



GX625 VHF Marine Radio



INSTRUCTION MANUAL

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ACCESSORIES SUPPLIED

The GX625 is supplied with the following standard accessories:

- Belt Clip – MB625
- Antenna – AE4027
- Charging cradle – BCD625
- AC Plug Pack – PS004
- Battery Pack – BP025

INTRODUCTION

Congratulations on purchasing this GME fully featured VHF marine radio. Your GX625 has been built to offer excellent value by combining advanced features, great design and manufacturing quality. To ensure you are familiar with the operation and features of your radio, and in order to obtain the best performance, please read this manual thoroughly before operation.

CAUTION

IMPORTANT: READ ALL INSTRUCTIONS carefully and completely before operating your radio and retain this manual for future reference.

NEVER: connect the radio to a power source other than the supplied battery. This may damage your product.

NEVER: operate your radio with the antenna less than 5 cm from exposed parts of the body.

NEVER: use or charge your radio in a potentially explosive atmosphere.

DO NOT: use your radio with a damaged antenna.

DO NOT: attempt to modify your radio in any way.

ALWAYS: charge your radio at normal room temperature.

ALWAYS: switch off your radio where notices restrict the use of two-way radio or mobile telephones.

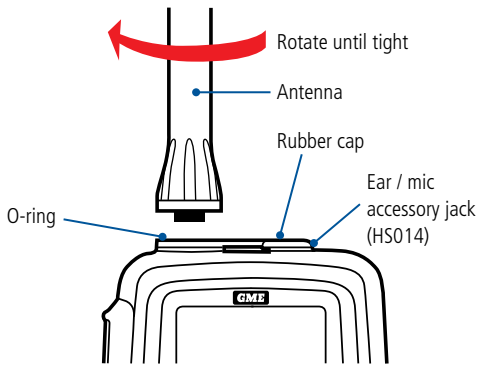
AVOID: storing or charging your radio in direct sunlight.

AVOID: storing or using your radio where temperatures are below -20° C or above +60° C.

WATER RESISTANCE

This product is an IP66 water resistant design. In order to achieve the best performance, please ensure:

1. The antenna is firmly attached. The O-ring at the base of antenna mounting is part of the water resistant design. Please ensure the antenna is firmly attached to ensure the water resistant properties are maintained.
2. The rubber cap is fully inserted into the ear/mic socket on the top panel.



RF RADIATION INFORMATION

RF RADIATION PROFILE

Your radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% transmitting and is authorised by the FCC for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your radio radiates measurable RF energy only while it is transmitting (during talking in PTT mode), not when it is receiving (listening) or in standby mode.

The device complies with SAR and/or RF field strength limits of RSS-102 requirements.

RF RADIATION SAFETY

In order to ensure user health, experts from relevant industries including science, engineering, medicine and health work with international organizations to develop standards for safe exposure to RF radiation. These standards consist of:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J;
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992;
- Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1999;
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998;

FCC Regulations

Federal Communication Commission (FCC) requires that all radio communication products should meet the requirements set forth in the above standards before they can be marketed in the US, and the manufacturer shall post a RF label on the product to inform users of operational instructions, so as to enhance their occupational health against exposure to RF energy.

Part 15 Compliance

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. Note: 'Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.'

EU Regulatory Conformance

As certified by the qualified laboratory, the product is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC. Please note that the above information is applicable to EU countries only.

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 OPERATOR QUALIFICATIONS

A certificate of proficiency is required to operate a VHF marine radio. The certificate shows that the holder understands distress and safety procedures, knows how to respond to an emergency call and helps to ensure that your messages are understood by others.

The minimum qualification is generally the Short Range Operators VHF Certificate of Proficiency (SROCP) however in Australia a new Australian Waters Qualification (AWQ) has been introduced for marine radio users who only operate VHF marine radios in Australian Territorial Waters.

A person who doesn't hold a certificate may operate a VHF radio if they are in the immediate vicinity of the certified operator and radio so that they can step in and take over if necessary

Persons operating a VHF marine radio without holding an appropriate qualification or being under the supervision of an appropriately qualified person, may be breaching the Radio communications Act.

RANGE

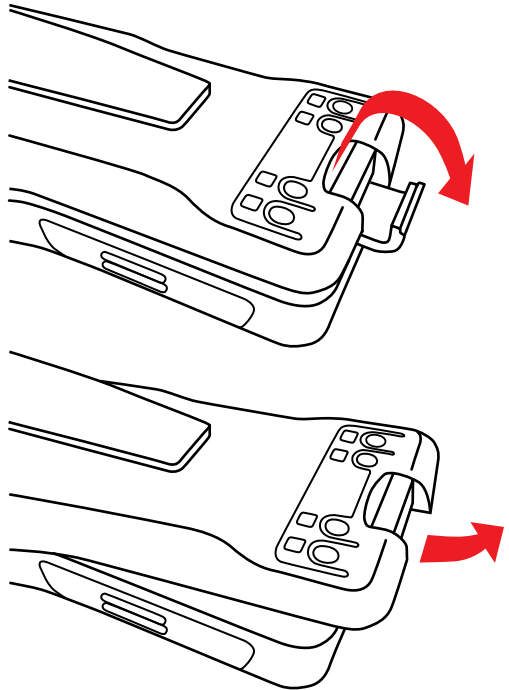
The range of VHF transmissions depends on antenna height, transmitter power and the terrain over which the signals pass. For a 5 watt handheld radio like the GX625, ship to ship communications up to 5 nautical miles should be possible. Using an external antenna should allow ship to ship communication of 8 nautical miles or more. Ship to shore ranges will often be greater due to the increased height of the shore antenna.

CHARGING THE BATTERY PACK

The GX625 has a rechargeable 1200mAh Li-Ion battery pack. To charge the battery, plug the AC charger unit into the mains supply and plug the DC connector into the charging cradle. Place the GX625 into the cradle for charging. The battery should charge in around 2 hours.

Removing the battery pack

To remove the battery pack, lift the locking lever at the base of the battery pack and rotate. Lift the battery pack from the base of the radio and slide the battery pack away from the radio.

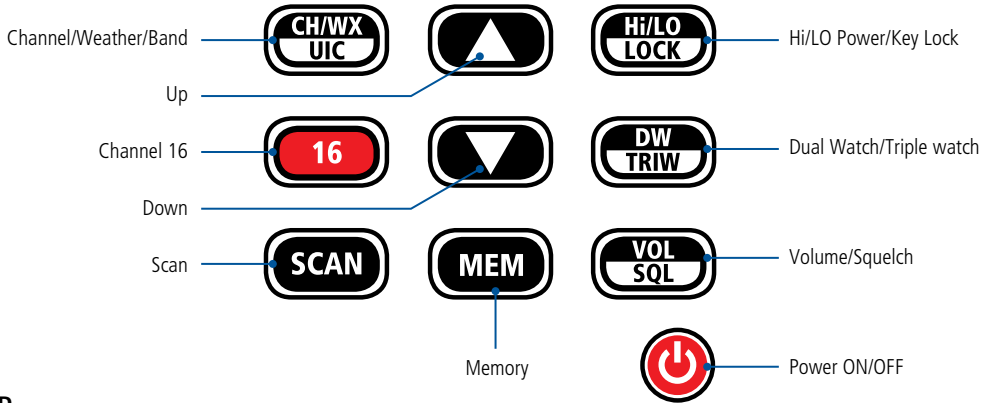


To re-fit the battery pack, slide the top of the battery pack in towards the radio then press the base of the battery pack downwards against the battery contacts. Rotate the battery lever upwards and press into place so that it clicks firmly.

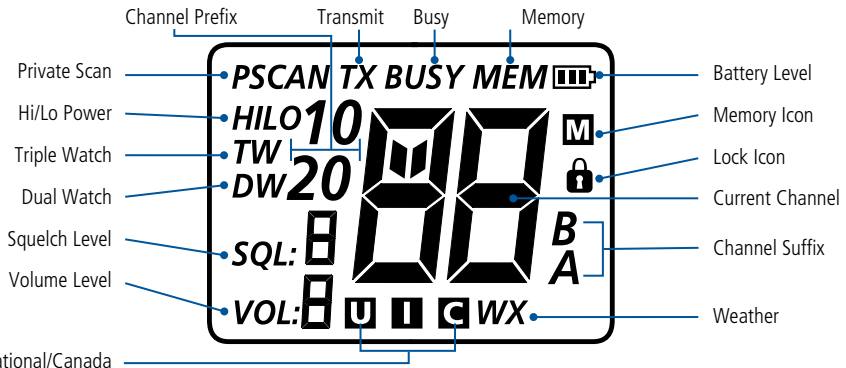
Key Functions

Key	Short Press	Long Press (> 3 sec)
HI/LO /Lock	TX Power Hi/Low	Key Lock
16	CH 16	User Programmable Priority Channel
DW/TRIW	Dual Watch mode	Triple Watch mode
Power Switch	On	Off
SCAN	All Scan/All Memory Scan	Priority all/memory Scan
MEM	MEMORY Mode	Save/Delete Memory Channel
Up/Down	Channel Up/Down	Channel Fast Up/Down
CH/WX/UIC	Channel/Weather	Band Selection
VOL/SQL	VOLUME Set	SQUELCH Set

KEY ARRANGEMENT




LCD






OPERATION

POWER ON/OFF




Press and hold the  key to switch the radio ON.

Press and hold the  key to switch the radio OFF.





VOLUME

Briefly press the  key. The 'VOL' level will flash. Press the  or  keys to select the required volume level. The volume can be adjusted from 0 to 9 with 0 being minimum and 9 being maximum volume.

SQUELCH

Press and hold the  key until the 'SQL' level flashes. Press the  or  keys to select the required squelch level. The squelch can be adjusted from 0 to 9 with 0 being minimum (open squelch) and 9 being maximum (full squelch).

SELECTING CHANNELS

Briefly press the  or  keys to select individual channels. Press and hold the  or  keys to step quickly through the channels. Release the keys when the required channel is displayed.

TRANSMITTING

To transmit, press the **PTT** button. Hold the radio about 5cm from your mouth and speak into the microphone in a normal voice.

When you have finished talking, release the **PTT** button.


When transmitting the 'TX' indicator appears on the display.


TRANSMIT TIME-OUT

The radio has a built-in time out timer that automatically limits transmissions to a maximum of 5 minutes of continuous operation. This feature is required to prevent accidental blocking of the frequency should your **PTT** switch become jammed or be otherwise pressed accidentally.

When the time out timer activates, the transmission will stop, and the radio will return to receive mode. Normal operation will be restored once the **PTT** is released.

HIGH/LOW POWER

Briefly press the  key to switch the transmitter power between HIGH power (5 watts) or LOW power (1 watt) on the selected channel. The corresponding 'HI' or 'LO' icon will be displayed on the LCD.


NOTE: Some channels may be permanently restricted to Low or High power. Pressing the  key on these channels will result in an error beep.




BACK LIGHT

The back light turns on automatically when any key (except the **PTT**) is pressed. The back-light will remain on for 6 seconds then will switch off if no further keys are pressed.

NOTE: If the back light is on, pressing the **PTT** will switch it off.

PRIORITY CHANNEL 16






Press the  key to jump immediately to emergency channel 16. 'P' is displayed to indicate Priority channel. Whenever 16 is selected the TX power setting is set to HI and all other functions (Scan, Dual Watch and Triple Watch) are cancelled.


Briefly press the  key again to return to the previously selected channel or press the  or  keys to select the next channel in sequence.

SECOND PRIORITY CHANNEL



The GX625 has a second priority channel. The second priority channel can be user-programmed to any of the standard marine channels.

To program your preferred channel into the second priority channel;

1. Press and hold the  key. The radio will switch to the channel currently stored in the second priority channel memory and 'P' will be displayed.
2. Press and hold the  key again. 'P' will disappear and the channel number will flash rapidly.
3. Select the required channel using the  or  keys.
4. Press and hold the  key again to store the displayed channel as your new second priority channel.

To select the second priority channel at any time, press and hold the  key. The radio will switch to the second priority channel and 'P' will be displayed.

LOCK KEY

The  key is also used to lock the keypad to prevent accidental key presses from changing the settings. When locked, all keys except the **PTT** and  keys are disabled and pressing any of the keys will result in an error beep.

To lock the keypad, press and hold the **HI/LO LOCK** key until a beep is heard. The **L** icon will appear on the LCD.

To restore the keypad press and hold the **HI/LO LOCK** key until a beep is heard. The **L** icon will disappear on the LCD.

CHANNEL SET (UIC BAND)

The GX625 supports the International, USA and Canadian channel sets. When operating outside the USA or Canada the International channel-set should be selected.

To select the desired channel-set, press and hold the **CH/UX UIC** key. The radio will beep and the selected channel-set icon will be displayed below the channel display. Each press and hold of the **CH/UX UIC** key will step to the next channel set in sequence.

U = USA, **I** = International, **C** = Canada

WEATHER CHANNELS

(USA and Canada Channels Only)

Briefly press the **CH/UX UIC** key to enter the WX (weather) mode. Press the **▲** or **▼** keys to select the required WX channel.

Briefly press the **CH/UX UIC** key again to return to normal channels.

BEEP ADJUSTMENT

By default, the radio will beep whenever a key is pressed. If you prefer, you can choose to disable the beep.

To switch the beeps off, first switch off the radio, then hold the **VOL SOL** key while switching the radio. The key beep will be disabled.

To restore the beeps, switch off the radio then hold the **VOL SOL** key while switching the radio on. The beeps will be re-enabled.

MEMORY CHANNELS

The memory function allows you to store specific channels into memory for easy access.

Adding channels to the memory:

1. During the normal mode, select the desired channel for programming using the **▲** or **▼** keys.
2. Press and hold the **MEM** key to store the selected channel as a memory channel. The 'M' icon indicates the current channel has been saved in the memory.
3. Repeat to add other channels.

You can store as many channels as you wish into the memory.

NOTE: Separate memories exist for the USA, International, and Canadian Frequency bands.

Deleting channels from the memory:

1. During the normal mode, use the **▲** or **▼** keys to select the channel to be deleted.
2. Press and hold the **MEM** key to delete the selected channel from the memory. The 'M' icon will disappear.
3. Repeat to delete other channels.

Accessing memory channels

1. Press the **MEM** key to enter the memory mode. 'MEM' is displayed.
2. Use the **▲** or **▼** keys to select the required memory channel.
3. To exit the memory mode, press the **MEM** key again. 'MEM' disappears from the display.

For details on scanning the memory channels, refer to the Scanning section below.

SCANNING

The scan function allows the radio to scan channels for signals. When a signal is detected the scan pauses to allow the signal to be heard. Once the signal has gone the scan resumes.

There are 4 Scan modes available – All Scan, Memory Scan, Priority All Scan and Priority Memory Scan.

All-Scan

The All Scan function allows the radio to scan all the available channels for signals.



To activate All-Scan, briefly press the **SCAN** key while in the normal mode. 'SCAN' appears on the display and the channel numbers change rapidly as the radio scans for signals.

To deactivate the All-Scan function, briefly press the **SCAN** key again. 'SCAN' disappears from the display.

Memory-Scan

The Memory-Scan function allows the radio to scan all the channels stored in the memory for signals.

M1 - M2 - M3 - M4 ... M86 - M87 - M88

Before scanning, press the **MEM** key to enter the memory mode. The 'MEM' icon will be displayed. There should be at least one channel in the memory (please refer to the MEMORY CHANNELS section above).

To activate the Memory-Scan, press the **SCAN** key. 'SCAN' appears on the display and the channel numbers change rapidly as the radio scans the channels programmed into the memory for signals.

To deactivate the Memory-Scan, briefly press the **SCAN** key again. 'SCAN' disappears from the display. Press the **MEM** key to exit the memory mode. The 'MEM' icon will disappear.

Priority All-Scan

The Priority All-Scan function scans all the available channels for signals while inserting CH16 into the scan every second channel.

1 - 16 - 2 - 16 ... 87 - 16 - 88 - 16

To activate the Priority All-Scan, press and hold the **SCAN** key while in the normal mode. 'PSCAN' appears on the display and the channel numbers change rapidly as the radio scans for signals.

To deactivate the Priority All-Scan function, briefly press the **SCAN** key again. 'PSCAN' disappears from the display.

Priority Memory-Scan

The Priority Memory-Scan function allows the radio to scan all the channels stored in the memory for signals while inserting CH16 into the scan every second channel.

1 - 16 - 2 - 16 ... 87 - 16 - 88 - 16

Before scanning, press the **MEM** key to enter the memory mode. The 'MEM' icon will be displayed. There should be at least one channel in the memory (please refer to the MEMORY CHANNELS section on the previous page).

To activate the Priority Memory-Scan, press and hold the **SCAN** key. 'SCAN' appears on the display and the channel numbers change rapidly as the radio scans the memory channels for signals.

To deactivate the Priority Memory-Scan, briefly press the **SCAN** key again. 'SCAN' disappears from the display. Press the **MEM** key to exit the memory mode.

DUAL WATCH

The Dual Watch function is a 2 channel scan feature where the radio switches between Channel 16 and any other selected channel. This allows you to monitor a working or club channel while still being able to receive important broadcasts on Channel 16.

To use the Dual Watch function;

1. Press the **▲** or **▼** keys to select your preferred working channel.
2. Briefly press the **DW TRIV** key to activate Dual Watch. 'DW' will be displayed and the channel number will quickly alternate between 16 and the selected channel.
 - If a signal is received on the selected channel, the Dual Watch will pause on the selected channel to allow the signal to be heard but will continue to monitor channel 16 every 2 seconds resulting in short breaks in the conversation. Once the signal has gone, Dual Watch continues.
 - If a signal appears on channel 16 the radio will lock onto channel 16 and signals on channel 16 will have priority over any signals on the selected channel.
3. To cancel Dual Watch, briefly press the **DW TRIV** key.


TRIPLE WATCH

The Triple Watch function is a 3 channel scan feature where the radio switches between Channel 16, your selected channel and a second priority channel. This allows you to monitor 2 channels while still being able to receive important broadcasts on Channel 16.


NOTE: Prior to using Triple Watch you will need to have programmed your second priority channel (see Second Priority Channel further above).

To use the Triple Watch Function

1. Ensure you have programmed your second priority channel on the **16** key (see 'Second Priority Channel' on page 7).
2. Press the **▲** or **▼** keys to select your preferred working channel.

3. Press and hold the  key to activate Triple Watch. 'TW' will be displayed and the channel numbers will quickly switch between the three channels (16, the second priority channel and the selected channel).
 - If a signal is received on either the selected channel or the second priority channel, the Triple Watch will pause to allow the signal to be heard but will continue to monitor

channel 16 every 2 seconds resulting in short breaks in the conversation. Once the signal has gone, Triple Watch continues.

- If a signal appears on channel 16 it will take priority over any signals on the other two channels.
4. To cancel Triple Watch, briefly press the  key.

CHANNEL LISTS

INTERNATIONAL MARINE VHF CHANNELS AND FREQUENCIES

CH	TX Freq	RX Freq	Simplex	Usage
01	156.050	160.650		Public Correspondence, Port Operations and Ship Movement
02	156.100	160.700		Public Correspondence, Port Operations and Ship Movement
03	156.150	160.750		Public Correspondence, Port Operations and Ship Movement
04	156.200	160.800		Public Correspondence, Port Operations and Ship Movement
05	156.250	160.850		Public Correspondence, Port Operations and Ship Movement
06	156.300	156.300	x	Inter-ship [1]
07	156.350	160.950		Public Correspondence, Port Operations and Ship Movement
08	156.400	156.400	x	Inter-ship
09	156.450	156.450	x	Inter-ship, Port Operations and Ship Movement
10	156.500	156.500	x	Inter-ship, Port Operations and Ship Movement [2]
11	156.550	156.550	x	Port Operations and Ship Movement
12	156.600	156.600	x	Port Operations and Ship Movement
13	156.650	156.650	x	Inter-ship Safety, Port Operations and Ship Movement [3]
14	156.700	156.700	x	Port Operations and Ship Movement
15	156.750	156.750	x	Inter-ship and On-board Communications at 1W only [4]
16	156.800	156.800	x	Distress, Safety and Calling
17	156.850	156.850	x	Inter-ship and On-board Communications at 1W only [4]
18	156.900	161.500		Public Correspondence, Port Operations and Ship Movement
19	156.950	161.550		Public Correspondence, Port Operations and Ship Movement
1019	156.950	156.950	x	New Simplex channel (for release 2017)
2019	161.550	161.550	x	New Simplex channel (for release 2017)
20	157.000	161.600		Public Correspondence, Port Operations and Ship Movement
1020	157.000	157.000	x	New Simplex channel (for release 2017)
2020	161.600	161.600	x	New Simplex channel (for release 2017)
21	157.050	161.650		Public Correspondence, Port Operations and Ship Movement
22	157.100	161.700		Public Correspondence, Port Operations and Ship Movement
23	157.150	161.750		Public Correspondence, Port Operations and Ship Movement
24	157.200	161.800		Public Correspondence, Port Operations and Ship Movement
25	157.250	161.850		Public Correspondence, Port Operations and Ship Movement

CH	TX Freq	RX Freq	Simplex	Usage
26	157.300	161.900		Public Correspondence, Port Operations and Ship Movement
27	157.350	161.950		Public Correspondence, Port Operations and Ship Movement
28	157.400	162.000		Public Correspondence, Port Operations and Ship Movement
60	156.025	160.625		Public Correspondence, Port Operations and Ship Movement
61	156.075	160.675		Public Correspondence, Port Operations and Ship Movement
62	156.125	160.725		Public Correspondence, Port Operations and Ship Movement
63	156.175	160.775		Public Correspondence, Port Operations and Ship Movement
64	156.225	160.825		Public Correspondence, Port Operations and Ship Movement
65	156.275	160.875		Public Correspondence, Port Operations and Ship Movement
65A	156.275	156.275		Non-Commercial
66	156.325	160.925		Public Correspondence, Port Operations and Ship Movement
66A	156.325	156.325		Non-Commercial
67	156.375	156.375	x	Inter-ship, Port Operations and Ship Movement [2]
68	156.425	156.425	x	Port Operations and Ship Movement
69	156.475	156.475	x	Inter-ship, Port Operations and Ship Movement
71	156.575	156.575	x	Port Operations and Ship Movement
72	156.625	156.625	x	Inter-ship
73	156.675	156.675	x	Inter-ship [2]
74	156.725	156.725	x	Port operations and Ship movement
75	156.775	156.775	x	See Note [5]
76	156.825	156.825	x	See Note [5]
77	156.875	156.875	x	Inter-ship
78	156.925	161.525		Public correspondence, Port Operations and Ship Movement
1078	156.925	156.925	x	New Simplex channel (for release 2017)
2078	161.525	161.525	x	New Simplex channel (for release 2017)
79	156.975	161.575		Public correspondence, Port Operations and Ship Movement
1079	156.975	156.975	x	New Simplex channel (for release 2017)
2079	161.575	161.575	x	New Simplex channel (for release 2017)
80	157.025	161.625		Public correspondence, Port Operations and Ship Movement
81	157.075	161.675		Public correspondence, Port Operations and Ship Movement
82	157.125	161.725		Public correspondence, Port Operations and Ship Movement
83	157.175	161.775		Public correspondence, Port Operations and Ship Movement
84	157.225	161.825		Public correspondence, Port Operations and Ship Movement
85	157.275	161.875		Public correspondence, Port Operations and Ship Movement
86	157.325	161.925		Public correspondence, Port Operations and Ship Movement
87	157.375	157.375	x	Port Operations and Ship Movement
88	157.425	157.425	x	Port Operations and Ship Movement

- Inter-ship channels are for communications between ship stations. Inter-ship communications should be restricted to Channels 6, 8, 72 and 77. If these are not available, the other channels marked for Inter-ship may be used.
- Channel 70 is used exclusively for Digital Selective Calling (DSC) and is not available for regular voice communications.

Notes:

- [1] Channel 06 may also be used for communications between ship stations and aircraft engaged in coordinated search and rescue operations. Ship stations should avoid harmful interference to such communications on channel 06 as well as to communications between aircraft stations, ice breakers and assisted ships during ice seasons.
- [2] Within the European Maritime Area and in Canada, channels 10, 67 and 73 may also be used by the individual administrations concerned for communication between

ship stations, aircraft stations and participating land stations engaged in coordinated search and rescue and anti-pollution operations in local areas. Channels 10 or 73 (depending on location) are also used for the broadcast of Marine Safety Information by the Maritime and Coast Guard Agency in the UK only.

- [3] Channel 13 is designated for use on a worldwide basis as a navigation safety communication channel, primarily for inter-ship navigation safety communications.
- [4] Channels 15 and 17 may also be used for on-board communications provided the effective radiated power does not exceed 1 watt.
- [5] The use of Channels 75 and 76 should be restricted to navigation related communication only and all precautions should be taken to avoid harmful interference to channel 16. Transmit power is limited to 1 watt.

U.S. MARINE VHF CHANNELS AND FREQUENCIES

CH	TX Freq	RX Freq	Simplex	Usage
01A	156.050	156.050	x	Port Operations and Commercial, VTS. Available only in New Orleans / Lower Mississippi area.
03A	156.150	156.150	x	U.S. Government only
05A	156.250	156.250	x	Port Operations or VTS in the Houston, New Orleans and Seattle areas.
06	156.300	156.300	x	Inter-ship Safety
07A	156.350	156.350	x	Commercial
08	156.400	156.400	x	Commercial (Inter-ship only)
09	156.450	156.450	x	Boater Calling. Commercial and Non-Commercial.
10	156.500	156.500	x	Commercial
11	156.550	156.550	x	Commercial. VTS in selected areas.
12	156.600	156.600	x	Port Operations. VTS in selected areas.
13	156.650	156.650	x	Inter-ship Navigation Safety (Bridge-to-bridge). Ships >20meters in length maintain a listening watch on this channel in US waters.
14	156.700	156.700	x	Port Operations. VTS in selected areas.
15	–	156.750	x	Environmental (Receive only). Used by Class 'C' EPIRBs.
16	156.800	156.800	x	International Distress, Safety and Calling. Ships required to carry radio, USCG, and most coast stations maintain a listening watch on this channel.
17	156.850	156.850	x	State Control
18A	156.900	156.900	x	Commercial
19A	156.950	156.950	x	Commercial
20	157.000	161.600		Port Operations (duplex)
20A	157.000	157.000	x	Port Operations
21A	157.050	157.050	x	U.S. Coast Guard only

CH	TX Freq	RX Freq	Simplex	Usage
22A	157.100	157.100	x	Coast Guard Liaison and Maritime Safety Information Broadcasts. Broadcasts announced on channel 16.
23A	157.150	157.150	x	U.S. Coast Guard only
24	157.200	161.800		Public Correspondence (Marine Operator)
25	157.250	161.850		Public Correspondence (Marine Operator)
26	157.300	161.900		Public Correspondence (Marine Operator)
27	157.350	161.950		Public Correspondence (Marine Operator)
28	157.400	162.000		Public Correspondence (Marine Operator)
61A	156.075	156.075	x	U.S. Government only
63A	156.175	156.175	x	Port Operations and Commercial, VTS. Available only in New Orleans / Lower Mississippi area.
64A	156.225	156.225	x	U.S. Coast Guard only
65A	156.275	156.275	x	Port Operations
66A	156.325	156.325	x	Port Operations
67	156.375	156.375	x	Commercial. Used for Bridge-to-bridge communications in lower Mississippi River. Inter-ship only.
68	156.425	156.425	x	Non-Commercial
69	156.475	156.475	x	Non-Commercial
71	156.575	156.575	x	Non-Commercial
72	156.625	156.625	x	Non-Commercial (Inter-ship only)
73	156.675	156.675	x	Port Operations
74	156.725	156.725	x	Port Operations
77	156.875	156.875	x	Port Operations (Inter-ship only)
78A	156.925	156.925	x	Non-Commercial
79A	156.975	156.975	x	Commercial. Non-Commercial in Great Lakes only.
80A	157.025	157.025	x	Commercial. Non-Commercial in Great Lakes only
81A	157.075	157.075	x	U.S. Government only – Environmental protection operations.
82A	157.125	157.125	x	U.S. Government only
83A	157.175	157.175	x	U.S. Coast Guard only
84	157.225	161.825		Public Correspondence (Marine Operator)
84A	157.225	157.225		Non-Commercial
85	157.275	161.875		Public Correspondence (Marine Operator)
85A	157.275	157.275		Non-Commercial
86	157.325	161.925		Public Correspondence (Marine Operator)
86A	157.325	157.325		Non-Commercial
87	157.375	161.975		Public Correspondence Marine Operator)
87A	157.375	157.375		Non-Commercial
88	157.425	162.025		Public Correspondence only near Canadian border
88A	157.425	157.425	x	Commercial, Inter-ship only

- Recreational boaters normally use channels listed as Non-Commercial: 68, 69, 71, 72, 78A.
- Channel 70 is used exclusively for Digital Selective Calling (DSC) and is not available for regular voice communications.
- Channels 75 and 76 are reserved as guard bands for Channel 16 and are not available for regular voice communications.

WEATHER CHANNELS

WX1	162.550
WX2	162.400
WX3	162.475
WX4	162.425
WX5	162.450
WX6	162.500
WX7	162.525
WX8	161.650
WX9	161.775
WX10	163.275

CANADIAN MARINE VHF CHANNELS AND FREQUENCIES

CH	TX Freq	RX Freq	Simplex	Usage
01	156.050	160.650		PC Public Correspondence
02	156.100	160.700		PC Public Correspondence
03	156.150	160.750		PC Public Correspondence
04A	156.200	156.200		PC Inter-ship, Ship/Shore and Safety: Canadian Coast Guard S&R
05A	156.250	156.250		Ship Movement
06	156.300	156.300		All areas Inter-ship, Commercial, Non-commercial and Safety: May Be used for search and rescue communications between ships and aircraft.
07A	156.350	156.350		All areas Inter-ship, Ship/Shore, Commercial
08	156.400	156.400		WC, EC Inter-ship, Commercial and Safety: Also assigned for operations in the Lake Winnipeg area.
09	156.450	156.450		AC Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement: May be used to communicate with aircraft and Helicopters in predominantly maritime support operations.
10	156.500	156.500		AC, GL Inter-ship, Ship/Shore, Commercial, Non-commercial, Safety and Ship Movement: May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations.
11	156.550	156.550		PC, AC, GL Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement: Also used for pilotage purposes.
12	156.600	156.600		WC, AC, GL Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement: Port operations and pilot information and messages.
13	156.650	156.650		All areas Inter-ship, Commercial, Non-commercial and Ship Movement: Exclusively for bridge-to-bridge navigational traffic. Limited to 1-watt maximum power.

CH	TX Freq	RX Freq	Simplex	Usage
14	156.700	156.700		AC, GL Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement: Port operations and pilot information and Messages.
15	156.750	156.750		All areas Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement: All May also be used for on-board Communications.
16	156.800	156.800		All areas International Distress, Safety and Calling.
17	156.850	156.850		All areas Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement: All operations limited to 1-watt maximum power. May also be used for on-board Communications.
18A	156.900	156.900		All areas Inter-ship, Ship/Shore and Commercial: Towing on the Pacific Coast.
19A	156.950	156.950		All areas except PC Inter-ship and Ship/Shore: Canadian Coast Guard only.
20	157.000	161.600		All areas Ship/Shore, Safety and Ship Movement: Port operation
21A	157.050	157.050		All areas Inter-ship and Ship/Shore: Canadian Coast Guard only.
21B	–	161.650		All areas Safety: Continuous Marine Broadcast (CMB) service.
22A	157.100	157.100		All areas Inter-ship, Ship/Shore, Commercial and Non-commercial: For communications between Canadian Coast Guard and non-Canadian Coast Guard stations only.
23	157.150	161.750		PC Ship/Shore and Public Correspondence: Also in the inland waters of British Columbia and the Yukon.
23B	–	161.750		Continuous Marine Broadcast Service
24	157.200	161.800		All areas Ship/Shore and Public Correspondence
25	157.250	161.850		PC Ship/Shore and Public Correspondence: Also assigned for operations in the Lake Winnipeg area.
25B	–	161.850		AC Safety: Continuous Marine Broadcast (CMB) service.
26	157.300	161.900		All areas Ship/Shore, Safety and Public Correspondence
27	157.350	161.950		AC, GL, PC Ship/Shore and Public Correspondence
28	157.400	162.000		PC Ship/Shore, Safety and Public Correspondence
28B	–	162.000		AC Safety: Continuous Marine Broadcast (CMB) service.
60	156.025	160.625		PC Ship/Shore and Public Correspondence.
61A	156.075	156.075		EC Inter-ship, Ship/Shore and Commercial: Commercial fishing only.
62A	156.125	156.125		EC Inter-ship, Ship/Shore and Commercial: Commercial fishing only.
63A	156.175	156.175		Tow Boats - BCC area
64	156.225	160.825		PC Ship/Shore and Public Correspondence
64A	156.225	156.225		EC Inter-ship, Ship/Shore and Commercial: Commercial fishing only.
65A	156.275	156.275		Inter-ship, Ship/Shore, Commercial, Non-commercial, Safety: Search & rescue and antipollution operations on the Great Lakes. Towing on the Pacific Coast. Port operations only in the St. Lawrence River areas with 1W maximum power. Pleasure craft in the inland waters of Alberta, Saskatchewan and Manitoba (excluding Lake Winnipeg and the Red River).
66A	156.325	156.325		Inter-ship, Ship/Shore, Commercial, Non-commercial, Safety and Ship Movement: Port operations only in the St.Lawrence River/Great Lakes Areas with 1-watt maximum power.
67	156.375	156.375		All areas except EC Inter-ship, Ship/Shore, Commercial, Non-commercial, Safety: May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations.

CH	TX Freq	RX Freq	Simplex	Usage
68	156.425	156.425		All areas Inter-ship, Ship/Shore and Non-commercial: For marinas and yacht clubs.
69	156.475	156.475		All areas except EC Inter-ship, Ship/Shore, Commercial and Non-commercial
71	156.575	156.575		PC Inter-ship, Ship/Shore, Commercial, Non-commercial, Safety and Ship Movement the East Coast and on Lake Winnipeg.
72	156.625	156.625		EC, PC Inter-ship, Commercial and Non-commercial: May be used to communicate with aircraft and helicopters in predominantly maritime support
73	156.675	156.675		All areas except EC Inter-ship, Ship/Shore, Commercial, Non-commercial, Safety: May also be used for communications with aircraft engaged in coordinated search and rescue and antipollution operations.
74	156.725	156.725		EC, PC Inter-ship, Ship/Shore, Commercial, Non-commercial and Ship Movement.
75	156.775	156.775		Simplex port operation, Ship movement and navigation related communication only. 1 watt maximum
76	156.825	156.825		Simplex port operation, Ship movement and navigation related communication only. 1 watt maximum
77	156.875	156.875		Inter-ship, Ship/Shore, Safety and Ship Movement: Pilotage on Pacific Coast. Port operations only in the St. Lawrence River/Great Lakes areas with 1W maximum power.
78A	156.925	156.925		EC, PC Inter-ship, Ship/Shore and Commercial
79A	156.975	156.975		EC, PC Inter-ship, Ship/Shore and Commercial
80A	157.025	157.025		EC, PC Inter-ship, Ship/Shore and Commercial
81A	157.075	157.075		Inter-ship and Ship/Shore: Canadian Coast Guard use only in the St. Lawrence River/ Great Lakes areas.
82A	157.125	157.125		Inter-ship and Ship/Shore: Canadian Coast Guard use only in the St. Lawrence River/ Great Lakes areas.
83A	157.175	157.175		EC Inter-ship and Ship/Shore: Canadian Coast Guard and other Government agencies.
83B	–	161.775		AC, GL Safety: Continuous Marine Broadcast (CMB) Service.
84	157.225	161.825		PC Ship/Shore and Public Correspondence
85	157.275	161.875		AC, GL, NL Ship/Shore and Public Correspondence
86	157.325	161.925		PC Ship/Shore and Public Correspondence
87	157.375	161.975		AC, GL, NL Ship/Shore and Public Correspondence
88	157.425	162.025		AC, GL, NL Ship/Shore and Public Correspondence

AC: Atlantic Coast, Gulf and St. Lawrence River up to and including Montreal

EC (East Coast): includes NL, AC, GL and Eastern Arctic areas

GL: Great Lakes (including St. Lawrence above Montreal)

NL: Newfoundland and Labrador

PC: Pacific Coast

WC (West Coast): Pacific Coast, Western Arctic and Athabasca-Mackenzie Watershed areas

All areas: includes East and West Coast areas

WEATHER CHANNELS

WX1	162.550
WX2	162.400
WX3	162.475
WX4	162.425
WX5	162.450
WX6	162.500
WX7	162.525
WX8	161.650
WX9	161.775
WX10	163.275

SPECIFICATIONS

GENERAL

Frequency Range: 156.025 to 163.275 MHz
Oscillator: PLL
Modulation: FM
Channel Spacing: 25 kHz
Frequency Stability: ± 5 PPM
Standard Operating Temperature: $-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$
Nominal Working Voltage: 7.4 V DC (with Li-Ion battery)
Battery Life (5% TX, 5% RX, 90% Stby): ≥ 8 Hrs
Antenna Socket: SMA
Built in Speaker: 40 mm Diameter, 8 Ohms
Dimensions: 67 (W) x 153 (H) x 43 (D) mm
Weight: 297 grams
Battery: 7.4 V @ 1200 mAh Li-Ion
DC Charger: 12 V DC @ 1 Amp
Charging Current: 450 mA \pm 50 mA
Water resistant: IP66

Spurious Response rejection (CH16): ≥ 70 dB

Conducted Spurious Emission: ≤ 70 dB

Scan Time per Channel: 200 ms

RX Current: Standby – 185 mA
Max Audio Power – 380 mA

TRANSMITTER

Output Power: High – 5W
Low – 0.8W

Frequency Tolerance: ± 5 PPM

Max Modulation: ± 5 kHz

Conducted Spurious Emission: ≤ -56 dB

Audio Distortion @ 3 kHz Dev: $< 5\%$ w

Conducted Spurious Emission: ≤ -56 dB

TX Current: High Power – 1.6 A
Low Power – 0.9 A

Specifications are nominal and are subject to change without notice or obligation.

RECEIVER

Sensitivity (12dB SINAD): -119 dBm

Squelch: Threshold: -119 dBm
Tight: -113 dBm to -107 dBm

Rated Audio Output @5% THD Speaker: 250 mW

Adjacent Channel Rejection: ≥ 70 dB

Image Rejection: ≥ 70 dB

Intermodulation Rejection: ≥ 68 dB

Maximum S/N @ 1 mV: ≥ 40 dB

STANDARD COMMUNICATIONS WARRANTY AGAINST DEFECTS

This warranty against defects is given by Standard Communications Pty Ltd ACN 000 346 814 (We, us, our or GME). Our contact details are set out in clause 2.7. This warranty statement only applies to products purchased in Australia. Please contact your local GME distributor for products sold outside of Australia. Local distributor details at: www.gme.net.au/export.

1. Consumer guarantees

- 1.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 1.2 To the extent we are able, we exclude all other conditions, warranties and obligations which would otherwise be implied.

2. Warranty against defects

- 2.1 This warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.
- 2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited.
 - (a) In the case of goods we supply, to any one of the following as we decide –
 - (i) The replacement of the goods or the supply of equivalent goods.
 - (ii) The repair of the goods.
 - (iii) The cost of repairing the goods or of acquiring equivalent goods.
 - (b) In the case of services we supply, to any one of the following as we decide –
 - (i) The supplying of the services again
 - (ii) The cost of having the services supplied again.
- 2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.
- 2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to

the extent permitted at law), we agree to supply those services again at no extra charge to you.

- 2.6 To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.
- 2.7 Send your claim to:
Standard Communications Pty Ltd.
17 Gibbon Rd, Winston Hills, NSW 2153, Australia.
Tel: (02) 8867 6000 Fax: (02) 8867 6199.
Email: servadmin@gme.net.au
- 2.8 If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

3. What this warranty does not cover

- 3.1 This warranty will not apply in relation to:
 - (a) Goods modified or altered in any way.
 - (b) Defects and damage caused by use with non Standard Communications products.
 - (c) Repairs performed other than by our authorised representative.
 - (d) Defects or damage resulting from misuse, accident, impact or neglect.
 - (e) Goods improperly installed or used in a manner contrary to the relevant instruction manual; or
 - (f) Goods where the serial number has been removed or made illegible.

4. Warranty period

- 4.1 We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

PRODUCT TYPE	WARRANTY PERIOD
27 MHz and VHF marine radios	1 year

