poly-planar®

MR-41 OWNER'S MANUAL

- PLL Synthesizer Stereo Radio
- CD/MP3/WMA Player
- Automatic Memory Storing
- Slide Down Detachable Panel
- Preset Equalization
- Electronic Shockproof (ESP) Function
- Auxiliary Input Function
- USB Ready Function

Before you begin…

Please take a few minutes to read the important information contained in this owner's manual to be sure you get the most out of your new marine stereo system.

Please retain these instructions for future reference when making changes to your system.

Precautions When Handling

1. Do not drop the front panel
2. Do not put pressure on the display or control buttons when detaching or re-installing the front panel
3. Do not touch the contacts on the front panel or on the main unit body. It may result in poor electrical contact.
4. If any dirt or foreign substances adhered on the contacts, they can be removed with a clean and dry cloth.
5. Do not expose the front panel to high temperatures or direct sunlight in anywhere.
6. Keep away any volatile agents (e.g. benzene, thinner, or insecticides) from touching the surface of the front panel
7. Do not attempt to disassemble the front panel.

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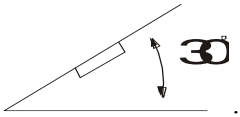
INSTALLATION

Notes:

- Find a suitable location making sure there is clearance for the installed depth.
- Before installing the unit, connect the wiring temporarily making sure the system works properly.
- Only use the parts included with the unit to ensure proper installation.
- If installation angel exceeds 30° from horizontal, the unit might not give its optimum performance.



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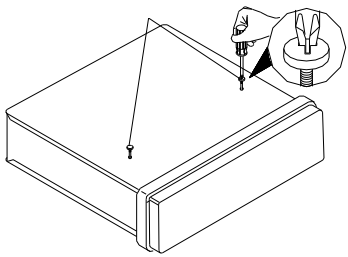
- Avoid installing the unit where it would be subject to high temperature (i.e. from direct sunlight, heaters or the engine) or where it would be subject to dust, dirt or excessive vibration.

Take out screws before installation

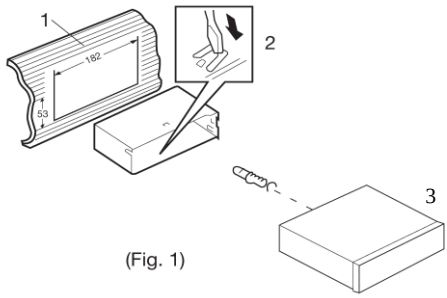
Before installing the unit, please remove the two screws.

Take out screws before installation



NOTE: Use the two pieces of plastic film (30mmX20mm) supplied with the unit to seal the two holes after removing the screws.

Installing the unit



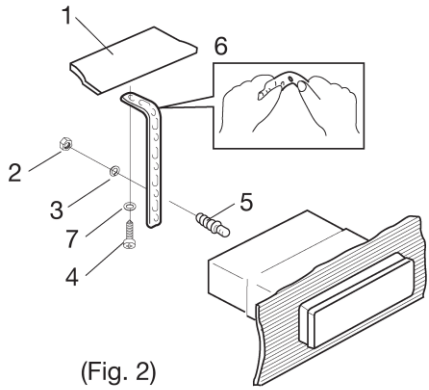
(Fig. 1)

1. mounting surface
2. holder
3. unit

a. Insert the holder(2) into the mounting surface(1), select the appropriate tab according to the thickness of the mounting surface(1) and bend the tab inwards to secure the holder in place.

b. Insert the unit(3) to the holder

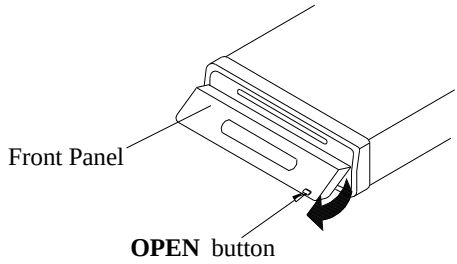
c. Be sure to use the provided strap(6) to secure the back of the unit in place as shown below (Fig.2). The strap can be bent by hand to the required angle.

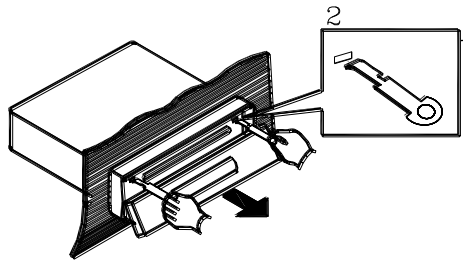


(Fig. 2)

1. Mounting Surface
2. Nut (5mm)
3. Spring washer
4. Screw (5x25mm)
5. Screw
6. Strap
7. Plain washer

Removing the unit

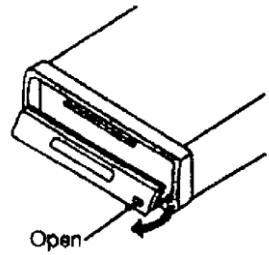




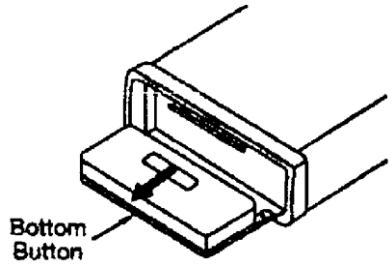
1. Before removing the unit, press the **OPEN** button (7) to slide the front panel down.
2. To remove the unit, Insert the provided levers into the grooves in the housing and press the lever downward as shown in the diagram above then safely pull the unit out.
3.

To Detach the Front Panel

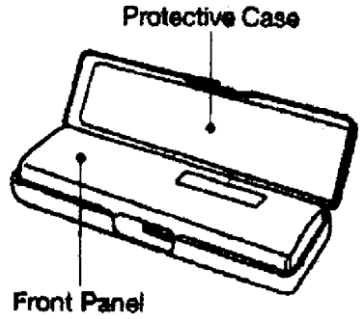
1. Press the **OPEN** button (7), the front panel will slide down.



2. When the front panel slides down, press the button located at the bottom of the panel and pull it out from the panel bracket.

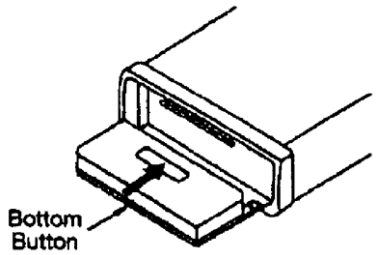


3. For protection, store the front panel in the supplied protective case immediately after being removed.



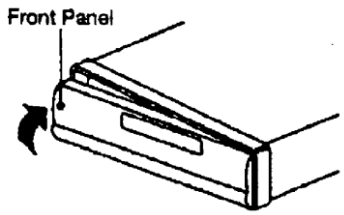
To Reinstall the Front Panel

1. Position the panel bracket in slide down position, insert then slide the front panel into the panel bracket until you hear a click sound.

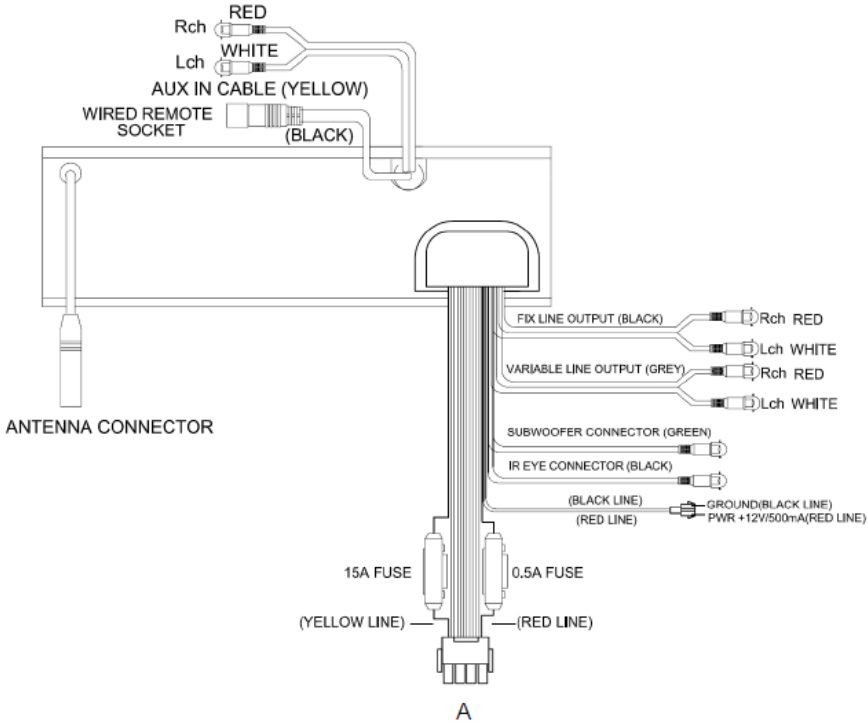


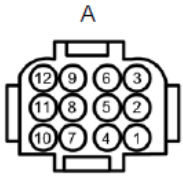
Note:

If the front panel is not in lock position, control buttons and LCD display will not function properly. Press the **OPEN** button (7) and then re-install the front panel again.



WIRING DIAGRAM

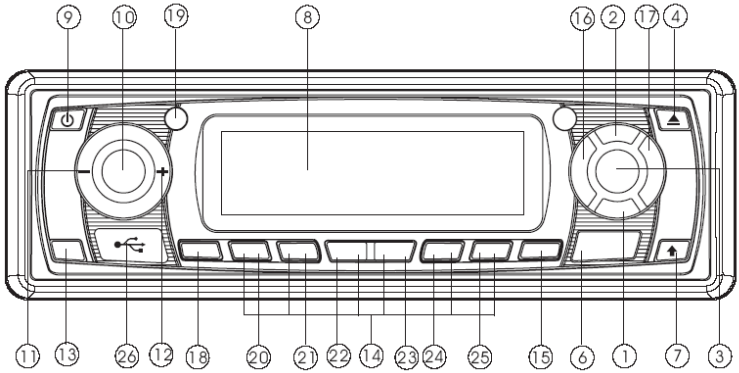




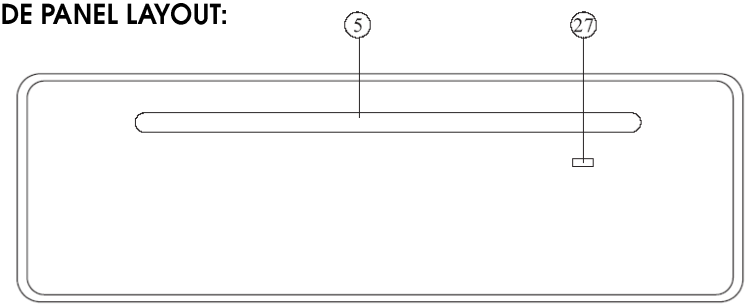
PIN NO.	WIRE COLOR	DESCRIPTION
1	RED	SWITCHED +12V
2	GREEN/BLACK	LEFT REAR SPEAKER(-)
3	GREEN	LEFT REAR SPEAKER(+)
4	YELLOW	CONSTANT +12V
5	WHITE/BLACK	LEFT FRONT SPEAKER (-)
6	WHITE	LEFT FRONT SPEAKER (+)
7	BLUE	POWER ANTENNA LEAD
8	GREY/BLACK	RIGHT FRONT SPEAKER (-)
9	GREY	RIGHT FRONT SPEAKER (+)
10	BLACK	GROUND
11	VIOLET/BLACK	RIGHT REAR SPEAKER (-)
12	VIOLET	RIGHT REAR SPEAKER (+)

LOCATION OF CONTROLS

FRONT PANEL LAYOUT:



INSIDE PANEL LAYOUT:



1. MON
2. LOC
3. MUTE
4. ⏏ (eject button)
5. Disc Slot
6. MODE/SUB.W(Optional)
7. OPEN
8. Liquid Crystal Display
9. ⏻ (power)
10. SEL
11. **–** (volume down button)
12. **+** (volume up button
13. BND/LOU/ENT
14. Preset buttons (1-6)
15. DISP
16. ⏪ tune/seek/track down button
17. ⏩ tune/seek/track up button
18. AS/PS/NAVI -SCH
19. EQ
20. 1 ⏯
21. 2 SCN
22. 3 RPT
23. 4 SHF
24. 5 DIR **v**
25. 6 DIR **^**
26. USB Port
27. Reset button

OPERATION

GENERAL OPERATION

SWITCHING ON/OFF THE UNIT

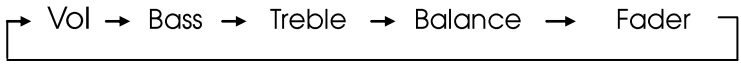
Press ⏻ button(9) to turn on or off the unit.

OPENING THE DISC COVER

Press **OPEN** button(7) to slide down the removable faceplate.

AUDIO MODE ADJUSTMENT

Press **SEL** button(10) to change audio mode through bass, treble, balance, and fader modes.



Press **+** (**volume up**) button(12) or **-** (**volume down**) button(11) to adjust desired setting. Unit will return to normal previous display if left untouched for 5 seconds.

Press and hold **SEL** button(10) for 5 seconds to enter menu select function, then press **+** (volume up) button(12) or **-** (volume down) button(11) to adjust desired setting, then press **SEL** (10) again to confirm.

- **BEEP 2nd**

The beep is only generated when all allowed double keys are held long (1 sec). E.G.:

When the preset button (11) is pressed.

When **BND/LOU/ENT** button (13) is pressed.

When **AS/PS** button (18) is pressed

- **BEEP All**

The beep is generated when every key is pressed.

- **BEEP Off**

The beep is disable.

BND/LOU/ENT

Press **BND/LOU/ENT** button (13) for 3 seconds to adjust the bass output.

SETTING THE CLOCK

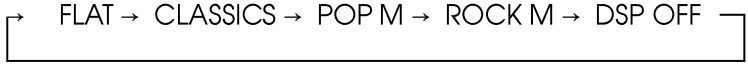
Press DISP button(15) to display the clock. Press and hold **DISP** button(15) until the time flashes, then press ⏪ button (16) to change minutes and ⏩ button (17) to change hours.

MUTE

In radio/AUX IN mode, press **MUTE** button(3) to mute audio level. Press the button again to resume.

EQUALIZATION

Press **EQ** button (19) to turn on equalization function and to select desired audio mode. There are five kind of audio mode:



SUBWOOFER (OPTIONAL)

Press and hold **MODE/SW** button (6) for 5 seconds to toggle sub-woofer output.

MODE SELECTION

Press **MODE** button (6) to choose desired listening mode. (e.g. radio mode to CD (MP3) mode to AUX IN mode)

If there is no disc loaded, CD mode will be skipped.

If USB is not connected to the unit, this mode will be skipped.

RESET FUNCTION

Open disc cover to display reset button (27). Use a ballpoint pen to press the reset button. The reset function is used in the following situations:

- Initial installation of the unit when all wiring is completed.
- All the function buttons do not operate.

- Error sign on the display.

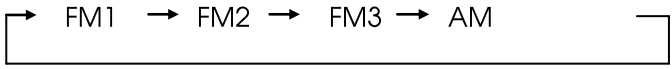
RADIO OPERATION

SWITCHING TO RADIO MODE

Press **MODE** button (6) to select radio mode and station frequency will appear on the display.

SELECTING THE FREQUENCY BAND

In radio mode, press **BND/LOU/ENT** button (13) to locate the desired band. The reception band will change in the following order:



SELECTING STATION

Press ⏪ button (16) or ⏩ button (17) to select a station. To use manual tuning, press and hold ⏪ button (16) or ⏩ button (17) for 3 seconds or until "**MANUAL**" appears on the display. Unit will return to "**AUTO**" mode if left untouched for 5 seconds.

AUTOMATIC & MANUAL MEMORY STORING

- Automatic memory storing

  Press **AS/PS** button (18) for 5 seconds, the radio searches and checks the signal strength until one cycle search is finished then the 6 strongest stations are stored into the corresponding preset number button automatically.

- Manual Storing

  1. Select the desired band, then select the station you want to store in memory.
  2. Press and hold one of the preset buttons for 3 seconds until the corresponding preset button number appears. Repeat steps 1 and 2 to program additional stations.

LOCAL/DISTANT

Press **LOC** button (2) to select between local and distant

stations. Local setting for reception with strong station, and a distant setting for reception with weaker stations.

MONO/STEREO

Press **MON** button (1) to select mono or stereo mode. You can sometimes improve reception of distant stations by selecting mono setting.

CD OPERATION

SWITCHING TO CD MODE

If there is no CD inserted in the driver:

Open the disc cover and insert CD into the slot with the CD label facing up. The CD will be drawn inside and will play automatically once inserted.

If a CD is already inserted in the driver:

Press **MODE** button (6) to change to CD mode.

SELECTING TRACKS

Press ⏭ button (17) to advance to the next track. To go backward, press ⏮ button (16). Release the button to start playing from the current position.

Press and hold ⏮ button (16) or ⏭ button (17) to fast reverse or fast forward.

PAUSING/PLAYING

Press ⏯ button (20) to pause CD player. Press ⏯ button (3) again to resume play.

PREVIEWING ALL TRACKS

Press **SCN** button (21) to play all tracks in scan mode. The unit will play the first 15 seconds of each track continuously until you press **SCN** button (24) again to stop scanning.

REPEATING THE SAME TRACK

Press **RPT** button (22) to repeat the same track. Press **RPT** button (22) again to stop repeat.

PLAYING ALL TRACKS IN RANDOM ORDER

Press **SHF** button (23) to play all tracks in random. Press **SHF** button (23) again to cancel the function.

EJECTING A DISC

To remove a disc, open the disc cover and press ⏏ (eject) button (4) to eject the disc. Remove the disc from the driver and close disc cover.

MP3/WMA OPERATION

SWITCHING TO MP3 MODE

If there is no MP3 Disc inserted in the driver:

Open the disc cover and MP3 Disc into the slot with the Disc label facing up. The MP3 will be drawn inside and will play automatically once inserted.

If MP3 Disc is already inserted in the driver:

Press **MODE** button (6) to change to CD (MP3) mode.

SINGLE TRACK SELECTION

Press ⏩ button (17) to advance to the next track. To go backward, press ⏪ button (16).

SELECTING DIRECTORY UP/DOWN

Press **DIR** ∨ button (24) or **DIR** ∧ button (25) to select directory downward or upward. If a directory does not contain any directory, there is no function of pressing **DIR** ∨ button (24) or **DIR** ∧ button (25).

PAUSING/PLAYING

Press ⏯ button (20) to pause MP3 player. Press ⏯ button (20) again to resume playing.

PREVIEWING ALL TRACKS

Press **SCN** button (21) to play all songs on the current disc in scan mode. The unit will play the first 15 seconds of each song continuously until you press **SCN** button (24) again to stop

scanning.

REPEATING THE SAME SONG

Press **RPT** button (22) to repeat the same song. Press **RPT** button (22) again to stop repeat.

PLAYING ALL SONGS IN RANDOM ORDER

Press **SHF** button (23) to play all songs in random. Press **SHF** button (23) again to cancel the function.

SELECTING TRACKS BY AS/PS (Navi-SCH) BUTTON

AS/PS button (18) is assigned as Digital Audio Mode selection button in MP3 operation.

1. SEARCHING TRACK DIRECTLY

Press the **AS/PS** button (18) one time. Then press corresponding buttons (see TABLE 1 below) to select desired track number and then press **BND/LOU/ENT** button (13) to confirm or wait 5 seconds and the unit will play the selected track automatically.

KEY Assigned IN Searching mode (TABLE 1)

BUTTON	FUNCTION
1 ▶/II	1
2 SCN	2
3 RPT	3
4 SHF	4
5 DIR^	5
6 DIRv	6
MON	7
◀◀	8
▶▶	9
DISP	0

Explain as follows:

- Use button **4 SHF** and button **DISP** to select track number 40
- Press **BND/LOU/ENT** button (13) twice to confirm and play.

2. SEARCHING A SONG TITLE DIRECTLY

   Press **AS/PS** button (18) two times. Press volume +/- buttons (12&11) to select characters A to Z, space, 0 to 9, _, -, or +, then press **SEL** button (10) to move the cursor for another character. Press volume +/- buttons (12&11) again to select another character. When finished, press **BND/LOU/ENT** button (13) twice to confirm and play.

3. SEARCHING A DIRECTORY DIRECTLY (if available)

   Press **AS/PS** button (18) three times. Select the desired directory by using the tune/seek/track buttons ⏭ ⏮ (16&17) and **BND/LOU/ENT** button (13) to confirm. Then press tune/seek/track buttons ⏭ ⏮ (16&17) to list all songs under this directory and select the title. Press **BND/LOU ENT** button to confirm and start the play

DISPLAY INFORMATION

Press **DISP** button (15) to show the following information, such as the clock, the ID3 TAG (if available: song title, directory name, artist name…) and other information.

AUXILIARY INPUT

This unit can be connected to portable devices such as MP3 Player, TV and DVD through the AUX IN jack on the back of the unit.

Press **MODE** button (6) to change the mode to AUX IN mode. "AUX" will appear on the display.

USB PLAY OPERATION

When you connect a USB driver through the USB port (26)

located at the front of the unit, the unit will search for MP3/WMA files and will play them automatically.
Refer MP3/WMA operation on pages 14-16 for further instructions.

Note :

- This unit can only supports a standard USB device.
- Not all USB MP3 players are compatible with this unit.
- Please remove all non-rechargeable batteries from MP3 players before connecting to the USB interface. Otherwise, the battery may burst.
- Make sure to turn off the unit before removing the USB driver from the USB interface.

CAUTION

If there are important files in the USB device, do not connect it to the main unit to play. Any wrong operation may cause file loss. Our company assumes no responsibility for lost files or directories.

SUPPORTED MP3/WMA DECODING MODES

PLAY ABILITY

1) **MP3:** Compliant with layer 3 of MPEG1/MPEG2/MPEG2.5
-Sampling rates (kHz): 48, 44.1, 32, 24, 22.05, 16, 12, 11.025, and 8
-Bit rates (kbps): 8, 16, 24, 32, 40, 48, 56, 64, 80, 96, 112, 128, 144, 160, 192, 224, 256, 320 variable bit rates supported.

2) **WMA:** Compliant with Windows Media Audio 9

- Sampling rates (kHz): 48, 44.1, and 32

-Bit rates (kbps): 32 to 192 does not support DRM and Lossless, Professional and Voice of WMA9.

READ ABILITY

	MP3/WMA	USB/SD
File	255 files / disc	255 files / folder
Folder	255 folders / disc	255 folders / device
Max File	255 Files / disc	65025 Files / device
Depth	8	8
		Support USB2.0 Full-speed

DISC NOTES

A. Notes on discs:

1. Attempting to use non-standard shape discs (e.g. square, heart) may damage the unit. Be sure to use round shape CD discs only in this unit.
2. Do not stick paper or tape, etc, onto the label side or the recording side of any discs, as it may cause a malfunction or damage the unit.
3. Dirty, dusty, scratched and warped discs will cause misoperation of this unit.

B. Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs):

1. Be sure to only use the following disc types:

2. Depending on the recording status, conditions of the disc and the equipment used for the recording, some CD-Rs/CD-RW may not be able to play on this unit. To have more reliable play back, please see following recommendations:

   a. Use CD-RWs with speed 1x to 4x and write with speed

1x to 2x.

b. Use CD-Rs with speed 1x to 8x and write with speed 1x to 2x.

c. Do not play a CD-RW which has been written for more than 5 times.

C. Notes on MP3 files:

1. The disc must be in the ISO9660 level 1 or level 2 formats.
2. When naming an MP3 file, be sure the file name extension is ".MP3".
3. Non-MP3 files with ".MP3" extension will not play on this unit.

SPECIFICATION

Power Supply Requirements	DC 12 Volts, Negative Ground
Chassis Dimensions	178 (W) x 178 (D) x 50 (H)
Maximum Output Power	4x40W watts
Current Drain:	15 Ampere (max.)

Tone Controls:	
Bass (at 100 Hz)	±10 dB
Treble (at 10 kHz)	±10 dB

CD PLAYER:	
Signal to Noise Ratio	more than 55dB
Channel Separation	more than 50dB

Frequency Response	40Hz-18kHz

RADIO:	**For USA**
	FM
Frequency Coverage	87.5 to 107.9 MHz
IF	10.7 MHz
Sensitivity (S/N=30dB)	10dBμ
Stereo Separation	>25dBu
	AM
Frequency Coverage	530 to 1720 kHz
IF	450 kHz
Sensitivity (S/N=20dB)	36 dBu

TROUBLE SHOOTING

Always check wiring connections first. If any problems persist consult your nearest service dealer.

Symptom	Cause	Solution
No power.	The ignition switch is not on.	If the power supply is connected to the accessory circuits, but the engine is not moving, switch the ignition key to "ACC".
	The fuse is blown.	Replace the fuse.
Disc cannot be loaded or ejected.	Inserting the disc in reverse direction.	Insert the compact disc with the label facing upward.
	Compact disc is extremely dirty or defective disc.	Clean the disc or try to play a new one.
	The ambient temperature is too high.	Allow to cool off until the ambient temperature returns to normal.

	Condensation.	Leave the player off for an hour or so, and then try again.
No sound.	Volume set at minimum	Adjust volume to a desired level.
	Wiring is not properly connected.	Check wiring connection.
Sound skips.	The installation angle is more than 30 degree.	Adjust the installation angle less than 30 degree.
	The disc is extremely dirty or defective disc.	Clean the compact disc, then try to play a new one.
The operation keys do not work.	The built-in microcomputer is not operating properly due to noise.	Press the RESET button. Front panel is not properly fixed into its place.
The radio does not work. The radio station automatic selection does not work.	The antenna cable is not connected.	Insert the antenna cable firmly.
	The signals are too weak.	Select a station manually.

WARRANTY INFORMATION

This unit is warranted to be free of defects in material and workmanship for a period of one year. Warranty is subject to proper installation and operation within the published specifications. Except as provided below, Poly Planar will repair or replace, at its discretion, any product returned prepaid to our facility and determined to be defective. Poly Planar is not liable for consequential damages

LIMITS OF LIABILITY

Poly Planar warranty does not cover damage occurred in transit, accident, abuse, misuse, negligence, fire, flood, lightning or unauthorized service. This warranty assumes no responsibility for damages incurred during installation of this equipment. This warranty covers normal consumer use only. In no event shall Poly Planar be liable for special, incidental, or consequential damages.

To obtain service under this warranty, please call Poly-Planar for a RETURN AUTHORIZATION NUMBER.

poly-planar, inc.
Maryland USA
(410) 761-4000
www.polyplanar.com

NOTES

detach here

poly-planar®
WATERPROOF MARINE AUDIO SYSTEMS

WARRANTY REGISTRATION

In order to validate you Warranty please complete this Registration Card within 1 week of purchase. Detach and mail to Poly-Planar Group, LLC P.O. Box 409 Hanover, MD 21076

SERIAL NUMBER *(optional)*	MODEL NUMBER	DATE OF PURCHASE
LAST NAME	FIRST NAME	EMAIL *(optional)*
STREET ADDRESS		
CITY	STATE	ZIP
DEALER	CITY	STATE