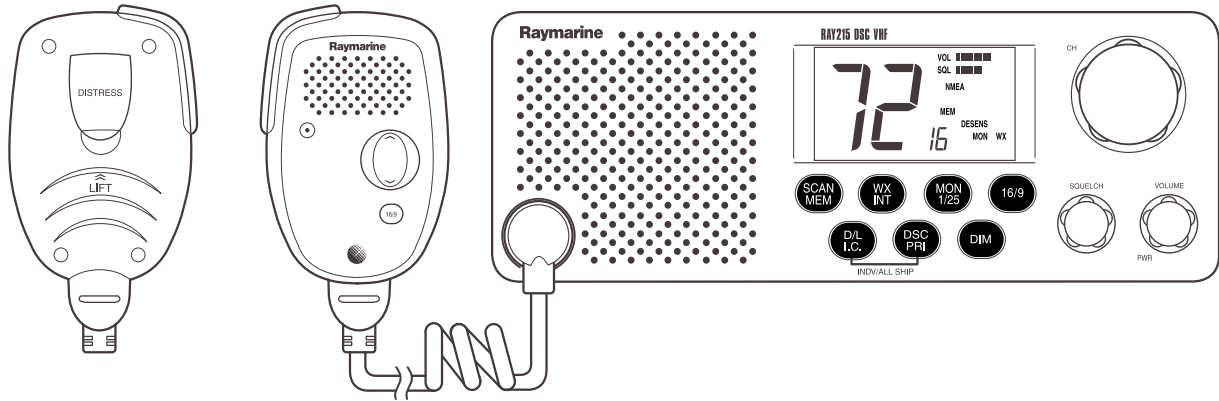


RAY215 Base Station and Fist Microphone



SCAN MEM Press and release to start or stop Scan Mode. Press and hold for 3 seconds to enter the currently indicated channel number into memory. If the indicated channel has already been stored, press to delete that channel from memory.

D/L I.C. Press and release to toggle receiver sensitivity between Distant (full) and Local (desensitized) modes. Press and hold for 2 seconds to toggle on and off the Intercom function between the base station and an optional Second Station full function handset.

WX INT Press and release to toggle between the Weather Channel and the last used marine channel. Pressing and releasing WX/INT while in the Dual Watch mode places the unit in Tri-Watch mode. Press and hold for 2 seconds to switch between the US, Canadian, and International frequency groups.

DSC PRI Pressing and releasing DSC/PRI by itself has no effect. Press and hold for 2 seconds to return priority control to the base station from an optional Second Station full function handset. This feature is for immediately taking radio operation control from the Second Station in case of an emergency.

MON 1/25 Press and release to initiate the Dual-Watch monitor mode. Press and hold for 2 seconds to toggle the transmission power between 1 and 25 watts. Press while holding PTT to override the 1W output setting at certain frequencies.

DIM Press to adjust the brightness of LCD's backlight. Each successive press switches the brightness from Off, to Low, to Medium, to High, then back to Off.

16/9 Press and release to switch the radio between the current Working Channel and the Priority Channel (16 or 9). Press and hold for 2 seconds to toggle the Priority Channel between 16 and 9.

DSC PRI + D/L I.C. Press and release both keys simultaneously to place the radio in DSC mode, which is used to make Individual Ship's, All Ships, and Distress Calls. Press and hold both keys simultaneously for 2 seconds to set up or play back the MMSI number. Exit DSC mode at any time by pressing the 16/9 key. **An MMSI number is required for DSC functions to operate.**

CH Turn to select the active channel. Rotating the knob clockwise increments the channel number. Rotating the knob counterclockwise decrements it.

SQUELCH Turn to adjust the squelch sensitivity level. Rotating the knob clockwise increases the squelch level. Rotating it counterclockwise decreases the squelch.

VOLUME When rotated completely counterclockwise the radio is off. Rotating the knob clockwise until it "clicks" powers on the radio. Continuing to turn the knob clockwise increases the volume. Rotating the knob counterclockwise, the volume decreases.

16/9 (On microphone.) Same as 16/9 key on base station.

CH (On microphone.) Press to change the channel number. Pressing the upper portion of the trackpad (↗) increases the channel. Pressing the lower portion (↘) decreases it.

DSC DISTRESS CALL

1 Lift the door labeled DISTRESS on the back of the microphone. Press and hold the DISTRESS key for a 5 second countdown. The countdown begins after 1 second.



2 After the countdown has completed, the Distress Call is sent on channel 70 and a loud alert tone is sounded. Release the Distress key. The radio monitors for an acknowledgement while flashing ACK on the display. The Distress Call is re-transmitted at 3.5 - 4.5 minute intervals until either an acknowledgement is received or the DSC mode is manually exited by pressing the 16/9 key. While awaiting the ACK, you can press PTT to communicate with other vessels on channel 16.

Press and release DSC/PRI to mute the alert tone. This does not interrupt the Distress Call.



3 When an acknowledgement is received, ACK appears solid. The radio exits the DSC mode and automatically switches to Channel 16. Press PTT to speak with the acknowledging station on channel 16.



DSC ALL SHIPS CALL

Makes a DSC call to All Ships in the area when assistance is needed but the ship is not in distress. Select between ROUTINE for normal calls, SAFETY for advisory alerts, or URGENCY for assistance when life is not in immediate danger.

1 Press and release the DSC/PRI and D/L / I.C. keys simultaneously to enter the DSC mode.



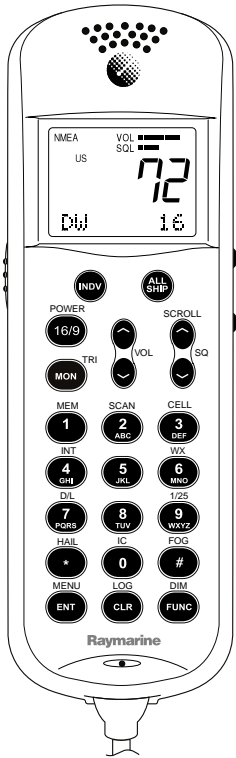
2 Rotate the Channel Select (CH) knob on the front panel to select the desired type of call. Select 'Ar' for ROUTINE, 'AS' for SAFETY, or 'AU' for URGENCY. Press and release the DSC/PRI key and TX begins to flash.



3 Press and release PTT to transmit the ALL SHIPS call. The radio switches to Channel 16.



4 Press PTT to converse with receiving stations on Channel 16.



RAY215 Full Function Handset

INDV	Switches to DSC Individual Ships Call mode for initiating ship-to-ship or ship-to-shore calls using a specific MMSI number.	ALL SHIP	Switches to the All Ships Call mode for Safety and Urgency transmissions.
POWER 16/9	Switches between the Working Channel and the Priority Channel. Pressing and holding for 2 seconds alternates the Priority Channel between 16 and 9.	VOL	Changes the sound volume of the handset.
MON TRI	Initiates the Dual-Watch monitor mode. Pressing FUNC + MON/TRI starts the Tri-Watch monitor mode.	SCAN 2 ABC	Alternately inputs the characters 2, A, B, and C. Pressing FUNC + 2/SCAN toggles ON and OFF the Scan mode.
MEM 1	Alternately inputs a 1 or a space character. Pressing FUNC + 1/MEM enters the currently indicated channel number into memory or, if the indicated channel has already been stored, deletes that channel from memory.	5 JKL	Alternately inputs the characters 5, J, K, and L.
INT 4 GH	Alternately inputs the characters 4, G, H, and I. Pressing FUNC + 4/INT switches between the US, Canadian, and International frequency groups.	8 TUV	Alternately inputs the characters 8, T, U, and V.
D/L 7 PQRS	Alternately inputs the characters 7, P, Q, R, and S. Pressing FUNC + 7/D/L switches receiver sensitivity between Distant (full) and Local (attenuated) modes.	IC 0	Inputs the number 0. Pressing FUNC + 0/IC toggles ON and OFF the Intercom mode, which enables conversation between the handset and the base station.
HAIL *	Inputs an asterisk (*) character. The HAIL function does not pertain to the RAY215.	LOG CLR	Exits the current mode and reverts to the last used mode or normal operation. Also used to clear any alphanumeric inputs, one at a time, in the order that they were entered. Pressing FUNC + CLR/LOG turns ON and OFF the Digital Selective Calling (DSC) Log.
MENU ENT	Performs the Enter function. Confirms and implements input actions. Pressing FUNC + ENT/MENU initiates Menu mode.	SCROLL	Increases or decreases the squelch sensitivity. Also used as a scroll key for selecting menu items and other settings.
		CELL 3 DEF	Alternately inputs the characters 3, D, E, and F. The CELL function does not pertain to the RAY215.
		WX 6 MNO	Alternately inputs the characters 6, M, N, and O. Pressing FUNC + 6/WX switches between the Working Channel and the Weather Channel.
		1/25 9 WXYZ	Alternately inputs the characters 9, W, X, Y, and Z. Pressing FUNC + 9/1/25 switches the transmission power between 1W and 25W. Press while holding PTT to override the 1W output setting at certain frequencies.
		FOG #	Inputs the # character. The FOG function does not pertain to the RAY 215.
		DIM FUNC	Initiates the Function mode and activates the FUNC indicator in the LCD display. The next key pressed determines the function selected. Pressing this key twice starts Dimmer mode, which adjusts the brightness of the LCD's backlight.

DSC DISTRESS CALL

- Lift the door labeled DISTRESS on the back of the handset.
- Without Specifying the Type of Distress (QUICK)**
 - Press **and hold** the DISTRESS key. **dSr** flashes and **DSC** illuminates on display.

OR

Specifying the Type of Distress (OPTIONAL)

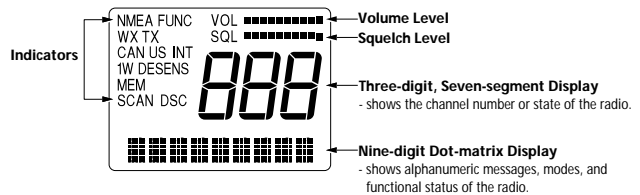
 - Press **and release** the DISTRESS key. **dSr** flashes and **DSC** illuminates on display.
 - Use the SQ UP and SQ DOWN keys to select the type of distress.
 - Press **and hold** the DISTRESS key to send.
- Continue to hold the DISTRESS key for a 5 second countdown. Release the DISTRESS key after the countdown has completed and **RELEASE** appears on the dot matrix display. The unit sounds a loud alert tone, monitors for acknowledgment on channel 70, and switches to channel 16 for voice communications.

Press and release **CLR** to mute the alert tone. This does not interrupt the Distress Call.
- When a response is received, the LCD scrolls a message that the DISTRESS has been acknowledged, along with the sending station's MMSI number or nickname. The message and alert are repeated until the CLR key is pressed.
- Press PTT to speak with the acknowledging station on channel 16.

DSC ALL SHIPS CALL

- Makes a DSC call to All Ships in the area when assistance is needed but the ship is not in distress. Select between ROUTINE for normal calls, SAFETY for advisory alerts, or URGENCY for assistance when life is not in immediate danger.
- Press the ALL SHIP key. Press the SQ UP/DOWN keys to switch between ROUTINE, SAFETY, and URGENCY.
 - Press the ENT key to submit your selection. The prompt RECONFIRM is displayed. Press the ENT key to confirm.
 - Press and release PTT to transmit the ALL SHIPS call. The radio switches to Channel 16.
 - Press PTT to converse with receiving stations on Channel 16.

FULL FUNCTION HANDSET DISPLAY



Indicators Illuminate during the following conditions:

- | | |
|--|---|
| NMEA Receiving valid SeaTalk or NMEA position data. | INT International Frequency Group selected. |
| FUNC FUNC key has been pressed. | 1W 1 Watt Power Transmission mode. |
| WX Radio in Weather Channel mode. | DESENS Desensitized (local) Receiving mode. |
| TX Radio in Transmit mode. | MEM Active channel is stored in memory. |
| CAN Canadian Frequency Group selected. | SCAN Radio in Scan mode. |
| US US Frequency Group selected. | DSC DSC call mode; DSC log or DSC menu active. |