MA200

MARINE AUDIO SYSTEM

Installation and Operation Manual

CONTENTS

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www.asaelectronics.com
877.305.0445

WARNINGS AND COMPLIANCE

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Portable Cart Warning

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power -supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING! To reduce the risk of fire of electric shock, do not expose this apparatus to rain or moisture.

WARNING! The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.

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

NOTE: USE THE PROPER POWER SUPPLY! This product is designed to operate with a12 volt DC negative ground battery system.

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.
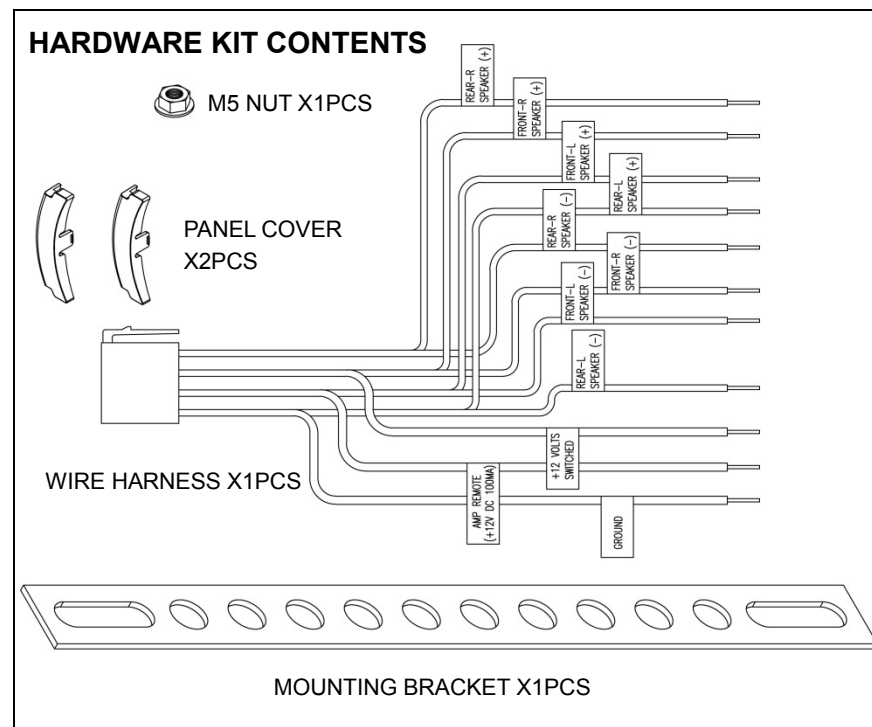*   Consult the dealer or an experienced radio/TV technician for help.

INTRODUCTION

System Features

Features of the Marine Audio MA200 marine audio system include:

- White LED Backlit LCD
- iPX5 Waterproof (after installation)
- Low Battery Alarm
- AM/FM US/EURO Tuner with 30 Presets (12 AM, 18 FM)
- Bluetooth (Supports A2DP and AVRCP)
- USB Playback of MP3/WMA files with iPod/iPhone 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 (MWR150 and MWR75 sold separately)
- 2-Channel Pre-amp Line Level Outputs
- Auxiliary Audio Input (Rear RCA)

Content List

- Marine Audio MA200 Radio
- Wire Harness
- Hardware Kit
- Owner's Manual

HARDWARE KIT CONTENTS

M5 NUT X1PCS

PANEL COVER
X2PCS

WIRE HARNESS X1PCS

REAR–R SPEAKER (+)
FRONT–R SPEAKER (+)
FRONT–L SPEAKER (+)
REAR–L SPEAKER (+)
REAR–R SPEAKER (–)
FRONT–R SPEAKER (–)
FRONT–L SPEAKER (–)
REAR–L SPEAKER (–)
+12 VOLTS SWITCHED
AMP REMOTE (+12V DC 100MA)
GROUND

MOUNTING BRACKET X1PCS

SAFETY INFORMATION

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

Protect from Water
Do not submerge the product in water, as this can cause electric shorts, fire or other damage.

Protect from the Elements
Use the included cover to protect the wired commander from sunlight, dust, and water while not in use.

Protect from High Temperatures
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.

CAUTION:
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 AND INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES.

INSTALLATION

Before You Begin

Before you begin, always disconnect the negative battery 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 if installation requires the drilling of holes or other modifications to your vessel.
- Install the unit where it does not interfere with operating the vessel 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.

Front Mount

1. Check the dashboard opening size by sliding the radio into it. If the opening is not large enough, carefully cut or file as necessary until the radio slides into the opening. Check that there will be sufficient space behind the dashboard for the radio chassis.
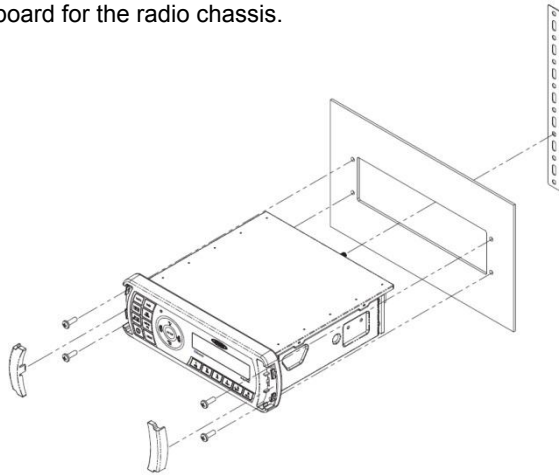
CAUTION: The rear of the radio must be supported with the strap to prevent damage to the radio and supporting structures.

2. Place the radio in front of the dashboard opening so the wiring can be brought through the opening.
3. Follow the wiring diagram carefully and make certain all connections are secure to ensure proper operation.
4. 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.
5. Carefully slide the radio into the opening, making sure it is right-side-up.
6. Secure the radio to the dashboard using the M5 x 25mm screws provided.
7. Replace the covers on either side of the radio.
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.
9. Test radio operation by referring to the operating instructions for the unit.
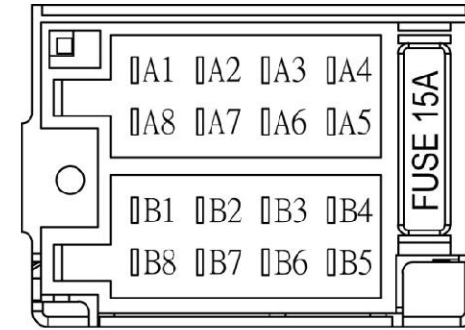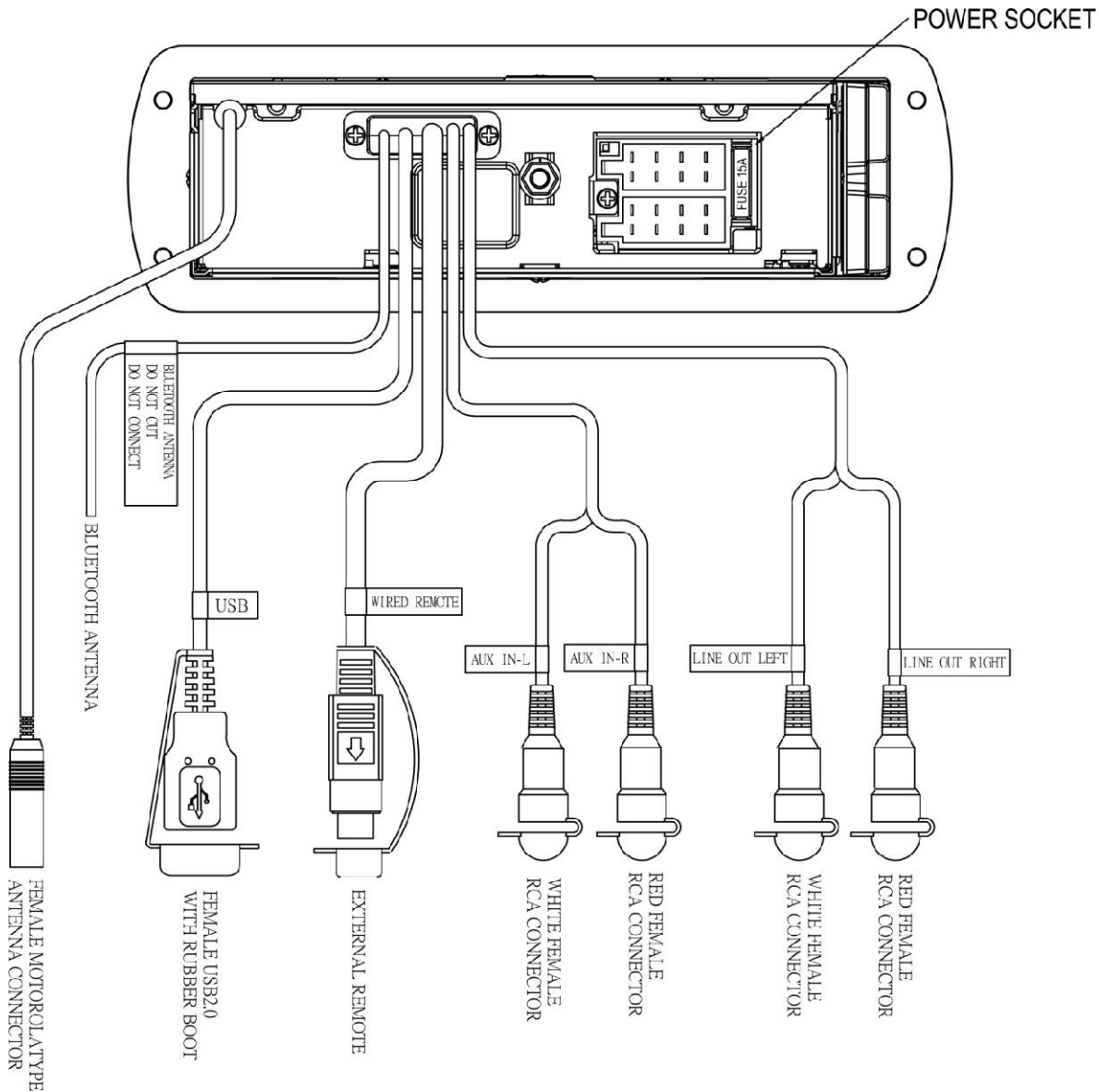
Removing the Unit

To remove the radio after installation, remove the covers, unscrew the installation screws and pull the radio out.

Removing Battery

When wiring is complete, reconnect the battery negative terminal.

WIRING

POWER SOCKET

FUSE 15A

A1 A2 A3 A4
A8 A7 A6 A5

B1 B2 B3 B4
B8 B7 B6 B5

2:1

BLUETOOTH ANTENNA
DO NOT CUT
DO NOT CONNECT

USB

WIRED REMOTE

AUX IN-L   AUX IN-R

LINE OUT LEFT   LINE OUT RIGHT

BLUETOOTH ANTENNA

FEMALE MOTOROLATYPE
ANTENNA CONNECTOR

FEMALE USB2.0
WITH RUBBER BOOT

EXTERNAL REMOTE

WHITE FEMALE
RCA CONNECTOR

RED FEMALE
RCA CONNECTOR

WHITE FEMALE
RCA CONNECTOR

RED FEMALE
RCA CONNECTOR

POWER SOCKET
SHOWN FROM PIN VIEW

PIN	DESCRIPTION	WIRE COLOR
A1	RIGHT REAR SPEAKERS (+)	PURPLE
A2	RIGHT FRONT SPEAKERS (+)	GRAY
A3	LEFT FRONT SPEAKERS (+)	WHITE
A4	LEFT REAR SPEAKERS (+)	GREEN
A5	LEFT REAR SPEAKERS (-)	GREEN/BLACK
A6	LEFT FRONT SPEAKERS (-)	WHITE/BLACK
A7	RIGHT FRONT SPEAKERS (-)	GRAY/BLACK
A8	RIGHT REAR SPEAKERS (-)	PURPLE/BLACK
B1	NO CONNECTION	EMPTY
B2	NO CONNECTION	EMPTY
B3	AMP REMOTE (+12VDC 100mA)	BLUE
B4	NO CONNECTION	EMPTY
B5	GROUND	BLACK
B6	NO CONNECTION	EMPTY
B7	+12VDC SWITCHED	RED
B8	NO CONNECTION	EMPTY

BASIC OPERATION
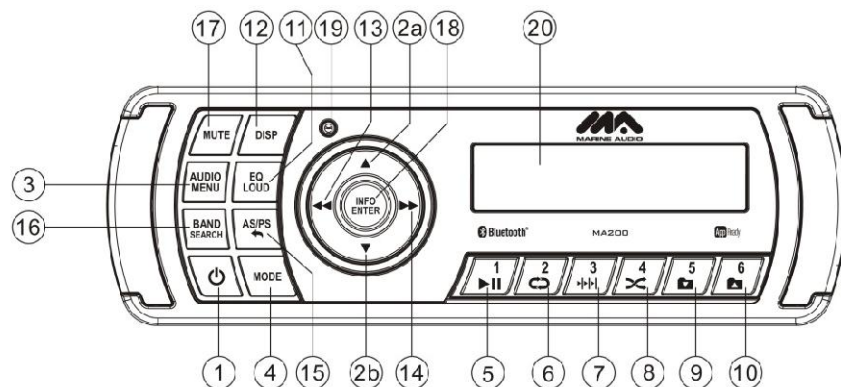
Power On/Off

Press any button on the front panel to turn the unit on. Press the power button (1) to turn the unit on/off.

Volume Control

To increase the volume, press the **VOL+** button (2a). To decrease the volume, press the **VOL-** 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** button (4) on the control panel to select a different mode of operation, as indicated on the display panel. Available modes include Tuner, iPod, USB, AUX In (optional Auxiliary Input) and BT Audio.

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 (19). This may be necessary should the unit display an error code.

You can recover factory default settings using the RESET function located on the system menu. With "RESET" flashing, press the **INFO/ENTER** button (18) 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 **VOL+/-** 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 **VOL** buttons to adjust the Bass level range from "-6" to "+6".

Treble Level

Use the **VOL** buttons to adjust the Treble level range from "-6" to "+6".

Balance

Use the **VOL** buttons to adjust the Balance between the left and right speakers from "L12" (full left) to "R12" (full right).

Fader

Use the **VOL** 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 **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 ►► or ◄◄ button (14, 13) or press the **AUDIO/MENU** button repeatedly to navigate the system menu and select the desired item.
3. Press the **VOL+/-** buttons (2) to adjust the selected menu item.
4. Press the **AS/PS** button (15) to return to the previous operation.

The following items can be adjusted:
- CONTRAST (00 – 10): Set LCD contrast.
- LOW BATT (ON/OFF): Monitor voltage on ACC line.
- DISTANT/LOC: "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 (USA/Latin/Europe): Set frequency spacing for various regions.
- VOL PGM (00 – 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.*
- LCD BRIT (01-10): Adjust LCD brightness.

- 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, Disconnect/Connect, Delete): View, lock and delete from a list of previously paired mobile phone device models.
- RESET: Return the EEPROM to factory default set up values. "RESET" will blink on the
- LCD to confirm. Press the **INFO/ENTER** button (18) to select.

NOTE: BT Pair and BT Device menu options are only available while in the BT mode.

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 (+/- 0.3V). 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 > CLAS > 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 cables routed from the rear of the radio.
2. Press the **MODE** button (4) twice to view the AUX option.
3. Press **MODE** again to cancel Aux In mode and switch to the next mode

Liquid Crystal Display (LCD)

The current frequency and activated functions are shown on the LCD panel (20).

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.
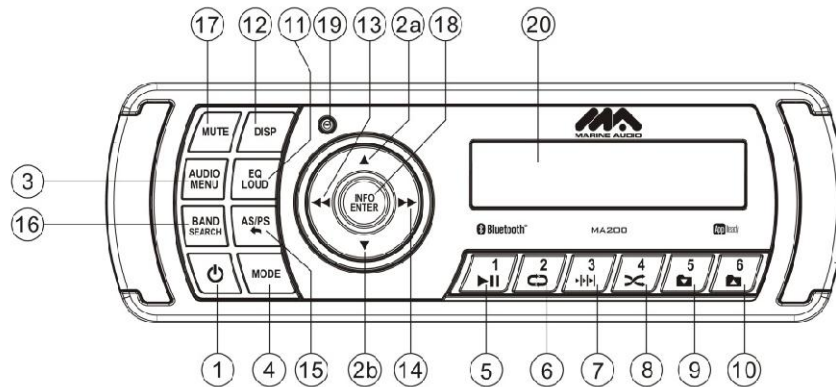
Quick Exit Hot Key

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 ►► or ◄◄ buttons (14, 13) to seek stations up/down step by step.

Auto Seek Tuning

Press and hold the ►► or ◄◄ buttons (14, 13) 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.

MP3/USB OPERATION
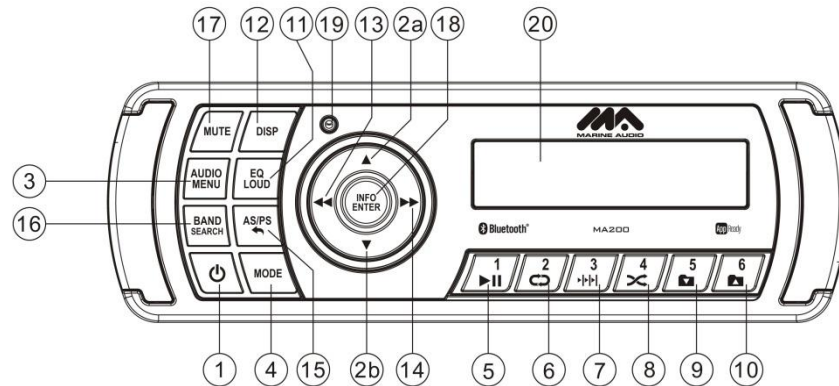
MP3 Specifications

- A 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
- Sampling frequency: 16KHz, 22.05KHz, 24KHz, 32KHz, 44.1KHz, 48KHz.
- Bit rates: maximum 384 Kbps.
- Maximum number of Characters of ID3 Tag:
- ID3 Tag version 1.0: 32
- ID3 Tag version 2.x: 32

NOTE: USB flash drives with a capacity of up to 64 GB are supported.

Inserting and Removing a USB Device

Inserting a USB Device

Insert the USB device into the USB connector routed from the rear of the radio and display will show the "Loading…" message. The unit will read the files on the USB device automatically.

Removing a USB Device

Press the **MODE** button (4) to select another mode and then remove the USB device from the USB connector.

NOTE: After loading a USB device, files and folders are accessed in the order in which they were written to the device. Therefore, the playing order may not be the same as the order in which they are expected to be played.

Controlling Playback

Pause/Play

Press the **1 >/||** button (5) to suspend playback. Press the **1 >/||** button again to resume play.

Track Select

Press the ►► or ◄◄ buttons (14, 13) 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.

Repeat (RPT)

Press the **2 RPT** button (6) to repeatedly play the current file. Press **2 RPT** again to repeat all songs in the current folder. Press **2 RPT** a third time to resume normal playback.

Intro Scan (INT)

Press the **3 INT** button (7) once to play the first 10 seconds of each file in the current folder. Press **3 INT** again to play the first 10 seconds of each file on the current device. When the desired file is reached, press **3 INT** a third time to end the scan and play the selected file.

Random (RDM)

Press the **4 RDM** button (8) to randomly play all files in the current folder. Press **4 RDM** again to randomly play all files on the device. Press **4 RDM** a third time to resume normal playback.

Navigating Folders

Press the **5** button (9) to move to the previous folder and begin playback of the first song in the folder. Press the **6** button (10) to advance to the next folder and begin playback of the first song in the folder.

Alternate Display Information

Press the **DISP** button (12) to change the display information in the following order: ALBUM >SONG TITLE > ARTIST > FILE X of Y > ALBUM.

MP3/WMA Directory Search

1. Press the **BAND/SEARCH** button (16) to enter directory search mode.
2. Press the **ENTER** button (18) to confirm search mode. The LCD will display the folder list.
3. Navigate the folder list by pressing the **VOL +/-** buttons (2).
4. Press the **ENTER** button to select a folder. The LCD will display the list of files within that folder.
5. Navigate the file list by pressing the **VOL +/-** buttons.
6. Press the **ENTER** button to select a file.
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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 – 6G, 7G
- iPod Classic
- iPod Touch – 4G, 5G
- iPhone – 4, 4S, 5, 5C, 5S

NOTE: Earlier model iPods may not be supported because they do not implement the USB control protocol. 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
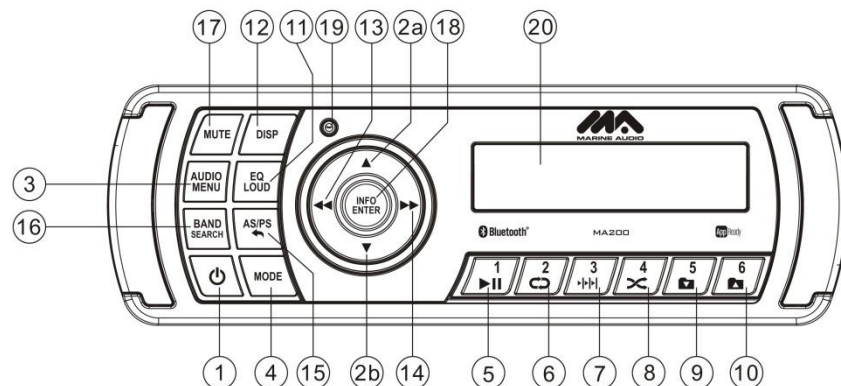
Connect a supported iPod or iPhone to the USB connector. The iPod icon illuminates in the bottom right left corner of the LCD whenever an iPod or iPhone is attached to the USB connector. Music playback begins automatically.

To enter iPod mode from any other source, press the **MODE** 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 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 ►►button (14) to play the next track in the current category. Press the ◄◄ button (13) twice to play the previous track. After the first 2 seconds of the playback. *Press and hold* the ◄◄ / ►► buttons to fast reverse/forward the song.

Pausing Playback

During playback, press the **1/►||** button (5) to pause playback. "Pause" will appear on the LCD. Press **1/►||** button again to resume playback.

Repeat Play

During playback, press the **2** button (6) to repeat the current song. "REPEA" will appear on the LCD. Press **2** again to stop repeat playback.

Random Play

During playback, press the **4** button (8) 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** again to stop random playback.

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

Alternate Display Information

Press the **DISP** button (12) to change the display information in the following order: ARTIST >TITLE > FOLDER > FILE NAME > ARTIST.

Search Mode

Press and hold the **BAND/SEARCH** button (16) 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 **INFO ENTER** button (18) to confirm selection. Use the **VOL +/-** button (2) to navigate through various list selections. Press **INFO/ENTER** (18) to make your final selection.

BLUETOOTH OPERATION

The MA200 includes built-in Bluetooth technology that allows you to wirelessly connect Bluetooth devices to this head unit for streaming audio playback.

About Bluetooth Technology

Bluetooth 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 BT menu options are only available while the unit is in BT Audio mode

Press and hold the **AUDIO/MENU** button (3) to enter menu adjustment mode. Repeatedly press the **AUDIO/MENU** button to access the following Bluetooth Menu options:

- **BT ON/OFF**: Press the **VOL+** or **VOL-** button (2) to choose "BT ON" or "BT OFF",
- **BT PAIR**: Press the **VOL+** or **VOL-** button to choose "ON" or "OFF", and then press the **INFO/ENTER** button to enter the selection.
- **BT DEVICE**: Press the **INFO/ENTER** button to view devices from the list. Press the **VOL+** or **VOL-** buttons (2a, 2b) to view a list of previously paired mobile devices. Press the **INFO/ENTER** button to select the device. Press the **VOL+** or **VOL-** button to choose Lock/Unlock, Disconnect or Delete for this device. You cannot delete a device that is actively connected.
  -
  - **LOCK/UNLOCK**: The MA200 can store up to 5 devices for BT 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 **INFO/ENTER** button to display/change the Locked ( ) or Unlocked ( ) icon.
  - **DISCONNECT**: To disconnect a paired device, press the **INFO/ENTER** button to temporarily remove the BT link. The link can be re-established through your phone menu by selecting the MA200 for connection.
  - **DELETE**: To delete a device from the list, press the **INFO/ENTER** button.
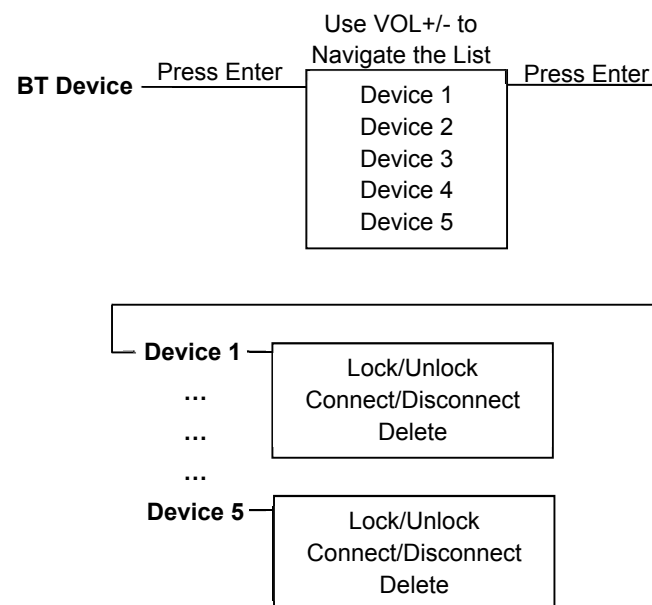
Pairing a Bluetooth Device

Before you begin, consult the owner's manual for the Bluetooth device you want to pair with the MA200.

1. Make sure the device is on and ready to receive a signal from the MA200. With the MA200 in BT Audio mode, choose BT PAIR from the MA200 menu and press the **VOL-** button to select ON. The unit is waiting to connect to a mobile 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 device will display the Bluetooth device name (MA200).
3. Select MA200. The Bluetooth Audio icon (♫) will show on the radio LCD display.
4. Enter the pairing password (0000), if requested.

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

Receiving a Call While Listening to Music

When answering a call using a connected phone, BT AUDIO will pause. After hanging up from the call, BT AUDIO will continue on some phones. It may be necessary to press the play button to resume BT AUDIO.

BT Audio (A2DP)

When connected, a Bluetooth enabled device is able to stream audio to the MA200. To access Bluetooth mode and play songs stored on your phone, press the **MODE** button (4). While in BT mode ⑧, the BT AUDIO icon (♫) illuminates on the LCD.

Selecting Tracks

During playback, press the ◄◄ / ►► buttons (13, 14) to play the previous or next track.

Pausing Playback

During playback, press the **1/►||** button (5) to pause the BT AUDIO player. "BT AUDIO ||" will appear on the LCD. Press **1/►||** again to resume playback.

If you change to another mode, the mobile phone audio will pause. Press the **MODE** button (4) to return to BT 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 disconnected inadvertently, the unit will automatically search for the matching Bluetooth 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, 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 MA200 as stated above for Bluetooth paring. 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 is too low	Adjust volume to audible level
	Wiring is not properly connected	Check wiring connections
The Operation keys do not work	Wired commander is not properly installed	Check wired commander installation and connection
	Built-in microcontroller is not operating properly	Press the **RESET** button located on the back of the Tuner/Amp Module

SPECIFICATIONS

FM Radio

Frequency Coverage (USA) . . . . 87.5 to 107.9 MHz

Frequency Coverage (Europe) . . . . .87.5 to 108 MHz

Sensitivity (S/N = 30dB) 4uV

Image Rejection . . . .>45 dB

Stereo Separation   . . . .>25 dB

AM/MW

Frequency Coverage (USA) . . . . .530-1710 kHz

Frequency Coverage (Latin) . . . . .520-1620 kHz

Frequency Coverage (Europe) . . . . .522-1620 kHz

Sensitivity (S/N = 20dB) 30dB

General

Operating Voltage . . . . .DC 12 Volts

Grounding System   . . . . Negative Ground

Speaker Impedance . . . . 4-8 ohms per channel

Tone Controls:

    Bass (at 100 Hz) . . . .±14dB

    Treble (at 10 kHz) . . . .±13dB

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)

MARINE AUDIO