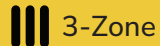


Modus



USER MANUAL | MX23 | Receiver | Marine Grade | 6-Channel |
Optically Bonded Backlit Color Display





Use of the Made for Apple badge means that an accessory has been designed to connect specifically to the Apple product(s) identified in the badge and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

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Made for iPhone 16 Pro Max, iPhone 16 Pro, iPhone 16 Plus, iPhone 16, iPhone 15 Pro Max, iPhone 15 Pro, iPhone 15 Plus, iPhone 15, iPhone 14 Pro Max, iPhone 14 Pro, iPhone 14 Plus, iPhone 14, iPhone SE (3rd generation), iPhone 13 Pro Max, iPhone 13 Pro, iPhone 13, iPhone 13 mini, iPhone 12 Pro Max, iPhone 12 Pro, iPhone 12, iPhone 12 mini, iPhone SE (2nd generation), iPhone 11 Pro Max, iPhone 11 Pro, iPhone 11.



Welcome to Modus.

You've chosen precision performance that works seamlessly in the background of every adventure. This user manual will help you unlock your system's full potential. Take a moment to review these guidelines and keep it stored in a convenient place for future reference. Your journey starts now.

If you have any technical questions, please contact:

Customer care: 805-790-7383

Online support: <https://support.modusglobal.com>

Register your purchase now to receive future firmware updates and warranty coverage. Purchase receipt is required.

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Introduction

The product is a NMEA 2000® certified marine receiver with an integrated 6-channel amplifier, and 7-channel pre-amp outputs. You can stream audio from a mobile phone to this product via Bluetooth, or play music from iPhone via USB connection. You can also play music and movie files on a USB flash drive, and music from an external device via RCA inputs. The product is also built against dust, saltwater, heat and UV rays.

Audio Zones

The product can group your speakers into three audio zones (Zone 1, Zone 2 and Zone 3) in which you can adjust individual zones for volume level and sound effects to provide a customized listening experience throughout your vessel.

Party Mode

With the Party Mode function, you can wirelessly connect this unit with Party Mode compatible units (**Modus models MX12, MX23 or MX44**) to share the same audio content between those units in different areas (vessels).

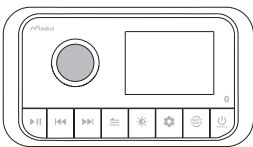
Remote Controller

The unit can work with the following remote controllers to give more convenience to control media playback.

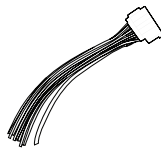
- Wired remote controller (sold separately)
- Wireless remote controller (**Modus model ATR-BTM**, sold separately)
- NMEA2000® network controller (**Modus models ACN-2K or AZC-2K**, sold separately)

What's Included

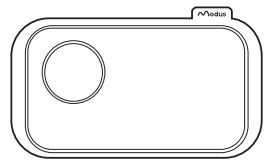
When first unpacking this product, please check that the package contains each of the items listed below. If something is missing, please contact the place of purchase.



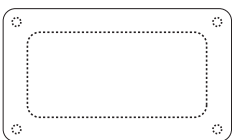
Marine Receiver



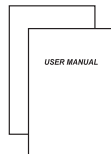
Power/Speaker Harness



Rubber Protection Cover



Mounting Template



User Manual
& Warranty



4x Mounting Screws
(PA4 x 25mm)

Warning

Please read and understand all instructions before using your product. Failure to follow these instructions could result in injury and/or damage which may void the warranty.

Safety Precautions

- Do not disassemble or modify this product. This can result in short circuits, fires, electric shocks or other hazards.
- Be sure to observe the following guidelines:
 - Do not increase speaker volume so high that you cannot hear what is around you.
 - Use caution or temporarily discontinue use in potentially hazardous situations.
- Start volume at a low setting then gradually increase the volume until you can hear it comfortably, without sound distortion or ear discomfort.
- If the product emits smoke, strange noises, odors, or shows any other abnormal signs, immediately disconnect it from the power supply. Discontinue use and contact your dealer or our technical support team. Using the product in this condition may result in permanent damage to the system.
- Servicing must be performed only by an authorized technician. Contact our technical support team for any service-related questions.

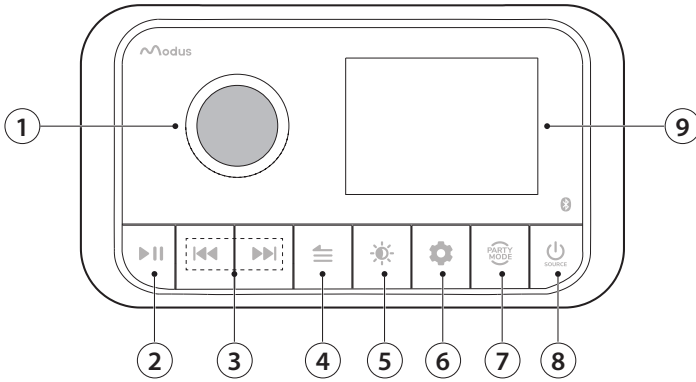
Installation Precautions

- **WARNING: Always consult a professional installer.**
- Installation must be performed by a professional. Contact our technical support team for any installation-related questions.
- Use only installation parts provided with the product.
- Before installation, disconnect the vessel battery's negative terminal to prevent product damage, fire, or injury.
- Always connect the power cable to the vessel's battery through the fuse to prevent short circuits.
- **IMPORTANT!** Replace a faulty fuse with the same type and rating. Using a different type or rating of use may result in damage to the product or vessel, or cause a fire.
- Observe the safety and operating instructions of the devices which are connected to the product.
- This product is water resistant against splashes, sprays or jets. However, never submerge.

Environmental Care

Do not dispose of the product with normal household waste. Follow local regulations for electronic disposal to help protect the environment.

Control Panel Description



1 Function Knob

- Rotate to adjust all zone volume.
- Press to access zone-specific volume adjustment screen.
- When in menu screens, rotate to navigate menu options or change a setting, or press to confirm a selection.
- In radio source, press and hold to access the radio setting options.

2 ▶|| (Pause/Resume)

- In Bluetooth/USB source, press to pause or resume play.
- In Radio/AUX source, press to mute or un-mute audio.

3 ◀◀▶▶ (Previous/Next)

- In radio source, press and hold to tune to a station; press to fine tune a station.
- In Bluetooth/USB source, press to select the previous or next track; press and hold to fast backward/forward in USB source.

4 ≡ (Back/Menu)

- When in menu screens, press to return to the previous menu level or exit the menu.
- In Bluetooth/USB/AUX source, press to access source-specific options.

5 ☀ (Brightness)

- Press to adjust screen and button brightness: low, medium and high.
- Press and hold to switch display theme between light and dark.

6 ⚙ (Settings)

- Press to access sound effects settings.
- Press and hold to access system settings.

7 (Party Mode)

- Press to access the Party Mode options to enable the unit's Party Mode as the host or a guest. (P.16)
- Press to disable the Party Mode when the Party Mode is enabled. (P.16)

8 SOURCE

- Press to power the unit on; hold down to power the unit off.
- When powered on, press to display source-selection screen.

9 Color LCD Display

Mounting



See the section "Installation Precautions". (P.3)

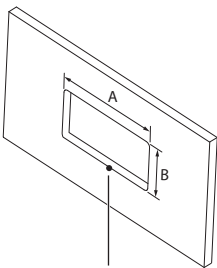
Disconnect the negative terminal of the vessel battery prior to installation.

Mount the unit in a location that does not interfere with your vessel's operation. Do not mount the unit in a location which is subjected to excessive moisture, and extreme heat (e.g. nearby the engine or other heat sources).

If you must modify the vessel for the installation, make sure you do not impair the safety and structural integrity of the vessel.

Before you drill or cut any holes, investigate your vessel's layout very carefully. Take special care when you work near the fuel tank, fuel lines, hydraulic lines and electrical wiring.

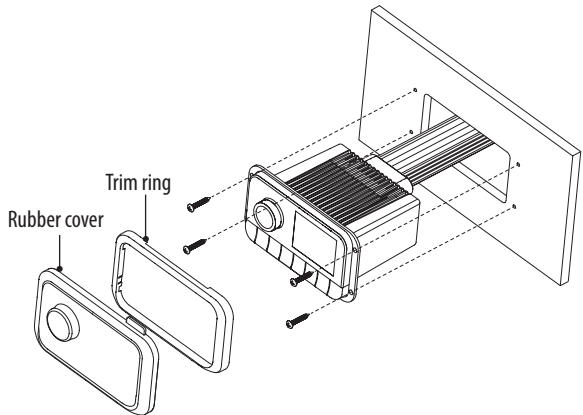
1. Use the supplied cutout template to mark the mounting hole and the four screw holes on the mounting surface.
2. Cut the mounting hole in the surface (See the illustration below).
3. Secure the unit in the mounting hole.
 - a. Remove the trim ring to access four screw holes in the unit's front panel.
 - b. Use the supplied four screws to fasten the unit in the dashboard.
4. Replace the trim ring. Make sure the trim ring is correctly oriented for replacement. If needed, place the rubber cover to protect the control panel against the harsh marine environment and additionally against UV exposure, water ingress and abrasion.



Mounting hole

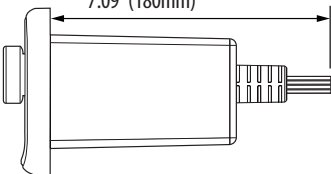
A: 4.84" (122.90mm)

B: 2.49" (63.30mm)



Mounting depth

7.09" (180mm)



Wiring



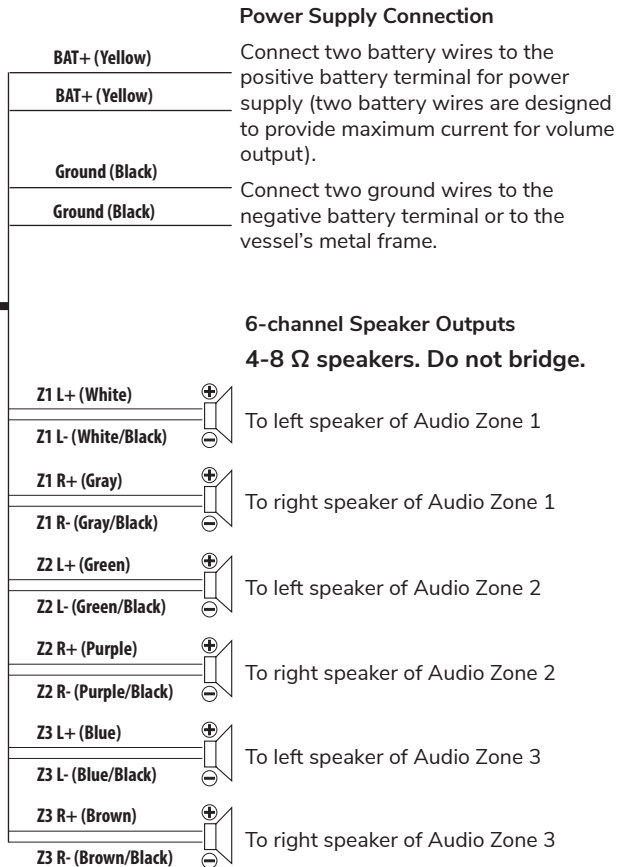
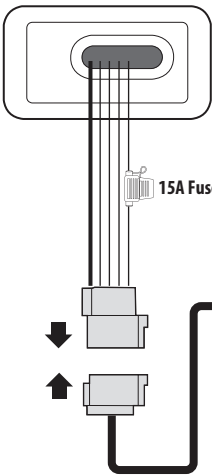
See the section “Installation Precautions”. (P.3)

Disconnect the negative terminal of the vessel battery prior to installation.

Connect the unit to a 12VDC battery and negative ground only.

Never ground or short the speaker wires. Insulate all bare wires and unconnected wires with electrical tape.

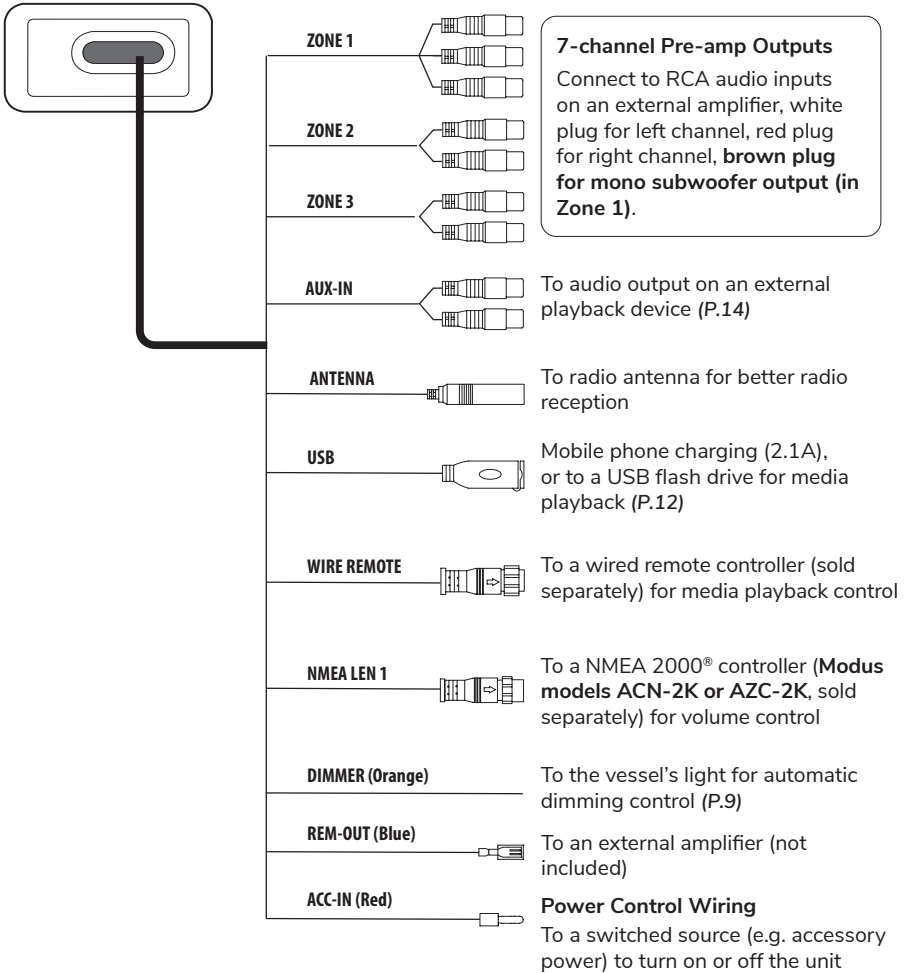
Power and Speaker Wiring



Note:

You also need to connect the red wire (labeled “ACC-IN”) to a switched source (e.g. accessory power), so that the unit can turn on with the switched source. See the wiring section next page.



External Components Wiring



Note:

The red wire (labeled "ACC-IN") must be connected to a switched source (e.g. accessory power), so that the unit can turn on with the switched source.

Power On/Off

- To power the unit on, press / **SOURCE**.
 - When powered on, the unit switches to the last selected source and the button lights are illuminated.
- To power the unit off, press and hold / **SOURCE**.
 - When powered off, the screen and the button lights are turned off.

Adjust Volume

Adjust all zone volume simultaneously


Simply rotate the function knob. The volume of all three audio zones (Zone 1/2/3) will be increased or decreased at the same time. When rotating the function knob, a volume bar is displayed and shows the highest zone volume level.

Adjust individual zone volume separately

1. Press the function knob. The zone volume screen is displayed.
2. Rotate the function knob to select “**Zone 1**”, “**Zone 2**”, “**Zone 3**” and “**SUB**” (Subwoofer), and press the function knob to access the selected zone, then rotate the function knob to adjust the volume level.
The zone volume screen will exit after five seconds of inactivity.

Set volume limit for individual zone

You can set the maximum volume level you adjust for each zone (Zone 1/2/3).

1. Press and hold  to enter the system settings.
2. Use the function knob to select “**Audio Zone**”, and a specific zone, then “**Maximum Volume Level**” to set a volume limit.

Mute volume



Press .

- Audio will mute in radio or AUX source.
- Media playback will pause in USB or Bluetooth source.

To un-mute or resume playback, press  again.



Link subwoofer with a zone for volume output

You can link the subwoofer to one of the audio zones (Zone 1, Zone 2 and Zone 3). When linked, the subwoofer volume level changes with the linked zone level.

1. Press and hold  to enter the system settings.
2. Use the function knob to select “**Audio Zone**” > “**SUB**”, and select a zone you want to link with or select the option to stay un-linked. When linked,  is displayed.

Adjust Screen Brightness

Manual adjustment



- Press  to select a brightness level for screen and button lights: High, Medium or Low.
- Press and hold  to switch display theme between light and dark.

Automatic dimming

When the vessel light is turned on, the screen brightness and button lights will automatically dim. Make sure the orange wire (labeled “DIMMER”) is connected to your vessel’s light.

Basic Functions

You can access the following basic functions through the system settings.

1. Press and hold  to enter the system settings.
2. Rotate the function knob to select an option from the settings, and press the function knob to confirm the selection.
Press  to exit the settings, or the settings will exit after five seconds of inactivity.

Key-press tone

“Beep Volume Level” option: Select a volume level for key-press tone (sound made when pressing a button): High, Medium, Low or Off.

Start-up screen

“Boot-up Screen” option: Set the animation screen to appear or skip before start up.

Button lights color

“Button Backlight Color” option: Select a button light color: Blue or White.

Low voltage warning

“Low Voltage Alert” option: When enabled and the source battery is below 10V, the low voltage warning will be displayed on the screen and the unit will also beep.

To turn off the beep and low voltage warning display, press  SOURCE or .

The low voltage warning display will come back on if the battery drops again below 10V from 11V or higher.


Menu language

“Language” option: You can select an on-screen menu language.


Listen to Radio

You can listen to FM, AM and WB (Weather Band radio), and store the radio stations. The stored radio stations will be retained if the unit is disconnected from the vessel's battery.

Select a radio source

1. Press  **SOURCE** to access the source-selection screen.
2. Rotate the function knob to select "FM", "AM", or "WB", and press the function knob to confirm.

Tune to a radio station

1. Select FM or AM radio source.
2. Press and hold . The unit will find a station with strong reception.
3. Repeat the steps above until you find your desired station.

Tune to a weak FM or AM station



Press  repeatedly to search by frequency step until you find optimal reception.

Tune to a WB station


Select WB radio source, then press  once or more.

Preset a radio station

You can store ten FM or AM radio stations each, and seven WB stations.

1. Tune to an FM, AM, or WB radio station which is not preset.
If the current radio station is not preset, a gray star icon () is displayed.
2. Press and hold the function knob to access the radio setting options. The current station frequency ("Save xxxx") is displayed on the top of the options.
3. Press the function knob to save the current station. A highlighted star icon () is displayed when broadcasting the preset station.
Repeat the steps above to store more stations.

Select a stored station



1. When listening to radio, press and hold the function knob to access the radio setting options.
2. Rotate the function knob to select "Select Preset" from the options, and press the function knob to access the stored stations list.
3. Rotate the function knob to select a stored station, and press the function knob to confirm. A highlighted star icon () is displayed when broadcasting a preset station.

Delete preset stations

1. When listening to radio, press and hold the function knob to enter the radio setting options.
2. Use the function knob to make the following preset deletion options.
 - “Delete **xxxx**” (displayed on the top of the options): Delete the current preset station. A gray star icon (☆) is displayed when broadcasting this station.
 - “Delete **Preset**”: Select and delete a preset station from the stations list.
 - “Delete **All Presets**” Delete all the preset stations.

Bluetooth Streaming




When you stream music from your mobile device (e.g. a mobile phone) to the unit for the first time, you must pair the unit with your mobile device through Bluetooth.

1. Press  **SOURCE** to access the source-selection screen.
2. Rotate the function knob to select “**BT**”, and press the function knob to access the Bluetooth source.
3. Press  to access the Bluetooth options. Select “**Pair New Device**” from the options and press the function knob to enter the pairing mode. The unit name (MX23_XXXX) is displayed.
4. On your mobile device, enable Bluetooth then select the unit name (MX23_XXXX) to pair the unit with your mobile device. “XXXX” of the unit name is the unique Bluetooth identifier of the unit.


When successfully connected, audio automatically streams from the mobile phone to the unit.

Playback control


When Bluetooth is streaming, you can have the following controls.

- To pause or resume play, press .
- To select the previous or next audio file, press .
- During playback, the screen scrolls the following information: song/artist/album name. To stop scrolling text, press and hold  to access the system settings and select “**Scrolling Text**” to uncheck the checkbox.
- For best sound performance, set the volume of your mobile device to maximum, then adjust the volume through the controls on the unit.


Re-connection

- To switch back to Bluetooth streaming from other sources or power off, press  **SOURCE** to access the source-selection screen and select “**BT**”.
- When powered back on, the unit automatically connects to the primary device (if set) or to the first paired device.

Pair more devices

1. In Bluetooth source or when Bluetooth is streaming, press  to access the Bluetooth options.
2. Select "**Pair New Device**" from the options, and press the function knob to enter the pairing mode. The unit name (MX23_xxx) is displayed and the current Bluetooth connection is disconnected.
3. On another device, enable Bluetooth and select the unit name to complete pairing. Repeat the steps above to pair more devices.


Connect another paired device

1. In Bluetooth source or when Bluetooth is streaming, press  to access the Bluetooth options.
2. Select "**Connect Paired Device**" from the options, and press the function knob to access the paired devices list.
3. Select a paired device from the list, and press the function knob to start streaming.

To delete a paired device or all paired devices at a time, select "**Delete Paired Device**" or "**Delete All Paired Devices**" from the Bluetooth options.



Set connection priority

If the unit is paired with more than one device, you can set which paired device is connected when the unit is powered on.





1. In Bluetooth source or when Bluetooth is streaming, press  to access the Bluetooth options.
2. Select "**Set Primary Device**" from the options, and press the function knob to access the paired devices list.
3. Select a paired device from the list, and press the function knob to set the priority. The primary device shows the star icon (★).

USB Playback


This unit can play audio and video files stored on a USB flash drive.

1. Insert a USB flash drive to the USB port on the unit. Audio automatically starts playback.
 - To switch back to USB playback from other sources or power off, press  **SOURCE** to access the source-selection screen and select "**USB**".
 - During playback, the screen scrolls the following information: song/artist/album name. To stop scrolling text, press and hold  to access the system settings and select "**Scrolling Text**" to uncheck the checkbox.

Audio playback





- During USB playback, press  to access the USB play menu and use the function knob to navigate and select a play option.
 - **“Play All Songs”**: Start playback from the beginning of the first audio file on the USB flash drive.
 - **“Select Song”**: Access to select an audio file and playback starts from the beginning of the file you select.
- To pause or resume play, press .
- To select the previous or next music file, press .
- To search fast, press and hold .

To select a play mode


During audio playback, press and hold  to access the playback options and use the function knob to select a play mode option.

- **“Shuffle”**: Play all audio files randomly, or cancel random play mode.
- **“Repeat Song”**: Play the current audio file repeatedly.
- **“Repeat All”**: Play all audio files repeatedly.
- **“Repeat Off”**: Cancel repeat play mode.

Video playback

1. During USB playback, press  to access the USB play menu.
2. Select **“Select Video”** from the menu and press the function knob to access the file browser. Use the function knob to navigate and select a video file to start playback.
 - To pause or resume play, press .
 - To select the previous or next video file, press .
 - To search fast, press and hold .


To select a play mode

During video playback, press and hold  to access the playback options and use the function knob to select a play mode option.




- **“Shuffle”**: Play all video files randomly, or cancel random play mode.
- **“Repeat Video”**: Play the current video file repeatedly.
- **“Repeat All”**: Play all video files repeatedly.
- **“Repeat Off”**: Cancel repeat play mode.

Play Music from iPhone

This unit can play audio from your iPhone.


1. Connect your iPhone to the USB port on the unit, using your iPhone USB cable.
The unit automatically switches to iPod mode and starts playing music from the iPhone.
 - To switch back to iPod mode from other sources or power off, press  **SOURCE** to access the source-selection screen and select "USB".

Playback control

- To pause or resume play, press .
- To select the previous or next music file, press .
- To search fast, press and hold .

You can also control playback via the music playback buttons from your iPhone.

Select songs from browser



During iPhone music playback, press  to access the music browser. Use the function knob to browse and select music for play by playlist, album, artist, songs, genres, etc.

Audio Input


The unit can play audio from a mobile phone or a playback device (e.g. CD/DVD player).

1. Connect the audio output jack on your mobile phone to the RCA audio inputs labeled "AUX- IN" on the unit, using the following audio cable (not included).
 - For a mobile phone with a headphone jack, use a 3.5mm to RCA cable.
 - For a mobile phone with a USB-C port, use a USB-C to RCA cable.
 - For an iPhone, use a lightning to RCA cable.

Or using audio cables with RCA plugs (not included), connect a playback device (e.g. CD/ DVD player) with RCA audio outputs to the RCA audio inputs labeled "AUX-IN" on the unit.


2. Press  **SOURCE** to access the source-selection screen, and use the function knob to navigate and select "AUX" . The AUX input screen is displayed.
3. Start playback on the connected device and audio will play through the unit.
To mute audio, press  on the unit. To adjust volume, rotate the function knob.


Adjust input level

When playing in AUX source, press  to display the Input Sensitivity bar then rotate the function knob to adjust input level for volume output.

Sound Settings

The unit allows you to adjust the sound settings for audio zones separately.

1. When powered on, press  to enter the system settings.
2. Rotate the function knob to navigate options or adjust settings; press the function knob to access the sub-options or confirm the selection.

Press  to exit the settings, or the settings will exit after five seconds of inactivity.


Adjust zone-specific sound effects

Select “Zone 1”, “Zone 2”, or “Zone 3” from the settings menu to access the selected zone for sound adjustment.

- “**Treble**”: Change output level for treble sound.
- “**Mid**”: Change output level for midrange.
- “**Bass**”: Change output level for bass sound.
- “**Balance**”: Adjust left-and-right speaker volume balance within the same audio zone.


System Settings

This section helps you change the system settings of this unit.

1. When powered on, press and hold  to enter the system settings.
2. Rotate the function knob to navigate options or adjust settings; press the function knob to access the sub-options or confirm the selection.

Press  to exit the settings, or the settings will exit after five seconds of inactivity.

- “**Audio Zone**”: Access to change zone-specific settings.
 - “**Max Volume Level**”: Set the maximum volume level you can adjust for each zone (Zone 1, Zone 2 and Zone 3).
 - “**Rename Zone**”: Select a name from the list for a specific zone. To change the name back to the default, select “**Factory Default**” from the list. Or select “**Custom**” to display on-screen keypad for name change input.
 - “**SUB**”: Link the subwoofer to a zone or stay un-linked to a zone. When linked to a zone, the subwoofer volume level is changed with the linked zone level.
- “**Beep Volume Level**”: Select a volume level for key-press sound: High, Medium, Low or Off.
- “**Boot-up Screen**”: When disabled, the unit will skip the animation screen before start up.
- “**Button Backlight Color**”: Select a button lights color: Blue or White.
- “**Diagnostic**”: Display the current firmware version of the unit, or select “**SW Update**” to update the unit (if update is required). Visit the product page on our website (www.modusglobal.com) to see if there is an update available and pay close attention to the update instructions included online.

- “**Language**”: Select an on-screen menu language.
- “**Low Voltage Alert**”: When enabled and the battery voltage is below 10V, the low voltage warning is displayed on the screen. Press  **SOURCE** to turn off the warning.
- “**Restore Factory Settings**”: Reset the unit to the factory settings.
- “**Scrolling Text**”: Enable or disable scrolling of song information text displayed on the screen when playing audio in USB and Bluetooth source.
- “**Tuner Region**”: Select the radio region where your unit is located (USA or Europe).

Change unit name

“**Name This Device**”: You can change the name of this unit to be displayed during Bluetooth pairing or connection. Input a new name on the pop-up keypad.

Remote Controller (Optional)

The unit can work with the following remote controllers to add auxiliary media playback control.

- Wired remote controller (sold separately).
- Wireless remote controller (**Modus model ATR-BTM**, sold separately).
- NMEA 2000® controller (**Modus models ACN-2K or AZC-2K**, sold separately).

Party Streaming

With Party Mode function, this unit can be wirelessly connected with Party Mode compatible units to share the same audio content in different areas (vessels) at the same time.


The unit which streams audio content is called **host**. The unit which plays the audio content streamed from the host is called **guest**.

Audio can stream to up to 100 connected units simultaneously within the range of 328 ft. (100 m) from the host unit.


What you need

- Prepare two or more Party Mode compatible units (**Modus models MX12, MX23 or MX44**).

Set party mode


1. On the unit which is to be set as host, press the Party Mode button  to access the Party Mode menu, select “**Host**” from the menu and press the function knob to enter the Party Mode.

When the unit is in Party Mode, the PARTY ON logo is displayed on the top right of the screen.

2. On the other units which are to be set as guest, press the Party Mode button  to access the Party Mode menu, select “**Guest**” from the menu and press the function knob to access the host unit names list. When the host unit name is selected, press the function knob to enter Party Mode.
When the unit is in Party Mode, the PARTY ON logo is displayed on the top right of the screen.
3. Now the guest unit automatically plays the audio content streamed from the host unit, and the guest unit is switched to the party streaming screen, showing the host unit name.


Set as standalone

You can stop the party streaming on your unit and allow the unit to play individually.

- Press the Party Mode button  to turn off Party Mode on your unit.
If your unit is the host, audio streaming to the guest units will stop and you can select an audio source to play individually. The Party Mode on the guest units still will remain on.
If your unit is a guest, it will not receive the audio content from the host unit and you can select an audio source to play individually. The Party Mode on the host unit and the other guest units will remain on for party streaming.

Re-join party

You can enter Party Mode again to continue party streaming.

- Press the Party Mode button  to access the Party Mode menu to select the host or guest option for your unit.



Change the host

You can switch to another host during party streaming.

- Repeat the steps described in the section “Set Party Mode” to select a new party stream.

Troubleshooting

Need assistance? Before reaching out to our support team, try these quick solutions. If your Modus system still isn't performing to your expectations, our in-house support team is ready to help you get back to creating perfect moments. We're here when you need us.

| Problem | Solution |
|--|---|
| Constant beeping | Low voltage alert (below 10 V). Press  SOURCE or  to turn off the beep. |
| Unit not responsive | Restart the unit by turning the vessel off for a few seconds, then turning the vessel back on. If the problem still persists, disconnect the unit from the source battery for a few minutes and then reconnect. |
| No power | Check that the battery and ground wires are correctly connected to provide power supply. (P.6) |
| | Check that the power-on control wire (labeled "ACC-IN") is connected to turn on the unit. (P.7) |
| | Check that the switched source connected to the power-on control wire (labeled "ACC-IN") is turned on. |
| | The fuse is blown. Replace with a new one with the same type and rating. |
| No sound/ Distorted sound | Check that your audio zone is not adjusted to the minimum volume level individually. (P.8) |
| | Check that two battery wires are connected to the source battery to provide sufficient current for volume output. (P.6) |
| | Check that playback is not paused, or turn up the volume. |
| | Incorrect source input. Select the correct sound source. |
| Bluetooth not connected / Streaming not possible | When powered back on, the unit automatically connects to the primary device (if set) or to the first paired device. |
| | Check that Bluetooth on your mobile device is enabled. Also make sure you correctly identify the unit name shown on your phone's Bluetooth settings. |
| | This unit is connected with another Bluetooth device. Switch the unit to pairing mode and connect to a second device. (P.11) |
| | Make sure your mobile device is located in Bluetooth range. |
| USB not playable | Files are not supported, or the USB device is not compatible with the unit. Change the media files or USB device. |

Specifications

Audio

| | |
|----------------------------|--|
| Output power | 25W RMS x 6 |
| Speaker impedance | 4 - 8 Ω |
| Frequency response | 20 Hz - 20 kHz |
| Signal-to-noise ratio..... | >70 dB |
| RCA input sensitivity..... | 180 - 1800 mV, adjustable |
| Pre-amp outputs | 4 V, full range 7-channel RCA outputs (with subwoofer output) |

FM Radio

| | |
|----------------------|---|
| Frequency range..... | 87.5 – 107.9 MHz (USA) 87.5 – 108 MHz (Europe) |
| Frequency step..... | 200 kHz (USA) 50 kHz (Europe) |

AM Radio

| | |
|----------------------|---|
| Frequency range..... | 530 – 1710 kHz (USA) 522 – 1620 kHz (Europe) |
| Frequency step..... | 10 kHz (USA) 9 kHz (Europe) |

WB Radio

| | |
|----------------------|------------------------------|
| Frequency range..... | 162.400 – 162.550 MHz (NOAA) |
|----------------------|------------------------------|

Bluetooth

| | |
|----------------------------|------------------------------------|
| Bluetooth version | 5.3 |
| Bluetooth profiles | A2DP, AVRCP |
| Bluetooth frequency | 2400 - 2483.5 MHz |
| Transmission power | <20 dBm, Class 1 |
| Transmission distance..... | Up to 328 ft /100m, in free field. |

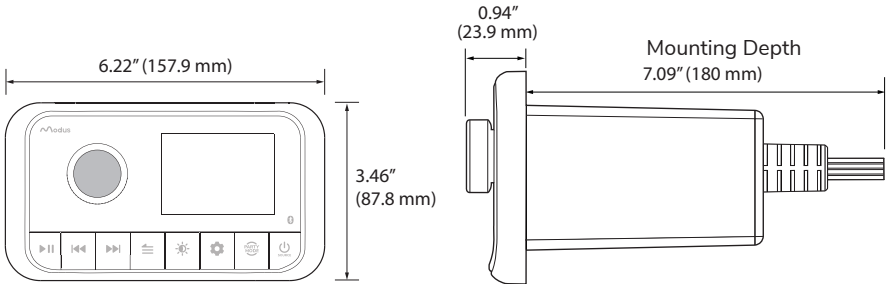
USB

| | |
|-----------------------|---------------------------------|
| Compatibility..... | Type A, USB 2.0 (High-Speed) |
| File system..... | FAT32 |
| Charging current..... | 5 VDC, max 2.1 A |
| Audio playback..... | MP3, WAV, FLAC (192 kHz/24 bit) |

General

| | |
|------------------------------------|---|
| Power supply..... | 9 – 16 VDC |
| Current draw..... | Max 15 A |
| Fuse..... | ATC type, 15 A |
| Current draw when powered off..... | <2 mA |
| Device Load Equivalency | LEN1 |
| Zero current draw memory | Retain radio presets, volume and sound settings in case of battery disconnected |
| Screen..... | 2.8", color LCD display |
| Ingress protection..... | IP66 (dustproof/ weatherproof) |
| Mounting hole (W x H)..... | 4.84" x 2.49" (122.90 x 63.30 mm) |
| Mounting depth..... | 7.09" (180 mm) |
| Operating temperature..... | -4 to 158 °F (-20 to 70 °C) |
| Storage temperature | -22 to 176 °F (-30 to 80 °C) |
| Unit weight..... | 0.99 kg / 2.18 lbs |

Unit Dimensions



Specifications are subject to change without notice.

Notice

FCC compliance statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation of the device.

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.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Supported NMEA 2000 PGN List

Transmit

59392/ 59904/ 60160/ 60416/ 60928/ 126208/ 126464/ 126996/ 126998/ 126993/
130569/ 130570/130571/ 130573/ 130574/ 130579/ 130582/ 130583/ 130584/ 130585/
130586/ 130822

Receive

59392/ 59904/ 60160/ 60416/ 60928/ 65240/ 126208/ 126464

USER MANUAL

Modus

www.modusglobal.com

Customer Service 805-790-7383

Tech Support: <https://support.modusglobal.com>



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V:A

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