MSR3012
MARINE AUDIO SYSTEM

Installation and Operation Manual
Manual de la Instalación y Operación / Guide d'installation et d'opération
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Important Legal Notice About Installation
Installation instructions are provided for your convenience. You must determine if you have the knowledge, skills, and ability required to properly perform installation. Professional installation is recommended. SiriusXM shall have no liability for damage/injury resulting from the installation/use of any SiriusXM or other products. You must ensure that all products are installed in adherence with local laws and regulations and in such a manner as to allow a vehicle to be operated safely and without distraction. SiriusXM product warranties do not cover the installation, removal, or reinstallation of any product.
INTRODUCTION

System Features
Features of the Jensen MSR3012 mobile audio system include:
- Full Dot Matrix LCD
- AM/FM US/EURO Tuner with 30 Presets (12 AM, 18 FM)
- SiriusXM Radio Ready
- Single In-Dash CD Player with MP3/WMA Playback Capability
- USB Playback of MP3 and WMA files
- CD ESP (Electronic Skip Protection) 30 Sec.
- iPod Ready (USB interface)
- Mute
- Pre-set Equalizer - 5 settings (USER > FLAT > POP > CLASSIC > ROCK)
- Electronic Bass, Treble, Balance and Fader Controls
- Output Power 40W x 4
- Wired Remote Control Ready (MWR100 sold separately)
- 2-Channel Pre-amp Line Level Outputs
- Auxiliary Audio Input (Front 3.5mm Stereo Jack, Rear RCA)

Content List
- Jensen MSR3012 Radio
- Wire Harness
- Hardware Kit
- Owner’s Manual

HARDWARE KIT CONTENTS

[Diagram showing FLANGE NUT, MOUNTING STRAP, DIN SLEEVE, REMOVAL TOOL]
SAFETY INFORMATION

When Boating
Keep the volume level low enough to be aware of your surroundings.

Protect from Water
Do not expose the product directly to water, as this can cause electrical shorts, fire or other damage.

Protect from High Temperatures
Exposure to direct sunlight for an extended period of time can produce very high temperatures inside your vessel. Give the interior a chance to cool down before starting playback. Do not mount radio within close proximity of engine compartment.

Use the Proper Power Supply
This product is designed to operate with a 12 volt DC negative ground battery system.

Protect the Disc Mechanism
Avoid inserting any foreign objects into the disc slot. Misuse may cause malfunction or permanent damage due to the precise mechanism of this unit.

CAUTION:
THIS MOBILE CD PLAYER IS A CLASS I LASER PRODUCT. THIS UNIT USES A VISIBLE/ INVISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION IF EXPOSED DIRECTLY. BE SURE TO OPERATE THE MOBILE CD PLAYER AS INSTRUCTED. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR BY YOURSELF. PLEASE REFER SERVICING TO A QUALIFIED TECHNICIAN.

WARNING:
• TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT DIRECTLY TO WATER.
• TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK AND INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES.

DISC NOTES
Depending on the recording status, conditions of the disc, and the equipment used for recording, some CD-Rs/CD-RWs may not play on this unit. For more reliable playback, please adhere to the following recommendations:
• Use CD-RWs with speed 1x to 4x and write with speed 1x to 2x.
• Use CD-Rs with speed 1x to 8x and write with speed 1x to 2x.
• Do not play a CD-RW which has been written more than 5 times.

Compatible Disc Types

<table>
<thead>
<tr>
<th>Disc Type</th>
<th>Logo</th>
<th>Diameter/Playable Sides</th>
<th>Playback Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio CD</td>
<td>![logo]</td>
<td>12 cm single side</td>
<td>74 minutes</td>
</tr>
</tbody>
</table>

NOTE: CD-R and CD-RW discs will not play unless the recording session is closed and the CD is finalized.

Disc Maintenance
• A dirty or defective disc may cause sound dropouts while playing. Before playing, wipe the disc using a clean cloth, working from the center hole towards the outside edge. Never use benzene, thinners, cleaning fluids, anti-static liquids or any other solvent.

NOTE: A disc may become scratched (although not enough to make it unusable) depending on how you handle it and other conditions in the usage environment. These scratches are not an indication of a problem with the player.
INSTALLATION

Before You Begin
1. Disconnect Battery
   Before you begin, always disconnect the battery negative terminal.
2. Remove Transport Screws

Important Notes
- Before final installation, test the wiring connections to make sure the unit is connected properly and the system works.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications to your vessel.
- Install the unit where it does not interfere with driving and cannot injure passengers if there is a sudden or emergency stop.
- If the installation angle exceeds 30º from horizontal, the unit might not give optimum performance.
- This unit is not waterproof and is intended for interior mounting applications only. Exterior mounting of the unit requires use of an ASA approved marine housing.
- Avoid installing the unit where it will be subject to high temperatures from direct sunlight, hot air, or from a heater, or where it would be subject to excessive dust, dirt or vibration.

DIN Front Mount
1. Slide the mounting sleeve off of the chassis if it has not already been removed. If it is locked into position, use the removal keys (supplied) to disengage it. The removal keys are depicted in “Removing the Unit” on page 3.
2. Check the dashboard opening size by sliding the mounting sleeve into it. If the opening is not large enough, carefully cut or file as necessary until the sleeve easily slides into the opening. Do not force the sleeve into the opening or cause it to bend or bow. Check that there will be sufficient space behind the dashboard for the radio chassis.
3. Locate the series of bend tabs along the top, bottom and sides of the mounting sleeve. With the sleeve fully inserted into the dashboard opening, bend as many of the tabs outward as necessary to firmly secure the sleeve to the dashboard.
4. Place the radio in front of the dashboard opening so the wiring can be brought through the mounting sleeve.
5. Follow the wiring diagram carefully and make certain all connections are secure and insulated with crimp connectors or electrical tape to ensure proper operation.
6. After completing the wiring connections, turn the unit on to confirm operation (vessel accessory switch must be on). If the unit does not operate, recheck all wiring until the problem is corrected. Once proper operation is achieved, turn the accessory switch off and proceed with final mounting of the chassis.
7. Carefully slide the radio into the mounting sleeve, making sure it is right-side-up, until it is fully seated and the spring clips lock it into place.
8. Attach one end of the perforated support strap (supplied) to the screw stud on the rear of the chassis using the hex nut and spring washer provided. Fasten the other end of the perforated strap to a secure part of the dashboard either above or below the radio using the screw and plain washer provided. Bend the strap, as necessary, to position it. CAUTION: The rear of the radio must be supported with the strap to prevent damage to the dashboard from the weight of the radio or improper operation due to vibration.
9. Test radio operation by referring to the operating instructions for the unit.

Removing the Unit
To remove the radio after installation, pull back the rubber covers, insert the removal keys straight back until they click, and then pull the radio out. If removal keys are inserted at an angle, they will not lock properly to release the unit.

Reconnect Battery
When wiring is complete, reconnect the battery negative terminal.
 **Power Antenna**  
Connect to power antenna or amplifier.  
If not used, tape bare end of wire.

**12V TURN ON**  
Connect to existing radio wire/fuse.

**Chassis Ground**  
Connect to ground terminal or clean unpainted metal part of chassis.

<table>
<thead>
<tr>
<th>PIN NO.</th>
<th>DESCRIPTION</th>
<th>WIRE COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>RIGHT REAR SPEAKER (+)</td>
<td>VIOLET</td>
</tr>
<tr>
<td>A2</td>
<td>RIGHT FRONT SPEAKER (+)</td>
<td>GRAY</td>
</tr>
<tr>
<td>A3</td>
<td>LEFT FRONT SPEAKER (+)</td>
<td>WHITE</td>
</tr>
<tr>
<td>A4</td>
<td>LEFT REAR SPEAKER (+)</td>
<td>GREEN</td>
</tr>
<tr>
<td>A5</td>
<td>LEFT REAR SPEAKER (-)</td>
<td>GREEN/BLACK</td>
</tr>
<tr>
<td>A6</td>
<td>LEFT FRONT SPEAKER (-)</td>
<td>WHITE/BLACK</td>
</tr>
<tr>
<td>A7</td>
<td>RIGHT FRONT SPEAKER (+)</td>
<td>GRAY/BLACK</td>
</tr>
<tr>
<td>A8</td>
<td>RIGHT REAR SPEAKER (-)</td>
<td>VIOLET/BLACK</td>
</tr>
<tr>
<td>B1</td>
<td>NO CONNECTION</td>
<td>EMPTY</td>
</tr>
<tr>
<td>B2</td>
<td>NO CONNECTION</td>
<td>EMPTY</td>
</tr>
<tr>
<td>B3</td>
<td>POWER ANTENNA</td>
<td>BLUE</td>
</tr>
<tr>
<td>B4</td>
<td>NO CONNECTION</td>
<td>EMPTY</td>
</tr>
<tr>
<td>B5</td>
<td>GROUND</td>
<td>BLACK</td>
</tr>
<tr>
<td>B6</td>
<td>NO CONNECTION</td>
<td>EMPTY</td>
</tr>
<tr>
<td>B7</td>
<td>+12V SWITCHED</td>
<td>RED</td>
</tr>
<tr>
<td>B8</td>
<td>NO CONNECTION</td>
<td>EMPTY</td>
</tr>
</tbody>
</table>
**BASIC OPERATION**

**Power On/Off**
Press any button on the front panel to turn the unit on. Press the **POWER** button (1) to turn the unit off.
- If a disc is being inserted when the radio power is off and the ACC (accessory switch) is on, the unit will automatically power up and playback will start.
- If a CD is present, playback resumes at the last position in memory before the ignition was turned off or the **POWER** button was pressed.
- If no CD is present, the unit will resume at the last mode selected (Tuner, Aux, etc.). The **POWER** button is illuminated whenever the IGN lead (red wire) is powered, regardless of whether the unit is on or off.

**Volume Control**
To increase the volume, press the **VOLUME +** button (2a). To decrease the volume, press the **VOLUME -** button (2b).

**Mute**
Press the **MUTE** button (17) on the control panel to mute the audio output. Press **MUTE** again to restore the audio output to the previous level.

**Mode**
Press the **MODE/SEL** button (4) on the control panel to select a different mode of operation, as indicated on the display panel. Available modes include Tuner, SiriusXM, CD, iPod and AUX In (optional Auxiliary Input).

**NOTE:** CD, IPOD, AUX or SIRIUSXM mode will be skipped if the module is not installed.

**Reset**
The reset button should be activated for the following reasons:
- initial installation of the unit when all wiring is completed
- function buttons do not operate

- error symbol on the display
Use a ball point pen or similar object to press the **RESET** button (18). This may be necessary should the unit display an error code.
You can recover factory default settings using the RESUME function located on the system menu. With “YES” flashing, press the **MODE/SEL** button (4) to activate.

**Audio Menu**
Press the **AUDIO/MENU** button (3) on the control panel to access the audio menu. You can navigate through the audio menu items by pressing the **AUDIO/MENU** button repeatedly. Once the desired menu item appears on the display, adjust that option by pressing the **VOLUME +/-** buttons (2) within 5 seconds. The unit will automatically exit the audio menu after five seconds of inactivity. The following menu items can be adjusted.

- **Bass Level**
  Use the **VOLUME** buttons to adjust the Bass level range from “-6” to “+6”.

- **Treble Level**
  Use the **VOLUME** buttons to adjust the Treble level range from “-6” to “+6”.

- **Balance**
  Use the **VOLUME** buttons to adjust the Balance between the left and right speakers from “L12” (full left) to “R12” (full right).

- **Fader**
  Use the **VOLUME** buttons to adjust the Fader between the rear and front speakers from “R12” (full rear) to “F12” (full front).

- **Volume Level**
  Use the **VOLUME** buttons to adjust the Volume level.

**System Menu**
1. Press and hold the **AUDIO/MENU** button (3) for more than 3 seconds to enter the system menu. “MENU” will appear on the display, followed by the first menu item, “CONTRAST.”
2. Press the **TUNE/TRK >> | <<** button (21, 20) or press the **AUDIO/MENU** button repeatedly to navigate the system menu and select the desired item.
3. Press the **VOLUME +/-** buttons (2) to adjust the selected menu item.
4. Press the **AS/PS** button (15) to return to the previous operation immediately or wait for 5 seconds to return automatically.

The following items can be adjusted:
- **CONTRAST** (0 – 10): Set LCD contrast.
- **LOW BATT (ON/OFF):** Monitor voltage on ACC line.
- **Local/Distant:** “Local” mode favors access to local stations whose signals are much stronger, thereby improving reception. Select “Distant” to terminate local receive mode and resume normal mode.
- **AREA (U.S.A./LATIN/EUROPE):** Set frequency spacing for various regions.
- **VOL PGM (0 – 46):** Select an automatic turn-on volume.
- **BEEP TONE (ON/OFF):** Turn the audible beep ON/OFF (heard when functions/buttons are selected). **NOTE:** Beep tone off will not affect LOW BATT audible tone.
- **SXM CH LOCK** (when SiriusXM tuner is present): Set and manage a 4-digit parental lock code to restrict mature content. Press the **MODE/SEL** button (4) to view “P-LOCK”. Use
the VOLUME +/- buttons (2) to choose digits from 0 to 9. Press the MODE/SEL button to enter and move to the next digit. The default code is “0000”.

- **RESET:** Return the EEPROM to factory default set up values. “Yes” will blink on the LCD to confirm. Press MODE to select.

**LOW BATTERY Operation**
If LOW BATT is set to “ON”, an alarm will sound (8 beeps every 30 sec) when the voltage drops to 10.8V (+/- 0.03V). A visual warning (LOBA) will appear flashing (8 flashes every 30 sec) in the lower left corner of the LCD display.

*NOTE: “OFF” is the default setting for LOW BATT. If the audio is muted or the volume is set to 0, the audible beep will not be heard.*

**Equalizer**
Press the EQ/LOUD button (11) to turn on the equalization function and select between five pre-defined bass and treble curves: USER > FLAT > POP > CLASSIC > ROCK.

**Loudness**
*Press and hold* the EQ/LOUD button (11) to toggle true loudness on/off. When listening to music at low volumes, this feature will boost the bass and treble ranges to compensate for the characteristics of human hearing.

**Auxiliary Input**
To access an auxiliary device:
1. Connect the portable audio player to the AUX IN on the front panel (19).
2. Press the MODE button (4) to select Aux In mode.
3. Press MODE again to cancel Aux In mode and go to the next mode.

**Liquid Crystal Display (LCD)**
The current frequency and activated functions are shown on the LCD panel (23).

*NOTE: LCD panels may take longer to respond when subjected to cold temperatures for an extended period of time. In addition, the visibility of the numbers on the LCD may decrease slightly. The LCD display will return to normal when the temperature increases to a normal range.*

**Scroll**
When the information is too long to be displayed on the LCD, *press and hold* the SCROLL/INFO button (12) to view the entire title. The information will scroll twice and then return to abbreviated text.

**Quick Exit Hot Key**
In the following modes and conditions, press the AS/PS button (15) < 3 seconds to quickly exit the current operation without waiting for the system default time out:
- System menu operation
- Searching mode
- Audio menu operation
TUNER OPERATION

Select a Band
Press the BAND/SEARCH button (16) to change between three FM bands and two AM (MW) bands.

Manual Tuning
Press the SEEK/TUNE/TRK |<< or >>| buttons (20, 21) to seek stations up/down step by step.

Auto Seek Tuning
Press and hold the SEEK/TUNE/TRK |<< or >>| buttons (20, 21) to automatically seek the next or previous strong station.

Preset Stations
Six numbered preset buttons store and recall stations for each band.

Store a Station
Select a band (if needed), then select a station. Press and hold a preset button (5-10) for two seconds. The preset number will appear in the display.

Recall a Station
Select a band (if needed). Press a preset button (5-10) to select the corresponding stored station.

Automatically Store / Preset Scan (AS/PS)

Automatically Store
Select a band (if needed). Press and hold the AS/PS button (15) for more than three seconds to automatically select six strong stations and store them in the current band. The new stations replace any stations already stored in that band.

NOTE: During Auto Store (AS), the tuner will default to “Local” mode while scanning the band initially. After scanning the entire band once, the unit will switch to “Distant” mode for all subsequent Auto Store tuning.

Preset Scan
Select a band (if needed). Press the AS/PS button (15) to scan stations stored in the current band. The unit will pause for ten seconds at each preset station. Press AS/PS again to stop scanning when the desired station is reached.
**CD PLAYER OPERATION**

**Inserting and Ejecting a Disc**
Insert a disc, label-side up, into the disc slot (24) with the unit turned on. The unit will automatically draw the disc in and play the first track on the disc.

Press the eject button (22) to stop disc play and eject the disc. The unit does not have to be turned on to eject the disc.

**Controlling Disc Playback**

**Selecting Tracks**
Press the SEEK/TUNE/TRK >>| (21) or SEEK/TUNE/TRK |<< button (20) to advance to the next track on the CD. The selected track number will appear on the display. *Press and hold* the SEEK/TUNE/TRK >>| or |<< button to fast forward or fast reverse through the disc. CD play starts when the button is released.

**Play/Pause Disc Playback**
Press the 1/>|| button (8) to suspend disc play. Press the 1/>|| button again to resume disc play.

**Previewing Tracks**
Press the 2/INT button (6) to play the first 10 seconds of each track sequentially. Press 2/INT again to stop Intro Scan and resume normal play at the current track.

**Repeat Play**
Press the 3/RPT button (5) during disc play to repeat play the current track. Press 3/RPT again to stop repeat play.

**Random Play**
Press the 4/RDM button (7) during disc play to play all tracks on a CD in random, shuffled order. Press 4/RDM again to stop random play.
MP3/WMA OPERATION

MP3/WMA File Requirements
The MP3/WMA recording media acceptable to this unit are CD-ROM, CD-R and CD-RW. When using CD-RW, use full format rather than quick format to prevent malfunction. Discs written by Packet Write (UDF) are not supported.
This unit can play MP3 (MPEG1, 2, 2.5 Audio Layer 2/3) and WMA (version 7/8/9).

Media Requirements
The following formats are available for the media used in this unit. The maximum number of characters used for file name including the delimiter (".") and three-character extension are indicated in parentheses.
• ISO 9660 Level 1 (11 characters)
• ISO 9660 Level 2 (31 characters)
• Joliet (31 characters)
• Romeo (31 characters)
The media reproducible on this unit has the following limitations:
• Maximum number of nested folders: 8
• Maximum number of files per disc: 999
• Maximum number of folders per disc: 99

Use the following settings when compressing audio data in MP3 data with the MP3 encoder.
• Transfer bit rate: 32 - 320 kbps
• Sampling frequency
  • MPEG1: 32/44,1/48 KHz
  • MPEG2:16/22.05/24 KHz
  • MPEG2.5: 8/11.025/12KHz
  • WMA: 22/32/44/48KHz

When using a CD writer to record MP3/WMA up to the maximum disc capacity, disable additional writing. To record an empty disc up to the maximum capacity at once, select the “disc at once” option. This unit supports multi-session recording.
• Maximum length of file name: 28 characters
• Maximum length of directory: 16 characters

ID3 Support
This unit supports ID3 tag versions 1.0, 1.1, 2.0 and 2.3 (Max 32 bytes).

Insert and Eject Disc
Insert a disc, label-side up, with the unit turned on. After the disc scan is complete, the unit will play the first track on the disc. The MP3 icon is illuminated during MP3 playback. Press the eject button (22) to stop disc play and eject the disc. The unit does not have to be turned on to eject the disc.

Installing a USB Device
Insert your USB thumb drive into the USB slot (25) on the front of the radio. The unit will automatically search for MP3 and WMA files on the device and begin playback. You can access USB mode from any other mode by pressing the MODE/SEL button (4).

WARNING: Do not remove the device when USB PLAY mode is active. Press MODE/SEL (4) to change to another mode before removing the device.

Controlling Playback
Pause
Press the 1 >/|| button (8) to suspend disc play. Press the 1 >/|| button again to resume play.
Track Select
Press the SEEK/TUNE/TRK >>| (21) or |<< (20) button for less than one second to advance to the next file, or press and hold to fast forward or fast reverse. Playback begins when the button is released.
Intro Scan (INT)
Press the 2 INT button (6) once to play the first 10 seconds of each file in the current folder. Press 2 INT again to play the first 10 seconds of each file on the current disc. When the desired file is reached, press 2 INT a third time to end the scan and play the selected file.
Repeat (RPT)
Press the 3 RPT button (5) to repeatedly play the current file. Press 3 RPT again to repeat all songs in the current folder. Press 3 RPT a third time to resume normal playback.
Random (RDM)
Press the 4 RDM button (7) to randomly play all files in the current folder. Press 4 RDM again to randomly play all files on the disc. Press 4 RDM a third time to resume normal playback.

Navigating Folders
Press the 5 button (9) to move to the previous folder.
Press the 6 button (10) to advance to the next folder.
MP3/WMA Directory Search

1. Press BAND/SEARCH button (16) to enter directory search mode.
2. Press the MODE/SEL button (4) to confirm search mode. The LCD will display the folder list.
3. Navigate the folder list by pressing the VOLUME +/- buttons (2).
4. Press the MODE/SEL button to select a folder. The LCD will display the list of files within that folder.
5. Navigate the file list by pressing the VOLUME +/- buttons.
6. Press the MODE/SEL button to select a file.
SiriusXM RADIO OPERATION

About SiriusXM
Everything worth listening to is on SiriusXM. Get over 130 channels, including the most commercial-free music, plus the best sports, news, talk and entertainment. A SiriusXM Tuner and Subscription are required. For more information, visit www.siriusxm.com.

NOTE: The SiriusXM Satellite Radio controls on this unit are available only when a SiriusXM Tuner is connected.

Switching to SiriusXM Mode
Press the MODE/SEL button (4) to change the mode to SiriusXM radio mode.

Accessing your SiriusXM ID
To subscribe to the SiriusXM Satellite Radio service, it is necessary to locate and identify the Radio ID of your SiriusXM Tuner.

1. In SiriusXM mode, press and hold the BAND/SEARCH button (16) to select DIRECT mode.
2. Press the MODE/SEL button (4) to activate Direct mode.
3. Press the MODE/SEL button for each digit to enter “000”.
4. Press MODE/SEL again to confirm. This will display the SiriusXM ID number for your tuner.
5. The SiriusXM ID number will scroll twice and then freeze with the first 11 digits on the display. Press the SCROLL/INFO button (12) to display the remaining digit.
6. Write down the number for reference.

Activating Your Service
1. With the radio still turned on, tune to the SiriusXM preview channel on Channel 1. You should be able to hear the SiriusXM preview channel even if your service is not activated. If you cannot hear the preview channel, please check the installation instructions to make sure your tuner is properly installed.
2. Visit www.siriusxm.com/activate or call SiriusXM Listener Care at 1-866-635-2349 to activate your service.

NOTE: As part of the activation process, the SiriusXM satellites will send an activation message to your tuner (see "Advisory Messages Reported by the SiriusXM Vehicle Tuner" on page 13). 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.

Selecting a Band
In SiriusXM mode, press the BAND/SEARCH button (16) to access the SiriusXM user-preset channel groups in the following order: SAT-1, SAT-2, SAT-3.

Category Tuning
1. Press the CAT +/- buttons (13/14) to change the category. Each category title will be displayed in increments.
2. While in the category mode, press the CAT +/- buttons again to view category names. (The lowest channel number within the chosen category will always be the default first channel tuned.)
3. Press the MODE/SEL button (4) to select the current channel or the SEEK/TUNE/TRK |<< / >>| buttons (20/21) to choose channels in that category.
4. Press the SEEK/TUNE/TRK buttons to select a channel within the chosen category.
5. Press MODE/SEL to confirm channel selection.

Channel Up/Down Tuning
Press the SEEK/TUNE/TRK |<< / >>| buttons (20/21) to search for a channel. Press and hold the SEEK/TUNE/TRK buttons to rapid search.

Storing Preset Channels
The preset buttons (5-10) can be used to store 6 channels, allowing convenient access to your favorite channels.

Programming Channels
1. Select the channel you want to store in preset memory.
2. Press and hold a preset button (5-10) until the corresponding preset button number appears.
3. Repeat steps 1 and 2 to program additional channels.

Recalling Preset Channels
Press one of the six preset buttons (5-10) to select a preset channel directly.

Radio ID: _____________________________________________________________

NOTE: The SiriusXM Radio ID does not include the letters I, O, S or F.
Channel Direct Access Searching
1. **Press and hold** the BAND/SEARCH button (16) to access Direct Tune mode. “DIRECT-T” appears on the display for a few seconds.
2. Press the MODE/SEL button (4) to confirm.
3. Use the VOLUME +/- buttons (2) to select a number for each position and move to the next digit.
4. Press the MODE/SEL button to confirm each digit.
5. Press the MODE/SEL button again to tune to the selected file.

Parental Lock
Set and manage a 4-digit parental lock code to restrict mature content.
1. Press and hold the AUDIO/MENU button (3) for more than 3 seconds to enter the system menu.
2. Press the TUNE/TRK >>| or |<< button (21, 20) navigate to the “SXM SETUP MENU” feature.
3. Press the MODE/SEL button (4) to view “P-LOCK”.
4. Use the VOLUME +/- buttons (2) to choose digits from 0 to 9. The default code is “0000”.
5. Press the MODE/SEL button to enter and move to the next digit.

Alternate Display Information
Press SCROLL/INFO button (12) to change the display information in the following order:
ARTIST NAME > SONG TITLE > CONTENT (if available) > CATEGORY > CHANNEL NAME.

Satellite Signal Strength
The display will indicate satellite reception strength as shown below.

<table>
<thead>
<tr>
<th>Signal Strength</th>
<th>Strength Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Signal</td>
<td>🌙</td>
</tr>
<tr>
<td>Weak</td>
<td>🌙 الأميركي</td>
</tr>
<tr>
<td>Good</td>
<td>🌙★</td>
</tr>
<tr>
<td>Excellent</td>
<td>🌙★★★</td>
</tr>
</tbody>
</table>
# Advisory Messages Reported by the SiriusXM Vehicle Tuner

Table 1: SiriusXM Advisory Messages

<table>
<thead>
<tr>
<th>On-Screen Display</th>
<th>Advisory Message</th>
<th>Cause</th>
<th>Explanation/Solution</th>
</tr>
</thead>
</table>
| Chk Antena        | Check Antenna    | The radio has detected a fault with the SiriusXM antenna. The antenna cable is 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       | 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 SiriusXM mating connector/cable.  
• If the problem persists, disconnect and reconnect the tuner and then contact your dealer. |
| No Signal         | 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 southern 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. Replace the antenna if the cable is damaged.  
• If the problem persists, disconnect and reconnect the tuner and then contact your dealer. |
| Scrolling “Subscriptn Updated” - press any key to continue” | Subscription Updated | The radio has detected a change in your SiriusXM subscription status. | • Press Enter to clear the message.  
• No further action is required.  
• Visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription. |
| Ch Unavail        | 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. Visit www.siriusxm.com for more information about the SiriusXM channel lineup. | |
| Chan Unsub        | 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. | Visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription package or would like to subscribe to this channel. |
| Channel Locked    | Channel Locked   | The channel that you have requested is Locked by the radio Parental Control feature. | See the section on Parental Control, page 45 for more information on the Parental Control feature and how to access locked channels. |
| “Paging Lock Code? followed by ****” | Enter Lock Code | User prompted to enter the lock/unlock code. | Enter the four digit code to play the audio. |
iPod OPERATION

This unit is equipped with an iPod ready function that will allow you to control your iPod (if compatible) using the control panel buttons. The following iPod versions are supported:

- iPod Nano (1G, 2G, 3G, 4G and 5G)
- iPod 5G
- iPod Classic
- iPhone, iPhone 3G, iPhone 3GS, iPhone 4
- iPod Touch
- iPod Touch 2G

NOTE: Earlier model iPods are not supported because they do not implement the USB control protocol. Also, the iPod Shuffle is not supported because it does not utilize the 30-pin Apple iPod Connector. These unsupported iPod models may be connected to the radio using one of the Auxiliary Inputs.

Accessing iPod Mode

Connect a supported iPod or iPhone to the front panel USB connector. The iPod icon illuminates in the bottom right corner of the LCD whenever an iPod or iPhone is attached to the USB connector. Music playback begins automatically.

To enter iPod mode from any other source, press the MODE/SEL button (4) until “USB” appears on the display. If the user connects an iPod containing no songs, the radio will display a message stating “No Songs” when it enters iPod mode.

Turning the iPod On/Off

The iPod power turns on automatically when an iPod is connected to the front panel USB connector, as long as the vehicle ignition is turned on. You can turn the iPod off by disconnecting it or by turning the ignition off. When the ignition is turned off, the iPod will pause and then enter sleep mode after 2 minutes. While the iPod is connected, the power cannot be turned on or off from the iPod itself.

NOTE: The iPod will continuously recharge when connected to the unit, as long as the vehicle ignition is turned on.

Controlling Playback

Selecting Tracks

During playback, press the SEEK/TUNE/TRK |<< / >>| button (20/21) to play the previous or next track in the current category. Press the SEEK/TUNE/TRK |<< button (20) once to play the song from the start position or press SEEK/TUNE/TRK |<< twice to play the previous track.

Press and hold the SEEK/TUNE/TRK |<< / >>| button (20/21) to fast reverse/forward the song.

Pausing Playback

During playback, press the 1/>|| button (8) to pause the iPod player. “PAUSE” will appear on the LCD. Press 1/>|| again to resume playback.

Repeat Play

During playback, press the 3/RPT button (5) to repeat the current song. “REPEA” will appear on the LCD. Press 3/RPT again to stop repeat playback.

Random Play

During playback, press the 4/RDM button (7) to play all songs in the current category in random order. Random play will begin once the current song has finished playing. “SHUFF” will appear on the LCD. Press 4/RDM again to stop random playback.

NOTE: If you press and hold the SEEK/TUNE/TRK |<< / >>| button to change the current song to the previous/next song, you will exit fast reverse/forward mode.

Alternate Display Information

Press the SCROLL/INFO button (12) to change the display information in the following order: ARTIST NAME > SONG TITLE > FOLDER NAME.

Search Mode

Press the BAND/SEARCH button (16) repeatedly to enter iPod search mode and choose from the following search criteria: Playlist, Artist, Album, Song, Genre or Composer (consecutively).

When search mode is selected, press the MODE/SEL button (4) to confirm selection. Use the VOLUME +/- buttons (2) to navigate through various list selections. Press MODE/SEL (4) to make your final selection.
CARE AND MAINTENANCE

- Keep the product dry. If it does get wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.
- Keep the product away from dust and dirt, which can cause premature wear of parts.
- Handle the product gently and carefully. Dropping it can damage circuit boards and cases, and can cause the product to work improperly.
- Wipe the product with a dampened cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the product.
- Use and store the product only in normal temperature environments. High temperature can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.

Ignition
The most common source of noise in reception is the ignition system. This is a result of the radio being placed close to the ignition system (engine). This type of noise can be easily detected because it will vary in intensity of pitch with the speed of the engine.
Usually, the ignition noise can be suppressed considerably by using a radio suppression type high voltage ignition wire and suppressor resistor in the ignition system. (Most vessels employ this wire and resistor but it may be necessary to check them for correct operation.) Another method of suppression is the use of additional noise suppressors. These can be obtained from most CB/A radio or electronic supply shops.

Interference
Radio reception in a moving environment is very different from reception in a stationary environment (home). It is very important to understand the difference.
AM reception will deteriorate when passing under a bridge or when passing under high voltage lines. Although AM is subject to environmental noise, it has the ability to be received at great distance. This is because broadcasting signals follow the curvature of the earth and are reflected back by the upper atmosphere.

<table>
<thead>
<tr>
<th>TROUBLESHOOTING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptom</strong></td>
</tr>
<tr>
<td>No power</td>
</tr>
<tr>
<td>Fuse is blown</td>
</tr>
<tr>
<td>Disc cannot be loaded or ejected</td>
</tr>
<tr>
<td>Inserting the disc in upside down</td>
</tr>
<tr>
<td>Compact disc is extremely dirty or disc is defective</td>
</tr>
<tr>
<td>Condensation</td>
</tr>
<tr>
<td>No sound</td>
</tr>
<tr>
<td>Wiring is not properly connected</td>
</tr>
<tr>
<td>The operation keys do not work</td>
</tr>
<tr>
<td>Built-in microcomputer is not operating properly due to noise</td>
</tr>
<tr>
<td>Sound skips</td>
</tr>
<tr>
<td>Disc is dirty or defective</td>
</tr>
<tr>
<td>Cannot tune to radio station, auto-seek does not work</td>
</tr>
<tr>
<td>Antenna cable is not connected</td>
</tr>
<tr>
<td>Signals are too weak</td>
</tr>
<tr>
<td>ERROR-01 on LCD</td>
</tr>
<tr>
<td>ERROR-02 on LCD</td>
</tr>
<tr>
<td>ERROR-03 on LCD</td>
</tr>
<tr>
<td>ERROR-04 on LCD</td>
</tr>
<tr>
<td>ERROR-05 on LCD</td>
</tr>
</tbody>
</table>
SPECIFICATIONS

CD
Signal to Noise Ratio: ≥ 75 dB
Channel Separation: More than 50 dB
Frequency Response: 20 Hz - 20 kHz

FM Radio
Frequency Coverage (USA): 87.5 to 107.9 MHz
Frequency Coverage (Europe): 87.5 to 108 MHz
Sensitivity (S/N=30dB): 4 µV
Image Rejection: > 45 dB
Stereo Separation: > 25 dB

AM/MW
Frequency Range (USA): 530-1710 kHz
Frequency Range (Europe): 522-1620 kHz
Sensitivity (S/N=20dB): 36 dB

General
Operating Voltage: DC 12 Volts
Grounding System: Negative Ground
Speaker Impedance: 4-8 ohms per channel
Tone Controls:
  Bass (at 100 Hz): ±10 dB
  Treble (at 10 kHz): ±10 dB
Power Output: 40W x 4
Current Drain: 15 Ampere (max.)
Chassis Dimensions: 182(L) x 52.2(W) x 173(H)
Front Panel Dimensions: 188(L) x 58(W) x 21(H)