



INSTRUCTION MANUAL

VHF MARINE TRANSCEIVER **GM600**



Icom Inc.

Thank you for choosing this Icom product.

This product is designed and built with Icom's state of the art technology and craftsmanship.

With proper care, this product should provide you with years of trouble-free operation.

The GM600 VHF MARINE TRANSCEIVER has the Class A DSC functions for a distress alert transmission and reception, as well as the general DSC calls (Individual call, All Ships call, Group call, and so on).

You must connect the GM600 to the DC power supply through the PS-310 DC-DC POWER SUPPLY that is sold as a set with the GM600.

EN60945 Environmental category

The GM600 is protected from the weather.


The PS-310 is protected from the weather.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL — This instruction manual contains important operating instructions for the GM600.

EXPLICIT DEFINITIONS

WORD	DEFINITION
 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.

DISPOSAL



The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

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IN CASE OF EMERGENCY

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

USING CHANNEL 16

DISTRESS CALL PROCEDURE

1. "MAYDAY MAYDAY MAYDAY."
2. "THIS IS" (name of vessel).
3. Say your call sign or other description 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.

Or, transmit your Distress call using digital selective calling on Channel 70.

USING DIGITAL SELECTIVE CALLING (Ch 70)

DISTRESS CALL PROCEDURE

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

INSTALLATION NOTE

Installation:

The installation of this equipment should be made in such a manner as to respect the EC recommended electromagnetic field exposure limits. (1999/519/EC)

The maximum RF power available from this device is 25 watts. The antenna should be installed as high as possible for maximum efficiency and the installation height should be at least 1.76 meters above any accessible position. In the case where an antenna cannot be installed at a reasonable height, then the transmitter should neither be continuously operated for long periods if any person is within a distance of 1.76 meters of the antenna, nor operated at all if any person is touching the antenna.

It is recommended that antenna of a maximum gain of 3 dB is used. If higher gain antenna are required then please contact your Icom distributor for revised installation recommendations.

Operation:

The exposure to RF electromagnetic field is only applicable when this device is transmitting. This exposure is naturally reduced due to the nature of alternating periods of receiving and transmitting. Keep your transmissions to the minimum necessary.

PRECAUTIONS

⚠ **WARNING! NEVER** connect the transceiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

⚠ **WARNING! NEVER** connect the transceiver to an external DC power supply directly. The transceiver must be connected to the DC power supply through the PS-310 DC-DC POWER SUPPLY that is sold as a set with this transceiver. Be sure to not connect with reverse polarity.

PS-310's version	Input voltage	Output voltage
#01	21.6 to 31.2 V DC	12.6 V DC
#02	10.8 to 15.6 V DC	12.6 V DC

⚠ **WARNING! NEVER** cut the DC power cable between the DC plug at the back of the transceiver/PS-310 and the fuse holder. If an incorrect connection is made, the transceiver may be damaged.

CAUTION: NEVER place the transceiver where normal operation of the vessel may be hindered, or where it could cause bodily injury.

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

DO NOT place or leave the transceiver in areas with temperatures below -15°C or above $+55^{\circ}\text{C}$, or in areas subject to direct sunlight, such as a dashboard.

DO NOT use harsh solvents such as Benzine or alcohol to clean the transceiver, as they will damage the transceiver's surfaces. If the transceiver becomes dusty or dirty, wipe it clean with a soft, dry cloth.

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

Place the transceiver in a secure place to avoid inadvertent use by unauthorized persons.

BE CAREFUL! The transceiver's front panel meets IPX7* requirements for waterproof protection. However, once the transceiver has been dropped, or the waterproof seal is cracked or damaged, waterproof protection cannot be guaranteed because of possible damage to the case or the waterproof seal.

*The connectors on the rear panel do not meet IPX7.

If the front panel is exposed to saltwater, **BE SURE TO CLEAN IT THOROUGHLY WITH FRESH WATER** when the front panel's waterproof protection is effective. Otherwise, the keys and switch may become inoperable due to salt crystallization.

COUNTRY CODE LIST

• ISO 3166-1

	Country	Codes		Country	Codes
1	Austria	AT	18	Liechtenstein	LI
2	Belgium	BE	19	Lithuania	LT
3	Bulgaria	BG	20	Luxembourg	LU
4	Croatia	HR	21	Malta	MT
5	Czech Republic	CZ	22	Netherlands	NL
6	Cyprus	CY	23	Norway	NO
7	Denmark	DK	24	Poland	PL
8	Estonia	EE	25	Portugal	PT
9	Finland	FI	26	Romania	RO
10	France	FR	27	Slovakia	SK
11	Germany	DE	28	Slovenia	SI
12	Greece	GR	29	Spain	ES
13	Hungary	HU	30	Sweden	SE
14	Iceland	IS	31	Switzerland	CH
15	Ireland	IE	32	Turkey	TR
16	Italy	IT	33	United Kingdom	GB
17	Latvia	LV			

ACTION ICON DESCRIPTION

The following describes the [CH/ENT], [ENT] and the keypad operations in this instruction manual.

Rotate



: Rotate [CH/ENT] to select.

Push



: Push [ENT] to enter or set.

Push



: Push the keypad to enter a digit or text.

Also, you can use the following key functions in the Menu screen.




FUNCTION	ACTION
Select	Rotate [CH/ENT]. Push [▲] or [▼].
Enter	Push [ENT], [CH/ENT], or [Enter]  .
Go to the next tree level	Push [ENT] or [▶].
Go back to the previous tree level	Push [CLR], [◀], or [Back]  .
Cancel	Push [CLR].
Exit	Push [MENU] or [Exit]  .

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◇ Priorities

- Read all rules and regulations pertaining to call 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 may require a current radio station license before using the transceiver. It is unlawful to operate a ship station which is not licensed, but required to be.

If required, contact 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

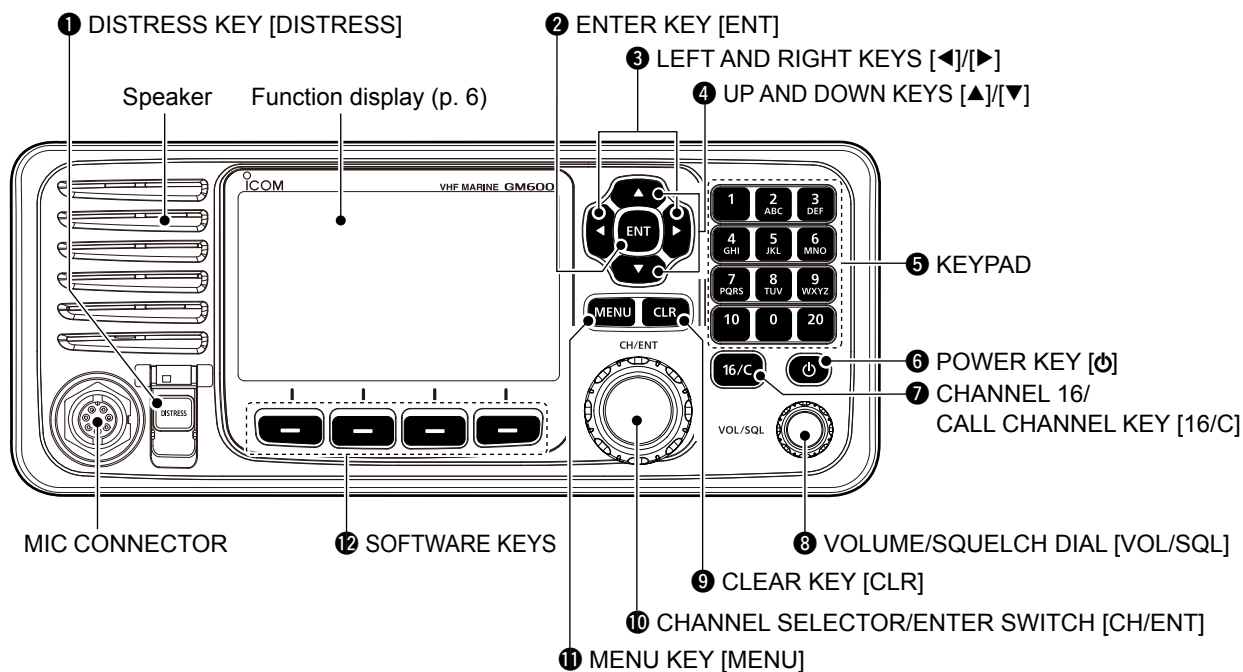
A Restricted Radiotelephone Operator Permit is the license most often held by small vessel radio operators when a radio is not required for safety purposes.

If required, the Restricted Radiotelephone Operator Permit must be posted or kept with the operator. If required, 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.

■ Front panel



1 DISTRESS KEY [DISTRESS] (p. 29)

Hold down for 3 seconds to transmit a Distress call.

2 ENTER KEY [ENT]

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

3 LEFT AND RIGHT KEYS [◀]/[▶]

- Push to scroll the software key functions. (p. 5)
- In the character or number entry mode, push to select the desired character or number in the keypad. (p. 18)

4 UP AND DOWN/CHANNEL SELECT KEYS [▲]/[▼]

- Push to select the operating channel (p. 13), Menu items (p. 12), Menu settings (p. 12), and so on.
- While scanning, push to check the Favorite channels, change the scanning direction or manually resume a scan. (p. 21)

5 KEYPAD

Push to enter numbers, letters or symbols.
For channel number entry, see page 13.
For channel name entry, see page 18.

6 POWER KEY [⏻]

Hold down for 1 second to turn the transceiver ON or OFF.

7 CHANNEL 16/CALL CHANNEL KEY [16/C]

- Push to select Channel 16. (p. 13)
- Hold down for 1 second to select the Call channel. (p. 13)
 - “CALL” is displayed when the Call channel is selected.

8 VOLUME/SQUELCH DIAL [VOL/SQL] (p. 15)

- Rotate to adjust the volume level.
- Push once or twice to display the Volume or Squelch Setting screen, and then rotate to adjust the volume or squelch level.

9 CLEAR KEY [CLR]

Push to cancel the entered data, or to return to the previous screen.

10 CHANNEL SELECTOR/ENTER SWITCH [CH/ENT]

- Rotate to select the operating channel (p. 13), Menu items (p. 12), Menu settings (p. 12), and so on.
- Push to set the entered data, selected item, and so on. (p. 12)

11 MENU KEY [MENU]

Push to enter or exit the Menu screen. (p. 12)

2 PANEL DESCRIPTION

■ Front panel (Continued)

⑫ SOFTWARE KEYS (p. 5)

You can use various key functions that are assigned to the software keys, as described below.

Compose Distress* (p. 30)

Push to display the COMPOSE DISTRESS screen.

Compose Non-Distress* (p. 42)

Push to display the COMPOSE NON-DISTRESS screen.

Compose DROBOSE* (p. 36)

Push to display the COMPOSE DROBOSE screen.

Task Mode (p. 27)

When the transceiver has any task, push to enter the Task mode.

Scan (p. 21)

Push to start or stop a Normal or Priority scan.

Dualwatch/Tri-watch [DW] (p. 22)

Push to start or stop the Dualwatch or Tri-watch.

High/Low [HI/LO] (p. 15)

Push to set the output power level to high or low.
• Some channels are set to only low power.

Channel [CHAN] (p. 13)

When Channel 16 or the Call channel is selected, push to select the last selected channel.

Favorite channel [Favorite] (p. 21)

Push to set or clear the displayed channel as a Favorite channel.

Channel Name (p. 18)

Push to display the CHANNEL NAME screen.

Backlight (p. 17)

Push to open the Backlight Settings window.

DSC Log (p. 69)

Push to display the RCVD CALL LOG screen.

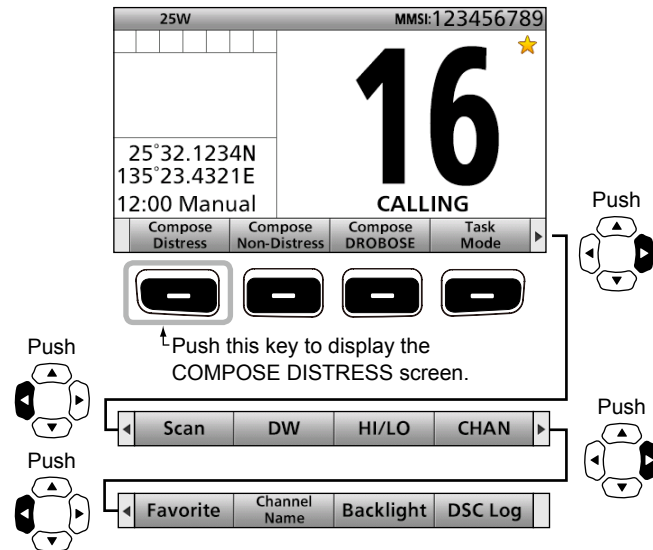
* These key functions are not displayed in the Radio Telephone (RT) mode. (p. 14)

■ Software key function

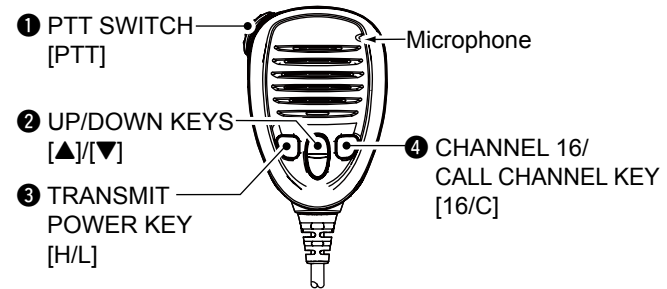
The transceiver has the software keys for various functions. The key function is displayed above the software key, as shown below.

◇ Selecting the software key function

When “◀” or “▶” is displayed beside the key icon, pushing [◀] or [▶] scrolls the software key functions. When you push [◀] or [▶] once, 4 functions scroll together.



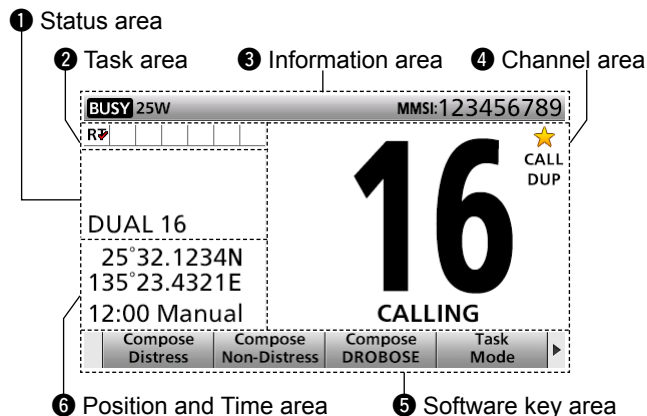
■ Speaker Microphone



- ❶ **PTT SWITCH [PTT]** (pp. 15, 29)
Hold down to transmit, release to receive.
- ❷ **UP/DOWN KEYS [▲]/[▼]** (p. 21)
Push to select the Favorite channels, change scanning direction or manually resume a scan.
• When the “FAV on MIC” item is set to “OFF,” you can select all channels. (p. 78)
- ❸ **TRANSMIT POWER KEY [H/L]**
➤ Push to set the power level to high or low. (p. 15)
• Some channels are set to only low power.
➤ While holding down this key, turn ON the transceiver to turn the Microphone Lock function ON or OFF. (p. 17)
- ❹ **CHANNEL 16/CALL CHANNEL KEY [16/C]** (p. 13)
➤ Push to select Channel 16.
➤ Hold down for 1 second to select the Call channel.
• The “CALL” icon is displayed.

2 PANEL DESCRIPTION

■ Function display (Main screen)



Display area	Description
1 Status area	Displays the current status.
2 Task area	Displays up to 7 task icons.
3 Information area	Displays various icons and the MMSI code.
4 Channel area	Displays the selected operating channel information. (p. 7)
5 Software key area	Displays the key function for each software key. (p. 5)
6 Position and Time area	Displays the current position and time. (p. 8)



◇ Status area

The current status is displayed in the Status area.

Indicator	Description
SCAN 16	Displayed during a Priority scan. (p. 21)
SCAN	Displayed during a Normal scan. (p. 21)
DUAL 16	Displayed during Dualwatch. (p. 22)
TRI 16	Displayed during Tri-watch. (p. 22)

◇ Task area

Up to 7 task icons are displayed in the Task area when the transceiver has a task.

Indicator	Description
RT	Displayed while in the Radio Telephone (RT) mode. (p. 14) <ul style="list-style-type: none">• "RT" is displayed when the RT mode task is activated.• Disappears if no operation occurs during the preset period of time. (p. 80)
	Displayed after receiving a DSC call. (p. 27) <ul style="list-style-type: none">• "RX" is displayed when the RX call task is activated.
	Displayed after making a DSC call. (p. 27) <ul style="list-style-type: none">• "TX" is displayed when the TX call task is activated.

Count on us!

< Intended Country of Use >

☐AT ☐BE ☐CY ☐CZ ☐DK ☐EE
☐FI ☐FR ☐DE ☐GR ☐HU ☐IE
☐IT ☐LV ☐LT ☐LU ☐MT ☐NL
☐PL ☐PT ☐SK ☐SI ☐ES ☐SE
☐GB ☐IS ☐LI ☐NO ☐CH ☐BG
☐RO ☐TR ☐HR

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