

MC-8000 DSC



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Included with your MC-8000 DSC



Controls and Indicators

Front Panel/Microphone

Alphanuméric keyboard for direct input of channels ans names



- 1. PTT Switch Press to transmit and release to receive.
- 2. CHANNEL ▲ / ▼ These keys are used to change the channel number up/down. These buttons are also used to move the cursor in Menu mode.
- 3. **STEP/SCAN** Press this key to activate the step operation. Every time this key is pushed, the radio will step to the next channel that has placed into Memory. Pressing and holding this key for 2 seconds will activate the channel scan feature.
- 4. **MEM** Pressing this key will place the currently selected channel into Memory.
- PA / MODE Press this key to enable the PA (Public Address) feature / Inland Waterway Mode
- 6. **PWR/VOL** (On/Off/Volume) Turns the unit On or Off and adjusts the speaker volume.
- 7. SELECT In the Menu mode this is used to select the menu options.
- 8. MENU Press this key to enter the Menu mode.
- 9. HI/LO Press this key to change the transmit power to either High or Low.
- 10. **16/9/TRI** Press this key instantly change to Channel 16, Channel 9 or current channel. Pressing and holding this key for 2 seconds will activate the triple Watch Feature.
- 11. DISTRESS Press this key to send a signal of distress in case of emergency.
- 12. **SQUELCH** Rotate this knob eliminate background noise when a signal is not being received.
- 13. CLR Press this key to delete a character.

Rear Panel Connectors



ACC Connectors



Note: DC13.8V and GND are for GPS ANT.

LCD Display



- 1. TX (Transmit) Indicates transmitting.
- 2. HI (High) Indicates transmit output is 25 Watts.
- 3. DSC Indicators the radio is in the DSC mode.
- 4. TRI (Triple Watch) Indicates Triple Watch Mode is in effect.
- 5. *MEM* (Memory) Indicates Memory Scan Mode status for each channel selected.
- 6. () (Alarm Icon) It appears when the alarm clock is set.
- 7. LO (Low) Indicates transmit output is 1 Watt.
- 8. (GPS Icon) It appears while GPS module is receiving the data.
- 9. WX It appears when Inland Waterway Mode is selected.
- 10. *CH TAG* This area is used for Channel Tag, Menu, DSC, GPS. These messages will continually scroll from right to the left.
- 11. Channel Display Indicates Channel Number in use.

Flow Chart for Menu Operation



Notes: "POS SEND", "LOCAL TIME ADJUST", "DAYLITE SAVE", and "ALARM CLOCK" are not displayed in Menu when GPS module is not connected. When the radio is in one of the following modes: **Channel 16/9** mode, **Scan** Mode,

or **Triple Watch** mode, and the user presses the **Menu** key, all the of these modes are cancelled.

The menu mode will be cancelled if the radio receives a DSC call or **EXIT** is selected.

Installation

Caution: The MC-8000 DSC will only operate with a nominal 12 volt negative ground battery system.

It is important to carefully determine the most suitable location for your radio on your vessel. Electrical, mechanical, and environmental considerations must all be taken into account. You should select the optimum relationship among these considerations.

Keep in mind the flexibility designed into the **MC-8000 DSC** so that you can most conveniently use it. Features which should be considered are:

- 1. The universal mounting bracket may be installed on either the top or bottom of a shelf, on a bulkhead, or for overhead mounting.
- 2. The REMOTE speaker wires can be used with an auxiliary speaker.
- 3. All connections are "plug-in" type for easy removal of the radio.

Choosing a Location

Some important factors to consider in selecting the location for your MC-8000 DSC.

- 1. Select a location that is free from spray and splash.
- 2. Keep the battery leads as short as possible. Direct connection to the battery is most desirable.
- 3. Keep the antenna lead as short as possible. Long antenna leads can cause substantial loss of performance for both receiving and transmitting.
- 4. Locate your antenna as high as possible and clear from metal objects. The reliable range of coverage is a direct function of the antenna height.
- 5. Select a location that allows free air flow around the heat sink on the rear of the radio.
- 6. Select a location well away from the ship's compass. Auxiliary speakers also should be located away from the compass.

Engine Noise Suppression

Interference from the noise generated by the electrical systems of engines is sometimes a problem with radios. The **MC-8000 DSC** has been designed to be essentially impervious to ignition noise and alternator noise. However, in some installations it may be necessary to take measures to further reduce the effect of noise interference. All DC battery wires, antenna lead, and accessory cables should be routed away from the engine and engine compartment, and from power cabling carrying high currents.

Installing the MC-8000 DSC

After you have carefully considered the various factors affecting your choice of location, position the radio (with the bracket, microphone, power cord, antenna and any auxiliary cables installed) into the selected location to assure there is no interference with the surrounding items. Mark the location of the mounting bracket. Remove the bracket from the radio and use it as a template to mark the holes to be drilled for the mounting hardware. Drill the holes and mount the bracket with hardware compatible with the material of the mounting surface.

Last Channel Memory

The MC-8000 DSC memorizes the last channel selected before you turn Off the radio. For example, if you turn Off the radio on CH 12, it will be on that channel when turned back On.

Note: In order for the last channel to be memorized, you must have the radio on that channel for 3 seconds.

Note: This HEXAGON HEAD BOLT is only for mounting the bracket with hardware. Do not use it for installing the radio in the mounting bracket.

Connect the red wire of the supplied power cord to the positive (+) battery supply. Connect the black wire of the power cord to the negative (-) battery supply. The power cord is equipped with a fuse to protect the radio. Use only a six (6) ampere fast blow fuse for replacement. Connect the power cord to the keyed connector on the power "pigtail".

Connect the antenna and all other auxiliary cables and accessories.

Install the radio in the mounting bracket and connect all cables and accessories to the appropriate jacks and connectors.

Note: Do not use any other mounting knobs than the ones enclosed. Do not insert the knobs without attaching the bracket.

Power On/Off

Turn the unit On by rotating the **PWR/VOL** control clockwise.

Adjust the volume to a comfortable level.

When you turn the unit On, you will hear a beep, and the greeting message below appears on the LCD for 3 seconds.

Note: When you turn On the radio for the first time after purchase, the channel 16 will appear on the LCD.

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Operation

Squelch

Turn **SQUELCH** fully clockwise. This raises the "Squelch Gate" so high that only very strong signals can get through.



Turn **SQUELCH** fully counterclockwise until you hear a hiss. This lowers the "Squelch Gate" so that everything gets through - noise, weak signals, and strong signals.



Turn **SQUELCH** back clockwise until the hiss stops. Now the "Squelch Gate" allows only strong signals through.



Channel 16/Channel 9 Communications

To access Channel 16 or Channel 9 communications, press **16/9/TRI**. You can access 16 CH instantly while tuned to another channel. Press **16/9/TRI** again for Channel 9 Calling commu-

nications. Press **16/9/TRI** a third time to return to the channel selected prior to accessing Channel 16/Channel 9 communications.

The display will indicate the selected channel.

To cancel Channel 16/Channel 9 communications:

- Press 16/9/TRI until the previous channel setting appears.
- - or -
- Press CH ▲, CH ▼ or STEP/SCAN.

Triple Watch

Triple Watch monitors Channel 16, Channel 9, and the current Marine Channel.

To activate Triple Watch, press and hold **16/9/TRI** for 2 seconds. **TR I** appears on the LCD, indicating Triple Watch mode is in effect. If a signal is received on either Channel 16 or Channel 9, the radio remains on that channel until the signal ends.

Press and hold **16/9/TRI** for 2 seconds to cancel the Triple Watch mode.

While in Triple Watch mode, you can change the cur-

rently selected channel using CH ▲ or CH ▼. A momentary press of the 16/9/TRI button interrupts Triple Watch mode and remains on channel 16, or on channel 9 if you press 16/9/TRI once more. To return to the Triple Watch mode, simply press the button again.

Manual Tuning

Note:

To manually select a channel, press $CH \blacktriangle$ or $CH \bigtriangledown$ or use the number key pad on the mic and press *SELECT*. Communication channels are located on channel 01-28 and 60-88. Channel 70 is used for DSC only, user cannot select this channel.

Mem (Entering channel numbers into Memory Scan)

You can enter channels into Memory Scan for instant scanning at any time. When a channel is selected for Memory Scan, *MEM* appears on the LCD display.

To enter a channel into Memory Scan, select the channel you want to store by using $CH \blacktriangle$ or $CH \blacktriangledown$ or use the number key pad on the mic and press *SELECT*, and then press *MEM*. The channel is stored in Memory Scan and *MEM* appears on the LCD display.

To cancel the channel in Memory, press *MEM*. The MEM icon disappears.

Triple Watch Scan

To turn Triple Watch Scan On, press and hold **STEP/SCAN** for 2 seconds. While the current channel is scanned, Channel 16 and Channel 9 are also scanned every 2 seconds. Then **TRI** appears.







Normal Scan

Normal Scan is performed only when the memory CH is registered.

To turn Normal Scan On, press and hold **16/9/TRI** for 2 seconds in **Triple Watch Scan** mode. Although Memory CH is scanned, Channel 16 and Channel 9 are not.

Transmitting

Note: Channel 70 is used for DSC only. All the available marine channel are located on page 34.

Setting TX Output

- **Caution:**It is important to remember to use the LO position in port or for short range communications.
- 1. When you turn the radio On for the first time, the unit is automatically set to transmit at 25 watts (**HI**).
- 2. Press *HI/LO* to change the transmitter output to 1 watt (LO).



- 3. Press HI/LO again to change back to 25 watts (HI).
- **Note:** Each time the **HI/LO** is pressed a short tone sounds. When the channel is set as LO power channel, you can transmit at 25 watts (**HI**) by pressing and holding **HI/LO** during the call (except for CH 75 and CH 76).

Transmit time is limited to 5 minutes. **TX** icon and channel number blinks when transmit time is over 5 minutes.

Distress

Note: You must set the user MMSI in order to send a Distress call.Please see page 30 to set the MMSI.





This feature will allow you to transmit a Distress call.

1 Press QUICKLY *DISTRESS*, *UNDESIGNATED* appears ans starts blinking. You can skip steps 1 and 2 WHEN IMMEDI-ATE HELP IS NEEDED. 2. Select the type of distress you desire by using CH ▲ and ▼ (fire, flooding, collision, etc.). You may skip this step if you cannot specify the type in a hurried situation.

GROUNDING

OVFRBOARD

FIRE

ADRIFT

FLOODING

CAPSIZING

ABANDONING

Type Code List

UNDESIGNATED

PIRACY/ARMED

COLLISION

SINKING

- 3. Press and hold **DISTRESS** for 3 seconds. The radio starts counting down 3, 2, 1. NEVER USE THE DISTRESS CALL WHEN YOUR SHIP OR PERSON IS NOT IN AN EMER-GENCY.
- 4. Upon elapse of the 3 second countdown period, the selected distress call is transmitted with high power.
- Note: TX appears when a Distress call is transmitted. Make sure the Distress call has been transmitted by checking the status of TX.
- 5. The Distress call is transmitted and it waits for about 210 -270 seconds. This is continued internally. After the Distress call has been sent, the Distress alert will sound every other second, and it also «shadow-watches» for a transmission between CH16 and CH70 until an acknowledgment signal is received from the Coast Guard shore station.

To cancel the Distress call, press 16/9/TRI.

6. When the radio receives a Distress call, the following screen appears. If an acknowledgment is not received, the Distress call is repeated until an acknowledgment is received from the Coast Guard shore station.

DISTRESS 3

DSC





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WRITING

- Notes: If you press and hold DISTRESS for 3 seconds instead of just pressing DIS-TRESS at step 1. the radio will transmit a Distress call with UNDESIGNATED as the default setting.
 - If the radio receives a Distress call, it will be displayed on the LCD display. An emergency alert will sound. The name will be displayed if it is the name registered in the directory.

Otherwise, sender's MMSI is displayed. Latitude, longitude, and time information will also be displayed if the GPS module is carried in the vessel that transmitted a DSC Distress call.

MARINE DISTRESS PROCEDURE

Speak slowly, clearly, calmy.

- 1. Make sure your radio is ON.
- 2. Tune to Channel 16.
- Press the PTT button on the microphone and say "MAYDAY MAYDAY MAYDAY"
- 4. Give your ship ID.
- 5. Say "MAYDAY [your ship name]"
- 6. Give your location: (what navigational aids or landmarks are near).
- 7. State the nature of your distress.
- 8. Give the number of persons aboard and the conditions of any injured.
- 9. Estimate present seaworthiness of your vessel.
- 10. Give a brief description of your vessel (meters, type, color, hull).
- 11. Say: "I will be listening on the Channel 16"
- 12. End your message by saying "THIS IS [your ship name or call sign] OVER."
- 13. Release the PTT button and listen. Someone should asnwer. If not, repeat call, beginning at item 3 above.

Switching the Inland waterway Mode/Seagoing Mode

You can switch between Inland waterway mode and Seagoing mode. Press and hold **PA** to switch between the two.

When the radio in the Inland waterway mode;

- DISTRESS/DSC cannot be transmitted nor received.
- Only ATIS can be transmitted. WX blinks.

When the radio in the Seagoing mode;

Transmission and reception of DISTRESS/DSC, and transmission of ATIS can be available.





P.A.

The **PA** key will be used to activate the **Public Address** feature. When **PA** key is pushed, the LCD screen will be as follows.

Push and hold *PTT* on the microphone, and speak clearly in a normal voice. Pushing the *PA* key again will return to the radio mode.

High/Low Battery detect

This feature will allow the user to detect a battery condition. The display of a battery is not performed when DSC is received.

When the radio detect battery low (11 V), the following screen appears.

When the radio detect battery high (16 V), the following screen appears.

GPS

Note: When the external GPS modulate is not connected, GPS lcon will start blinking. When the external GPS modulate is connected trough the NMEA0183 jack, GPS lcon is fixe.

Press *SELECT*. The message "WAITING GPS DATA" appears. The radio meets the requirements of *GPS* by displaying date, time, latitude and longitude.

UIC (for the authorized country only)

This feature can change the following 3 modes of operation; USA, INT ans CAN. This hidden feature is enabled when user is pushing and holding *HI/LO* and *SELECT* keys and turns on the radio. To change mode press *MEM* more than 2 seconds.



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LO

MEM

BRITERY



Menu Operation

You can enter in the menu all its functions from the mic.

1. DIGITAL SELECTIVE CALLING (DSC)

Digital Selective Calling is a process of establishing a radio call, it has been chosen by the International Maritime Organization (IMO) as an international standard for establishing VHF, MF and HF radio calls. Digital Selective Calling has also been selected as part of the Global Maritime Distress and Safety System (GMDSS).

This service will let you instantly send a Distress call with GPS position (when optional GPS receiver is connected to the **MC-8000 DSC**) to the US Coast Guard and other vessels within range of the transmission. DSC will also let you initiate or receive distress, urgency, safety, position information and routine calls to or from another vessel outfitted with a DSC transceiver.

See the directory section 2-D (p. 26) for instructions on how to setup the directory of names.

- **Note:** Position **SEND** and **ALARM CLOCK** will not be displayed if GPS is not connected.
 - Refer to page 8 for the flow chart of Menu Operation.
- 1. Press *MENU* to enter Menu Operation.
- 2. Press SELECT to enter DSC CALL.

DSC CALL has 7 options as follows.

To exit, select EXIT.

1-A. INDIVIDUAL

- 1. Press SELECT at DSC CALL.
- 2. INDIVIDUAL appears. Press SELECT.





- If the contact is not recorded in the directory press SELECT to enter the ID number. Use the Number key pad on the mic to enter the number otherwise select the individual you want to contact using CH ▲ or CH ▼.
- 4. Select Inter-Ship Channel by $CH \blacktriangle$ or $CH \blacktriangledown$ key.



- 5. Press **SELECT** to transmit the *DSC* signal. *DSC* CALL is sent with high power.
- 6. If the CHannel 70 is busy the message **BUSY CHECK** appears. When the channel is free, the **DSC CALL** is transmitted.

1-B. GROUP

- Press SELECT at DSC CALL (To enter DSC CALL, see page 17). INDIVIDUAL appears.
- 2. Press CH ▼ once to select GROUP.

3. Press **SELECT**. The MMSI code appears, and you can now call the group members. Press **SELECT**

5. Press **SELECT** to transmit the **DSC** signal. **DSC** CALL is sent with high power.

4. Select Inter-Ship Channel by *CH* ▲ or *CH* ▼ key.











- If the CHannel 70 is busy the message **BUSY CHECK** appears. When the channel is free, the *DSC CALL* is transmitted.
- 7. When you finish calling, the radio returns to the channel display screen.
- **Note:** If the Group MMSI is not recorded, you can't enter this menu (to enter Group MMSI see page 30).

1-C. ALL SHIPS

- 1. Press **SELECT** at **DSC** CALL (To enter **DSC** CALL, see page 17). **INDIVIDUAL** appears.
- 2. Press CH ▼ twice to select ALL SHIPS.
- 3. Press SELECT. URGENCY appears.
- 4. Select the category of your call using *CH* ▲ or *CH* ▼ (*UR*-*GENCY*, *SAFETY*, *EXIT*).
- Press SELECT to transmit the ALL SHIPS DSC signal. When sending either an URGENCY or SAFETY message, all radios will automatically move to channel 70 until all of the data is received.
- If the CHannel 70 is busy the message BUSY CHECK appears. When the channel is free, the DSC CALL is transmitted.













 After selecting URGENCY or SAFETY, ALL SHIPS call is transmitted, the radio will switch to Channel 16. You should wait a few minutes before transmitting the ALL SHIPS call information.

1-D. POSITION REQUEST

This radio has the ability to request the position of an individual vessel that is registered in the DIRECTORY.

- 1. Press **SELECT** at **DSC CALL** (To enter **DSC CALL**, see page 17). **INDIVIDUAL** appears.
- 2. Display *POS REQUEST* using *CH* ▲ or *CH* ▼.
- 3. Press SELECT.
- If the contact is not recorded in the directory press SELECT to enter the ID number. Use the Number key pad on the mic to enter the number otherwise select the individual you want to contact using CH ▲ or CH ▼.
- 5. Press **SELECT** to transmit the **DSC** signal. **DSC** CALL is sent with high power.
- If the CHannel 70 is busy the message **BUSY CHECK** appears. When the channel is free, the *DSC CALL* is transmitted.
- 7. When the called vessel sends the position information, time and position appears followed by the individual. You can see the time and the position.
- **Note:** The requested radio must have the ability to transmit the position information (such as having a **MC-8000 DSC** radio).











1-E. POSITION SEND

This radio has the ability to send the position of your vessel to another vessel using a VHF marine radio equipped with DSC.

Note: Position send is only available when it is connected to the GPS.

- 1. Press **SELECT** at **DSC CALL** (To enter **DSC CALL**, see page 17). **INDIVIDUAL** appears.
- 2. Display POS SEND using CH ▲ or CH ▼.
- 3. Press SELECT.



TNPHT

DSC

DSC

MANUAL

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TX

- If the contact is not recorded in the directory press SELECT to enter the ID number. Use the Number key pad on the mic to enter the number otherwise select the individual you want to contact using CH ▲ or CH ▼.
- 5. Press **SELECT** to transmit the **DSC** signal. **DSC** CALL is sent with high power.
- If the CHannel 70 is busy the message BUSY CHECK appears. When the channel is free, the DSC CALL is transmitted.



ВИЗҮ СНЕГК

1-F. STANDBY

The DSC STANDBY function allows the **MC-8000 DSC** to answer DSC calls with the UNAT-TENDED message and record the calls for response at another time. When you set the radio to DSC STANDBY mode, voice traffic may still be active on any chosen channel.

1. Press SELECT at *DSC CALL* (To enter *DSC CALL*, see page 17). *INDIVIDUAL* appears.



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- 2. Display STANDBY using $CH \blacktriangle$ or $CH \bigtriangledown$. Then press SELECT.
- 3. When an individual DSC call is received, the radio will respond with the UNATTENDED message when an operator cannot answer the call. The DSC call will be recorded into the radio's Call Waiting directory.

Note: If you press a key on the radio or the PTT, this feature will be canceled.

1-G. CALL WAIT

The DSC Call Waiting directory records 10 received distress calls, and records 20 individual calls that are received and not answered within 5 minutes or while the radio is set to DSC Standby. Calls will be recorded while you are busy with other communications as long as the transmitter is not keyed at the time of the call. If the call is answered within 5 minutes the call will not be recorded. When a call is recorded, a message appears.

1. Press SELECT at DSC CALL (To enter DSC CALL, see page 17). INDIVIDUAL appears.

3. Press SELECT. The CALL WAIT directory appears.

2. Display CALL WAIT using $CH \blacktriangle$ or $CH \blacktriangledown$.

- 4. Select the options you want to view using $CH \blacktriangle$ or $CH \blacktriangledown$.
- Note: If a call has not been logged, the radio will beep and you will not be able to proceed to the next step.
- 5. Press SELECT.
- 6. If a DISTRESS call is received in Call Wait, the following display appears.











If an INDIVIDUAL call is received in Call Wait, the following display appears. At this point, you can call back any of the radios in the log.

- 7. Press SELECT. Received data appears.
- 8. Using *CH* ▲ or *CH* ▼ allows you to look through all of the data. If you press *SELECT*, the radio starts transmitting.

2. SETUP

- 1. Press *MENU* to enter Menu Operation.
- 2. Press CH ▼ once to display SETUP, and press SELECT.

SETUP has some options as follows. To exit, select EXIT.

2-A. ALARM CLOCK

This feature is only available when the GPS is connected to the NMEA0183 Accessory Wires. If it is connected to the GPS, the alarms are set based on the satellite. You need to set the time previously to setting the alarm (from 2-A to 2-C feature).

2-A-1. ALARM SET

This feature allows you to set the alarm.

- 1. Press **SELECT** at **SETUP**. ALARM CLOCK appears.
- 2. Press SELECT.
- Press CH ▲ or CH ▼ to select On. Then, press and hold SELECT.
- 4. Select the hour using $CH \blacktriangle$ or $CH \blacktriangledown$, then press SELECT.
- 5. Select the minute using $CH \blacktriangle$ or $CH \blacktriangledown$, then press SELECT.
- 6. Select *AM* or *PM* using *CH* ▲ or *CH* ▼, then press *SELECT*.
- 7. A confirmation screen appears.









2-A-2. ALARM ON

This feature allows you to turn the alarm ON.

- 1. Press SELECT at SETUP (To enter SETUP, see above).
- 2. ALARM CLOCK appears. Then, press SELECT.
- 3. Press SELECT again.

- 4. Select *On*. Using *CH* \blacktriangle or *CH* \bigtriangledown , and press *SELECT*. The radio returns to the channel display screen and the icon (L) appears.
- 5. When the radio reaches the set time the alarm sounds and the icon (-) blinks.
- Note: The alarm sounds when the set time is reached, you can turn the alarm Off by pressing any key. Alarm mode will turn Off automatically once the alarm sounds.

2-A-3. ALARM OFF

This feature allows you to turn the alarm OFF.

- 1. Press **SELECT** at **SETUP** (To enter **SETUP**, see page 23).
- 2. ALARM CLOCK appears.
- 3. Press SELECT.
- 4. Select *OF* using *CH* ▲ or *CH* ▼, then press *SELECT*.

5. Press **SELECT**. The radio returns to the channel display screen and the icon (L) disappears.





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2-B. LOCAL TIME ADJUST

This feature allows you to fine tune the Local Time for any location in Europe. The feature enables you to adjust the Local time by ± 1 hour.

To set LOCAL TIME ADJUST

- 1. Press SELECT at SETUP (To enter SETUP, see page 23).
- 2. Display *LOCAL TIME ADJUST* using *CH* ▲ or *CH* ▼.
- 3. Press **SELECT**. The registering screen appears. You can now adjust the time for your local area using **CH** ▲ or **CH** ▼.
- 4. The time will be entered when you press **SELECT**. The display returns to **LOCAL TIME ADJUST** screen.

2-C. DAYLIGHT SAVINGS On/Off

This feature enables you to select the automatic Daylight Savings clock setting.

To set DAYLIGHT SAVINGS On/Off

1. Press **SELECT** at **SETUP** (To enter **SETUP**, see page 23).

2. Display DAYLITE SAVE using CH ▲ or CH ▼.

3. Press **SELECT**. Then press **CH** ▲ to set DAYLIGHT SAV-INGS **On** or **CH** ▼ to OFF (the default setting is **OF**).









4. Press SELECT. The display returns to DAYLITE SAVE screen.



2-D. DIRECTORY

This function will allow you to send an individual call, etc. The Directory function memorizes the name and MMSI number of 20 other vessels. The following screen will allow you to setup an alphanumeric identity as well as the corresponding MMSI number.

1. Press SELECT at SETUP (To enter SETUP, see page 23).

- 2. Display *DIRECTORY* using *CH* ▲ or *CH* ▼.
- 3. Press **SELECT**. The DIRECTORY menu appears. Use **CH**▲ or **CH** ▼ to select the menu.



2-D-1. NEW

This function will allow you to enter new information into the directory.

- 1. Press SELECT at NEW. The registering screen appears.
- 2. You can now enter the person's name. Using the number key pad on the mic, choose the alphabet. The character will be entered when *SELECT* or the different number key is pressed, and the blinking digit moves to the right.
- After you enter the person's name, you can enter their MMSI number. Using the number key pad on the mic, enter their MMSI number. The number will be entered when *SELECT* or the different number key is pressed, and the blinking digit will move to the right.
- 4. When you finish entering the last digit, the radio returns to *NEW* screen.



2-D-2. EDIT

If you want to edit the DIRECTORY

- 1. Press SELECT at the individual you want to edit.
- 2. EDIT appears, then press SELECT.
- 3. You can now edit the person's name using the number key pad on the mic choose the alphabet.
- After you edit the person's name, you can edit the MMSI. The number will be entered when SELECT or the different number key is pressed, and the blinking digit moves to the right.
- 5. After the directory data is edited, the individual appears.

2-D-3. DELETE

If you want to delete the directory

- 1. Press **SELECT** at the individual you want to delete.
- 2. Press CH ▼ once. DELETE appears, then press SELECT.

3. The radio displays the next individual. If no more code remains, *EXIT* appears.

2-E. AUTO CHANNEL SWITCH

This feature is to allow you to disable the automatic channel change that happens when receiving a DSC call. This feature is useful when engaged in bridge – to – bridge or other safety related calls. When you have completed these calls, all of the incoming DSC calls received are available in the call log.

1. Press SELECT at SETUP (To enter SETUP, see page 23).

2. Display AUTO CH SW using CH ▼ or CH ▲.



3. Press **SELECT** to enter the setting mode.

- 4. If you want to change this mode to off, press CH ▼ once. (Default is set as **On**).
- 5. Press **SELECT**. The radio returns to the AUTO CH SW screen.

2-F. POSITION REPLY

When the calling radio has requested the position information of your radio, you can decide to transmit an acknowledgment automatically or on a call by call basis.

1. Press SELECT at SETUP (To enter SETUP, see page 23).

3. Press SELECT to enter the setting mode.

2. Display **POS REPLY** using **CH** \blacktriangle or **CH** \blacktriangledown .

4. Press **CH** \blacktriangle or **CH** \checkmark to make your selection.

Example: On

When the radio receives a position request, the following screen appears.









АПТО СН 2М





Example: OF

When the radio receives a position request, the following screen appears. You can select whether reply the request or not. If you wants to reply press SELECT.

5. Press **SELECT**. The radio returns to the **POS REPLY** screen.

2-G. CH TAG

This feature allows you to name each marine channel.

1. Press **SELECT** at **SETUP** (To enter **SETUP**, see page 23).

- 2. Display CH TAG using CH \blacktriangle or CH \checkmark .
- 3. Press **SELECT**. The channels and its names appear.
- 4. Press **CH** \blacktriangle or **CH** \blacktriangledown repeatedly to select the channel that you would like to EDIT.
- Note: The MC-8000 DSC radio comes pre-programmed with default channel names.

2-G-1. EDIT

If you want to edit the channel name

- 1. Press SELECT at the individual channel you want to edit.
- 2. You can edit the name using the number key pad on the mic to select the alphabet, numeric, or symbols. The character will be entered when **SELECT** or the different number key is pressed, and the blinking digit moves to the right.
- 3. Press and hold **SELECT** when you enter the last digit.
- 4. Press **MENU** to exit.









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2-H. GROUP MMSI

- 1. Press SELECT at SETUP (To enter SETUP, see page 23).
- 2. Display GROUP MMSI using CH ▲ or CH ▼.
- 3. Press **SELECT**. The group MMSI ID screen appears.
- You can now enter the GROUP MMSI code. Use the number key pad on the mic to display the number. The number will be entered when SELECT or the different number key is pressed, and the blinking digit moves to the right.
- 5. After the final digit is entered, a confirmation screen appears. Press **SELECT** and the radio returns to the following screen.



2-I. USER MMSI

You will need to obtain a nine digit MMSI number and program it into the **MC-8000 DSC**. To obtain an MMSI number, contact your authorized GPE dealer. This portion of the SETUP menu will allow you to program an MMSI, (Maritime Mobile Service Identity) for sending and receiving DSC calls.

To set USER MMSI code

1. Press SELECT knob at SETUP.



- USER MMSI
- 2. Press CH ▼ eight times to select USER MMSI.

3. Press SELECT. The user MMSI ID screen appears.

- 4. You can now enter the USER MMSI code. Use the number key pad on the mic to display the number. The number will be entered when SELECT is pressed, and the blinking moves to the right.
- 5. After the final digit is entered, press and hold SELECT. The radio returns to USER MMSI screen.

Note: You can only program your radio once with an MMSI number. After that, send your radio to GPE for factory service.

2-J. ATIS ID

ATIS is the automatic transmitter identification system. The ATIS ID is composed by number of 10 digits, and it is already registered to your radio. The first digit is pre-selected to "9", but it doesn't appear on the display. From 2nd to last digits are displayed.

To confirm the ATIS ID

1. Press SELECT knob at SETUP.

3. Press SELECT. The ATIS ID number appears.

2. Press CH ▼ nine times to select ATIS ID.

If it's necessary to change the ATIS ID, the user should send back to GPE for reprogramming.





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3. SYSTEM

- 1. Press *MENU* to enter Menu Operation.
- 2. Press CH ▼ twice to display SYSTEM, and press SELECT.

SYSTEM has 3 options as follows. To exit, select EXIT.

3-A. CONTRAST

- 1. Press SELECT at SYSTEM. CONTRAST appears.
- Press SELECT to enter the setting mode. (Default is set at 7).
- Press CH ▲ or CH ▼ to increase or decrease the contrast level.
- When you find the most favourable brightness, press SELECT. The radio returns to the CONTRAST screen. If you want to exit the setting screen without changing the contrast, press MENU.
- Note: There are 8 contrast levels (0 7).

3-B. LAMP ADJUST

1. Press SELECT at SYSTEM (To enter SYSTEM, see above).

2. Press CH ▼ once to select LAMP ADJUST.

- Press SELECT to enter the setting mode. (Default is set at 3).
- 4. Press $CH \blacktriangle$ or $CH \blacktriangledown$ to select the backlight brightness level.











NMEA Technical Setup

MC-8000 DSC NMEA0183 GPS Input Connection

An external GPS can be attached to the **MC-8000 DSC** via NMEA 0183 serial data output which is used to supply position, date an time data, speed and direction.

(International Channels) CHANNEL FREQUENCY (MHz) CHANNEL FREQUENCY (MHz) DESIGN. TRANSMIT RECEIVE DESIGN. TRANSMIT RECEIVE 01 156.050 160.650 60 156.025 160.625 02 156.100 160.700 61 156.075 160.675 03 156.150 160.750 62 156.125 160.725 04 156.200 160.800 63 156.175 160.775 05 156.250 160.850 64 156.225 160.825 06 156.300 156.300 65 156.275 160.875 07 156.350 160.950 66 156.325 160.925 08 156.400 67 156.375 156.375 156.400 09 156.450 156.450 68 156.425 156.425 10 156.500 156.500 69 156.475 156.475 11 156.550 156.550 70 DSC only 156.525 12 156.600 156.600 71 156.575 156.575 13 156.650 156.650 72 156.625 156.625 14 156.700 156.700 73 156.675 156.675 15 156.750 156.750 74 156.725 156.725 16 156.800 156.800 75 156.775 156.775 17 156.850 156.850 76 156.825 156.825 18 156.900 161.500 77 156.875 156.875 19 156.950 161.550 78 156.925 161.525 20 157.000 161.600 79 161.575 156.975 21 157.050 161.650 80 157.025 161.625 22 157.100 161.700 81 157.075 161.675 23 157.150 161.750 82 157.125 161.725 24 157.200 161.800 83 157.175 161.775 25 157.250 161.850 84 157.225 161.825 26 157.300 161.900 85 157.275 161.875 27 157.350 161.950 86 157.325 161.925

VHF Marine Channels

87

88

157.375

157.425

157.375

157.425

162.000

28

157.400

EXTEND CH (Hidden feature) for the authorized country only

СН	CH TAG	S/D	тх	RX
30	30 D CH	D	157.500	162.100
31	31 D CH	D	157.550	162.150
L1	CH L1	S	155.500	155.500
L2	CH L2	S	155.525	155.525
L3	CH L3	S	155.650	155.650
F1	CH F1	S	155.625	155.625
F2	CH F2	S	155.775	155.775
F3	CH F3	S	155.825	155.825
M1	CH M1	S	157.850	157.850

Specification

General	
Controls	: On-Off/Volume, Squelch
Status Indicators	: TX (Transmit), TRI (Triple Watch), HI (High), LO (Low), I, MEM, DSC, ((Alarm), 🔮 (GPS), WX (Navigation Mode) and Channel Display
Channel Display	: LCD with Orange backlight
Buttons	: 16/9/TRI, DISTRESS, PA, MEM, SELECT, STEP/SCAN, MENU, HI/LO
Connectors	: Antenna, Remote, ACC, and DC power
Size	: H63 mm x W160 mm x L168 mm (W/O Heat Sink) H3.07 inches x W7.24 inches x L6.61 inches
Weight	: 1.0 kg / 2.65 lbs / 42.3 oz
Supply Voltage	: 13.8 V DC negative ground
Standard Accessories	: Mounting bracket and hardware, DC power cord, microphone hanger, spare fuse, ACC Cable
Antenna Impedance	: 50 Ω nominal
Microphone	: Rugged 2 k $\!\Omega$ condenser mic element with coiled cord
Speaker	: 1.82 inch, Mylar Cone 8 Ω
Operating Temperature Range	: -15 °C to + 55 °C (+4 °F to +131 °F)
Shock and Vibration	: Meets or exceeds EIA standards, RS152B and RS204C
Transmitter	
Power Output	: 1 watt or 25 watt (switch selectable)
Power Requirement	: Not rated on LO, 25 watts output: 5.6A@13.8V DC
Modulation	: FM ±5 kHz deviation
Hum and Noise Signal-to-Noise	: 45 dB@1 kHz with 3 kHz deviation with 1000 Hz modulating frequency (nominal)
Audio Distortion	: Less than 8% with 3 kHz deviation with 1000 Hz modulating frequency
Spurious Suppression	: -70 dBc @ Hi, -70 dBc @ Lo
Output Power Stabilization	: Built-in automatic level control (ALC)
Frequency Range	: 156 to 158 MHz
Frequency Stability	: ±10 ppm @ -15°C to + 55°C
Receiver	
Frequency Range	: 156 to 163 MHz
Sensitivity	: 0.25 V for 12 dB SINAD
Circuit	: Dual Conversion Super Heterodyne PLL
Squelch Sensitivity	: 0.8 V Threshold
Spurious Response	: 70 dB
Adjacent Channel Selectivity	: 75 dB @ ±25 kHz
Audio Output Power	: 2.8 watts (10% Distortion)
Power Requirement	: 200 mA @ 13.8V DC squelched, 0.7A @ 13.8V DC at maximum audio output
IF Frequencies	: 1st 21.4 MHz, 2nd -455 kHz

Troubleshooting

If the **MC-8000 DSC** does not perform to your expectations, try the suggestions listed below. If you cannot get satisfactory results, call the GPE Technical Support

SYMPTOM	CAUSE	REMEDY
Won't power On.	No or low voltage.	Check for proper voltage getting to the set.
When the PTT is pressed - Tx icon comes on and an- other radio can hear a "click" but no audio is heard.	Bad mic element.	Send in for repair.
While scanning, the radio stops on a particular chan- nel all of the time.	A source of noise is nearby.	Eliminate the source of the noise or delete the channel from the scanner.
There is noise on the re- ceiver that the squelch will not eliminate.	An external noise is being generated by some device.	Either turn off the offending device or contact that Mfg.

Warranty

This transceiver has a 3 years warranty for materials and workmanship in its country of purchase against any manufacturing defect recognized by our technical department. It is recommended to read carefully following conditions and to respect them in order not to loose it.

- Any repair under warranty will be free of charge and the transport costs for sending back will be on charge of our company.
- A proof of purchase must compulsorily be added to the transceiver in need of repair.
- Don't install your transceiver without having read this instructions manual.
- Our technical department won't send nor exchange any spare parts as part of warranty.

Are not covered

- Immersion higher than : 30 minutes, 1 meter (IPX7)
- Damages caused by accident , shock , inadequate packing or the use of accessories that are not in conformity.
- Interventions that modified the conformity features, repairs or modifications done by third parties which are not agreed by our company.
- Any opening of the housing cancels the warranty.• Any opening of the housing cancels the warranty.

CERTIFICATE OF CONFORMITY

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We, GROUPE PRESIDENT ELECTRONICS, Route de Sète, BP 100 – 34540 Balaruc – FRANCE,

Declare, on our own responsibility that the Marine VHF radiocommunication transceiver,

Brand : **PRESIDENT** Model : **MC-8000 DSC** Manufactured in P.R.C.

is in conformity with the essential requirements of the Directive 1999/5/CE (Article 3) adapted to the national law, as well as with the following European Standards:

EN 300 698-2 V1.1.1 (2000-08), EN 300 698-3 V1.1.1 (2001-05) EN 301 025-2 V1.1.1 (2000-08), EN 301 025-3 V1.1.1 (2001-05) EN 301 843-1 V1.2.1 (2004-06), EN 301 843-2 V1.2.1 (2006-06)

Balaruc, the 01/12/2004

O. Espallargas Technical Manager





Siège Social / Head Office France – Route de Sète BP 100 – 34540 BALARUC Site internet : http://www.president-electronics.com E-mail : groupe@president-electronics.com



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