


6. Repeat steps 4 and 5 until the name is complete. The name can consist of up to fifteen characters, and if you do not use all fifteen characters, select “→” to move to the next space. The “→” can also be used to enter a blank space in the name.
If a mistake is made entering in the name, press the [◀] or [▶] key to select “←” or “→”, press the [SELECT] soft key until the incorrect character is selected, then perform steps 4 and 5.
7. When finished entering the name (using eleven characters or less), press the [FINISH] soft key to advance to the MMSI number entry.
8. Rotate the **DIAL/ENT** knob to select “**MMSI:**”, then press the [SELECT] soft key.
9. Press the [◀] or [▶] key to select numbers, 0 - 9. To enter the desired number and move one space to the right by pressing the [SELECT] soft key. Repeat this procedure until all nine space of the MMSI number are entered. If a mistake is made entering in the MMSI number, press the [◀] or [▶] key to select “←” or “→”, press the [SELECT] soft key until the incorrect character is selected, then perform step 9.
10. When finished entering the MMSI number, press the [FINISH] soft key.
11. To store the entered data, Rotate the **DIAL/ENT** knob to select “**SAVE**”, then press the [ENTER] soft key.
12. To enter another individual address, repeat steps 2 through 11.
13. Press the [CLEAR] key to return to radio operation.



11.4.2 Setting up the Individual Call Reply

This menu item sets up the radio to manually (default setting) or automatically respond to a DSC individual call requesting you to switch to a working channel for voice communications. When “MANUAL” is selected the MMSI of the calling vessel is shown allowing you to see who is calling. This function is similar to caller ID on a cellular phone.

1. Press & hold [] ⇒ “**DSC SETUP**” ⇒ “**INDIVIDUAL REPLY**”
2. Rotate the **DIAL/ENT** knob to select “**AUTO**” or “**MANUAL**”.
3. Press the [ENTER] soft key to store the selected setting.
4. Press the [CLEAR] key to return to radio operation.

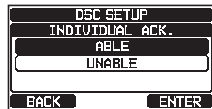


11.4.3 Enabling the Individual Call Acknowledgment

The radio can select either reply message “**ABLE**” (default) or “**UNABLE**” when the individual reply setting (described in the previous section) is set to “**AUTOMATIC**”.

1. Press & hold [] \Rightarrow “**DSC SETUP**” \Rightarrow “**INDIVIDUAL ACK.**”

2. Rotate the **DIAL/ENT** knob to select “**ABLE**” or “**UNABLE**”.



3. Press the [**ENTER**] soft key to store the selected setting.

4. Press the [**CLEAR**] key to return to radio operation.

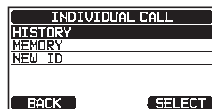
11.4.4 Transmitting an Individual Call

This feature allows the user to contact another vessel with a DSC transceiver, and is similar to calling a vessel on CH16 and requesting to go to another channel.

Individual Call using the Individual/Position Directory

1. [] \Rightarrow “**DSC CALL**” \Rightarrow “**INDIVIDUAL CALL**”

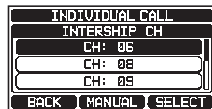
2. Rotate the **DIAL/ENT** knob to select “**HISTORY**” or “**MEMORY**”, then press the [**SELECT**] soft key.



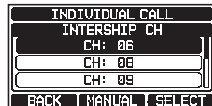
3. Rotate the **DIAL/ENT** knob to select an individual you want to contact, press the [**SELECT**] soft key.



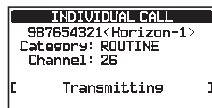
4. In the INTERSHIP CH list, rotate the **DIAL/ENT** knob to select the operating channel on which you want to communicate, then press the [**SELECT**] soft key. To select operating channels from all voice channels, press the [**MANUAL**] soft key.



5. Press the [**YES**] soft key to transmit the individual DSC signal.



6. When an individual call acknowledgment is received, the operating channel is automatically changed to the channel which is selected in step 4 above and a ringing tone sounds.



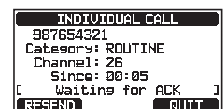
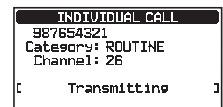
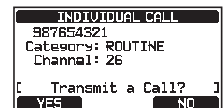
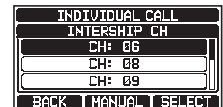
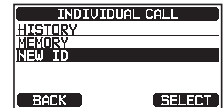
- Press the **[QUIT]** soft key to listen to the channel to make sure it is not busy, then press the microphone **PTT** switch and talk into the microphone to communicate with the other vessel.



Individual Call by Manually Entering an MMSI

You may enter an MMSI contact number manually without storing it in the individual directory.

- [**MENU / SET**] → “**DSC CALL**” → “**INDIVIDUAL CALL**”
- Rotate the **DIAL/ENT** knob to select “**NEW ID**”, then press the **[SELECT]** soft key.
- Press the [**◀**] or [**▶**] key to select the first number of the MMSI which you want to contact, then press the **[SELECT]** soft key to step to the next number.
- Repeat step 3 to set the MMSI number (nine digits). If a mistake is made while entering the MMSI number, press the [**◀**] or [**▶**] key to select “←” or “→”, press the **[SELECT]** soft key until the incorrect character is selected, then perform step 3 to enter the corrections.
- When finished entering the MMSI number, press the **[FINISH]** soft key.
- In the INTERSHIP CH list, rotate the **DIAL/ENT** knob to select the operating channel on which you want to communicate, then press the **[SELECT]**. To select operating channels from all voice channels, press the **[MANUAL]** soft key.
- Press the **[YES]** soft key to transmit the individual DSC call.
- When an individual call acknowledgment is received, the operating channel is automatically changed to the channel which is selected in step 6 above and a ringing tone sounds.
- Press the **[QUIT]** soft key to listen to the channel and make sure it is not busy, then press the microphone **PTT** switch and talk into the microphone to communicate with the other vessel.



11.4.5 Receiving an Individual Call

When an individual DSC call is received, the MMSI (Maritime Mobile Service Identity Number) or person's name is displayed, you may choose whether or not to send your position to the requesting vessel. Refer to section "11.4.2 Setting up the Individual Call Reply" to change the reply to "AUTO" if you want to automatically replying to the call.

Manual reply (Default setting):

1. When an individual call is received, a ringing alarm sounds.

The display shows the MMSI of the vessel transmitting the individual call.



2. Press any key to stop the alarm.
3. The 3 soft key selections shown on the display are described below:

[ACCEPT]: Press this key to accept the DSC individual call, and switch to the requested channel.

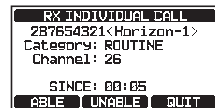
[PAUSE]: Press this key to temporarily pause automatically switching to the requested channel.

NOTE: In some cases, automatically switching to a requested channel might disrupt important ongoing communications. Commercial users may suspend channel switching and remain on the working channel in use before the individual call was received.

[QUIT]: Press this key to exit the automatic channel switching and revert to the last selected working channel.

NOTE: If a key is not pressed within 30 seconds, the transceiver will automatically change to radio operation.

4. After accepting the call, press the **[ABLE]** soft key to switch to the requested channel. (To inform the calling vessel that you are unable to respond, press the **[UNABLE]** soft key.)



5. Press the **[YES]** soft key to send an acknowledgement. Press the **[CHG CH]** soft key to change to the requested operating channel for communication.



6. Monitor the specified channel until the message is completed. Press the microphone **PTT** switch and talk into the microphone to communicate with the vessel that initiated the individual call.
7. Press the **[QUIT]** soft key to return to the channel display.



Automatic reply:

1. When an individual call is received, a ringing alarm sounds.

The radio automatically switches to the requested channel. The display shows the MMSI of the vessel calling.



2. Press any key to stop the alarm.
3. Monitor the requested channel until the message is completed.

Press the microphone **PTT** switch and talk into the microphone to communicate with the vessel that initiated the individual call.

4. Press the **[QUIT]** soft key to return to radio operation.

**NOTE**

When there is an unread individual call, the “✉” icon will appear on the display. You may review the unread individual call from the DSC log, refer to section “**11.10.2 Reviewing a Logged DSC RX Distress Alert and acknowledgement**”.

11.4.6 Setting up the Individual Call Ringer

When an individual call is received the call ringer will sound for 2 minutes (default setting). This selection allows the individual call ringer time to be changed.

1. Press & hold [] ➡ “DSC SETUP” ➡ “INDIVIDUAL RING”

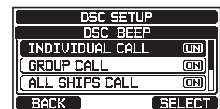
2. Rotate the **DIAL/ENT** knob to select the individual call ringing time.
3. Press the **[ENTER]** soft key to store the selected setting.
4. Press the **[CLEAR]** key to return to radio operation.



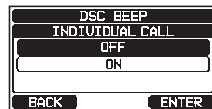
The **GX2400** individual call ringer may be set to OFF:

1. [Press & hold [] ➡ “DSC SETUP” ➡ “DSC BEEP”

2. Rotate the **DIAL/ENT** knob to select “INDIVIDUAL CALL”, then press the **[SELECT]** soft key.



3. Rotate the **DIAL/ENT** knob to select “**OFF**”.
4. Press the [**ENTER**] soft key to store the selected setting.
5. Press the [**CLEAR**] key to return to radio operation.



To enable the ringer tone, repeat the above procedure, Rotate the **DIAL/ENT** knob to select “**ON**” in step 3 above.

11.5 GROUP CALL

This feature allows users to automatically contact a specific group of vessels using DSC radios with the group call function. The called radios can automatically switch to the desired channel for voice communications. This function is very useful for yacht clubs and vessels traveling together that want to make communal announcements on a predetermined channel. Up to 30 group MMSIs may be programmed.

11.5.1 Setting up a Group Call

For this function to operate, the same group MMSI (Maritime Mobile Service Identity Number) must be programmed into all the DSC VHF radios within the group of vessels that will be using this feature. To understand Group MMSI programming, first a ship MMSI has to be understood.

Ship MMSI: The first three digits called MID (Mobile Identity Group) of a ship MMSI denote the country where the ship’s MMSI is registered. The last 6 digits are specific to the ships ID.

Ship MMSI Example: If your MMSI is “366123456”, “366” is MID which denote the country and “123456” is the vessel’s MMSI.

Group MMSI:

- Group MMSI numbers are not assigned by the FCC or other organizations licensed to assign ship MMSI numbers.
- The first digit of a group MMSI is always set to “0” by International rules. All Standard Horizon radios are preset so when programming a group MMSI the first digit is set to “0”.
- The ITU (International Telecommunication Union) recommends programming the MID of a ship MMSI into the Second, Third and Fourth digits of the group MMSI as it denotes the area where the ship is located.
- The last 5 digits are decided upon by persons in the group. This is an important step as all radios in the group must contain the same group MMSI in order to be contacted by each other. There is a chance that another group of vessels may program the same group MMSI. If this happens, simply change one or more of the last 5 digits of the group MMSI.

1. [Press & hold []] ⇒ “DSC SETUP” ⇒ “GROUP DIRECTORY”

2. Rotate the **DIAL/ENT** knob to select “**ADD**”, then press the [**SELECT**] soft key.



3. Rotate the **DIAL/ENT** knob to select “**GP NAME:**”, then press the [**SELECT**] soft key.



4. Press the [**◀**] or [**▶**] key to select the first letter of the name of the group you want to reference in the directory.



5. Press the [**SELECT**] soft key to store the first letter of the name and step to the next letter to the right.

6. Repeat steps 4 and 5 until the name is complete. The name can consist of up to fifteen characters, if you do not use all eleven characters, select “→” to move to the next space. This method can also be used to enter a blank space in the name.

If a mistake is made entering the name, press the [**◀**] or [**▶**] key to select “←” or “→”, press the [**SELECT**] soft key until the incorrect character is selected, then perform steps 4 and 5.

7. When finished entering the group name (using fifteen characters or less), press the [**FINISH**] soft key to advance to the group MMSI number entry.

8. Rotate the **DIAL/ENT** knob to select “**GP MMSI:**”, then press the [**SELECT**] soft key.



9. Press the [**◀**] or [**▶**] key to select the second number of the MMSI (the first of the nine digits is permanently set to “0”) which you want to contact, then press the [**SELECT**] soft key to step to the next number.

Repeat this procedure until all eight spaces of the MMSI number are entered.

If a mistake is made entering in the MMSI number, press the [**◀**] or [**▶**] key to select “←” or “→”, press the [**SELECT**] soft key until the incorrect character is selected, then perform step 9.

10. When finished entering the MMSI number, press the [**FINISH**] soft key to confirm.


11. To store the data, select “**SAVE**”, then press the [**SELECT**] soft key.

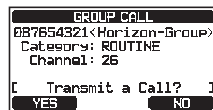
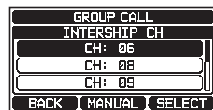
12. To enter another group address, repeat steps 2 through 11.

13. Press the [**CLEAR**] key to return to radio operation.

11.5.2 Transmitting a Group Call

Group Call using the Group Directory

1. [] → “DSC CALL” → “GROUP CALL”
2. Rotate the **DIAL/ENT** knob to select “**HISTORY**” or “**MEMORY**”, then press the [**SELECT**] soft key.
3. Rotate the **DIAL/ENT** knob to select a group you want to contact, then press the [**SELECT**] soft key
4. In the INTERSHIP CH list, rotate the **DIAL/ENT** knob to select the operating channel on which you want to communicate, then press the [**SELECT**] soft key. To select operating channels from all voice channels, press the [**MANUAL**] soft key.
5. Press the [**YES**] soft key to transmit the group call signal.
6. When the group call signal is sent, the display will be as shown in the illustration at the right.
7. After the group call is transmitted, all the radios in the group will switch to the designated channel.
8. Listen to the channel to make sure it is not busy, then press the microphone **PTT** switch to communicate with all of the vessels in the group.

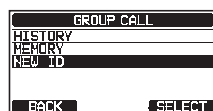






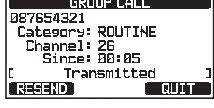
Group Call by Manually Entering an MMSI

This feature allows you to contact a group of vessels by entering in their group MMSI manually.

1. [] → “DSC CALL” → “GROUP CALL”

2. Rotate the **DIAL/ENT** knob to select “**NEW ID**”, then press the [**SELECT**] soft key.



3. Rotate the **DIAL/ENT** knob to select the second number of the MMSI (the first of nine digits is permanently set to “0”) which you want to contact, then press the [**SELECT**] soft key to step to the next number.
 
4. Repeat step 3 to set the MMSI number.
If a mistake is made entering in the MMSI number, press the [**◀**] or [**▶**] key to select “←” or “→”, press the [**SELECT**] soft key until the incorrect character is selected, then perform steps 3 and 4.
5. When finished entering the MMSI number, press the [**FINISH**] soft key.
6. In the INTERSHIP CH list, rotate the **DIAL/ENT** knob to select the operating channel on which to communicate, then press the [**SELECT**] soft key. To select operating channels from all voice channels, press the [**MANUAL**] soft key.
 
7. Press the [**YES**] soft key to transmit the group call signal.
 
8. After the group call is transmitted, all the radios in the group will switch to the designated channel.
 
9. Listen to the channel to make sure it is not busy, then press the microphone **PTT** switch to communicate with all of the vessels in the group.
 

11.5.3 Receiving a Group Call

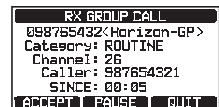
1. When a group call is received, the transceiver will produce a ringing alarm sound.
2. The display shows the group MMSI number.
3. Press any key to stop the alarm.

On the display 3 soft key selections are shown. These selections are described below:

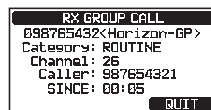
[ACCEPT]: Press this key to accept the group call and switch to the requested channel.

[PAUSE]: Press this key to temporarily pause automatic switching to the requested channel.


[QUIT]: Press this key to exit the automatic channel switching and revert to the last selected working channel.



- If you want to respond, monitor the channel to make sure it is clear, then press the microphone **PTT** switch and talk into the microphone to communicate with all of the vessels in the group.
- Press the **[QUIT]** soft key to return to radio operation.
NOTE: If a key is not pressed within 30 seconds, the radio will automatically change to radio operation.




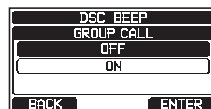
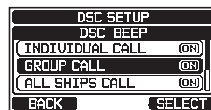
NOTE

When there is an unread group call, the “” icon will appear on the display. You may review the unread group call from the DSC log, refer to section “**11.10.3 Reviewing Other Logged Calls**”.

11.5.4 Setting up the Group Call Ringer

The transceiver group call ringer may be turned OFF using the following procedure:

- Press & hold [] → “DSC SETUP” → “DSC BEEP”
- Rotate the **DIAL/ENT** knob to select “**GROUP CALL**”, then press the **[SELECT]** soft key.
- Rotate the **DIAL/ENT** knob to select “**OFF**”.
- Press the **[ENTER]** soft key to store the selected setting.
- Press the **[CLEAR]** key to return to radio operation.



To enable the ringer tone, repeat the above procedure, rotate the **DIAL/ENT** knob to “**ON**” in step 3 above.

11.6 POSITION REQUEST

Advancements in DSC have made it possible to poll the location of another vessel and show the position of that vessel on the display of the **GX2400**. Standard Horizon has taken this feature one step further, if a compatible GPS chart plotter is connected to the **GX2400**, the polled position of the vessel is shown on the display of the GPS chart plotter making it easy to navigate to the location of the polled vessel. This is a great feature for anyone wanting to know the position of another vessel. For example, find where your buddy is catching fish or find the location of a vessel you are cruising with.

NOTE

The other vessel must have an operating GPS receiver connected to its DSC radio, and the radio must not be set to deny position requests. (Refer the section “**11.4 INDIVIDUAL CALL**” to enter information into the individual directory).

11.6.1 Setting up a Position Request Reply

The transceiver can be set up to automatically (default setting) or manually send your position when requested by another vessel. This selection is important if you are concerned about someone polling the position of your vessel that you may not want to. In the manual mode you will see the MMSI (Maritime Mobile Service Identity Number) or persons name shown on the display allowing you to choose whether or not to send your position to the requesting vessel.

1. Press & hold [] ⇒ “DSC SETUP” ⇒ “POSITION REPLY”

2. Rotate the **DIAL/ENT** knob to select “**AUTO**” or “**MANUAL**”. In “**AUTO**” mode, after a DSC POS request is received, the radio will automatically transmit your vessel’s position. In “**MANUAL**” mode, the display of the transceiver will show who is requesting the position and the [YES] soft key on the radio must be pressed to send your position to the requesting vessel.



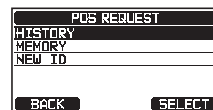
3. Press the [ENTER] soft key to store the selected setting.
4. Press the [CLEAR] key to return to radio operation.

11.6.2 Transmitting a Position Request to Another Vessel*Position Request using the Individual/Position Directory*

Refer to section “**11.4 INDIVIDUAL CALL**” to enter information into the individual directory.

1. [] ⇒ “DSC CALL” ⇒ “POS REQUEST”

2. Rotate the **DIAL/ENT** knob to select “**HISTORY**” or “**MEMORY**”, then press the [SELECT] soft key.



3. Rotate the **DIAL/ENT** knob to select a name that is stored in the individual/position directory.



- Press the [**SELECT**] soft key, then press the [**YES**] soft key to transmit the position request DSC call.
- When the transceiver receives the position from the polled vessel it is shown on the radio display.
- Press the [**QUIT**] soft key to return to radio operation.



NOTE

If the transceiver does not receive position data from the polled vessel, the display will show as follows.

```
--.---.----  _
---.---.----  _
```

Position Request by Manually Entering an MMSI

This feature allows you to request the position of a vessel by manually entering the MMSI.

- [**MENU / SET**] → "DSC CALL" → "POS REQUEST"

- Rotate the **DIAL/ENT** knob to select "**NEW ID**", then press the [**SELECT**] soft key.



- Press the [◀] or [▶] key to select the first number of the MMSI (nine digits) which you want to contact, then press the [**SELECT**] soft key to step to the next number.



- Repeat step 3 to set the MMSI number.
If a mistake is made entering in the MMSI number, press the [◀] or [▶] key to select "←" or "→", press the [**SELECT**] soft key until the incorrect character is selected, then perform step 3.
- When finished entering the MMSI number, press the [**FINISH**] soft key.
- Press the [**YES**] soft key to transmit the position request DSC call.



- When the transceiver receives the position from the polled vessel it is shown on the radio display.
- Press the [QUIT] soft key to return to radio operation.



NOTE

The received position from the polled vessel can be transferred to a GPS chart plotter via NMEA DSC and DSE sentences.

11.6.3 Receiving a Position Request

- When a position request call is received from another vessel, a ringing sound will be produced, and the display will be as shown in the illustration at the right.
- Press any key to stop the alarm.
- To send your vessel's position to the requesting vessel, press the [REPLY] soft key.
Or to exit from position request display, press the [QUIT] soft key.
- Press the [QUIT] soft key to return to the channel display.



NOTE

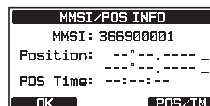
When there is an unread position request call, the "☒" icon will appear on the display. You may review the unread individual call from the DSC log, refer to section "11.10.3 Reviewing Other Logged Calls".

11.6.4 Manual Input of Position Information

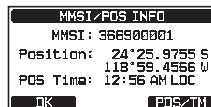
If the transceiver is located in an area where GPS reception is limited when you are going to reply to the received position request, you may manually input your location (latitude and longitude) and time to be sent.

- [MENU / SET] → "MMSI/POS INFO"

- Press the [POS/TM] soft key.



3. Press the [◀] or [▶] key to select the first number of latitude, then press the [SELECT] soft key to step to the next number.
4. Repeat step 3 to set the position and time.
If a mistake is made, press the [◀] or [▶] key to select “←” or “→”, press the [SELECT] soft key until the incorrect character is selected, then perform step 3.
5. When finished programming the position and time, press the [FINISH] soft key. The display will return to the previous screen.
6. Press the [OK] soft key.
7. Press the [CLEAR] key to return to radio operation.



11.6.5 Setting up a Position Request Ringer

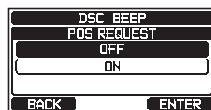
The transceiver has the capability to turn off the position request ringer.

1. Press & hold [MENU/SET] → “DSC SETUP” → “DSC BEEP”

2. Rotate the DIAL/ENT knob to select “POS REQUEST”, then press the [SELECT] soft key.



3. Rotate the DIAL/ENT knob to select “OFF”.
4. Press the [ENTER] soft key to store the selected setting.
5. Press the [CLEAR] key to return to radio operation.



To enable the ringer tone, repeat the above procedure, rotate the DIAL/ENT knob to select “ON” in step 3 above.

11.7 POSITION REPORT

The feature is similar to position request, however instead of requesting a position of another vessel this function allows you to send your position to another vessel.

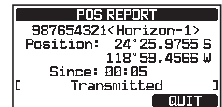
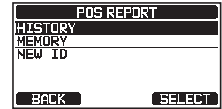
11.7.1 Transmitting a DSC Position Report Call

DSC Position Report Call using the Individual/Position Directory

Refer to section “11.4 INDIVIDUAL CALL” to enter information into the individual directory.

1. [MENU/SET] → “DSC CALL” → “POS REPORT”

2. Rotate the **DIAL/ENT** knob to select “**HISTORY**” or “**MEMORY**”, then press the [**SELECT**] soft key.
3. Rotate the **DIAL/ENT** knob to select the name in the directory, then press the [**SELECT**] soft key.
4. If you want to change the position displayed, press the [**POS/TM**] soft key to go to the position information input screen. After inputting new position information, press the [**FINISH**] soft key to confirm.
5. Press the [**YES**] soft key to send your position to the selected vessel.
6. Press the [**QUIT**] soft key to return to radio operation.



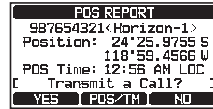
DSC Position Report Call by Manually Entering an MMSI

This feature allows you to send your position to another vessel by manually entering the MMSI of the ship you want to send your position to.

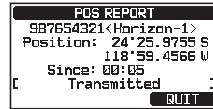
1. [**MENU / SET**] → “**DSC CALL**” → “**POS REPORT**”
2. Rotate the **DIAL/ENT** knob to select “**NEW ID**”, then press the [**SELECT**] soft key.
3. Rotate the **DIAL/ENT** knob to select the first number of the MMSI of the vessel you want to contact, then press the [**SELECT**] soft key to step to the next number.
4. Repeat step 3 to complete the MMSI number.
If a mistake is made entering in the MMSI number, press the [◀] or [▶] key to select “←” or “→”, press the [**SELECT**] soft key until the incorrect character is selected, then perform step 3.
5. When finished entering the MMSI number, press the [**FINISH**] soft key.
6. If you want to change the position displayed, press the [**POS/TM**] soft key to go to the position information input screen. After inputting the new position information, press the [**FINISH**] soft key to confirm.



- Press the **[YES]** soft key to send your position to the selected vessel.



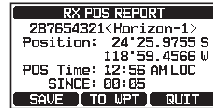
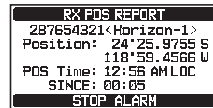
- Press the **[QUIT]** soft key to return to radio operation.



11.7.2 Receiving a DSC Position Report Call

When another operator transmits their vessels location to another **GX2400** receiver the following will happen:

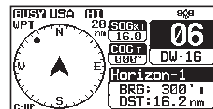
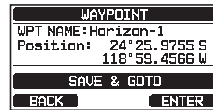
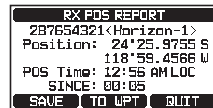
- When a position report call is received from another vessel, a ringing sound will be produced.
- Press any key to stop ringing.
- To exit to radio mode, press the **[QUIT]** soft key.



11.7.3 Navigating to the Reported Position

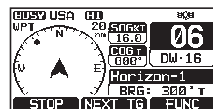
The transceiver has a feature that permits navigate to a received position report call by using the compass display. Navigation to the location of a position report call may be enabled by the procedure below.

- Press the **[TO WPT]** soft key.
- Press the **[ENTER]** soft key to save the waypoint into memory.
- The display indicates the distance and direction of the received vessel, and the compass displays the received vessel with a dot (●).



Stopping Navigation to the Reported Position

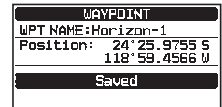
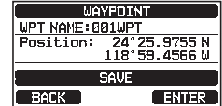
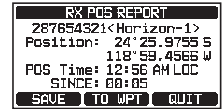
- Press one of the soft keys, then press the **[STOP]** soft key. The radio will stop navigating to the waypoint and the normal VHF display will be shown.



11.7.4 Saving the Reported Position as a Waypoint

The transceiver can save a position report call in the radio's memory as a waypoint.

1. After the position report call has been received, press the **[SAVE]** soft key.
2. If you want to change the name of the waypoint, rotate the **DIAL/ENT** knob to select "NAME", then press the **[SELECT]** soft key.
3. Enter the name of the waypoint you want to reference in the directory. For details, refer to "11.4.1 Setting up the Individual / Position Call Directory".
4. Press the **[ENTER]** soft key to save the waypoint into memory.
5. Press the **[OK]** soft key to return to the position report display.



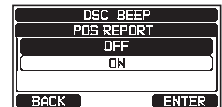
Navigating to a Saved Waypoint

Refer to section "12.1.1 Starting and Stopping Navigation" for details.

11.7.5 Setting up a Position Report Ringer

The transceiver position report ringer may be turned OFF.

1. Press & hold **[MENU/SET]** → "DSC SETUP" → "DSC BEEP"
2. Rotate the **DIAL/ENT** knob to select "POS REPORT", then press the **[SELECT]** soft key.
3. Rotate the **DIAL/ENT** knob to select "OFF".
4. Press the **[ENTER]** soft key to store the selected setting.
5. Press the **[CLEAR]** key to return to radio operation.




To enable the ringer tone, repeat the above procedure, rotate the **DIAL/ENT** knob to select "ON" in the step 3 above.

11.8 AUTO POSITION POLLING


The transceiver has the capability to automatically track six vessels programmed into the individual directory, or to automatically send your position information to the programmed stations.

11.8.1 Setting up the Polling Operation

1. Press & hold [] ⇒ “DSC SETUP” ⇒ “AUTO POSITION POLLING”
2. Rotate the **DIAL/ENT** knob to select the desired operation (AUTO POS REQUEST and AUTO POS REPORT), and press the [ENTER] soft key.
3. Press the [CLEAR] key to return to radio operation.



11.8.2 Setting up the Polling Time Interval


1. Press & hold [] ⇒ “DSC SETUP” ⇒ “AUTO POS INTERVAL”
2. Rotate the **DIAL/ENT** knob to select the desired interval time (30 second, 1, 2, 3, and 5 minutes) and press the [ENTER] soft key.
3. Press the [CLEAR] key to return to radio operation.

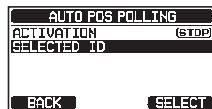


11.8.3 Selecting Vessels to be Automatically Polled

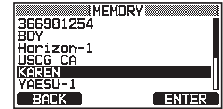
NOTE

The radio uses the individual directory to select vessels to be automatically polled. Refer to section “11.4.1 Setting up the Individual / Position Call Directory” and enter the MMSI of vessels you may want to poll before proceeding.

1. [] ⇒ “DSC CALL” ⇒ “AUTO POS POLLING”
2. Rotate the **DIAL/ENT** knob to select “SELECTED ID”, then press the [SELECT] soft key.
3. The radio will show a highlighted blank row when you select the vessel for the first time. Press the [SELECT] soft key.

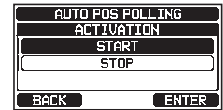
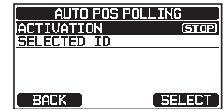


4. The radio will show the vessels programmed in the individual directory. Rotate the **DIAL/ENT** knob to select the desired vessel, then press the **[ENTER]** soft key.
5. For more entries, rotate the **DIAL/ENT** knob to select a blank row, press the **[SELECT]** soft key, then perform step 4.
6. When finished, press the **[CLEAR]** key to exit to the radio mode.



11.8.4 Enabling/Disabling Auto POS Polling

1. **[MENU / SET]** ⇒ **“DSC CALL”** ⇒ **“AUTO POS POLLING”**
2. Rotate the **DIAL/ENT** knob to select **“ACTIVATION”**, then press the **[SELECT]** soft key.
3. Rotate the **DIAL/ENT** knob to select **“START”** to enable transmissions or **“STOP”** to disable, then press the **[ENTER]** soft key.
4. Press the **[CLEAR]** key to return to radio operation.
5. Auto POS Polling starts and the **“A”** icon will appear on the display.



11.9 DSC TEST

This function is used to contact another DSC equipped vessel to ensure the DSC functions of the radio are operating.

NOTE

To use the DCS Test feature, a radio that is to receive the test call also needs to have the DSC Test feature.


To perform the DSC test you will need to enter the MMSI of another vessel into the individual directory or manually enter the MMSI using the procedure below.

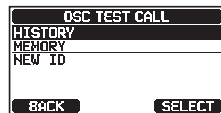
11.9.1 Programming MMSI into Individual Directory

Refer to section **“11.4.1 Setting up the Individual / Position Call Directory”**.


11.9.2 Transmitting a DSC Test to Another Vessel

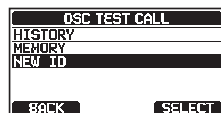
DSC Test call using the Individual/Position Directory

1. [] ⇒ “DSC CALL” ⇒ “DSC TEST CALL”
2. Rotate the **DIAL/ENT** knob to select “**HISTORY**” or “**MEMORY**”, then press the [**SELECT**] soft key.
3. Rotate the **DIAL/ENT** knob to select the ship name, then press the [**SELECT**] soft key.
4. Press the [**YES**] soft key to transmit the DSC test call to the other vessel.
5. Press the [**QUIT**] soft key to return to radio operation.



DSC Test Call by Manually Entering an MMSI

1. [] ⇒ “DSC CALL” ⇒ “DSC TEST CALL” ⇒ “**MANUAL**”
2. Rotate the **DIAL/ENT** knob to select “**NEW ID**”, then press the [**SELECT**] soft key.
3. Rotate the **DIAL/ENT** knob to select the first digit in the MMSI, then press the [**SELECT**] soft key.
4. Repeat step 3 until all the numbers of the MMSI are shown on the display.
5. Press the [**FINISH**] soft key to show the test call page.
6. Press the [**YES**] soft key to transmit the DSC test call to the other vessel.
7. Press the [**QUIT**] soft key to return to radio operation.



NOTE

When the radio receives a test call reply from the vessel that was called, the radio will ring and show **“RX TEST CALL”** on the display, this confirms the called radio has received the test call.

11.9.3 Receiving a DSC Test Call

When another vessel transmits a DSC Test call to the **GX2400** following will happen:

1. When a DSC Test call is received, the radio will automatically respond to the calling vessel.
2. To exit from the DSC Test call display, press the **[QUIT]** soft key.

**11.10 DSC LOG OPERATION**

The **GX2400** logs transmitted calls, received DSC distress calls, and other calls (individual, group, all ships, etc.). The DSC log feature is similar to an answer machine where calls are recorded for review and an “☑” icon will appear on the radio's display. The **GX2400** can store up to 100 transmitted calls, up to the latest 50 distress calls, and up to the latest 100 other calls (individual, group, all ships, position report, position request acknowledge and test call acknowledge).

NOTE

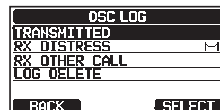
When the **“DSC LOG”** menu is selected, the transceiver may display high-priority logged calls automatically.

11.10.1 Reviewing and Resending a Transmitted Logged Call

The transceiver allows transmitted logged calls to be reviewed and resent.

1. **[MENU /SET]** → **“DSC CALL”** → **“DSC LOG”**

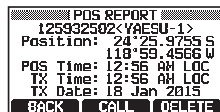
2. Rotate the **DIAL/ENT** knob to select **“TRANSMITTED”**, then press the **[SELECT]** soft key.



3. Rotate the **DIAL/ENT** knob to select the station (name or MMSI number) you want to review and/or resend the call.
4. Press the **[SELECT]** soft key to review details of the selected station.



- Press the [CALL] soft key to resend the DSC call or press the [BACK] soft key to go back to the transmitted DSC call list.



11.10.2 Reviewing a Logged DSC RX Distress Alert and acknowledgement

The transceiver allows logged DSC RX distress alerts and acknowledgements to be reviewed.

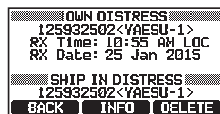
- [MENU/SET] → "DSC CALL" → "DSC LOG" → "RX DISTRESS"

- Rotate the DIAL/ENT knob to select the station (name or MMSI number) of the distress alert you want to review its acknowledgement.



NOTE: When there is an unread received call, the "✉" icon will appear to the left of the logged call.

- Press the [SELECT] soft key to review details for the selected station.
- Press the [INFO] soft key to display more information or press the [BACK] soft key to go back to the received DSC distress call list.



11.10.3 Reviewing Other Logged Calls

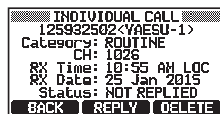
- [MENU/SET] → "DSC CALL" → "DSC LOG" → "RX OTHER CALL"

- Rotate the DIAL/ENT knob to select the station (name or MMSI number) you want to review and/or call back.




NOTE: When received call is unread, the "✉" icon will appear to the left of the logged call.

- Press the [SELECT] soft key to review details of the selected station.
- Press the [REPLY] soft key to reply to the call or press the [BACK] soft key to return to the received call list.



11.10.4 Deleting Logged Calls from the DSC Log Directory

1. [] → “DSC CALL” → “DSC LOG” → “LOG DELETE”
2. Rotate the **DIAL/ENT** knob to select the category (“TRANSMITTED”, “RX DISTRESS”, “RX OTHER CALL” or “ALL LOG”) to be deleted.
3. Press the [**SELECT**] soft key.
The display will show “Do you want to delete the LOG?”.
4. Press the [**YES**] soft key. (To cancel, press the [**NO**] soft key.)
5. Press the [**CLEAR**] key to return to radio operation.




NOTE

The procedure above will delete all logged calls of the selected category at one time.

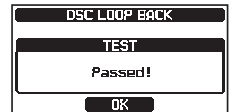
To delete logged calls one by one, review the details of the call you want to delete, then press the [**DELETE**] soft key.

11.11 DSC LOOP BACK OPERATION

The **GX2400** has a DSC self-test feature.

1. [] → “DSC CALL” → “DSC LOOP BACK”
2. Press the [**YES**] soft key to start a test. (To cancel, press the [**NO**] soft key.)

The display will show “Passed!” if the DSC feature properly operates. Press the [**OK**] soft key to return to the “DSC CALL” menu.
3. Press the [**CLEAR**] key to return to radio operation.



12 NAVIGATION

The **GX2400** is capable of storing up to 250 waypoints for navigation using the compass page.

You can also navigate to a DSC distress call with location data, or to the position received from another DSC radio using DSC polling.

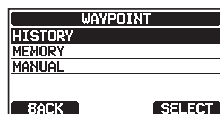
12.1 WAYPOINT OPERATION

12.1.1 Starting and Stopping Navigation

Navigation Using the Waypoint Directory

1. [] ⇒ “NAVI” ⇒ “WAYPOINT”

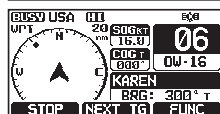
2. Rotate the **DIAL/ENT** knob to select the desired category (“**HISTORY**” or “**MEMORY**”), then press the [**SELECT**] soft key.



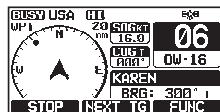
3. Rotate the **DIAL/ENT** knob to select a waypoint, then press the [**SELECT**] soft key. The navigation screen will appear.



The navigation screen includes the distance and direction to the destination. The destination waypoint is indicated by a dot (●) inside the compass.



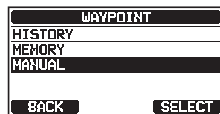
4. Press one of the soft keys, then press the [**STOP**] soft key to exit the navigation screen.



Navigation by Manually Entering a Waypoint

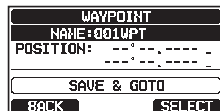
1. [] ⇒ “NAVI” ⇒ “WAYPOINT”

2. Rotate the **DIAL/ENT** knob to select “**MANUAL**”, then press the [**SELECT**] soft key.



3. If you want to give the waypoint an easy-to-find name, rotate the **DIAL/ENT** knob to select “**NAME:**”, press the [**SELECT**] soft key, then enter the name. For details, refer to “**11.4.1 Setting up the Individual / Position Call Directory**”.

4. Rotate the **DIAL/ENT** knob to select “**POSITION:**”, then press the [**SELECT**] soft key.



- Rotate the **DIAL/ENT** knob to select the first number of latitude, then press the [**SELECT**] soft key to step to the next number.

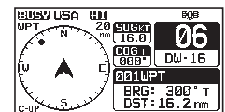


- Repeat step 5 to set the position.
If a mistake is made, press the [◀] or [▶] key to select “←” or “→”, press the [**SELECT**] soft key until the incorrect character is selected, then perform step 5.
- When finished programming the position, press the [**FINISH**] soft key. The display will return to the previous screen.

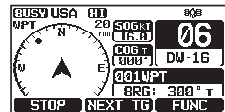
- Rotate the **DIAL/ENT** knob to select “**SAVE & GOTO**”, then press the [**SELECT**] soft key. The navigation screen will appear.



The screen includes the distance and direction to the destination. The destination and the waypoint is indicated by a dot (●) inside the compass.



- Press one of the soft keys, then press the [**STOP**] soft key to exit the navigation screen.



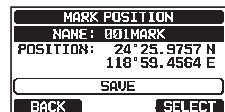
12.1.2 Setting Up Waypoint Directory

Marking a Position

This feature allows the radio to mark the current position of the vessel.

- Press & hold [] → “**WAYPOINT SETUP**” → “**MARK POSITION**”

- If you want to modify the name, rotate the **DIAL/ENT** knob to select “**NAME:**”, then press the [**SELECT**] soft key.

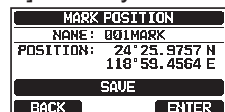


- Enter the waypoint name by rotating the **DIAL/ENT** knob and the [**SELECT**] soft key.

When finished entering the name (using fifteen characters or less), press the [**FINISH**] soft key.


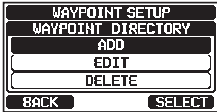
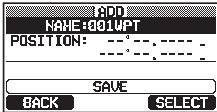
- If you want to modify the position, rotate the **DIAL/ENT** knob to select “**POSITION:**”, press the [**SELECT**] soft key, then enter the new coordinates. When finished modifying the position, press the [**FINISH**] soft key.

- Rotate the **DIAL/ENT** knob to select “**SAVE**”, then press the [**SELECT**] soft key to save the mark position into memory.







- Press the [**CLEAR**] key to return to radio operation.




Adding a Waypoint

- Press & hold [] \Rightarrow "WAYPOINT SETUP" \Rightarrow "WAYPOINT DIRECTORY"
- Rotate the **DIAL/ENT** knob to select "ADD", then press the [SELECT] soft key.
 
- Rotate the **DIAL/ENT** knob to select "NAME:", then press the [SELECT] soft key.
 
- Enter the waypoint name by pressing the [◀] or [▶] key and the [SELECT] soft key.
When finished entering the name (using fifteen characters or less), press the [FINISH] soft key.
- Rotate the **DIAL/ENT** knob to select "POSITION:", press the [SELECT] soft key, then enter the waypoint coordinates.
When finished entering the position, press the [FINISH] soft key.
- Rotate the **DIAL/ENT** knob to select "SAVE", then press the [SELECT] soft key to save the waypoint into memory.
- Press the [CLEAR] key to return to radio operation.

Editing a Waypoint

- Press & hold [] \Rightarrow "WAYPOINT SETUP" \Rightarrow "WAYPOINT DIRECTORY"
- Rotate the **DIAL/ENT** knob to select "EDIT", then press the [SELECT] soft key.
 
- Rotate the **DIAL/ENT** knob to select the waypoint to be edited, then press the [SELECT] soft key to show the waypoint input display.
 
- Rotate the **DIAL/ENT** knob to select "NAME:" or "POSITION:", then press the [SELECT] soft key.
- Press the [◀] or [▶] key to select "←" or "→", press the [SELECT] soft key until the character to be changed is selected, then enter a new character.
- Repeat step 5 until the waypoint is updated.
When finished editing, press the [FINISH] soft key.
- Rotate the **DIAL/ENT** knob to select "SAVE", then press the [SELECT] soft key to store the edited waypoint into memory.
 
- Press the [CLEAR] key to return to radio operation.

Deleting a Waypoint

1. Press & hold [] ⇒ **“WAYPOINT SETUP”** ⇒ **“WAYPOINT DIRECTORY”**
2. Rotate the **DIAL/ENT** knob to select **“DELETE”**, then press the [**SELECT**] soft key.
 
3. Rotate the **DIAL/ENT** knob to select the waypoint to be deleted, then press the [**SELECT**] soft key.
 
4. Confirm the waypoint to be deleted, rotate the **DIAL/ENT** knob to select **“OK”**, then press the [**SELECT**] soft key.
5. Press the [**CLEAR**] key to return to radio operation.


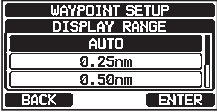
Saving a DSC Position Call as a Waypoint

When a position is received from another DSC radio the **GX2400** allows the position to be saved as a waypoint.

Refer to section **“11.7.4 Saving the Reported Position as a Waypoint”** for details.


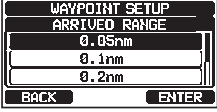
12.1.3 Selecting the Display Range

This menu item allows setting of the range on the compass display.

1. Press & hold [] ⇒ **“WAYPOINT SETUP”** ⇒ **“DISPLAY RANGE”**
2. Rotate the **DIAL/ENT** knob to select desired range. (Unit of measure depends on the settings in the GPS SETUP menu. Refer to section **“19.7 UNITS OF MEASURE”**.)
 
3. Press the [**ENTER**] soft key to store the selected setting.
4. Press the [**CLEAR**] key to return to radio operation.

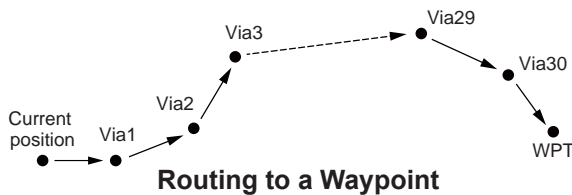
12.1.4 Selecting the Arrival Range

This menu setting determines the arrival range distance. An alert will sound when your vessel navigates to within the arrival range of the designated waypoint.

1. Press & hold [] ⇒ **“WAYPOINT SETUP”** ⇒ **“ARRIVAL RANGE”**
2. Rotate the **DIAL/ENT** knob to select desired range. (Unit of measure depends on the settings in the GPS SETUP menu. Refer to section **“19.7 UNITS OF MEASURE”**.)
 
3. Press the [**ENTER**] soft key to store the selected setting.
4. Press the [**CLEAR**] key to return to radio operation.

12.2 ROUTING OPERATION

The **GX2400** permits setting 1 to 30 waypoints along the route to a destination.



12.2.1 Setting Up Routing Directory

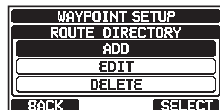
NOTE

All the destinations and via-points must be programmed as waypoints in the memory. Refer to section “12.1.2 Setting Up Waypoint Directory”.

Adding a Route

1. Press & hold [] ⇒ “WAYPOINT SETUP” ⇒ “ROUTE DIRECTORY”

2. Rotate the **DIAL/ENT** knob to select “ADD”, then press the [SELECT] soft key.



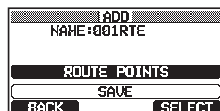
3. Rotate the **DIAL/ENT** knob to select “NAME:”, then press the [SELECT] soft key.
4. Enter the route name by rotating the **DIAL/ENT** knob and the [SELECT] soft key.

When finished entering the name (using fifteen characters or less), press the [FINISH] soft key.

5. Rotate the **DIAL/ENT** knob to select “ROUTE POINTS”, press the [SELECT] soft key.



6. Rotate the **DIAL/ENT** knob to select “WPT:”, then press the [SELECT] soft key.
7. Rotate the **DIAL/ENT** knob to select a waypoint, then press the [SELECT] soft key.
8. Rotate the **DIAL/ENT** knob to select “Via 1:”, then press the [SELECT] soft key.



9. Rotate the **DIAL/ENT** knob to select a waypoint, then press the [SELECT] soft key.



10. Repeat steps 8 and 9 to add more via-points.
11. Press the **[BACK]** soft key.
12. Rotate the **DIAL/ENT** knob to select “**SAVE**”, then press the **[ENTER]** soft key to store the route into memory.
13. Press the **[CLEAR]** key to return to radio operation.



Editing a Route

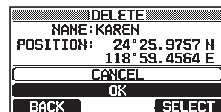
This function allows a previously entered route to be edited.

1. Press & hold **[MENU / SET]** → “**WAYPOINT SETUP**” → “**ROUTE DIRECTORY**”
2. Rotate the **DIAL/ENT** knob to select “**EDIT**”, then press the **[SELECT]** soft key.
3. Rotate the **DIAL/ENT** knob to select the route to be edited, then press the **[SELECT]** soft key to show the route input display.
4. Perform steps 3 to 11 of the previous page until the route is updated.
5. Rotate the **DIAL/ENT** knob to select “**SAVE**”, then press the **[SELECT]** soft key to store the edited route into memory.
6. Press the **[CLEAR]** key to return to radio operation.




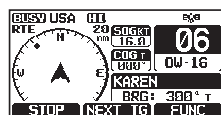
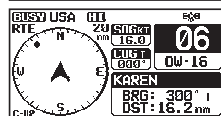
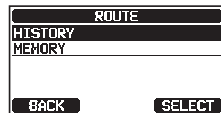
Deleting a Route

1. Press & hold **[MENU / SET]** → “**WAYPOINT SETUP**” → “**ROUTE DIRECTORY**”
2. Rotate the **DIAL/ENT** knob to select “**DELETE**”, then press the **[SELECT]** soft key.
3. Rotate the **DIAL/ENT** knob to select the route to be deleted, then press the **[SELECT]** soft key.
4. Confirm the route to be deleted, Rotate the **DIAL/ENT** knob to select “**OK**”, then press the **[SELECT]** soft key.
5. Press the **[CLEAR]** key to return to radio operation.



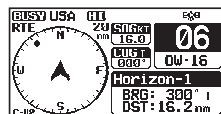
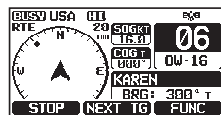
12.2.2 Starting and Stopping Route Navigation

1. Press [] to navigate to "NAVI" and then to "ROUTE".
2. Rotate the **DIAL/ENT** knob to select the desired category ("**HISTORY**" or "**MEMORY**"), then press the [**SELECT**] soft key.
3. Rotate the **DIAL/ENT** knob to select a route, then press the [**SELECT**] soft key. The navigation screen with "**RTE**" indicator appears.
4. A message "**ARRIVED**" will appear when the first target point is reached.
To start navigation to the next target, press the [**YES**] soft key.
5. Press one of the soft keys, then press the [**STOP**] soft key to exit the navigation screen.




12.2.3 Changing the Destination

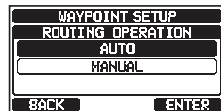
1. On the navigation screen, press one of the soft keys, then press the [**NEXT TG**] soft key.
2. Rotate the **DIAL/ENT** knob to select the desired destination, then press the [**SELECT**] soft key.
3. The navigation screen with the new destination appears.



12.2.4 Selecting Automatic or Manual Routing

When your vessel arrives at a via waypoint, this setting determines whether or not navigation to the next waypoint will continue automatically or must be initiated manually.

1. Press & hold [] to navigate to "WAYPOINT SETUP" and then to "ROUTING OPERATION".
2. Rotate the **DIAL/ENT** knob to select "**AUTO**" or "**MANUAL**", then press the [**ENTER**] soft key.
3. Press the [**CLEAR**] key to return to radio operation.



13 GM OPERATION

The GM (Group Monitor) feature of the **GX2400** utilizes the same system as the DSC Group call and Auto Position Polling, to display the group members' locations.

13.1 SETTING UP GM OPERATION

The transceiver is capable of storing up to 10 groups with 1 to 9 members each.

13.1.1 Setting Up GM Group Directory

NOTE

- For this function to operate, the same group MMSI must be programmed into the transceivers of all the group members to be monitored. Refer to section “11.5.1 Setting up a Group Call” for details.
- Group members for GM operation can only be selected from the Individual/ Position Call directory, therefore for all members that you want to monitor, must be stored in the directory. Refer to section “11.4.1 Setting up the Individual / Position Call Directory” for details.

1. Press & hold [] ⇒ “GM SETUP” ⇒ “GM GROUP DIRECTORY”

2. Rotate the **DIAL/ENT** knob to select “ADD”, then press the [SELECT] soft key.



3. Rotate the **DIAL/ENT** knob to select “NAME:”, then press the [SELECT] soft key.



4. Enter the route name by rotating the **DIAL/ENT** knob and the [SELECT] soft key.

When finished entering the name (using eleven characters or less), press the [FINISH] soft key.

5. Rotate the **DIAL/ENT** knob to select “GM ID:”, press the [SELECT] soft key, then enter the group MMSI number.



When finished entering the MMSI, press the [FINISH] soft key.

6. Rotate the **DIAL/ENT** knob to select “MEMBER”, then press the [SELECT] soft key.

