

clarion®

Owner's manual & Installation manual

CMS4

**MARINE DIGITAL MEDIA BLACK BOX RECEIVER
WITH WATERTIGHT DISPLAY CONTROLLER**

CLARION PRODUCT REGISTRATION INFORMATION

For USA and Canada only

www.clarion.com

Dear Customer:

Congratulations on your purchase of a Clarion mobile electronic product. We are confident that you'll enjoy your Clarion experience.

There are many benefits to registering your Clarion product. We invite you to visit our website at www.clarion.com to register your Clarion product.

We have made product registration simple with our easy to use website. The registration form is short and easy to complete. Once you're registered, we can keep you informed of important product information.

Register at www.clarion.com - it's easy to keep your Clarion product up to date.

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1. FEATURES

- SiriusXM-Ready™
- AM/FM/WB Tuner
- Watertight Remote
- Built-in Bluetooth® with aptX
- 70Wx4 Built-In Amplifier
- Made for iPod/iPhone/iPad
- 4 Zones / 4 Sources
- Pandora
- Camera connection

USB 2.1A

Bluetooth®
(SiriusXM) READY
pandora®
MP3/WMA

Made for


Qualcomm® aptX™


2. PRECAUTIONS

⚠ WARNING

For your safety, while boating, keep the volume to a level at which external sounds can be heard.

1. This unit has precision parts inside. Even in the event that trouble arises, never open the case, disassemble the unit, or lubricate the parts.
2. FCC STATEMENT
 - 2.1. 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.
 - (2) This device must accept any interference received, including interference that may cause undesired operation.
 - 2.2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
3. IC warning
 - 3.1. This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
 - (1) This device may not cause interference, and
 - (2) This device must accept any interference, including interference that may cause undesired operation of the device.
 - 3.2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
 - 3.3. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
 - (1) l'appareil ne doit pas produire de brouillage, et
 - (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

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.

FCC 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 20cm between the radiator & your body

	MODEL	CMS4	Clarion
	12V (-) GROUND	USA: AM530-1710kHz, FM 87.9-107.9MHz EUROPE: AM531-1620kHz, FM87.5-108.0MHz AUSTRALIA: AM531-1620kHz, FM87.5-108.0MHz ASIA: AM531-1620kHz, FM87.5-108.0MHz	
	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.		
	This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.		
	CLARION CORPORATION OF AMERICA 6200 GATEWAY DRIVE, CYPRESS, CA 90630, USA		
	MANUFACTURED:	<input type="text"/>	FCC ID: 2AB7S-CMS4 IC: 1188A-CMS4 CAVICE-S3(*)/M B-3(*)
	SERIAL NO.	<input type="text"/>	0700
			MADE IN CHINA

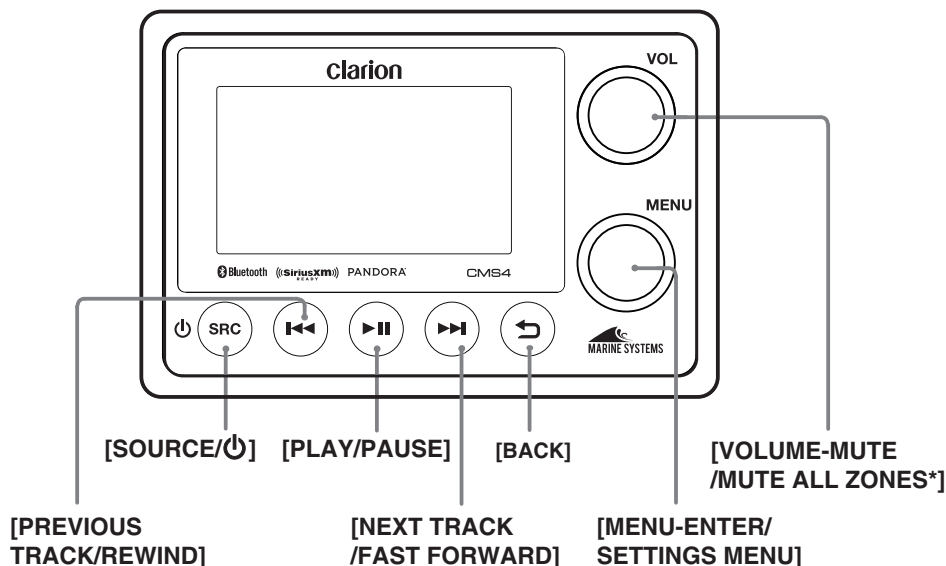
0700

3. CAUTIONS ON HANDLING

- Exposure to extreme heat and direct sunlight may hinder the performance of your Clarion product. In the event this happens, allow the unit to cool down before use.

4. CONTROLS

◆ Display Controller



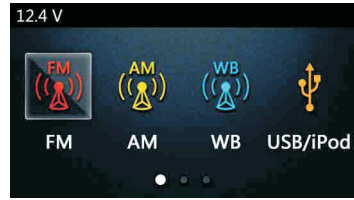
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- The first time Qualcomm® aptX™ appears in the text or major heading of a document, the entire Qualcomm® aptX™ name should be used, and it should be followed by the word "audio." On first use, the Qualcomm mark should be followed by the ® symbol, and the aptX mark should be followed by the ™ symbol. In "aptX," the letter "X" must be capitalized. Never abbreviate, shorten, or alter the mark. Do not pluralize it or make it possessive. The aptX mark should never be used in domain names, except those owned by Qualcomm Technologies International, Ltd. or its affiliated companies.

Choosing Your Source Unit Configuration

◆ Standard Mode

Standard mode is ideal for basic installations that utilize a single audio source with speakers configuration. Utilizing this configuration you can have Front and Rear speakers with the ability to control fade, a secondary set of speakers unaffected by fading and a fixed connection at full output.



◆ Multi-Zone Mode

Multi-Zone mode is ideal for installations that require multiple sources to play simultaneously from different speakers. Using this configuration you can control up to 4 independent zones with 4 sources such as FM, BT, USB, SiriusXM. All 4 zones are variable with independent volumes, EQ, gain and other configurable zone settings.



Note:

When using Multi-Zone with multi-source, radio band sources are limited to a single band (FM/AM/WB) across all zones utilizing radio. Example: If Zone 1 and Zone 2 are set to AM and Zone 3 is set to FM, both Zone 1 and Zone 2 will now become FM and vice versa.

Name of Buttons and Their Functions

Note: Be sure to read this chapter while referring to the front diagram in chapter "4. CONTROLS"

⚠ CAUTION

Lower the volume level before powering the source unit off. The source unit stores the last volume setting.

⚠ WARNING

EXPOSING THE UNIT TO WATER WITH THE FRONT PANEL OPEN WILL CAUSE DAMAGE OR UNIT MALFUNCTION!

[⏻ / SRC] Button

- Press the [⏻ / SRC] button to turn the power on and press and hold it (2 sec.) to bring up the Power off / Display off selection. Select Power off to completely power down the CMS4 unit. Select Display off to keep the CMS4 operating with the display backlight off.
- Press and release the [⏻ / SRC] button to switch between available sources: FM, AM, Weather Band, USB/iPod, Aux, Bluetooth, Pandora, SiriusXM and Camera.

Note: If the above equipment is not connected, the corresponding mode may not function. When using CMS4 in Multi-Zone mode, only zones currently in control will have their sources changed.

[⏪ / ⏩] Buttons

Pressing these buttons will perform the following operations based on their current mode:

- Menu Screen** - No function in this mode
- AM/FM/WB** - Auto Seek Tuner Forwards / Backwards
- SiriusXM** - Skip Forward/Skip Backwards, Press and hold Fast Forward/Rewind 5/10/30 seconds
- USB/iPod** - Next Track/Previous Track, Press and hold Fast Forward/Rewind. When accessing USB Browser, press the [⏪ / ⏩] will function as page down/page up.
- AUX** - No function in this mode
- Bluetooth** - Next Track/Previous Track, press and hold Fast Forward/Rewind
- Pandora** - Skip Track/Replay Track, press and hold Thumbs Up/Thumbs Down

[VOL] Knob

- Rotate the [VOL] knob clock-wise to increase the volume.
- Rotate the [VOL] knob counter-clock-wise to decrease the volume.
- Standard mode** - Press the [VOL] knob to mute the audio. Press again to restore audio.
- Multi-zone mode** - Press the [VOL] knob to mute all zones currently being controlled. Press and hold to mute all zones, regardless if being controlled. Press again to restore audio.

Name of Buttons and Their Functions

[MENU] Knob

- **Volume Screen** - When in Standard mode and while the volume level is still shown, rotate the [MENU] knob clock-wise or counter clock-wise to adjust front/rear audio fading. When in Multi-zone mode and while the volume levels are still shown, rotate the [MENU] knob to select individual zone audio controls.
- **MENU Screen** - Rotate clock-wise to select menu item below current selection. Rotate counter clock-wise to select menu item above current selection. Press the [MENU] knob to select current menu item.
- **AM/FM/Weather Band** - Rotate clock-wise/ counter clock-wise to manually seek stations Up/Down. Press to access content menu.
- **USB** - Press to access content menu.
- **iPod/iPhone/iPod** - Press to access content menu.
- **AUX In** - No function
- **SiriusXM** - Rotate clock-wise to select Next channel. Rotate counter clock-wise to select previous channel.
- **SiriusXM Replay** - Press the button and select Jump to Live to exit SiriusXM Replay mode
- **BT Audio** - Press to access content menu.
- **Home Screen** - When in the **Standard** mode home screen, rotate the [MENU] knob to highlight available sources. Press the [MENU] knob to select the source. When in the **Multi-zone** mode home screen, rotate the [MENU] knob to highlight the Source and Control boxes. Press the [MENU] knob to execute the function. When selecting a source, press and hold the [MENU] knob to automatically set all zones to that source.

Note: In any source, Press the [MENU] knob to access current source settings. Press and hold the [MENU] knob to access CMS4 device settings.

[⏪] Back Button

Pressing this button will perform the following operations based on the current screen:

- **Home Screen** - Launch source selection mode
- **Menu Screen** - Return to previous screen/menu

[▶ ||] Play/Pause Button

- Press this button to Play / Pause current track.
- **SiriusXM Replay** - Press to enter Replay mode.

5. OPERATIONS

Basic Operation

Note: Be sure to read this chapter referring to the chapter "4. CONTROLS"

⚠ CAUTION

When the unit is turned on, starting and stopping the engine with its volume raised to the maximum level it may cause hearing damage. Be careful about adjusting the volume.

◆ Turning on and off the power


Note:

- Start the engine before using this unit.
- Be careful about using this unit for a long time without running the engine. If you drain the vessel battery too far, you may not be able to start the engine and this can reduce the service life of the battery.


1. Start the engine.



Engine ON
position

2. If the CMS4 does not automatically turn on, Press the [ /SRC] button to turn the power on. Press and hold it (2 sec.) to bring up the Power Off/Display Off selection. Select Power Off to completely power down the CMS4 unit. Select Display Off to keep the CMS4 operating with the display backlight off.

◆ Selecting a mode

1. Press the [ / SRC] button to change to the next available source.
 - * If a Bluetooth device is not connected to the CMS4, it is not displayed.

◆ Adjusting the volume

1. Rotate [VOL] knob clock-wise to increase the volume.
2. Rotate [VOL] knob counter clock-wise to decrease the volume.

⚠ CAUTION

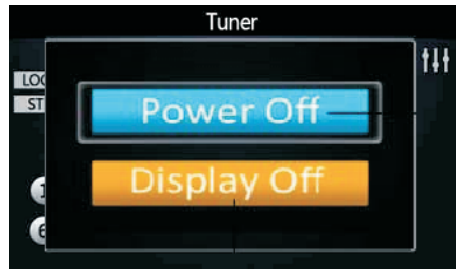
While boating, please be aware of the volume levels in residential, family areas and local volume level ordinances.

◆ Mute

Press the [VOL] button to turn the Mute On and Off.

◆ Power Off / Display Off


This feature will allow the user to Power Off the unit or to turn the Display OFF in the event the display is too bright for current lighting conditions.



- **Power Off** – Select to turn off the unit
- **Display Off** – Select to turn off the backlight of the display, but the button and knob illumination will remain until a button or knob action occurs.

Settings

You can customize the various settings of this unit from the Settings screen.

When in Standard mode, press the [] button to access the Home screen, rotate the [MENU] knob to select the Settings option, then press the [MENU] knob access into the Settings Mode. You can rotate the [MENU] knob to select the options, then press the [MENU] knob to confirm.



Note:

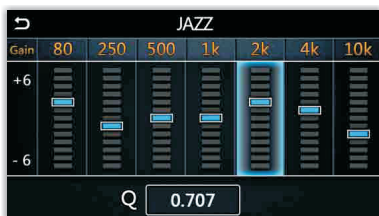
Press and hold the [MENU] knob to quickly access the Settings menu. This is the only way to access the Settings menu when using the **Multi-zone** mode.

◆ Audio Settings

Press and hold the [MENU] knob to enter Settings menu. Rotate the [MENU] knob to select items to be adjusted:

● Preset EQ

1. Rotate the [MENU] knob to change the EQ: FLAT->JAZZ->POP->CLASSIC->ROCK->NEWS->URBAN->RAVE->MOVIE->TECHNO->USER
2. When USER EQ is selected, press the [MENU] knob to cycle through each of the 7 EQ bands and rotate the [MENU] knob to adjust each band.



● Balance

Rotate the [MENU] knob to adjust the Balance between the right and left speakers from R12 (full right) to L12 (full left).

● Fader (Standard Mode Only)

Rotate the [MENU] knob to adjust the Fader between the front and rear speakers from R12 (full rear) to F12 (full front).

● Crossover

1. Press the [MENU] knob to turn On or Off the Crossover function.
2. Press the [MENU] knob to access the Front HPF menu, and rotate the [MENU] knob to select the below items to adjust:
 - SLOPE** - Press the [MENU] knob to change the value: 12dB / 24dB
 - FREQUENCY** - Press the [MENU] knob to change the value: 60Hz/80Hz /120Hz/ALL
 - LEVEL** - Press the [MENU] knob to highlight and rotate it to adjust the level between 0 ~ 20.

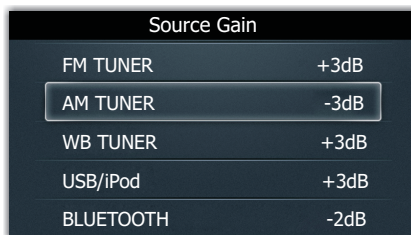
● Loudness

Press the [MENU] knob to set Loudness to ON or OFF.

● Source Gain

Press the [MENU] knob to access the Source Gain menu, and rotate the [MENU] knob to select the items, then press the [MENU] knob to change the value:

FM TUNER->AM TUNER->WB TUNER->USB/iPod
->BLUETOOTH->PANDORA->SIRIUSXM->AUX



◆ System Settings

Press and hold the [MENU] knob to enter Settings menu. Rotate the [MENU] knob to select items to be adjusted:

● Dimmer

Press the [MENU] knob to adjust the LCD display backlight level between High or Low.

● Theme

This option allows the user to select theme for the LCD display. Auto is the default setting and is triggered through the dimmer wire on the CMS4 black box unit. Press the [MENU] knob to toggle between Day, Night or Auto.

● Screen Saver

Press the [MENU] knob to toggle the screen saver mode: Clock/Slide Show/Off.
Screen saver will be enabled after [30/60/90/120] seconds of no device operation

Settings

● LED Color

This unit is equipped with user configurable color LED. Once in the LED COLOR menu, rotate the [MENU] knob to select the LED Color. Press the [MENU] knob to complete the LED COLOR selection.

● Beep

Press the [MENU] knob to select between ON and OFF.

● Time

Press the [MENU] knob to enter clock setting mode. Use the [MENU] knob to set the clock, then press the [↵] button to confirm.

● Time Format

Press the [MENU] knob to choose a time format: 12H or 24H.

● Camera Audio

Press the [MENU] knob to enter Camera Audio menu, rotate the [MENU] knob to select:

YES - The Aux audio is played while the Camera image is shown the display controller's screen. This will cause the Aux source to become unavailable as an audio playback source.

NO - The auxiliary audio input is not utilized while displaying the camera image on the display controller's screen.

● Tuner Region

Press the [MENU] knob to enter the Tuner Region menu, rotate the [MENU] knob to select the region: "EUROPE", "USA", "ASIA" or "AUSTRALIA"

● Audio Mode

Press the [MENU] knob to enter the Audio Mode screen, rotate the [MENU] knob to select Standard or Multi-zone mode.

● Factory Reset

Press the [MENU] knob to restore the factory default settings.

◆ Bluetooth Settings

Press the [MENU] knob to enter the Bluetooth Settings menu. Use the [MENU] knob to select the items:

● Auto Connect

Press the [MENU] knob to change the Bluetooth auto connect On or Off:

ON - If the paired device is within range, the system reconnects automatically.

OFF-Bluetooth devices will need to be reconnected manually.

● Device Name

Press the [MENU] knob to View the name of paired device.

◆ Info Settings

Press the [MENU] knob to view the system version information.

Radio (AM/FM/Weather Band) Operation



◆ World Tuner

This unit is initially set to USA frequency intervals of 10 kHz for AM and 200 kHz for FM. When using it outside the USA, the frequency reception range can be switched to the intervals below.

		U.S.A standard	Europe standard	Aisa standard	Australia standard
AM	Frequency spacing	10kHz	9kHz	9kHz	9kHz
	Frequency range	530-1710 kHz	531-1602 kHz	531-1620 kHz	531-1620 kHz
FM	Frequency spacing	200kHz	50kHz	50kHz	100kHz
	Frequency range	87.9-107.9 MHz	87.5-108 MHz	87.5-108 MHz	87.5-108 MHz

◆ Auto Seek

Press the [◀◀ / ▶▶] buttons to automatically search for the next radio station.

◆ Manual Seek

Rotate the [MENU] knob to manually change intervals step by step.

◆ Tuner Settings

Press the [MENU] knob to access the Tuner settings menu. Use the [MENU] knob to select the below functions:

● Presets

Rotate the [MENU] knob to select which preset station to listen to, then press [MENU] knob to confirm.

● Save As Preset

Use the [MENU] knob to select the preset position to save the current frequency.

● Auto Store

Only stations with sufficient signal strength will be detected and stored as a preset. Press the [MENU] knob to automatically select ten strong stations and store them into ten presets. The new stations replace presets.

● Local On/Off

To receive more radio stations or only stations with strong signal, you can adjust the tuner sensitivity.

Press the [MENU] knob to turn On or Off the Local Seek Mode.

ON - Only stations with a strong signal can be played back.

OFF - Stations with strong and weak signals can be played back.

● RDS On/Off

Press the [MENU] knob to turn On or Off the RDS Mode.

● PTY

Use the [MENU] knob to select the desired PTY mode.

SiriusXM® Satellite Radio Operations

Only SiriusXM® brings you more of what you love to listen to, all in one place. Get over 140 channels, including commercial-free music plus the best sports, news, talk, comedy and entertainment. Welcome to the world of satellite radio. A SiriusXM Vehicle Tuner and Subscription are required. For more information, visit www.siriusxm.com

◆ Displaying the Radio ID

Before you listen to satellite radio, you must subscribe to the service using the SiriusXM Radio ID number.

1. Press the [**⏻ / SRC**] button to enter SiriusXM mode.
2. Press the [**⏮**] or [**⏭**] buttons select channel "0". The unit displays the Radio ID.

Note:

1. The Radio ID is located on the bottom of the SiriusXM Connect Vehicle Tuner.
2. Please note that the SiriusXM Radio ID does not include the letters I, O, S or F.
3. In the USA, to activate the SiriusXM Connect Vehicle Tuner go online to www.siriusxm.com/activatenow or call 1-866-635-2349.
4. In Canada, to activate the SiriusXM Connect Vehicle Tuner go online to www.siriusxm.ca/activatexm or call 1-877-438-9677.

◆ Channel Tune

1. Press the [**⏭**] button or rotate the [**MENU**] knob clockwise to advance to the next channel.
2. Press the [**⏮**] button or rotate the [**MENU**] knob counter-clockwise to go to the previous channel.

◆ SiriusXM Replay™ function

The Replay feature allows you to pause,rewind, and replay live SiriusXM Satellite Radio.

1. While listening to a SiriusXM channel, press the [**⏸**] button to enter Replay mode. The display will show "PAUSE" when entering this mode.
2. Press the [**⏸**] button to resume playback of the stored audio from the point at which it was paused. During playback, the SiriusXM Tuner will continue to store the channel audio until you exit the Replay mode.

During REPLAY playback

- Fast rewind: Press and hold [**⏮**].
 - Fast forward: Press and hold [**⏭**].
 - To return to the beginning of the current song: Press [**⏮**].
 - To advance to the beginning of the next song: press [**⏭**].
3. Press the [**⏪**] button to end Replay mode.

Note:

- If you continue to press the [**⏭**] button until the end, the Replay mode is canceled, and the unit will change to live SiriusXM radio mode.
- If you change channels while in Replay mode, the unit will exit Replay mode to live Satellite mode and clear the Replay memory.
- Replay mode will not exit if you change to another source and then back to SiriusXM.

◆ SiriusXM Settings

Press the [**MENU**] button under SiriusXM mode to access SiriusXM settings, rotate the [**MENU**] button to select below functions:

● Jump To Live

Press the [**MENU**] button to go to Live signal.

Note: Press the [**⏪**] button to exit.

● Preset

1. Press the [**MENU**] button to access the SiriusXM Preset list.
2. Rotate the [**MENU**] knob to select the desired Preset you wish to access.
3. Press the [**MENU**] button to confirm you want to tune to that channel.

● Save As Preset

1. Press the [**MENU**] button to access the SiriusXM Save As Preset list.
2. Rotate the [**MENU**] knob to select the desired Preset number you want to store the preset in.
3. Press the [**MENU**] button to store the current channel into preset.

● Channel Browse

Text information, such as the channel name, artist name, song title and content is available with each SiriusXM channel. The unit can display this text information as explained below:

1. Press the [**MENU**] button to activate the Channel Browse mode.
2. Press the [**⏮**] or [**⏭**] button to view:
Channel->Artist->Song->Info

SiriusXM Satellite Radio Operations

• Category

Channel scan receives the channel (in the current category) in order. This function is useful when searching for a desired channel in the current category.

1. Press the **[MENU]** button to access the SiriusXM Category browser mode.
2. When a desired channel is tuned in, press the **[MENU]** button to continue receiving that channel.

Note:

If the current station does not have an associated category, then Category Scan mode can not be accessed.

• Direct Tuning

1. Press the **[MENU]** button to access the SiriusXM Direct Tuning mode.
2. Press the **[MENU]** button to change the digit location or rotate the **[MENU]** knob to change the number.
3. Press the **[MENU]** button to confirm channel number selection.

• Parental Controls

Parental Control allows you to prevent unauthorized access to selected channels you select. When enabled, the Parental Control feature requires you to enter a passcode to unlock any locked channels.

1. Press the **[MENU]** button to access the SiriusXM Parental Controls mode.
2. Press the **[MENU]** button to turn On or Off the Parental Controls.
3. Rotate the **[MENU]** knob to select the default passcode is "1111".

Lock Channels

1. Press the **[MENU]** button to access the SiriusXM Parental Controls mode.
2. Rotate the **[MENU]** knob to select "**LOCK CHANNELS**", press the **[MENU]** knob to access the enter code.
3. Rotate the **[MENU]** knob to enter the passcode, then press the **[MENU]** button to confirm.

Change Code

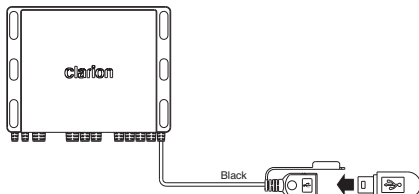
1. Press the **[MENU]** button to access the SiriusXM Parental Controls mode.
2. Rotate the **[MENU]** knob to select "**CHANGE CODE**", press the **[MENU]** to access the change code menu.
3. Enter Old / New passcode, press the **[MENU]** button to change the digit location and rotate the **[MENU]** knob to change the number.
4. To confirm the New passcode, enter it a second time.

Note: *If the passcodes do not match, the radio will display "CODE DID NO MATCH PLEASE ENTER AGAIN " for 3 seconds and then it will return to the Old Code screen.*

USB Mode Operation

◆ Connect

1. Insert a USB drive into the USB pigtail.
2. To remove the USB device, you should first select another source or turn off the power, in order to avoid damaging the USB device. Then remove the USB device.



◆ USB Settings

Press the [**MENU**] knob to access the USB settings menu. Rotate the [**MENU**] knob to select the following functions:

● Browse

Use the [**MENU**] knob to browse folders or files to play back. Press the [**↶**] button to navigate back through the menu.

Note:

*Pressing the [**⏮** / **⏭**] buttons will allow you to quickly skip through pages of folders when browsing.*

◆ Selecting a Track

1. Press the [**▶▶**] button to go to the next track. Press the [**◀◀**] button to go to previous track.
2. Press and hold the [**▶▶**] button to fast forward through the track. Press and hold the [**◀◀**] button to rewind through the track.

◆ Play / Pause

Press the [**▶||**] button to pause the track is currently playing.

Press the [**▶||**] button to resume playing the track that has been paused.

● Repeat

This function allows you to Repeat All track (Default), Repeat the currently playing track, or to Repeat the tracks in the current folder.

Press the [**MENU**] knob to select Repeat options: "ALL" or "TRACK" or "FOLDER".

● Shuffle

This function allows you to play tracks in a random order.

Press the [**MENU**] knob to turn On or Off the shuffle function.

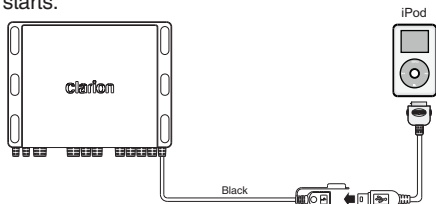
Note:

Enabling shuffle mode will change Repeat to the default mode of ALL tracks.

iPod/iPhone/iPad Mode Operation

◆ Connect

Connect an iPod/iPhone/iPad to the USB pigtail using a USB Cable. When connecting a device, the unit will read the files automatically. The track information displays on the screen once playback starts.



◆ Compatible Apple Devices

You can connect the following devices:

- iPod nano (6G)
- iPod nano (7G)
- iPod touch (3G)
- iPod touch (4G)
- iPod touch (5G)
- iPhone 3GS
- iPhone 4
- Minimum iOS 5.0 or higher
- iPhone 4S
- iPhone 5
- iPhone 5C
- iPhone 5S
- iPhone 6
- iPhone 6S
- iPhone 7
- iPhone 7Plus

◆ Selecting a Track

1. Press the [▶▶▶] button to advance to the next track.
Press the [◀◀◀] button to go to previous track.
2. Press and hold the [▶▶▶] button to fast forward through the track.
Press and hold the [◀◀◀] button to rewind through the track.

◆ Play / Pause

Press the [▶▶▶] button to pause the track that is currently playing.
Press the [▶▶▶] button to resume playing the track that has been paused.

◆ iPod Settings

Press the [MENU] knob to access the iPod settings menu, rotate the [MENU] knob to select the following functions:

● Browse

1. Press the [MENU] knob to access the iPod Browse mode.
2. Use the [MENU] knob to select a category: PLAYLIST → ARTISTS → ALBUMS → GENRES → SONGS → COMPOSERS → AUDIOBOOKS → PODCASTS
3. Use the [MENU] knob to select navigate the menus and select options.
4. Press the [↶] button to navigate back through the menu.

Note:

Pressing the [◀◀◀ / ▶▶▶] buttons will allow you to quickly skip through pages of folders when browsing.

● Repeat

This function allows you to Repeat All tracks, Repeat the currently playing track, or to turn the Repeat feature OFF.

Press the [MENU] knob to select Repeat options: "OFF" or "ONE" or "ALL".

● Shuffle

This function allows you to play tracks / songs from the current album, songs or artists in a random order.

Press the [MENU] knob to turn On or Off the shuffle function.

Note:

Press the [↶] button to exit.

Bluetooth Operation

◆ Pairing a Bluetooth Device

1. From your Bluetooth enabled device, turn Bluetooth ON and search for Bluetooth devices.
2. When a list of available Bluetooth devices appear, select "CMS4".
3. "Connected OK" will appear on the CMS4 display.
4. The unit will automatically enter the BT Audio source and you can now start streaming audio from your Bluetooth enabled device.

Note:

If the mobile phone doesn't support the SSP (Simple Secure Pairing) Profile, please enter the pass code of "0000".

◆ What is audio streaming?

Audio streaming is a technique for transferring audio data such that it can be processed as a steady and continuous stream. Users can stream music from their external audio player to their audio system wirelessly and listen to the tracks through the vehicle's speakers.

⚠ CAUTION

Please avoid operating your connected mobile phone while audio streaming as this may cause noise or choppiness during playback. Audio streaming may or may not resume after telephone interrupt as this is dependent on the mobile phone.

◆ Play / Pause

Press the [▶||] button to pause the track currently playing.

Press the [▶||] button to resume playing the track that has been paused.

◆ Selecting a Track

1. Press the [▶▶] button to go to the next song.
Press the [◀◀] button to go to previous track.
2. Press and hold the [▶▶] button to fast forward through the track.
Press and hold the [◀◀] button to rewind through the track.

◆ Bluetooth Settings

Press the [MENU] knob to access the Bluetooth settings menu, rotate the [MENU] knob to select the following functions:

● Browse

1. Press the [MENU] knob to access the BT Audio Browse mode.
2. Rotate the [MENU] knob to make folder or song selections. Press the [MENU] knob to enter the folder list.
3. Rotate the [MENU] knob to select the desired song and press the [MENU] knob to start playing.

Note:

Pressing the [◀◀ / ▶▶] buttons will allow you to quickly skip through pages of folders when browsing.

● Repeat

This function allows you to Repeat All tracks, Repeat the currently playing track, or to turn the Repeat feature OFF.

Press the [MENU] knob to select the Repeat options: "ALL" or "TRACK" or "FOLDER".

● Shuffle

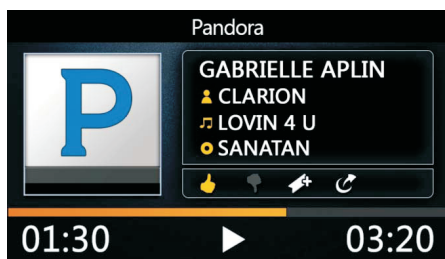
This function allows you to play tracks in a random order.

Press the [MENU] knob to turn On or Off the shuffle function.

Note:

- *Not all Bluetooth enabled devices will support the fast forward and rewind function.*
- *Playing order will depend on BT Audio player. When the [◀◀] button is pressed, some Bluetooth devices will restart the current track depending on how long the track has been playing. During music streaming playback, "BT Audio" will be shown on the display. When BT Audio device is disconnected, "BT Disconnect" will be shown on the display. Some Bluetooth audio players may not have play/pause synchronized with this unit. Please make sure both device and main unit are in the same play/pause status in BT Audio mode.*

Pandora Operation



You can stream Pandora internet radio by connecting an iOS or Android device that has the Pandora mobile application already installed. To start streaming, connect the devices with Pandora already launched.

Press the [⏮/SRC] button to select the Pandora source.

◆ Thumbs Up/Thumbs Down

1. Press and hold the [▶▶] button for thumbs up. Giving a track the thumbs up will tell Pandora to play more tracks like that one.
2. Press and hold the [◀◀] button for thumbs down. Giving a track the thumbs down will skip to the next track, and Pandora will remember not to play that track on the station again.

Note:

- You can personalize your stations by “thumbs up” or “thumbs down”.
- If you give a track the thumbs down after the skip limit has been exceeded, your feedback will be saved but the current track will continue to play.

◆ Skip

Press the [▶▶] button for the next tracks in station.

Note:

Pandora limits the number of skips allowed on their service. If you attempt to skip tracks beyond the limit, “SKIP LIMIT” is displayed.

◆ Replay

Press the [◀◀] button to replay the currently playing track. This is a feature supported by a Pandora Plus subscription.

◆ Pandora Settings

Press the [MENU] knob to access the Pandora setting menu, rotate the [MENU] knob to select the following functions:

● Stations

1. Press the [MENU] knob to access the Stations setting mode.
2. Rotate the [MENU] knob to select the Stations options.
3. Press the [MENU] knob to confirm the selection.

● Bookmark

1. Press the [MENU] knob to access the Bookmark setting mode.
2. Rotate the [MENU] knob to select the Track or Artist.
3. Press the [MENU] knob to start the bookmark.

● Stations Manage

1. Press the [MENU] knob to access the Stations Manage Settings menu.
2. Rotate the [MENU] knob to select the Stations Manage Settings options.

Create From Artist: Allows you to create a station from the artist that you are currently listening to.

Create From Track: Works similarly by creating a station from the current track being played.

Create From Genre: This will give you music genres to select from to create your station.

Delete: Will delete the now playing station.

3. Press the [MENU] knob to confirm.

Note:

If the name of the station you wish to create from a track title or an artist name is the same as the station name currently playing, “NOW PLAY” appears on the display and the station will not be created.

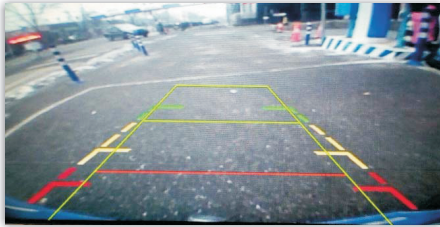
AUX Operation

The AUX RCA input is provided to allow audio playback from external devices. Press the [⏪/SRC] button and select “**AUX**”.



Camera Operation

The unit features an optional Security Camera input function. Press the [⏪/SRC] button and select “**Camera**”. The camera can be viewed on the unit’s TFT screen plus the camera output can be viewed on the screen.



6. TROUBLESHOOTING

GENERAL

Problem	Cause	Measure
The unit will not power on	The vehicle's accessory switch is not on	If the power supply is properly connected to the vehicle's accessory terminal, switch the ignition key to "ACC"
No sound	Volume is set too low	Increase the volume to audible level
	Wiring is not properly connected	Correct wiring connections
The remote is not responding	The built-in internal processor is not operating properly	Hold the Power / SRC button and select Power Off. Press the Power / SRC button to power back on and check if the remote is functioning properly.
Auto seek function can not find any stations	The antenna cable is not connected	Insert the antenna cable securely
	The signals are too weak	Select a station manually

USB

Problem	Cause	Measure
USB device cannot be inserted.	The USB device has been inserted with wrong direction.	Reversing the connection direction of the USB device, try it again.
	The USB connector is broken.	Replace with a new USB device.
USB device is not recognized.	The USB device is damaged.	Disconnect the USB device and reconnect. If the device is still not recognized, try replacing with a different USB device.
	Connectors are loose.	
No sound heard with the display "No File" shown.	No MP3/WMA file is stored in the USB device.	Store these files properly in the USB device.
Sound skips or is noisy.	MP3/WMA files are not encoded properly.	Use MP3/WMA files encoded properly.

Bluetooth

Problem	Cause	Measure
Cannot pair the Bluetooth enabled device with the audio system.	The device does not support the profiles required for the system.	Use another device to connect.
	The Bluetooth function of the device is not enabled.	Refer to the user manual of the device for how to enable the function.
The audio quality is poor after connection with a Bluetooth-enabled device.	The Bluetooth reception is poor.	Move the device closer to the audio system or remove any obstacle between the device and the system.

6. TROUBLESHOOTING

SiriusXM Advisory Messages

Message	Description
Chek Tuner	The radio is having difficulty communicating with the SiriusXM Connect Vehicle Tuner. The tuner may be disconnected or damaged. Verify that the SiriusXM Connect Vehicle Tuner cable is securely connected to the radio.
Check Antenna	The radio has detected a fault with the SiriusXM antenna. The antenna cable may be either disconnected or damaged. Verify that the antenna cable is connected to the SiriusXM Connect Vehicle Tuner. Inspect the antenna cable for damage and kinks. Replace the antenna if the cable is damaged. SiriusXM products are available at your local car audio retailer or online at www.shop.siriusxm.com .
No Signal	The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal. Verify that your vehicle is outdoors with a clear view of the sky. Verify that the SiriusXM magnetic mount antenna is mounted on a metal surface on the outside the vehicle. Move the SiriusXM antenna away from any obstructions. Inspect the antenna cable for damage and kinks. Consult the SiriusXM Connect Vehicle tuner installation manual for more information on antenna installation. Replace the antenna if the cable is damaged. SiriusXM products are available at your local car audio retailer or online at www.shop.siriusxm.com .
Channel Not Subscribed	The channel that you have requested is not included in your SiriusXM subscription package or the channel that you were listening to is no longer included in your SiriusXM subscription package. Visit www.siriusxm.com or call 866-635-2349 if you have questions about your subscription package or would like to subscribe to this channel.
Channel Not Available	The channel that you have requested is not a valid SiriusXM channel or the channel that you were listening to is no longer available. You may also see this message briefly when first connecting a new SiriusXM Connect Vehicle tuner. Visit www.siriusxm.com for more information about the SiriusXM channel lineup.
Channel Locked	The channel that you have requested is Locked by the radio Parental Control feature. See the section on Parental Control, page 12 for more information on the Parental Control feature and how to access locked channels.
Subscription Updated	An update to your SiriusXM subscription has been received by the SiriusXM tuner. Press any button to continue. Visit www.siriusxm.com or call 866-635-2349 if you have questions about your subscription.

7. SPECIFICATIONS

FM Tuner

Frequency Range:	USA	87.9 - 107.9MHz
	Europe	87.5 - 108.0MHz
	Asia	87.5 - 108.0MHz
	Australia	87.5 - 108.0MHz
Usable Sensitivity:	4 μ V (S/N=30dB)	
Image Rejection:	>45dB	
Stereo Separation:	>25dB	

AM Tuner

Frequency Range:	USA	530 - 1710KHz
	Europe	531 - 1602KHz
	Asia	531 - 1629KHz
	Australia	531 - 1629KHz
Usable Sensitivity:	40dB (S/N=20dB)	

Weather Band Selection

CH.1	162.400MHz	CH.2	162.425MHz
CH.3	162.450MHz	CH.4	162.475MHz
CH.5	162.500MHz	CH.6	162.525MHz
CH.7	162.550MHz		

Audio

Maximum Power Output:	50W x 4
Speaker Impedance:	4-8 Ω

USB

USB:	2.0 Full Speed
USB Port:	2.1A
USB Voltage:	5.0V
Maximum MP3/WMA Songs:	65535
Maximum MP3/WMA Folder:	255
Maximum Songs per Folder:	65535
Maximum USB Memory Size:	32G
USB Flash Drive and Hard Drive Compatible Format:	FAT16/FAT32


Bluetooth

Specification:	Bluetooth Version. 3.0+EDR (Enhanced Data Rate)
Supported Profiles:	A2DP (Advanced Audio Distribution Profile) aptX (CD Quality audio bandwidth matching and reproduction) AVRCP 1.4 (Audio/Video Remote Control Profile) SPP (Serial Port Profile) SSP (Simple Secure Pairing)
Send/Receive Sensitivity:	Class 2

General

Power Supply Voltage:	14.4V DC (10.8 to 15.6V allowable)
Grounding System:	Negative Ground

Note: Specifications and design are subject to change without notice for further improvement.

Power Output: 20W x 4 RMS (4 Ω @ 14.4V \leq 1% THD+N) Signal to Noise Ratio: 74dB (reference: LPF 1 W into 4 Ω)	
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INSTALLATION AND WIRE CONNECTION

1. BEFORE STARTING

1. This set is exclusively for use in vessels with a negative ground 12 V power supply.
2. Read these instructions carefully.
3. Be sure to disconnect the battery “-” terminal before starting. This is to prevent short circuits during installation. (Figure 1)

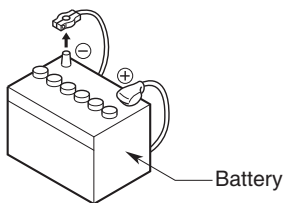


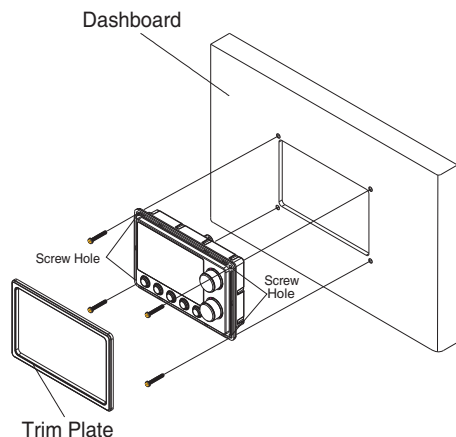
Figure 1

2. INSTALLATION CAUTIONS

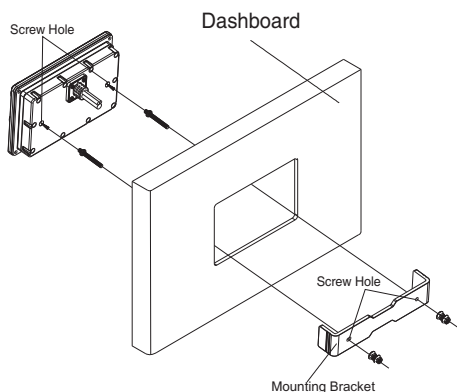
1. In order to avoid any interference, do not install the tuner module or control unit in the proximity of the engine compartment.
2. The use of unauthorized parts can cause permanent damage to the unit.
3. Always check your wire connections to ensure proper installation before turning on the unit.
4. Consult with your nearest dealer for proper installation or if common parts need to be used. Seek assistance if modifications or drilling holes to your vessel is needed.
5. Do not install the unit where it will be subjected to excessive moisture, dust, dirt, foreign particles or vibration. Areas of high temperature from the engine, direct sunlight, heater or hot air should also be avoided.
6. Do not install the unit in a location where it will interfere with the vessel operation, or it will injure the passengers if there is a sudden or emergency stop.

3. OPTIONAL MARINE WIRED REMOTE INSTALLATION

The control unit should be mounted to a dry, clean and flat surface. Ensure the rear gasket is fully sealed to the mounting surface without distorting the unit.



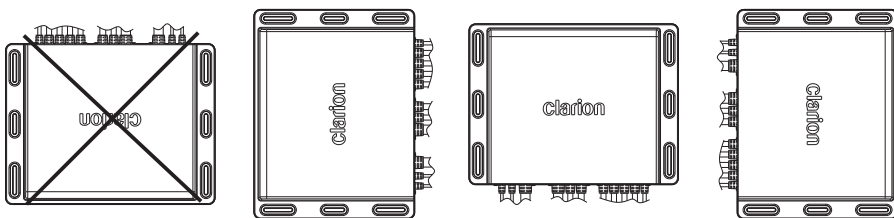
Method 1



Method 2

4. BLACK BOX INSTALLATION

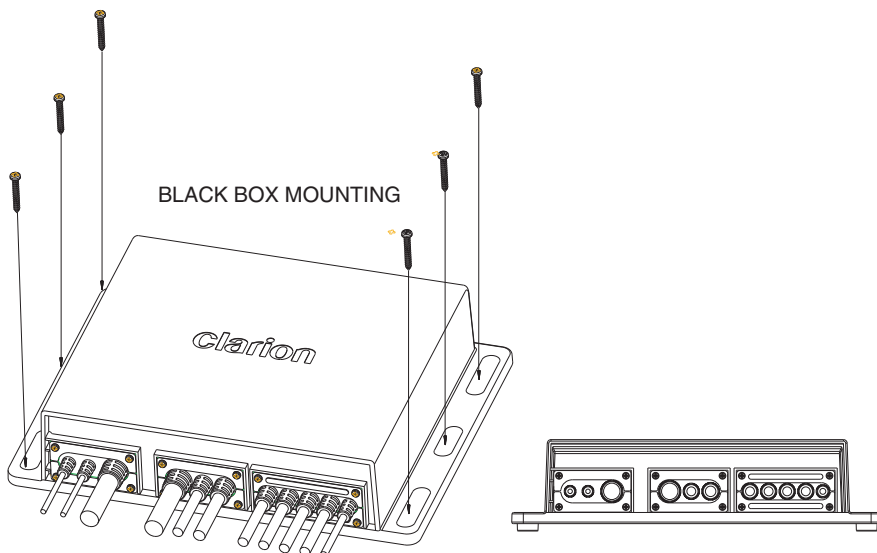
1. Select an area with sufficient ventilation for the mounting of the black box in order to prevent the module from overheating. You may mount the black box in a horizontal or vertical position. If the black box is mounted in a vertical position, do not mount the module with the harness exit points directly facing up to prevent water collecting in these areas.



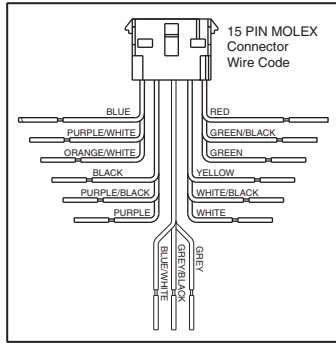
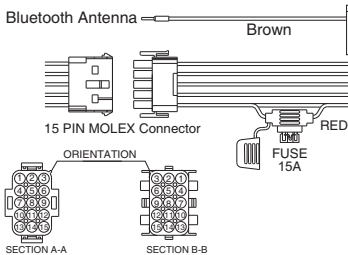
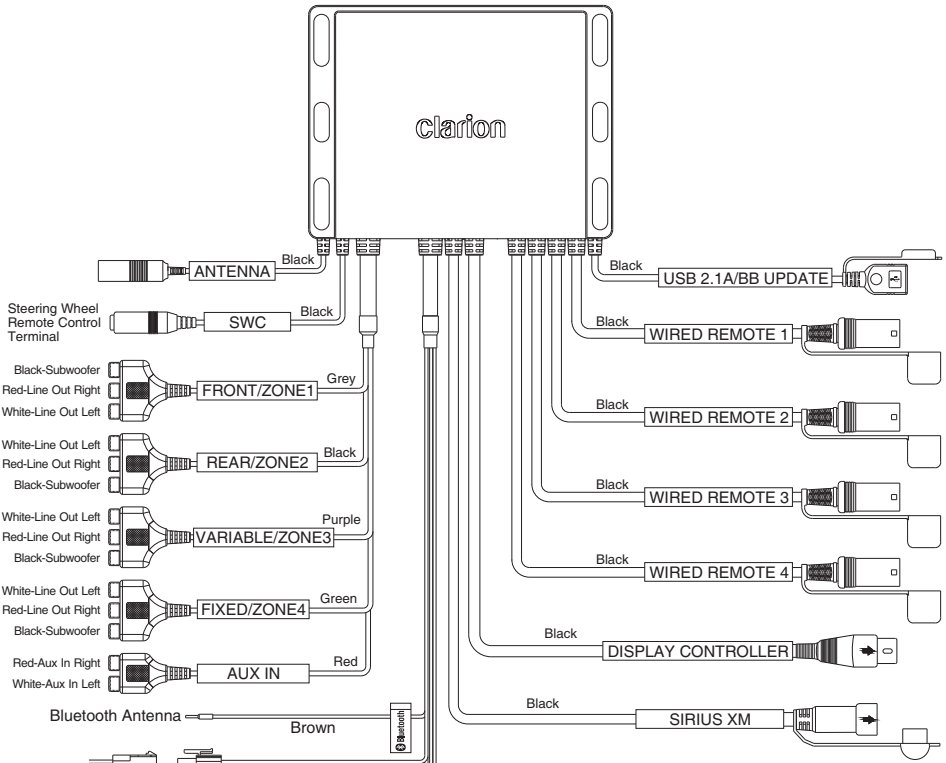
2. Please refer to the diagram below for the mounting screw hole positions. Always use the shortest length of screw possible.
3. During installation, use the 6 rubber mounting stoppers (included in the package) for the bottom of the module. This provides clearance from surface moisture and provides sufficient ventilation for the heat sink.
4. Extension wires/cables may be needed to route the harness and cable throughout the vessel.

Note: Retain some slack in the harness/ cables to prevent damage to the wires. It is recommended relieve stress in all cables and harnesses.

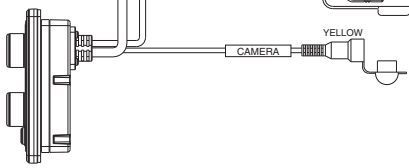
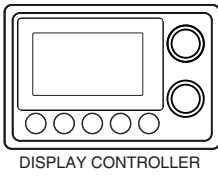
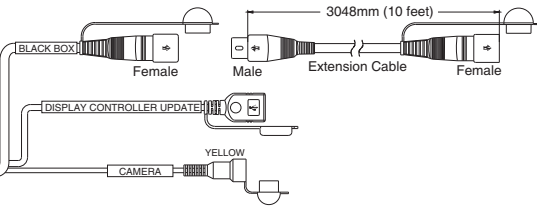
5. Always read through the wiring diagram in this manual first, and follow all the wiring diagrams carefully. The connections should be secured and insulated with crimp connectors or electrical tape to ensure proper connections.
6. Once the wiring connections are completed, connect the negative terminal on the battery, turn the vessel accessory ON and power on the unit to check if it is operating correctly. If abnormalities occur, disconnect the battery negative terminal, recheck all wiring and try again. Please refer to the troubleshooting section for assistance.



5. WIRE CONNECTION



PIN NO.	WIRE COLOR	WIRE DEFINITION	AWG
1	GREEN	SPEAKER REAR LEFT (+)	20
2	GREEN/BLACK	SPEAKER REAR LEFT (-)	20
3	RED	ACCESSORY/IGNITION SWITCHED (+12V)	20
4	WHITE	SPEAKER FRONT LEFT (+)	20
5	WHITE/BLACK	SPEAKER FRONT LEFT (-)	20
6	YELLOW	BATTERY (+12V)	20
7	GREY	SPEAKER FRONT RIGHT (+)	20
8	GREY/BLACK	SPEAKER FRONT RIGHT (-)	20
9	BLUE/WHITE	AMPLIFIER REMOTE TURN ON (+)	20
10	PURPLE	SPEAKER REAR RIGHT (+)	20
11	PURPLE/BLACK	SPEAKER REAR RIGHT (-)	20
12	BLACK	GROUND (-)	18
13	ORANGE/WHITE	(+12V)/DIMMER	20
14	PURPLE/WHITE	CAMERA TRIGGER (+)	20
15	BLUE	POWER ANTENNA	20



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