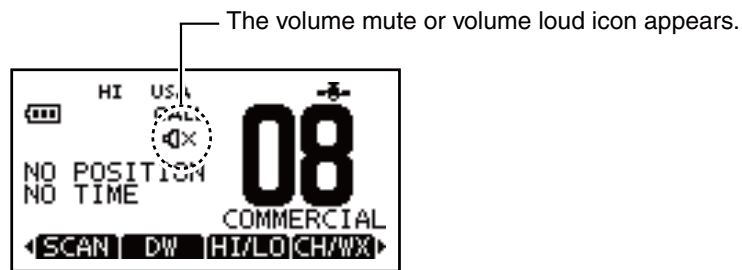
■ Lock function

This function electronically locks all keys (except for [**PTT**] and [⏻]) to prevent accidental channel changes and function access.

➥ Push **[CLEAR/🔒]** for 1 second to turn the lock function ON and OFF.

```
       HI  USA              -⚓-
(▭▭▭)
                    18     🔒  ——— Appears whi
NO POSITION                            function is a
NO TIME
                    COMMERCIAL  A
◀ SCAN ▐ DW ▐HI/LO▐CH/WX▶
```

■ Monitor function

This function lights the function display and keys, and it is convenient for night-time operation. The automatic backlighting can be set in the set mode. (p. 19)

➥ Push any key except for **[PTT]** to turn the backlight ON.
• The backlight is automatically turned OFF after 5 seconds of inactivity.

■ AquaQuake water draining function

The AquaQuake water draining function clears water away from the speaker grill. Without this function, water may muffle the sound coming from the speaker. The transceiver emits a vibrating beep when this function is activated.

➥ Select "AQUA" and hold down the soft key.
• A beep sounds for 10 seconds to drain water, regardless of the volume level setting.
• The transceiver never accepts key operation while the Aqua-Quake function is activated.
• The AquaQuake function can not be activated when an optional speaker-microphone is connected.

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■ Setting TAG channels

For more efficient scanning, add the desired channels as TAG channels or clear TAG for unwanted channels. Channels that are not tagged will be skipped during scanning. TAG channels can be assigned to each channel group (U.S.A., International and Canada) independently.

① Select "**CH/WX**" to select the desired channel group.
② While the desired channel is selected on the display, select the TAG icon on the soft keys.
  • "★" appears on the display.
③ To cancel a TAG channel setting, select the desired TAG channel, then select the TAG icon on the soft keys.
  • "★" disappears.
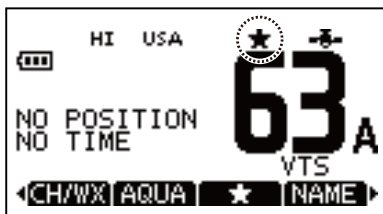
To Clear (or set) all tagged channels:
Hold down to select TAG for 3 seconds on the soft keys until a short beep sounds. This clears all tags or tag all channels.

■ Channel names

Each channel can be labeled with alphanumeric names of up to 10 characters for easy channel recognition.
  ➥ The programmed names will be indicated at the channel name indicator of the function display.
  ➥ Capital letters, numbers, 26 types of symbols and space can be used.

① Select the desired channel.
  • Cancel dualwatch, Tri-watch or Scan in advance.
② While the desired channel is displayed, select "NAME" to enter the channel name edtting mode screen.
③ Select the desired character by pushing **[▲]/[▼]/[◄]/[►]** keys, and then input with **[ENTER]**.
  • While in the channel name editting mode, push the very right key of the soft keys to change between alphabets, numers and symbols.
  • Select "DELETE" to delete the selected character and select "SPACE" to insert a space.
④ Select "FINISH" to program the name.
  • Automatically returns to the main mode.
  • The programmed name appears on the dsiplay.

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■ Backlight setting

This function lights the function display and keys, and it is convenient for night-time operation.

① Select "**BKLT**" to enter the backlight adjusting mode.

② Push **[▲]** or **[▼]** to adjust the brightness level between 1(minimum) to 7 (maximum) or OFF.

  • The default setting is 3.
  • The display returns automatically to the main manu after 5 seconds without no key operation is been performed.

6 SCAN OPERATION

■ Scan types

Scanning is an efficient way to locate signals quickly over a wide frequency range. The transceiver has priority scan and normal scan.

In addition, the weather alert and auto scan functions are available for standby convenience. These functions can be activated simultaneously, depending on the setting in the set mode.

Set the TAG channels (scanned channels) before scanning. Clear the TAG for unwanted channels which inconveniently stop scanning, such as those for digital communications. (p. 15)

╱ Choose the desired scan type from "Priority" or "Normal" in ╱ the set mode.

PRIORITY SCAN

* Previously selected weather channel.
(when the weather alert function is activated)

Priority scan searches through all TAG channels in sequence while monitoring Channel 16. When a signal is detected on Channel 16, scan pauses until the signal disappears; when a signal is detected on a channel other than Channel 16, scan becomes Dualwatch until the signal disappears.

NORMAL SCAN

* Previously selected weather channel.
(when the weather alert function is activated)

Normal scan, like priority scan, searches through all TAG channels in sequence. However, unlike priority scan, Channel 16 is not checked unless Channel 16 is set as a TAG channel.

■ Starting a scan

Set the scan type (Priority or Normal scan), WX Alert function and Scan Timer function in advance, using the se mode.

To select a scan type:

Select the scan type between Normal scan and Priority scan.

① Push **[MENU].**
② Push **[▲]** or **[▼]** to select "Radio Settings", then push **[EN-TER]**.
③ Select "Scan Type", then push **[ENTER]**.
④ Select "Normal Scan" or "Priority Scan" and push **[ENTER]** to program.
⑤ Select "BACK" to return to the previous page, or simply select "EXIT" to return to the main menu screen.
  • "SCAN" appears if "Normal Scan" is selected, and "SCAN 16" apppears if "Priority Scan" is selected as show below.
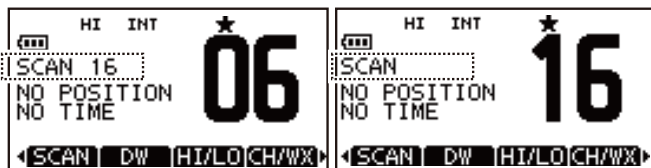
To scan:

Select "SCAN" and push on the soft key to start or stop scanning.

• Pushing **[PTT]** also stops the scan.
• When a signal is received, scan pauses until the signal disappears or resumes after pausing for 5 seconds according to the Scan Timer setting.
• While scanning, push **[▲]** or **[▼]** to check which channels have been set as TAG channels or to change the scanning direction.

6

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7 DUALWATCH/TRI-WATCH

■ Description

Dualwatch monitors Channel 16 while you are receiving on another channel; Tri-watch monitors Channel 16 and the call channel while receiving another channel. Dualwatch/Triwatch is convenient for monitoring Channel 16 when you are operating on another channel.

DUALWATCH/TRI-WATCH SIMULATION

Call channel

Ch 16 — Ch 88   Ch 88   Ch 16   Ch 88   Ch 9

Dualwatch   **Tri-watch**

• If a signal is received on Channel 16, Dualwatch/Tri-watch pauses on Channel 16 until the signal disappears.
• If a signal is received on the call channel during Tri-watch, Tri-watch becomes Dualwatch until the signal disappears.
• To transmit on the selected channel during Dualwatch/ Tri-watch, hold down **[PTT]**.

■ Operation

① Push **[MENU].**
② Push **[▲]** or **[▼]** to select "Radio Settings", then push **[EN-TER]**.
③ Select "Dual/Tri-Watch", then push **[ENTER]**.
④ Select "Dualwatch" or "Tri-watch" and push **[ENTER]** to program.
⑤ Select "BACK" to return to the previous page, or simply select "EXIT" to return to the main menu screen.
  • "DUAL 16" appears if "Dualwatch" is selected, and "TRI 16" appears if "Tri-watch" is selected as shown below.

DUAL 16 or TRI 16 appears, depending on the setting.


```
     HI   INT
⊞
DUAL 16          17
NO POSITION
NO TIME
                    SAR
 DW  HI/LO CH/WX AQUA ▶
```

Select to start Dualwatch or Tri-watch.

19
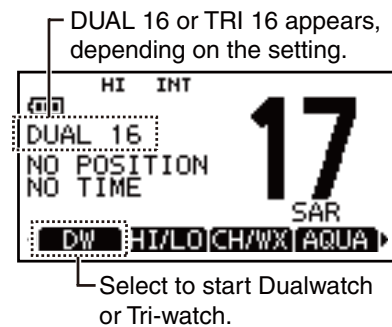
■ DSC address ID

◇ Programming Individual ID

A total of 100 DSC address IDs can be programmed and assigned a name of up to 10 characters.

① Enter "INDIVIDUAL ID" in the DSC SETTINGS menu.

❰MENU❱ ⇨ ❰DSC Settings ❱ ⇨ ❰Individual ID❱
(Push [MENU]) (Push [▲]/[▼], then push [ENT].)

② Push [ADD].
   • The "INDIVIDUAL ID" program screen is displayed.
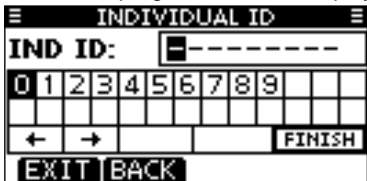
③ Enter a desired individual ID in the following instruction:
   • Select a desired number using [▲]/[▼]/[◀]/[▶].
   • Push [ENT] to set it.
   • To move the cursor, select either arrow, "←" or "→," then push [ENT].
   ⁂ The first digit is specified as '0' for a Group ID.
   ⁂ The first two digits are '0' for any Coast station ID.

④ Repeat step ③ to enter all 9 digits.

⑤ After entering the 9 digit code, push [ENT] to set it.
   • ID name programming screen is displayed.

⑥ Enter a desired 10 digit ID name in the following instruction:
   • Select a desired character using [▲]/[▼]/[◀]/[▶].
   • Push [ENT] to set it.
   • To move the cursor, select either arrow, "←" or "→," then push [ENT].
   • Push [123] then [!$?] then [ABC] to select a character group.

⑦ After entering the ID name, select "FINISH" by pushing [▲]/[▼]/[◀]/[▶], then push [ENT] to program it.

⑧ The "INDIVIDUAL ID" list screen is displayed.
   • Push [MENU] to exit the MENU screen.

8 DSC OPERATION

◇ Programming Group ID

① Enter "GROUP ID" in the DSC SETTINGS menu.

❰MENU❱ ⇨ ❰DSC Settings❱ ⇨ ❰Group ID❱
(Push [MENU])　　(Push [▲]/[▼], then push [ENT].)

- • When no group ID is programmed, "No ID" is displayed. In this case, push [MENU] to exit the MENU screen.

② Push [ADD].
- • The "GROUP ID" program screen is displayed.
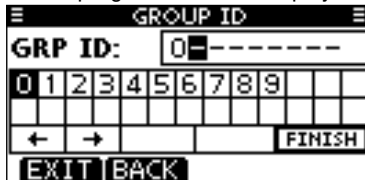
③ Enter a desired group ID in the following instruction:
- • Select a desired number using [▲]/[▼]/[◀]/[▶].
- • Push [ENT] to set it.
- • To move the cursor, select either arrow, "←" or "→," then push [ENT].
  ▨ The first digit is fixed as '0' for a Group ID.
  ▨ The first two digits are '0' for any Coast station ID.

④ Repeat step ③ to input the specific 9 digits group code.

⑤ After entering the 9 digit code, push [ENT] to set it.
- • Group ID name programming screen is displayed.

⑥ Enter a desired 10 digit ID name in the following instruction:
- • Select a desired character using [▲]/[▼]/[◀]/[▶].
- • Push [ENT] to set it.
- • To move the cursor, select either arrow, "←" or "→," then push [ENT].
- • Push [123], [!$?] or [ABC] to select a character group.

⑦ After entering the ID name, select "FINISH" pushing [▲]/[▼]/[◀]/[▶], then push [ENT] to program it.
- • The "GROUP ID" list screen is displayed.

⑧ Push [MENU] to exit the MENU screen.

◇ **Deleting Individual/Group ID**

① Enter "INDIVIDUAL ID" or "GROUP ID" in the DSC SET-TINGS menu.

❮MENU❯ ➭ ❮DSC Settings❯ ➭ ❮Individual ID❯/❮Group ID❯
(Push [MENU])   (Rotate Dial, then push [ENT].)

• When no address ID is programmed, "No ID" is displayed. In this case, push [MENU] to exit the MENU screen.

② Select a desired ID name (or ID, if no name is programmed) with Dial or [▲]/[▼] to be deleted, then push [DEL].
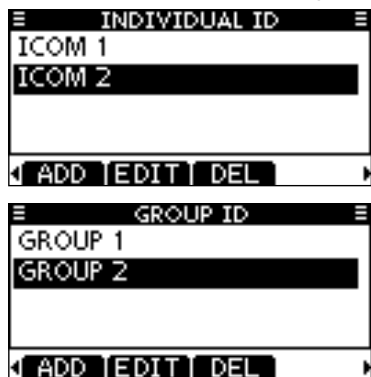
③ Push [OK] to delete the ID, and return to the "INDIVIDUAL ID" or "GROUP ID" list screen.

• Push [CANCEL] to cancel it.

④ Push [MENU] to exit the MENU screen.

■ Position and time programming

A Distress call should include the ship's position and time data. If no GPS is connected, your position and UTC (Universal Time Coordinated) time should be manually input. They are automatically included when a GPS receiver compatible with the NMEA0183 ver. 2.0 or 3.01 format is connected.

• Manual programming is disabled when a GPS receiver is connected.
• Manually programmed position and time data will be held for only 23.5 hours.

① Enter "POSITION INPUT" in the DSC SETTINGS menu.

❮MENU❯ ➪ ❮DSC Settings❯ ➪ ❮Position Input❯
(Push [MENU]) (Push [▲]/[▼], then push [ENT].)

② Edit your latitude and longitude position data using Dial, or [▲]/[▼]/[◀]/[▶].
• Select a desired number using Dial, or [▲]/[▼]/[◀]/[▶].
• Push [ENT] or Dial to set it.
• To move the cursor, select either arrow, "←" or "→," then push [ENT].
• Select N: North latitude or S: South latitude when the cursor is on the 'N' or 'S' position.
• Select W: West longitude or E: East longitude when the cursor is on the 'W' or 'E' position.

③ After entering the position data, push [ENT] to program it.
④ The UTC time programming screen is displayed, enter the UTC time in the following way:
• Select a desired number using [▲]/[▼]/[◀]/[▶].
• Push [ENT] to set it.
• To move the cursor, select either arrow, "←" or "→," then push [ENT].
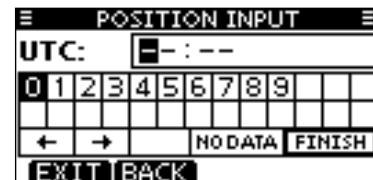
⑤ Push [ENT] to program your position and time data.
• Return to the "DSC SETTING" screen.

■ **Distress call**

A Distress call should be transmitted if, in the opinion of the Master, the ship or a person is in distress and requires immediate assistance.

NEVER MAKE A DISTRESS CALL IF YOUR SHIP OR A PERSON IS NOT IN AN EMERGENCY. A DISTRESS CALL SHOULD BE MADE ONLY WHEN IMMEDIATE HELP IS NEEDED.

◇ **Simple call**

① Confirm no Distress call is being received.
② While lifting up the key cover, hold down [DISTRESS] for 3 seconds to transmit the Distress call.
  • While holding down [DISTRESS], count down beeps sound and both the key and display backlighting blink.
  • DSC channel (Channel 70) is automatically selected and the Distress call is transmitted.

```
≡        !! DISTRESS !!        ≡

          Hold Down
          for 3 sec.
```

```
≡        !! DISTRESS !!        ≡

        TRANSMITTING
        DISTRESS ALERT
```
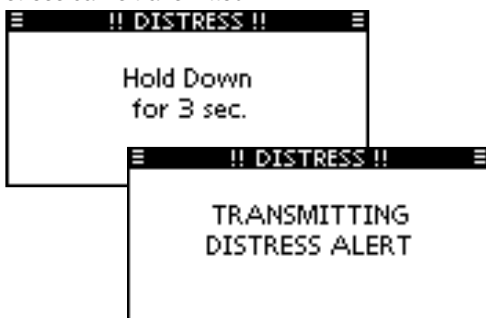
③ After transmitting the call, the transceiver waits for an acknowledgment call.
  • The Distress call is automatically transmitted every 3.5 to 4.5 minutes, until an acknowledgement is received ('Call repeat' mode), or DSC Cancel call is made (p. 26).
  • Push [RESEND] to manually transmit the Distress repeat call.
  • Push [◄]/[►] then push [INFO] to display the transmitted Distress call information.
  • Push [◄]/[►] then push [PAUSE] to pause the 'Call repeat' mode, push [RESUME] to resume it.

```
≡        !! DISTRESS !!        ≡

        Waiting for ACK
        Next TX after
        3 min. 42 sec.

◄   CANCEL   |   RESEND   ►
```

④ After receiving the acknowledgment, push [ALARM OFF] then reply using the microphone.

A distress alert contains (default):
  • Nature of distress : Undesignated distress
  • Position data   : The latest GPS or manual input position data is held for 23.5 hours, or until the power is turned OFF.

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8 DSC OPERATION

◇ Distress cancel call

① While waiting for an acknowledgment call, push [CANCEL].

```
≡  !! DISTRESS !!  ≡

    Waiting for ACK
    Next TX after
    3 min. 42 sec.
◀  CANCEL  |  RESEND  ▶
```
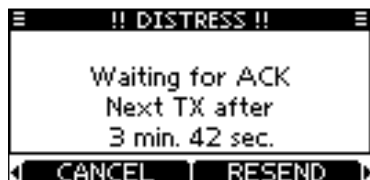
② Push [CONTINUE].
  • Push [BACK] to return to waiting for an acknowledgement call.

```
≡  !! DISTRESS CANCEL !!  ≡

    ARE YOU SURE?


 BACK          CONTINUE
```

③ Push [FINISH].
  • Push [EXIT] to return to waiting for an acknowledgement call.

```
≡  !! DISTRESS CANCEL !!  ≡

  Report Your Situation
      On CH 16.

 EXIT          FINISH
```

④ The Distress cancel call is transmitted.

```
≡  !! DISTRESS CANCEL !!  ≡

     TRANSMITTING
    DISTRESS CANCEL

```
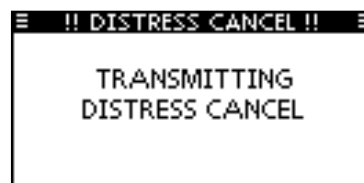
⑤ Channel 16 is automatically selected.
  • Report your situation using the microphone.
  • After the report, push [EXIT] to return to the normal operating mode.

```
≡  !! DISTRESS CANCEL !!  ≡
  25W              16


 EXIT
```

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◇ **Regular call**
The nature of the Distress call should be included in the Distress call.

① Enter "DISTRESS CALL" in the DSC CALLS menu.

| ❰MENU❱ ⇨ ❰DSC Calls❱ ⇨ ❰Distress Call❱ |
| (Push [MENU]) (Push [▲]/[▼], then push [ENT].) |
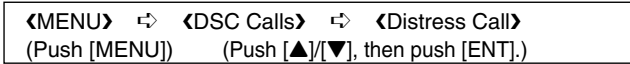
② Select the nature of the distress using Dial or [▲]/[▼], then push Dial or [ENT].
  • 'Undesignated,' 'Fire,Explosion,' 'Flooding,' 'Collision,' 'Grounding,' 'Capsizing,' 'Sinking,' 'Adrift,' 'Abandoning ship,' 'Piracy' or 'Man Overboard' is selectable.
  • The nature of the distress is stored for 10 minutes after a selection is made.

```
≡        DISTRESS CALL        ≡
Undesignated
Fire,Explosion
Flooding
Collision
 EXIT BACK              ENT
```
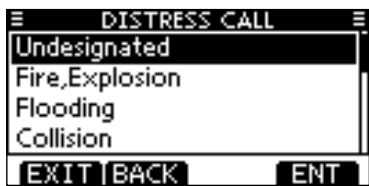
③ The Distress call confirmation screen is displayed.
  • Rotate Dial or push [▲]/[▼] to see the hidden lines.

```
≡        DISTRESS CALL        ≡
Push DISTRESS for 3 sec
MMSI: 123456789
Undesignated
 35°00.0000N
 EXIT BACK
```
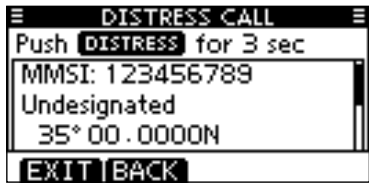
④ Hold down [DISTRESS] for 3 seconds to transmit the Distress call.
  • While holding down [DISTRESS], count down beeps sound and both the key and display backlight blink.
  • The selected nature of the distress is stored for 10 minutes.

```
≡        !! DISTRESS !!        ≡

        Hold Down
        for 3 sec.

```

```
≡        !! DISTRESS !!        ≡

       TRANSMITTING
       DISTRESS ALERT

```

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■ Transmitting DSC calls

////To ensure correct operation of the DSC function, make sure you correctly set the CH70 SQL LEVEL. (p. 64)

◇ Transmitting an individual call
The Individual call function allows you to transmit a DSC signal to only a specific station.

① Enter "INDIVIDUAL CALL" in the DSC CALLS menu.

> ❰MENU❱ ⇨ ❰DSC Calls❱ ⇨ ❰Individual Call❱
> (Push [MENU])   (Push [▲]/[▼], then push [ENT].)

② Select the desired preprogrammed individual address, or "Manual Input," using [▲]/[▼], then push [ENT].
   • The ID code for the Individual call can be set first. (p. 19)
   • When "Manual Input" is selected, set a desired 9 digit MMSI ID code for the individual you wish to call.
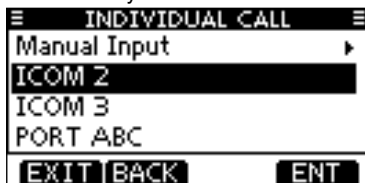
③ *About Manual Inputting:*
Enter a desired individual ID in the following way:
• Select a desired number using [▲]/[▼]/[◀]/[▶].
• Push [ENT] to set it.
• To move the cursor, select either arrow, "←" or "→," then push [ENT].
• The first digit is specified as '0' for a Group ID.
• The first two digits are '0' for any coast station ID.
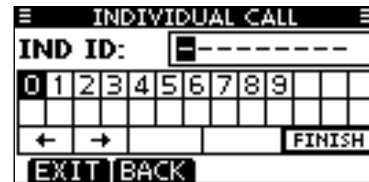
③ Select Routine, Safety or Urgency as the desired call type using [▲]/[▼], then push [ENT].
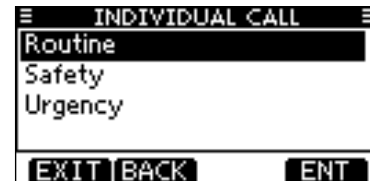
////**NOTE:** When a coast station is selected in step ②, the voice channel is automatically specified by the coast station. Therefore, skip step ④ and go directly to step ⑤.

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◇ Transmitting an Individual call (continued)

④ Select a desired intership channel using [▲](CH)/[▼](CH), then push [ENT].
 • Intership channels are already preset into the transceiver in the recommended order.

```
≡   INDIVIDUAL CALL   ≡
Intership CH
CHAN:   08   ⬍

 EXIT  BACK        ENT
```

⑤ A confirmation screen appears.
 • Confirm the call contents.

```
≡   INDIVIDUAL CALL   ≡
To: ICOM 2
Routine
CH 08
Telephony
 EXIT  BACK        CALL
```
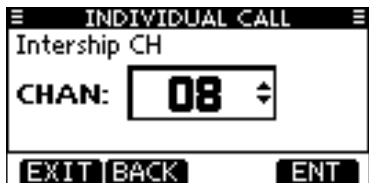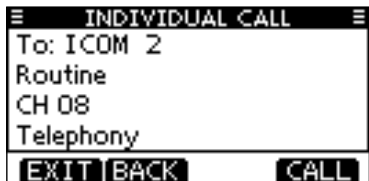
⑥ Push [CALL] to transmit the Individual call.
 • If Channel 70 is busy, the transceiver stands by until the channel becomes clear.

```
≡   INDIVIDUAL CALL   ≡

    TRANSMITTING
    INDIVIDUAL CALL

```
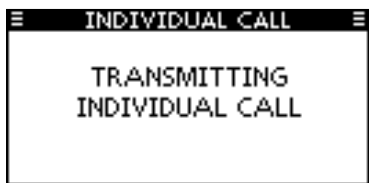
⑦ Standby on Channel 70 until an acknowledgement is received.
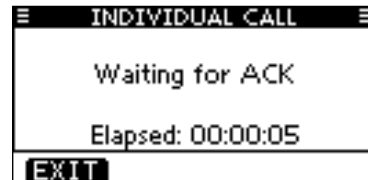
```
≡   INDIVIDUAL CALL   ≡

    Waiting for ACK

    Elapsed: 00:00:05
 EXIT
```

⑧ When the acknowledgement 'Able to comply' is received, beeps sound and the screen below is displayed.

```
≡   INDIVIDUAL CALL   ≡

    Received ACK

    Elapsed: 00:00:02
    ALARM  OFF
```

Or, when the acknowledgement 'Unable to comply' is received, beeps sound and the screen below is displayed.
 • Push [ALARM OFF] to stop the beeps and then return to the operating channel (before you entered the MENU screen).

```
≡   INDIVIDUAL CALL   ≡

    Received Unable ACK

    Elapsed: 00:00:02
    ALARM  OFF
```

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◇ Transmitting an Individual Acknowledgement

When receiving an Individual call, you can transmit an acknowledgement ('Able to Comply,' 'Propose New Channel' or 'Unable to Comply') by using the on-screen prompts (Quick ACK.) Also, you can send an acknowledgement through the MENU system (Manual ACK.)

Quick ACK:

① When an Individual call is received, beeps sound and the screen as shown below is displayed.
Push [ALARM OFF] to stop the beeps.

```
RCVD INDIVIDUAL CALL
   FROM: 123456789
        CH 08
   ELAPSED: 00:00:05
       ALARM OFF
```

② Push [ACK].

```
RCVD INDIVIDUAL CALL
   FROM: 123456789
        CH 08
   ELAPSED: 00:00:30
EXIT INFO        ACK
```
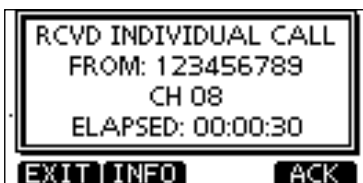
③ Select one of three options, then push [ENT].

```
≡    INDIVIDUAL ACK    ≡
Able to Comply
Unable to Comply
Propose New Channel      ▶

EXIT BACK        ENT
```

- Able to Comply : Make an acknowledgment call without any changes.
- Unable to Comply : You cannot make an acknowledgement call.
  The Acknowledgement call ('Unable to Comply') can be automatically transmitted, if set. See page 61 for details.
- Propose New Channel : You can make an acknowledgement call, but you specify the intership channel. Select a desired intership channel, using Dial, or [▲](CH)/[▼] (CH), then push [ENT].

```
≡    INDIVIDUAL ACK    ≡
Intership CH

CHAN:  08  ⇕

EXIT BACK        ENT
```
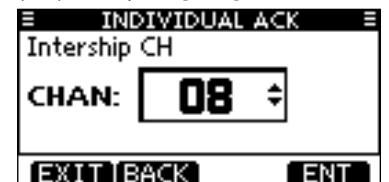
④ The Individual ACK confirmation screen is displayed. Push [CALL] to transmit an acknowledgement call.

```
≡    INDIVIDUAL ACK    ≡
To: 123456789
Routine
CH 08
Able to Comply
 EXIT BACK        CALL
```
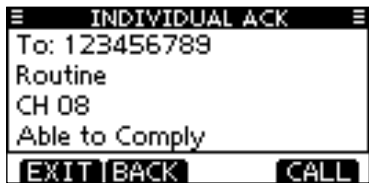
⑤ Following screens as shown below are displayed.

```
≡    INDIVIDUAL ACK    ≡

     TRANSMITTING
     INDIVIDUAL ACK


```

```
≡    INDIVIDUAL ACK    ≡
    25W            08
To: 123456789
Elapsed: 00:00:11
 EXIT
```
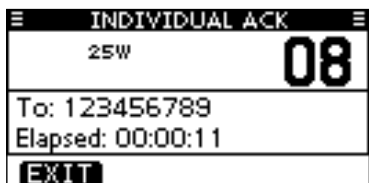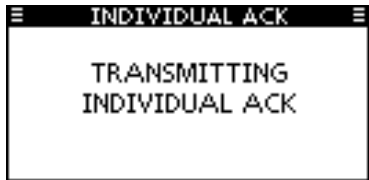
⑥ Comply to the call using the microphone.
⑦ Push [EXIT] to return to the normal operating mode.

Manual ACK:
① Enter "INDIVIDUAL ACK" in the DSC CALLS menu.
  • When no Individual call has been received, "Individual ACK" item will not be displayed.

```
≡      DSC CALLS       ≡
Individual Call        ▶
Individual ACK         ▶
Group Call             ▶
All Ships Call         ▶
 EXIT BACK         ENT
```

② Select a desired individual address or ID code to reply to, using Dial or [▲]/[▼], then push [ENT].

```
≡    INDIVIDUAL ACK    ≡
123456789



 EXIT BACK         ENT
```

③ Perform steps ③ to ⑦, as described in "Quick ACK:" to the left.

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◇ Transmitting a Group call

The Group call function allows you to transmit a DSC signal to only a specific group.

① Enter "GROUP CALL" in the DSC CALLS menu.

| 《MENU》 ⇨ 《DSC Calls》 ⇨ 《Group Call》 |
| (Push [MENU]) (Push [▲]/[▼], then push [ENT].) |

② Select the desired preprogrammed group address or "Manual Input," using [▲]/[▼], then push [ENT].
  • The ID code for the Group call can be set first. (p. 20)
  • When "Manual Input" is selected, set the 8 digit ID code for the group you wish to call.

```
≡        GROUP CALL        ≡
Manual Input                ▶
ICOM MARIN

 EXIT  BACK          ENT
```

③ Select a desired intership channel using [▲](CH)/[▼](CH), then push [ENT].
  • Intership channels are already preset into the transceiver in the recommended order.

```
≡        GROUP CALL        ≡
Intership CH

CHAN:   08    ⬍

 EXIT  BACK          ENT
```

About Manual Inputting:
Enter a desired group ID in the following way:
• Select a desired number using [▲]/[▼]/[◀]/[▶].
• Push [ENT] to set it.
• To move the cursor, select either arrow, "←" or "→," then push [ENT].
• The first digit is specified as '0' for a Group ID.
• The first two digits are '0' for any Coast station ID.

```
≡        GROUP CALL        ≡
GRP ID:   0█-------
 0 1 2 3 4 5 6 7 8 9
 ←  →              FINISH
 EXIT  BACK
```

④ A confirmation screen appears.
  • Confirm the call contents.

```
≡        GROUP CALL        ≡
To: ICOM MARIN
Routine
CH 08
Telephony
 EXIT  BACK          CALL
```

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⑤ Push [CALL] to transmit the Group call.
  • If Channel 70 is busy, the transceiver stands by until the channel becomes clear.
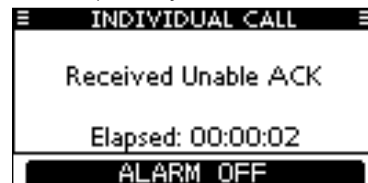
```
≡        GROUP CALL        ≡

        TRANSMITTING
        GROUP CALL


```

⑥ After the Group call has been transmitted, the following screen is displayed.

```
≡        GROUP CALL        ≡
    25W                   08
To: ICOM MARIN
Elapsed: 00:00:09
 EXIT
```

⑦ Announce the information using the microphone.
⑧ After the announcement, push [EXIT] to return to the normal operating mode.

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8 DSC OPERATION

◇ Transmitting an All Ships call

All ships, that have DSC transceiver, use Channel 70 as their 'listening channel.' When you want to announce a message to these ships within range, use the 'All Ships Call' function.

① Enter "ALL SHIPS CALL" in the DSC CALLS menu.

> 〈MENU〉 ➯ 〈DSC Calls〉 ➯ 〈All Ships Call〉
> (Push [MENU]) (Push [▲]/[▼], then push [ENT].)

② Select a desired category, using [▲]/[▼], then push [ENT].
  • The selectable categories may differ, depending on the programmed setting. Ask your dealer for the selectable categories.

```
≡    ALL SHIPS CALL    ≡
Safety
Urgency


 EXIT BACK           ENT
```
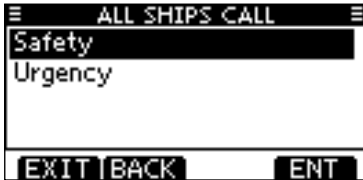
③ Select a desired traffic channel, using [▲]/[▼], then push [ENT].
  • The selected channel is displayed.

```
≡    ALL SHIPS CALL    ≡
ITU CH

CHAN:    16    ↕

 EXIT BACK           ENT
```

④ A confirmation screen appears.
  • Confirm the call contents.

```
≡    ALL SHIPS CALL    ≡
To: All Ships
Safety
CH 16
Telephony
 EXIT BACK          CALL
```
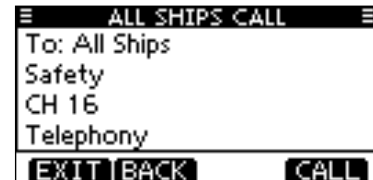
⑤ Push [CALL] to transmit the All Ships call.
  • If Channel 70 is busy, the transceiver stands by until the channel becomes clear.

```
≡    ALL SHIPS CALL    ≡

      TRANSMITTING
      ALL SHIPS CALL


```

⑥ After the All Ships call has been transmitted, the following screen is displayed.

```
≡    ALL SHIPS CALL    ≡
   25W           16
To: All Ships
Elapsed: 00:00:10
 EXIT
```
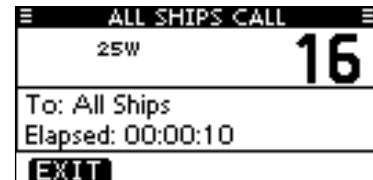
⑦ Announce the message using the microphone.
⑧ After the announcement, push [EXIT] to return to the normal operating mode.

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◇ **Transmitting a Position request call**

Transmit a Position request call when you want to know a specific ship's current position.

① Enter "POSITION REQUEST" in the DSC CALLS menu.

❮MENU❯ ⇨ ❮DSC Calls❯ ⇨ ❮All Ships Call❯
(Push [MENU])   (Push [▲]/[▼], then push [ENT].)
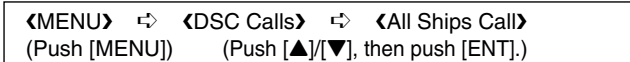
② Select the desired preprogrammed Position request address or "Manual Input," using [▲]/[▼], then push [ENT].
   • The ID code for the Position request call can be set first. (p. 20)
   • When "Manual Input" is selected, set the 8 digit ID code for the group you wish to call.
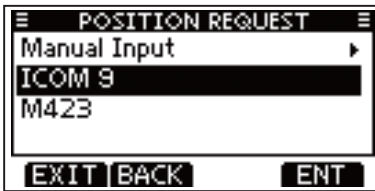
About Manual Inputting:
Enter a desired address ID in the following way:
• Select the desired number usuing [▲]/[▼]/[◀]/[▶].
• Push [ENT] to set it.
• To move the cursor, select either arrow, "←" or "→," then push [ENT].
• The first digit is specified as '0' for a Group ID.
• The first two digits are '0' for any Coast station ID.

③ A confirmation screen appears.
   • Confirm the call contents.

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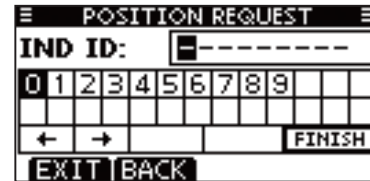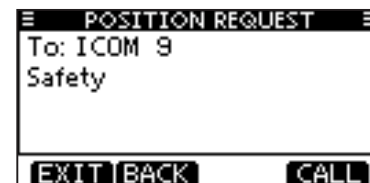
◇ **Transmitting a Position report call**

◇ Transmitting a Position Reply call

Transmit a Position Reply call when a Position Request call is received.

When the "POSITION ACK" in DSC Settings is set to 'Auto TX' (p. 61), the transceiver automatically transmits a reply call when receiving a Position Request call.

Quick Reply:

① When a Position Request call is received, beeps sound and the screen as shown below is displayed.
Push [ALARM OFF] to stop the beeps.

```
  RCVD POS REQUEST
  FROM: ICOM 1
   ELAPSED: 00:00:01


       ALARM OFF
```

② Push [ACK].

```
  RCVD POS REQUEST
  FROM: ICOM 1
   ELAPSED: 00:00:21

 EXIT  INFO       ACK
```

• Push [INFO] to display the Position Request call information. Push [BACK] to return to the previous screen, or push [ACK].

```
 ≡  RCVD CALL LOG  ≡
Position Request
From: ICOM 1
Safety
12:00 UTC
 EXIT BACK      ACK
```

③ The Position Reply confirmation screen is displayed.
Push [CALL] to transmit the reply call.

```
 ≡  POSITION REPLY  ≡
To: ICOM 1
Safety
 35°00.0000N
135°00.0000E
 EXIT BACK      CALL
```

④ While transmitting the reply call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
 ≡  POSITION REPLY  ≡

     TRANSMITTING
     POSITION REPLY

```

Manual Reply:
① Enter "POSITION REPLY" in the DSC CALLS menu.
 • If no Position Request call has been received, the "POSITION REPLY" item will not be displayed.

❰MENU❱ ⇨ ❰DSC Calls❱ ⇨ ❰Position Reply❱
(Push [MENU])   (Push [▲]/[▼], then push [ENT].)

```
≡       DSC CALLS       ≡
Position Reply          ▶
Polling Reply           ▶
Test Call               ▶
Test ACK                ▶
 EXIT BACK          ENT
```

② Select a desired Position Request call to reply to, using [▲]/[▼], then push [ENT].

```
≡     POSITION REPLY     ≡
ICOM 1



 EXIT BACK          ENT
```
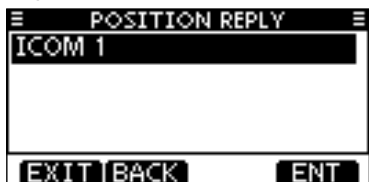
③ The Position Reply call confirmation screen is displayed. Push [CALL] to transmit the acknowledgement call.

```
≡     POSITION REPLY     ≡
To: ICOM 1
Safety
 35°00.0000N
135°00.0000E
 EXIT BACK         CALL
```

④ While transmitting the reply call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
≡     POSITION REPLY     ≡

    TRANSMITTING
    POSITION REPLY

```
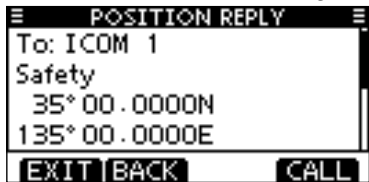
When no GPS receiver is connected, and both position and time have been manually programmed, the screen as shown below appears. Edit your latitude and longitude position and UTC time data as follows:

```
≡     POSITION REPLY     ≡
 35°00.0000N
135°00.0000E
12:00 UTC

 EXIT BACK CHG  ENT
```

Push [CHG], then edit your latitude and longitude position and UTC time data.
 • Select a desired number using [▲]/[▼]/[◀]/[▶].
 • Push [ENT] to set it.
 • To move the cursor, select either arrow, "←" or "→," then push [ENT].
 • Select N: North latitude or S: South latitude when the cursor is on the 'N' or 'S' position.
 • Select W: West longitude or E: East longitude when the cursor is on the 'W' or 'E' position.

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8 DSC OPERATION

◇ Transmitting a Position Report Reply call

Transmit a Position Report Reply call when a Position Report Request call is received.

Quick Reply:

① When a Position Report Request call is received, beeps sound and the screen as shown below is displayed.
Push [ALARM OFF] to stop the beeps.

```
RCVD POSITION REPORT
    FROM: 604012345
    ELAPSED: 00:00:12

        ALARM  OFF
```

② Push [ACK].

```
RCVD POSITION REPORT
    FROM: 604012345
    ELAPSED: 00:00:33

 EXIT  INFO        ACK
```

• Push [INFO] to display the Position Report Request call information.
Push [BACK] to return to the previous screen, or push [ACK].

```
≡  RCVD CALL LOG  ≡
Position Report
From: 604012345
Routine
 35°12.5678N
 EXIT  BACK       ACK
```
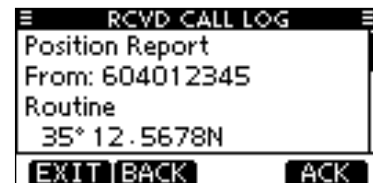
③ The Position Report Reply confirmation screen is displayed.
Push [CALL] to transmit the reply call.

```
≡    REPORT REPLY   ≡
To: 604012345
Routine
 35°12.5678N
135°45.6789E
 EXIT  BACK       CALL
```

④ While transmitting the reply call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
≡    REPORT REPLY   ≡

    TRANSMITTING
    REPORT REPLY

```

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Manual Reply:

① Enter "POSITION REPORT REPLY" in the DSC CALLS menu.
  • If no Position Report Request call has been received, the "PO-

❰MENU❱ ⇨ ❰DSC Calls❱ ⇨ ❰Position Report Reply❱
(Push [MENU]) (Push [▲]/[▼], then push [ENT].)

  SITION REPORT REPLY" item will not be displayed.

```
≡          DSC CALLS          ≡
Position Report Reply        ▶
Polling Request              ▶
Polling Reply                ▶
Test Call                    ▶
 EXIT  BACK           ENT
```

② Select a desired Position Report Request call to be replied, using [▲]/[▼], then push [ENT].

```
≡         REPORT REPLY        ≡
604012345
 EXIT  BACK           ENT
```

③ The Position Report Reply call confirmation screen is displayed.
  Push [CALL] to transmit the acknowledgement call.

```
≡         REPORT REPLY        ≡
To: 604012345
Routine
 35° 12.5678N
135° 45.6789E
 EXIT  BACK          CALL
```

④ While transmitting the reply call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
≡         REPORT REPLY        ≡

        TRANSMITTING
        REPORT REPLY

```

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8 DSC OPERATION

◇ Transmitting a Polling Reply call

Transmit a Polling Reply call when a Polling Request call is received.

When the "POSITION ACK" in DSC Settings is set to 'Auto TX' (p. 61), the transceiver automatically transmits a reply call when receiving a Polling Request call.

Quick Reply:

① When a Polling Request call is received, beeps sound and the screen as shown below is displayed.
Push [ALARM OFF] to stop the beeps.

```
RCVD POLLING REQUEST
    FROM: ICOM 1
    ELAPSED: 00:00:02


    ALARM OFF
```

② Push [ACK].

```
RCVD POLLING REQUEST
    FROM: ICOM 1
    ELAPSED: 00:00:37

EXIT  INFO        ACK
```
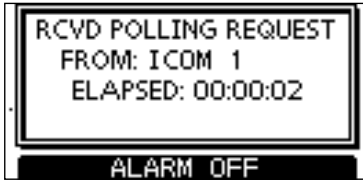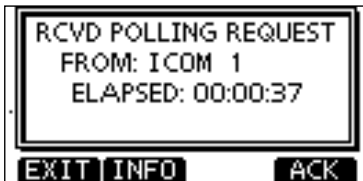
• Push [INFO] to display the Polling Request call information. Push [BACK] to return to the previous screen, or push [ACK].

```
☰   RCVD CALL LOG   ☰
Polling Request
From: ICOM 1
Routine
12:00 UTC
EXIT  BACK        ACK
```

③ The Polling Reply confirmation screen is displayed.
Push [CALL] to transmit the reply call.
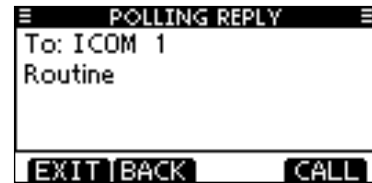
```
☰    POLLING REPLY    ☰
To: ICOM 1
Routine


EXIT  BACK        CALL
```

④ While transmitting the reply call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
☰    POLLING REPLY    ☰

      TRANSMITTING
      POLLING REPLY


```

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Manual Reply:

① Enter "POLLING REPLY" in the DSC CALLS menu.

〈MENU〉 ⇨ 〈DSC Calls〉 ⇨ 〈Polling Reply〉
(Push [MENU]) (Push [▲]/[▼], then push [ENT].)

• If no Polling Request call has been received, the "POLLING REPLY" item will not be displayed.

```
≡        DSC CALLS        ≡
Transmitted Call Log     ▶
Position Reply           ▶
Polling Reply            ▶
Test Call                ▶
 EXIT BACK          ENT
```

② Select a desired Polling Request call to be replied, using [▲]/[▼], then push [ENT].

```
≡      POLLING REPLY      ≡
ICOM 1


 EXIT BACK          ENT
```
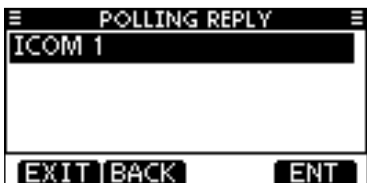
③ The Position Polling Reply call confirmation screen is displayed.
Push [CALL] to transmit the acknowledgement call.

```
≡      POLLING REPLY      ≡
To: ICOM  1
Routine


 EXIT BACK          CALL
```

④ While transmitting the reply call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
≡      POLLING REPLY      ≡

    TRANSMITTING
    POLLING REPLY

```

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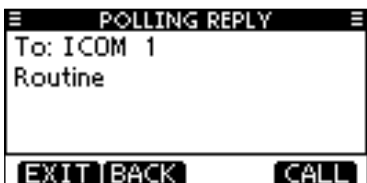
8 DSC OPERATION

◇ Transmitting a Test call

Testing on the exclusive DSC distress and safety calling channels should be avoided as much as possible. When testing on the distress/safety channel is unavoidable, you should indicate that these are test transmissions.

Normally the test call would require no further communications between the two stations involved.

① Enter "TEST CALL" in the DSC CALLS menu.

❮MENU❯ ⇨ ❮DSC Calls❯ ⇨ ❮Test Call❯
(Push [MENU]) (Push [▲]/[▼], then push [ENT].)

② Select a desired preprogrammed individual address, or "Manual Input," then push [ENT].
• The ID code for the Individual call can be set first. (p. 19)
• When "Manual Input" is selected, set the 9 digit MMSI ID code for the individual you wish to call.
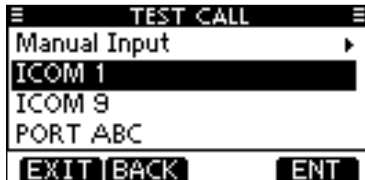
About Manual Inputting:
Enter a desired address ID in the following way:
• Select a desired number using [▲]/[▼]/[◄]/[►].
• Push [ENT] to set it.
• To move the cursor, select either arrow, "←" or "→," then push [ENT].
• The first digit is specified as '0' for a Group ID.
• The first two digits are '0' for any Coast station ID.

③ A confirmation screen appears.
• Confirm the call contents.

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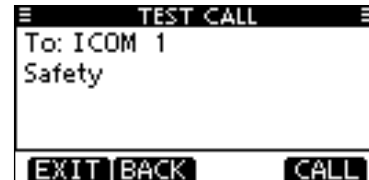
④ Push [CALL] to transmit the Test call.
  • If Channel 70 is busy, the transceiver stands by until the channel becomes clear.

```
≡       TEST CALL      ≡

      TRANSMITTING
       TEST CALL


```

⑤ After the Test call has been transmitted, the following screen is displayed.

```
≡       TEST CALL      ≡

     Waiting for ACK


 EXIT
```
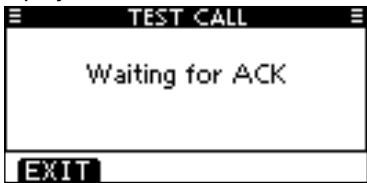
⑥ When the acknowledgement call is received, beeps sound and the following screen is displayed.

```
≡       TEST CALL      ≡

     Received ACK


     ALARM OFF
```

⑦ Push [ALARM OFF] to stop the beeps, and then the screen as shown below is displayed.

```
≡       TEST CALL      ≡

From: ICOM 1
Elapsed: 00:00:26
 EXIT
```

⑧ Push [EXIT] to return to the normal operating mode.

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8 DSC OPERATION

◇ Transmitting a Test Acknowledgement call

When the "TEST ACK" in DSC settings is set to 'Auto TX' (p. 61), the transceiver automatically transmits a reply call when receiving a Test call.

Quick ACK:

① When a Test call is received, beeps sound and the screen as shown below is displayed.
   Push [ALARM OFF] to stop the beeps.

```
RCVD TEST CALL
FROM: ICOM 1
  ELAPSED: 00:00:03

       ALARM OFF
```

② Push [ACK].

```
RCVD TEST CALL
FROM: ICOM 1
  ELAPSED: 00:00:21

 EXIT INFO        ACK
```
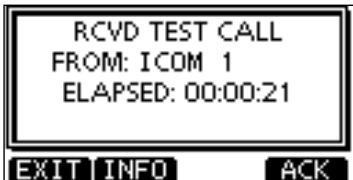
• Push [INFO] to display the Test call information.
   Push [BACK] to return to the previous screen, or push [ACK].

```
≡   RCVD CALL LOG   ≡
Test Call
From: ICOM 1
Safety
12:00 UTC
 EXIT BACK        ACK
```

③ The Test ACK confirmation screen is displayed.
   Push [CALL] to transmit the acknowledgement call.

```
≡     TEST ACK     ≡
To: ICOM 1
Safety

 EXIT BACK       CALL
```

④ While transmitting the acknowledgement call, the screen as shown below is displayed, and then returns to the normal operating mode.

```
≡     TEST ACK     ≡

     TRANSMITTING
       TEST ACK

```

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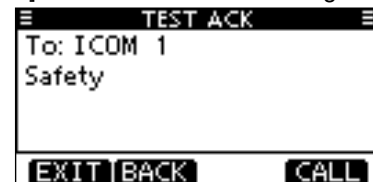
Manual ACK:

① Enter "TEST ACK" in the DSC CALLS menu.

• If no Test call has been received, the "TEST ACK" item will not

❰MENU❱　⇨　❰DSC Calls❱　⇨　❰Test ACK❱
(Push [MENU])　　(Push [▲]/[▼], then push [ENT].)

be displayed.
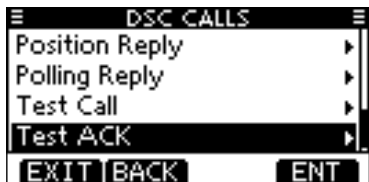
② Select a desired Test call to reply to, using [▲]/[▼], then push [ENT].
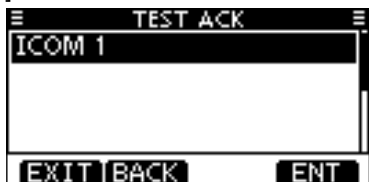
③ The Test ACK confirmation screen is displayed. Push [CALL] to transmit the acknowledgement call.

④ While transmitting the acknowledgement call, the screen as shown below is displayed, and then returns to the normal operating mode.

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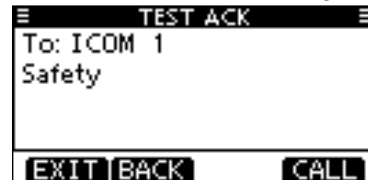
■ Receiving DSC calls

◇ Receiving a Distress Call

When a Distress Call is received:

➥ The emergency alarm sounds.

➥ "RCVD DISTRESS" pops up and the LCD backlight blinks.

➥ Continue monitoring the current operating channel for 10 seconds. After that, the transceiver automatically switches to Channel 16.

   ⁜ This action may differ, depending on the CH16 Switch setting. See page 62 for more details.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

```
RCVD DISTRESS
FROM: 111111112
UNDESIGNATED
ELAPSED: 00:00:01
ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD DISTRESS
FROM: 111111112
UNDESIGNATED
CH 16 after 8 sec.
EXIT INFO      CH 16
```

[EXIT]

➥ Push to return to the normal operating mode.

   • The transceiver exits the DSC mode.

   • By pushing [PTT], the transceiver also exits the DSC mode.

   • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]

➥ Push to display the Received call information. (p. 58)

```
RCVD CALL LOG
Distress
From: 111111112
Undesignated
 35°00.0000N
EXIT BACK DEL
```

[CH 16]

➥ Push to switch the operating channel to Channel 16, and monitor Channel 16, as a coast station may require assistance.

   • If you haven't pushed any key within 10 seconds, the operating channel automatically switches to Channel 16.

```
RCVD DISTRESS
25W              16
From: 111111112
Elapsed: 00:00:11
EXIT INFO
```

49
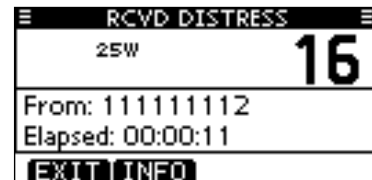
◇ Receiving a Distress Acknowledgement

When a Distress Acknowledgement to other ship is received:

➡ The emergency alarm sounds.

➡ "RCVD DISTRESS ACK" pops up and the LCD backlight blinks.

➡ Continue monitoring the current operating channel for 10 seconds. After that, the transceiver automatically switches to Channel 16.

  ▨ This action may differ, depending on the CH16 Switch
  ▨ setting. See page 62 for more details.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

```
RCVD DISTRESS ACK
FROM: 111111112
UNDESIGNATED
ELAPSED: 00:00:01
ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD DISTRESS ACK
FROM: 111111112
UNDESIGNATED
CH 16 after 8 sec.
EXIT INFO      CH 16
```

[EXIT]

➡ Push to return to the normal operating mode.

  • The transceiver exits the DSC mode.

  • By pushing [PTT], the transceiver also exits the DSC mode.

  • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]

➡ Push to display the Received call information. (p. 58)

```
RCVD DISTRESS ACK
From: 111111112
Distress ID
  111111112
Undesignated
EXIT BACK
```

[CH 16]

➡ Push to switch the operating channel to Channel 16, and monitor Channel 16, as a coast station may require assistance.

  • If you haven't pushed any key within 10 seconds, the operating channel also switches to Channel 16.

```
RCVD DISTRESS ACK
25W          16
From: 111111112
Elapsed: 00:00:11
EXIT INFO
```

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◇ Receiving a Distress Relay Call

When a Distress Relay call is received:
➥ The emergency alarm sounds.
➥ "RCVD DISTRESS RELAY" pops up and the LCD back-light blinks.
➥ Continue monitoring the current operating channel for 10 seconds. After that, the transceiver automatically switches to Channel 16.
  ▨ This action may differ, depending on the CH16 Switch setting. See page 62 for more details.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

```
RCVD DISTRESS RELAY
   FROM: 111111122
     UNDESIGNATED
   ELAPSED: 00:00:01
      ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD DISTRESS RELAY
   FROM: 111111122
     UNDESIGNATED
   CH 16 after 8 sec.
 EXIT INFO      CH 16
```

[EXIT]
➥ Push to return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • By pushing [PTT], the transceiver also exits the DSC mode.
 • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]
➥ Push to display the Received call information. (p. 58)

[CH 16]
➥ Push to switch the operating channel to Channel 16, and monitor Channel 16, as a coast station may require assistance.
  • If you haven't pushed any key within 10 seconds, the operating channel also switches to Channel 16.

```
≡  RCVD DISTRESS RELAY  ≡
     25W            16
From: 111111122
Elapsed: 00:00:11
 EXIT INFO
```
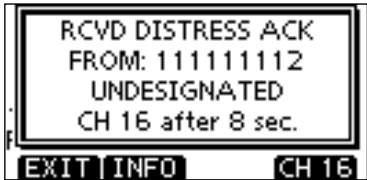
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◇ **Receiving a Distress Relay Acknowledgement**

When a Distress Relay Acknowledgement is received:

➥ The emergency alarm sounds.

➥ "RCVD DIST RELAY ACK" pops up and the LCD backlight blinks.

➥ Continue monitoring the current operating channel for 10 seconds. After that, the transceiver automatically switches to Channel 16.

⧄ This action may differ, depending on the CH16 Switch setting. See page 62 for more details.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

```
RCVD DIST RELAY ACK
  FROM: 111111123
   UNDESIGNATED
 ELAPSED: 00:00:01
    ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD DIST RELAY ACK
  FROM: 111111123
   UNDESIGNATED
  CH 16 after 8 sec.
EXIT INFO      CH 16
```
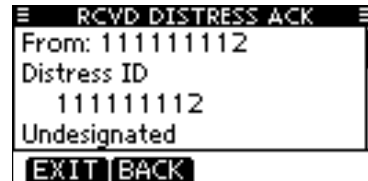
[EXIT]

➥ Push to return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • By pushing [PTT], the transceiver also exits the DSC mode.
  • " ✉ " continues to blink and the Call is stored in the Received Call Log.
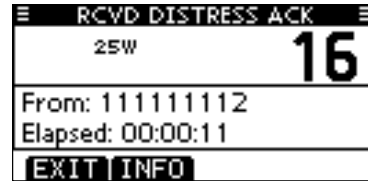
[INFO]

➥ Push to display the Received call information. (p. 58)

[CH 16]

➥ Push to switch the operating channel to Channel 16, and monitor Channel 16, as a coast station may require assistance.
  • If you haven't pushed any key within 10 seconds, the operating channel also switches to Channel 16.

```
☰  RCVD DIST RELAY ACK  ☰
  25W              16
From: 111111123
Elapsed: 00:00:11
EXIT INFO
```

⧄ **NOTE:** If a duplicate call is received within 1 hour after receiving the Distress Relay or Distress Relay Acknowledgement call, the alarm does not sound.

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8 DSC OPERATION

◇ Receiving an Individual Call

When an Individual Call is received:

➥ The emergency alarm sounds for 2 minutes, depending on the received Category.

➥ "RCVD INDIVIDUAL CALL" pops up. The LCD backlight blinks for 2 minutes, depending on the received Category.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

　• If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears, depending on the received Category.

```
RCVD INDIVIDUAL CALL
   FROM: 111111112
        CH 08
   ELAPSED: 00:00:01

        ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD INDIVIDUAL CALL
   FROM: 111111112
        CH 08
   ELAPSED: 00:00:14

  EXIT  INFO       ACK
```
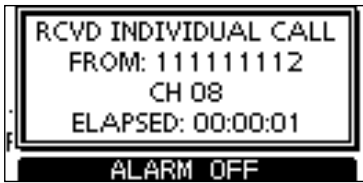
[EXIT]

➥ Push to ignore the Call and return to the normal operating mode.

　• The transceiver exits the DSC mode.

　• The Call is stored in the Received Call Log.

　• "✉" continues to blink and the Call is stored in the Received Call Log.

[INFO]

➥ Push to display the Received call information. (p. 59)

[ACK]

➥ Push to display the "INDIVIDUAL ACK" screen to reply to the Call, and select the channel specified by the calling station for voice communication, depending on your situation. See page 30 for details of the Individual Acknowledgement procedure.

```
☰   INDIVIDUAL ACK   ☰
Able to Comply
Unable to Comply
Propose New Channel        ▶

  EXIT  BACK        ENT
```

When "INDIVIDUAL ACK" is set to "Auto ACK (Unable)," the transceiver automatically replies to the Call. In that case, both the TX and RX calls are stored in the Transmitted and Received Call Logs.

◇ **Receiving a Group Call**

When a Group Call is received:
➥ The emergency alarm sounds for 2 minutes, depending on the received Category.
➥ "RCVD GROUP CALL" pops up. The LCD backlight blinks for 2 minutes, depending on the received Category.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.
  • If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears, depending on the received Category.

```
RCVD GROUP CALL
FROM: 111111112
     CH 08
ELAPSED: 00:00:01
    ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD GROUP CALL
FROM: 111111112
     CH 08
ELAPSED: 00:00:05
EXIT INFO      CH 08
```
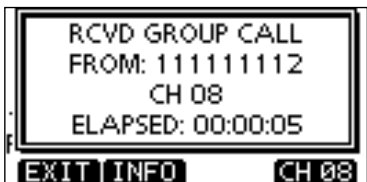
[EXIT]
➥ Push to ignore the Call and return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]
➥ Push to display the Received call information. (p. 59)

[CH xx*]
* xx is specified by the calling station. (Example: 08)
➥ Push to monitor the specified channel for an announcement from the calling station.

```
☰ RCVD GROUP CALL ☰
25W              08
From: 111111112
Elapsed: 00:00:14
EXIT
```

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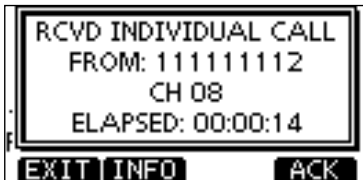
◇ Receiving an All Ships Call

When an All Ships Call is received:

➥ The emergency alarm sounds for 2 minutes, depending on the received Category.

➥ "RCVD ALL SHIPS CALL" pops up. The LCD backlight blinks for 2 minutes, depending on the received Category.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

• If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears, depending on the received Category.

```
RCVD ALL SHIPS CALL
   FROM: 111111112
        CH 16
   ELAPSED: 00:00:01
       ALARM  OFF
```

② Push either softkey to select a desired action.

```
RCVD ALL SHIPS CALL
   FROM: 111111112
        CH 16
   ELAPSED: 00:00:05
 EXIT INFO       CH 16
```
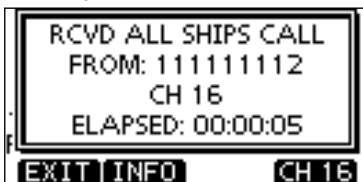
[EXIT]

➥ Push to ignore the Call and return to the normal operating mode.

• The transceiver exits the DSC mode.

• " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]

➥ Push to display the Received call information. (p. 59)

[CH xx*]

* xx is specified by the calling station. (Example: 16)

➥ Push to monitor the specified channel for an announcement from the calling station.

```
≡  RCVD ALL SHIPS CALL  ≡
   25W                16
From: 111111112
Elapsed: 00:00:19
 EXIT
```

◇ Receiving a Geographical Area Call

When a Geographical Area Call (for the area you are in) is received:

➥ The emergency alarm sounds for 2 minutes, depending on the received Category.

➥ "RCVD GEOGRAPHICAL CALL" pops up. The LCD backlight blinks for 2 minutes, depending on the received Category.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.

• If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears, depending on the received Category.

```
RCVD GEOGRAPHICAL
FROM: 111111112
CH 08
ELAPSED: 00:00:01
ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD GEOGRAPHICAL
FROM: 111111112
CH 08
ELAPSED: 00:00:05
EXIT INFO        CH 08
```
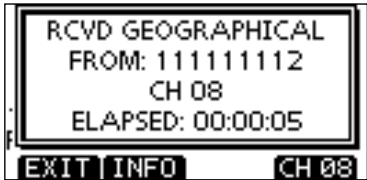
[EXIT]

➥ Push to ignore the Call and return to the normal operating mode.

• The transceiver exits the DSC mode.

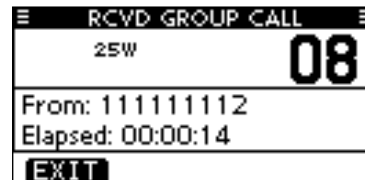• " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]

➥ Push to display the Received call information. (p. 59)

[CH xx*]

* xx is specified by the calling station.

➥ Push to monitor the specified channel for an announcement from the calling station.

```
☰  RCVD GEOGRAPHICAL  ☰
25W               08
From: 111111112
Elapsed: 00:00:14
EXIT
```
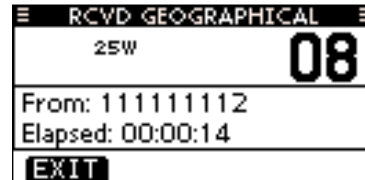
When no GPS receiver is connected or if there is a problem with the connected receiver, all Geographical Area Calls are received, regardless of your position.

◇ Receiving a Position Request Call

When a Position Request Call is received:
➥ The emergency alarm sounds for 2 minutes.
➥ "RCVD POS REQUEST" pops up. The LCD backlight blinks for 2 minutes.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.
  • If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears.

```
RCVD POS REQUEST
FROM: 111111112
ELAPSED: 00:00:02

      ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD POS REQUEST
FROM: 111111112
ELAPSED: 00:00:07

 EXIT  INFO      ACK
```
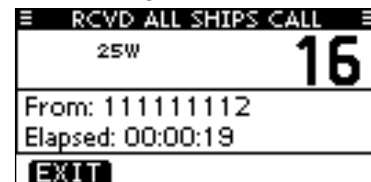
[EXIT]
➥ Push to ignore the Call and return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]
➥ Push to display the Received call information. (p. 59)

[ACK]
➥ Push to display the "POSITION REPLY" screen and send a reply to the Call. (p. 39)

```
≡   POSITION REPLY   ≡

     TRANSMITTING
    POSITION REPLY

```

When "POSITION ACK" is set to "Auto TX," the transceiver automatically replies to the Call. In that case, both the TX and RX calls are stored in the Transmitted and Received Call Logs.

◇ Receiving a Position Report Call

When a Position Report Call is received:
➥ The emergency alarm sounds for 2 minutes.
➥ "RCVD POSITION REPORT" pops up. The LCD backlight blinks for 2 minutes.
① Push [ALARM OFF] to stop the alarm and the backlight blinking.
 • If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears.

```
RCVD POSITION REPORT
   FROM: 111111112
   ELAPSED: 00:00:01

       ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD POSITION REPORT
   FROM: 111111112
   ELAPSED: 00:00:06

   EXIT   INFO
```

[EXIT]
➥ Push to ignore the Call and return to the normal operating mode.
 • The transceiver exits the DSC mode.
 • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]
➥ Push to display the Received call information. (p. 59)

```
≡    RCVD CALL LOG    ≡
Position Report
From: 111111112
Safety
 35°00.0000N

 EXIT  BACK
```

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◊ Receiving a Polling Request call

When a Polling Request call is received:
➥ The emergency alarm sounds for 2 minutes.
➥ "RCVD POLLING REQUEST" pops up. The LCD backlight blinks for 2 minutes.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.
  • If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears.

RCVD POLLING REQUEST
FROM: 111111112
ELAPSED: 00:00:01

ALARM OFF

② Push either softkey to select a desired action.

RCVD POLLING REQUEST
FROM: 111111112
ELAPSED: 00:00:07

EXIT INFO   ACK
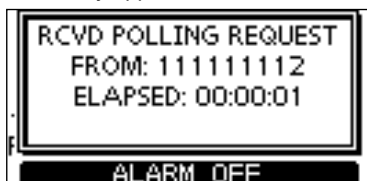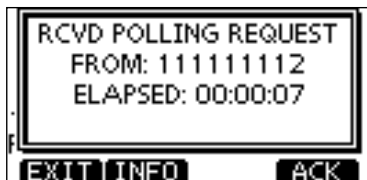
[EXIT]
➥ Push to ignore the Call and return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]
➥ Push to display the Received call information. (p. 58)

[ACK]
➥ Push to display the "POLLING REPLY" screen to reply to the Call. (p. 43)

POLLING REPLY
To: 111111112
Routine

EXIT BACK   CALL

When "POSITION ACK" is set to "Auto TX," the transceiver automatically replies to the Call. In that case, both the TX and RX calls are stored in the Transmitted and Received Call Logs.

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◇ **Receiving a Test Call**

When a Test Call is received:
➥ The emergency alarm sounds for 2 minutes.
➥ "RCVD TEST CALL" pops up. The LCD backlight blinks for 2 minutes.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.
  • If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears.

```
RCVD TEST CALL
FROM: 111111112
ELAPSED: 00:00:01

        ALARM OFF
```

② Push either softkey to select a desired action.

```
RCVD TEST CALL
FROM: 111111112
ELAPSED: 00:00:04

EXIT INFO        ACK
```
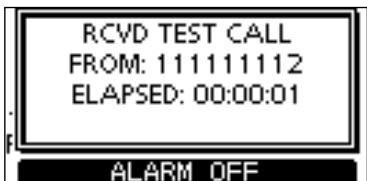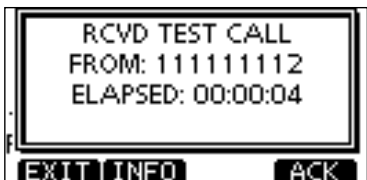
[EXIT]
➥ Push to ignore the Call and return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • " ✉ " continues to blink and the Call is stored in the Received Call Log.

[INFO]
➥ Push to display the Received call information. (p. 58)

[ACK]
➥ Push to display the "TEST ACK" screen to reply to the Call. (p. 37)

```
≡      TEST ACK      ≡
To: 111111112
Safety

EXIT BACK        CALL
```
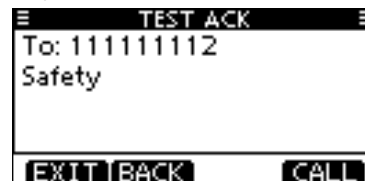
When "TEST ACK" is set to "Auto TX," the transceiver automatically replies to the Call. In that case, both the TX and RX calls are stored in the Transmitted and Received Call Logs.
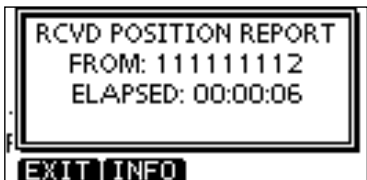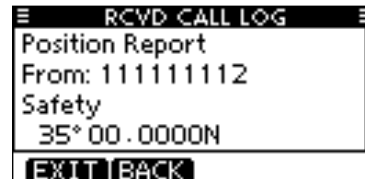
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◊ Receiving a Test Acknowledgement Call

When a Test Acknowledgement Call is received:
➥ The emergency alarm sounds for 2 minutes.
➥ "RCVD TEST ACK" pops up. The LCD backlight blinks for 2 minutes.

① Push [ALARM OFF] to stop the alarm and the backlight blinking.
  • If you haven't pushed [ALARM OFF] within 2 minutes, the next screen automatically appears.

```
≡       TEST CALL       ≡

      Received ACK

        ALARM OFF
```

② Push either softkey to select a desired action.

```
≡       TEST CALL       ≡

From: 111111112
Elapsed: 00:00:11
 EXIT
```
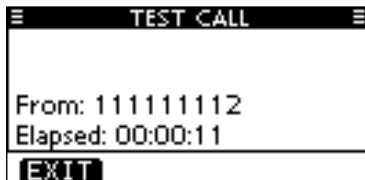
[EXIT]
➥ Push to ignore the Call and return to the normal operating mode.
  • The transceiver exits the DSC mode.
  • " ✉ " continues to blink and the Call is stored in the Received Call Log.
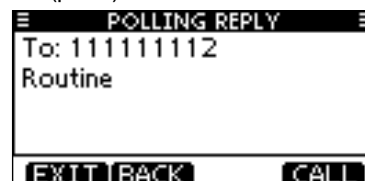
■ Transmitted Call log

The transceiver automatically stores up to 50 transmitted calls, and the logs can be used as a supplement to your logbook.

① Enter "TX CALL LOG" in the DSC CALLS menu.

❮MENU❯ ⇨ ❮DSC Calls❯ ⇨ ❮Transmitted Call Log❯
  (Push [MENU])   (Push [▲]/[▼], then push [ENT].)

② Push [▲] or [▼] to select the desired item, then push [ENT].

```
≡      TX CALL LOG      ≡
13:40    Distress
13:39    Distress
13:33    Group Call
13:31    Individual Call
 EXIT  BACK         ENT
```

③ Push [▲] or [▼] to scroll the message contents.

```
≡      TX CALL LOG      ≡
MMSI: 123456789
Undesignated
 35° 45.0100N
135° 36.1000E
 EXIT  BACK   DEL
```
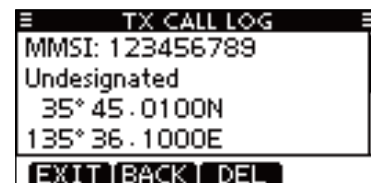
④ To delete the displayed message, push [DEL].
  • The confirmation screen appears, then push [OK] to delete.
⑤ Push [EXIT] to return to the normal operating mode.

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■ Received Call log

The transceiver automatically stores up to 50 distress messages and 50 other messages, and the messages can be used as a supplement to your logbook.
• " ▨ " blinks when there is an unread message.

◇ Distress message

① Enter "RCVD CALL LOG" in the DSC CALLS menu.

《MENU》 ➪ 《DSC Calls》 ➪ 《Received Call Log》
(Push [MENU])　　(Push [▲]/[▼], then push [ENT].)

② Push [▲] or [▼] to select "Distress," then push [ENT].
• The messages are stored in "Distress," if its format specifier is 'Distress.'
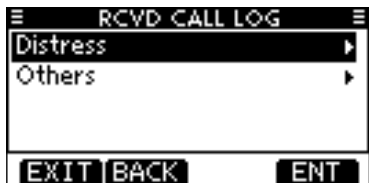
③ Push [▲] or [▼] to select the desired item, then push [ENT].
• The message in the unopened file has not been read.
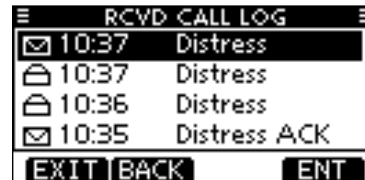
④ Push [▲]/[▼] to scroll the message contents.

⑤ To delete the displayed message, push [DEL].
• The confirmation screen appears, then push [OK] to delete.

⑥ Push [EXIT] to return to the normal operating mode.

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8 DSC OPERATION

◇ Other messages

① Enter "RCVD CALL LOG" in the DSC Calls menu.

❰MENU❱ ⇨ ❰DSC Calls❱ ⇨ ❰Received Call Log❱
(Push [MENU])　　(Push [▲]/[▼], then push [ENT].)

② Push [▲] or [▼] to select "Other," then push [ENT].
   • The messages are stored in "Other," if its format specifier is other than 'Distress.'
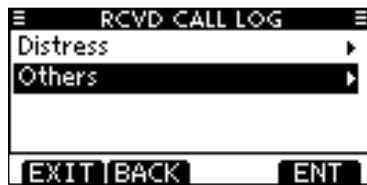
```
≡       RCVD CALL LOG       ≡
Distress                     ▶
Others                       ▶


  EXIT BACK          ENT
```

③ Push [▲] or [▼] to select the desired item, then push [ENT].
   • The message in the unopened file has not been read.

```
≡       RCVD CALL LOG       ≡
✉ 11:05    Test ACK
🗁 11:04    POS Request
🗁 10:59    Test Call
🗁 10:58    Test Call
  EXIT BACK          ENT
```

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■ DSC Settings

◇ Position Input (See page 22)
◇ Add Individual ID/Group ID (See pages 19, 20)
◇ Delete Individual ID/Group ID (See page 21)

◇ Automatic Acknowledgement

These items set the Automatic Acknowledgement function to "Auto TX" or "Manual TX."

When an Individual, Position Request, Position Report, Polling Request or Test Call is received, the transceiver automatically transmits an Individual Acknowledgement, Position Reply, Position Report Reply*, Polling Reply or Test Acknowledgement Call, respectively.

*Only when the received Position Report call requires a reply.

When "INDIVIDUAL ACK" is set to "Auto TX," the transceiver automatically transmits the Acknowledgment call including "Unable to Comply" (No Reason Given) after receivng the Individual call.

① Enter either "INDIVIDUAL ACK," "POSITION ACK," "TEST ACK" in the DSC Settings menu.

❬MENU❭ ⇨ ❬DSC Settings❭ ⇨ ❬Individual ACK❭
(Push [MENU])　(Push [▲]/[▼], then push [ENT].)

❬MENU❭ ⇨ ❬DSC Settings❭ ⇨ ❬Position ACK❭

❬MENU❭ ⇨ ❬DSC Settings❭ ⇨ ❬Test ACK❭

② Rotate Dial to select "Auto TX" or "Manual TX," then push [ENT].
　• Push [BACK] to cancel and return to the DSC Settings menu.

INDIVIDUAL ACK
Auto TX (Unable)
✔ Manual TX
EXIT BACK ENT
(default)

POSITION ACK
✔ Auto TX
Manual TX
EXIT BACK ENT
(default)
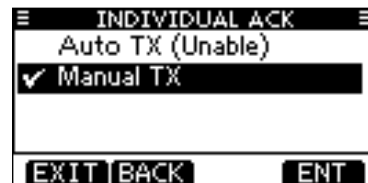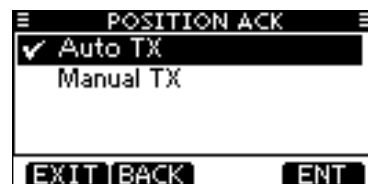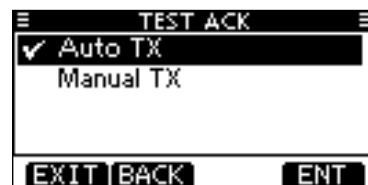
TEST ACK
✔ Auto TX
Manual TX
EXIT BACK ENT
(default)

③ Push [EXIT] to return to the normal operating mode.

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10 BATTERY CHARGING

■ Battery caution

> Misuse of Lithium-ion batteries may result in the following hazards: smoke, fire, or the battery may rupture. Misuse can also cause damage to the battery or degradation of battery performance.

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

◇ Battery caution

⚠ **DANGER! DO NOT** hammer or otherwise impact the battery. Do not use the battery if it has been severely impacted or dropped, or if the battery has been subjected to heavy pressure. Battery damage may not be visible on the outside of the case. Even if the surface of the battery does not show cracks or any other damage, the cells inside the battery may rupture or catch fire.

⚠ **DANGER! NEVER** use or leave battery pack in areas with temperatures above +60˚C (+140˚F). High temperature buildup in the battery, such as could occur near fires or stoves, inside a sun-heated car, or by setting the battery in direct sunlight may cause the battery to rupture or catch fire. Excessive temperatures may also degrade battery performance or shorten battery life.

⚠ **DANGER! DO NOT** expose the battery to rain, snow, saltwater, or any other liquids. Never charge or use a wet battery. If the battery gets wet, be sure to wipe it dry before using. The battery by itself is not waterproof.

⚠ **DANGER! NEVER** incinerate a used battery pack since internal battery gas may cause them to rupture or may cause an explosion.

⚠ **DANGER! NEVER** solder the battery terminals, or **NEVER** modify the battery pack. This may cause heat generation, and the battery may rupture, emit smoke or catch fire.

⚠ **DANGER!** Use the battery only with the transceiver for which it is specified. Never use a battery with any other equipment, or for any purpose that is not described in this instruction manual.

⚠ **DANGER!** If fluid from inside the battery gets in your eyes, blindness can result. Rinse your eyes with clean water, without rubbing them, and see a doctor immediately.**WARNING!** Immediately stop using the battery if it emits an abnormal odor, heats up, or is discolored or deformed. If any of these conditions occur, contact your Icom dealer or distributor.

WARNING! Immediately wash, using clean water, any part of the body that comes into contact with fluid from inside the battery.

WARNING! NEVER put the battery in a microwave oven, high-pressure container, or in an induction heating cooker. This could cause overheating, a fire, or cause the battery to rupture.

CAUTION: Always use the battery within the specific temperature range for the transceiver and the battery itself (–20˚C to +60˚C (-4˚F to +140˚F)). Using the battery out of its specific temperature range will reduce the battery's performance and battery life. Please note that the specified temperature range of the battery may exceed that of the transceiver. In such cases, the transceiver may not work properly because it is out of its operating temperature range.

CAUTION: Shorter battery life could occur if the battery is left fully charged, completely discharged, or in an excessive temperature environment (above +50˚C (+122˚F)) for an extended period of time. If the battery must be left unused for a long time, it must be detached from the radio after discharging. You may use the battery until the remaining capacity is about half, then keep it safely in a cool dry place with the temperature range as follows:

–20˚C to +50˚C (–4˚F to +122˚F) (within a month)

–20˚C to +35˚C (–4˚F to +122˚F) (within three months)

–20˚C to +25˚C (–4˚F to +122˚F) (within a year)

◇ Charging caution

Charge the battery pack at least once every six months, even if it has been not used for a long period of time. The battery pack will have slowly self-discharged, even though it has not been used. If the battery pack is left for a long period without being charged, its life cycle will be shorter, or worse, it will never accept a charge again.

Due to the characteristics of the Li-ion rectangular battery, the battery pack may change its shape as the charge and discharge cycles are repeated. This is a normal phenomenon, and it is quite safe to continue to use the pack, as long as it is properly handled. However, when the shape of the battery pack is so changed that the battery pack or battery cover can not be correctly attached to the transceiver, it is time to replace it with a new one. Otherwise, the transceiver can be damaged due to the loss of air tightness.

⚠ **DANGER! NEVER** charge the battery pack in areas with extremely high temperatures, such as near fires or stoves, inside a sun-heated car, or in direct sunlight. In such environments, the safety/protection circuit in the battery will activate, causing the battery to stop charging.

WARNING! DO NOT charge or leave the battery in the battery charger beyond the specified time for charging. If the battery is not completely charged by the specific time, stop charging and remove the battery from the battery charger. Continuing to charge the battery beyond the specific time limit may cause a fire, overheating, or the battery may rupture.

WARNING! NEVER insert the transceiver (battery attached to the transceiver) into the charger if it is wet or soiled. This could corrode the battery charger terminals or damage the charger. The charger is not waterproof.

CAUTION: DO NOT charge the battery outside of the specified temperature range: ±0˚C to +45˚C (+32˚F to +113˚F). Icom recommends charging the battery at +20˚C (+68˚F). The battery may heat up or rupture if charged out of the specified temperature range, and battery performance or battery life may be reduced.

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■ Regular battery charger

◇ Regular charging with the BC-204 + BC-147S
The supplied BC-204 with BC-147 provide regular charging of the Li-ion battery pack.
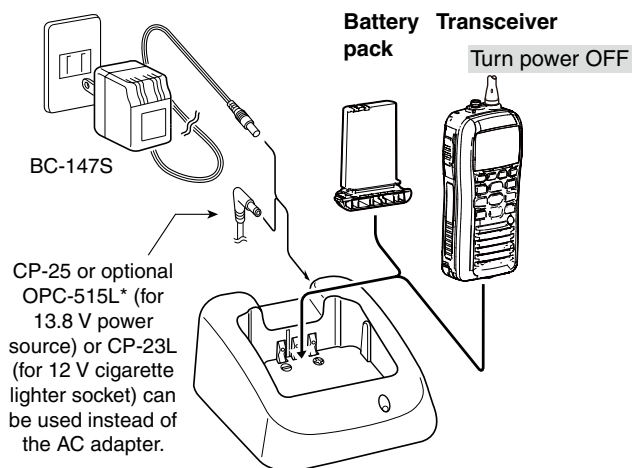
Battery pack **Transceiver**

Turn power OFF

BC-147S

CP-25 or optional OPC-515L* (for 13.8 V power source) or CP-23L (for 12 V cigarette lighter socket) can be used instead of the AC adapter.

*CAUTION: NEVER connect the OPC-515L to a power source using reverse polarity. This will ruin the battery charger.
White line: ⊕ Black line : ⊖

■ Optional battery chargers

◇ Rapid charging with the BC-205 + BC-145S
The optional BC-205 provides rapid charging of the Li-ion battery pack.
• An AC adapter (may be supplied with BC-205 depending on version) or the DC power cable (OPC-515L/CP-23L) is additionally required.
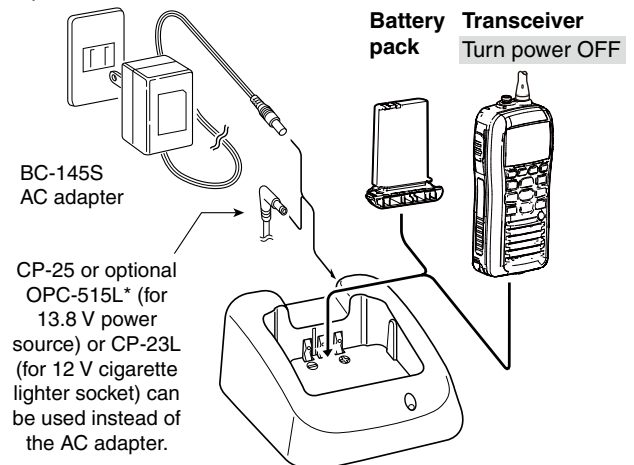
Battery pack **Transceiver**

Turn power OFF

BC-145S AC adapter

CP-25 or optional OPC-515L* (for 13.8 V power source) or CP-23L (for 12 V cigarette lighter socket) can be used instead of the AC adapter.

*CAUTION: NEVER connect the OPC-515L to a power source using reverse polarity. This will ruin the battery charger.
White line: ⊕ Black line : ⊖

◇ Rapid charging with the BC-197+BC-157S

The optional BC-197 allows up to 6 Li-ion battery packs to be charged simultaneously. The following items are additionally required.
• Six BC-157S charger adapter
• An optional AC adapter or the DC power cable (OPC-656)

Transceiver
Turn power OFF

Battery pack

AC adapter (Purchased separately)

AD-157S charger adapters are installed in each slot.

DC power cable (OPC-656)
(Connect with the DC power supply; 13.8 V/at least 7 A)

*Abou the OPC-656
Red line : ⊕   Black line : ⊖

IMPORTANT: Battery charging caution
Ensure the guide tabs on the battery pack are correctly aligned with the guide rails inside the charger adapter.
(This illustration is described with the BC-160.)

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Channel number			Frequency (MHz)	
USA	INT	CAN	Transmit	Receive
	01	01	156.050	160.650
01A			156.050	156.050
	02	02	156.100	160.700
	03	03	156.150	160.750
03A			156.150	156.150
	04		156.200	160.800
		04A	156.200	156.200
	05		156.250	160.850
05A		05A	156.250	156.250
06	06	06	156.300	156.300
	07		156.350	160.950
07A		07A	156.350	156.350
08	08	08	156.400	156.400
09	09	09	156.450	156.450
10	10	10	156.500	156.500
11	11	11	156.550	156.550
12	12	12	156.600	156.600
13*	13	13*	156.650	156.650
14	14	14	156.700	156.700
15*	15*	15*	156.750	156.750
16	16	16	156.800	156.800
17*	17	17*	156.850	156.850
	18		156.900	161.500
18A		18A	156.900	156.900
	19		156.950	161.550
19A		19A	156.950	156.950
20	20	20*	157.000	161.600
20A			157.000	157.000

Channel number			Frequency (MHz)	
USA	INT	CAN	Transmit	Receive
	21	21	157.050	161.650
21A		21A	157.050	157.050
		21b	Rx only	161.650
	22		157.100	161.700
22A		22A	157.100	157.100
	23	23	157.150	161.750
23A			157.150	157.150
24	24	24	157.200	161.800
25	25	25	157.250	161.850
		25b	Rx only	161.850
26	26	26	157.300	161.900
27	27	27	157.350	161.950
28	28	28	157.400	162.000
		28b	Rx only	162.000
	60	60	156.025	160.625
	61		156.075	160.675
61A		61A	156.075	156.075
	62		156.125	160.725
		62A	156.125	156.125
	63		156.175	160.775
63A			156.175	156.175
	64	64	156.225	160.825
64A		64A	156.225	156.225
	65		156.275	160.875
65A	65A	65A	156.275	156.275
	66		156.325	160.925
66A	66A	66A*	156.325	156.325
67*	67	67	156.375	156.375

Channel number			Frequency (MHz)	
USA	INT	CAN	Transmit	Receive
68	68	68	156.425	156.425
69	69	69	156.475	156.475
70	70	70	RX only	156.525
71	71	71	156.575	156.575
72	72	72	156.625	156.625
73	73	73	156.675	156.675
74	74	74	156.725	156.725
75*	75*	75*	156.775	156.775
76*	76*	76*	156.825	156.825
77*	77	77*	156.875	156.875
	78		156.925	161.525
78A		78A	156.925	156.925
	79		156.975	161.575
79A		79A	156.975	156.975
	80		157.025	161.625
80A		80A	157.025	157.025
	81		157.075	161.675
81A		81A	157.075	157.075
	82		157.125	161.725
82A		82A	157.125	157.125
	83	83	157.175	161.775
83A		83A	157.175	157.175
		83b	Rx only	161.775
84	84	84	157.225	161.825
84A			157.225	157.225
85	85	85	157.275	161.875
85A			157.275	157.275
86	86	86	157.325	161.925

Channel number			Frequency (MHz)	
USA	INT	CAN	Transmit	Receive
86A			157.325	157.325
87	87	87	157.375	161.975
87A			157.375	157.375
88	88	88	157.425	162.025
88A			157.425	157.425

WX channel	Frequency (MHz)	
	Transmit	Receive
1	RX only	162.550
2	RX only	162.400
3	RX only	162.475
4	RX only	162.425
5	RX only	162.450
6	RX only	162.500
7	RX only	162.525
8	RX only	161.650
9	RX only	161.775
10	RX only	163.275

* Low power only.

NOTE: Simplex channels, 3, 21, 23, 61, 64, 81, 82 and 83 **CANNOT** be lawfully used by the general public in U.S.A. waters.

■ Specifications

◇ General

- Frequency coverage : Tx 156.025–157.425 MHz
  Rx 156.050–163.275 MHz
- Mode : FM (16K0G3E),
  DSC (16K0G2B)
- Channel spacing : ±25 kHz
- Operating temp. range : −20°C to +60°C
- Current drain (at 7.4 V) : TX high   1.5 A
  (approximately)   Max. audio 0.50 A
- Power supply requirement : 7.4 V DC norminal
  (negative ground)
- Frequency stability : ±10 PPM (−20°C to +60°C)
- Antenna impedance : 50 Ω nominal
- Dimensions (approximately) : 61.2(W) × 141.4(H) × 43.2(D)mm
  : 2.4(W) × 5.6(H) × 1.7(D) inch
  (Projections not included)
- Weight (approximately) : 295 g/10.4 oz with BP-275

◇ Transmitter

- Output power : 5 W/1 W
- Modulation system : Variable reactance frequency
  modulation
- Max. frequency deviation : ±5.0 kHz
- Adjacent channel power : 70 dB
- Spurious emissions : -68 dBc (typical)

◇ Receiver

- Sensitivity (12 dB SINAD) : 0.25 µV (typical)
- Squelch sensitivity : 0.35 µV typical (at threshold)
- Intermodulation rejection ratio : 70 dB (typical)
- Spurious response rejection ratio:
  70 dB (typical)
- Adjacent channel selectivity : 70 dB (typical)
- Audio output power : 0.35 W typical at 10% distor-
  tion with an 8 Ω load (External)
  : 0.7 W typical at 10% distortion
  with an 8 Ω load (Internal)

All stated specifications are subject to change without notice or obligation.

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14 SPECIFICATIONS AND OPTIONS

■ Options

• **BP-275** Li-ion BATTERY PACK
 7.4V 1590mAh (Typical) Li-ion battey pack. The battery pack must be charged with the supplied BC-204 or the optional BC-205.

• **BC-204** REGULAR CHARGER + **BC-147S** AC ADAPTER
 Used for regular charging of battery pack. The same as supplied with the transceiver.

• **BC-205** RAPID CHARGER + **BC-145S** AC ADAPTER + **OPC-515L** DC POWER CABLE
 For rapid charging of battery pack.

• **HM-167** SPEAKER MICROPHONE
 Full sized waterproof speaker-microphone including alligator type clip to attach to your shirt or collar, etc.

• **FA-SC59V** ANTENNA

• **CP-25** CIGARETTE LIGHTER CABLE
 For charging the battery pack through a 12 V cigarette lighter socket. (For BC-204)

• **MB-109** BELT CLIP

• **MB-96F** LEATHER BELT HANGER

Approved Icom optional equipment is designed for optimal performance when used with an Icom transceiver.
Icom is not responsible for the destruction or damage to an Icom transceiver in the event the Icom transceiver is used with equipment that is not manufactured or approved by Icom.

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SAFETY TRAINING INFORMATION

WARNING

Your Icom radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "General Population Use" in an uncontrolled environment.

This radio has been evaluated for compliance at the distance of 2.5 cm (1 inch) with the FCC RF exposure limits for "General Population Use." 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 01-01 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 requirements for wireless RF exposure.; Belt Clip (MB-109), Rechargeable Li-Ion Battery Pack (BP-275).

CAUTION

To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for general population 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 "transmit indicator" appears on the LCD. 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 clip which is listed on page 28 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.

Votre radio Icom produit une énergie électromagnétique de radiofréquences (RF), en mode de transmission. Elle est conçue pour une «utilisation grand public», dans un environnement non contrôlé. Cet appareil a été évalué et jugé conforme, à 2,5 cm, aux limites d'exposition aux **AVERTISSEMENT** RF de la FCC, pour une «utilisation grand public». En outre, votre radio Icom satisfait les normes et directives qui suivent en matière de niveaux d'énergie et d'énergie électromagnétique de RF et d'évaluation de tels niveaux en ce qui concerne l'exposition humaine :

• Supplément C, édition 01-01, du Bulletin OET de la FCC, «Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields».
• Norme de l'American National Standards Institute (ANSI) : IEEE C95.1-1992 sur les niveaux de sécurité compatibles avec l'exposition humaine aux champs électromagnétiques de radiofréquences (3 kHz à 300 GHz).
• Norme de l'ANSI : IEEE C95.3-1992 sur la méthode d'évaluation recommandée du champ magnétique potentiellement dangereux des radiofréquences et des micro-ondes.
• Les accessoires qui suivent sont approuvés pour une utilisation avec ce produit. L'utilisation d'accessoires autres que ceux précisés peut entraîner des niveaux d'exposition aux RF supérieures aux limites établies par la FCC en matière d'exposition aux RF sans fil; attache pour ceinture (MB-109), bloc-piles rechargeable au lithium-ion (BP-275).

CAUTION
Afin de vous assurer que votre exposition à une énergie électromagnétique de RF se situe dans les limites permises par la FCC pour une utilisation grand public, veuillez en tout temps respecter les directives MISE EN GARDE suivantes :

• **NE PAS** faire fonctionner la radio sans qu'une antenne appropriée y soit fixée, car ceci risque d'endommager la radio et causer une exposition supérieure aux limites établies par la FCC. L'antenne appropriée est celle qui est fournie avec cette radio par le fabricant ou une antenne spécialement autorisée par le fabricant pour être utilisée avec cette radio.
• **NE PAS** émettre pendant plus de 50% du temps total d'utilisation de l'appareil («50% du facteur d'utilisation»). Émettre pendant plus de 50% du temps total d'utilisation peut causer une exposition aux RF supérieure aux limites établies par la FCC. La radio est en train d'émettre lorsque le témoin du mode de transmission s'affiche sur l'écran ACL. La radio émettra si vous appuyez sur le bouton du microphone.
• **TOUJOURS** tenir l'antenne éloignée d'au moins 2,5 cm de votre corps au moment d'émettre et utiliser uniquement l'attache pour ceinture Icom illustrée à la p. 28, lorsque vous attachez la radio à votre ceinture, ou à autre chose, de façon à vous assurer de ne pas provoquer une exposition aux RF supérieure aux limites fixées par la FCC. Pour offrir à vos interlocuteurs la meilleure qualité de transmission possible, tenez l'antenne à au moins 5 cm de votre bouche et légèrement de côté.

Les renseignements ci-dessus fournissent à l'utilisateur toute l'information nécessaire sur l'exposition aux RF et sur ce qu'il faut faire pour assurer que cette radio fonctionne en respectant les limites d'exposition aux RF établies par la FCC.

Interférence électromagnétique et compatibilité
En mode de transmission, votre radio Icom produit de l'énergie de RF qui peut provoquer des interférences avec d'autres appareils ou systèmes. Pour éviter de telles interférences, mettez la radio hors tension dans les secteurs où une signalisation l'exige. **NE PAS** faire fonctionner l'émetteur dans des secteurs sensibles au rayonnement électromagnétique tels que les hôpitaux, les aéronefs et les sites de dynamitage.

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