



MANUAL



MRD87i IPX6 Marine Radio

Poly-Planar IPX6 Marine Grade digital media entertainment system with ultimate audio 4X45 sound.

- **SiriusXM-Ready™** (*SiriusXM Connect Tuner and Subscription required*)
 - **Made For iPhone®/iPod®**
 - **Bluetooth**
- **USB music player & USB charger**
 - **SD card reader**
 - **AM/FM digital tuner**
 - **NOAA weather band**
- **USB and 3.5mm aux input inside drawer/dock**
 - **Front and rear RCA line out**
 - **NMEA 2000® certified**
 - **Remote control interface**

Disclaimer

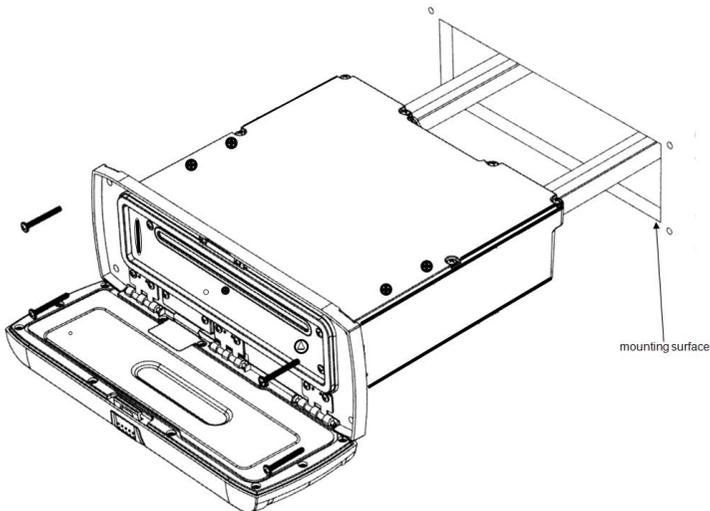
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- *iPad, iPhone, iPod, iPod classic, iPod nano, iPod touch, and Retina are trademarks of Apple Inc., registered in the U.S. and other countries. iPad Air, iPad mini, and Lightning are trademarks of Apple Inc*

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INSTALLATION

- **IMPORTANT!** Before mounting be sure there is sufficient room to accommodate the unit and that there is sufficient ventilation.
- 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.
- Avoid installing the unit where it would be subject to high temperatures such as direct sunlight or hot air from heaters or the engine or where it would be subject to dust, dirt or excessive vibration.
- Use the template provided to make the cutout.
- With the front panel down insert the 4 provided screws. Use the 5mm nut and bracket provided to stabilize the rear of the radio.
- Be sure to mount the unit to a strong, solid surface which will not give way under the stress of waves pounding the hull.



Poly-Planar are proud to offer a high quality product at the industries most competitive pricing!

Optional Mounting Techniques

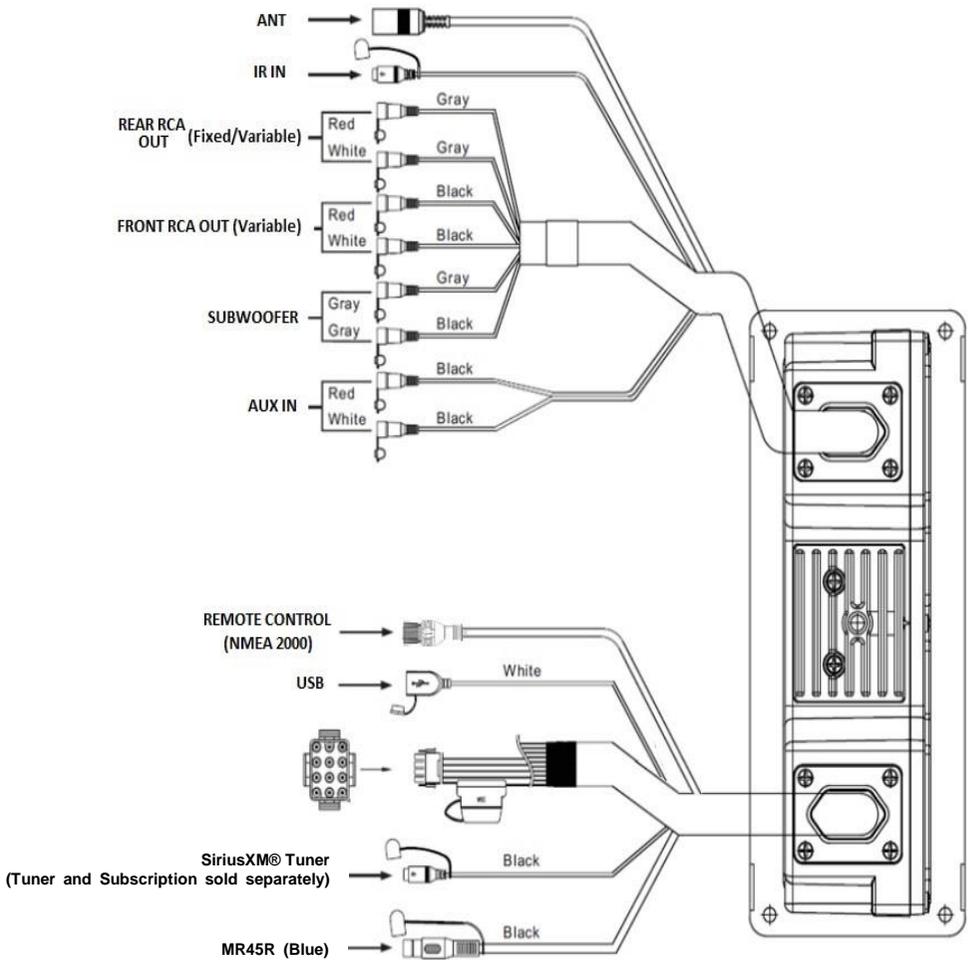
Optional gimbal mount
bracket installation
Model # GM-MRD80



Optional Overhead / Under
Dash mount installation
Model # RM-10

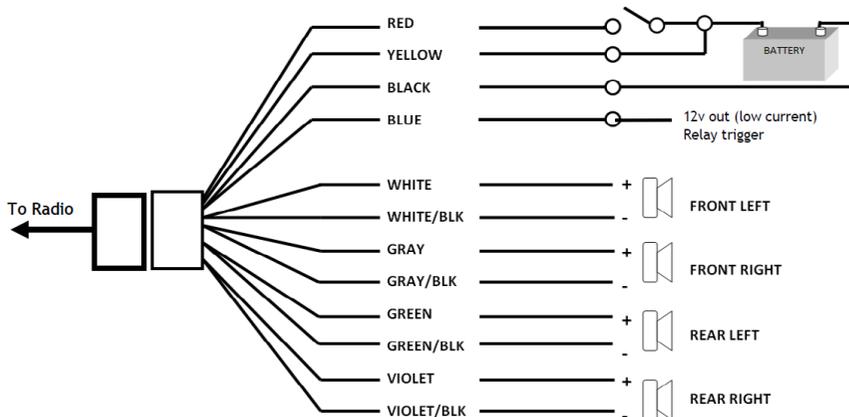


WIRING DIAGRAM

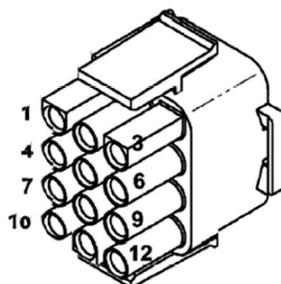


Wiring Details:

Use the wired plug end (Pigtail) provided to make power and speaker connections according to the diagram below. Using this connector will make it easy to disconnect the radio for adding additional features or service. Removing the factory plug end will void warranty.



Wire Color	Function
Yellow	1 B+ (+12VDC)
Green w/stripe	2 Rear Left Speaker-
Green	3 Rear Left Speaker+
Red	4 ACC (+12VDC)
White w/stripe	5 Front Left Speaker-
White	6 Front Left Speaker+
Blue	7 Relay Trigger
Gray w/stripe	8 Front Right Speaker-
Gray	9 Front Right Speaker+
Black	10 Ground (Neg)
Violet w/stripe	11 Rear Right Speaker-
Violet	12 Rear Right Speaker+



Power Wire Specifications:

Yellow Wire - Connect this wire to a **constant** +12V source.

Red Wire - Connect this wire to a switched +12V source such as an ignition or accessory switch. (Must be connected to +12V source for unit to operate.)

Black Wire - Connect this wire to the negative battery terminal or other good power ground.

Blue Wire - This wire outputs a 12V signal when the MRD87i turns on. It is used to remotely turn on external amplifiers.

Notes:

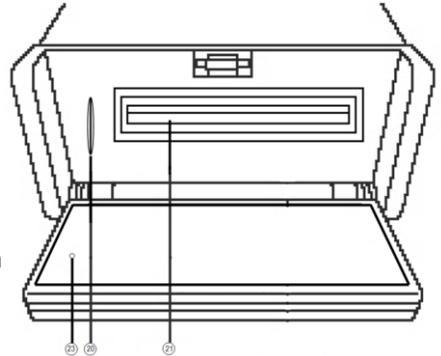
- Use the included plug/wire bundle to connect to the power source and speakers.

- The Yellow, Red and Black power wires should be 14AWG or larger depending on the length to the battery. NEVER operate the unit without the proper power and ground wire.
- NEVER ground the speaker leads and NEVER allow the speaker leads to come in contact with each other. The speaker wire should be at least 16 gauge or larger. Be sure to observe the correct polarity on the speaker connections
- Use quality crimp connectors to connect wires together. Seal the connection well with electrical tape.
- NEVER operate the unit without proper fusing. Fuse holder must be located within 2 feet from the battery. This fuse is to protect the vessel, not the electronics. In case of a short, the fuse will blow instead of the wire burning up. Using other than the recommended fuse ratings at the battery and at the unit may cause damage to the unit and will void your warranty.
- Whenever possible, use cable ties, mounting clamps and similar wiring aids. Adding stress relief loop to wiring is also advisable to prevent straining or breakage.
- If after reading the directions you feel uncomfortable about installing the unit, or not equipped or competent to do so, you should have this installed by a professional installer

BUTTON DESCRIPTION



1. Volume UP/DOWN Knob
2.  - Power Button
3. IR Receiver
4. Front Panel Latch Button
5. LCD Display
6. MODE - Mode Button
7. BAND – Band Button
8.  /  – Control Button
9. MUTE – Mute Button
10. MENU/DISP – Menu/Display Button
11. 1/INTRO - Preset 1/Scan Button
12. 2/RANDOM - Preset 2/Random Button
13. 3/REPEAT - Preset 3/Repeat Button
14. 4/ - Preset 4/(Play/Pause) Button
15. 5/ - Preset 5/Folder down (optional)
16. 6/ - Preset 6/Folder up (optional)
17. SCAN- Scan Button
18. Live Functions/Select Knob
19. AS/PS - Auto Store and Preset Scan Button
20. SD Card Slot
21. DMD Drawer
23. RESET



BASIC OPERATION

SWITCHING ON/OFF THE UNIT

Press  button to turn on the unit. Press and hold  button for 4 sec to turn off the unit

OPENING THE FRONT PANEL

Place thumb on the **front panel latch button**. Firmly depress the button while pulling the front panel open. Keep door firmly closed except when accessing inside drawer.

ADJUSTING THE AUDIO LEVELS

Press **Volume knob** to enter audio level menu
 → Bass → Treble → Balance → Fader → Subwoofer → RSpkers → RLineOut → EQ

then use the **Volume Knob** to adjust to your desired setting. Press **Volume knob** again to select different functions. Unit will return to normal previous display if left untouched for 5 seconds.

RSpker (Rear Speaker) – can be set to either full range or low

pass full range for conventional speaker power or low pass for MS56 subwoofer

RLineOut (Rear Line Out) – can be set to variable or fixed as required by amplifier

EQUALIZER SETTING

Press **volume knob** repeatedly until EQUALIZER menu appears then rotate the **volume knob** to select EQUALIZER setting selection.

Current Equalizer Preset Chart below. Choose one that sounds best with your speakers:

EQUALIZER PRESET	EQ BANDS				
	EQ1	EQ2	EQ3	EQ4	EQ5
Flat	0	0	0	0	0
Rock	9	1	5	7	10
Hall	0	0	-1	-7	-5
Jazz	8	1	1	7	1
Pop	0	8	0	0	4
Live	-7	-2	4	1	0
Classic	0	0	0	-2	-8
Vocal	0	3	11	3	0
Arena	4	1	0	-1	-4
Cinema	3	1	0	2	6
Custom EQ	0	0	0	0	0

To customize your own EQUALIZER setting, please press **volume knob** repeatedly until EQUALIZER menu appears then rotate the **volume knob** to locate “CUSTOM EQ” then press the **volume knob** to enter your own setting. You can set each EQ Band by rotating the **volume knob** left or right from -10 to +10 scale

MODE SELECTION

Press **MODE button** to choose desired listening mode. (e.g. Radio mode to USB mode to AUX IN mode... etc.)

MUTE

Press **MUTE button** to mute the sound. Press again to return to previous volume level.

DIMMER CONTROL

Press and hold **MENU button** for 3 seconds to display current setting. Then use the Volume Knob to adjust to different setting.

Note: Firmware version level will also be displayed

RESET FUNCTION

Open front panel to display reset button. Use a ballpoint pen to press the reset button. The reset function is used in the following situations:

- All the function buttons do not operate.
- Error sign on the display.

FACTORY DEFAULT RESET

Press and hold **MENU button** for 3 seconds to access DIMMER CONTROL then press MENU and AS/PS button simultaneously to reset factory default settings. A warning screen will appear – press the **Select knob** to confirm and **MENU button** to cancel.

RADIO OPERATION

SWITCHING TO RADIO MODE

Press **MODE button** to select radio mode.

SELECTING THE FREQUENCY BAND

In radio mode, press **BAND button** to locate the desired band. The reception band will change in the following order:

→ FM1 → FM2 → FM3 → AM1 → AM2 → WeatherBand →

SELECTING STATION

Press **▶▶/◀◀ button** to select a station. To do manual tuning use **Function/Select knob**.

AUTOMATIC MEMORY STORING & PRESET SCAN (AS/PS)

The **PRESET buttons** can be used to store 6 stations in each band (FM 1, FM 2, FM 3 and AM1, AM2) for convenient access to your favorite stations.

■ Automatic Storing

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

■ Manual Storing

1. Select the desired band.
2. Select the station you want to store in memory, then press and hold one of the **preset buttons** for 3 seconds until the corresponding preset button number appears.

3. Repeat steps 1 and 2 to program additional stations.

SCAN FUNCTION

Press **SCAN button** to scan a station. The unit will keep on scanning every 7 seconds until you press the **SCAN button** again to stop scan function.

SiriusXM® OPERATION

Please Note: You need SiriusXM® Tuner (sold separately) and you must activate your SiriusXM® Tuner before you can begin to receive the SiriusXM® service.

Please connect your SiriusXM® Tuner to the SiriusXM® Tuner port located at the back of the unit.

After installing your SiriusXM® Tuner and antenna, power on your radio and then press **MODE** button to change to SiriusXM® mode. You should be able to hear the SiriusXM® preview channel on Channel 1. If you cannot hear the preview channels, please check the installation instructions to make sure your SiriusXM® Tuner is properly installed.

After you can hear the Preview channel, tune to Channel 0 to find the Radio ID of your tuner. In addition, the Radio ID is located on the bottom of the SiriusXM® Tuner and its' packaging. You will need this number to activate your subscription. Write the number down for reference.

Note: the SiriusXM® Radio ID does not include the letters I, O, S or F.

As part of the activation process, the SiriusXM® satellites will send an activation message to your tuner. When your radio detects that the tuner has received the activation message, your radio will display: "Subscription Updated". Once subscribed, you can tune to channels in your subscription plan. Note, the activation process usually takes 10 to 15 minutes, but may take up to an hour. Your radio will need to be powered on and receiving the SiriusXM® signal to receive the activation message.

Some button functions are different when in SiriusXM® mode:

Faceplate button function assignments



SiriusXM® Function of buttons:

- Live - push to Play/Pause, hold to return to Live play
- |<< - Track Back (Replay Function), hold to Rewind
- >>| - TrackUp or Live if is playing last track, hold to Fast Forward
- ASPS - Display (change displaying info Ch#/Name -> Artist -> Track -> Content - Category)
- Scan - push to scan all channels, hold to scan channels in current category
- Band - push to change band, hold for Direct Tune
- But 1-6 - Presets. Push - tune to preset, hold - save preset.
- Mute - Audio Mute
- Menu - push to enter Menu, hold to enter dimmer settings. In menu navigate with right encoder, select by pushing it. Press menu again to return to main screen.

SiriusXM® Mode:

Initial Channel screen (Channel Number, Preset, Time Offset and Channel Name)



Press AS/PS to change metadata to Artist



Press AS/PS to change metadata to Song



Press AS/PS to change metadata to Info



Press AS/PS to change metadata to Category



Press and hold **BAND** for Direct Tune then use the **Function/Select Knob** to select the digits



Press and hold **AS/PS** to select category, use **Function/Select Knob** to navigate category then press **Function/Select Knob** to enter in selected category and browse channels using **Function/Select Knob**



Press **SCAN** to scan all channels



Press and hold **SCAN** to scan channels in current category



Press **MENU** to enter then use **Function/Select Knob** to navigate through the available 5 options: New Password, Lock, Unlock All Ch and Signal Strength.





To enter password, rotate **Function/Select Knob** to the left to change current digit then push to go to next digit



If password is wrong, there is a Wrong password warning



ADVISORY MESSAGES:

Check tuner advisory message



Check antenna advisory message



No signal advisory message



Subscription update advisory message



Channel unavailable advisory message



Channel unsubscribed advisory message



Channel locked advisory message



SELECTING A TRACK

Press **▶▶/◀◀** button to select a track in Replay buffer. Press and Hold **▶▶** or **◀◀** button to go faster.

HOW TO DIRECT TUNE

Press and hold **AS/PS** button “Select: 000” will show on the display. Rotate **FUNCTION/SELECT** knob to change current digit, push to go to next digit. When finished, press **FUNCTION/SELECT** knob to confirm and play.

Example:

- If you want to search channel number 151, rotate left encoder to get 1,

then push left encoder to go to next digit and rotate to get 5, then push left encoder again and rotate to get 1.

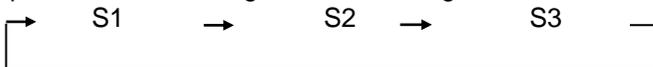
- Press **FUNCTION/SELECT knob** to confirm and play.

SELECT A CHANNEL BY CATEGORY

Press and hold **AS/PS button** to enter category selection menu. Use the **FUNCTION/SELECT knob** to navigate to all the categories available then when done selecting a category press **FUNCTION/SELECT knob** once to confirm. The unit will only play the selected category channels until you go back in category select menu and select "All channels" category.

SELECTING THE FREQUENCY BAND

In SiriusXM® mode, press **BAND button** to locate the desired band. The reception band will change in the following order:



AUTOMATIC MEMORY STORING

The **PRESET buttons** can be used to store 6 channels in each band (S1, S2 and S3) for convenient access to your favorite channels.

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

PARENTAL CONTROL

You can lock any SiriusXM® channels you do not want others to have access without your permission. The default code is "0000". In case you forget your code please perform **FACTORY DEFAULT RESET**.

- GUIDE ON HOW TO ENTER THE CODE USING THE FUNCTION/SELECT KNOB

Rotate **FUNCTION/SELECT knob** to enter first digit, push **FUNCTION/SELECT knob** once and rotate to enter second digit, press **FUNCTION/SELECT knob** to enter third digit and push **FUNCTION/SELECT knob** again and rotate to enter last digit. When done, press **FUNCTION/SELECT knob** to confirm.

- TO LOCK A CHANNEL

Select a channel that you wish to lock then enter in menu and select "Lock Channel". Enter the code then press **FUNCTION/SELECT knob** to confirm.

- TO UNLOCK A CHANNEL

Tune to desired locked channel by entering the correct password. Then press **MENU button** to enter in the menu and select “Unlock Channel” then enter code again to permanently unlock channel.

- TO UNLOCK ALL LOCKED CHANNEL

Enter in menu and select “Unlock All Ch”. You will be prompted to enter the code. After entering the code all channels will be unlocked

- TO EXIT RESTRICTED MODE

Press **BAND button** to manually enter the channel you wish to unlock then press **FUNCTION/SELECT knob**. Enter the code then press **FUNCTION/SELECT knob** to confirm. Now you can access all locked channels without entering password until shutdown the unit.

- TO CHANGE THE CODE

Enter in menu and select “New Code” “Enter Code” will show on the display. Enter the old code then press **FUNCTION/SELECT knob** to confirm “New Code” will show on the display. Enter your new code then press **FUNCTION/SELECT knob** again “Repeat Code” will show on the display. Repeat the code and press **FUNCTION/SELECT knob** to confirm.

- TO RESET SIRIUS FACTORY DEFAULT SETTINGS

Press **Menu button** and select “Factory Default” then enter parental control code to confirm. If you forget parental control code, please use **FACTORY DEFAULT RESET** to reset radio.

DISPLAY INFORMATION

Press **AS/PS button** to change current displayed info on display. You can rotate through Channel Info, Artist Info, Track Info, Content info, Category info.

iPod®/iPhone® OPERATION

SWITCHING TO iPod®/iPhone® MODE

If a device is already connected:

Press **MODE button** to change to iPod®/iPhone® mode.

If there is no device connected the display will show “No Device” please follow instructions below on how to connect your devices

Turn on your DMD device then open the front panel to connect the accessory cable to the connector on the right side of the device drawer then

insert your music device in the drawer. Use one of the 2 adapters available to connect your device then push the drawer back in place. If operating an iPod/iPhone® device, please connect to USB connector then press **MODE button** to change to iPod/iPhone® mode. If you chose the 3.5mm plug adapter press **MODE button** to change to AUX Input 2 mode, then refer AUX Operation on page 22 for further instructions. For iPod/iPhone® mode, refer operation instructions below:

SELECTING SONGS

Press **▶▶** or **◀◀** **button** to select next or previous song. Press and Hold **▶▶** or **◀◀** **button** to fast forward or rewind a song.

PAUSING/PLAYING

Press **4 button** to pause the play. Press **4 button** again to resume play.

RANDOM

Press **2 button** to start random song play

REPEAT

Press **3 button** sequentially to repeat current playlist, song or turn repeat

BLUETOOTH OPERATION

SWITCHING TO BLUETOOTH MODE

If a device is already paired:

Press **MODE button** to change to Bluetooth (BT) mode.

If there is no device paired the display will show “Bluetooth Not Connected” please follow instructions below on how to pair your device

- 1) Make sure you are close enough to MRD87i
- 2) Open Bluetooth setting on your device
- 3) Choose “Poly-Planar” from the list of available Bluetooth link
- 4) Enter “0000” as the Bluetooth password (if required)
- 5) Once connected, you can now start playing your favorite music from your music device.
- 6) Operating Range is up to 30’ (will vary, dependent on installation)

IMPORTANT NOTE:

Some Bluetooth-enabled devices may take more than 45 seconds to initiate after pairing or does not pair at all. If this happen, try to turn off the stereo and the device and pair it again.

SELECTING SONGS

Press **▶▶** or **◀◀** button or rotate **Function/Select knob** to select a song.

PAUSING/PLAYING

Press **4** button to pause the playing. Press **4** button again to resume playing.

AUX OPERATION

This unit can be connected to any portable music devices such as MP3 Player, TV and DVD through the AUX IN located at the back of the unit.

Press **MODE** button to change the mode to “AUX Input 1” (back) or “AUX Input 2” (DMD drawer) mode.

Please note: In this mode, all controls and functions must be controlled from your music device.

USB OPERATION

SWITCHING TO USB MODE

If there is no USB inserted in the driver:

Insert a USB through the USB port located at the back of the unit then press **MODE** button to change to USB mode.

If a USB is already inserted in the driver:

Press **MODE** button to change to USB mode.

SELECTING SONGS

Press **▶▶** or **◀◀** button or rotate **Function/Select knob** to select a song. Press and Hold **▶▶** or **◀◀** button to fast forward or rewind a song.

SELECTING SONGS BY FOLDER

Note: Make sure RPT MODE is off before using this function

Press **5** button or **6** button to select folder downward or upward. If a folder does not exist or does not have music files, it will be skipped.



DISPLAY INFORMATION (music files only)

First line is showing mode information and the second line is displaying the song name. When browsing by rotating right functional key a folder name will be shown at the first line and track name at the second line of the display

PREVIEWING ALL TRACKS

Press **1 button** to play all songs in intro mode. The unit will play the first 10 seconds of each song continuously until you press **1 button** again to stop intro function.

PLAYING ALL TRACKS IN RANDOM ORDER

Press **2 button** and select “Random: Track” to play all tracks in random. Press 2 button and select “Random: Off” to cancel random function.

REPEAT FUNCTION

Press **3 button** and select “Repeat: ONE” to repeat same song. Press **3 button** and select “Repeat: ALL” to repeat all tracks or to stop repeat function.

PAUSE FUNCTION

Press **4 button** to pause player. Press **4 button** again to resume play.

IMPORTANT NOTE:

Some USB devices may not be compatible with the unit.

Some USB devices may take more than 45 seconds to initiate after plugging in. If this happen, try to remove the USB memory stick and insert it again.

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.

Media type	USB (can support USB2.0 but the speed is USB1.1.)
Capacity	up to 2000 songs

SD CARD OPERATION

SWITCHING TO SD MODE

If SD card is already inserted in the driver:

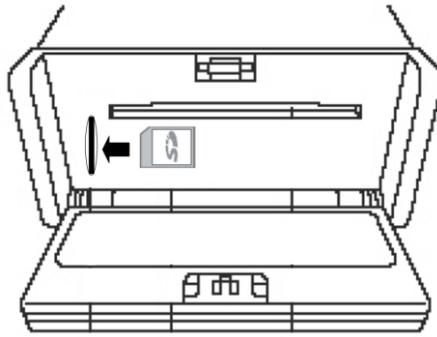
Press **MODE** button to change to SD Card mode.

If there is no SD card inserted in the driver, the display will show “No SD Card attached”:

Insert SD card through the SD card port located in front of the unit. Press **MODE** button to change to SD Card mode.



Warning! Do not over-insert the card as this can damage the contact pins.



Refer USB operation on pages 22 for further instructions.

REMOVING THE SD CARD

Firmly press the card into the slot and release it. The card should pop partially out of the slot.

IMPORTANT NOTE:

Some Memory Card devices may not be compatible with the unit.

Some Memory Card devices may take more than 45 seconds to initiate after plugging in. If this happen, try to remove the memory card and insert it again.

CAUTION

Be sure to use only recommended SD cards (<32GB). Using non-recommended SD cards could cause data loss and damage your device. If there are important files in the memory card, 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.

Media type	Memory Card
Capacity	Standard SD: up to 1000 songs SDHC: up to 1000 songs
Dimensions	32 × 24 × 2.1 mm

COMPATIBLE ACCESSORIES (*sold separately*)

MR45R Wired Remote Control – connect to the back of the unit labeled “TO MR45R”. You can add up to 2 MR45R in conjunction with CMR-Y7.

MRR21 IR Wireless Remote Control - the IR eye is located next to the volume button and must be in line of site for the remote to operate.

ACX-11 USB/AUX accessory extension cable - provides easy access to your USB input and Aux input

IC-3.5PM MP3 /iPod/Satellite Radio Panel Mount Adapter - allows you to connect your MP3 player, iPod® or satellite radio to any audio device with RCA inputs

IR-4050 IR Sensor with 9'cable - connect this IR sensor to the IR port located at the back of the unit. This is an IR sensor, another way to point your MRR21 without going to the front of the stereo.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTIVE ACTION
No power	Blown fuse, power wires disconnected	Check the fuse and power wire or ground wire connection
No sound	Mute is on, Volume set at minimum, wiring is not properly connected	Turn Mute to off, adjust volume to a desired level, check the speaker wire
Cannot read some USB devices	This unit is not 100% compatible with all USB devices or the USB devices has special format.	Try to format the USB device in FAT 16/32 standard
Unit powers off by itself	The battery may be too low (the unit operating voltage is 10.8v to 15.6v).	
Unit takes about 45 seconds to recognize some USB device or SD card	This is normal. The unit sometimes takes longer time to read all the files inside the USB device or SD Card.	Try to remove the USB device or memory card and insert it again.
Operations keys do not work		Press the RESET button
The unit picks up engine noise.		Check the ground wire.
The radio does not work. The radio station automatic selection does not work	The antenna cable is not connected or the signals are too weak	Insert the antenna cable firmly or select a station manually

SiriusXM® Troubleshooting

Advisory Name	Recommended Description
Check Antenna	The radio has detected a fault with the SiriusXM antenna. The antenna cable may be either disconnected or damaged. Verify that the antenna cable is connected to the

	SiriusXM Connect Vehicle Tuner. Inspect the antenna cable for damage and kinks. Replace the antenna if the cable is damaged.
Check Tuner	The radio is having difficulty communicating with the SiriusXM Connect Vehicle Tuner. The tuner may be disconnected or damaged. Verify that the SiriusXM Connect Vehicle Tuner cable is securely connected to the radio
No Signal	The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal. Verify that your vehicle is outdoors with a clear view of the sky. Verify that the SiriusXM magnetic mount antenna is mounted on a metal surface on the outside the vehicle. Move the SiriusXM antenna away from any obstructions. Inspect the antenna cable for damage and kinks. Consult the SiriusXM Connect Vehicle tuner installation manual for more information on antenna installation. Replace the antenna if the cable is damaged.
Subscription Updated	The radio has detected a change in your SiriusXM subscription status.
Channel Not Available	The channel that you have requested is not a valid SiriusXM channel or the channel that you were listening to is no longer available. You may also see this message briefly when first connecting a new SiriusXM Connect Vehicle tuner.
Channel Not Subscribed	The channel that you have requested is not included in your SiriusXM subscription package or the channel that you were listening to is no longer included in your SiriusXM subscription package.
Channel Locked	The channel that you have requested is Locked by the radio Parental Control feature. See Parental Control, page 20 for more information on the Parental Control feature and how to access locked channels.

TECHNICAL SPECIFICATIONS

TUNER(AM)	
Frequency Range	530-1710 KHz
Usable Sensitivity	32 dBuV
TUNER(FM)	
Frequency Range	87.5-107.9 MHz
Channel Step	200KHz
Sensitivity	2.8 uV
Stereo Separation	30dB
Signal to Noise Ratio	50dB
LINE-OUT	
Output	5 Volt (max)
Impedance	33 Ohm
GENERAL	
Power Supply	12V DC (10.8-15.6V allowable)
Speaker Impedance	4 or 8 ohm
Output Power	45W x 4CH
Fuse	15A

NOTE: Specification & design subject to change without notice for improvements.