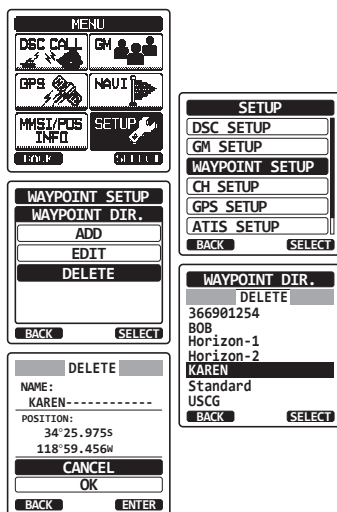


11.2.4 Deleting a Waypoint

1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "WAYPOINT SETUP".
3. Press the **[SELECT]** soft key, then select "WAYPOINT DIR." with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key, then select "DELETE" with the **CH▲/CH▼** key.
5. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to highlight the waypoint to be deleted.
6. Press the **[SELECT]** soft key.
7. Confirm the waypoint to be deleted, then with "OK" highlighted, press the **[ENTER]** soft key.
8. Press the **CLR** key to return to radio operation.



11.2.5 Saving a DSC Position Call as a Waypoint

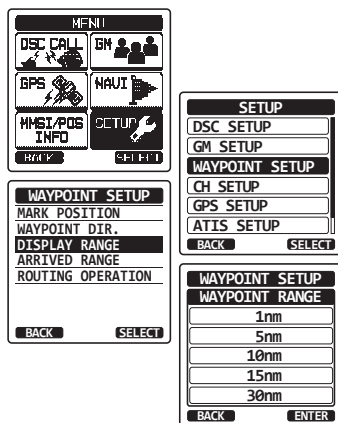
When a position is received from another DSC radio the **HX870** allows the position to be saved as a waypoint.

Refer to section "10.8.5 Saving a Position Report as a Waypoint" for details.

11.2.6 Selecting the Waypoint Range

This menu item allows setting of the range on the display. The default setting is “10nm”.

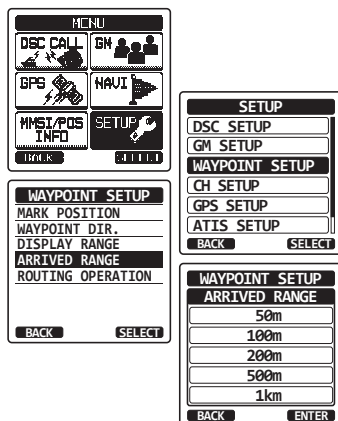
1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “WAYPOINT SETUP”.
3. Press the **[SELECT]** soft key, then select “DISPLAY RANGE” with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select desired range. Available selections are “1nm”, “5nm”, “10nm”, “15nm”, and “30nm”.
6. Press the **[ENTER]** soft key to store the selected setting.
7. Press the **CLR** key to return to radio operation.



11.2.7 Selecting the Arrived Range

To stop navigating to a waypoint, the radio must be switched to the normal mode with the following procedure.

1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “WAYPOINT SETUP”.
3. Press the **[SELECT]** soft key, then select “ARRIVED RANGE” with the **CH▲/CH▼** key.
4. Press the **[ENTER]** soft key.
5. Press the **CH▲/CH▼** key to select desired range. Available selections are “50 m”, “100 m”, “200 m”, “500 m”, and “1 km”.
6. Press the **[ENTER]** soft key to store the selected setting.

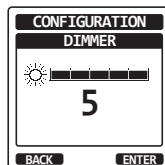
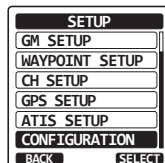
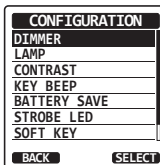
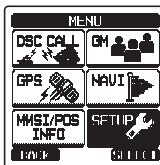


12 CONFIGURATION

12.1 DIMMER ADJUSTMENT

This menu selection adjusts the backlight intensity.

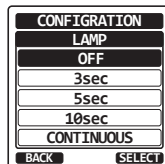
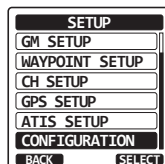
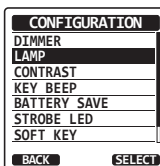
1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "CONFIGURATION" menu.
3. Press the **[SELECT]** soft key, then select "DIMMER" with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select the desired level ("5" is default). When "OFF" is selected, the lamp is turned off.
6. Press the **[SELECT]** soft key to store the selected level.
7. Press the **CLR** key to return to radio operation.



12.2 LAMP

This menu selection is used to setup the illumination time of the display and keypad. The default setting is "OFF".

1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "CONFIGURATION" menu.
3. Press the **[SELECT]** soft key, then select "LAMP" with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select the desired time.



CONTINUOUS: Illuminates the display/keypad continuously.

3/5/10 Sec: Illuminates the display/keypad for the selected time when press any key (except the **PTT** switch).

OFF: Disables the display/keypad lamp illumination.

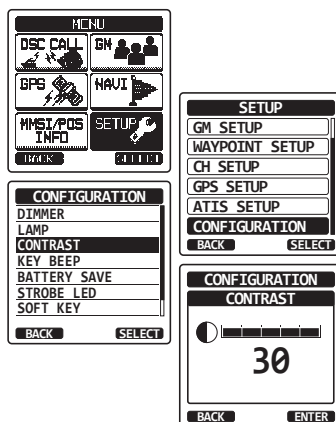
6. Press the **[SELECT]** soft key to store the selected setting.

- Press the **CLR** key to return to radio operation.

12.3 DISPLAY CONTRAST

The display contrast can be adjusted to suit overhead or dash board installations.

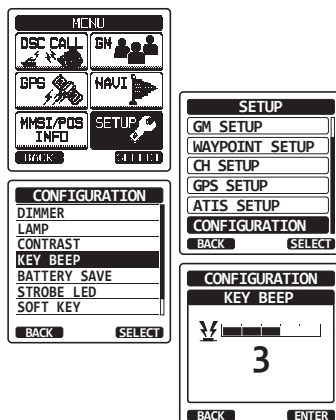
- Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
- Press the **CH▲/CH▼** key to select “CONFIGURATION” menu.
- Press the **[SELECT]** soft key, then select “CONTRAST” with the **CH▲/CH▼** key.
- Press the **[SELECT]** soft key.
- Press the **CH▲/CH▼** key to select the desired level. The contrast level can be set from “0” to “30” (“15” is default).
- Press the **[SELECT]** soft key to store the selected level.
- Press the **CLR** key to return to radio operation.



12.4 KEY BEEP

This selection is used to select the beep tone volume level when a key is pressed.

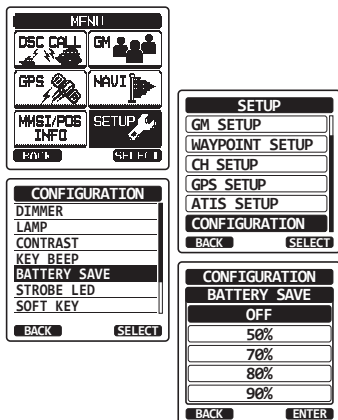
- Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
- Press the **CH▲/CH▼** key to select “CONFIGURATION” menu.
- Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select “KEY BEEP”.
- Press the **[SELECT]** soft key.
- Press the **CH▲/CH▼** key to select the desired level. The beep level can be set from “LEVEL 1” to “LEVEL 5”, or “OFF”.
- Press the **[SELECT]** soft key to store the selected level.
- Press the **CLR** key to return to radio operation.



12.5 BATTERY SAVER

This function allows you to change the battery save mode setting.

1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “CONFIGURATION” menu.
3. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select “BATTERY SAVE”.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select the desired setting. You can select one from “OFF”, “50%”, “70%”, “80%”, or “90%”.
6. Press the **[SELECT]** soft key to store the selected setting.
7. Press the **CLR** key to return to radio operation.

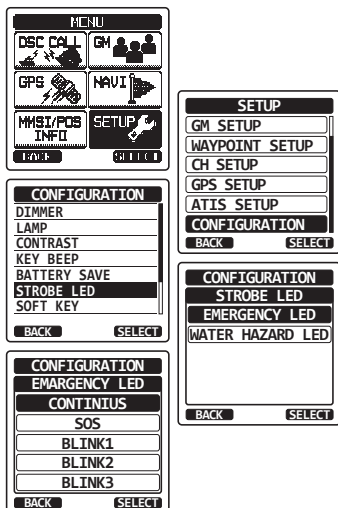


12.6 STROBE LED

This function allows you to change the EMERGENCY LED and WATER HAZARD LED settings.

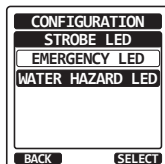
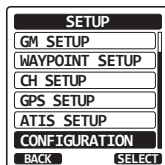
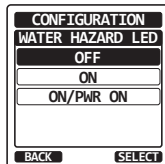
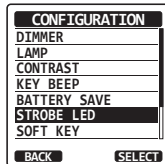
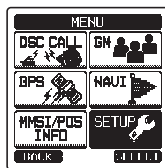
12.6.1 EMERGENCY LED

1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “CONFIGURATION” menu.
3. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select “STROBE LED”.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select “EMERGENCY LED”.
6. Press the **CH▲/CH▼** key to select the desired setting. You can select one from “CONTINUOUS”, “SOS”, “BLINK 1”, “BLINK 2”, or “BLINK 3”.
7. Press the **[SELECT]** soft key to store the selected setting.
8. Press the **CLR** key to return to radio operation.



12.6.2 WATER HAZARD LED

1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “CONFIGURATION” menu.
3. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select “STROBE LED”.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select “EMERGENCY LED”.
6. Press the **CH▲/CH▼** key to select the desired setting. You can select one from “OFF”, “ON”, or “ON/PWR ON”.
OFF: The LED does not light up.
ON: The LED lights up.
ON/PWR ON: The LED lights up and the transceiver turns on if it is off.
7. Press the **[SELECT]** soft key to store the selected setting.
8. Press the **CLR** key to return to radio operation.

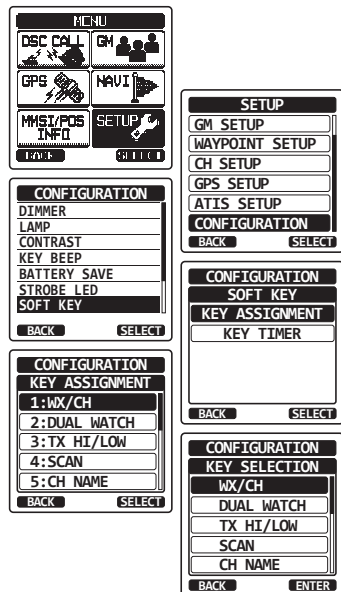


12.7 SOFT KEYS

This menu item allows selection of the number of soft keys, soft key selection and how long the display will show the soft key icon after a soft key is pressed.

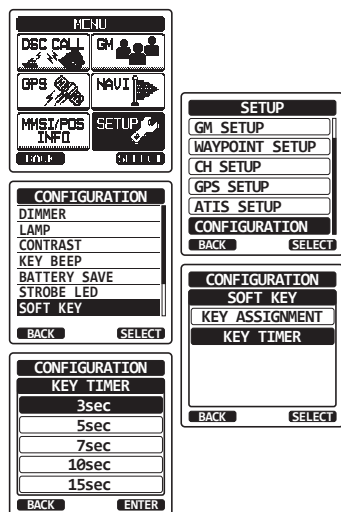
12.7.1 Key Assignment

1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "CONFIGURATION" menu.
3. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select "SOFT KEY".
4. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to "KEY ASSIGNMENT".
5. Press the **[SELECT]** soft key to select the key to be programmed, and press the **[SELECT]** soft key.
6. Press the **CH▲/CH▼** key to select the new function to be assigned, and press the **[ENTER]** soft key. Available functions are listed in the next page. Repeat steps 5 and 6 to program other soft keys.



12.7.2 Key Timer

1. Press the **CH▲/CH▼** key to select "KEY TIMER" (selects how long the soft key icon will be shown on the display after a soft key is pressed; default is 5 seconds). Then, press the **[SELECT]** soft key.
2. Press the **CH▲/CH▼** key to select the desired time.
3. Press the **[ENTER]** soft key to store the selected setting.
4. Press the **CLR** key to return to radio operation.



DISPLAY	FUNCTION
WX/CH	Switches channels between weather and marine.
HI/MD/LO	Configures transmission.
SCAN	Starts and stops scanning.
DW	Starts and stops dual watch scan.
MOB	Registers the position where people fall overboard.
COMP	Shows the "Compass" display.
WPT	Shows the "Waypoint" navigation display.
MARK	Mark the current position for a "Waypoint".
MEM	Switches on and off of the memory channel scan
PRESET	Programs or deletes the preset memory channel.
STOROB	Activates the strobe LED.
NAME	Registers channel names.
LOGGER	Starts and stops logging position data.

13 CHANNEL FUNCTION SETUP

13.1 CHANNEL GROUP

This section selects a channel group from USA, Canada, and International. Refer to section “8.6 USA, INTERNATIONAL, AND CANADA MODE” for details.

13.2 SCAN MEMORY

To be able to scan channels the radio must be programmed. This section allows channels to be stored in scan memory.

Refer to section “8.9.2 Programming Scan Memory” for details.

13.3 SCAN TYPE

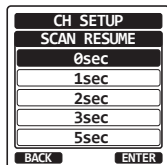
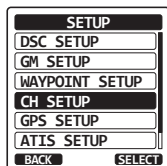
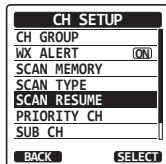
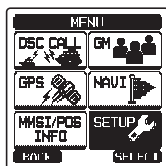
This selection is used to select the scan mode between “Memory Scan” and “Priority Scan”. The default setting is “Priority Scan”.

Refer to section “8.9.1 Selecting the Scan Type” for details.

13.4 SCAN RESUME

This selection is used to select the time the **HX870** waits after a transmission ends before the radio start to scan channels again. The default setting is 2 seconds.

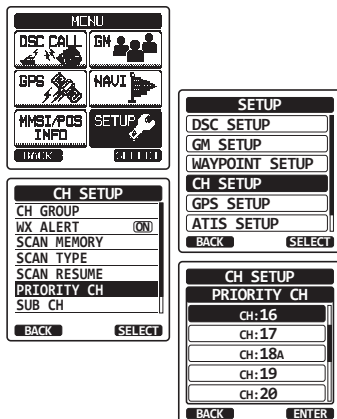
1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “CH SETUP”.
3. Press the **[SELECT]** soft key, then select “SCAN RESUME” with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select the desired resume time, default is 2 seconds. The resume time can be set to “0sec” through “3sec” or “5sec”. In the “0sec” selection, the scanner will resume after another station stops transmitting (carrier drops).
6. Press the **[ENTER]** soft key to store the new setting.
7. Press the **CLR** key to return to radio operation.



13.5 PRIORITY CHANNEL

By default the radio priority channel is set to Channel 16. This procedure allows the radio to use a different priority channel used when priority scanning.

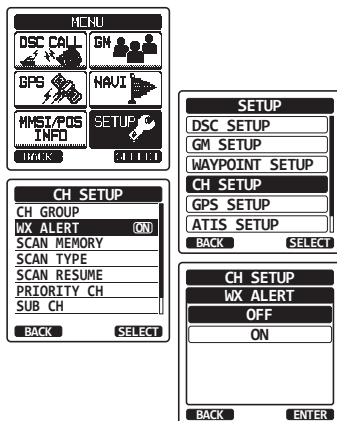
1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “CH SETUP”.
3. Press the **[SELECT]** soft key, then select “PRIORITY CH” with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select the desired channel to be a priority.
6. Press the **[ENTER]** soft key to store the new setting.
7. Press the **CLR** key to return to radio operation.



13.6 WEATHER ALERT

Enables/disables the NOAA Weather Alert function. The default setting is “ON”.

1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “CH SETUP”.
3. Press the **[SELECT]** soft key, then select “WX ALERT” with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select “ON” or “OFF”.
6. Press the **[ENTER]** soft key to store the selected level.
7. Press the **CLR** key to return to radio operation.

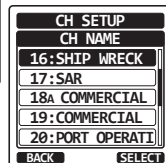
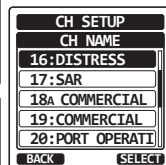
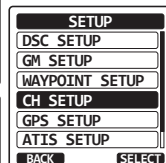
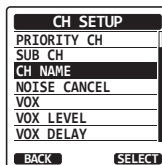
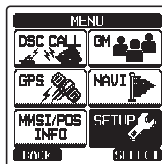


13.7 CHANNEL NAME

When the radio ("Normal") mode is selected, the display will show a name under the channel number. This name describes the use of the channel. The radio has the capability to customize the name by the procedure below.

Example: CH69 PLEASURE to HOOKUP

1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "CH SETUP".
3. Press the **[SELECT]** soft key, then select "CH NAME" with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key.
5. Press the **CH▲/CH▼** key to select the channel to be named, then press the **[SELECT]** soft key.
6. Press the **CH▲/CH▼** key to scroll through the first letter of the new channel name.
7. Press the **[SELECT]** soft key to store the first letter in the name and step to the next letter to the right.
8. Repeat step 6 and 7 until the name is complete. The name can consist of up to 16 characters, if you do not use all 16 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 was made entering in the name repeatedly press the **[BACK]** key until the wrong character is selected, then press the **CH▲/CH▼** key to correct the entry.
9. Press the **[FINISH]** soft key to save the name.
10. If you want to enter the name of another channel, repeat the steps 5 through 9.
11. Press the **CLR** key to return to radio operation.



13.8 SUMMARY OF THE CANNEL FUNCTION SETUP

Item	Description	Default Value
CH GROUP	Selects a channel group	USA: USA EU: INTL
WX ALERT	Switches on and off of the weather alert function	On
SCAN MEMORY	Selects a channel for scan memory	–
SCAN TYPE	Switches the priority scan and memory scan	PRI SCAN
SCAN RESUME	Sets the resume time of scanning	
PRIORITY CH	Selects a priority channel	CH16
SUB CH	Selects a sub channel	CH09
CH NAME	Sets the name of memory channels	–
NOISE CANCEL	Switches on and off of noise cancelling function (independently available for transmission and reception)	Off
VOX	Switches on and off of the VOX function	Off
VOX LEVEL	Selects a VOX gain	LOW
VOX DELAY	Selects a VOX delay time	3 sec

14 DSC SETUP

14.1 INDIVIDUAL DIRECTORY

The **HX870** has a DSC directory that allows you to store a vessel or person's name and the MMSI number associated with vessels you wish to transmit individual calls, position requests and position report transmissions.

To transmit an individual call you must program this directory with information of the persons you wish to call, similar to a cellular phones telephone directory. Refer to section **"10.5.1 Setting up the Individual / Position Call Directory"** for details.

14.2 INDIVIDUAL REPLY

This menu item sets up the radio to automatically (default setting) or manually 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.

Refer to section **"10.5.2 Setting up the Individual Call Reply"** for details.

14.3 INDIVIDUAL ACKNOWLEDGMENT

The radio can be setup to transmit a reply automatically (default) or set so the radio will not reply to an individual call.

Refer to section **"10.5.3 Enabling the Individual Call Acknowledgment"** for details.

14.4 INDIVIDUAL RINGER

The radio can be setup to ring like a telephone to alert you the radio received a DSC individual call. The default setting is 2 minutes, however this can be changed to 15, 10 or 5 seconds with the procedure below.

Refer to section **"10.5.6 Setting up the Individual Call Ringer"** for details.

14.5 GROUP DIRECTORY

For this function to operate, the same group MMSI must be programmed into all the DSC VHF radios within the group of vessels that will be using this feature.

Refer to section **"10.6.1 Setting up a Group Call"** for details.

14.6 POSITION REPLY

The **HX870** 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 or persons name shown on the display allowing you to choose to send your position to the requesting vessel.

Refer to section “**10.7.1 Setting up a Position Request Reply**” for details.

14.7 AUTO POS POLLING

The **HX870** has the capability to automatically track four stations programmed into the individual directory.

Refer to section “**10.10 AUTO POS POLLING**” for details.

14.8 AUTO POS INTERVAL

The **HX870** has the capability to automatically track four stations programmed into the individual directory.

Selecting the auto position polling time interval between position request transmissions to be setup.

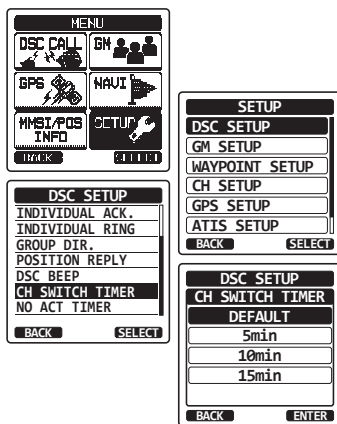
Refer to section “**10.10.1 Setting up the Polling Time Interval**” for details.

14.9 AUTO CH CHANGE

When a DSC distress or an all ships (urgency or safety) call is received, the **HX870** will automatically switch to Channel 16.

This menu selection allows the automatic switch time to be changed. The default selection is 30 seconds.

1. Press the **MENU** key to display “MENU”, then select “SETUP” with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select “DSC SETUP”.
3. Press the **[SELECT]** soft key, then select “CH SWITCH TIMER” with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select the desired time and press the **[ENTER]** soft key.
5. Press the **CLR** key to return to radio operation.



14.10 NO ACT TIMER

If a key is not pressed during the distress operation, the **HX870** will automatically return to radio operation.

The default selection is 15 seconds.

1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "DSC SETUP".
3. Press the **[SELECT]** soft key, then select "NO ACT TIMER" with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select the desired time and press the **[ENTER]** soft key.
5. Press the **CLR** key to return to radio operation.



14.11 DSC BEEP

This feature allows the alarm beeps to be turned on (default setting) or off when a DSC call is received. The DSC calls that can be customized are: individual, group, all ships, position request, and position report.

1. Press the **MENU** key to display "MENU", then select "SETUP" with the **CH▲/CH▼/◀/▶** key.
2. Press the **CH▲/CH▼** key to select "DSC SETUP" menu.
3. Press the **[SELECT]** soft key, then select "DSC BEEP" with the **CH▲/CH▼** key.
4. Press the **[SELECT]** soft key, then press the **CH▲/CH▼** key to select the desired DSC call type and press the **[ENTER]** soft key.
5. Press the **CH▲/CH▼** key to turn "ON" or "OFF" the DSC beep and press the **[SELECT]** soft key.
6. Press the **CLR** key to return to radio operation.

