

DSC OPERATION

■ Set MMSI Code

The 9 digits MMSI code is also called Maritime Mobile Service Identity. The MMSI code can be programmed by PC programming software or by manually input.

1. Press and hold [⏻] to power ON.
 - Three "beep" sound emits and "No DSC MMSI" appears.
2. Press [OK] to start MMSI code setting.
 - Press [CLEAR] to cancel during the setting and return to normal operation mode.
The radio cannot make DSC call if cancel setting.
 - Power OFF and then power ON after setting MMSI code.
3. Input MMSI code as the following steps.
 - Press [▲]/[▼]/[◀]/[▶] to select desired number.
 - Press [OK] to confirm.
 - Move the cursor, select "←" or "→" and then press [OK].

MMSI									
MMSI: []									
0	1	2	3	4	5	6	7	8	9
←	→							FINISH	

4. Repeat Step 3 to input all 9 digits.
5. "FINISH" will automatically selected after inputting 9 digits.
Press[OK] to set.
6. "MMSI CONFIRMATION" appears.

MMSI CONFIRMATION									
MMSI: []									
0	1	2	3	4	5	6	7	8	9
←	→							FINISH	

7. Input MMSI code again to confirm. Repeat from Step 3 to Step 5.
8. The screen shows as below while MMSI code is set successfully.
The radio can do normal operation after setting.

111222333
MMSI Successfully Registered

The MMSI code can be checked in menu interface.

※ NOTE: The MMSI code can be set only once. After being set, you should contact with your dealer to set by PC programming software. If your MMSI code has been set, do not need to set again.

■ DSC Setting

◆ Program Position and Time

A distress call should include ship position and time. If no GPS data is received, the position and UTC (Universal Time Coordinated) time can be input manually.

- The manual programming is turned OFF automatically while GPS data is received.
 - The manual programmed position and time can be held for 23.5 hours.
1. Select "Position Input" in "DSC Settings".
 2. Press [▲]/[▼]/[◀]/[▶] to edit latitude and longitude.
 - Press [◀]/[▶] to select desired number.
 - Press [OK] to confirm.
 - Move the cursor to select "←" or "→". Then press [OK].
 - Select N (North Latitude) or S (South Latitude) when the cursor is on the "N" or "S" position.
 - Select W (West Longitude) or E (East Longitude) when the cursor is on the "W" or "E" position.

POSITION INPUT														
LAT:		[]-°--.----N												
0	1	2	3	4	5	6	7	8	9					
N	S													
←		→		NODATA					FINISH					
EXIT		BACK												

POSITION INPUT														
LON:		[]--°--.----W												
0	1	2	3	4	5	6	7	8	9					
W	E													
←		→		NODATA					FINISH					
EXIT		BACK												

3. Input position information and press [OK] to confirm.
4. In UTC time edit interface, input UTC time as the following ways.
 - Press [◀]/[▶] to select desired number.
 - Press [OK] to confirm.
 - Move the cursor, select "←" or "→". Then press [OK].

POSITION INPUT														
UTC:		12:[]-												
0	1	2	3	4	5	6	7	8	9					
←		→		NODATA					FINISH					
EXIT		BACK												

5. Press [OK] to confirm position and time programming.
 - Return to "DSC Settings" interface.

◆ Program Individual ID

The radio has 100 programmable DSC address ID. Each ID can be named by 10 characters.

1. Select "Individual ID" in "DSC Settings".
2. Press [ADD] to enter "INDIVIDUAL ID" programming interface.

INDIVIDUAL ID														
IND ID:		123[]----												
0	1	2	3	4	5	6	7	8	9					
←		→							FINISH					
EXIT		BACK												

3. Input desired individual ID as the following ways.

- Press [◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor, select "←" or "→". Then press [OK].
 - ※ If the first digit is "0", it is regard as Group ID.
 - ※ If the first two digits is "0", it is regard as Coast Station ID.
- 4. Repeat Step 3 to input all 9 digits ID code.
- 5. After input 9 digits ID code, press [OK] to confirm. Enter individual ID name programming interface.

INDIVIDUAL ID																
NAME:		U[]														
A	B	C	D	E	F	G	H	I	J	K	L	M				
N	O	P	Q	R	S	T	U	V	W	X	Y	Z				
←		→		SPACE					DELETE					FINISH		
EXIT		BACK														

6. Input the desired 10 digits ID name as the following steps.
 - Press [▲]/[▼]/[◀]/[▶] to select desired digit.
 - Press [OK] to confirm.
 - Move the cursor, select "←" or "→". Then press [OK].
 - Press [123]/[!\$?]/[ABC] to select character group.
7. Input ID name, press Press [▲]/[▼]/[◀]/[▶] to select "FINISH". Press [OK], "INDIVIDUAL ID" interface appears on display.

INDIVIDUAL ID														
USER														
◀		ADD		EDIT		DEL							▶	

8. Press [MENU] to exit Menu interface.

◆ Program Group ID

1. Select "Group ID" in "DSC Settings".
2. Press [ADD] to enter "GROUP ID" programming interface.

GROUP ID									
GRP ID:		0-----							
0	1	2	3	4	5	6	7	8	9
←		→						FINISH	
EXIT		BACK							

- Input desired 10 digits ID as the following ways.
 - Press [◀]/[▶] to select desired number.
 - Press [OK] to confirm.
 - Move the cursor, select "←" or "→". Then press [OK].
 - ※ If the first digit is "0", it is regard as Group ID.
 - ※ If the first two digits is "0", it is regard as Coast Station ID.
- Repeat Step 3 to input all 9 digits ID code.
- After inputing 9 digits ID code, press [OK] to confirm. Enter group ID name programming interface.

GROUP ID									
NAME:		GP							
A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	SPACE		DELETE	FINISH
←		→						123	
EXIT		BACK							

- Input the desired 10 digits ID name as the following steps.
 - Press [▲]/[▼]/[◀]/[▶] to select desired digit.
 - Press [OK] to confirm.
 - Move the cursor, select "←" or "→". Then press [OK].
 - Press [123]/[!\$%]/[ABC] to select character group.
- Input ID name, press [▲]/[▼]/[◀]/[▶] to select "FINISH". Press [OK], "GROUP ID" interface appears on display.

GROUP ID									
GP1									
ADD		EDIT		DEL					

- Press [MENU] to exit Menu interface.

◆ Delete Individual/Group ID

- Select "Individual ID" or "Group ID" in "DSC Settings".
 - If no address ID is programmed, "No ID" appears. In this case, press [MENU] to exit Menu interface.
- Press [▲]/[▼] to select ID name, then press [DEL].

INDIVIDUAL ID									
USER 1									
USER 2									
ADD		EDIT		DEL					

GROUP ID									
GP 1									
GP 2									
ADD		EDIT		DEL					

- Press [OK] to delete ID and return to "INDIVIDUAL ID" or "GROUP ID" interface.
 - Press [CANCEL] to cancel.

INDIVIDUAL ID									
ARE YOU SURE?									
OK					CANCEL				

GROUP ID									
ARE YOU SURE?									
OK					CANCEL				

- Press [MENU] to exit.

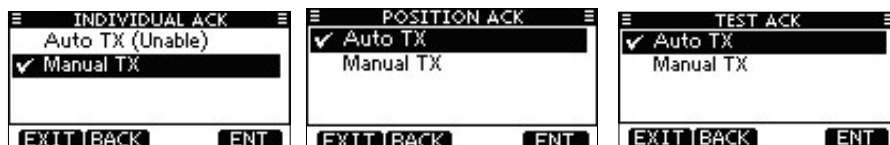
◆ Automatic Acknowledgement

The automatic acknowledgement function can be set as "Auto TX" or "Manual TX".

When an Individual, Position Request, Polling Request or Test Call is received, the radio automatically transmits an Individual Acknowledgement, Position Reply, Polling Reply or Test Acknowledgement call.

When "INDIVIDUAL ACK" is set as "Auto TX", the radio transmits the acknowledgement call including "Unable to Comply" (No Reason Given) automatically.

1. Input "INDIVIDUAL ACK", "POSITION ACK" or "TEST ACK" in "DSC Settings".
2. Press [▲]/[▼] to select "Auto TX" or "Manual TX", then press [OK].

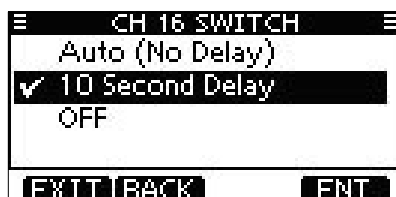


3. Press [EXIT] to return to normal operating mode.

◆ Channel 16 Switch Function

As regulation required, the radio will switch to Channel 16 after receiving a Distress call. However, while the setting is OFF, the radio will remain on the operating channel, even after receiving a Distress call.

1. Enter "CH 16 SWITCH" in "DSC Settings".
2. Press [▲]/[▼] to select "Auto (No Delay)", "10 Second Delay" and "OFF", then press [OK].



- ※ Auto (No Delay): Press [ACPT] in the confirmation interface after a Distress call is received. The radio will switch to Channel 16 immediately.
- ※ 10 Second Delay: Press [ACPT] in the confirmation interface after a Distress call is received. The radio will remain on the current channel for 10 seconds and then switch to Channel 16 automatically.
- ※ OFF: The radio remain on the operating channel even after a Distress call is received. "✂" appears.

3. Press [EXIT] to return to normal operating mode.

◆ Alarm

Set the Alarm function ON or OFF according to the category or status.

1. Enter "ALARM" in "DSC Settings".
 2. Press [▲]/[▼] to select status and then press [OK].
 - Press [BACK] to cancel and return to "DSC Settings".
 - "Safety", "Self-Terminate", "Routine", "Warning" and "Discrete" are selectable.
- Factory default: ON.

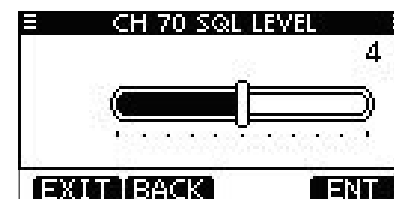


3. Press [▲]/[▼] to set the Alarm function ON or OFF.
4. Press [EXIT] to return to normal operating mode.

◆ Channel 70 Squelch Level

The radio has 11 squelch levels between 1~10 and OPEN.

1. Enter "CH 70 SQL LEVEL" in "DSC Settings".
2. Press [▲]/[▼]/[◀]/[▶] to adjust squelch level and then press [OK].
 - Press [BACK] to cancel and return to "DSC Settings".



3. Press [EXIT] to return to normal operating mode.

◆ DSC Loop Test

The DSC loop test function can send transmit DSC signals to the receive AF circuit to compare and check the TX and RX signals at the AF level.

1. Enter "DSC LOOP TEST" in "DSC Settings".
2. Press [OK] to start DSC loop test.
 - Press [BACK] to cancel and return to "DSC Settings".
 - "OK" appears while the transmit DSC and receive DSC are matched.
 - "NG" appears while either TX or RX DSC circuits has a problem. Please send the radio to the dealer for repair.

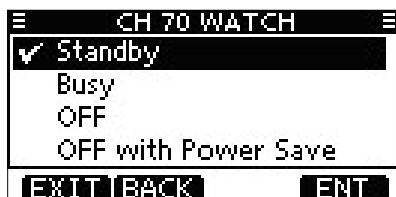


3. Press [EXIT] to return to normal operating mode.

◆ Channel 70 Watch Function

The radio can select whether watch in Channel 70 or not.

1. Enter "CH 70 Watch" in "DSC Settings".
2. Press [▲]/[▼] to set Channel 70 watch function as "Standby", "Busy", "OFF" and "OFF with Power Save", then press [OK].



- ※ Standby: The radio will monitor Channel 70 according to the scan speed cycle time while no signal is received.

- ※ Busy: The radio will monitor Channel 70 according to the scan speed cycle time while no signal is received in operating channel. The radio monitor Channel 60 every 1.5 seconds while signal is received in operating channel.

- ※ OFF: The radio does not monitor Channel 70.

- ※ OFF with Power Save: The radio does not monitor Channel 70. The power save function is activated while no signal is received.

3. Press [EXIT] to return to normal operating mode.

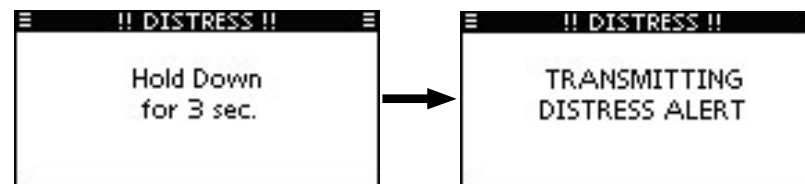
■ Distress Call

A Distress call can be transmitted in the opinion of needs while the ship or person is in distress and requires immediate assistance.

- ※ NEVER make a Distress call if the ship or person is not in an emergency. The Distress call is only used for emergency help.

◆ Simple Call

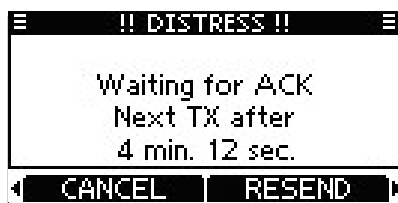
1. Confirm no Distress signal is received.
2. Lift up the key cover at the radio back, press and hold [DISTRESS] for 3 seconds to transmit Distress call.
 - DSC channel (Channel 70) select and transmit distress call automatically.



- ※ NOTE: The distress call is paused up to 15 seconds if no valid position data is received. The distress call will be transmitted if valid position data is received within 15 seconds. If valid position data cannot be received within 15 seconds, the distress call will be made by the stored position data.

3. After the distress call is transmitted, the radio will wait for acknowledgement call in Channel 70 for 10 seconds and then wait for a call by alternately monitoring in Channel 70 and Channel 16.

- The distress call will transmit automatically every 3.5-4.5 minutes until a acknowledgement is received (Call Repeat Mode) or DSC call is cancelled.
- Press [RESEND] to repeat the distress call transmission manually.
- Press [◀]/[▶] and then press [INFO] to show the transmitted distress call information.
- Press [◀]/[▶] and then press [PAUSE] to pause "Call Repeat" mode. Press [RESUME] to resume.



4. Press [ALARM OFF] and then press [PTT] to reply after receiving acknowledgement.

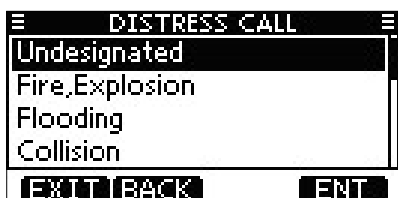
※ A distress alert default contains:

- Nature of distress: Undesignated distress.
- Position information: The latest GPS or manual input position data is held for 23.5 hours, or until power OFF.

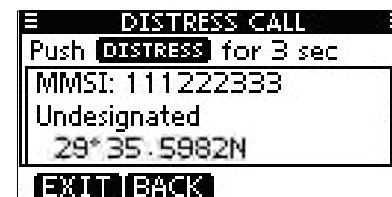
◆ Regular Call

The nature of distress call should be included in distress call.

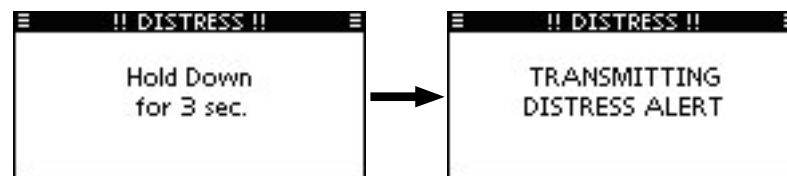
1. Enter "DISTRESS CALL" in DSC CALLS menu.
2. Press [▲]/[▼], select distress nature. Then press [OK].
 - "Undesignated", "Fire, Explosion", "Collision", "Grounding", "Capsizing", "Sinking", "Out of control/Adrift", "Abandon ship", "Piracy/Armed attack" or "Man overboard" is selectable.
 - The distress nature can store 10 minutes after the selection.



3. Enter distress call confirmation interface.
 - Press [▲]/[▼] to check the hidden lines.



4. Lifting the key cover of the radio back, press [DISTRESS] for 3 seconds to transmit distress call.
 - The radio will emit alarm sound and the backlight flash at the same time while pressing and holding [DISTRESS].
 - The selected distress nature will store for 10 minutes.



5. The radio will wait for an acknowledgment call after transmitting a distress call.
 - The distress call will transmit automatically every 3.5-4.5 minutes until a acknowledgement is received (Call Repeat Mode) or DSC call is cancelled.
 - Press [RESEND] to repeat the distress call transmission manually.
 - Press [◀]/[▶] and then press [INFO] to show the transmitted distress call information.
 - Press [◀]/[▶] and then press [PAUSE] to pause "Call Repeat" mode. Press [RESUME] to resume.



6. Press [ALARM OFF] and then press [PTT] to reply after receiving acknowledgement.



※ A distress alert default contains:

- Nature of distress: Follow Step 2 to select.
- Position information: The latest GPS or manual input position data is held for 23.5 hours, or until power OFF.

NOTE: When no GPS data is received or invalid data is received, and both position and time are input manually, the screen shown as below. Edit the latitude and longitude position and UTC time as below.



※ Press [CHG] and edit the latitude and longitude position and UTC time.

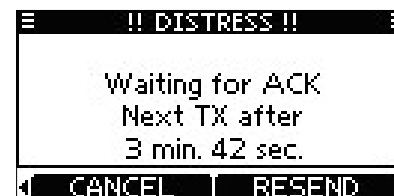
- Press [◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor to select "←" or "→". Then press [OK].
- Select N (North Latitude) or S (South Latitude) when the cursor is on the "N" or "S" position.
- Select W (West Longitude) or E (East Longitude) when the cursor is on the "W" or "E" position.



◆ Cancel Distress Call

The nature of distress call should be included in distress call.

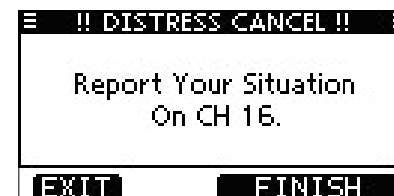
1. Press [CANCEL] while waiting for an acknowledgement call.



2. Press [CONTINUE]. The radio return to wait for an acknowledgement call if press [BACK].



3. Press [FINISH]. The radio return to wait for an acknowledgement call if press [BACK].



4. Transmit distress call.
5. Select Channel 16 automatically.
 - Press [PTT] to report your situation.
 - Press [EXIT] to return to normal operating mode after reporting.

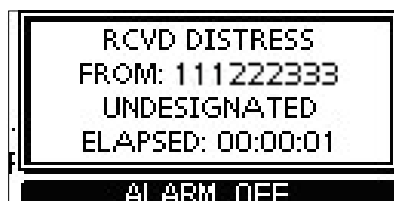


◆ Receive Distress Call

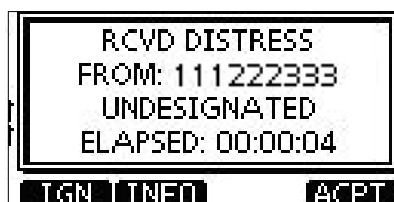
When a distress call is received,

- The emergency alarm emits for 2 minutes.
- "RCVD DISTRESS" appears and the backlight flashes.

1. Press [ALARM OFF] to stop alarm and backlight flash.



2. Press softkey to select desired operation.



- ※ Press [IGN] to ignore and return to normal operating mode.
 - The radio exits DSC mode.
 - The radio exits DSC mode while pressing [PTT].
 - "✉" continues to flash and the call is stored in the received call record.

- ※ Press [INFO] to show the received call information.



- ※ Press [ACPT] to accept call. Then press [CH 16] to switch the operating channel to Channel 16 and monitor it as the major caller may require assistance. If you do not press [CH 16] in 10 seconds, the operating channel will switch to Channel 16 automatically.

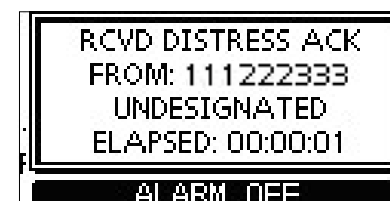


◆ Receive Distress Acknowledgement

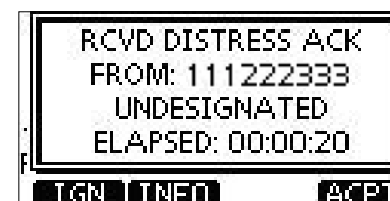
When a distress acknowledgement call is received from other ships,

- The emergency alarm emits for 2 minutes.
- "RCVD DISTRESS ACK" appears and the backlight flashes.

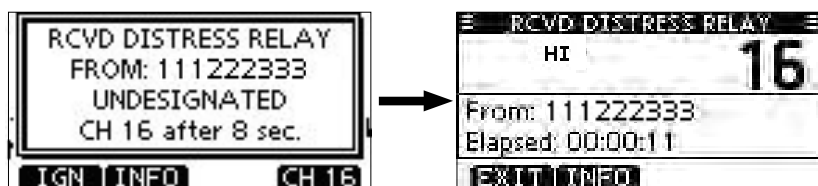
1. Press [ALARM OFF] to stop alarm and backlight flash.



2. Press softkey to select desired operation.



- ※ Press [IGN] to ignore and return to normal operating mode.
 - The radio exits DSC mode.
 - The radio exits DSC mode while pressing [PTT].
 - "✉" continues to flash and the call is stored in the received call record.
- ※ Press [INFO] to show the received call information.
- ※ Press [ACPT] to accept call. Then press [CH 16] to switch the operating channel to Channel 16 and monitor it as the major caller may require assistance. If you do not press [CH 16] in 10 seconds, the operating channel will switch to Channel 16 automatically.



◆ Receive Distress Reply Call

When a distress reply call is received,

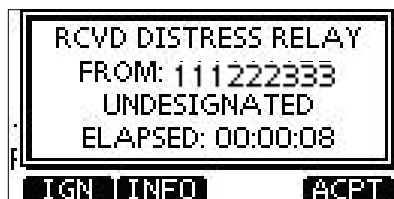
→ The emergency alarm emits for 2 minutes.

→ "RCVD DISTRESS REPLY" appears and the backlight flashes.

1. Press [ALARM OFF] to stop alarm and backlight flash.



2. Press softkey to select desired operation.

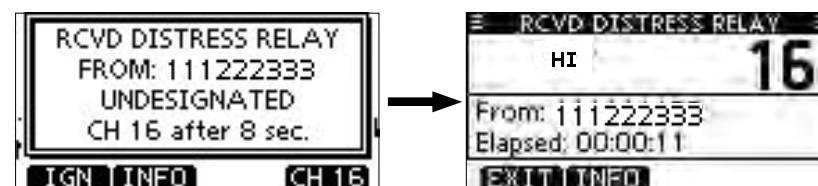


※ Press [IGN] to ignore and return to normal operating mode.

- The radio exits DSC mode.
- The radio exits DSC mode while pressing [PTT].
- "☑" continues to flash and the call is stored in the received call record.

※ Press [INFO] to show the received call information.

※ Press [ACPT] to accept call. Then press [CH 16] to switch the operating channel to Channel 16 and monitor it as the major caller may require assistance. If you do not press [CH 16] in 10 seconds, the operating channel will switch to Channel 16 automatically.



◆ Receive Distress Reply Acknowledgement

When a distress reply acknowledgement is received,

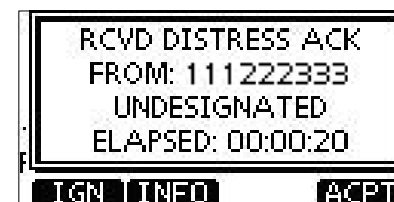
→ The emergency alarm emits for 2 minutes.

→ "RCVD DIST REPLY ACK" appears and the backlight flashes.

1. Press [ALARM OFF] to stop alarm and backlight flash.



2. Press softkey to select desired operation.

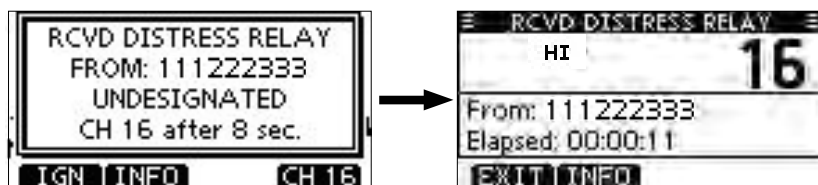


※ Press [IGN] to ignore and return to normal operating mode.

- The radio exits DSC mode.
- The radio exits DSC mode while pressing [PTT].
- "☑" continues to flash and the call is stored in the received call record.

※ Press [INFO] to show the received call information.

※ Press [ACPT] to accept call. Then press [CH 16] to switch the operating channel to Channel 16 and monitor it as the major caller may require assistance. If you do not press [CH 16] in 10 seconds, the operating channel will switch to Channel 16 automatically.

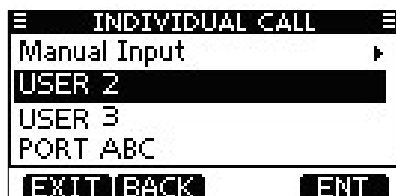


■ Individual Call

The individual call function allows to call a specific ship.

◆ Transmit Individual Call

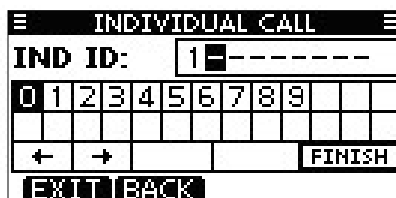
1. Enter "INDIVIDUAL CALL" in DSC CALLS menu.
2. Select the desired preprogrammed individual address or select "Manual Input" and then press [OK].
 - The individual ID code should be set first.
 - Set desired 9 digits MMSI code for individual call while selecting "Manual Input".



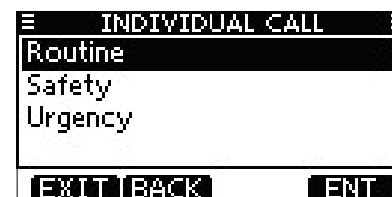
※ Manual Input

Input the desired individual call ID as the following way.

- Press [▲]/[▼]/[◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor to select "←" or "→". Then press [OK].
- If the first digit is "0", it is regard as Group ID.
- If the first two digits is "0", it is regard as Coast Station ID.



3. Select Routine, Safety or Urgency and then press [OK].

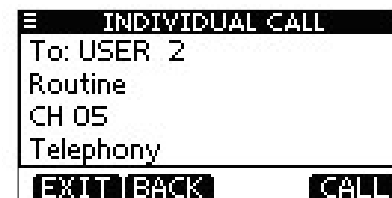


- ※ NOTE: When a coast station is selected in Step 2, the voice channel will be specified by the coast station automatically. Therefore, skip Step 4 and go to Step 5 directly.

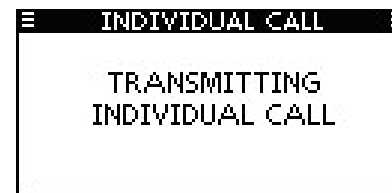
4. Select Routine, Safety or Urgency and then press [OK].
 - Intership channels are already preset into the radio as the recommended order.



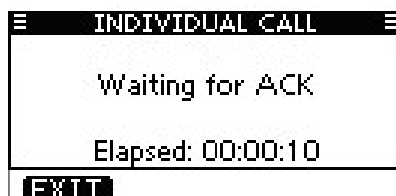
5. A confirmation interface appears to confirm the call contents.



6. Press [CALL] to transmit individual call.
 - If Channel 70 is busy, the radio will standby until channel leisure.



7. Standby in Channel 70 until an acknowledgement is received.
 - The radio waits in Channel 70 for 10 seconds and then alternately monitors Channel 70 and the operating channel.

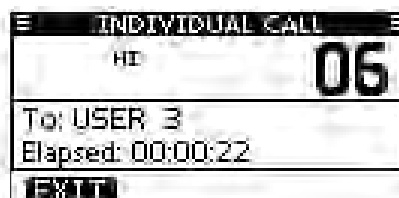


8. When the received acknowledgement is "Able to comply", a prompt sound emits and the screen is showed as below.

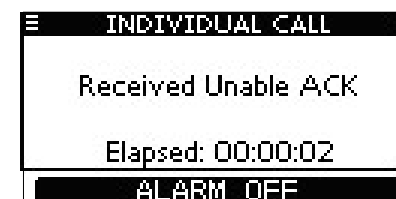


Press [ALARM OFF] to turn OFF the prompt sound. Follow Step 4 to select intership call channel.

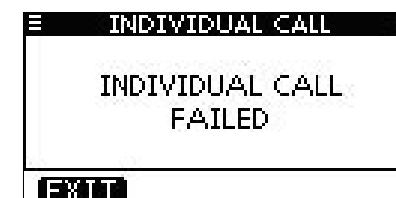
- A different intership call channel will be selected if the station you call cannot use the channel.
- Press [PTT] to reply.



※ When the received acknowledgement is "Unable to comply", a prompt sound emits and the screen is showed as below.



Press [ALARM OFF] to turn OFF the prompt sound. Then press [EXIT] to return to operating channel.

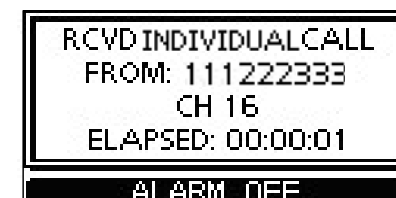


9. Press [EXIT] to return to normal operating mode.

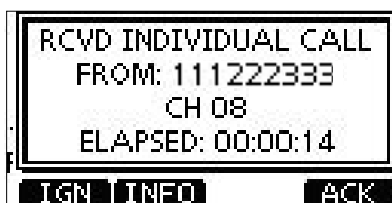
◆ Receive Individual Call

While receiving individual call:

- The emergency alarm emits for 2 minutes.
 - "RCVD INDIVIDUAL" appears. The backlight may flash for 2 minutes according to the received category.
1. Press [ALARM OFF] to stop alarm and backlight flash.
 - The next interface will appears according to received category if no press [ALARM OFF] in 2 minutes.



2. Press softkey to select desired operation.



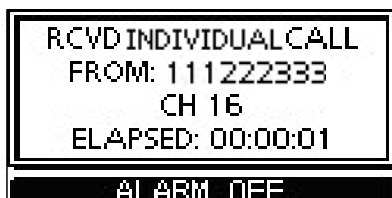
- ※ Press [IGN] to ignore and return to normal operating mode.
 - The radio exits DSC mode.
 - "☐" continues to flash and the call is stored in the received call record.
- ※ Press [INFO] to show the received call information.
- ※ Press [ACK] to show "INDIVIDUAL ACK" reply call. Select the channel specified by major caller to communicate. While "INDIVIDUAL ACK" is set as "Auto ACK (Unable)", the radio will reply a call automatically. The transmit and receive call will be stored in Call Logs in this situation.

◆ Transmit Individual Acknowledgement

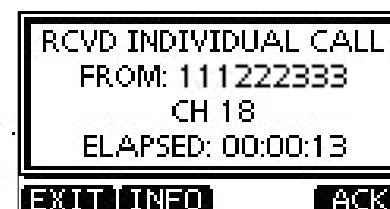
While receiving individual call, you can transmit an acknowledgement (Quick ACK) ("Able to Comply", "Propose New Channel" or "Unable to comply") by using screen prompts. You can also send an acknowledgement through the following menu operation. (Manual ACK)

Quick ACK

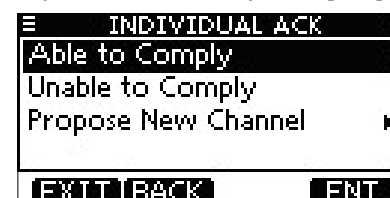
1. While receiving individual call, a prompt sound emits and the screen is showed as below.
 - Press [ALARM OFF] to turn OFF the prompt sound.



2. Press the softkey [ACK].



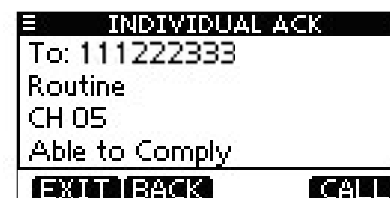
3. Select one of the options and then press [OK].



- Able to Comply: Transmit an acknowledgement without any changes.
- Unable to Comply: Cannot make a communication. The acknowledgement call (Unable to Comply) will transmit automatically.
- Propose New Channel: You can make an acknowledgement call, but it has specified intership communication channel. Press [▲]/[▼] to select desire intership communication channel and then press [OK].



4. The screen shows the ACK confirmation interface. Press [CALL] to transmit acknowledgement call.



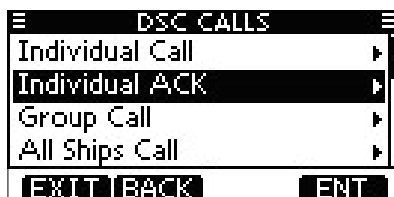
5. The screen is shown as below.



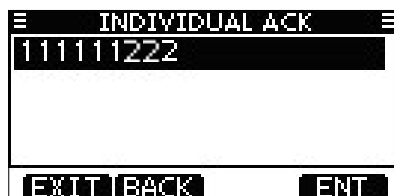
6. Press [PTT] to reply.
7. Press [EXIT] to return to normal operating mode.

Manual ACK

1. Enter the "Individual ACK" in DSC CALLS menu.
 - The "Individual ACK" will not be shown if no individual call is received.



2. Press [▲]/[▼] to select individual address or ID code to reply and then press [OK].



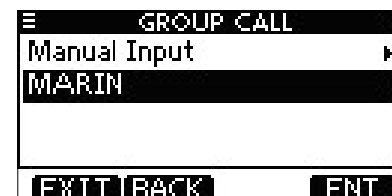
3. Follow Step 3 to Step 7 as describe in "Quick ACK".

Group Call

The group call function allows to call a specific ship station (ship group). The ship has its own group call ID code. The whole ship will receive while transmitting a group call.

◆ Transmit Group Call

1. Enter "GROUP CALL" in DSC CALLS menu.
2. Press [▲]/[▼] to select the desired preprogrammed group address or select "Manual Input" and then press [OK].
 - The group ID code should be set first.
 - Set 8 digits ID code for group code while selecting "Manual Input".



※ Manual Input

Input the desired group call ID as the following ways.

- Press [▲]/[▼]/[◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor to select "←" or "→". Then press [OK].
- If the first digit is "0", it is regard as Group ID.
- If the first two digits is "0", it is regard as Coast Station ID.



3. Press [▲]/[▼] to select desire intership communication channel and then press [OK].
 - Intership channels are already preset into the radio as the recommended order.



4. A confirmation interface appears to confirm the call contents.



5. Press [CALL] to transmit group call.
 • If Channel 70 is busy, the radio will standby until channel leisure.
 6. The screen is shown as below after a group call is transmitted.



7. Press and hold [PTT] to communicate with specified ship.
 8. Press [EXIT] to return to normal operating mode after the communication.

◆ Receive Group Call

- The emergency alarm emits for 2 minutes.
 → "RCVD GROUP CALL" appears. The backlight may flash for 2 minutes according to the received category.
 1. Press [ALARM OFF] to stop alarm and backlight flash.
 • The next interface will appear according to received category if no press [ALARM OFF] in 2 minutes.



2. Press softkey to select desired operation.



- ※ Press [IGN] to ignore and return to normal operating mode.
 • The radio exits DSC mode.
 • "✉" continues to flash and the call is stored in the received call record.
 ※ Press [INFO] to show the received call information.
 ※ Press [ACPT] to monitor the announcement by the major caller in the specified channel.

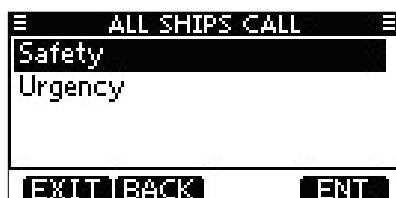


■ All Ships Call

The all ships call function allows to call the whole ships.

◆ Transmit All Ships Call

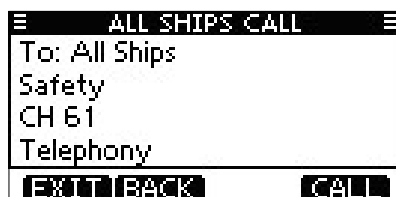
- Enter "ALL SHIPS CALL" in DSC CALLS menu.
- Press [▲]/[▼] to select the desired preprogrammed group address or select "Manual Input" and then press [OK].
 • The selectable category may be different according to programmed setting. Please ask your dealer for the selectable category.



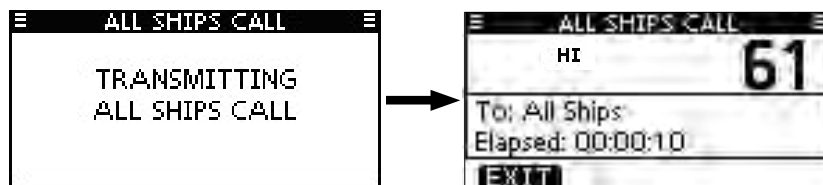
3. Press [▲]/[▼] to select desired communication channel and then press [OK].
 - The screen shows the selectable communication channels.



4. A confirmation interface appears to confirm the call contents.



5. Press [CALL] to transmit all ships call.
 - If Channel 70 is busy, the radio will standby until channel is free.

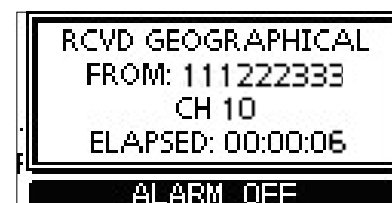


6. Press and hold [PTT] to communicate with specified ship.
7. Press [EXIT] to return to normal operating mode after the communication.

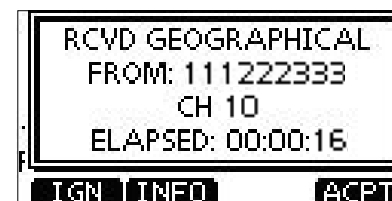
◆ Receive All Ships Call

While receiving all ships call:

- The emergency alarm emits for 2 minutes.
 - "RCVD ALL SHIPS CALL" appears. The backlight may flash for 2 minutes according to the received category.
1. Press [ALARM OFF] to stop alarm and backlight flash.
 - The next interface will appear according to received category if no press [ALARM OFF] in 2 minutes.



2. Press softkey to select desired operation.



- ※ Press [IGN] to ignore and return to normal operating mode.
 - The radio exits DSC mode.
 - "☑" continues to flash and the call is stored in the received call record.
- ※ Press [INFO] to show the received call information.
- ※ Press [ACPT] to show "POSITION REPLY" and send reply call.



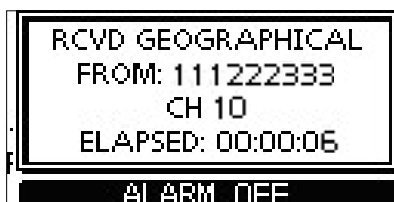
■ Geographical Area Call

The geographical area call function allows to call the whole ship stations in the sea area you are in.

◆ Receive Geographical Area Call

While receiving geographical area call:

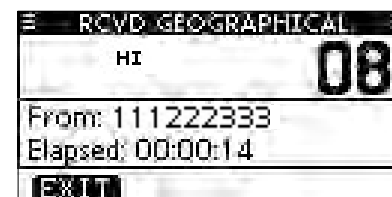
- The emergency alarm emits for 2 minutes.
- "RCVD GEOGRAPHICAL AREA CALL" appears. The backlight may flash for 2 minutes according to the received category.
- 1. Press [ALARM OFF] to stop alarm and backlight flash.
 - The next interface will appear according to received category if no press [ALARM OFF] in 2 minutes.



2. Press softkey to select desired operation.



- ※ Press [IGN] to ignore and return to normal operating mode.
 - The radio exits DSC mode.
 - "☑" continues to flash and the call is stored in the received call record.
- ※ Press [INFO] to show the received call information.
- ※ Press [ACPT] to monitor the announcement by the major caller in the specified channel.
 - When no GPS data is received or if there is problem with the connected GPS receiver, all geographical area call can be received no matter what position you are.



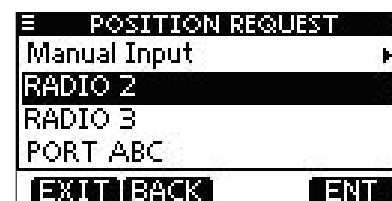
■ Position Request Call

Transmit a position request call while you want to know a specific ship's position.

◆ Transmit Position Request Call

Enter "POSITION REQUEST" in DSC CALLS menu.

1. Press [▲]/[▼] to select the desired preprogrammed individual address or select "Manual Input" and then press [OK].
 - The position request call ID code should be set first.
 - Set desired 9 digits MMSI code for individual code while selecting "Manual Input".



※ Manual Input

Input the desired individual call ID as the following ways.

- Press [▲]/[▼]/[◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor to select "←" or "→". Then press [OK].
- If the first digit is "0", it is regard as Group ID.
- If the first two digits is "0", it is regard as Coast Station ID.

POSITION REQUEST														
IND ID:		1-----												
0	1	2	3	4	5	6	7	8	9					
←		→							FINISH					
EXIT BACK														

2. A confirmation interface appears to confirm the call contents.

POSITION REQUEST														
To: RADIO 2														
Safety														
EXIT BACK CALL														

3. Press [CALL] to transmit position request call.
 - If Channel 70 is busy, the radio will standby until channel leisure.

POSITION REQUEST														
TRANSMITTING POSITION REQUEST														

4. The screen is shown as below after the position request call is transmitted.
 - The radio waits in Channel 70 for 10 seconds and then alternately monitors Channel 70 and the operating channel.

POSITION REQUEST														
Waiting for ACK														
EXIT														

5. When the acknowledgement call is received, a prompt sound emits and the screen is showed as below.
6. Press [ALARM OFF] to turn OFF the prompt sound. The screen is shown as below.

POSITION REQUEST														
Received ACK														
ALARM OFF														

POSITION REQUEST														
From: RADIO 2														
29° 35.5982N														
123° 28.3868E														
10:22 UTC														
EXIT														

7. Press [EXIT] to return to normal operating mode.

◆ Receive Position Request Call

While receiving position request call:

- The emergency alarm emits for 2 minutes.
 - "RCVD POS REQUEST" appears. The backlight may flash for 2 minutes according to the received category.
1. Press [ALARM OFF] to stop alarm and backlight flash.
 - The next interface will appear according to received category if no press [ALARM OFF] in 2 minutes.

RCVD POS REQUEST														
FROM: 111222333														
ELAPSED: 00:00:06														
ALARM OFF														

2. Press softkey to select desired operation.

RCVD POS REQUEST														
FROM: 111222333														
ELAPSED: 00:00:16														
IGN					INFO					ACK				

- ※ Press [IGN] to ignore and return to normal operating mode.
 - The radio exits DSC mode.
 - "☐" continues to flash and the call is stored in the received call record.
- ※ Press [INFO] to show the received call information.

- ※ Press [ACPT] to show "POSITION REPLY" and send reply call.
 - When the "POSITION ACK" is set as "Auto TX", the radio will reply call automatically. In this situation, the transmit and receive call will be stored in call record.

◆ Transmit Position Reply Call

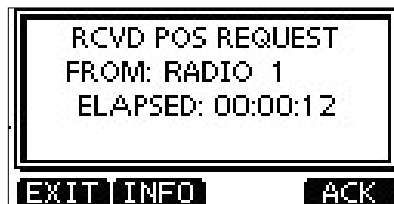
The radio will transmit a position reply call while a position request call is received. When the "POSITION ACK" in DSC Settings is set as "Auto TX", the radio will transmit position reply call automatically after position request call is received.

Quick ACK

1. While receiving individual call, a prompt sound emits and the screen is showed as below.
 - Press [ALARM OFF] to turn OFF the prompt sound.



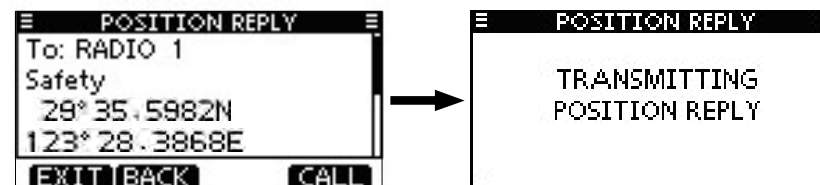
2. Press the softkey [ACK].



- Press [INFO] to show the received position request call information.
- Press [BACK] to return to last interface.

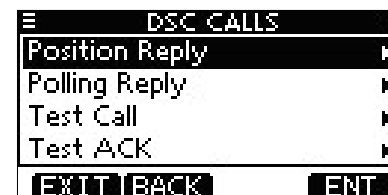


3. A position reply confirmation interface appears. Press [CALL] to transmit position reply call.
4. The screen shows as below after transmitting position reply call. Then return to normal operating mode.



Manual Reply

1. Enter the "POSITION REPLY" in DSC CALLS menu.
 - The "POSITION REPLY" will not be shown if no position request call is received.



2. Press [▲]/[▼] to select desired position request call to reply and then press [OK].



3. The position reply call confirmation interface is shown as below. Press [CALL] to transmit position reply call.



4. The screen is shown as below after a position reply call is transmitted and then return to normal operating mode.



When no GPS data is received or invalid data is received, and both position and time are manually input, the screen is shown as below. Edit you latitude and longitude and UTC time as below.



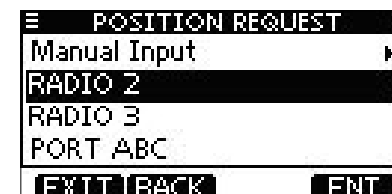
- ※ Press [CHG] and edit the latitude and longitude position and UTC time.
- Press [◀]/[▶] to select desired number.
 - Press [OK] to confirm.
 - Move the cursor to select "←" or "→". Then press [OK].
 - Select N (North Latitude) or S (South Latitude) when the cursor is on the "N" or "S" position.
 - Select W (West Longitude) or E (East Longitude) when the cursor is on the "W" or "E" position

■ Position Report Call

Transmit a position report call while you want to know a specific ship's position.

◆ Transmit Position Report Call

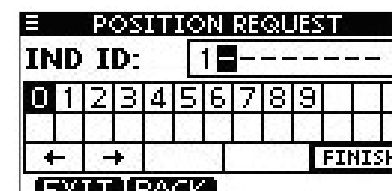
1. Enter "POSITION REPORT" in DSC CALLS menu.
2. Press [▲]/[▼] to select the desired preprogrammed individual address or select "Manual Input" and then press [OK].
 - The individual call ID code should be set first.
 - Set desired 9 digits MMSI code for individual code while selecting "Manual Input".



※ Manual Input

Input the desired individual call ID as the following way.

- Press [▲]/[▼]/[◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor to select "←" or "→". Then press [OK].
- If the first digit is "0", it is regard as Group ID.
- If the first two digits is "0", it is regard as Coast Station ID.



3. A confirmation interface appears to confirm the call contents.



4. Press [CALL] to transmit position request call.

- If Channel 70 is busy, the radio will standby until channel leisure.



5. The screen is shown as below after a position report call is transmitted and then return to normal operating mode.

When no GPS data is received or invalid data is received, and both position and time are manually input, the screen is shown as below. Edit you latitude and longitude and UTC time as below.



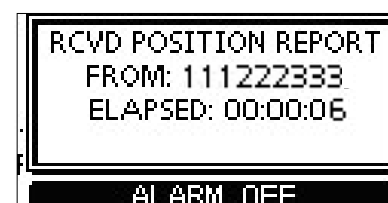
※ Press [CHG] and edit the latitude and longitude position and UTC time.

- Press [◀]/[▶] to select desired number.
- Press [OK] to confirm.
- Move the cursor to select "←" or "→". Then press [OK].
- Select N (North Latitude) or S (South Latitude) when the cursor is on the "N" or "S" position.
- Select W (West Longitude) or E (East Longitude) when the cursor is on the "W" or "E" position.

◆ Receive Position Report Call

While receiving position report call:

- The emergency alarm emits for 2 minutes.
 - "RCVD POSITION REPORT" appears. The backlight may flash for 2 minutes according to the received category.
1. Press [ALARM OFF] to stop alarm and backlight flash.
 - The next interface will appear according to received category if no press [ALARM OFF] in 2 minutes.



2. Press softkey to select desired operation.



※ Press [EXIT] to ignore call and return to normal operating mode.

- The radio exits DSC mode.
- "☐" continues to flash and the call is stored in the received call record.

※ Press [INFO] to show the received call information.

