Uniden®

MHS245

Handheld VHF Marine Transceiver

For more exciting new products please visit our website:
Australia: www.uniden.com.au

OWNER'S **MANUAL**

Making a Distress Call

Speak slowly - clearly - calmly.

For future reference, write your boat's name & call sign here:

1. Make sure your radio is on.
   On the radio, press the 16/67-Tri button to switch to Channel 16 (156.8 MHz). (If the corner of the display does not show 16, press the 16/67-Tri button again until it does.)
2. Press the push to talk button and say: "MAYDAY -- MAYDAY -- MAYDAY."
3. Say "THIS IS {name of your boat (three times) and call sign/boat registration number (once)}."
4. Say "MAYDAY {name or call sign of your boat}."
5. Tell where you are: (what navigational aids or landmarks are near, or read the latitude and longitude from your GPS).
6. State the nature of your distress, (e.g. are you sinking, medical emergency, man overboard, on fire, adrift, etc.)
7. State the type of assistance you need (medical, towing, pumps, etc.).
8. Give number of persons aboard and conditions of any injured persons.
9. Estimate present seaworthiness of your ship (e.g. how immediate is the danger due to flooding or fire or proximity to shore).
10. Briefly describe your ship, giving the ship name (e.g. "Blue Duck is 32 foot cabin cruiser, white hull, blue deck house").
11. Say: "I WILL BE LISTENING ON CHANNEL 16."
12. End message by saying "THIS IS {name or call sign of your boat}, OVER."
13. Release the push to talk button and listen.

If you do not get an answer after 30 seconds, repeat your call, beginning at step 3, above.

Warning

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Floating/Waterproof: IPX8/JIS8

Uniden's MHS245 radio is designed to meet the water proofing standard of IPX8/JIS8 and will float in water.

This Means: Protected against the effects of continuous immersion in water.The MHS245 can withstand immersion in water up to 1.5m depth for 1hr. Note this is not suitable for scuba diving.

The MHS245 will only meet this rating if fully assembled and all rubber seals are well maintained and correctly fitted. This means that the carabiner clip is not connected and the battery cover securely fastened.

After your radio is submerged in water, you might notice that the sound is distorted. This is because there is still water remaining in and around the speaker and microphone. Just shake the radio to clear excess water, and the sound should return to normal.

If your radio is exposed to salt water, clean your radio thoroughly with fresh water, and dry it before turning it on.

Contents

Contents

Introduction

The MHS245 is a floating, waterproof, portable two-way VHF transceiver. It is compact, lightweight, rugged and fits easily in your hand. This handheld VHF marine radio will give you consistent, outstanding performance in virtually all conditions and situations.

To ensure that you get the most from the MHS245's features, please read this operating guide carefully before using the unit.

Features

Your radio provides the following key features:

- Submersible design. Complies with floating IPX8/JIS8 water-resistant standards.
- Memory Scan mode. Lets you save channels to memory and monitor them in quick succession.
- Transmitter power level select/Boost. Lets you boost the transmitter power from 1W to 2.5W or 5W for added transmission distance.
- Battery level display and low battery alert.
- Dual Watch: This mode lets you monitor Instant CH along with one regular marine channel.
- Triple Watch: This mode lets you monitor 16CH, 67CH along with one regular marine channel.
- Battery Save. The Battery Save feature automatically turns off RX power at regular intervals to save battery power.
- SOS Strobe/Flashlight. A high intensity strobe LED can be set to blink an SOS pattern or to be steady on.
- Emergency 16/67 Channel monitoring. Set unit to scan one or both of these emergency channels regularly within normal scanning cycles.
- Key Lock. Locks keys to prevent accidentally changing channels or entering data.
- Selectable Volume (0 - 15) and Squelch (0 - 15) levels.
- Temperature. The thermal sensor lets you measure both water and air temperature. You can display temperature in Fahrenheit or Celsius.
- Selectable Backlight Timer. Lets you select the length of time the backlight will be on.
- Reversable LCD. You can change the display from light characters on dark background to dark characters on light background.
- DSC. Lets you call other stations or groups using their unique identification code. This radio complies with International Class D DSC standards for Handheld GPS/VHF marine transceivers.
- GPS (Favorite Position mode). Lets you to save your current position as well as manually enter other positions.You can save positions into

a directory to return to them as desired.

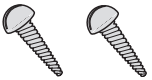
- NMEA input/output. Lets you connect to a chartplotter and determine what NMEA data you want to receive.
- MOB (Man Overboard). Lets you lock onto the current position when a Man Overboard situation occurs.
- Compass Display. Lets you determine the way you want the radio to display your course - by showing your course and direction or by showing location on an north-south-east-west display. Automatically auto-plots to a received DSC distress call.

Getting Started

What's Included?

MHS245 Radio

Wrist Strap



Mounting Hardware

Antenna

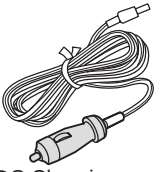
Lithium Ion Rechargeable Battery

AC Adaptor

Belt Clip

Charging Cradle

Alkaline Battery Tray (batteries not included)



DC Charging Adaptor

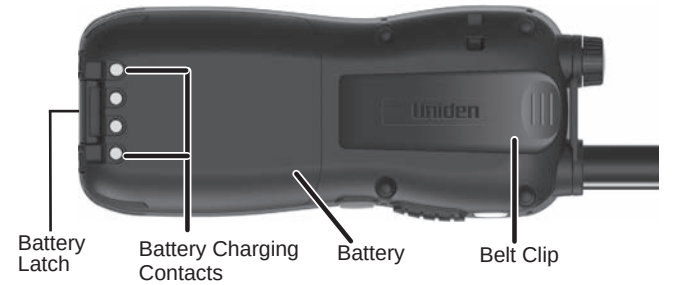
Not Shown:
External speaker/ microphone

- If any item is missing or damaged, contact your place of purchase immediately. **Never use damaged products!**
- Need help? Get answers at our website: ***www.uniden.com.au*** for Australian model

Controls and Indicators

MHS245 Radio

Controls and Indicators



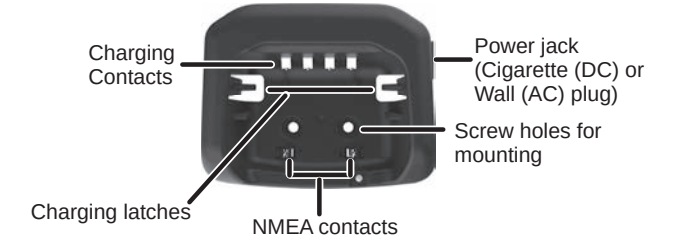
Button	Press to...	Press and hold to...
Power	NA	Turn the radio on or off.
PTT (Push to Talk)	NA	Talk/transmit on a channel.
Boost	NA	Transmit with a higher power level.
16/67/TRI	1st press: Go to channel 16. 2nd press: Go to channel 67. 3rd press: Go back to the starting channel.	Turn Triple Watch on and off.
SCAN/MEM ◄	Select Scan function. Move a cursor to left in Menu Mode.	Save a channel into memory or delete a channel from memory.
MENU/CALL	Access MENU.	Select the DSC Call menu.
Channel Up ▲	Move up channel or squelch/volume one step at a time.	Move up quickly the channels/squelch/volume steps.

Controls and Indicators

Channel Down ▼	Move down channel or squelch/volume one step at a time.	Move down quickly the channels/ squelch/volume steps.
DISP/ENT/H/M/L	Select Display mode. Select MENU items.	To change TX power.
INST/SQL	Instant CH Call	Enter/Exit squelch level setting condition.
GPS/SOS ►	Access GPS mode. Move Cursor to right in menu mode.	Activate strobe SOS light.
CLR/VOL	Exit menu screen.	Enter/exit volume setting.

Controls and Indicators

Charger



Reading the Display

The LCD display shows different information depending on what you are doing. This sample screen shows some of this information. The following table shows all the possible icons and what they mean.

Controls and Indicators

Icon	Detail
	The keys are locked.
LOW MID 5W	The transmitter power is set to LOW (1W), MID (2.5W), or 5W.
BRG	Bearing from boat's position to the destination. This icon appears when Favorite mode is active.
COG	Current course (Course over Ground). COG displays when Favorite mode or Compass mode is active, or when a DSC distress call is received.
SOG	Speed Over Ground - This icon appears when compass mode is active.
DIST	Indicates the distance from the boat's position to the destination. This icon appears when Favorite mode is active.
USA, CAN, or INT	Indicates if the radio is set for US channels, CANadian channels, or INTernational channels.
VOL or SQ	This icon appears when Audio Volume Setup or Squelch Setup mode is active.
TRIWATCH or DUALWATCH	TRIple Watch or DUAL Watch is turned on.
MEM	The current channel is saved in memory.
°F/ °C	Temperature display is active (Fahrenheit or Centigrade).
	Valid GPS data received from the GPS receiver.
	No valid GPS data received from the GPS receiver.
	The battery is fully charged, mostly charged, halfcharged, mostly empty, or completely empty.

Controls and Indicators

	This icon appears when Auto Channel Switch is ‘Off’.
	Compass icon shows when a DSC distress call has been received, a Favorite location has been selected, or the Compass main display screen has been selected.
	Position mark. Indicates the target point.

How it Works?

Display

Press the **DISP/ENT/H/M/L** key to display the following screens:

Marine mode
Position mode
Favorite mode
Compass mode
Temperature mode
GPS Status mode

The last screen displayed will display again the next time the unit is powered up.

Menus

Various menus let you establish guidelines and parameters for sending and receiving calls. Menus also let you set your radio's characteristics such as brightness, code selection, and contrast.

The **MENU/CALL** button accesses menus that let you set the way your radio operates. The **GPS/SOS** button lets you set up your GPS features and save GPS locations to a favorites list to use again later.

MENU/CALL Menus

You can set up the radio's physical displays and operation modes (*Normal* menu) and how you want to receive and send various types of calls (*Call* menu), The *Normal* menu provides access to the *Radio Setup* submenu and the *Call* menu provides access to the *DSC Setup* submenu.

Normal Menu

Press **MENU/CALL** to display the following *Normal* menu options:

MENU Option	What it does
Dual/Tri Watch	Sets the radio to turn on as either Dual Watch or Tri Watch when 16/67/TRI is pressed.
USA/CAN/INT	Selects which channels and frequencies your radio will communicate with (USA, Canadian, or International)

Channel Name	12 characters that allow custom channel names to be used.
Key Lock	Locks the keypad so the selected channel is not accidentally changed.
Radio Setup	Select this option from the *Normal* menu to set up the radio itself.

Radio Setup Menu

Use this option from the *Normal* menu to set up physical requirements for the radio. The menus options are:

MENU Option	What it does
Lamp Adjust	Set the backlight always off, timer, or always on.
Contrast/RVS	You can adjust the brightness of the screen contrast higher or lower through 10 levels. Once you get to the bottom limit of the contrast, selecting it again reverses the contrasts.
Temperature	Set the air and water temperature reading to display in degrees Fahrenheit or Celcius.
Key Beep	Set unit to sound a beep tone with each key press (ON/OFF).

Call Menu

Press and hold **MENU/CALL** to display options under the Call Menu. The menu options are:

MENU Option	What it does
Individual	Sends an individual call to an individual station.
Group	Sends a call to a group.
All Ships	Sends *URGENCY* or *SAFETY* message to all ships.
POS Request	Requests the position of an individual vessel.
Position Send	Transmits your position to an individual vessel.
Test	Sends a test call.

Standby	Places the radio in an unattended mode.
Receive Log	Displays a list of all received calls to the radio. The MHS245 stores log data for 10 distress calls and 50 other calls.
DSC Setup	Allows the user to set up Digital Selective Calling (DSC) service.

DSC Setup Menu

Press and hold **MENU/CALL** to enter the Call Menu. Then select the option DSC Setup to get the options displayed below.

MENU Option	What it does
Directory	Displays a list of up to 20 vessel IDs. Provides a means of entering a new vessel ID
Auto CH SW	Select ON or OFF to enable/disable Automatic Channel Switch. Auto CH SW lets you automatically change channels if an Urgent or Safety DSC call comes in.
POS Reply	Lets you elect to respond automatically or manually.
Test Reply	Lets you elect to respond to a test request automatically or manually.
Group MMSI	Allows you to program the 9-digit Group MMSI setting.
User MMSI	Allows you to program the 9-digit User MMSI setting.

GPS Menu

Press **GPS/SOS** to configure the GPS module through the GPS menu.

MENU Option	What it does
MOB (Man Overboard)	Instantly saves your current position to the top of the Favorites list.

Favorite	Allows you to select a GOTO location and add new GOTO coordinates and name them.
GPS Setup	Sets up how the GPS will operate.

GPS Setup Menu

This menu sets up GPS module parameters. The menu options are:

MENU Option	What it does
Unit Power	Allows you to turn the GPS module on or off to conserve battery life.
Power Save	Turns the Battery Save feature on or off.
Time Adjust	Allows you to adjust to local time.
Daylight Save	Allows you to turn Daylight Savings Time on or off.
SOG Unit	Lets you set the Speed Over Ground measurement in knots, miles per hour, or kilometers per hour.
Compass	Set Compass display setting to either Course-Up or North Up.
NMEA Out	Allows you to select any or all of the following NMEA sentences for output: GGA, GSA, GSV, and RMC. The DSC and DSE sentences are always sent.

Operation Modes

Operation Modes

Your radio has two main operation modes: Normal and Scan.

Mode	What it does	Use it when you want to...	To turn it on/off
Normal	Monitors a single marine channel and lets you talk on that channel.	Monitor a channel or talk to another radio	(default mode)
Scan	Monitors all the channels you save into memory.	Check a small group of regularly-used channels for traffic.	Press **SCAN/MEM**.

In addition to the two operation modes, your radio provides two different watch modes which you can activate during any operation mode. In the watch modes, the radio briefly checks for activity on a specific channel, then returns to its previous operation.

Watch mode	What it does	To turn it on/off
Dual Watch	Checks Instant Channel for activity every few seconds.	Select dual watch from the *Normal/Dual/TriWatch* menu and press and hold **16/67-Tri** for 2 seconds.
Triple Watch	Checks emergency channels 16 and 67 for activity every few seconds.	Select triple watch from the *Normal/Dual/TriWatch* menu and press and hold **16/67-Tri** for 2 seconds.

NOTE

Private boats must monitor channel 16. Whenever they are underway. Water-going vessels should have either Triple Watch or Dual Watch on at all times.

Operation Modes

Normal Mode

- To transmit, remove the radio from the charger, then press and hold **Push To Talk**. Release the button when you have finished talking.
- For the best sound quality, hold the microphone about two inches from your mouth while you are talking.
- Press **Channel Up** to move up one channel at a time. Press and hold the button to scroll quickly up the channels.
- Press **Channel Down** to move down one channel at a time. Press and hold the button to scroll quickly down the channels.
- To change the transmit power, press and hold **DISP/ENT/H/M/L**. The transmit power cycles through LOW (1W), MID (2.5W), and HI (5W), then back to LOW again. Press **BOOST** on the left side of the radio to boost the transmit power to 5W (Lithium Ion battery) or to 2.5W (Alkaline batteries).

NOTE

If you are using Alkaline batteries, 5W is not available.

Normal Mode with Triple Watch or Dual Watch

If you activate Triple Watch while operating in Normal mode, the radio checks channels 16 and 67 every few seconds; with Dual Watch turned on, the radio only checks only instant channel. The radio will not check channels 16, 67 or instant channel while you are actively transmitting; it waits until your transmission is finished and then checks the channels.

Scan Mode

You can save any channel (except Weather channels) into memory and then use Scan mode to monitor those channels from lowest to highest. If the radio detects a signal on a channel, it stays on that channel as long as the signal is received; when the signal stops, the radio continues scanning.

Using the Radio in Scan Mode

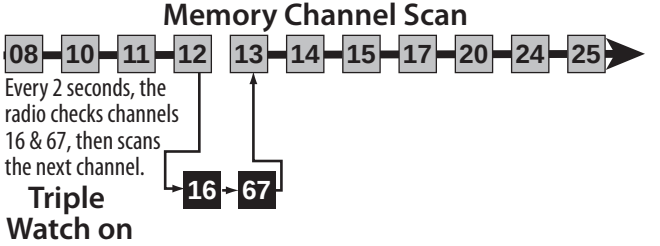
- To activate Scan mode, press **SCAN/MEM**. The radio scans channels in memory.
- You must have at least two channels in memory to start a scan.
- You cannot transmit while in Scan mode.
- To save a channel into memory, select the channel, then press and hold the **SCAN/MEM** button. The *MEM* icon displays whenever you tune to that channel.

Operation Modes

- To remove a channel from memory, set the radio to that channel, then press and hold the **SCAN/MEM** button. The *MEM* icon no longer displays.
- When the radio stays on a channel, press **Channel Up** to leave that channel and resume scanning.

Scan Mode with Triple or Dual Watch

If you activate Triple Watch (press and hold **16/67 TRI**) while operating in Scan mode, the radio checks channels 16 and 67 every few seconds, then goes on to scan the next channel in memory. With Dual Watch turned on, the radio only checks instant channel:



Press **16/67 TRI** again to cancel Triple Watch mode.

INSTANT Channel Feature

Allows you to store one channel to the Instant key for one-touch access.

To Program Instant Channel

1. Press **Channel Up** and **Channel Down** to select a channel.
2. Then press **INST/SQL** within 2 seconds to save the selected channel as Instant Channel. Instant Icon is indicated.

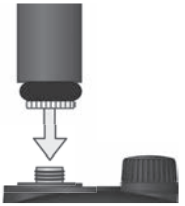
To use the Instant Feature

Press **INST/SQL** to toggle between the Instant Channel and the current channel.

Setting up the Hardware

Attaching the Antenna

The antenna detaches from the radio for easy shipping or storage. To attach the antenna to your radio, screw it tightly onto the anchor post at the top of the radio.



Installing the Battery

Your radio comes with a rechargeable Li-Ion Polymer battery; for shipping safety, the battery is not installed at the factory. The empty alkaline battery tray is installed as a placeholder.

1. Insert the tabs on the battery into the notches at the top of the battery compartment.
2. Lower the battery until it rests flat in the compartment.
3. Bring the battery latch up and snap it into place.

NOTE

Each time you remove the battery, check the rubber seal around the battery compartment. Make sure the seal is seated in the groove and there is no dirt or debris on it. If the seal looks worn or damaged, contact customer service to order a replacement (see front cover page for contact information).

Using the Alkaline Battery Tray

The radio also comes with an alkaline battery tray that holds four AAA-type alkaline batteries (not included). You can use alkaline batteries as a backup for the Li-Ion Polymer battery so you can still use your radio while your Li-Ion Polymer battery is recharging.

CAUTION: If you are using your radio in a cold-weather environment, Uniden recommends using nonrechargeable Lithium batteries.

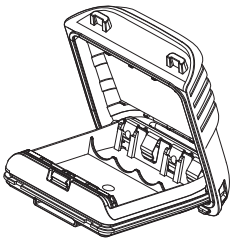
NOTE

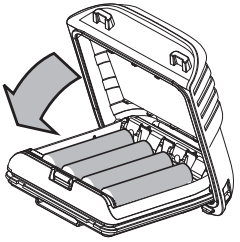
When using alkaline batteries, transmit power is limited to a maximum of 2.5W.

Setting up the Hardware

Follow these steps to use the alkaline battery tray:

1. Hold the lower part of the tray in one hand with the three battery contacts facing down. Use your thumb to hold the notch on the lower part of the tray.
2. With your other hand, grip the upper part of the tray and lift the cover open.
3. Align the batteries' positive and negative terminals with the drawing on the tray and snap each battery into place.
4. Insert the two hooks on the lower part of the tray into the notches on the cover; close the cover. (The cover fits snugly but you should not have to force it closed.)
5. Install the alkaline battery tray in your radio just as you do the Li-Ion Polymer battery (see page 23).





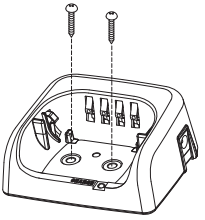
NOTE

WARNING! The tray is designed to prevent the accidental charging of alkaline batteries. Never use alkaline batteries in the radio without the alkaline battery tray. Do not attempt to modify the battery tray design.

Mounting the Charger

You can mount the charger on any flat surface.

1. Use the two holes at the base of the charger as a template to mark the drill holes.
2. Using a 3mm (1/8-inch) drill bit, drill two holes 13mm (1/2 inch) deep.
3. Use the provided screws to attach the charger to the surface.



Setting up the Hardware

Charging the Battery

Your radio includes a charger and a rechargeable battery pack. Place your radio in the charger with the display facing forward. Make sure that the CHARGE LED on the charger turns orange.

Cautions:

- Use only the battery and charger supplied with this radio.Using a different charger or battery can damage the radio and create a risk of fire or shock.
- The charger is not waterproof. If the charger falls into the water, unplug it before attempting to remove it from the water. After you remove the charger from the water, please contact our Customer Care Line.
- Wipe off dirt or shake water from your radio before placing in the charger if your radio gets dirty or wet.

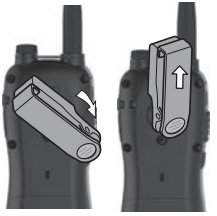
Important notes on charging the battery

- Charge the battery fully before using the radio. When the battery is completely charged, the CHARGE LED turns green.
- Don't use the charger when the ambient temperature is below 5° C (41° F) or above 40° C (104° F).
- If the radio is powered down, the battery can charge in about seven hours. (If the radio is powered on, the battery takes longer to charge.)

Attaching the Belt Clip

To attach the belt clip:

1. Rotate the belt clip so that the finger indentation is towards the top of the radio.
2. Align the center of the clip with the anchor post.
3. Place the clip on the post and slide the clip upwards until it clicks into place.



To remove the belt clip:

1. Rotate the clip so that the finger indentation is towards the bottom of the radio.
2. Slide the clip up until it comes free of the anchor post.

Using Your Radio

Turning It On

Press and hold **POWER** for at least two seconds to turn the radio on. Press and hold **POWER** again to turn the unit off.

Entering the User MMSI

When you power up your radio for the first time, it displays *MMSI Not Entered* and then displays a Marine mode screen. User MMSI numbers are unique and cannot be entered more than once. See page 33 for general information about MMSI numbers and how to get your specific User MMSI number and enter it.

NOTE

If you must change your user MMSI, instructions are on the Uniden website (www.uniden.com.au).

Setting It Up

Even though you can change your radio's settings at anytime, you will probably want to establish initial settings after you have turned it on for the first time. You will adjust some of these settings on an as-needed basis, but some settings might only need to be set once.

Acquiring GPS Location

The MHS245 automatically acquires your current GPS location when it is turned on. Turn on the radio and point the antenna towards the sky. It will triangulate your location and save it.

NOTE

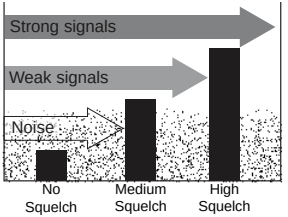
Do not let anything obstruct the antenna, such as a metal cabin ceiling.

Changing the Volume

To change the speaker volume, press and hold **CLR/VOL** to enter Volume Setting mode. 0 (for volume level 0 - 15) displays. Press **Channel Up** or **Channel Down** to increase or decrease the volume levels. Press and hold **CLR/VOL** to save and exit the setting.

Setting the Squelch level

The MHS245 recognizes signals as transmissions if they exceed a signal strength threshold.



Adjusting the squelch sets this threshold level. Increasing squelch requires a signal to be stronger to be seen as a transmission. If you set the squelch too high, you will risk not receiving transmissions that are lower than that threshold. Reducing the squelch allows weaker signals to be accepted.However, if you lower the squelch too much, you will hear white noise all the time

While listening to a channel, press and hold **INST/SQL** to enter Squelch Setting mode.The SQUELCH Level bars display on the LCD. Press **Channel Up** or **Channel Down** to increase or decrease the squelch levels. Press and hold **INST/SQL** to save and exit the setting.

NOTE

Setting the squelch level too high may prevent you from hearing weaker transmissions. If you are having difficulty hearing a transmission, try setting the squelch level lower.

Setting the INT Channel Mode (USA/CAN/INT)

You can select marine channels for the USA, Canada, or International waters. Press **MENU/CALL** to enter the Normal Menu mode. Select USA/CAN/INT and then use the **Channel Up** or **Channel Down** keys to scroll through and select USA, CANada, or INTernational channel options. Press **DISP/ENT/H/M/L** to save and exit.

Using Your Radio

Setting Key Lock

You can lock the keypad through the *Normal* menu. The icon displays when Keylock is on. Unlock it by pressing and holding **MENU/CALL** for 2 seconds.

Adjusting the Lamp

The LCD backlight can always be turned on, off or set to dim after a set time.

1. Press **MENU/CALL** and select R*adio Setup/Lamp Adjust*.
2. Lamp Adjust options are *Always Off, Timer*, or *Always On*.
3. If you select *Always On*, the next screen lets you choose between *Green* and *Orange*.
   If you select timer, the options are:
   5 sec, 10 sec, 30 sec, 1 min, 5 min.

Adjusting the LCD Contrast

This feature lets you adjust the LCD's contrast level. It also permits you to reverse the contrast completely. You can choose to have dark characters on a light background or light characters on a dark background.

1. Press **MENU/CALL** and select R*adio Setup/Contrast/RVS*; press **Channel Up** or **Channel Down** to adjust the contrast.
2. Pressing **Channel Down** to turn the contrast all the way off will reverse the background/letters.

Setting the Air or Water Temperature Measurement

You can set the temperature to display in Celsius or Fahrenheit.

1. Press **MENU/CALL** and select select R*adio Setup/Temperature*.
2. Temperature options are *°C (Celsius) or °F (Fahrenheit)*.

The temperature may not display correctly if the internal temperature of the radio is high (i.e., being out in the sun or a high receiver audio output).

Turning the Key Beep On and Off

Key beep is the tone that sounds when you press a key or a button. Press **MENU/CALL** to bring up the *Normal* menu. Select R*adio Setup/ Key Beep*. Press **Channel Up** or **Channel Down** to turn the key beep on or off.

Making a Transmission

Select the channel you want to transmit on, then press and hold the **PTT** button. Release the **PTT** button when you're finished talking to let the other party respond.

- To prevent stuck microphone problems or situations where the **PTT** button is pushed accidentally, the radio limits your talk time to 5 minutes in a single transmission.
- For the best sound quality, hold the microphone about two inches away from your mouth.
- See page 53 for a list of receive-only channels.

Changing the Transmission Level

In most situations, 1W transmission power is all you need. If you find yourself far away from other stations and have trouble getting a response, you may need to increase the transmission power. If your radio is powered by a Li-Ion battery, you can press and hold the **BOOST** button to transmit at 5W. Alkaline battery power boost is limited to 2.5W.

To increase the transmission power in increments:

1. Select the channel you want to transmit on.
2. Press and hold **DISP/ENT H/M/L** to switch to the next transmission power level (for example, from 1W to 2.5W, from 2.5W to 5W, or from 5W back to 1W). The display shows the new transmission power as *5W, MID*, or *LOW*.
3. The display shows the new transmission power as *5W, MID*, or *LOW*. The transmit power remains at the new setting until you change it again.

Current power level (W)	Press and hold DISP/ ENT H/M/L to change to ..(W)	Displays
1	2.5	MID
2.5	5	5W
5	1	LOW

NOTE

Don't forget to change the transmission setting back to 1W when you move close to other stations.

Some channels limit the transmission power to 1W. When you tune to a

limited power channel, the radio automatically switches to 1W.
See page 53 for a list of power-restricted channels.

Changing the Channel

Press the **Channel Up** or **Channel Down** buttons briefly to scroll through the channels one channel at a time. Press and hold the **Channel Up** or **Channel Down** buttons to quickly scroll through the channels.

Saving Channels to Memory

If you find a channel you like and want to listen to it again, save it to memory. Press and hold **SCAN/MEM**; the active channel is stored in memory and MEM displays. Press **SCAN/MEM** to scan the channels in memory.


NOTE

You must have at least 2 channels in memory in order to use Scan mode. Channel 70 cannot be stored into memory.

Press and hold **SCAN/MEM** again to remove the channel from memory.

Using the Strobe SOS Light/Flashlight

You can use this radio in an emergency. If you turn on the strobe SOS high-intensity LED light on your radio, your radio will blink “S O S” in international Morse Code. This will make it easier for rescuers to find you faster.


NOTE

Your radio operates normally when the SOS LED strobe is activated.

With the SOS LED in this state	Do this	For this
OFF	Press and hold **GPS/ SOS** for 2 seconds.	SOS LED signals SOS in Morse code.
SOS	Press and hold **GPS/ SOS** for 2 seconds.	SOS LED remains on continuously. (Flashlight mode)
Continuous	Press and hold **GPS/ SOS** for 2 seconds.	SOS LED turns off.

Using DSC Features

Digital Selective Calling

Digital Selective Calling (DSC) is a standard that allows you to call other stations using their unique identification code (the Maritime Mobile Service Identity or MMSI number), just like you would call a phone number. To call another station, just enter that station's MMSI number and choose the voice channel you want to talk on. The radio uses channel 70 to transmit your MMSI number to the other station along with the voice channel you requested. If the other station accepts your call, both radios automatically switch to the requested voice channel so you can talk to the other station.

DSC provides a system for automated distress calls. At the touch of a button, the radio can transmit your MMSI number, the nature of your distress, and your current position based on data from your GPS receiver. The radio repeats the distress call every few minutes until it receives an acknowledgement.

The DSC standard dedicates a VHF channel—channel 70—to digital transmissions only. Since digital transmissions require less bandwidth voice transmissions, channel 70 avoids the problems of busy voice channels

Advanced DSC Features

Your radio supports the following DSC features.

Feature	Menu Item	Function
Individual Call	Individual	Contact another vessel from your directory.
Group Call	Group	Contact all vessels that share your group MMSI code.
All Ships Call	All Ships	Broadcast to all vessels within range (used for Safety or Urgency messages).
Position Request	POS Request	Request the current location of another vessel.
Position Send	Position Send	Transmit your current location to another vessel.

Test Call	Test	Make sure your radio is working and configured correctly.
Standby Mode	Standby	Automatically respond to all DSC calls with “Unavailable” status.
Receive Log	Receive Log	Displays last 10 distress calls and last 50 general calls the radio received.
DSC Setup	DSC Setup	Accesses DSC menus. - Directory - Auto CH SW - POS Reply - Test Reply - Group MMSI - User MMSI

MMSI Numbers

In order to use DSC features, you must be assigned a User MMSI number and program that number into your radio. There are two kinds of MMSI numbers: individual numbers for use by single boats and group numbers for use by fleets, boating organizations, event coordinators, etc.

You can get more information on MMSI numbers at these resources:

• The dealer where you purchased the radio

• To Obtain an MMSI Code in Australia
The Australian Maritime Safety Authority allocates MMSI. To apply for an MMSI complete the MMSI Application form available for download via www.amsa.gov.au/mmsi. This page has important information about MMSI and DSC radio.

• To Obtain an MMSI Code in NZ
To obtain an MMSI for a VHF Recreational Radio contact the Ministry of Economic Development - Radio Spectrum Management at; Email: info@rsm.govt.nz or free phone 0508 776 4630.

Using DSC Features

The DSC radio owner should indicate they are seeking an MMSI for a VHF Recreational Radio and would then need to supply the following;
• Name • VHF Call sign • Vessel Name • Vessel Details

The MMSI given will then be a unique number which will conform to the ITU format.

Entering MMSI Numbers

Use the **Channel Up** or **Channel Down** keys to scroll through numbers (and letters when entering names). When you see the number/letter you want, press the right arrow **GPS/SOS** to move the cursor to the next space. Press the left arrow **SCAN/MEM** to back up.

When using the **Channel Up** or **Channel Down** keys to enter a name, the alphabetic and numeric characters display in the following order:

Capital letters (A through Z)

Lower-case letters (a through z)

Punctuation (/ ‘ + -)

Numbers (0 through 9)

One blank space

Entering Your User MMSI Numbers

NOTE

Be sure you have the correct User MMSI number before entering it in the radio. The radio only allows you to enter the User MMSI once. If you need to re-enter the User MMSI number, contact customer service (see back page for contact information).

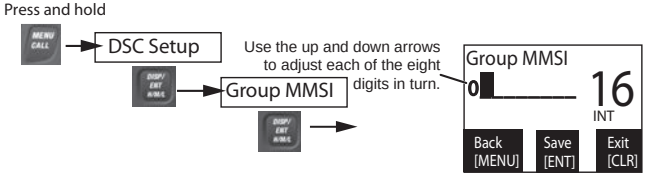
When you power up your radio for the first time, it displays *MMSI Not Entered* and then displays a Marine mode screen.

1. Press and hold **MENU/CALL**; the *Enter User MMSI* screen displays.
2. Press **DISP/ENT/H/M/L**. The *User MMSI* screen displays.
3. Enter the MMSI number as described previously to scroll through the numbers. When the ninth digit is entered, the radio asks if you want to save the number and confirm it. Press **DISP/ENT/H/M/L** to save it.
4. Before saving the number, the radio displays the message *Confirm number! User MMSI data is Permanent!* At this point you can edit the number (press **MENU/CALL**), save the number (press **DISP/ENT/H/M/L**), or return to the Marine mode screen (press **CLR/VOL**).

Using DSC Features

Entering a Group User MMSI Numbers

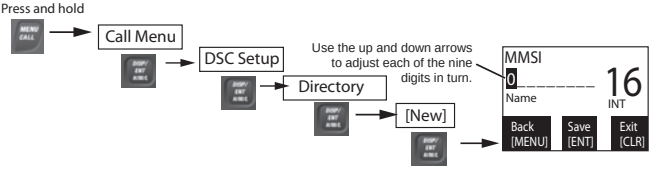
You can change the group MMSI number as often as you want. The first digit of a group MMSI is fixed at “0.” Follow the steps below to enter a group MMSI number into the radio:



1. Press and hold **MENU/CALL** to display the *Call* Menu.
2. Select *DSC Setup/Group MMSI* and press **DISP/ENT/H/M/L**. The *Group MMSI* screen displays.
3. Group MMSI numbers always start with a 0, so that digit is already entered for you. Enter the MMSI number as described previously. When the ninth digit is correct, press **DISP/ENT/H/M/L**. The radio asks you to confirm.
4. To save this MMSI number, press **DISP/ENT/H/M/L**. To cancel this MMSI number, press **CLR/VOL**.

Entering an Individual MMSI Numbers

Follow the steps below to enter individual MMSIs and names of other vessels into the directory:



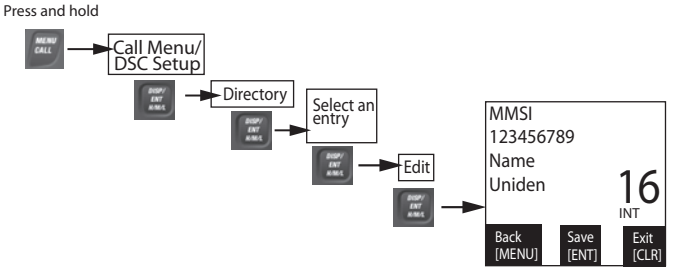
1. Press and hold **MENU/CALL** to display the *Call* Menu.
2. Scroll to *DSC Setup* and press **DISP/ENT/H/M/L**.The *DSC Setup* menu displays.
3. Scroll to *Directory* and press **DISP/ENT/H/M/L**. The *Directory* menu displays.
4. Select *[New]* and press **DISP/ENT/H/M/L**.
5. Enter the MMSI number as described previously. When the ninth digit is correct, press **DISP/ENT/H/M/L** and the cursor moves to the *Name* field.

6. Enter the name as described previously. When you have entered the name, press **DISP/ENT/H/M/L**.
7. The radio displays the new MMSI number and name and asks you to confirm. To save this MMSI number and name, press **DISP/ENT/H/M/L** To cancel this MMSI number, press **CLR/VOL**.

Using the Directory

The directory lets you store up to 20 MMSI numbers of other stations so you can call them quickly. From the directory, you can edit or delete MMSI numbers.

Follow the steps below to edit the MMSI numbers in your directory:



1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Scroll to *DSC Setup* and press **DISP/ENT/H/M/L**.The *DSC Setup* menu displays.
3. Scroll to *Directory* and press **DISP/ENT/H/M/L**.The *Directory* screen displays. This screen lets you add a new MMSI or edit/delete an existing MMSI.
4. To enter a new MMSI, select [NEW] and follow the procedures for entering an individual MMSI number.
5. To edit an existing MMSI number/name, select the entry and press **DISP/ENT/H/M/L**
6. Select *Edit* and press **DISP/ENT/H/M/L**.The MMSI number and name display. Edit accordingly and press **DISP/ENT/H/M/L** when complete. A confirmation screen displays.
7. Press **DISP/ENT/H/M/L** to accept the edits or **CLR/VOL** to cancel. The radio returns to the *DSC Directory Edit* screen.
8. To delete the directory entry, select *Delete*.
   When you are satisfied with the directory list, press **CLR/VOL** to close the menu screen.

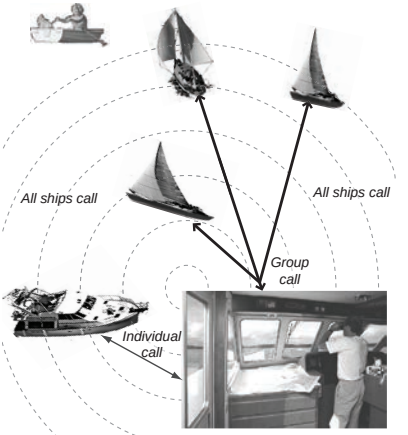
Using DSC Features

Making DSC Calls

There are essentially four different types of DSC voice calls:

Call Type	What it does	When to use it
Distress	Alerts all stations that you need assistance and sends them your current position.	In an emergency only.
Individual	Calls a single station using the User MMSI.	When you want to talk to another station.
Group	Calls all the stations that have the same Group MMSI as yours.	Any time you want to talk with the whole group you are traveling with at the same time.
All Ships	Calls all stations within range of your radio.	Safety warnings (e.g., debris in the water) or any urgent situation.

Suppose you are coordinating safety for a sailboat race. Before the race starts, you instruct all the racers to enter your group MMSI number into their radios. During the race:



- Throughout the race, you use group calling to update the racers on the time, race status, and any course corrections.
- A power boat full of spectators comes too close to the race path. You use individual calling to contact the power boat and advise them to stay clear of the race.
- You see a rowboat entering the area, but since it doesn't have a radio, you can't communicate with the rowboat. You use all ships calling to alert all the other boats in the area of the possible danger.

Using DSC Features

Calling a Single Station (Individual Call)

To call a single station with DSC, follow these steps:

1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *Individual*.
3. The radio displays the names listed in your directory; use **Channel Up** or **Channel Down** to choose the directory entry you want to call and press **DISP/ENT/H/M/L**.
   If you want to call a station that is not in your directory, select *Manual*. The radio prompts you to enter the MMSI number you want to call. Enter the MMSI number the same way you enter directory entries (see page 33). Enter all nine digits and press **DISP/ENT/H/M/L**.
4. The radio prompts you to select a response channel. Use **Channel Up** or **Channel Down** to scroll through the available channels. When you reach the channel you want to use for a response, press the **DISP/ ENT/H/M/L** button.
5. The radio displays the MMSI number you are about to call and asks you to confirm. If you want to call the displayed MMSI number, select *Send (press* **DISP/ENT/H/M/L**. To cancel the call, select *Exit* (press **CLR/VOL**).
6. The radio automatically switches to channel 70 to transmit the call request.

- When the other station accepts the call, both radios switch to the selected response channel for voice transmission.
- If the other station cannot respond on the channel you selected, the radio displays *Not support CH*.

Calling a Particular Group of Stations (Group Call)

Group calling calls all the stations that share your group MMSI. You must have a group MMSI programmed into the radio to make a group call, and the stations (boats) you are calling must have this same group MMSI programmed into their radios.

1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *Group*.
3. The radio prompts you to select a response channel. Use **Channel Up** or **Channel Down** to scroll through the available channels. When you reach the channel you want to use for a response, press **DISP/ ENT/H/M/L**.
4. The radio asks you to confirm the call. Select *Send (press* **DISP/ENT/ H/M/L**) to continue with the call or select *Exit* (press **CLR/VOL**) to cancel the call.
5. The radio switches to channel 70 to transmit the call request then automatically switches to the designated response channel.

Using DSC Features

Calling all Stations (All-Ships Call)

All ships calling contacts all DSC radios within range of your boat. You should only use all ships calling in the event of a Safety warning (such as debris in the water) or to request assistance in an Urgency (any situation where your vessel has a serious problem but is not yet in distress).

1. Open the *Call* menu.
2. Select *All Ships*, and then choose whether this is an Urgency call or a Safety call.
3. The radio asks you to confirm the call. Select *Send (press* **DISP/ENT/ H/M/L)** to continue with the call or select *Exit* (press **CLR/VOL**) to cancel the call.
4. The radio automatically switches to channel 70 to transmit the call request then automatically switches to channel 16, the designated response channel for all-ships calling.

Making an Automatic Distress Call

If you have programmed your MMSI number, your radio can transmit an automated distress call with your current location and nature of the distress. The radio then monitors channel 16 for a response and repeats the distress call every few minutes until it receives an acknowledgement.

To send an automatic distress call, press and hold **DISTRESS** for three seconds. If no MMSI number has been programmed, the radio prompts you to enter your MMSI number.

If you want to include the nature of your distress in the distress call, use the following distress procedure:

1. Press **DISTRESS**.
2. The radio displays the list of distress conditions; use **Channel Up** or **Channel Down** to choose the nature of your distress, then press and hold **DISTRESS** for three seconds.

Undesignated	Sinking	Fire	Overboard
Adrift	Flooding	Abandoning	Capsizing
Collision	Piracy, Armed	Grounding	

Cancelling an Automatic Distress Call

While the radio is waiting for a response, it gives you the option of canceling the call. To cancel the distress call, press **CLR/VOL.** And press **DISP/ENT/ H/M/L** to send a Distress Cancellation call.

Using DSC Features

Receiving a DSC Call

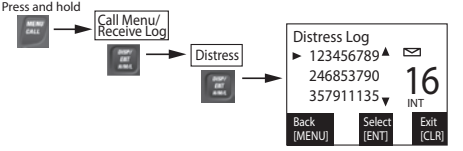
If your radio receives an individual DSC call from another station, it sounds an incoming call tone and displays the name/MMSI number of the station calling you. To respond to the call, select *Send: Able-Comply*; the radio sends an acknowledgement and automatically switches to the designated response channel. To reject the call, select *Send: Unable-Comply*; the radio advises the other station that you are unable to respond to the call.

If the DSC request contains a response channel that you are not allowed to use, the radio displays *Not Support CH*; your only response option is *Send: Unable-Comply*.

If the radio receives a group or all ships call, it sounds an incoming call tone and automatically switches to the designated response channel.

Receive Log

Just like your telephone's caller ID list, your radio keeps track of the calls you receive. The receive log is useful if you have been off your boat or away from your radio and want to see who has tried to contact you. The radio displays the last 10 distress calls and the last 50 non-distress calls that it received. If you have unread incoming DSC calls, the radio displays a Message icon. When you display all Distress and Other receiving logs, the message icon disappears.



1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *Receive Log*.
3. Select *Distress* to see the last 10 distress calls received by the radio. Select *Other* to see the last 50 normal calls received by the radio, then choose from *Individual*, *Group,* or *All Ships* calls.
4. Calls are listed in the order they were received, with the newest call shown first. The display blinks if there are new calls you have not reviewed. The Message icon also displays.
5. Select the call you want to see the details of. Use **Channel Up** or **Channel Down** to see all of the information. The log displays different information depending on type of call received. See the table below for the information stored for each type of call:

DSC Call Type	Receive Log Information
Distress	MMSI (or name), position, time, nature code.
Distress Acknowledge	MMSI (or name), distress MMSI, position, time, nature code.
All Ships	MMSI (or name), category code, communication channel number.
Group	MMSI (or name), category code, communication channel number.
Individual	MMSI (or name), category code, communication channel number.
Individual Acknowledge	MMSI (or name), Completed/Unattended, category code, communication channel number.
Test	MMSI (or name), category code.
Test Acknowledge	MMSI (or name), category code.
Pos Reply	MMSI (or name), position, time, category code.
Pos Request	MMSI (or name), category code.
Pos Send	MMSI (or name), position, time, category code.

6. From the log menu, select *Exit* to close the receive log and return to the mode you were in.

Returning a Call from Receive log

You can return individual calls directly from the Receive Log. From the call detail screen, press **Channel Down** until *Call Back* appears at the bottom of the display. Press **DISP/ENT/H/M/L** to return that station's call.

Using DSC Features

TEST Calls

Making Test Calls

NOTE

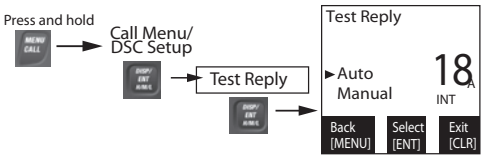
You can use the test call feature to make sure your radio is working and configured correctly. To avoid overloading coastal receiving stations, you should limit test calls to these stations to once a week.

NOTE: Many coastal stations have specific frequencies and MMSI numbers you should use for making test calls. Before making a test call to a coastal station, be sure to check the coastal station before making a DSC test call.

1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *Test*.
3. The radio displays the names listed in your directory; use **Channel Up** or **Channel Down** to choose the directory entry you want to send a test call to and press **DISP/ENT/H/M/L**.
4. If you want to send a test call to a station that is not in your directory, select *Manual*. The radio prompts you to enter the MMSI number you want to call. Enter the MMSI number the same way you enter directory entries (see page 33). Enter all nine digits and press **DISP/ENT/H/M/L**.
5. The radio displays the MMSI number you are about to call and asks you to confirm. If you want to call the displayed number, select *Send*. To cancel the call, select *Exit*.
6. The radio automatically switches to channel 70 to transmit the test call request, then switches back to the last-used channel.
7. When the other station acknowledges the test call, the radio displays an acknowledgement screen.

Receiving Test Call Setup

When another station sends you a test call, you can select options to answer the test call manually or have the radio answer automatically.



1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *DSC Setup* and then *Test Reply*.

3. Choose *Auto* and press **DISP/ENT/H/M/L**. The radio will automatically send an acknowledgement when it receives a test call.
4. To disable automatic test call reply, repeat the steps above and select *Manual*.

Acknowledging a Test Call Receipt

Different screens display depending on whether you set the *Test Reply* to *Auto* or *Manual.*

If *Test Reply* is set to *Auto*:

No action is necessary.

If *Test Reply* is set to *Manual*:

Select *Send* to send a reply.

Position Request and Reply

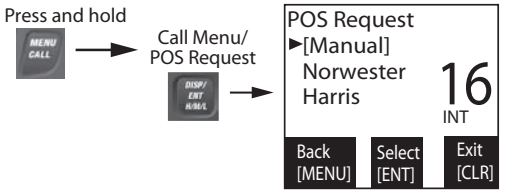
Enabling Automatic Position Reply

If you want the radio to automatically transmit your current position whenever it receives a position request, you can enable automatic position reply. Most boaters activate automatic position reply for safety reasons or because they subscribe to a marine towing service. Sometimes—for example, in some competitive situations--you may not want other stations to get your position without your manual confirmation.

1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *DSC Setup* and then *Position Reply*.
3. Choose *Auto* and press **DISP/ENT/H/M/L**. The radio will automatically transmit your position when it receives a position request.
4. To disable automatic position reply, repeat the steps above and select *Manual*.

POS Request

Any time you need to know where another boat currently is—to find your boating partners, to respond to a request for assistance, etc.—you can send a position request to their radio:

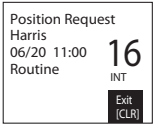


1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *POS Request* and press **DISP/ENT/H/M/L.**
3. The radio displays the names listed in your directory; use **Channel Up** or **Channel Down** to choose the directory entry you want to contact and press **DISP/ENT/H/M/L**. If you want to contact a station that is not in your directory, select *Manual*. The radio prompts you to enter the MMSI number you want to call. Enter the MMSI number the same way you enter directory entries (see page 33). Enter all nine digits and press **DISP/ENT/H/M/L**.
4. The radio displays the MMSI number you are about to contact and asks you to confirm. If you want to request the position of the displayed MMSI number, select *Send*. To cancel the request, select *Exit*.
5. When the other station responds, the radio displays the MMSI number, the longitude, and the latitude of the other station. If your radio is connected to a chartplotter through the NMEA OUT connection (see page 47), the position information will also be displayed on the plotter screen.
6. If the other station does not have valid GPS data, the radio displays *No Position*.

Position Reply

When another station requests your current position, different screens display depending on whether you set *Position Reply* to *Auto* or *Manual.*

If *Position Reply* is set to *Auto*:



No action is necessary.

If *Position Reply* is set to *Manual*:

Select *Send* to send a reply or *Exit* to reject the request.

Using DSC Features

Position Send

If you are requesting assistance or using an all ships call to give a safety warning, you can send your current position so other stations know where you are:

1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *Position Send*.
3. The radio displays the names listed in your directory; use **Channel Up** or **Channel Down** to choose the directory entry you want to contact and press **DISP/ENT/H/M/L.** If you want to contact a station that is not in your directory, select *Manual*. The radio prompts you to enter the MMSI number you want to call. Enter the MMSI number the same way you enter directory entries (see page 33). Enter all nine digits and press **DISP/ENT/H/M/L**.
4. The radio displays the MMSI number you are about to contact and asks you to confirm. If you want to transmit your position to the displayed MMSI number, select *Send*. To cancel the transmission, select *Exit*.
5. The radio transmits your MMSI number, your longitude, and your latitude to the other station.

Putting the Radio into Standby

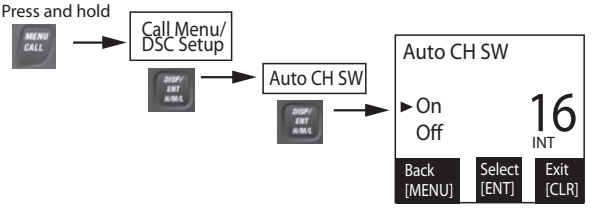
If you are leaving your radio or do not wish to answer any DSC calls, you can put your radio in standby mode. If your radio receives an individual call, it will automatically respond with a message that indicates your radio is currently unattended. Follow the steps below to put your radio in standby:

1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *Standby* to place your radio in standby mode.
3. To cancel standby and return to the mode your radio was in, press any button.

Disabling Automatic Channel Switching

If you are involved in a bridge-to-bridge call, you may not want the radio to automatically switch channels when it receives a DSC call. In cases like this, you can disable automatic channel switching. If you receive an individual call, the radio will respond with an unattended code, just as if the radio were in Standby.

Using DSC Features



1. Press and hold **MENU/CALL** to display the *Call* menu.
2. Select *DSC Setup*, then *Auto CH SW.*
3. Select *Off* and press **DISP/ENT/H/M/L**. The radio will not automatically switch channels until you reactivate this feature.

NOTE

Use this feature with caution. Deactivating automatic switching and then forgetting it can make it hard for you to receive DSC calls.

If you have unread incoming DSC calls, the radio displays a message icon. You will be able to review who has called. The radio displays the last 10 distress calls and the last 50 non-distress calls it received (see page 39).

Additional Features

GPS Features

GPS Operation Overview

Your GPS system provides more than just your specific location. The *MOB* (Man Overboard) menu lets you immediately save your current position so rescuers can converge on the exact man overboard location. The *Favorites* menus let you create a directory of favorite places and their coordinates so you can easily return there. Using the GPS *Setup* menus, you can determine power-saving options, measurement increments, and time settings.

The radio is factory-preset to search for your geographic location when it is turned on for the first time.

MOB Menu

The *MOB* menu lets you quickly save your current selection so you can easily navigate back to it. It will be saved in the first position of the Favorites list.

Favorite Menu

The *Favorite* menu is comprised of the *Goto* menu and the *Add* menu. The Goto menu adds (saves) the current GPS position as well as recalls that position and others you have saved to sail back to it.

Goto Menu

The *Goto* menu allows you to select from a list of saved coordinates or to input coordinates manually.

To input coordinates

1. From the *Goto Fav.* screen, select *[Manual]*.
2. Manually input coordinates. When the last digit is entered, the screen displays *Go* and *Save*.
3. Select *Go* to display the coordinates and the compass bearing and begin traveling towards that destination.
4. Select *Save* to save the location into a Favorites directory. When you select *Save*, the screen prompts you to name these coordinates.
5. When you have entered a name for the saved coordinates, they will appear on the *Goto* screen as a selection.

To select a Goto entry

1. From the *Goto Fav.* screen, select from the directory entries listed.
2. The screen displays three options: *Go*, *Delete*, and *Edit*.
3. Select *Go* to display the coordinates and the compass bearing and begin traveling towards that destination.

   Select *Delete* to delete the entry.

   Select *Edit* to change the entry.

NMEA Features

Your radio supports NMEA0183, a standard for data communication between marine instruments. If you are connected to a chartplotter and the radio receives another boat's position data (sentences) in a DSC call, the radio sends the position data to the chartplotter so you can see the location.

NMEA sentences contain different sets of data. The MHS245 supports the following sentences:

DATA	RMC	GLL	GNS	GGA	ZDA
UTC Time	O	O	O	O	O
Status (Valid/IInvalid)	O	O	O	O	X
Latitude/Longitude	O	O	O	O	X
Speed	O	X	X	X	X
Course	O	X	X	X	X
Data	O	X	X	X	O

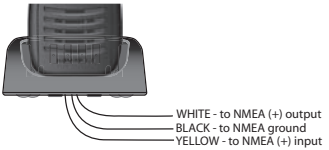
Additional Features

The radio can output the following NMEA sentences:

GGA GSV DSC GSA RMC DSE

To connect to a chartplotter:

1. Connect the WHITE wire to the NMEA positive (+) output.
2. Connect the BLACK wire to the NMEA ground.
3. Connect the YELLOW wire to the NMEA positive (+) input.



NOTE

Use waterproof tape to seal electrical connections.

Renaming Channels

If you discover that a marine radio channel has a different common name in your local area, you can change the name of that channel to make it easier for you to use (see the channel lists beginning on page 53 for the default channel names). To rename a channel, follow the steps below:

1. Press **MENU/CALL** and select *Channel Name* from the *Normal* menu. The screen displays the list of channels.
2. Use **Channel Up** or **Channel Down** to choose the channel you want to change and press **DISP/ENT/H/M/L**.
3. Select *Rename* to enter a new name for this channel. The radio prompts you to enter a new name for this channel. Each name can be up to 12 characters. Use **Channel Up** or **Channel Down** to change the name.
4. When you finish entering the name, the radio displays the new channel name and asks you to confirm. To save this new channel name, select *Save*; to cancel the change, select *Exit*. The radio returns to the channel list.
5. To restore a channel back to its original name, select the channel and choose *Default*.
6. When you are satisfied with the channel list, select *Exit*.

Maintenance and Troubleshooting

Due to its rugged design, your radio requires very little maintenance. However, it is a precision electronic instrument, so you should follow a few precautions:

- If the antenna has been damaged, do not transmit except in an emergency situation. Transmitting with a defective antenna may cause further radio damage.

Common Questions

Problem	Things to try
The radio won't turn on.	Charge the radio.
The power LED on the charger doesn't turn on.	• Don't use the charger when the ambient temperature is below 5° C (41° F) or above 40° C (104° F). • Make sure the charging contacts on the radio and charger are clean. • Replace the battery.
The radio won't transmit.	• Make sure you are not in Scan mode. • Make sure you are not trying to transmit on a receive-only channel or transmit at the wrong power level for this channel (see the channel lists starting on page 53). • Check the battery power level; if it's low, charge the battery before trying to transmit. • Make sure the duration of each transmission is less than 5 minutes.
I can't hear anything from the speaker.	Adjust the squelch level; it is probably too high.
Noise comes out of the speaker all the time.	Adjust the squelch level; it is probably too low.
I can transmit, but no one can hear me.	Check your UIC channel settings: does the area you are in use different channel assignments?

The display flashes, and I don't know why.	The channel number on the display will flash if the radio is in a Watch mode or in Scan mode. Try turning off scanning, Triple Watch, or Dual Watch (see page 20).
Where can I find my radio's serial number?	The serial number is on a plate inside the battery compartment.

Specifications

General	
Channels	All US/International/Canada marine channels
	5 Weather channels
Freq. Control	PLL
Oper. Temp.	-10°C(14°F) to +55°C(+131°F)
Antenna	Flexible Whip
Microphone	Built-in Electret type
Display	Liquid Crystal Display
Speaker	8Ω 1.0 Watt
Power Source	Rechargeable Lithium Ion Battery 7.4V 1160 mAh
Size (without antenna)	6.29 (H) x 2.40 (W) x 1.61 (D) inch 160 (H) x 61 (W) x 41 (D) mm
Weight	10.9 oz (309g) (w/battery and antenna)
Transmitter	
Frequency Range	156.025~157.425 MHz
Frequency Stability	±2.5 PPM (nominal)
Power Output	1.0 W & 2.5W & 5W
Spurious Emissions	-40dBm
Current Drain	1300 mA (5W) nominal
Receiver	
Type	Double Conversion Super Heterodyne Phase Locked Loop system for Local Oscillator
Frequency Range	156.050~162.000 MHz
Sensitivity	0.25 µV for 12dB SINAD (nominal)
Squelch Sensitivity	Threshold 0.18 µV (nominal)

Specifications

Audio Frequency Response	+6.0 dB @ 500 Hz; -6 dB @ 2000Hz (nominal)
Adjacent Channel Selectivity	72dB @ ±25 kHz (nominal)
Audio Output Power	600mW @10% THD (nominal)
Current Drain	Squelched: 65 mA; Max. Audio: 230 mA (nominal)
Inter Modulation	72dB (nominal)

Channels and Frequencies (MHz)

US Channel Frequencies and Names

US Marine Channels				
Ch	**RX Freq**	**TX Freq**	**Status**	**Name**
1A	156.050	156.050	Simplex	Vessel traffic system/commercial
5A	156.250	156.250	Simplex	Vessel traffic system/commercial
6	156.300	156.300	Simplex	Inter-ship safety
7A	156.350	156.350	Simplex	Commercial
8	156.400	156.400	Simplex	Commercial
9	156.450	156.450	Simplex	Non commercial
10	156.500	156.500	Simplex	Commercial
11	156.550	156.550	Simplex	Vessel traffic system
12	156.600	156.600	Simplex	Vessel traffic system
13	156.650	156.650	Simplex, 1W	Bridge to bridge
14	156.700	156.700	Simplex	Vessel traffic system
15	156.750	Inhibit	Receive only	Environmental
16	156.800	156.800	Simplex	Distress, safety, and calling
17	156.850	156.850	Simplex, 1W	Govt maritime control
18A	156.900	156.900	Simplex	Commercial
19A	156.950	156.950	Simplex	Commercial
20	161.600	157.000	Duplex	Port operation
20A	157.000	157.000	Simplex	Port operation
21A	157.050	157.050	Simplex	Coast guard only
22A	157.100	157.100	Simplex	Coast guard
23A	157.150	157.150	Simplex	Coast guard only
24	161.800	157.200	Duplex	Marine operator
25	161.850	157.250	Duplex	Marine operator
26	161.900	157.300	Duplex	Marine operator
27	161.950	157.350	Duplex	Marine operator
28	162.000	157.400	Duplex	Marine operator
63A	156.175	156.175	Simplex	Vessel traffic system
65A	156.275	156.275	Simplex	Port operation
66A	156.325	156.325	Simplex	Port operation

Channels and Frequencies (MHz)

US Marine Channels				
Ch	**RX Freq**	**TX Freq**	**Status**	**Name**
67	156.375	156.375	Simplex, 1W	Bridge To Bridge
68	156.425	156.425	Simplex	Non Commercial
69	156.475	156.475	Simplex	Non Commercial
70	156.525	Inhibit	Receive only	Digital Selective Calling
71	156.575	156.575	Simplex	Non Commercial
72	156.625	156.625	Simplex	Non Commercial (Ship-Ship)
73	156.675	156.675	Simplex	Port Operation
74	156.725	156.725	Simplex	Port Operation
75	156.775	156.775	Simplex, 1W	Port Operation
76	156.825	156.825	Simplex, 1W	Port Operation
77	156.875	156.875	Simplex, 1W	Port Operation (Ship-Ship)
78A	156.925	156.925	Simplex	Non Commercial
79A	156.975	156.975	Simplex	Commercial
80A	157.025	157.025	Simplex	Commercial
81A	157.075	157.075	Simplex	Coast Guard
82A	157.125	157.125	Simplex	Coast Guard
83A	157.175	157.175	Simplex	Government
84	161.825	157.225	Duplex	Marine Operator
85	161.875	157.275	Duplex	Marine Operator
86	161.925	157.325	Duplex	Marine Operator
87	157.375	157.375	Simplex	Marine Operator
88	157.425	157.425	Simplex	Commercial (Ship-Ship)

Channels and Frequencies (MHz)

Canadian Channel Frequencies and Names

Canadian Marine Channels				
Ch	**RX Freq**	**TX Freq**	**Status**	**Name**
1	160.650	156.050	Duplex	Marine Operator
2	160.700	156.100	Duplex	Marine Operator
3	160.750	156.150	Duplex	Marine Operator
4A	156.200	156.200	Simplex	Canadian Coast Guard
5A	156.250	156.250	Simplex	Vessel Traffic System
6	156.300	156.300	Simplex	Inter-Ship Safety
7A	156.350	156.350	Simplex	Commercial
8	156.400	156.400	Simplex	Commercial
9	156.450	156.450	Simplex	Boater Calling Channel
10	156.500	156.500	Simplex	Commercial
11	156.550	156.550	Simplex	Vessel Traffic System
12	156.600	156.600	Simplex	Vessel Traffic System
13	156.650	156.650	Simplex, 1W	Bridge To Bridge
14	156.700	156.700	Simplex	Vessel Traffic System
15	156.750	156.750	Simplex, 1W	Environmental
16	156.800	156.800	Simplex	Distress, safety, calling
17	156.850	156.850	Simplex, 1W	State Control
18A	156.900	156.900	Simplex	Commercial
19A	156.950	156.950	Simplex	Canadian Coast Guard
20	161.600	157.000	Duplex, 1W	Port Operation
21A	157.050	157.050	Simplex	Canadian Coast Guard
22A	157.100	157.100	Simplex	Canadian Coast Guard
23	161.750	157.150	Duplex	Canadian Coast Guard
24	161.800	157.200	Duplex	Marine Operator
25	161.850	157.250	Duplex	Marine Operator
26	161.900	157.300	Duplex	Marine Operator
27	161.950	157.350	Duplex	Marine Operator
28	162.000	157.400	Duplex	Marine Operator
60	160.625	156.025	Duplex	Marine Operator
61A	156.075	156.075	Simplex	Canadian Coast Guard

Channels and Frequencies (MHz)

Canadian Marine Channels				
Ch	**RX Freq**	**TX Freq**	**Status**	**Name**
62A	156.125	156.125	Simplex	Canadian Coast Guard
63A	156.175	156.175	Simplex	Port Operation
64	160.825	156.225	Duplex	Marine Operator
64A	156.225	156.225	Simplex	Port Operation
65A	156.275	156.275	Simplex	Port Operation
66A	156.325	156.325	Simplex, 1W	Port Operation
67	156.375	156.375	Simplex	Bridge To Bridge
68	156.425	156.425	Simplex	Non Commercial
69	156.475	156.475	Simplex	Non Commercial
70	156.525	Inhibit	Receive only	Digital Selective Calling
71	156.575	156.575	Simplex	Non Commercial
72	156.625	156.625	Simplex	Non Commercial
73	156.675	156.675	Simplex	Port Operation
74	156.725	156.725	Simplex	Port Operation
75	156.775	156.775	Simplex, 1W	Port Operation
76	156.825	156.825	Simplex, 1W	Port Operation
77	156.875	156.875	Simplex, 1W	Port Operation
78A	156.925	156.925	Simplex	Inter Ship
79A	156.975	156.975	Simplex	Inter Ship
80A	157.025	157.025	Simplex	Inter Ship
81A	157.075	157.075	Simplex	Canadian Coast Guard
82A	157.125	157.125	Simplex	Canadian Coast Guard
83	161.775	157.175	Duplex	Canadian Coast Guard
83A	157.175	157.175	Simplex	Canadian Coast Guard
84	161.825	157.225	Duplex	Marine Operator
85	161.875	157.275	Duplex	Marine Operator
86	161.925	157.325	Duplex	Marine Operator
87	157.375	157.375	Simplex	Port Operation
88	157.425	157.425	Simplex	Port Operation

Channels and Frequencies (MHz)

International Channel Frequencies and Names

International Marine Channels				
Ch	**RX Freq**	**TX Freq**	**Status**	**Name**
1	160.650	156.050	Duplex	Marine operator
2	160.700	156.100	Duplex	Marine operator
3	160.750	156.150	Duplex	Marine operator
4	160.800	156.200	Duplex	Marine operator
5	160.850	156.250	Duplex	Marine operator
6	156.300	156.300	Simplex	Inter-ship safety
7	160.950	156.350	Duplex	Marine operator
8	156.400	156.400	Simplex	Commercial (ship-ship)
9	156.450	156.450	Simplex	Boater calling channel
10	156.500	156.500	Simplex	Commercial
11	156.550	156.550	Simplex	Vessel traffic system
12	156.600	156.600	Simplex	Vessel traffic system
13	156.650	156.650	Simplex	Bridge to bridge
14	156.700	156.700	Simplex	Vessel traffic system
15	156.750	156.750	Simplex, 1W	Environmental
16	156.800	156.800	Simplex	Distress, safety, calling
17	156.850	156.850	Simplex, 1W	Govt maritime control
18	161.500	156.900	Duplex	Port operation
19	161.550	156.950	Duplex	Commercial
20	161.600	157.000	Duplex	Port operation
21	161.650	157.050	Duplex	Port operation
22	161.700	157.100	Duplex	Port operation
23	161.750	157.150	Duplex	Marine operator
24	161.800	157.200	Duplex	Marine operator
25	161.850	157.250	Duplex	Marine operator
26	161.900	157.300	Duplex	Marine operator
27	161.950	157.350	Duplex	Marine operator
28	162.000	157.400	Duplex	Marine operator
60	160.625	156.025	Duplex	Marine operator
61	160.675	156.075	Duplex	Marine operator
62	160.725	156.125	Duplex	Marine operator
63	160.775	156.175	Duplex	Marine operator
64	160.825	156.225	Duplex	Marine operator

Channels and Frequencies (MHz)

International Marine Channels				
Ch	**RX Freq**	**TX Freq**	**Status**	**Name**
65	160.875	156.275	Duplex	Marine operator
66	160.925	156.325	Duplex	Marine operator
67	156.375	156.375	Simplex	Bridge to bridge
68	156.425	156.425	Simplex	Non commercial
69	156.475	156.475	Simplex	Non commercial
70	156.525	Inhibit	Receive only	Digital Selective Calling
71	156.575	156.575	Simplex	Non commercial
72	156.625	156.625	Simplex	Non commercial
73	156.675	156.675	Simplex	Port operation
74	156.725	156.725	Simplex	Port operation
75	156.775	156.775	Simplex, 1W	Port operation
76	156.825	156.825	Simplex, 1W	Port operation
77	156.875	156.875	Simplex	Port operation (ship-ship)
78	161.525	156.925	Duplex	Port operation
79	161.575	156.975	Duplex	Port operation
80	161.625	157.025	Duplex	Port operation
81	161.675	157.075	Duplex	Port operation
82	161.725	157.125	Duplex	Port operation
83	161.775	157.175	Duplex	Port operation
84	161.825	157.225	Duplex	Marine operator
85	161.875	157.275	Duplex	Marine operator
86	161.925	157.325	Duplex	Marine operator
87	157.375	157.375	Simplex	Marine operator
88	157.425	157.425	Simplex	Marine operator

Regulations and Safety Warnings

Lithium-Ion Polymer Battery Warning

This equipment contains a rechargeable Lithium-Ion Polymer battery. The rechargeable Lithium-Ion Polymer battery contained in this equipment may explode if disposed of in a fire.

Do not short-circuit the battery.

Do not charge the rechargeable battery used in this equipment in any charger other than the one specified in the owner's manual. Using another charger may damage the battery or cause the battery to explode.

NOTE: Li-Ion Polymer batteries must be recycled or disposed of properly.

Avoid exposing the battery (whether attached to the radio or not) to direct sunlight, heated cars, or temperatures below -4°F (-20°C) or above +140°F (+60°C). Exposing the chemical contained within the battery pack to temperatures above +140°F (+60°C) may cause the battery to rupture, fail, or reduce performance.

In case of exposure to the cell contents, wash the affected area thoroughly, and seek medical attention.

Warranty

UNIDEN MHS245 Handheld VHF Marine Transceiver

IMPORTANT: Satisfactory evidence of the original purchase is required for warranty service

Please refer to our Uniden website for any details or warranty durations offered in addition to those contained below.

Warrantor: The warrantor is Uniden Australia Pty Limited ABN 58 001 865 498 ("Uniden Aust").

Terms of Warranty: Uniden Aust warrants to the original retail purchaser only that the MHS245 ("the Product"), will be free from defects in materials and craftsmanship for the duration of the warranty period, subject to the limitations and exclusions set out below.

Warranty period: This warranty to the original retail purchaser is only valid in the original country of purchase for a Product first purchased either in Australia or New Zealand.

Product	3 Years
Battery Pack & Accessories	1 Year

If a warranty claim is made, this warranty will not apply if the Product is found by Uniden to be:

(A) Damaged or not maintained in a reasonable manner or as recommended in the relevant Uniden Owner's Manual;

(B) Modified, altered or used as part of any conversion kits, subassemblies or any configurations not sold by Uniden Aust;

(C) Improperly installed contrary to instructions contained in the relevant Owner's Manual

(D) Repaired by someone other than an authorized Uniden Repair Agent in relation to a defect or malfunction covered by this warranty; or

(E) Used in conjunction with any equipment, parts or a system not manufactured by Uniden.

Parts Covered: This warranty covers the Product and included accessories.

User-generated Data: This warranty does not cover any claimed loss of or damage to user-generated data (including but without limitation phone numbers, addresses and images) that may be stored on your Product.
Statement of Remedy: If the Product is found not to conform to this warranty as stated above, the Warrantor, at its discretion, will either repair the defect or replace the Product without any charge for parts or service. This warranty does not include any reimbursement or payment of any consequential damages claimed to arise from a Product's failure to comply with the warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is in addition to and sits alongside your rights under either the COMPETITION AND CONSUMER ACT 2010 (Australia) or the CONSUMER GUARANTEES ACT (New Zealand) as the case may be, none of which can be excluded.

Procedure for obtaining warranty service: Depending on the country in which the Product was first purchased, if you believe that your Product does not conform with this warranty, you should deliver the Product, together with satisfactory evidence of your original purchase (such as a legible copy of the sales docket) to Uniden. Please refer to the Uniden website for address details. You should contact Uniden regarding any compensation that may be payable for your expenses incurred in making a warranty claim. Prior to delivery, we recommend that you make a backup copy of any phone numbers, images or other data stored on your Product, in case it is lost or damaged during warranty service.

UNIDEN AUSTRALIA PTY LTD
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Email: custservice@uniden.com.au

Uniden®

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