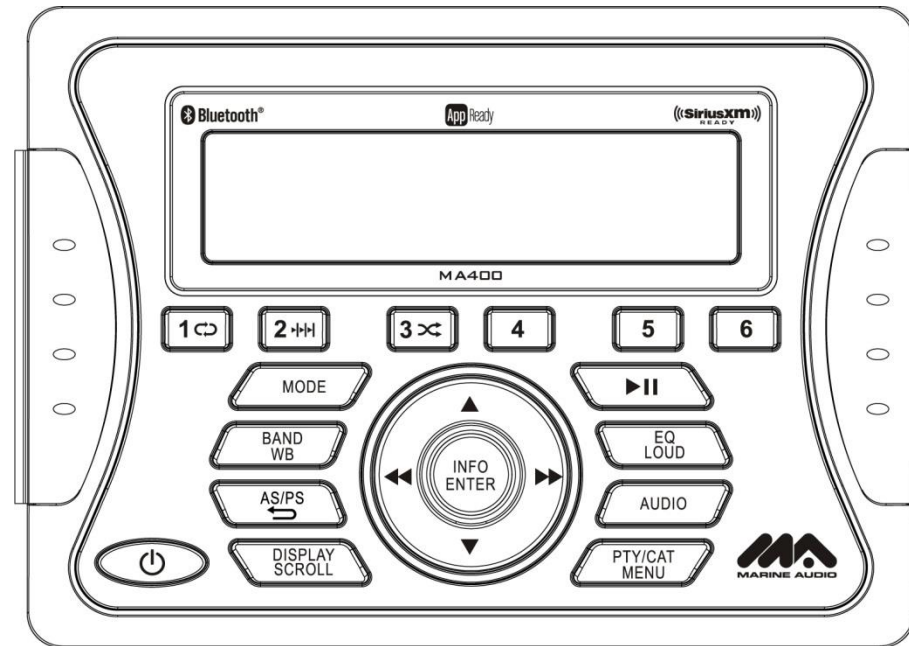




MA400

MARINE AUDIO SYSTEM

Installation and Operation Manual



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INTRODUCTION

System Features

Features of Marine Audio MA400 mobile audio system include:

- Full Dot Matrix LCD
- AM/FM Tuner with 30 Presets (12AM, 18FM)
- RBDS (Radio Broadcast Data Service) with PTY Search
- SiriusXM-Ready (SiriusXM Connect Vehicle tuner and subscription sold separately)
- USB Playback of MP3 and WMA files
- iPod Ready (USB Interface)
- Weatherband Tuner with SAME Technology
- Mute
- Bluetooth (Supports A2DP, AVRCP and ID3)
- APP Ready
- Pre-set Equalizer – 5 settings (User, Flat, Pop, Classical, Rock)
- Electronic Bass, Treble, Balance and Fader Controls
- Output Power 50W x 4
- 4-Channel Pre-amp Line Level Outputs (Front & Rear RCA)
- 2 Wire Power Supply
- Auxiliary Audio Input (RCA)

Content List

- Tuner Amplifier Module
- Wired Commander
- Wired Commander Cover
- 10' Wired Commander Extension Cable
- Power Harness
- Stainless-steel tapping screws (4)
- Quick Reference Guide

SAFETY INFORMATION

When Boating

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

Protect from Water

Do not submerge or 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 with 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.

WARNING:

- DO NOT OPEN, DISASSEMBLE OR ALTER THE UNIT IN ANYWAY. Doing so may result in fire, electric shock or product damage.
- USE THE CORRECT AMPERE RATING WHEN REPLACING FUSE. Failure to do so may result in fire, electric shock or product damage.
- DO NOT INSTALL IN LOCATIONS THAT MIGHT HINDER VEHICLE OPERATION. Doing so may obstruct vision or hamper movement which can result in a serious accident.
- INSTALL THE WIRING SO THAT IT IS NOT CRIMPED OR PINCHED BY SCREWS OR SHARP METAL EDGES. Route the cables away from moving parts or sharp pointed edges. This will prevent crimping and damage to the wiring. If the wiring must pass through a metal hole, be sure to use a rubber grommet to prevent the wire's insulation from being cut by the metal edge of the hole. It is also recommended to apply sealing caulk to any opening that may potentially allow water to enter.
- Be sure to choose a location that is flat and has clearance above the unit to prevent any damage, as well as allow for ventilation
- Before drilling any holes, carefully inspect the area underneath and behind the mounting surface where the devices will be mounted to make sure it will not interfere with existing wires, fuel lines, the fuel tank or any other objects that could be damaged.
- Always disconnect the vehicle negative battery terminal to prevent accidental shorting during installation.

INSTALLATION

Before you Begin

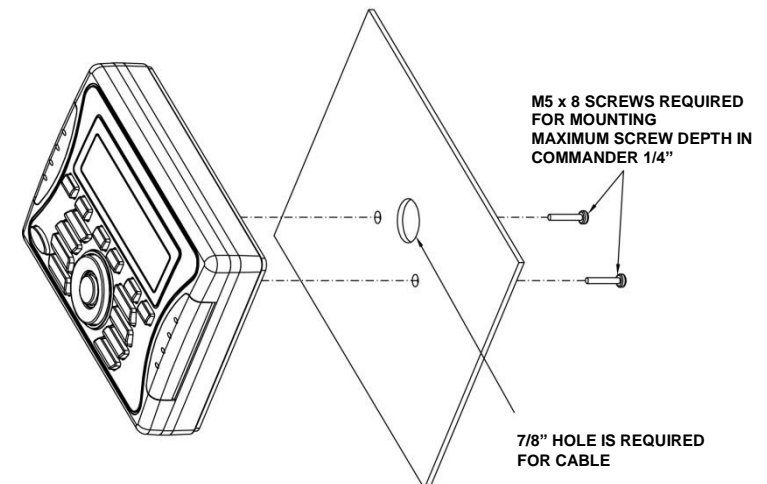
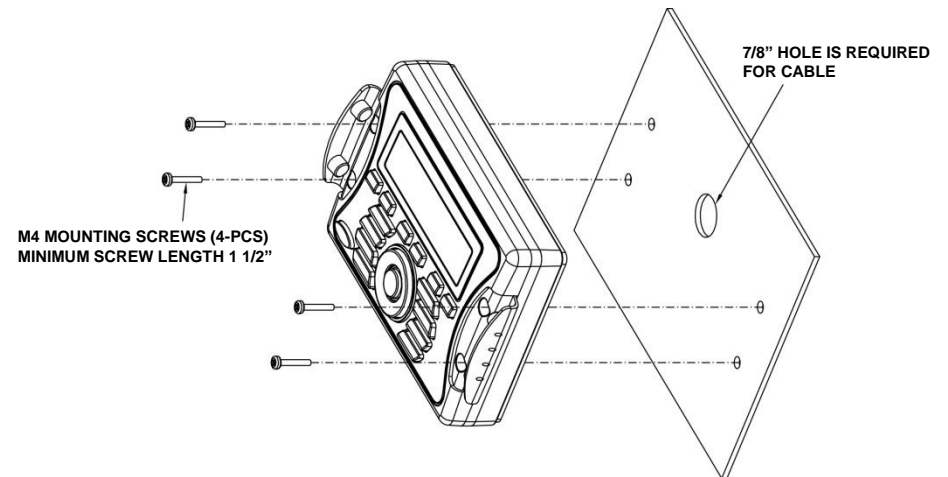
Before you begin, always disconnect the battery negative terminal.

Important Notes

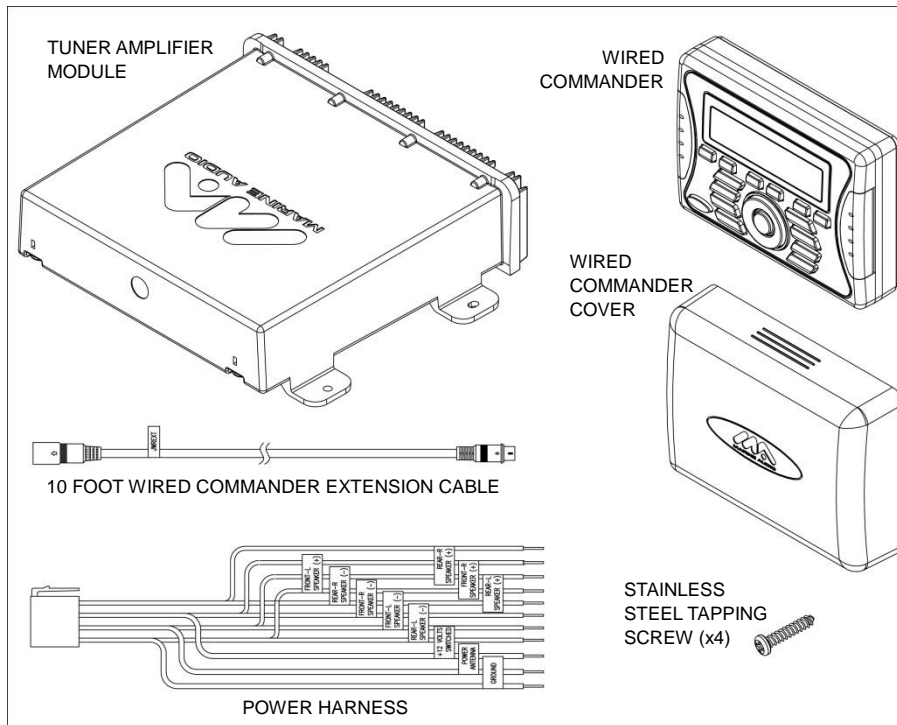
- Before final installation, test the wiring connections to make sure the unit is connected properly and the system works.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer prior if installation required 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.
- 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.

Wired Commander Mounting

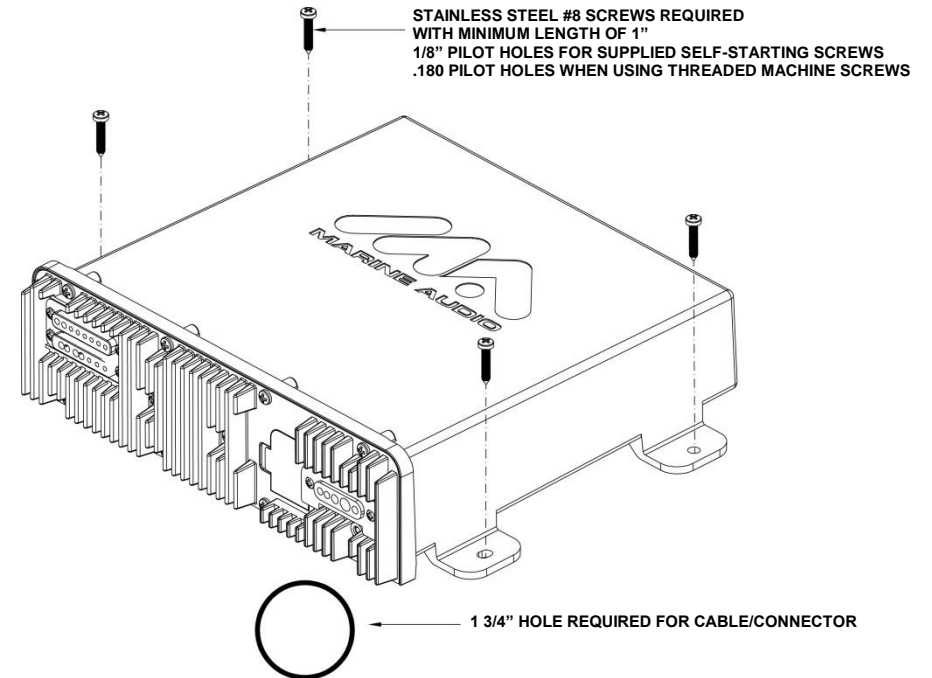
1. Choose a mounting area for the wired commander that is clean and flat, allowing the rear gasket to fully seal to the mounting surface
2. Secure the wired commander using either of the recommended mounting methods detailed in the diagrams below.



Hardware Kit Contents

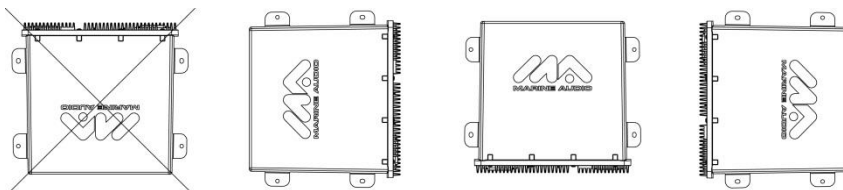


- Using the shortest length of the recommended size screws possible, mount the tuner/amplifier as detailed in the diagram on the right.
- Route the tuner/amplifier harness and cable throughout the vessel as required. Keep some slack in the harness/cables so it won't be too tight, as this can cause damage to the wires.
- Follow the wiring diagram carefully and make certain all connections are secure and insulated with crimp connectors or electrical tape to ensure proper operation.
- After completing the wiring connections, reconnect the negative terminal of the battery and turn the unit on to confirm operation (vessel accessory switch must be on). If the unit does not operate, disconnect battery, recheck all wiring and refer to the trouble-shooting guide located in the back of the manual.



Tuner/Amplifier Mounting

- Choose a mounting area for the tuner/amplifier module that will provide plenty of ventilation to prevent the amplifier from overheating. The tuner/amplifier module can be mounted in the horizontal or vertical position. Please note that when mounting in vertical position, do not mount with the harness exit points facing straight up, as water can collect around the chassis in these areas.

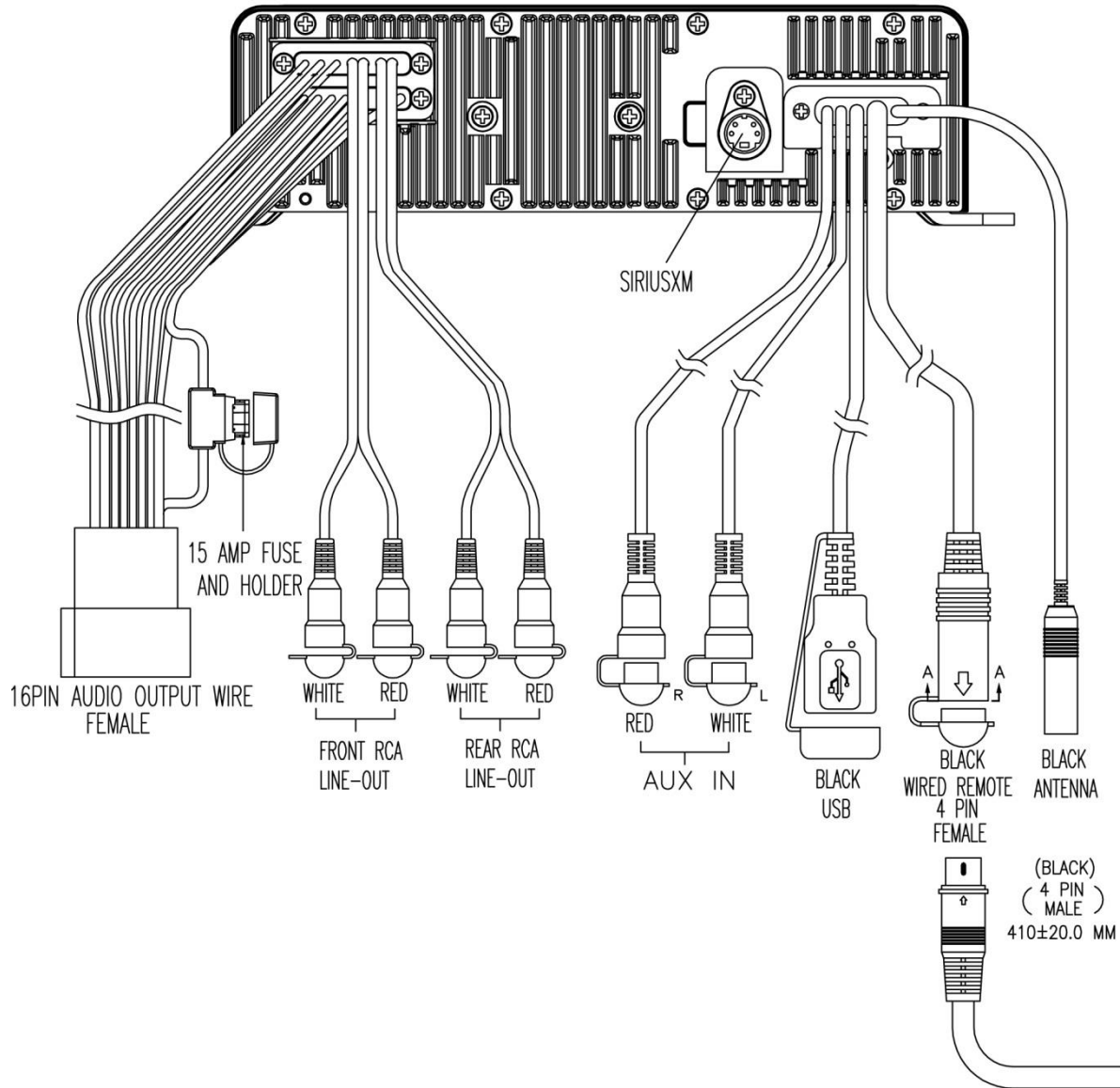


Reconnect Battery

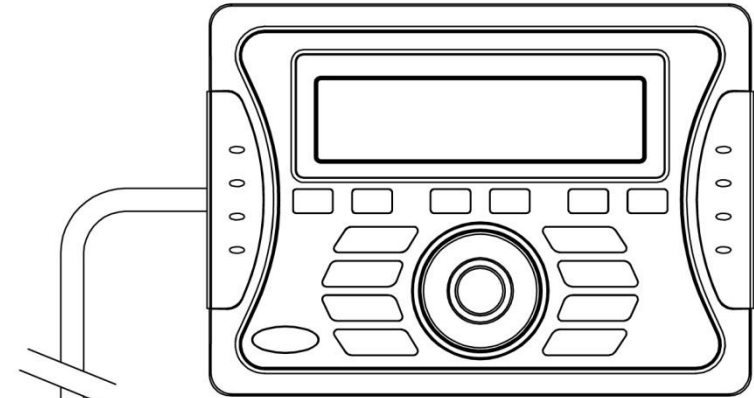
When wiring is completed, reconnect the battery negative terminal.

WIRING

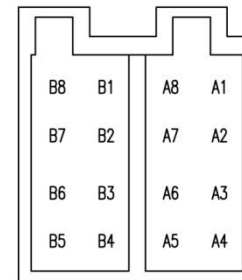
TUNER/AMP MODULE



WIRED COMMANDER

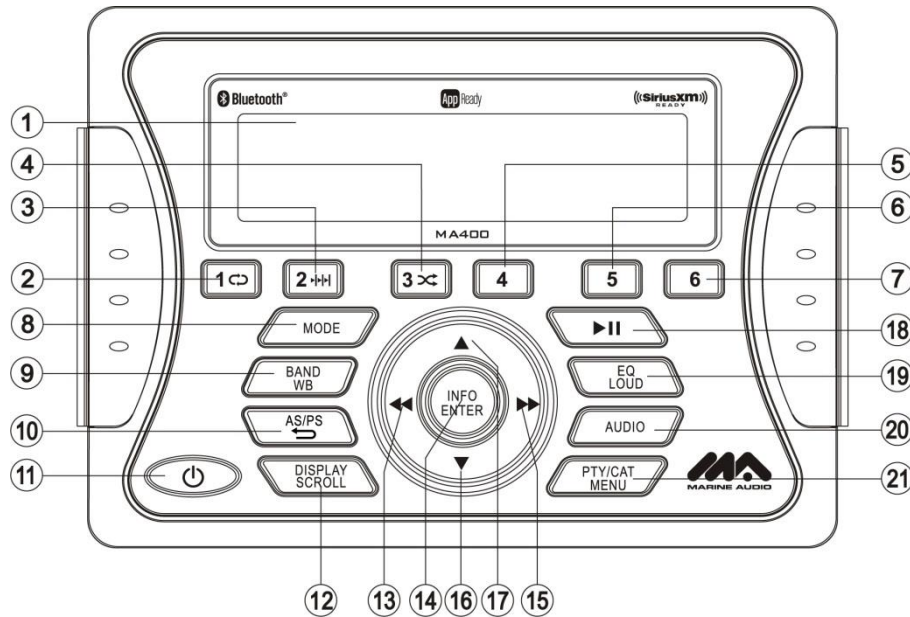


16PIN AUDIO OUTPUT WIRE SOCKET FEMALE
RADIO EXIT VIEW
SCALE 2:1



PIN	COLOR	PIN	COLOR
A1	PURPLE 20#WIRE	B1	N.C
A2	GRAY 20#WIRE	B2	N.C
A3	WHITE 20#WIRE	B3	BLUE 20#WIRE
A4	GREEN 20#WIRE	B4	N.C
A5	GREEN/BLACK 20#WIRE	B5	BLACK 16#WIRE
A6	WHITE/BLACK 20#WIRE	B6	N.C
A7	GRAY/BLACK 20#WIRE	B7	RED 16#WIRE
A8	PURPLE/BLACK 20#WIRE	B8	N.C

BASIC OPERATION

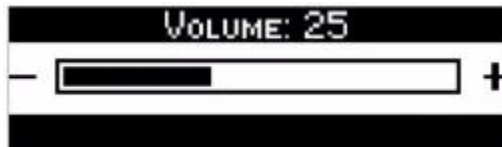


Power On/Off

Press the **POWER** button (11) to turn the unit on. The unit will resume at the last mode (Tuner, Aux, etc.).

Volume Control

To increase the volume, press the ▲ button (17). To decrease the volume, press the ▼ button (16). The maximum volume setting is "40". While adjusting the volume, the LCD displays a bar graph and numerical representation of the level.



Mute

Press the ►|| button (18) to mute the audio output. Press ►|| again to restore the audio output to the previous level.

Mode

Press the **MODE** button (8) on the control panel to select a different mode of operation, as indicated on the display panel. Available modes include Tuner (AM/FM), SiriusXM, iPod/USB, Auxiliary and Bluetooth Audio.

NOTE: SiriusXM and iPod mode will be skipped if the module/device 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 thin metal object to press the **RESET** button located on the tuner box.



You can recover factory default settings using the **RESET** function located on the system menu. With "YES" flashing, press the **MODE** button (8) to activate.

Audio Menu

Press the **AUDIO** button (20) on the control panel to access the audio menu. You can navigate through the audio menu items by pressing the **AUDIO** button repeatedly. Once the desired menu item appears on the display, adjust that option by pressing one of the ▲/▼ buttons (16, 17) 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 ▲/▼ buttons to adjust the Bass level range from "-6" to "+6".

Treble Level

Use the ▲/▼ buttons to adjust the Treble level range from "-6" to "+6".

Balance

Use the ▲/▼ buttons to adjust the Balance between the left and right speakers from "L12" (full left) to "R12" (full right).

Fader

Use the ▲/▼ buttons to adjust the Fader between the rear and front speakers from "R12" (full rear) to "F12" (full front).

System Menu

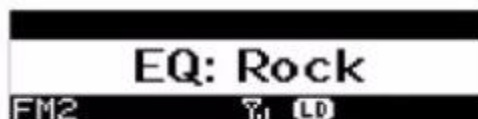
1. Press and hold the **PTY/CAT/MENU** button (21) for more than 2 seconds to enter the system menu. The first menu item, "Key Beep", will appear on the display.
2. Press **▲/▼** buttons (17, 16) repeatedly to navigate the system menu.
3. Press the **INFO/ENTER** button (14) to adjust the highlighted menu item.
4. Press the **PTY/CAT/MENU** button to exit the system menu.

The following items can be adjusted:

- Key Beep (Click/ Beep / Off): Turn the audible beep On/Off (heard when functions/buttons are selected).
- LCD Backlight (1-10): Adjust LCD brightness.
- LCD Contrast (1-10): Adjust LCD contrast.
- Button Backlight (1-10)
- Tuning Region (USA / EUROPE): Set frequency spacing for various regions.
- Bluetooth Setup (Sub Menu, only accessible in Bluetooth mode)
 - BT ON/OFF: Choose "BT ON" or "BT OFF"
 - BT PAIR (ON/OFF): Choose "YES" to automatically pair a previously paired device
 - BT DEVICE (Lock/Unlock, Disconnected/Connect, Delete): View, lock and delete from a list of previously paired mobile devices.
- SXM Satellite Radio (only appear when SiriusXM tuner is connected and in SiriusXM mode)
 - Set Lock Code: _ _ _ _ _
 - Locked Channels: List of Channels (Locked / Unlocked)
 - SXi software Version
- Battery Alarm (Off / On): When On, if the battery supply voltage drops below 10.8V, indicating a possible problem with the vessel's battery charging system, the radio will issue a low battery display warning and an audio beep once per minute. The warning and sound will continue until the unit is turned off or the voltage is restored to more than 10.8 Volts
- Battery Auto-Off (Off / On)
- Reset To Defaults <ENTER>: Press the **INFO/ENTER** button (14) to return the MA400 to factory default set up values.

Equalizer

Press the **EQ/LOUD** button (19) to choose one of the following pre-defined bass and treble curves: USER > FLAT > ROCK > CLASSICAL > POP.



Loudness

Press and hold the **EQ/LOUD** button (19) to toggle 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 a portable audio player to the AUX IN cables on the back of the radio.
2. Press the **MODE** button (8) to select "Auxiliary" mode.
3. Press **MODE** again to exit "Auxiliary" mode and access another mode.

Liquid Crystal Display (LCD)

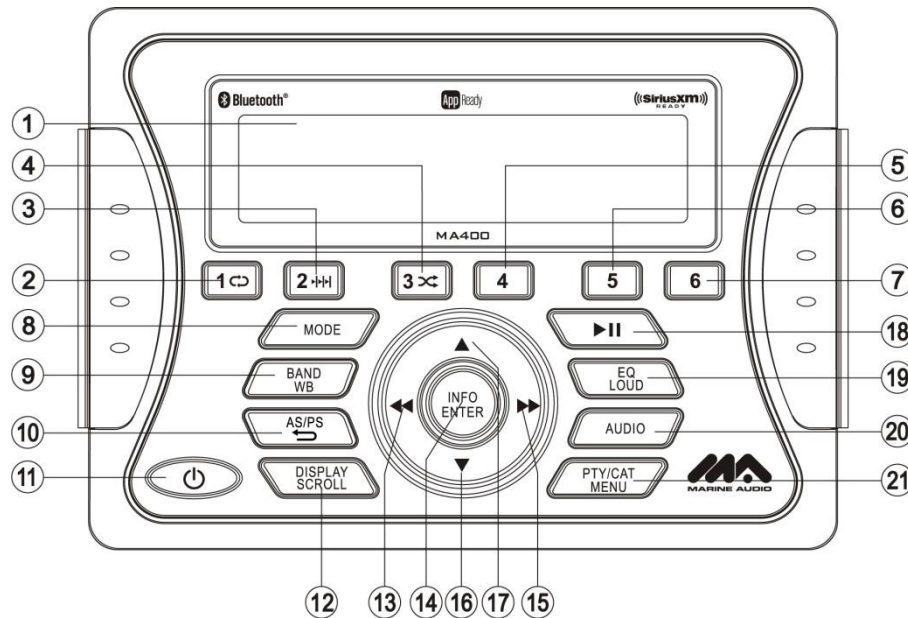
The current frequency and activated functions are shown on the LCD panel (1).

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 moderate range.

Scroll

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

TUNER OPERATION



Select a Band

Press the **MODE** button (8) to change between the FM and AM bands.
Press and hold the **MODE** button to access the Weatherband (WB).

Manual Tuning

Press the **▶▶** / **◀◀** buttons (15, 13) to seek stations up/down step by step.

Auto Seek Tuning

Press and hold the **▶▶** / **◀◀** buttons (15, 13) to automatically seek the next or previous strong station.

NOTE: *Seek tuning is not available for weather band channels. Use the up or down tuning buttons to manually select any of the seven available weather band channels.*

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 1-6 preset button for two seconds. The present number will appear in the display.

Recall a Station

Select a band (if needed). Press a **1-6** preset button to select the corresponding stored station.

Automatically Store / Preset Scan (AS/PS)

Automatically Store

Select an AM or FM band. *Press and hold* the **AS/PS** button (10) for more than 2 seconds to automatically select the 18 strongest stations (12 for AM) in your area. "Storing Presets" appears on the screen and the new stations replace any stations already stored.

Preset Scan

Select a band. Press **AS/PS** button (10) to scan stations stored in the current band. The unit will pause for 5 seconds at each preset station. Press **AS/PS** again to stop scanning when the desired station is reached.

RBDS Operation

This unit is equipped to display RBDS (Radio Broadcast Data Service) information when broadcast by the radio station.

NOTE: *Radio stations broadcasting RBDS may not be available in your listening area.*

In FM radio mode, press the **PTY/CAT/MENU** button (21) to access the PTY menu and choose from the following Program Type (PTY) options: ANY / News / Information / Sports / Talk / Rock / Classic Rock / Adult Hits / Soft Rock / Top 40 / Country / Oldies / Soft / Nostalgia / Jazz / Classical / Rhythm and Blues / Soft Rhythm & Blues / Foreign Language / Religious Music / Religious Talk / Personality / Public /College / Weather / Emergency Test / EMERGENCY!

To search for stations in a PTY category:

1. Press the **PTY/CAT/MENU** button (21) to view the current PTY category.
2. Press the **▶▶** / **◀◀** buttons (15, 13) to move through the list of available categories and select the program type you wish to search.
3. After selecting the desired PTY, press the **INFO/ENTER** button (14) to search the band for broadcasts of this type. "PTY Search" is displayed while the tuner is searching.

NOTE: *Performing a PTY search on "ANY" will Seek Tune and stop on any station broadcasting RBDS, regardless of the program type.*

Weather Band Operation

What is the NOAA Weather Radio/Weatheradio Canada?

NOAA (National Oceanic and Atmospheric Administration) is a nationwide system that broadcasts local weather emergency information 24 hours a day via the National Weather Service (NWS) network. The U.S. network has more than 530 stations covering the 50 states as well as the adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands and the U.S. Pacific Territories. Each local area has its own transmitting station and there are a total of seven broadcasting frequencies used. A similar system is available in Canada under the Weatheradio Canada service administered by Environment Canada.

Tuning to Weatherband

Press and hold the **BAND/WB** button (9) to access the Weatherband. The indication "WB" will appear on the display panel, along with the current number and channel indication: "WB-1", "WB-2", "WB-3", "WB-4", "WB-5", "WB-6" or "WB-7". The seven frequencies are shown in the following table:

Table 1: WB Frequencies

Frequency (MHz)	Preset
162.400	2
162.425	4
162.450	5
162.475	3
162.500	6
162.525	-
162.550	1

The above table also shows which preset button will access the frequency. Note that one frequency cannot be accessed using a preset button. The frequency can only be reached using the tuning controls.

Use the ►►/◀◀ buttons (15, 13) or the preset buttons to tune to each of the seven channels until you find the weatherband station broadcasting in your area.

How many stations can I expect to receive?

Since the broadcasts are local weather and information, the transmission power is usually very low (much less than standard AM or FM stations) so you will usually receive only one station unless you are on the edge of two or more broadcast signals. The most you will receive will be two or three, and that is rare.

Is it possible I won't receive any stations?

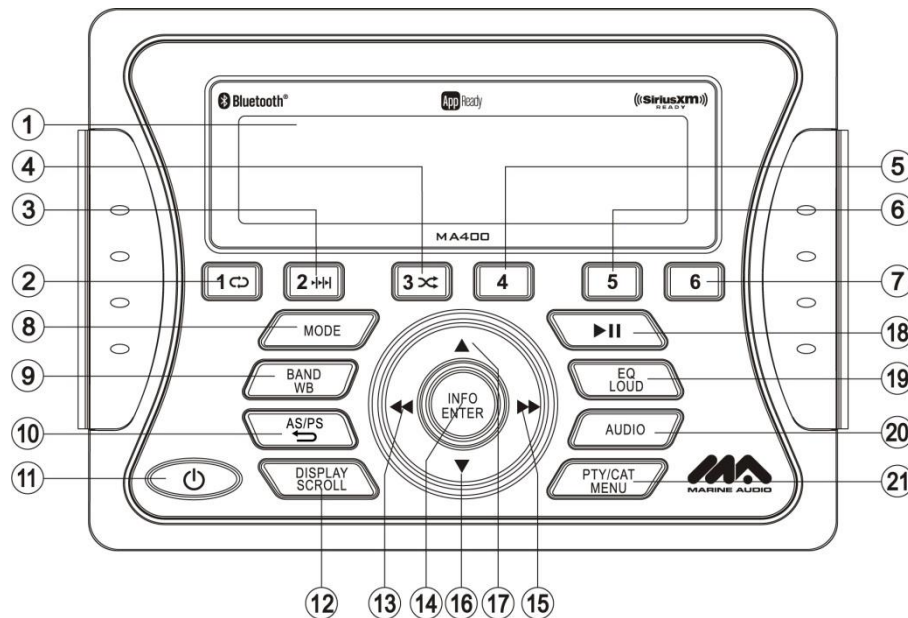
Depending on where you are located, there is a possibility you will receive only a very weak signal or none at all. Also, similar to AM and FM signals, weatherband signals are subject to surrounding conditions, weather, obstructions of the signal by hills or mountains, etc.

MP3/USB OPERATION

If the user connects a USB mass storage device, the radio automatically powers on, if necessary, and switches to digital file playback mode and selects that physical media. Changing modes or turning off the radio pauses playback. Playback will resume exactly where paused when returning to digital file playback mode.

Inserting a USB Device

The wired USB connector is at the rear of the radio. Insert a USB device to automatically access USB mode and begin playback.



Controlling File Playback

Accessing USB Mode

Press the **MODE** button (8) to select USB mode. USB mode will not be selectable unless a USB device is connected.

Selecting Files

Press the **SEEK >>|** (15) or **SEEK |<<** button (13) to advance to the next track/ file in the current folder. The selected track number will appear on the display. *Press and hold* the **▶▶** or **◀◀** button to fast forward or fast reverse. Playback resumes when the button is released.

Play/Pause

Press the **▶||** button (18) to suspend playback. "Pause" is displayed on the screen. Press the **▶||** button again to resume play.

Repeat Play

Press the **1** button (2) during disc play to repeat the current track. Press **1** again to stop repeat play.

Previewing Tracks

Press the **2** button (3) to play the first 10 seconds of each track in the current folder sequentially. Press **2** again to stop Intro Scan and resume normal play at the current track.

Random Play

Press the **3** button (4) during disc play to play all tracks in the current folder in random, shuffled order. Press **3** again to stop random play.

Folder Navigation (MP3 Only)

Press the **PTY/CAT/MENU** button (21) to view a list of all songs in the current folder.

Press the **PTY/CAT/MENU** button again to navigate up through the file structure.

Press the **▲** and **▼** (16, 17) buttons to navigate the list.

Press the **INFO/ENTER** button (14) to play the highlighted song or view files in the selected folder. Continue pressing **INFO/ENTER** until the desired file is selected

The unit will automatically exit the folder navigation menu after 5 seconds of inactivity.

MP3 Specifications

Notes on MP3 Playback

- Any directory that does not include an MP3 file is skipped
- Maximum number of folders: 512 (including skipped directories)
- Maximum number of folder levels: 12
- Maximum number of MP3 files: 999
- Maximum number of characters for MP3 file name and folder name: 32
- Maximum number of Characters of ID3 Tag:
 - ID3 Tag version 1.0: 32
 - ID3 Tag version 2.x: 32

File Playing Order

Files will be continually played sequentially within the current folder. To play songs in another folder, press the **PTY/CAT/MENU** button (21) twice to move up a folder level. Press the **▲** (17) and **▲** (16) buttons to navigate the list and then press the **INFO/ENTER** button (14) to access the selected song or folder.

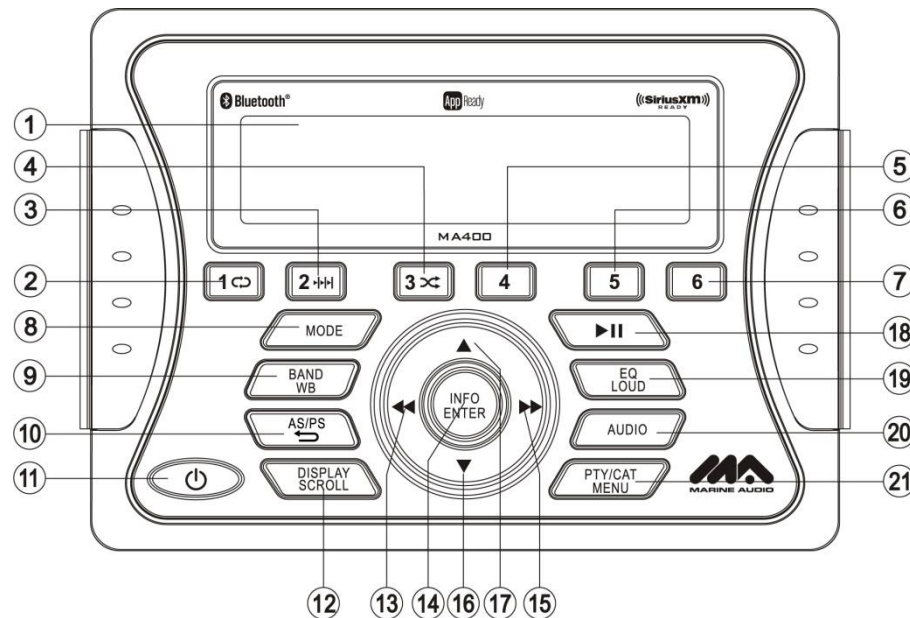
You can set the order in which MP3/WMA are to be played by storing them with their file names beginning with play sequence numbers such as "01" to "99".

SIRIUSXM RADIO OPERATION

About SiriusXM

Sirius, XM and all related marks and logos are trademarks of Sirius XM Radio Inc. and its subsidiaries. Visit www.siriusxm.com/xmlineup for updates. All programming/channel lineup/ XM service subject to change or preemption. All other marks and logos are the property of their respective owners. All rights reserved.

NOTE: The SiriusXM Satellite Radio controls on this unit are available only when an optional SiriusXM Connect Vehicle Tuner is connected.



Accessing SIRIUSXM Mode (Requires optional SIRIUSXM tuner)

Press the **MODE** button (8) as many times as necessary to change the mode to SIRIUSXM radio mode.

Accessing your SIRIUSXM Radio ID

The SiriusXM ID is required for activation. To display your SIRIUSXM radio ID, use the **◀◀** button (13) to tune to channel "000". The screen will display "SIRIUSXM ID" with the ID displayed in the middle of the screen. The SIRIUSXM radio ID is 8 characters long and does not include the letters I, O, S, or F.

Selecting a Band

In SIRIUSXM mode, press the **BAND/WB** button (9) to access the SIRIUSXM user-preset channel groups in the following order: SXM1, SXM2, SXM3.

Category Tuning

1. Press the **PTY/CAT/MENU** button (21) to access Category mode.
2. While in category mode, press **▶▶** OR **◀◀** buttons (15, 13) to choose a category.
3. Press **▲/▼** buttons (17, 16) to choose desired channels in that category. (The current channel number within the chosen category will always be the first channel tuned.)
4. Press the **INFO/ENTER** button (14) to play the highlighted channel and return to channel tuning mode.

Channel Up/Down Tuning

Press the **▶▶/◀◀** buttons (13, 15) to search for a channel. *Press and hold* the **SEEK** buttons to fast search.

Direct Tuning Mode

1. *Press and hold* the **INFO/ENTER** button (14) to enter direct tuning mode.
2. Press **▲/▼** buttons (17, 16) to change the first of three digits for the desired channel in the direct entry screen.
3. Press the **INFO/ENTER** button to confirm the entered digit and move to the second digit field.
4. Press **▲/▼** buttons to select the second digit.
5. Press the **INFO/ENTER** button to confirm the entered digit and move to the third digit field.
6. Press **▲/▼** buttons to select the third digit.
7. Press the **INFO/ENTER** button to confirm the three digit channel and tune to the selected channel.

Storing Preset Channels

The preset buttons (1-6) 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 memory.
2. *Press and hold* a 1-6 preset button until the corresponding preset button number appears.
3. Repeat steps 1 and 2 to program additional channels.

Preset Recall

Press one of the six preset buttons to directly select a preset channel stored in the current band.

Preset Scan

Press **AS/PS** button (10) to scan stations stored in all three user-preset channel groups (SXM1, SXM2 and SXM3). The unit will pause for 10 seconds at each preset station. Press **AS/PS** again

to stop scanning when the desired station is reached.

Preset Tuning

In Preset Tuning Mode, you can use the ►►OR◀◀ buttons (13, 15) to access all 18 preset stations in sequential order.

Alternate Display Mode





Press the **DISP/SCROLL** button (12) to change the display information between single and dual line text display. In dual line mode, both artist and title are available for viewing.

Press and hold the **DISP/SCROLL** button to scroll the Artist/Song Title information.

While in category tuning list mode, press the **DISP/SCROLL** button in sequence to change the display information from Channel Name, Artist, and Song Title.



Satellite Signal Strength

The display will indicate satellite reception strength as shown below.

Signal Strength	Strength Display
No Signal	
Weak	
Good	
Excellent	

Channel Lock

Access Channel Lock through the System Menu under the “SiriusXM Satellite Radio” menu. See “System Menu” on page 8. Select “Set Lock Code”.

1. Enter the default lock code of “0000”. To set the lock code:
 - a. Press the ▲/▼ buttons (17, 16) to enter the first digit of the default code.
 - b. Press the **INFO/ENTER** button (14) to move to the next digit.
 - c. Repeat above steps to enter all 4 digits of the default code.
 - d. Press the ▲/▼ buttons to enter the first digit of the new code.
 - e. Press the **INFO/ENTER** button to move to the next digit.
 - f. Repeat above steps to enter all 4 digits.
 - g. Repeat above steps to confirm the new code.
2. After setting a new four digit code, you can lock channels by entering the “Locked Channels” menu.
3. Upon entering the code, you can navigate the list using the **VOL +/-** buttons to highlight the channels.
4. Press the **INFO/ENTER** button (14) to Lock indicated by a  or Unlock () the selected channel.

Reset SiriusXM Channel Lock Code

If you forget your Parental Control lock code, use the following directions to reset the code to the default “0000”. Resetting the lock code will not affect the locked channels list.

1. In SiriusXM mode, tune to Channel 0
2. Set volume level to 0.
3. Press **Power** button (11) to power off the unit.
4. With power off, press and hold the **Power** button until the system version info is displayed on the screen
5. Press and hold the **Info/Enter** button (14) until display turns off.
6. The lock code has now been reset to “0000”

Advisory Messages Reported by the SiriusXM Vehicle Tuner

On-Screen Display	Advisory Message	Cause	Explanation/Solution
Check Antenna	Check Antenna	The radio has detected a fault with the SiriusXM antenna. The antenna cable is either disconnected or damaged.	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The radio is having difficulty communicating with the SiriusXM Connect Vehicle Tuner. The tuner may be disconnected or damaged. 	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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 "Subscription Updated" – press any key to continue"	Subscription Updated	The radio has detected a change in your SiriusXM subscription status.	<ul style="list-style-type: none"> Press any key to clear the message. No further action is required. Questions about your subscription in the United States please visit www.siriusxm.com/activatenow or call SiriusXM Listener Care at 1-866-635-2349 Questions about your subscription in Canada, please visit www.siriusxm.ca/activatexm or call XM Listener Care at 1-877-438-9677
Chan Unavailable	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.	Visit www.siriusxm.com/channellineup for more information about the SiriusXM channel lineup.
Ch Unsubscribed	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.	<ul style="list-style-type: none"> Questions about your subscription in the United States please visit www.siriusxm.com/activatenow or call SiriusXM Listener Care at 1-866-635-2349. Questions about your subscription in Canada please visit www.siriusxm.ca/activatexm or call XM Listener Care at 1-877-438-9677.

On-Screen Display	Advisory Message	Cause	Explanation/Solution
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 13 for more information on the Parental Control feature and how to access locked channels.
"Enter Code?" followed by ****	Enter Lock Code	User prompted to enter the lock/unlock code.	Enter the four digit code to play the audio.
Wrong Code	Invalid Lock Code	The unlock code entered by the user is incorrect	Input the correct four digit code to unlock the channel. Reset lock code to default following instructions on page 13.

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 models are supported:

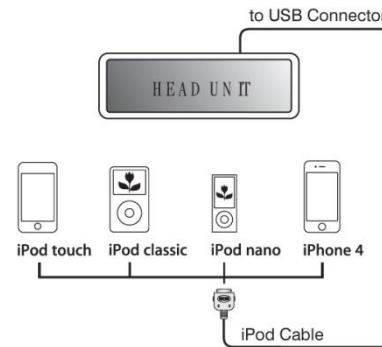
- iPod Nano 5G, 6G, 7G
- iPod Classic
- iPod Touch 3G, 4G, 5G
- iPhone 4, 4S, 5, 5C, 5S

NOTE: Earlier model iPod's are not supported because they do not implement the required 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

The unit will automatically switch to iPod mode when an iPod is plugged into the iPod cable. To return to the iPod menu from any other source, press the **MODE** button (8) on the control panel or remote control until "iPod" appears on the display.

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



Controlling Playback

Pausing Playback

During playback, press the **PAUSE** button (18) to pause playback. "Pause" will appear on the LCD. Press **PAUSE** button again to resume playback.

Repeat Play

During playback, press the **1** button (2) to repeat the current song. "Repeat" will appear on the LCD. Press **1** again to stop repeat playback.

Random Play

During playback, press the **3** button (4) to play all songs in the current category in random order. Random play will begin once the current song has finished playing. "Shuffle" will appear on the LCD. Press **3** again to stop random playback.

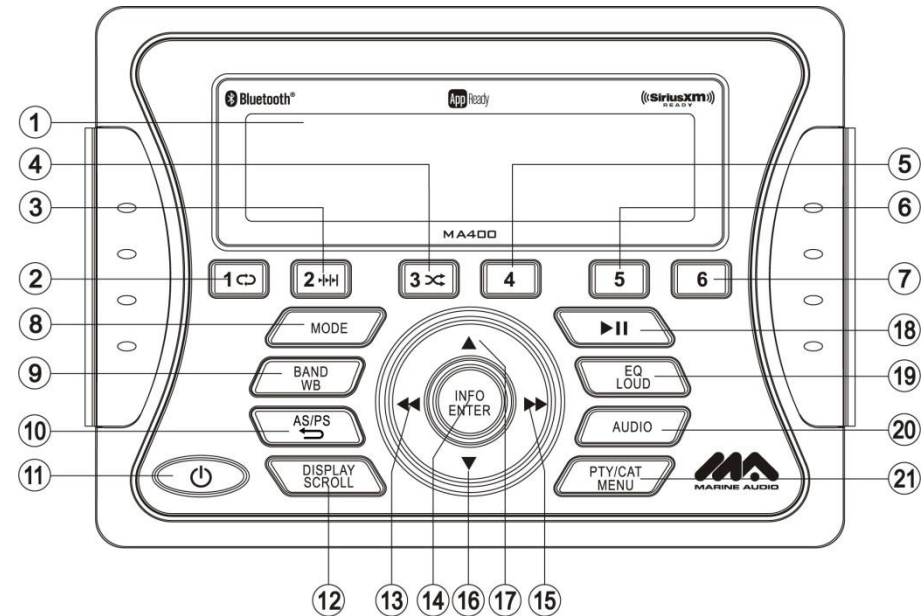
Selecting Tracks

During playback, press the **SEEK** \ll button (15) to play the previous or next track in the current category. Press the **SEEK** \ll button (13) once to play the song from the start position or

press **SEEK** \ll button twice to play the previous track.

Press and hold the **SEEK** \ll buttons (13, 15) to fast reverse/forward the song.

NOTE: If you press and hold the SEEK \ll or \gg button to change the current song to the previous/next song, you will exit fast reverse/forward mode.



Alternate Display Mode

Press the **DISPLAY/SCROLL** button (12) to change the display information between single and dual line text display. In dual line mode, both artist and title are available for viewing.

Playlist Search

Press the **PTY/CAT/MENU** button (21) to access Playlist selection mode. While in Category mode, press the $\blacktriangle/\blacktriangledown$ buttons (17, 16) to choose file search by Playlist, Artist, Album, Genre, Song, Audiobook or Podcast. Press the **INFO/ENTER** button (14) to select the search mode. Use the $\blacktriangle/\blacktriangledown$ buttons (17, 16) buttons to search the available files on the iPod. Press the **INFO/ENTER** button to play the selected song or file.

BLUETOOTH OPERATION

The MA400 includes built-in Bluetooth technology that allows you to connect this head unit to Bluetooth-enabled devices for streaming audio playback.

About Bluetooth Technology

Bluetooth wireless technology is a short-range wireless radio protocol. Operating in the 2.4 GHz range, it transmits voice and data at speeds up to 2.1 Mbit/s over a range of up to 10 meters.

Bluetooth Menu Options

NOTE: Please note that some Bluetooth menu options are only available while the unit is in Bluetooth Audio mode.

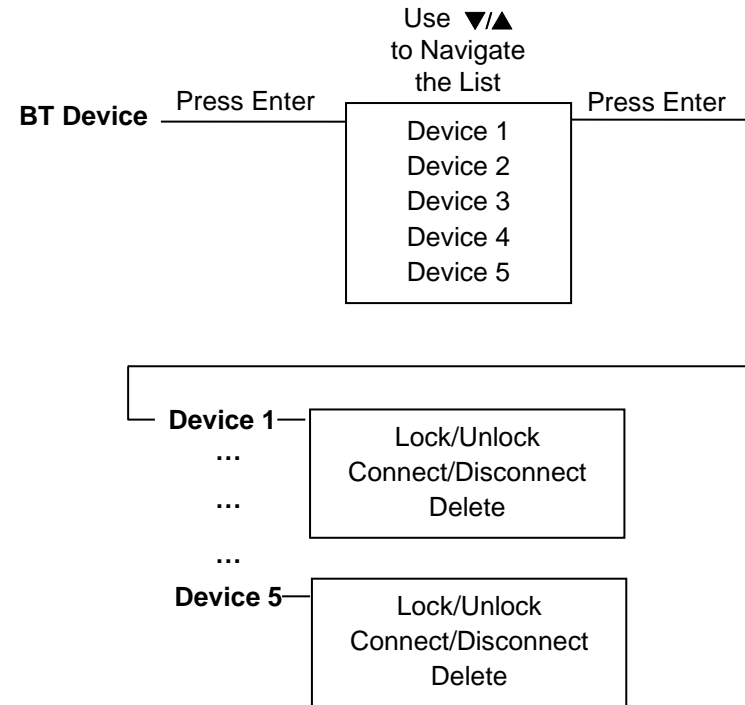
Press and hold the **PTY/CAT/MENU** button (21) to enter menu adjustment mode. Repeatedly press the **▲/▼** buttons (17, 16) to access the following Bluetooth Menu options:

- **BT ON/OFF:** Press the **▲/▼** buttons to choose "BT ON" or "BT OFF", then press the **ENTER** button (14) to select.
- **BT PAIR:** Press the **▲/▼** buttons to choose "ON" or "OFF", then press the **ENTER** button to start pairing mode.
- **BT DEVICE:** Press the **ENTER** button to view a list of previously paired mobile devices. Press the **▲/▼** buttons to view devices from the list. You cannot delete a device that is actively connected. Press the **ENTER** button to select the device. Press the **▲/▼** button to choose Lock/Unlock, Disconnect or Delete for this device.
 - **LOCK/UNLOCK:** The MA400 can store up to 5 devices for Bluetooth connection. The devices are stored in FIFO (First In First Out) order. To prevent a device from being bumped from the list when more than 5 devices are used, you must lock the device. To Lock/Unlock a device, press the **ENTER** button to display/change the Locked (🔒) or Unlocked (🔓) icon.
 - **DISCONNECT:** To disconnect a paired device, press the **ENTER** button to temporarily remove the Bluetooth link. The link can be re-established through your phone menu by selecting the MA400 for connection.
 - **DELETE:** To delete a device from the list, press the **ENTER** button.

Pairing a Bluetooth Device

Before you begin, consult the owner's manual for the Bluetooth device you want to pair with the MA400.

1. Make sure the device is on and ready to receive a signal from the MA400. With the MA400 in Bluetooth Audio mode, choose BT Pair from the MA400 menu and press the **▲** button to select ON. The unit is waiting to connect to a mobile phone device. With the BT function of the mobile device turned on, search for a Bluetooth device.
2. When the Bluetooth device has completed its search, the mobile phone will display the Bluetooth device name (MA400).



3. Select MA400. The BT AUDIO icon (🎵) on the radio LCD will display.
4. Enter the pairing password (0000), if requested.

After connecting successfully, you will be able to listen to music stored on your Bluetooth enabled device through the radio.

Answering a Call

When answering a call using a connected phone, Bluetooth audio playback will pause. After hanging up from the call, Bluetooth audio playback will resume on most devices. It may be necessary to press the play button on your device to resume playback.

BT Audio (A2DP)

The A2DP music is available for Bluetooth enabled phones when the phone is connected. To access Bluetooth mode and play songs stored on your phone, press the **MODE** button (8). While in Bluetooth mode, the Bluetooth Audio icon (🎵) will be illuminated on the LCD.

Selecting Tracks

During playback, press the ►►/◀◀ button (13, 15) to play the previous or next track.

Pausing Playback

During playback, press the ►|| button (18) to pause the Bluetooth audio playback. "A2DP ||" will appear on the lower left corner LCD. Press ►|| button again to resume playback.

If you change to another mode, the mobile device audio will pause. Press the **MODE** button (8) to return to Bluetooth mode and resume mobile phone audio playback.

NOTE: If a Bluetooth device is disconnected due to the power being turned off or if the device is out of range, the unit will automatically search for the matching Bluetooth mobile device when the power is restored.

APP OPERATION

MARINE AUDIO® Specialty Controller is the ultimate wireless remote control for your MARINE AUDIO stereo system. Store away your old remotes and enjoy the convenience of all the primary functions of your MARINE AUDIO stereo right from your phone or tablet by transforming your mobile device into a functional stereo remote control!

Features

This app controls all of the primary functions of your stereo features including:

- Power on/off
- Volume and mute
- AM/FM radio tuner: access station, recall, store presets, switch songs
- Bluetooth® streaming audio
- File structure visibility, track selection, track audible scan up and down via USB
- iPod/iPhone/iPad® control capabilities via USB
- Auxiliary audio input control –auxiliary analog 1
- Audio menu controls- bass, treble, balance, fader, equalizer and volume
- Visual display feedback so you can see artist title and album on your mobile screen

Connecting and using MARINE AUDIO app

After downloading and installing MARINE AUDIO app on your apple device, pair your device to the MA400 as stated above for Bluetooth pairing. Once your device is paired you can open the app and use as instructed with the MARINE AUDIO app manual found at <http://asaelectronics.com/manuals-guides>.

When MARINE AUDIO is installed on Android operating system, close the app before Bluetooth pairing, otherwise there may be errors on Bluetooth connection.

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 receive at great distance. This is because broadcasting signals follow the curvature of the earth and are reflected back by the upper atmosphere.

TROUBLESHOOTING

Symptom	Cause	Solution
No power	The vessel's accessory switch is not on	If the power supply is properly connected to the vessel's accessory terminal, switch the ignition key to "ACC"
	Fuse is blown	Replace the fuse
No sound	Volume too low	Adjust volume to audible level
	Wiring is not properly connected	Check wiring connections
The operation keys do not work	The built-in microcomputer is not operating properly due to noise	Press the RESET button
Cannot tune to radio station, auto-seek does not work	The antenna cable is not connected	Insert the antenna cable firmly
	Signals are too weak.	Select a station manually

SPECIFICATIONS

FM Radio

Frequency Coverage (USA)	87.5 to 107.9 MHz
Frequency Coverage (Europe)	87.5 to 108 MHz
Sensitivity (S/N=30dB)	4 μ V
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 Ω ohms per channel
Tone Controls:	
Bass (at 100 Hz)	\pm 10 dB
Treble (at 10 kHz)	\pm 10 dB
Power Output	50W x 4
Current Drain	15 Ampere (max.)
Commander Dimensions	5.15" (W) x 1.2" (D) x 3.7" (H)
Tuner/Amp Dimensions	8.35" (W) x 6.55" (D) x 2.4" (H)

FCC Notes

WARNING! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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