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WARNINGS AND COMPLIANCE

Important Safety Instructions

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

NOTE: USE THE PROPER POWER SUPPLY! This product is designed to operate with a 12 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 MA300 include:
- White LED Backlit LCD
- iPX6 Waterproof
- Low Battery Alarm
- AM/FM US/EURO Tuner with 30 Presets (12 AM, 18 FM)
- Weatherband with Weather Alert
- Bluetooth (Supports A2DP and AVRCP)
- APP Ready
- USB Playback of MP3/WMA Files
- Mute
- Pre-set Equalizer - 5 settings (User > Flat > Pop > Classical > Rock)
- Electronic Bass, Treble, Balance and Fader Controls
- Output Power 22W x 4
- Wired Remote Control Ready (only supports MARC100)
- 2-Channel Pre-amp Line Level Outputs
- Auxiliary Audio Input (Rear RCA)

Content List
- Marine Audio MA300 Radio
- Installation Opening Cutout Template
- M4 x 0.7 Screws (x4)
**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.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications to your vehicle.
- Install the unit where it does not interfere with diving and cannot injure passengers if there is a sudden or emergency stop.

**Front Mount**

1. Use the included template to cut the installation opening.
2. 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.
3. Place the radio in front of the dashboard opening so the wiring can be brought through the opening.
4. Follow the wiring diagram carefully and make certain all connections are secure to ensure proper operation.
5. After completing the wiring connections, temporarily reconnect the battery terminal and turn the unit on to confirm operation (vehicle 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.
6. Carefully slide the radio into the opening, making sure it is right-side-up.
7. Secure the radio to the dashboard using #6 stainless steel pan head screws (not provided).
8. Replace the covers on either side of the radio.
9. Test radio operation by referring to the operating instructions for the unit.

**Removing the Unit**

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

**Reconnect Battery**

When wiring is complete, reconnect the battery negative terminal.

**Bracket Mount**

The VOSHD4MNT (sold separately) is a versatile mounting base/bracket for easy installation on most flat surfaces. Please use the included M4 screws to attach the radio to the bracket, as shown in the diagram below.

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**NOTE:** Use only the M4 x 7-10mm length screws, included.
## Wiring

<table>
<thead>
<tr>
<th>Wire Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>AMP Remote (+12VDC 500mA)</td>
</tr>
<tr>
<td>Red</td>
<td>+12V Switched</td>
</tr>
<tr>
<td>Gray</td>
<td>Front Right Speaker (+)</td>
</tr>
<tr>
<td>White</td>
<td>Front Left Speaker (+)</td>
</tr>
<tr>
<td>Purple</td>
<td>Rear Right Speaker (+)</td>
</tr>
<tr>
<td>Green</td>
<td>Rear Left Speaker (+)</td>
</tr>
<tr>
<td>Black</td>
<td>Ground</td>
</tr>
<tr>
<td>Purple/Black</td>
<td>Rear Right Speaker (-)</td>
</tr>
<tr>
<td>White/Black</td>
<td>Front Left Speaker (-)</td>
</tr>
<tr>
<td>Gray/Black</td>
<td>Front Right Speaker (-)</td>
</tr>
<tr>
<td>Green/Black</td>
<td>Rear Left Speaker (-)</td>
</tr>
</tbody>
</table>

![Wiring Diagram](image-url)
BASIC OPERATION

Power On/Off
Press the power button (1) on the front panel to turn the unit on or off.

Volume Control
To increase the volume, press the ▲ button (21). To decrease the volume, press the ▼ button (9).

Mute
Press the MUTE button (2) 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 (15) on the control panel to select a different mode of operation, as indicated on the display panel. Available modes include AM/FM Tuner, Weatherband, USB, AUX In (optional Auxiliary Input), and Bluetooth Audio.

Reset
The reset button (11) 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 (11). This may be necessary should the unit display an error code.

You can recover factory default settings using the RESET function located in the system menu. With “Reset to Defaults?” flashing, press the ENTER/ button (20) 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 ▲▼ buttons (21, 9) within 5 seconds. The unit will automatically exit the audio menu after five seconds of inactivity. The following menu items can be adjusted.

Bass
Use the ▲▼ buttons to adjust the bass level range from “-6” to “+6”.

Treble
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).

Fade
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 AUDIO/MENU button (3) for more than 2 seconds to enter the system menu.
2. Press the ▲▼ buttons (21, 9) repeatedly to navigate the system menu and select the desired item.
3. Press the ENTER/ or ←→ button (8, 10) to adjust the selected menu item.
4. Press the AS/PS button (16) to return to the previous operation.

The following items can be adjusted:
- Key Beep (On/Off): Turn the audible beep On/Off (heard when functions/buttons are selected). NOTE: Beep tone off will not affect Battery Alarm audible tone.
- LCD Backlight (1/10 – 10/10): Adjust LCD brightness.
- LCD Contrast (1/10 – 10/10): Set LCD contrast.
- Tuning Region (USA/Europe/China/Latin/Aus/Russia/Japan): Set frequency spacing for various regions.
- Weather Alert Configure: Press the ENTER/ button (18) to see weather alert options.
  - Weather Alert (On/Off): Determines if the weather band alert feature is activated.
  - Alert Volume (1/40 – 40/40): Set default volume for weather alert broadcasts.
- Battery Alarm (On/Off): Monitor voltage on ACC line and send alert when voltage is low.
- Battery Auto-Off (On/Off): Automatically turn off power to radio when battery voltage is low.
- Bluetooth Device (Lock/Unlock, Disconnect/Connect, Delete): View, lock and delete from a list of previously paired mobile phone device models.
• Bluetooth Pair (On/Off): Choose “ENTER” to automatically pair a device.
• Bluetooth (On/Off): Choose “Bluetooth On” or “Bluetooth Off”.
• Volume Preset (1/40 – 40/40): Select an automatic turn-on volume.
• Reset to Defaults <ENTER>: Return the EEPROM to factory default set up values. Press the ENTER button (20) to select.

NOTE: Bluetooth Pair and BT Device menu options are only available while the Bluetooth feature is ON and the radio is in Bluetooth Audio mode.

NOTE: A locked Bluetooth device will not be overwritten from the list.

Liquid Crystal Display (LCD)
The current frequency and activated functions are shown on the LCD panel (22).

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.

Battery Alarm Operation
If Battery Alarm is set to “On”, an alarm will sound (8 beeps every 30 sec) when the voltage drops to 10.5V (+/- 0.3V). A visual warning (Low Battery) will appear flashing (8 flashes every 30 sec) in the LCD display.

NOTE: “Off” is the default setting for Battery Alarm. 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 (17) to turn on the equalization function and select between five pre-defined bass and treble curves: User > Flat > Pop > Classical > Rock.

Loudness
Press and hold the EQ/LOUD button (17) to toggle true loudness on/off. When listening to music at low volumes, this feature will boost the bass 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 (15) to select Aux In mode.
3. Press MODE again to cancel Aux In mode and switch to the next mode.
**TUNER OPERATION**

**Select a Band**
Press the BAND/SEARCH button (4) to change between three FM bands and two AM (MW) bands.

**Manual Tuning**
Press the ◄◄ or ►► buttons (8, 10) to seek stations up/down step by step.

**Auto Seek Tuning**
Press and hold the ◄◄ or ►► buttons (8, 10) 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 (5-7, 12-14) for two seconds. The preset number will appear in the display.

**Recall a Station**
Select a band (if needed). Press a preset button (5-7, 12-14) to select the corresponding stored station.

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**Automatically Store / Preset Scan (AS/PS ↔)**

**Automatically Store**
Select an AM or FM band. Press and hold the AS/PS ↔ button (16) for more than two seconds to automatically select strong stations and store them in all bands. The new stations replace any stations already stored in that band.

**Preset Scan**
Select a band (if needed). Press the AS/PS ↔ button (16) to scan stations stored in all bands. The unit will pause for ten seconds at each preset station. Press AS/PS ↔ again to stop scanning when the desired station is reached.
WEATHER BAND OPERATION

Accessing the Weather Band
Press the MODE button (15) to access the weather band mode.

What is the NOAA Weather Radio?
NOAA is a nationwide system that broadcasts local weather emergency information 24 hours a day. 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: 162.400MHz (CH2), 162.425MHz (CH4), 162.450MHz (CH5), 162.475MHz (CH3), 162.500MHz (CH6), 162.525MHz (CH7) and 162.550MHz (CH1).

How many stations can I expect to receive?
Since the broadcasts pertain to local weather and information, the transmission power is usually very low (much less than AM or FM stations) which means you will usually receive only one station unless you are on the edge of two or more broadcast signals. The most you will receive is two or three, and that is rare.

Is it possible I won't receive any stations?
Depending on location, it's possible to receive a very weak signal or none at all. Also, similar to AM and FM signals, weather band signals are subject to surrounding conditions, weather, obstructions of the signal by hills or mountains, etc. If no NOAA signals are found, the tuner will scan all seven NOAA frequencies every 30 seconds.

How will I know I am tuned to the weather band?
When you select the weather band, the “WB” icon will appear on the display panel, along with the current channel indication. Press the ◀ ◀ or ► ► buttons (8, 10) to tune to each of the seven channels until you find the weather band station broadcasting in your area.

NOAA Weather Alert
The Weather Alert function adds an additional level of user safety by automatically switching from the current function mode to weather band mode for a minimum of 60 seconds if a NOAA warning tone (1050 Hz) is received. If no additional warning tone is received for 60 seconds, the unit will switch back to the last known function mode.

The Weather Alert function can be turned “on” or “off” by the ENTER/ button (20), as described on page 5. When set to “ON”, the weather tuner remains active in the background, even when the radio is turned off (as long as the power is still applied to the radio). If a weather alert is issued, the radio will turn on and play the announcement, then turn back off and revert to weather alert monitor mode.

The radio will not respond to any weather alerts when it is off and will not automatically switch to the weather band if an alert is issued.

NOTE: If the unit is programmed for European operation, the WB function will be disabled.
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: 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 1 (10) or 1 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 button (7) to repeatedly play the current file. Press 2 again to repeat all songs in the current folder. Press 2 a third time to resume normal playback.

Intro Scan (INT)
Press the 3 button (6) once to play the first 10 seconds of each file in the current device. When the desired file is reached, press 3 again to end the scan and play the selected file.

Random (RDM)
Press the 4 button (14) to randomly play all files in the current folder. Press 4 again to resume normal playback.

Navigating Folders
Press the 5 button (12) to move to the previous folder and begin playback of the first song in the folder. Press the 6 button (13) to advance to the next folder and begin playback of the first song in the folder.

Alternate Display Information
Press the DISPLAYS/CRoll (19) button to change the display information from file name default display to Artist/Song Title double line display mode.

MP3/WMA Directory Search
1. Press the BAND/SEARCH button (4) to enter directory search mode.
2. The LCD will display the folder list for the current directory. Press the BAND/SEARCH button to view the folder directory list.
3. Navigate the folder list by pressing the ▲▼ buttons (21, 9).
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 ▲▼ buttons.
6. Press the ENTER button to select a file.
7. Use the AS/PS button (16) to reverse navigate the list.

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 (15) to select another mode and then remove the USB device from the USB connector.
BLUETOOTH OPERATION

The MA300 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 technology. Operating in the 2.4 GHz frequency 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 Bluetooth 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 ▲▼ buttons (21, 9) to choose “BT ON” or “BT OFF”.
- **BT PAIR**: Press the ▲▼ buttons to choose “BT PAIR” and then press the ENTER/ button (20) to enter the selection.
- **BT DEVICE**: Press the ENTER/ button to view devices from the list. Press the ◄◄ / ►► buttons (8, 10) to view a list of previously paired mobile devices. Press the ENTER/ button to select the device. Press the ◄◄ / ►► button to choose Lock/Unlock, Disconnect or Delete for this device. You cannot delete a device that is actively connected.
- **LOCK/UNLOCK**: The MA300 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 ENTER/ button to display/change the Locked (🔒) or Unlocked (🔓) icon.
- **DISCONNECT**: To disconnect a paired device, press the ENTER/ button to temporarily remove the BT link. The link can be re-established through your phone menu by selecting the MA300 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 MA300. If you are having difficulty putting the MA300 into pairing mode, check to make sure the MA300 Bluetooth (BT) is ON in the system menu. BT is ON by default.

**Bluetooth Quick Pair (Newer revisions only, Rev. E or later):**

1. On your personal Bluetooth device, enter the Bluetooth settings list. Make sure your device has Bluetooth turned on and is searching for new devices.
2. Press MODE button (15) repeatedly until the M23A is in Bluetooth mode.
3. **Press and hold** the ENTER/ button for three seconds to make the MA300 available on your Bluetooth device.
4. On your Bluetooth device, select MA300 once it becomes available to pair and connect your device. Enter the pairing password (0000), if requested.

**Note:** You can alternatively pair from the System Menu while in Bluetooth Mode.
**Bluetooth System Menu Pair (All revisions):**

1. On your personal Bluetooth device, enter the Bluetooth settings list. Make sure your device has Bluetooth turned on and is searching for new devices.
2. Press **MODE** button (15) repeatedly until the MA300 is in Bluetooth mode.
3. Press and hold the **AUDIO/MENU** button (3) to enter the system menu.
4. Repeatedly press **AUDIO/MENU** until the unit displays BT PAIR and then press the **ENTER** button (20).
5. On your Bluetooth device, select MA300 once it becomes available to pair and connect your device.
   Enter the pairing password (0000), if requested.

After connecting successfully, you will be able to listen to audio from your Bluetooth enabled device through the MA300.

**Answering a call While Listening to Music**
When answering a call using a connected phone, Bluetooth audio playback will pause. After hanging up from the call, Bluetooth audio will continue on some phones. It may be necessary to press the play button to resume Bluetooth audio playback.

**Bluetooth 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 (15). While in BT mode 🎧, the BT Audio icon (🎶) illuminates on the LCD.

**Selecting Tracks**
During playback, press the ◀◀/▶▶ button (8, 10) to play the previous or next track.

**Pausing Playback**
During playback, press the 1►|| button (5) to pause the Bluetooth audio playback. “BT Audio Pause” will appear on the LCD. Press 1►|| button again to resume playback.
If you change to another mode, the mobile phone audio will pause. Press the **MODE** button (15) to return to BT mode and resume mobile phone audio playback.

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**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
- Bluetooth® streaming audio
- File structure visibility, track selection, track audible scan up and down via USB
- Auxiliary audio input control
- 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 device, pair your device to the MA300 as stated above for Bluetooth pairing.

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

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**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.
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.

TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No power</td>
<td>The vessel’s accessory switch is not on</td>
<td>If the power supply is properly connected to the vessel’s accessory terminal, switch the ignition key to “ACC”.</td>
</tr>
<tr>
<td></td>
<td>Fuse is blown</td>
<td>Replace the fuse.</td>
</tr>
<tr>
<td>No sound</td>
<td>Volume too slow</td>
<td>Adjust volume to audible level.</td>
</tr>
<tr>
<td></td>
<td>Wiring is not properly connected</td>
<td>Check wiring connections.</td>
</tr>
<tr>
<td>The operation keys do not work</td>
<td>The built-in microprocessor is not operating properly due to noise</td>
<td>Press the reset button (19).</td>
</tr>
<tr>
<td>Cannot tune to radio station, auto-seek does not work</td>
<td>Antenna cable is not connected</td>
<td>Insert the antenna cable firmly.</td>
</tr>
<tr>
<td></td>
<td>Signals are too weak.</td>
<td>Select a station manually.</td>
</tr>
</tbody>
</table>
## 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 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)**: 30 dB

### General
- **Frequency band(s) (for Bluetooth)**: 2.4~2.4835GHz
- **Maximum radio-frequency power transmitted (for Bluetooth)**: 4 dBm
- **Operating Voltage**: DC 12 Volts
- **Grounding System**: Negative Ground
- **Speaker Impedance**: 4 - 8 Ω (ohms) per channel
- **Tone Controls**:
  - **Bass (at 100 Hz)**: ±14 dB
  - **Treble (at 10 kHz)**: ±13 dB
- **Power Output**: 22 W x 4
- **Fuse Rating**: 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)