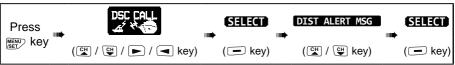
Transmitting the Distress Alert with Nature of Distress

The **HX890** is capable of transmitting the Distress Alert with the following "Nature of Distress" categories:

Undesignated, Fire, Flooding, Collision, Grounding, Capsizing, Sinking, Adrift, Abandoning, Piracy, MOB.

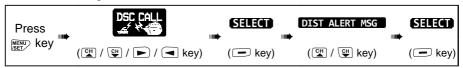


- Press the [NATURE] soft key. The "NATURE OF" menu will appear on the display.
- Press the CH▼/CH▲ key to select the desired nature of distress category, then press the [SELECT] soft key.
- Press and hold the **DISTRESS** key until a Distress Alert is transmitted.



Transmitting the Distress Alert by Manually Inputting Location and Time

In case the **HX890** fails to get a GPS position fix, you may manually input the latitude and longitude, and the time to transmit the Distress Alert.



- 1. Press the [POS/TM] soft key.
- Press the CH▼/CH▲/◄/▶ key to select the first number of latitude, then press the [SELECT] soft key to step to the next number.
- Repeat step 2 to set the position and time.
 If a mistake was made, press the CH▼/
 CH▲/◄/▶ keys to select "←" or "→", press
 the [SELECT] soft key until the wrong character is selected, then perform step 2.

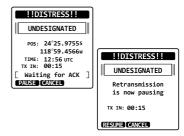


- 4. When finished programming the position and time, press the **[FINISH]** soft key. The display will return to the previous screen.
- 5. Press and hold the **DISTRESS** key until the Distress Alert is transmitted.

Pausing the Distress Alert

When the Distress Alert is transmitted, it is repeated every 4 minutes until the Distress Alert is canceled by the user, or until the radio is turned OFF and ON again. The **HX890** Distress Alert may be suspended (paused) using the procedure below.

- After the Distress Alert is transmitted, the radio will show the display as on the right. Looking at this display you will notice "TX IN: 0:15", this is the time when the radio will re-transmit the DSC Distress Alert.
- To suspend re-transmitting the Distress Alert, press the [PAUSE] soft key.
- To resume counting down to transmit the Distress Alert, press the [RESUME] soft key.



Canceling the Distress Alert

If a DSC Distress Alert was sent by error the **HX890** allows sending a message to other vessels to cancel the Distress Alert that was made.

Press the **[CANCEL]** soft key, then press the **[YES]** soft key. After the cancel message has been transmitted, press the **[OK]** soft key.





11.3.2 Receiving the Distress Alert

- 1. When the Distress Alert is received, an emergency alarm sounds.
- 2. Press any key to stop the alarm.
- Press the CH▼ key several times to show the information about the vessel in distress.

On the display you will notice 3 soft key selections. These selections are described below:

[ACCEPT]: Press this key to accept the Distress Alert and to switch to Channel 16.





Note: If a key is not pressed for 15 seconds or longer the radio will automatically select Channel 16. (Timer setting time is set in "CH SWITCH TIME" from "DSC SETUP". The default setting is 15 sec.)

[PAUSE]: Press this key to temporarily disable automatically switching to Channel 16.

[QUIT]: Press this key to quit the automatic Channel 16 switching and revert to the last selected working channel.

- 4. After accepting the call, press the **[TO WPT]** soft key to set the vessel in distress as a destination for navigation.
 - **Note**: You may change the waypoint name.
- 5. Press the CH▼/CH▲ key to select "SAVE & GO", then press the [SELECT] soft key to return the display to the waypoint screen. The display indicates the distance and direction of the distressed vessel, and also the distressed vessel is indicated on the compass by a dot (●).
- 6. To stop navigating to a waypoint, press one of the soft keys, then press the **[STOP]** soft key. The radio is switched to the normal mode.





NOTE

- You must continue monitoring Channel 16, as a coast station may require assistance in the rescue attempt.
- When there is an unread Distress Alert, the "☐" icon will appear on the display. You may review the unread Distress Alert from the DSC log, refer to the section "11.11.2 Reviewing a Logged Distress Alert".
- · Not all DSC radios can receive a DSC distress relay call.

11.4 ALL SHIPS CALL

The all ships call function allows calls DSC equipped vessels without having their MMSI in the individual calling directory.

11.4.1 Receiving an All Ships Call

 When an all ships call is received, an emergency alarm will sound.

The display shows the MMSI of the vessel transmitting the all ships call and the radio will change to the requested channel after 15 seconds (the default setting of "CH SWITCH TIMER").

- 2. Press any key to stop the alarm.
- 3. Monitor the requested channel until the all ships voice communication is completed.



On the display you will notice 3 soft key selections. These selections are described below:

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

Note: If a key is not pressed for 15 seconds or longer the radio will automatically change to the requested channel (the default setting of "CH SWITCH TIMER").

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

Note: In some cases, automatically switching to a requested channel might disrupt important ongoing communications. This feature allows commercial users to suspend channel switching and stay on the working channel selected before the all ships call was received.

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

4. Press the [QUIT] key to return to the channel display.

NOTE

When there is an unread all ships call, the "\sum " icon will appear on the display. You may review the unread all ships call from the DSC log, refer to the section "11.11.3 Reviewing Other Logged Calls".

11.5 INDIVIDUAL CALL

This feature allows the **HX890** to contact another vessel with a DSC VHF radio and automatically switch the receiving radio to a desired communications channel. This feature is similar to calling a vessel on CH16 and requesting to go to another channel (switching to the channel is private between the two vessels). Up to 100 individual contacts may be programmed.

11.5.1 Setting up the Individual Call Directory

The **HX890** has a DSC directory that allows you to store a vessel or person's name and the associated MMSI number you wish to contact via individual calls, position report, and test call transmissions.

To transmit an individual call, this directory must be programed with information of the vessel you wish to call, similar to a cellular phones telephone directory.



- Select "ADD" with the CH▼/CH ▲ key, then press the [SELECT] soft key.
- Press the CH▼/CH ▲ key to scroll through the first letter of the name of the vessel or person you want to reference in the directory.
- 3. Press the **[SELECT]** soft key to store the first letter in the name and step to the next letter to the right.



- 4. Repeat steps 2 and 3 until the name is complete. The name can consist of up to eleven characters, and 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 was made entering in the name, press the $CH \nabla/CH \triangle/A/P$ key to select " \leftarrow " or " \rightarrow ", press the **[SELECT]** soft key until the wrong character is selected, then perform steps 2 and 3.
- 5. After the eleventh letter or space has been entered, press the **[FINISH]** soft key to advance to the MMSI number entry.
- Press the CH▼/CH▲ key to scroll through numbers, 0-9. To enter the
 desired number and move one space to the right by pressing the [ENTER]
 soft key. Repeat this procedure until all nine characters of the MMSI number
 are entered.

If a mistake was made entering in the MMSI number, press the $CH \checkmark / CH \blacktriangle / \checkmark / \blacktriangleright$ key to select " \leftarrow " or " \rightarrow ", press the [SELECT] soft key until the wrong character is selected, then perform step 11.

- 7. After the ninth character has been entered, press the **[FINISH]** soft key.
- To store the entered data, press the CH▼/CH▲/◄/▶ key to select "SAVE", then press the [SELECT] soft key.
- 9. To enter another individual address, repeat steps 6 through 13.
- 10. Press the **CLR** key to return to radio operation.



11.5.2 Setting up the Individual Call 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.



- Press the CH▼/CH ★ key to select "AUTO" or "MANUAL".
- 2. Press the [ENTER] soft key to store the selected setting.
- 3. Press the CLR key to return to radio operation.



11.5.3 Enabling the Individual Call Acknowledgment

When the individual reply setting (described in the previous section) is set to "AUTOMATIC", the transceiver reply message can be set to "Able" (default) or "Unable"



- Press the CH▼/CH ▲ key to select "ABLE" or "UNABLE".
- 2. Press the **[ENTER]** soft key to store the selected setting.
- 3. Press the **CLR** key to return to radio operation.



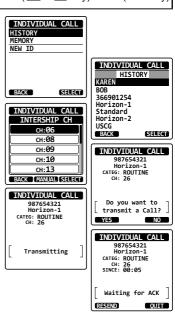
11.5.4 Transmitting an Individual Call

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

Individual Call using the Individual/Position Directory

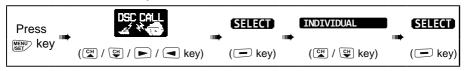


- Press the CH▼/CH ▲ key to select "HISTO-RY" or "MEMORY", then press the [SELECT] soft key.
- 2. Press the CH▼/CH▲ key to select an individual you want to contact.
- Press the [SELECT] soft key, then press the CH▼/CH ▲ key to select the operating channel you want to communicate on, then press the [SELECT] soft key. To select an operating channel from all the voice channels, press the [MANUAL] soft key.
- 4. Press the **[YES]** soft key to transmit the individual DSC signal.
- When an individual call acknowledgment is received, the established channel is automatically changed to the channel which is selected on step 3 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 PTT button and talk into the microphone to the other vessel.

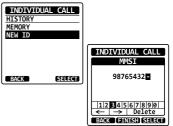


Individual Call by Manually Entering a MMSI

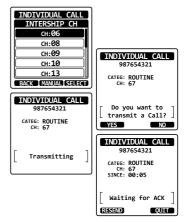
An MMSI number to be contacted may be manually entered without storing it in the individual directory.



- Press the CH▼/CH ▲ key to select "NEW ID", then press the [SELECT] soft key.
- Press the CH▼/CH ▲ 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.



- 3. Repeat step 2 to set the MMSI number (nine digits).
 - If a mistake was made entering in the MMSI number, press the CH▼/CH ▲/◄/▶ key to select "←" or "→", press the [SELECT] soft key until the wrong character is selected, then perform step 2.
- When finished entering the MMSI number, press the [FINISH] soft key. To select an operating channel from all the voice channels, press the [MANUAL] soft key.
- Press the CH▼/CH ▲ key to select the operating channel you want to communicate on, then press the [SELECT] soft key.



- 6. Press the [YES] soft key to transmit the individual DSC signal.
- 7. When an individual call acknowledgment is received, the established channel is automatically changed to the channel which is selected in step 8 above, and a ringing tone sounds.
- 8. Press the **[QUIT]** soft key to listen to the channel and make sure it is not busy, then press the **PTT** button and talk into the microphone to the other vessel.

11.5.5 Receiving an Individual Call

When an individual DSC call is received, the radio will automatically respond (default setting) to the calling ship, and switch to the requested channel for voice communications. If you want to see who is calling before replying to the call, change the Call Reply setting to manual. Refer to section "11.5.2 Setting up the Individual Call Reply".

Automatic reply:

 When an individual call is received, an individual call 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 **PTT** button and talk into the microphone to respond to the calling

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

RX INDIVIDUAL 366901235 Yaesu CATEG: ROUTINE CH: 06 SINCE: 00:15 Connected STOP ALARM RX INDIVIDUAL 366901235 Yaesu CATEG: ROUTINE CH: 06 SINCE: 00:15 Connected RESEND QUIT

Manual reply:

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

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

- 2. Press any key to stop the alarm.
- On the display you will notice 3 soft key selections. These selections are described below:

RX INDIVIDUAL

366901235
Yaesu
CATEG: ROUTINE
CH: 06
SINCE: 00:15

RX INDIVIDUAL

366901235
Yaesu
CATEG: ROUTINE
CH: 06
SINCE: 00:15

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

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

Note: In some cases, automatically switching to a requested channel might disrupt important ongoing communications. This feature allows commercial users to suspend channel switching and continue communications on the working channel selected before the individual call was received.

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

Note: If a key is not pressed within 30 seconds, the radio will automatically revert to normal operation.

- To accept and respond to the call, press the [ABLE] soft key to switch to the requested channel. (To inform calling vessel that you cannot respond, press the [UNABLE] soft key.)
- Press the [YES] soft key to send an acknowledgement.

Press the **[CHG CH]** soft key to change to another channel for communication instead of the requested one.

6. Monitor the requested or specified channel until the message is completed.

Press the **PTT** button and talk into the microphone to respond to the calling vessel.

RX INDIVIDUAL

366901235 Yaesu CATEG: ROUTINE CH: 06 SINCE: 00:15

ABLE [UNABLE] QUIT

RX INDIVIDUAL

366901235

Yaesu CATEG: ROUTINE

Connected

QUIT

CH: 06 SINCE: 00:15

RESEND

RX INDIVIDUAL

Yaesu

Able to comply

Transmit?

YES [CHG CH] NO

CATEG: ROUTINE

7. Press the **[QUIT]** soft key to return to the channel display.

NOTE

When there is an unread individual call, the "\sum" icon will appear on the display. You may review the unread individual call from the DSC log, refer to the section "11.11.3 Reviewing Other Logged Calls".

11.5.6 Setting up the Individual Call Ringer

When an individual call is received the radio's default setting will produce a ringing sound for 2 minutes. This DSC Set Up selection allows the individual call ringer time to be changed.



- Press the CH▼/CH ▲ key to select ringing time of individual calls.
- 2. Press the [ENTER] soft key to store the selected setting.
- 3. Press the **CLR** key to return to radio operation.



The HX890 individual call ringer may be turned ON or OFF.



- Press the CH▼/CH▲ key to select "INDI-VIDUAL", then press the [SELECT] soft key
- 2. Press the CH▼/CH▲ key to select "OFF".
- Press the [ENTER] soft key to store the selected setting.





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

To re-enable the ringer tone, repeat the above procedure, pressing the $CH \lor / CH \land$ key to select "ON" in step 7 above.

11.6 GROUP CALL

The Group Call feature allows the user to contact a specific group of vessels (e.g. members of a yacht club) using DSC radios and signal all the group to automatically switch to the designated channel for voice communications. This function is very useful for yacht clubs and vessels traveling together to collectively make announcements on a predetermined channel. Up to 20 group MMSI numbers may be programmed.

11.6.1 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: This number is assigned by the FCC, or other organization licensed to assign ship MMSI numbers. The first three digits called MID (Mobile Identity Group) of a vessel's MMSI denote the country where the MMSI is registered. The last 6 digits are specific to the ships ID.

Ship MMSI Example: If the MMSI is "366123456", "366" is the MID which denotes the country and "123456" is the ships 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 USCG recommends programming the MID of a ship MMSI into the Second, Third and Fourth digits of the group MMSI as it denotes the area the ship is located in.
- ☐ The last 5 digits are decided upon by the members of the group. All radios