ICOM

INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER

IC-M125

Icom Inc.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL – This instruction manual contains important safety and operating instructions for the IC-M125.

EXPLICIT DEFINITIONS

The following explicit definitions apply to this instruction manual.

WORD	DEFINITION
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No personal injury, risk of fire or electric shock.

CAUTIONS

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

NEVER allow children to touch the transceiver.

AVOID using or placing the transceiver in direct sunlight or in areas with temperatures below −20 ℃ (−4 ℉) or over +60 ℃ (+140 ℉).

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

KEEP the transceiver and microphone at least 1 meter away from the vessel's magnetic navigation compass.

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

DO NOT use any thing other than your fingertips to push the front panel switches, as the switches could be damaged.

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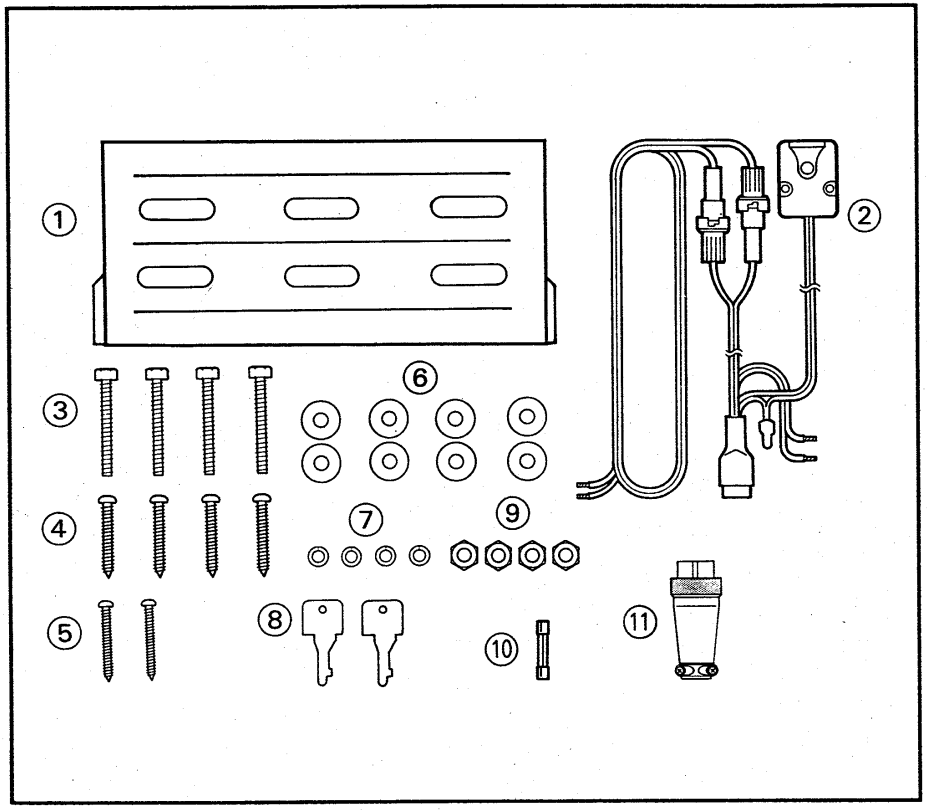
UNPACKING

After unpacking, immediately report any damage to the delivering carrier or dealer. It is recommended you keep the shipping cartons.

This set includes the following accessories with the transceiver main body and the microphone.



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

* Black model : OPC-291
White model : OPC-291A

• PRIORITIES

1) Read all rules and regulations pertaining to priorities and keep an up-to-date copy handy. Safety and distress calls take priority over all others.

2) You must monitor channel 16 when you are not operating on another channel.

3) False or fraudulent distress signals are prohibited under law.

• PRIVACY

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

2) Indecent or profane language is prohibited.

• RADIO LICENSES

(1) SHIP STATION LICENSE

When your craft is equipped with a VHF FM transceiver, you must have a current radio station license before using the transceiver. It is unlawful to operate a ship station which is not licensed.

Inquire through your dealer or the appropriate government agency for a Ship-Radiotelephone license. This license includes the call sign which is your craft's identification for radio purposes.

(2) OPERATOR'S LICENSE

A Restricted Radiotelephone Operator Permit is the license most often held by small vessel radio operators when a radio is not required for safety purposes. You can usually obtain this permit by mail.

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

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

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

2 PANEL DESCRIPTION

■ Front panel

LOCKOUT SCAN SWITCH [L-SCAN](SCAN)
- Activates lockout scan. (p. 17)
- Activates full scan as the secondary function. (p. 17)

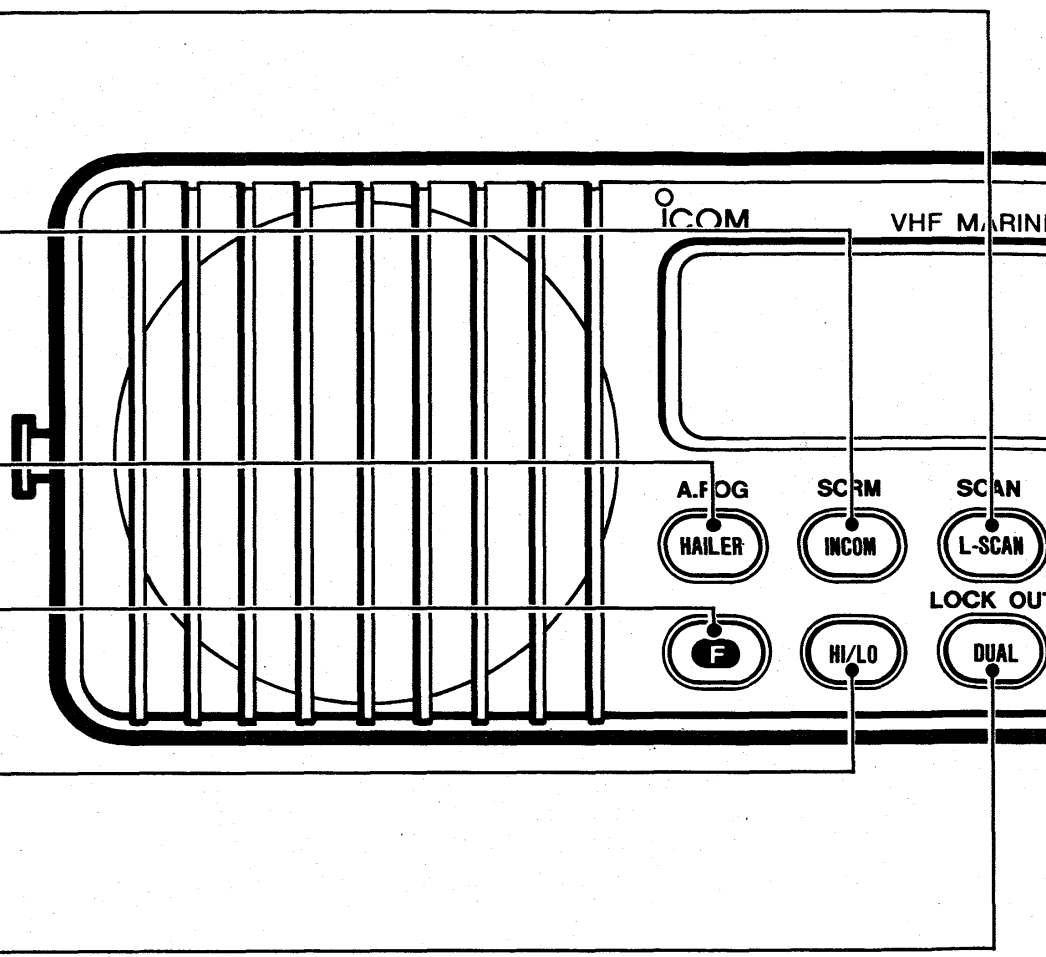
INTERCOM SWITCH [INCOM](SCRM)
- Activates the intercom function. (p. 22)
- Activates the voice scrambler as the secondary function. (p. 25)
  - An optional unit is necessary.

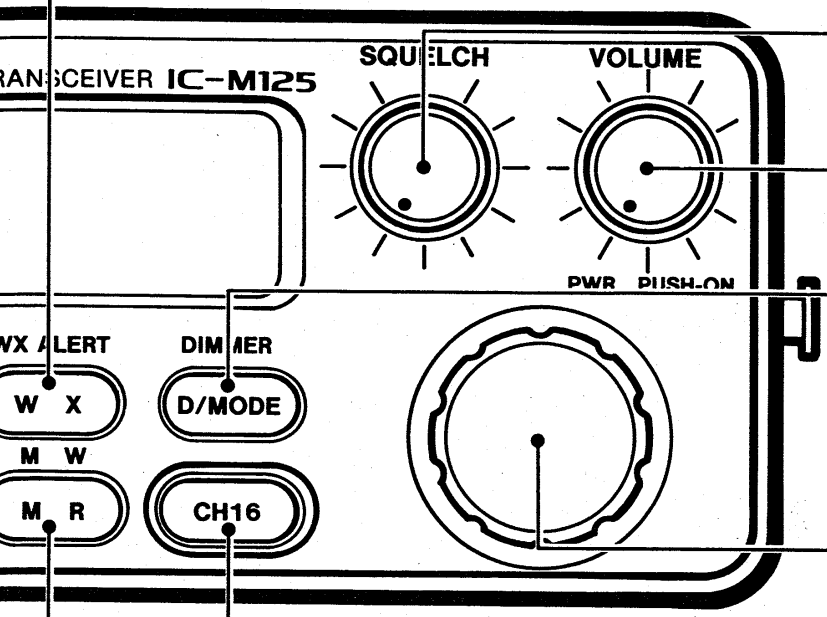
HAILER SWITCH [HAILER](A.FOG)
- Activates the hailer function. (p. 21)
- Activates an auto fog horn as the secondary function. (p. 24)

FUNCTION SWITCH [F]
Activates the secondary function of some switches.

POWER HIGH/LOW SWITCH [HI/LO]
Selects high or low output power. (p. 12)

DUALWATCH SWITCH [DUAL](LOCK OUT)
- Activates the dualwatch function. (p. 19)
- Locks out the selected channel as the secondary function. (p. 17)





WEATHER MODE SWITCH [WX](WX ALERT)
- Selects the weather mode. (p. 11)
- Turns the weather alert ON and OFF as the secondary function. (p. 18)

SQUELCH CONTROL [SQUELCH]
- Rotate clockwise to eliminate audio noise. (p. 12)
- Activates the built-in attenuator when rotated far clockwise.

VOLUME CONTROL [VOLUME](PWR PUSH-ON)
- Push to turn power ON and OFF. (p. 12)
- Rotate to adjust the audio output level. (p. 12)

DIAL/MODE SWITCH [D/MODE](DIMMER)
- Selects the dial mode.(p. 11)
- Selects USA or international channels alternately. (p. 11)
- Turns the backlighting ON and OFF, and changes its intensity as the secondary function. (p. 20)

CHANNEL SELECTOR
Selects an operating channel. (p. 10)

CHANNEL 16 SWITCH [CH16]
Selects the channel 16 mode. (p. 10)

MEMORY MODE SWITCH [MR](MW)
- Selects the memory mode. (p. 14)
- Selects the memory programming condition as the secondary function. (p. 15)

■ Function display

WEATHER ALERT FUNCTION INDICATOR
Shows the weather alert function is activated. (p. 18)

LOW POWER INDICATOR
Shows that low output power is selected. (p. 12)

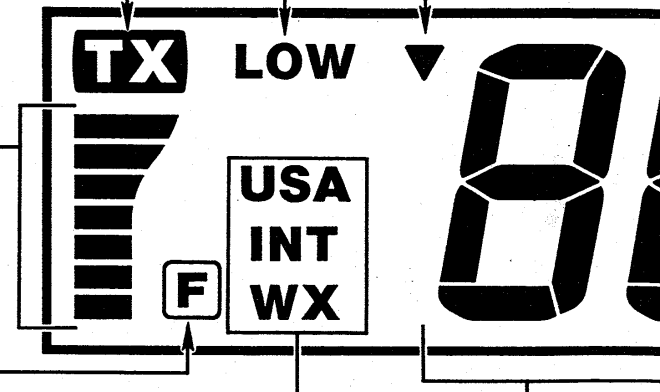
TX INDICATOR
Appears while transmitting. (p. 12)

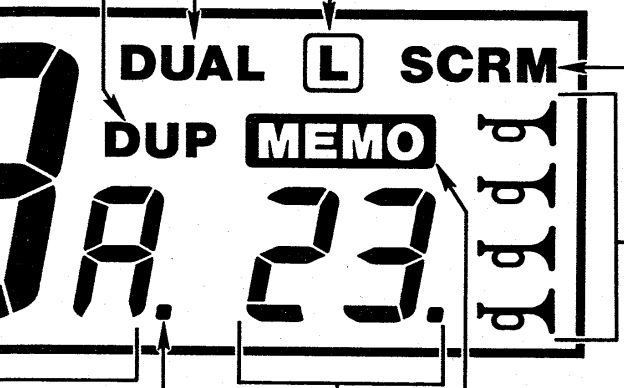
S/RF INDICATOR
- Shows the relative signal strength while receiving. (p. 12)
- Shows high, or low output power selection while transmitting. (p. 12)

FUNCTION INDICATOR
Appears when [FUNC] is pushed, and indicates a secondary function can be activated.

MODE INDICATORS
- "USA" shows the dial mode (USA) is selected. (p. 11)
- "INT" shows the dial mode (international) is selected. (p. 11)
- "WX" shows the weather mode is selected. (p. 11)
- No indicator appears when the channel 16 mode is selected. (p. 11)

CHANNEL INDICATOR
Shows the operating channel.





DUPLEX INDICATOR
Shows the selected channel is a duplex channel.

DUALWATCH INDICATOR
Shows that dualwatch is activated. (p. 19)

LOCKOUT INDICATOR
Shows the selected channel is a lockout channel. (p. 17)

SCRAMBLER INDICATOR
Shows the voice scrambler function is activated. (p. 25)

AUTO FOG HORN INDICATORS
Show the fog horn function is activated. The number of indicators shows the selected fog horn type. (p. 24)

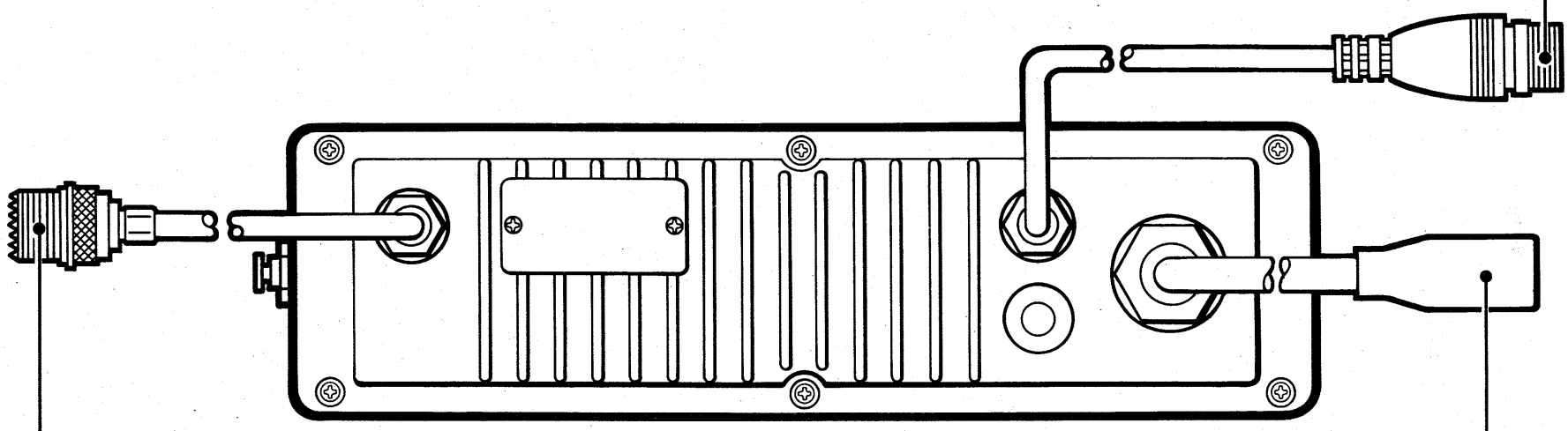
MEMORY MODE INICATOR
Shows the memory mode is selected. (p. 14)

MEMORY NUMBER INDICATOR
- Shows the selected memory number.
- "b" is indicated when the connected battery capacity is exhausted.

SCAN INDICATOR
Blinks while lockout or full scan is activated. (p. 17)

■ Rear panel

ACC CONNECTOR
Connects speaker and switches for the hailer, intercom and fog horn functions. With an optional UA-1 AUDIO AMPLIFIER, 30 W output is possible from the speaker for the hailer or fog horn function. (p. 8)



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

CAUTION: Transmitting without an antenna will damage the transceiver.

DC POWER CONNECTOR
Connect the supplied DC power cable from this connector to an external 12 V DC power source. (p. 8)

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

■ Mounting the transceiver

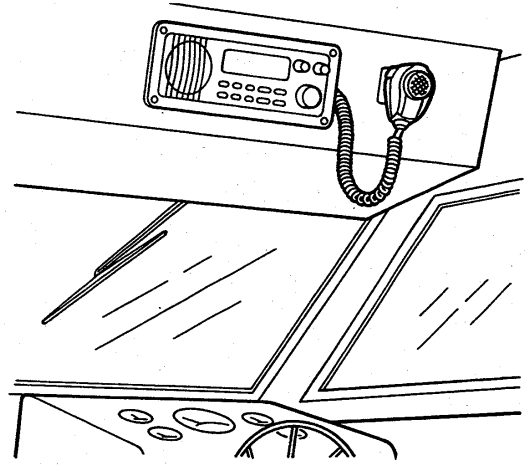
The universal mounting bracket supplied with your transceiver allows overhead or dashboard mounting. Please read the following instructions carefully.

- Mount the transceiver securely with bolts and nuts or it may come loose as a result of wave shocks or vibration.
- Mount the transceiver so that the face of the transceiver is at 90 degrees to your line of sight when operating it.

CAUTION: KEEP the transceiver and microphone at least 1 meter away from your vessel's magnetic navigation compass.

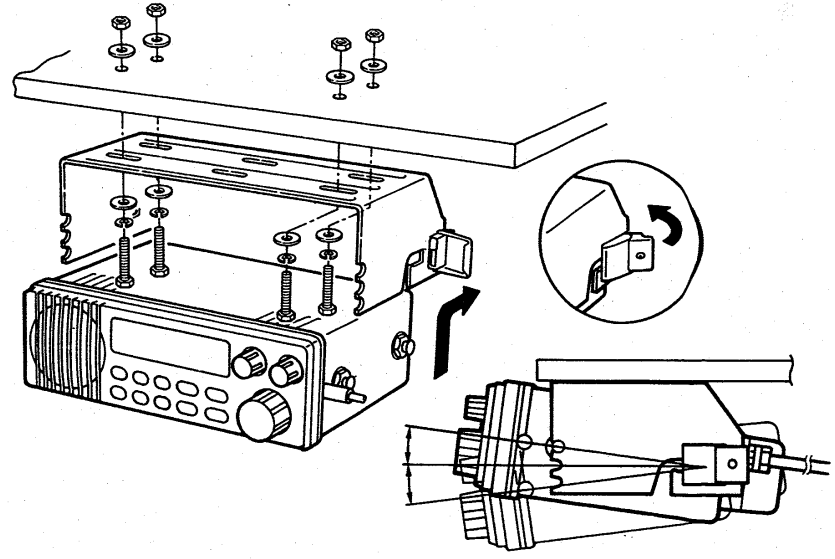
NOTE: Check the installation angle; the function display may not be easy-to-see at some angles.

DASHBOARD MOUNTING



An optional MB-33 is available for mounting the transceiver as above.

OVERHEAD MOUNTING



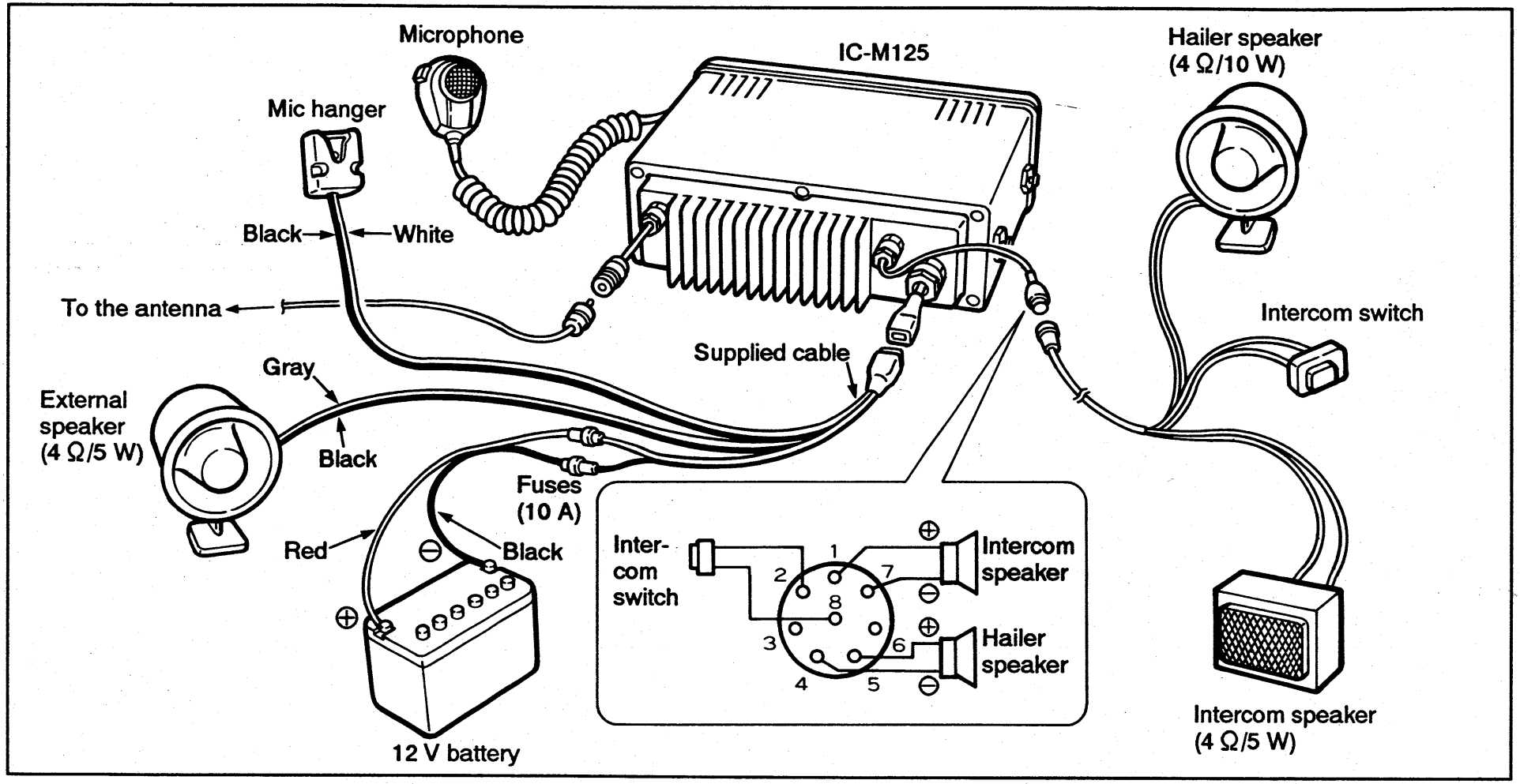
■ Antenna

One of the most important items that influences the performance of any communication system is an antenna. Ask your dealer about antennas and the best place to mount them.

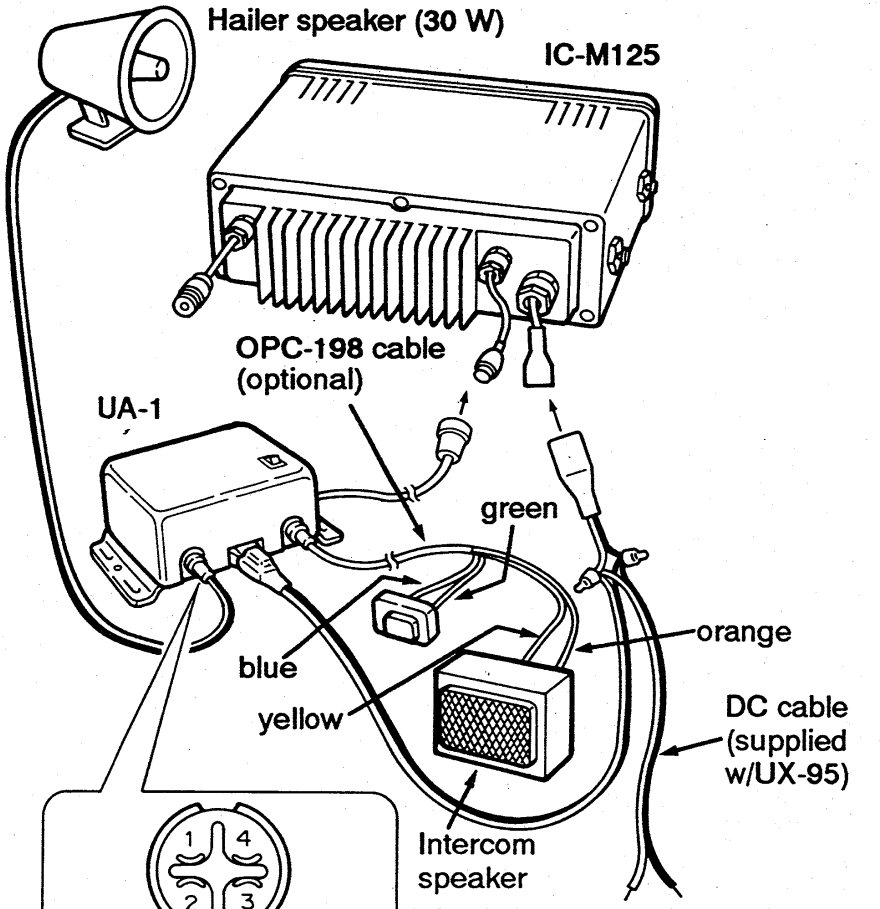
■ Connections

Use a 12 V DC power source and be sure of the following points:

- **AVOID** long cable runs to the antenna and power source.
- **KEEP** these cables as far as possible from electrical pumps, generators and other electronic instruments.



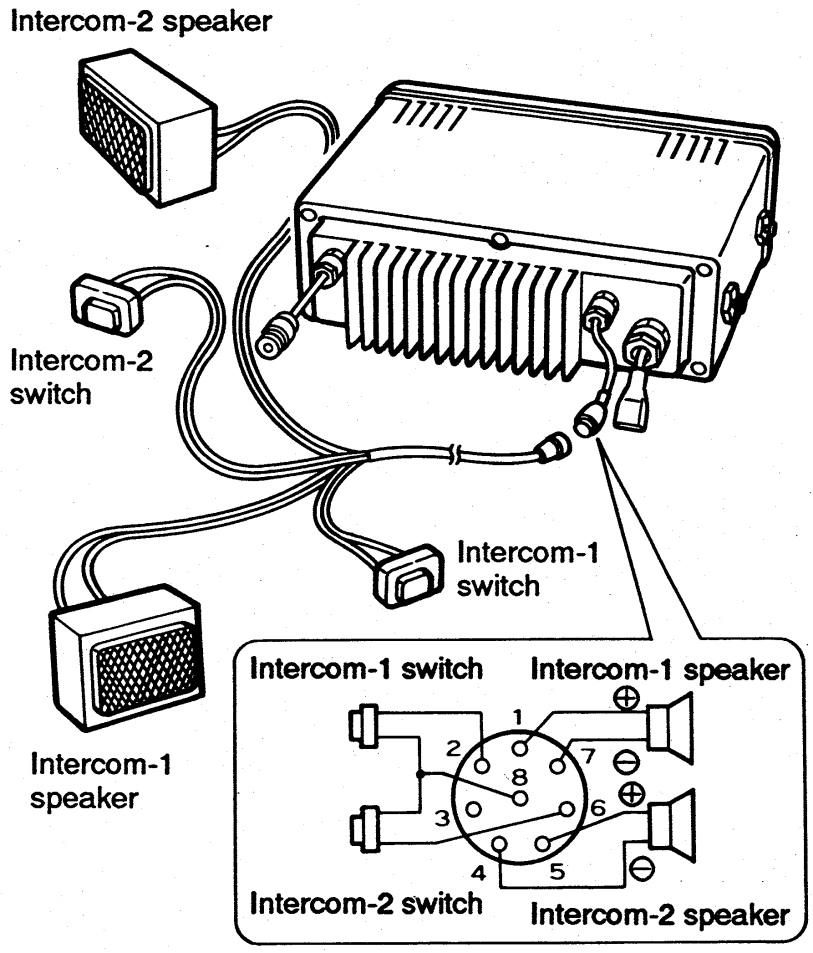
WHEN USING THE UA-1 (OPTIONAL)



Pin number	Impedance
1 and 4	16 Ω
2 and 4	8 Ω
3 and 4	4 Ω

The UX-95 MUST be installed when using the UA-1. otherwise self-oscillation may occur.

WHEN USING TWO SEPARATE INTERCOMS



- The hailer function cannot be used when 2 intercoms are used.

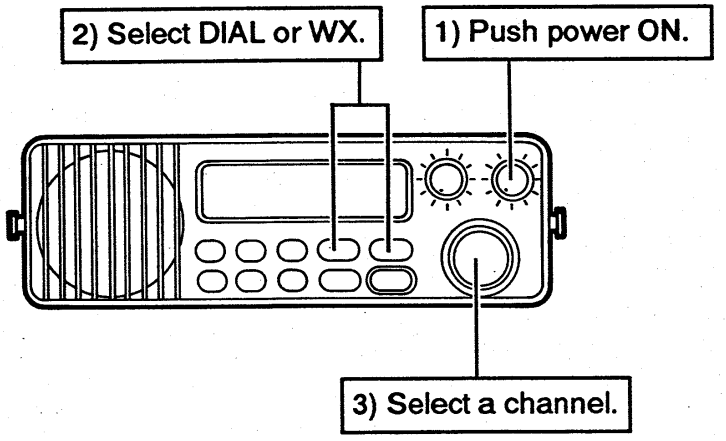
4 BASIC OPERATION

■ Selecting a channel

1) Push [VOLUME] to turn power ON.
   • Channel 16 is displayed.

2) Select your desired mode.
   • Dial mode (USA) : push [D/MODE] once or twice.
   • Dial mode (INT) : push [D/MODE] once or twice.
   • Weather mode : push [WX].

3) Rotate the channel selector to select your desired channel.

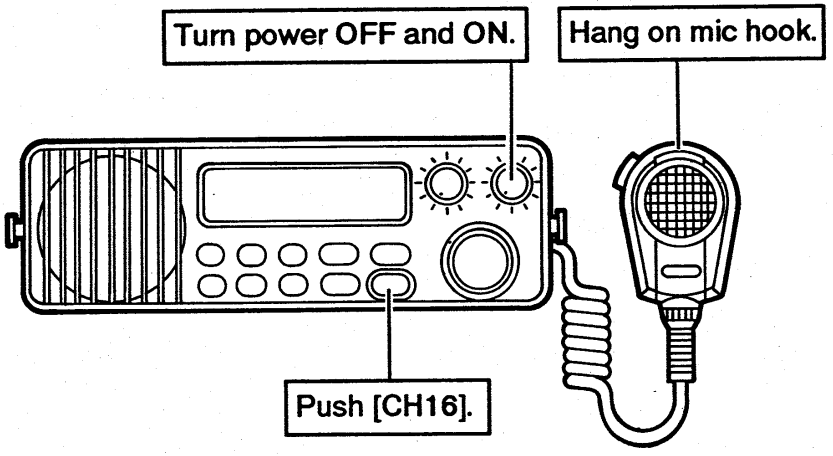


■ Selecting channel 16

Channel 16 is a call channel for ship-to-ship contact and is also used as an emergency and distress channel.

Channel 16 mode is instantly selected in any of the following ways:
- Push [CH16].
- Turn power OFF and ON again.
- Hang the microphone on the microphone hanger.

The dial mode has USA channel 16 and international channel 16. These are the same frequency as the channel 16 in the channel 16 mode.



■ Mode types

MODE TYPE	DISPLAY	DESCRIPTION	MODE SELECTION
CH16 mode		There is channel 16 only. The channel selector does not function in this mode.	Push [CH16].
Dial mode	USA channel  International channel 	There are all international VHF marine channels in this mode. USA channels are a part of international channels and are generally used in U.S. waters. Push [D/MODE] to change between USA channels and international channels.	Push [D/MODE].
Weather mode		There are 10 weather channels. Transmitting is impossible in this mode.	Push [WX].
Memory mode		There are 24 memories. Only user-programmed memories can be selected.	Push [MR].

■ Receiving

1) Push [VOLUME] to turn power ON.

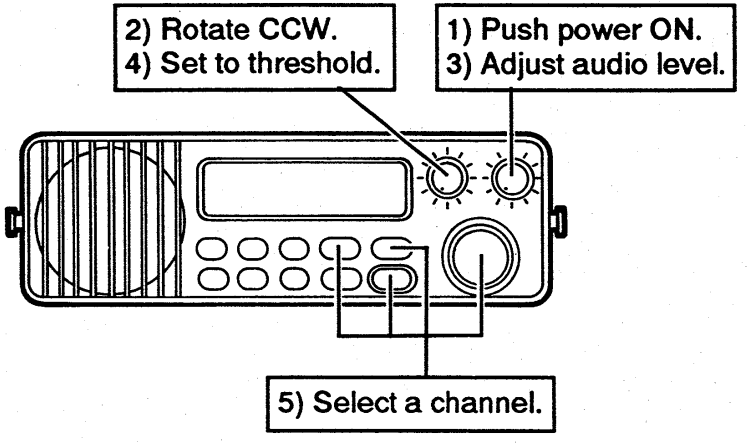
2) Rotate [SQUELCH] fully counterclockwise.

3) Adjust [VOLUME] to a suitable audio level.

4) Rotate [SQUELCH] clockwise until the audio noise disappears.

5) Select the desired channel. See p. 10 for details.

- When a signal is received:
  - The squelch opens.
  - Audio is emitted from the speaker.
  - The S/RF indicator shows relative signal strength.



■ Transmitting

Before transmitting a signal, read call procedures on p. 13.

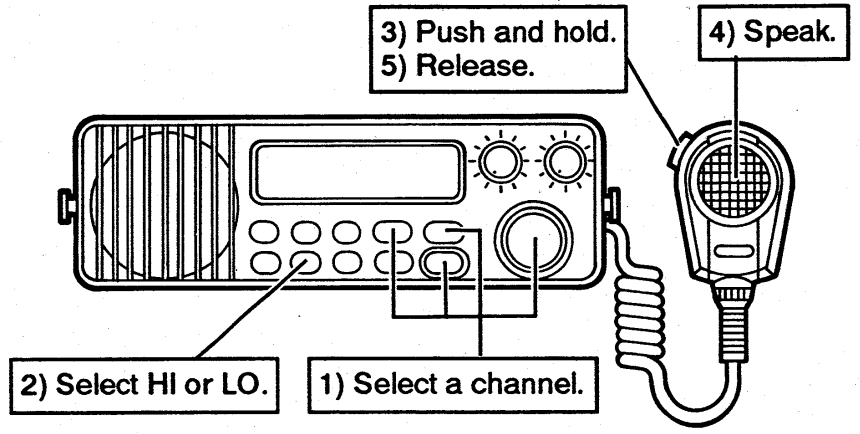
1) Select an operating channel. See p. 10 for details.

2) Push [HI/LO] to select transmit output power.
   - "LOW" appears when low output power is selected.
   - Transmission is restricted on some channels. See p. 13.

3) Push and hold the PTT switch to transmit.
   - "TX" and the RF indicator appear.

4) Speak into the microphone at your normal voice level.
   - Do not hold the microphone too closely to your mouth or speak too loudly. This may distort the transmit signal.

5) Release the PTT switch to receive.



CALL PROCEDURES

You must identify yourself when you transmit and you must respect time limits.

1) Give your call sign each time you call another vessel or a coast station. If you have no call sign, identify the station by giving the vessel name and the name of the license.

2) Give your call sign at the end of each transmission that lasts more than 3 minutes.

3) You must pause and give your call sign at least once every 15 minutes during long ship-to-shore calls.

4) Keep your calls short (less than 3 min.). Wait 2 minutes before repeating a call.

5) Unnecessary transmissions are not allowed.

TRANSMITTER RESTRICTIONS

CHANNEL NUMBER	U.S.A. CHANNELS	INTERNATIONAL CHANNELS
13	Momentary high power*	No restriction
15	Receive only	Low power only
17	Low power only	Low power only
67	Momentary high power*	No restriction
Weather channels	Receive only	

***Momentary high power**

On these channels, transmissions using high power are momentarily possible. To transmit using high power, push and hold [HI/LO] and [PTT].

TIME-OUT TIMER (TOT)

The transceiver has a TOT to prevent continuous, long transmission. The transceiver automatically returns to receive when you transmit for more than 5 min. continuously.

CAUTION: When "TX" blinks during transmission at high output power, there is an antenna problem.
Stop the transmission immediately; then, check the questions at right.

- Is an antenna connected?
- Is the antenna connector tight?
- Is the cable between the antenna and the transceiver free of cuts or shorts?
- Is the antenna correctly installed?
- Is the antenna free from bends or cuts?

5 FUNCTION OPERATION

■ Memory mode operation

The transceiver has 24 memories. The memories are especially useful to quickly call up channels you often use.

MEMORY MODE
(Memory channel programmed example)

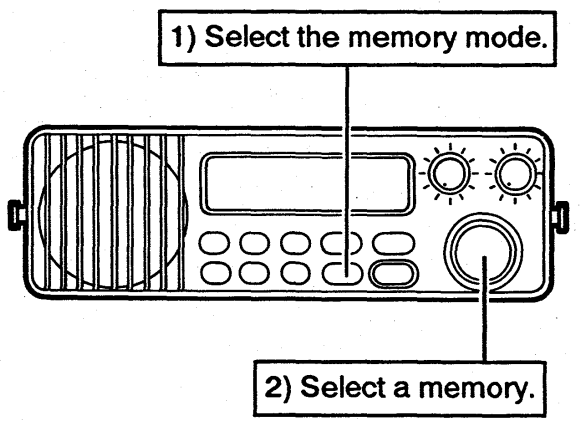
Memory 0	USA 16 MEMO 0	USA channel 16 has been programmed.
Memory 1	INT 20A MEMO 1	International channel 20 has been programmed.
Memory 2	USA - - MEMO 2	No channel has been programmed. Does not appear when regularly selected.
Memory 3	WX 7 L MEMO 3	Weather channel 7 has been programmed. • "L" means this memory is locked out. (See p. 17)
• • • •	• • • •	
Memory 23	USA 88 DUP MEMO 23	USA channel 88 has been programmed.

• SELECTING A MEMORY

1) Push [MR] to select the memory mode.

2) Rotate the channel selector to select the desired memory.

NOTE: Only memories you have already programmed can be selected. If 2 or more memories have not been programmed, the channel selector is deactivated. Memory 0 has already been programmed at the factory before delivery.



• PROGRAMMING A MEMORY

1) Push [F]; then, push [MR] .
   - "MEMO" blinks. This means the transceiver is in the memory programming condition.
   - Push [MR] within 5 sec. after pushing [F], otherwise " F " disappears.

2) Rotate the channel selector to select the desired memory.

3) Push [D/MODE] or [WX] to select the desired mode.
   - When the dial mode is selected, choose USA or international channels by pushing [D/MODE].
   - Channel number blinks.

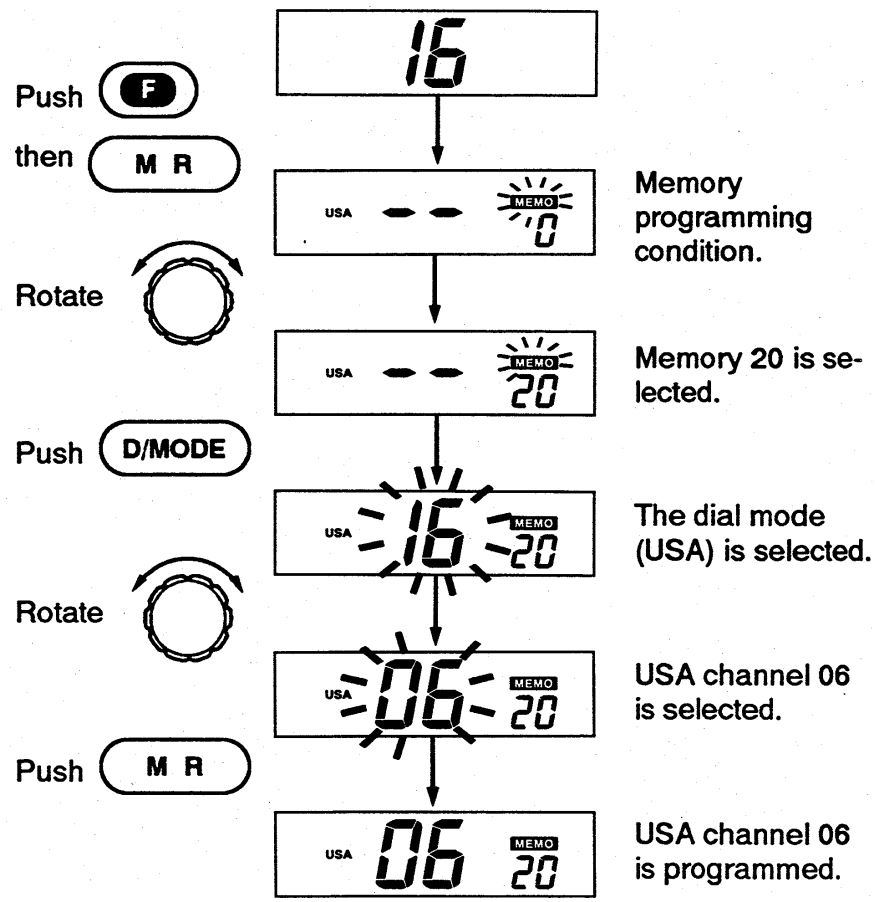
4) Rotate the channel selector to select the desired channel you want to program.

5) Push [MR] to complete programming.
   - The memory mode is automatically selected.

6) For programming other memories, repeat from step 1.

NOTE: Output power can be programmed in a memory. Push [HI/LO] while " MEMO " blinks to program.

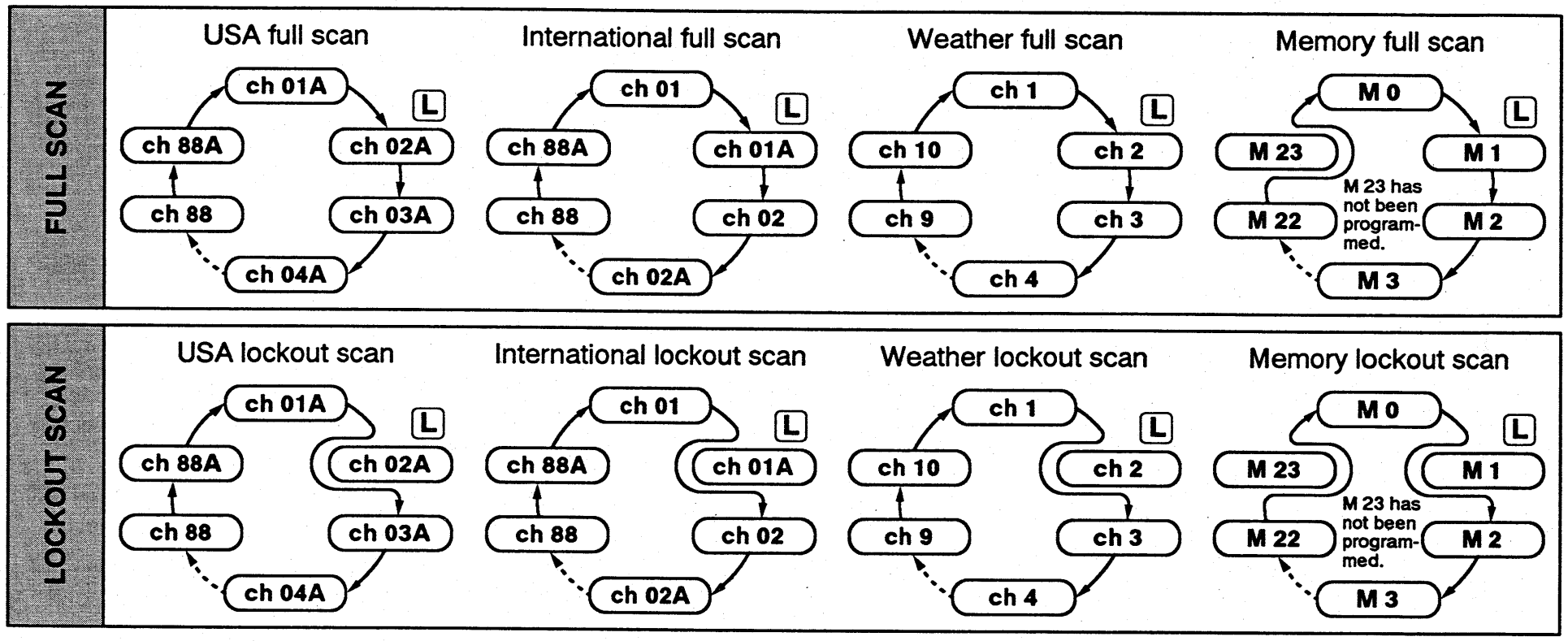
[EXAMPLE]: Writing USA channel 06 into memory 20.



■ Scan operation

The transceiver has full scan and lockout scan functions. Each scan includes USA channel scan, international channel scan, weather channel scan and memory scan.

8 types of scanning are possible with the transceiver as follows:



"L" shows that the channel is a lockout channel.

When a signal is received, scan pauses on the channel until the signal disappears.

- The channel selector does not function while a scan is activated.
- Transmitting (pushing PTT) cancels the scan.

• FULL SCAN

1) Select the desired mode.
   - Push [D/MODE] once or twice to select the dial mode for USA channels or international channels.
   - Push [WX] to select the weather mode.
   - Push [MR] to select the memory mode.

2) Rotate [SQUELCH] clockwise until the audio noise disappears.

3) Push [F]; then, push [L-SCAN] to start the scan.
   - The scan indicator (a dot) blinks while scanning.

4) To cancel the scan, push [L-SCAN] again.

• LOCKOUT SCAN

1) Select the desired mode.
   - Push [D/MODE] once or twice to select the dial mode for USA channels or international channels.
   - Push [WX] to select the weather mode.
   - Push [MR] to select the memory mode.

2) Rotate [SQUELCH] clockwise until the audio noise disappears.

3) Push [L-SCAN] to start the scan.
   - The scan indicator (a dot) blinks while scanning.

4) To cancel the scan, push [L-SCAN] again.

PROGRAMMING A LOCKOUT CHANNEL

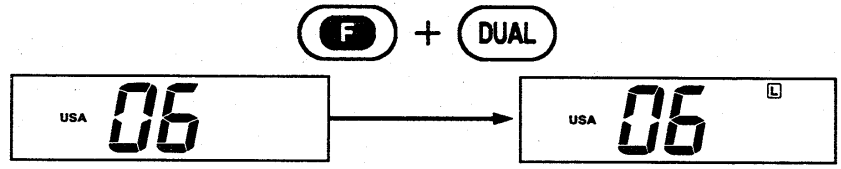
1) Select the desired mode.

2) Select the channel to be locked out using the channel selector.

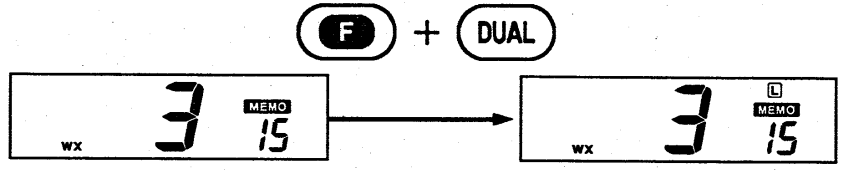
3) Push [F]; then, push [DUAL] to lockout the channel.
   - "L" appears.

4) To cancel the lockout, repeat from step 1.
   - "L" disappears.

[EXAMPLE]: Locking out USA channel 06.



[EXAMPLE]: Locking out memory 15.



■ Weather alert

When the IC-M125 catches a weather alert tone during scanning on weather channels, the transceiver sounds a beep to inform that an emergency weather report is on the air.

• TURNING THE FUNCTION ON AND OFF

1) Push [F].
   • "Ⓕ" appears.

2) Push [WX] to turn the function ON.
   • "▼"(weather alert indicator) appears.

3) To turn the function OFF, repeat steps 1 and 2.
   • "▼" disappears.

The weather alert function is available only while scanning weather channels. Unless weather scan is active, the weather alert does not function, even when "▼" is indicated.

What is the weather alert tone?
The NOAA weather radio broadcasts are continuous, pre-recorded broadcasts. In case of a local weather emergency, the broadcast becomes live. Before this live broadcast, a warning tone (1050 Hz) is transmitted.

• ACTIVATING THE FUNCTION

1) Turn the weather alert function ON.
   • See left for details.

2) Start weather full scan or weather lockout scan.
   • See pgs. 16 ~ 17 for scan details.
   • Memory scans can also be used. See CONVENIENT below.

3) When the transceiver catches an alert tone on a weather channel, a 1 sec. beep sounds and the scan automatically stops on the channel to receive the emergency weather report.

4) To cancel the scan manually, push [L-SCAN].

NOTE: While scanning on the weather channels with the weather alert function ON, the scan does not pause for normal signals.

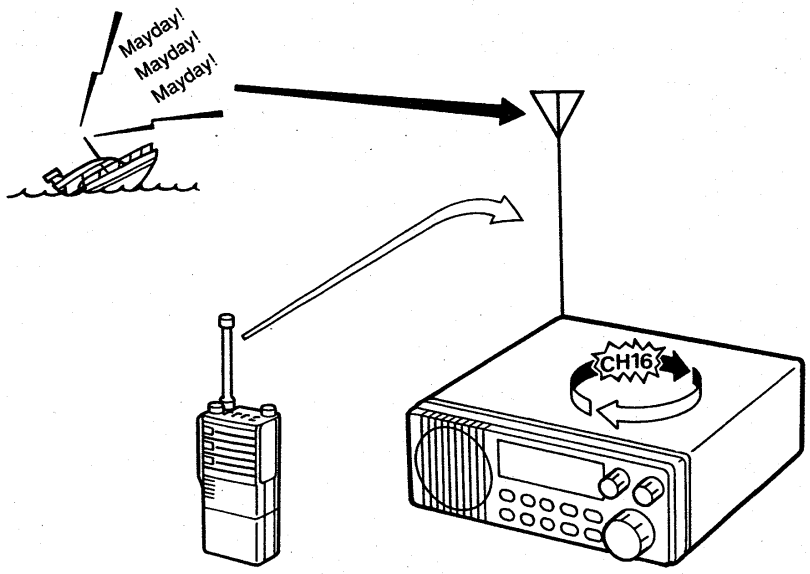
CONVENIENT

If weather channels have been programmed into memory channels, use memory full scan or memory lockout scan with the weather function ON. The scan pauses for signals on USA or international channels and stops with a beep for an alert tone on weather channels.

■ Dualwatch

The dualwatch function monitors channel 16 while you are receiving another channel.

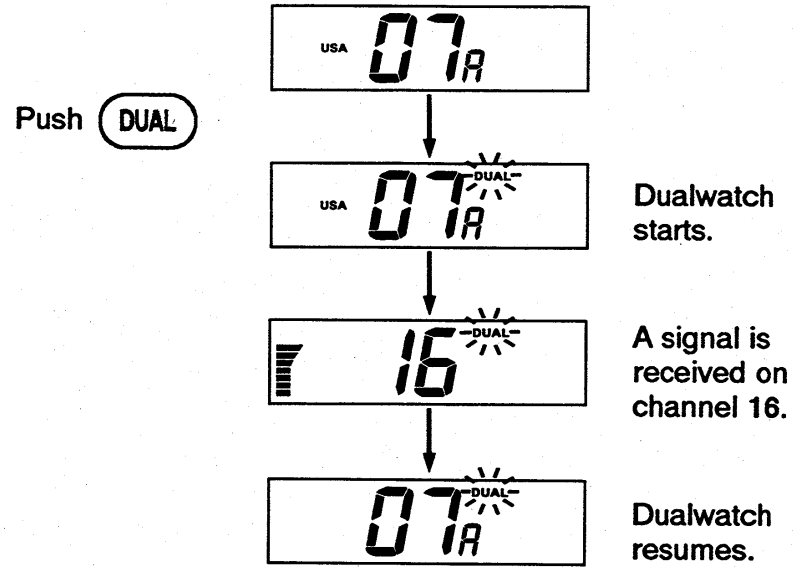
DUALWATCH SIMULATION



- If a signal is received on channel 16, dualwatch stops on channel 16 until the signal disappears.
- During dualwatch, the channel selector does not function and transmitting on channel 16 is impossible.

1) Select the desired operating channel.
2) Push [DUAL] to start the dualwatch function.
   - "DUAL" blinks.
3) To cancel dualwatch, push [DUAL] again.
   - "DUAL" disappears.

[EXAMPLE]: Operating dualwatch on USA channel 07A.



■ Backlight intensity

The backlight can be turned ON and OFF, and the intensity can be selected from 3 levels.

• TURNING OFF THE BACKLIGHTING

1) Push [F].
   • "Ⓕ" appears.

2) Push [D/MODE] to turn the backlighting OFF.

3) To turn the backlighting ON again, repeat steps 1 and 2.

• ADJUSTING THE BACKLIGHT INTENSITY LEVEL

1) Push [F].
   • "Ⓕ" appears.

2) While pushing [D/MODE], rotate the channel selector to select the desired level of backlight intensity.

3) Release [D/MODE].

■ Internal speaker OFF

When you connect an external speaker and the IC-M125 internal speaker is not required, the internal speaker can be deactivated.

1) Turn power OFF.

2) While pushing [HAILER], turn power ON, and keep pushing [HAILER] until step 4.
   • "SP on" appears.

3) Rotate the channel selector to select "SP oF."

4) Release [HAILER].

When you want to turn the internal speaker ON again, repeat from step 1 and then select "SP on" in step 3.

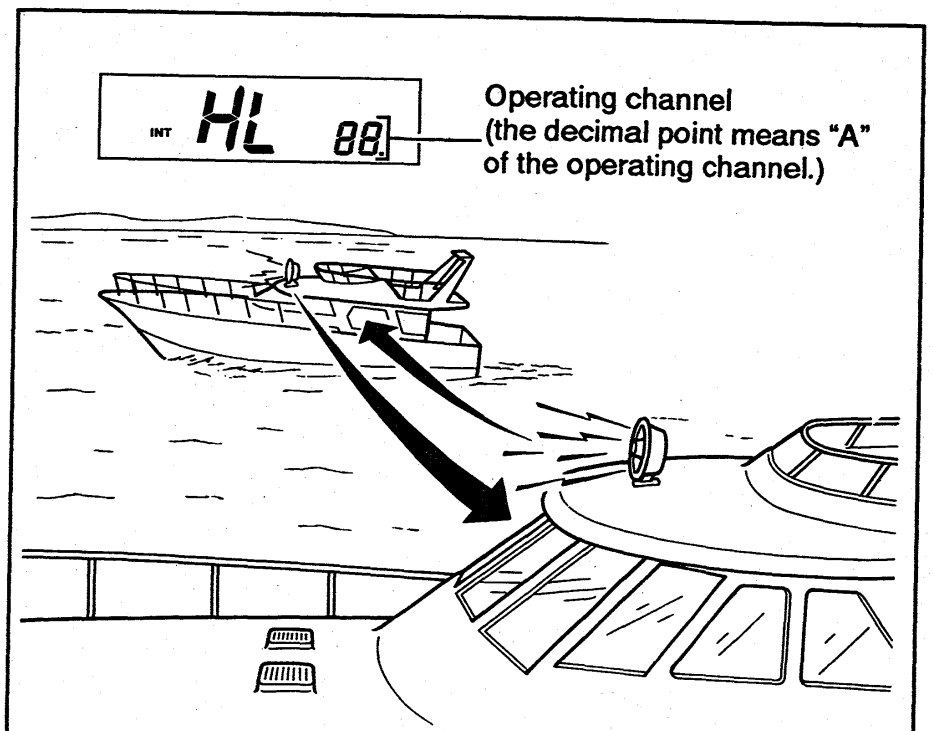
[DISPLAY EXAMPLE]:

Internal speaker ON

Internal speaker OFF

■ Hailer operation

The IC-M125 has a two-way hailer function for voice amplifying and receiving over the loudspeaker, making it unnecessary to leave the bridge to hear a hailing party.



- The external speaker emits your amplified voice and receives an answer from another vessel.
- Transmitting is impossible during hailer operation.
- The hailer function can be operated during dualwatch.

• PREPARATION

1) Connect an external speaker as illustrated on p. 8.

2) When you need to have more power (up to 30 W), connect an optional UA-1 AUDIO AMPLIFIER. (p. 9)

• OPERATION

1) Turn the transceiver and UA-1 (when connected) powers ON.
   - With an optional UX-95 RELAY INTERFACE UNIT, UA-1 power is synchronized with the transceiver power.

2) Push [HAILER] on the transceiver.
   - "HL" appears.

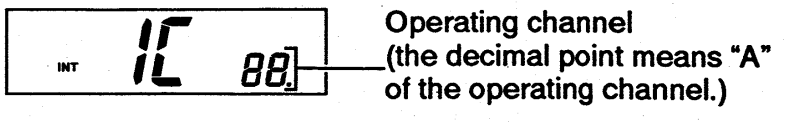
3) Push and hold the PTT switch on the microphone and speak at a normal voice level into the microphone.
   - The S/RF indicator shows the hailer output level. To adjust the level, rotate the main dial while PTT is pushed.

5) After releasing the PTT switch you can hear the response through the hailer speaker.

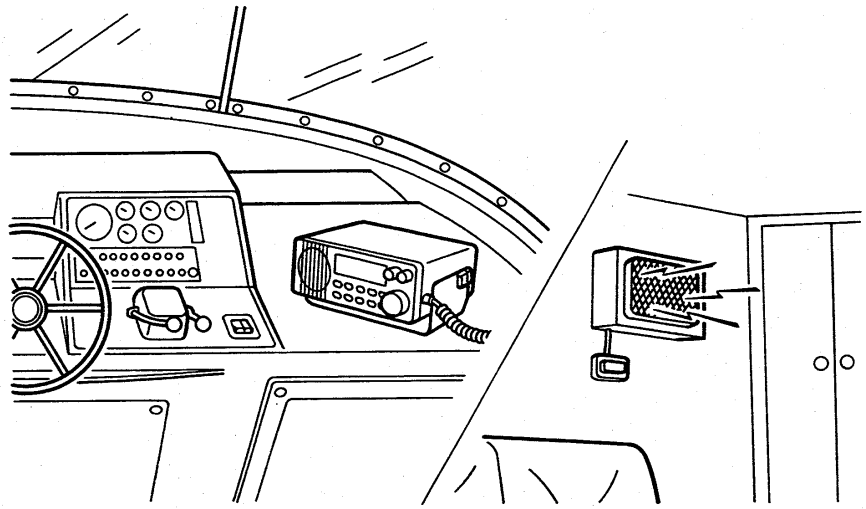
6) Push [HAILER] again to cancel the hailer function.

■ Intercom operation

The intercom function allows you to talk to the deck from the cabin. When you do not require the hailer function, you can use 2 separate intercoms.



Operating channel
(the decimal point means "A" of the operating channel.)



- The external speaker functions as a speaker and a microphone.
- Transmitting is impossible during intercom operation.
- The intercom function can be operated during dualwatch.

• PREPARATION

Connect an external speaker and an intercom switch as illustrated on p. 8.

• OPERATION FROM THE TRANSCEIVER

1) Turn power ON.

2) Push [INCOM].
   - "IC" appears.

3) Push and hold the PTT switch on the microphone and speak at a normal voice level into the microphone.
   - The S/RF indicator shows the intercom output level. To adjust the level, rotate the main dial while PTT is pushed.
   - To adjust the IC-M125's internal speaker output level, rotate [VOLUME].

4) Release the PTT switch to hear a response through the intercom speaker.
   - The S/RF indicator disappears.

5) Push [INCOM] again to cancel the intercom function.
   - "IC" disappears.

• OPERATION FROM THE INTERCOM SPEAKER

1) Push and hold the intercom switch and speak into the speaker.

2) Keep pushing the intercom switch to receive an answer.

3) Release the intercom switch to return the IC-M125 to cabin control of the intercom function.

NOTE: While the intercom switch is pushed, "IC" is indicated on the IC-M125 function display and only the intercom function can be used with the IC-M125.

• OPERATION WITH 2 SEPARATE INTERCOMS

When you connect two intercom switches and two intercom speakers to the IC-M125, you can talk to two separate places such as the deck and another room.

Connect switches and speakers as illustrated on p. 9 before operating with 2 speakers.

TO OUTPUT FROM INTERCOM-1 SPEAKER

1) Push [INCOM] to turn the intercom ON.

2) Push and hold the PTT switch and speak into the mic.

TO OUTPUT FROM INTERCOM-2 SPEAKER

1) Push [HAILER] to turn the hailer ON.

2) Push and hold the PTT switch and speak into the mic.

WHEN SPEAKING FROM THE INTERCOM SPEAKERS

Push and hold intercom switch 1 or 2, then speak into the speaker as described at left.

NOTE: The hailer function cannot be used when you connect the two intercom speakers.

■ Automatic fog horn

The automatic fog horn function sounds a horn repeatedly until the function is turned OFF. 4 horn patterns can be selected depending on your needs.

The fog horn outputs from the hailer speaker. To use this function, the hailer speaker must be connected to the transceiver. See p. 8 for connection details.

TYPE	DISPLAY	PATTERN	USAGE
1		One 5-second blast every 2 minutes.	Power boat underway.
2		Two 5-second blasts every 2 minutes.	Power boat stopped.
3		One 5-second blast followed by two 1-second blasts every 2 minutes.	Sail boat, fish boat, tow boat.
4		One 5-second blast followed by three 1-second blasts every 2 minutes.	Vessel under tow.

• TURNING AUTO FOG HORN ON AND OFF

1) Push [F].
   • "F" appears.

2) Push [HAILER].
   • One or more "📯" appear depending on the fog horn pattern.

3) To cancel the function, repeat steps 1 and 2.

• SELECTING A FOG HORN PATTERN

1) Push [F].
   • "F" appears.

2) While pushing [HAILER], rotate the channel selector to select the desired fog horn pattern.
   • The number of "📯" shows the selected fog horn pattern.

3) Release [HAILER].

■ Voice scrambler (optional)

To ensure private communications, a voice scrambler function is available when the optional UT-74 VOICE SCRAMBLER UNIT is installed. With this function, outgoing messages are scrambled and cannot be understood with receivers not having the UT-74. Only IC-M125's with a UT-74 plus the same programmed scrambling code can properly reproduce the signal and hear the messages. 128 scrambling codes are available.

NOTE: Voice scrambler cannot be used on channel 16.

• TURN THE SCRAMBLER ON AND OFF

1) Push [F].
   • "Ⓕ" appears.

2) Push [INCOM] to activate the scrambler.
   • "SCRM" appears.

3) To turn OFF the function, repeat steps 1 and 2.
   • "SCRM" disappears.

NOTE: To communicate with a scrambling signal, the scramblers of all the transceivers in your group must be turned ON.

• SELECTING A SCRAMBLING CODE

The IC-M125 has 128 scrambling codes. Set the desired code number in your IC-M125. All transceivers in your group must be set to the same scrambling code.

1) Turn the transceiver power OFF.

2) While pushing [INCOM], turn power ON. Keep pushing [INCOM] until step 4.
   • Scrambling code previously set appears.

3) While continuously pushing [INCOM], rotate the channel selector to select the desired scrambling code.

4) Release [INCOM].
   • The selected scrambling code is set.
   • All characters on the function display appear, then channel 16 mode is selected.

[DISPLAY EXAMPLE]: Scrambling code 110.

6 MAINTENANCE

■ Resetting the CPU

If the function display occasionally displays erroneous information when the power is turned ON or while operating, reset the CPU.

CAUTION: After resetting the CPU, all information you have programmed into memories is erased.

1) Turn power ON.

2) Push and hold [F] and [CH16] until step 4.

3) Turn power OFF and then turn it ON again.
   • The function display shows all characters for a second.

4) Release [F] and [CH16].
   • Now the CPU is reset completely.

■ Cleaning

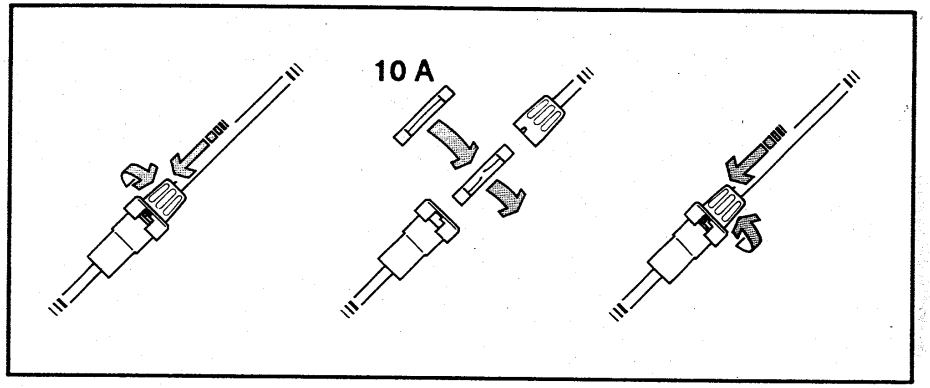
If the transceiver becomes dusty or dirty, wipe it clean with a dry, soft cloth.

AVOID the use of chemical agents such as benzine or alcohol, as they may damage transceiver surfaces.

■ Fuse replacement

Two fuses are installed in the supplied DC power cable. If a fuse blows or the transceiver stops functioning, track down the source of the problem, if possible, and replace the damaged fuse with a new, rated fuse.

• Fuse rating : 10 A



■ Backup battery

The built-in lithium backup battery retains information programmed into the memories. The life of the lithium battery is approximately five years. If the battery is exhausted, the transceiver operates normally but information in the memories is not retained.

NOTE: Backup battery replacement **MUST** be done by an authorized Icom Dealer or Icom Service Center.

PROBLEM	POSSIBLE CAUSE	SOLUTION	REF.
No power comes ON.	• Power cord has been connected incorrectly. • Blown fuse.	• Check the power cord connection. • Check the polarity of the power connection, then, replace the fuse.	p. 8 p. 8
No sound comes from the speaker.	• The hailer or intercom function is activated. • Handset is out of the cradle (when an optional handset is used).	• Push [HAILER] or [INCOM] to turn the function OFF. • Set the handset into the cradle.	pgs. 21, 22 –
Sensitivity is low and only strong signals are audible.	• Antenna feedline is cut or shorted, or the antenna connector has a poor connection.	• Check the feedline and correct any improper condition and check the antenna connector connection.	–
Transmitting is impossible, or high power cannot be selected.	• Transmission is restricted on some channels. • The transceiver is in hailer or intercom operation.	• See p. 13 for details. • Turn the function OFF.	p. 13 pgs. 21, 22
The displayed channel cannot be changed.	• The channel 16 mode has been selected. • Dualwatch has been activated. • Scan has been activated.	• Select another mode. • Push [DUAL] to cancel dualwatch. • Push [L-SCAN] to cancel the scan.	p. 11 p. 19 p. 17
The memory number cannot be changed.	• Other memories have not been programmed.	• Program at least 2 memories.	p. 15
Scanning or dualwatch does not function.	• The channel 16 mode has been selected. • The squelch is open.	• Select another mode. • Rotate [SQUELCH] clockwise.	p. 11 –
Scan does not pause on weather channels	• The weather alert function has been turned ON.	• Turn the function OFF.	p. 18
Receive signal cannot be understood.	• Voice scrambler has been turned OFF. • Voice scrambling code has not been set correctly (when the scrambler has been turned ON).	• Push [F], then push [INCOM] to turn it ON. • Reset the scrambling code.	p. 25 p. 25

8 VHF MARINE CHANNEL LIST

International channel	USA channel	Frequency (MHz)		Transmit output power
		Transmit	Receive	
01	–	156.050	160.650	25 W & 1 W
01A	01A	156.050	156.050	25 W & 1 W
02	–	156.100	160.700	25 W & 1 W
02A	02A	156.100	156.100	25 W & 1 W
03	–	156.150	160.750	25 W & 1 W
03A	03A	156.150	156.150	25 W & 1 W
04	–	156.200	160.800	25 W & 1 W
04A	04A	156.200	156.200	25 W & 1 W
05	–	156.250	160.850	25 W & 1 W
05A	05A	156.250	156.250	25 W & 1 W
06	06	156.300	156.300	25 W & 1 W
07	–	156.350	160.950	25 W & 1 W
07A	07A	156.350	156.350	25 W & 1 W
08	08	156.400	156.400	25 W & 1 W
09	09	156.450	156.450	25 W & 1 W
10	10	156.500	156.500	25 W & 1 W
11	11	156.550	156.550	25 W & 1 W
12	12	156.600	156.600	25 W & 1 W
13	13	156.650	156.650	25 W & 1 W *1
14	14	156.700	156.700	25 W & 1 W
15	15	156.750	156.750	1 W only *2
16	16	156.800	156.800	25 W & 1 W
17	17	156.850	156.850	1 W only
18	–	156.900	161.500	25 W & 1 W
18A	18A	156.900	156.900	25 W & 1 W
19	–	156.950	161.550	25 W & 1 W
19A	19A	156.950	156.950	25 W & 1 W
20	20	157.000	161.600	25 W & 1 W
20A	20A	157.000	157.000	25 W & 1 W
21	–	157.050	161.650	25 W & 1 W
21A	21A	157.050	157.050	25 W & 1 W
22	–	157.100	161.700	25 W & 1 W
22A	22A	157.100	157.100	25 W & 1 W
23	–	157.150	161.750	25 W & 1 W
23A	23A	157.150	157.150	25 W & 1 W
24	24	157.200	161.800	25 W & 1 W
25	25	157.250	161.850	25 W & 1 W
26	26	157.300	161.900	25 W & 1 W
27	27	157.350	161.950	25 W & 1 W
28	28	157.400	162.000	25 W & 1 W
60	–	156.025	160.625	25 W & 1 W
60A	60A	156.025	156.025	25 W & 1 W
61	–	156.075	160.675	25 W & 1 W
61A	61A	156.075	156.075	25 W & 1 W
62	–	156.125	160.725	25 W & 1 W
62A	62A	156.125	156.125	25 W & 1 W
63	–	156.175	160.775	25 W & 1 W
63A	63A	156.175	156.175	25 W & 1 W
64	–	156.225	160.825	25 W & 1 W
64A	64A	156.225	156.225	25 W & 1 W

*1 Momentary high power on a U.S.A. channel

*2 Receive only on a U.S.A. channel

International channel	USA channel	Frequency (MHz)		Transmit output power
		Transmit	Receive	
65	–	156.275	160.875	25 W & 1 W
65A	65A	156.275	156.275	25 W & 1 W
66	–	156.325	160.925	25 W & 1 W
66A	66A	156.325	156.325	25 W & 1 W
67	67	156.375	156.375	25 W & 1 W *1
68	68	156.425	156.425	25 W & 1 W
69	69	156.475	156.475	25 W & 1 W
70	70	156.525	156.525	1 W only
71	71	156.575	156.575	25 W & 1 W
72	72	156.625	156.625	25 W & 1 W
73	73	156.675	156.675	25 W & 1 W
74	74	156.725	156.725	25 W & 1 W
75	–	-----	-----	Guard
76	–	-----	-----	Guard
77	77	156.875	156.875	25 W & 1 W
78	–	156.925	161.525	25 W & 1 W
78A	78A	156.925	156.925	25 W & 1 W
79	–	156.975	161.575	25 W & 1 W
79A	79A	156.975	156.975	25 W & 1 W
80	–	157.025	161.625	25 W & 1 W
80A	80A	157.025	157.025	25 W & 1 W
81	81	157.075	161.675	25 W & 1 W
81A	81A	157.075	157.075	25 W & 1 W
82	–	157.125	161.725	25 W & 1 W
82A	82A	157.125	157.125	25 W & 1 W

International channel	USA channel	Frequency (MHz)		Transmit output power
		Transmit	Receive	
83	–	157.175	161.775	25 W & 1 W
83A	83A	157.175	157.175	25 W & 1 W
84	84	157.225	161.825	25 W & 1 W
84A	–	157.225	157.225	25 W & 1 W
85	85	157.275	161.875	25 W & 1 W
85A	–	157.275	157.275	25 W & 1 W
86	86	157.325	161.925	25 W & 1 W
86A	86A	157.325	157.325	25 W & 1 W
87	87	157.375	161.975	25 W & 1 W
87A	–	157.375	157.375	25 W & 1 W
88	88	157.425	162.025	25 W & 1 W
88A	88A	157.425	157.425	25 W & 1 W

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

9 SPECIFICATIONS

GENERAL

- Frequency coverage : Transmit 156 ~ 157.5 MHz
  Receive 156 ~ 163 MHz
- Mode : FM (16K0G3E)
- Number of memory channels : 24
- Power supply requirement : 13.8 V DC ± 15%
- Current drain (at 13.8 V DC) : Transmit,
  high power 6.3 A
  low power 1.7 A
  Receive,
  standby 400 mA
  max. audio output 1.5 A
- Frequency stability : Less than 0.0005%
- Usable temperature range : −20 ℃ ~ +60 ℃; −4 ℉ ~ +140 ℉
- Dimensions : 228(W) × 78(H) × 208(D) mm;
  9.0(W) × 3.1(H) × 8.2(D) in
  (projections not included)
- Weight : 2.2 kg; 4.9 lb

TRANSMITTER

- Output power : High 25 W Low 1 W
- Modulation system : Variable reactance phase modulation
- Max. frequency deviation : ± 5 kHz
- Spurious emissions : Less than −70 dB
- Microphone impedance : 600 Ω

RECEIVER

- Receive system : Double-conversion superheterodyne
- Intermediate frequency : 1st 21.8 MHz 2nd 455 kHz
- Sensitivity : 0.3 µV for 12 dB SINAD
- Adjacent channel selectivity : −70 dB
- Spurious response rejection : −70 dB
- Intermodulation rejection : −70 dB
- Squelch sensitivity : 0.22 µV at threshold
- Audio output power : 5 W with a 4 Ω load
  (10W for the hailer function)
- Audio output impedance : 4 Ω

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

IN CASE OF EMERGENCY

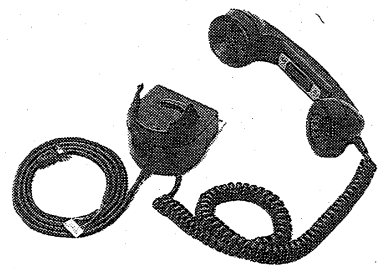
If your vessel requires assistance, contact other vessels and the Coast Guard by sending a distress call on Channel 16.

DISTRESS CALL PROCEDURE

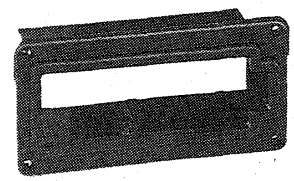
1. "MAYDAY MAYDAY MAYDAY"
2. "THIS IS - - - - - - - - - - - - - - -" (name of vessel)
3. "LOCATED AT - - - - - - - - - - -" (your position)
4. Give the reason for the distress call.
5. Explain what assistance you need.
6. Give additional information:
   - Vessel type
   - Vessel length
   - Vessel color
   - No. of people on board

OPTIONS

IC-HS2 HANDSET KIT (black)
IC-HS3 HANDSET KIT (white)

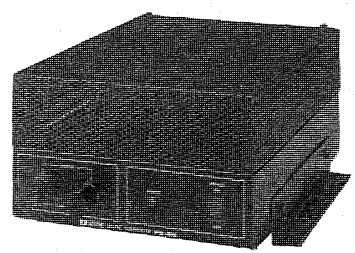


MB-33 FLUSH MOUNT
For mounting the IC-M125 to a panel.

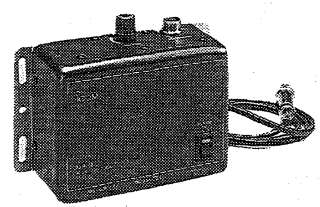


Available in white or black.

PS-66 DC-DC CONVERTER
Input voltage : 19 ~ 32 V DC
Output voltage : 13.6 V DC



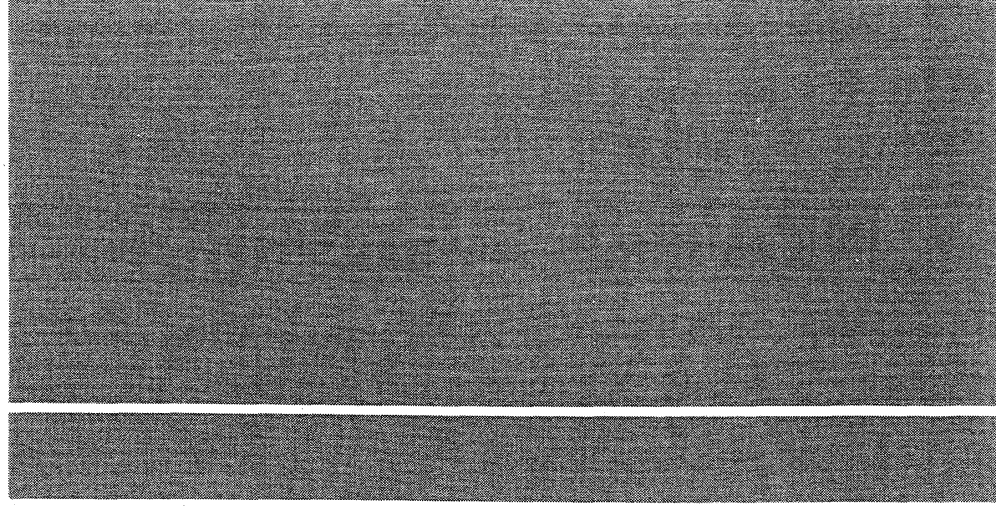
UA-1 AUDIO AMPLIFIER
Boosts hailer output to 30 W.
Can be used separately as a paging amplifier.



UT-74 VOICE SCRAMBLER UNIT
Required to add the scrambling function to the transceiver. 128 codes are available.

UX-95 RELAY INTERFACE UNIT
Remotely controls the UA-1 power switch..

Count on us!



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