

# OWNER'S MANUAL



## CMM-20

Marine Source Unit with LCD Display



## 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 not accept any interference received, including interference that may cause undesired operation. 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 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, 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 separation between the equipment and the receiver.
- Connect the equipment to 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.

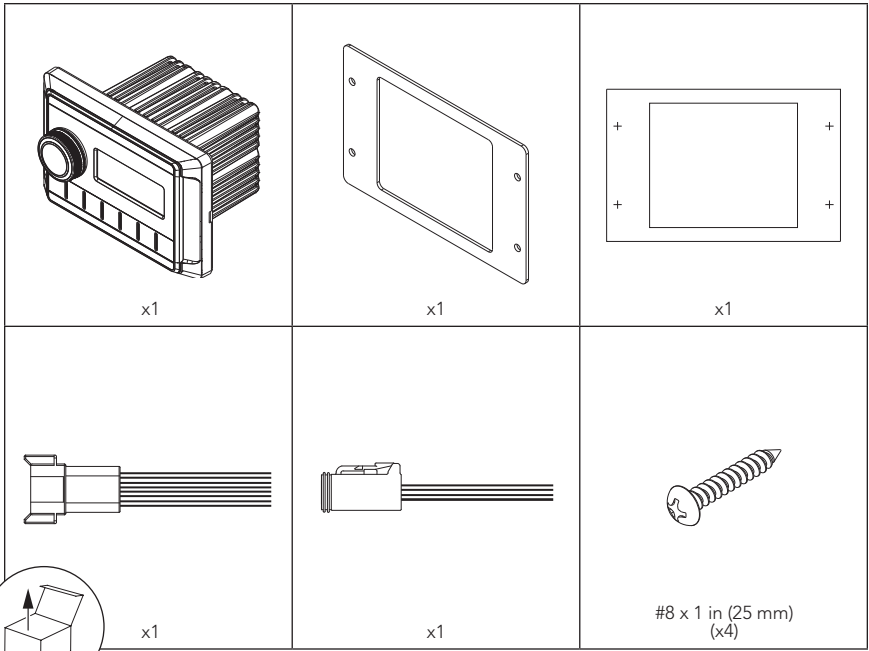
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## SAFETY CONSIDERATIONS

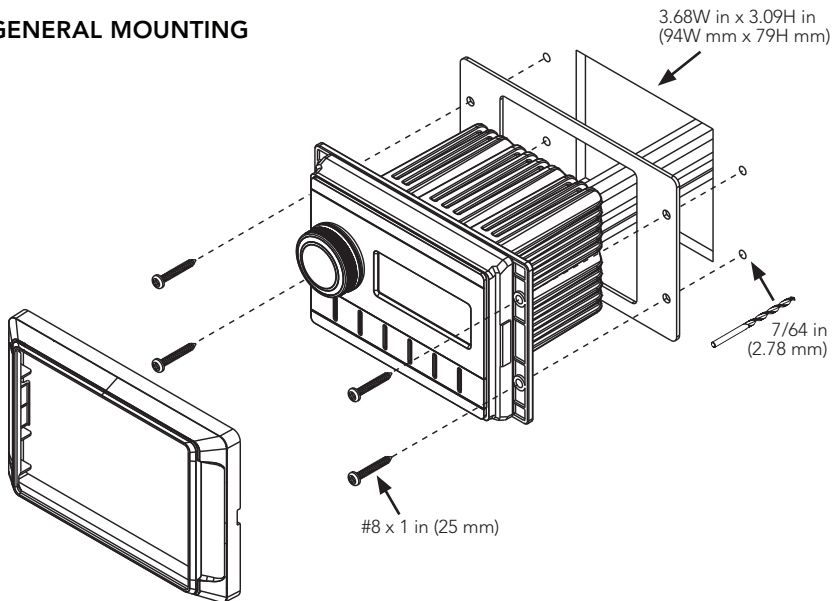
- Only use this product in vehicles with 12 volt, negative-ground electrical systems. This product is not certified or approved for use in aircraft.
- Mount this product securely to prevent damage or injury in severe conditions.
- Do not replace the power wire fuse with one of a different value. Never bypass the fuse.
- Listen to your audio system at levels appropriate for operating conditions and hearing safety.

## INSTALLATION CONSIDERATIONS

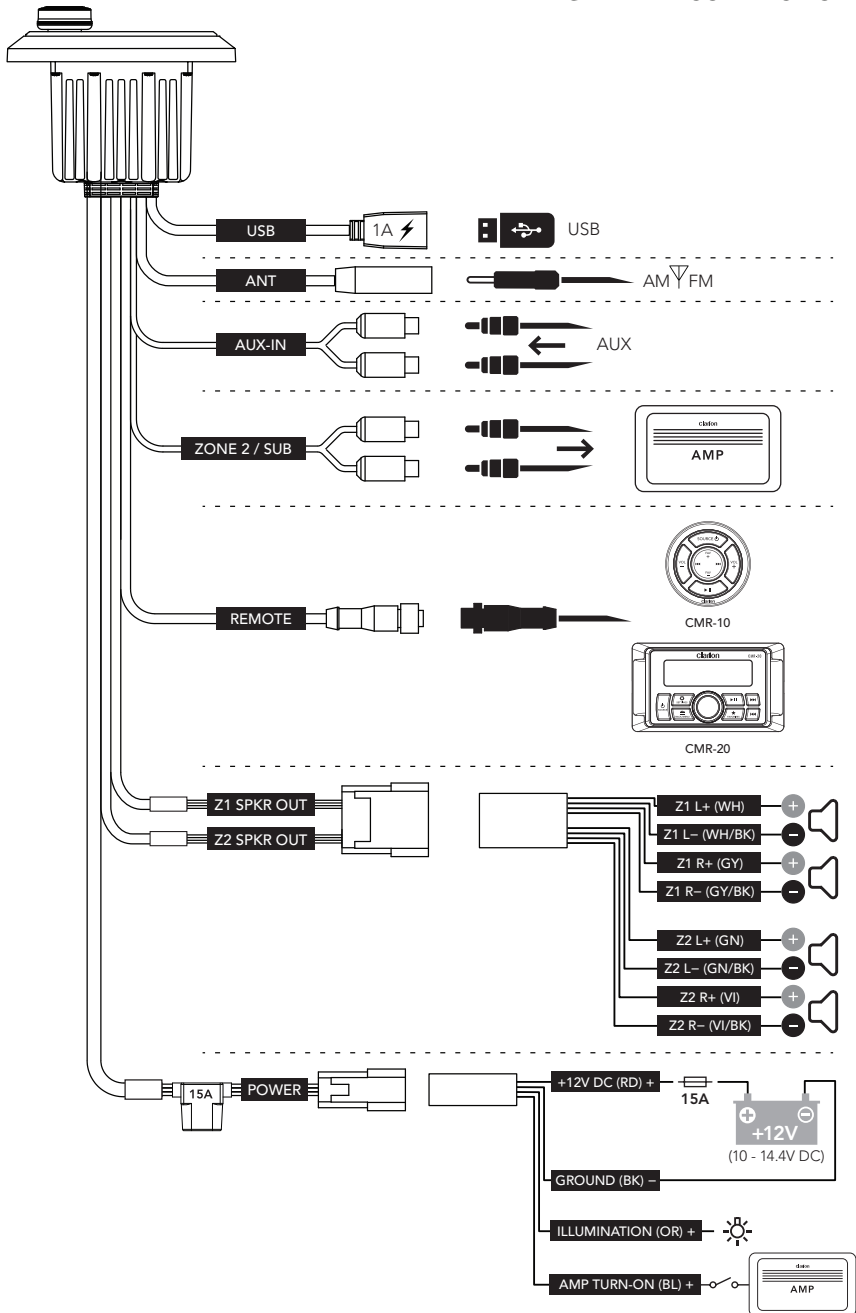
- Installation requires appropriate tools and safety equipment. Professional installation is recommended.
- This product is water-resistant. Do not submerge or subject to high-pressure water spray.
- Before installation, turn off the audio system and disconnect the battery system from the audio system.
- Install in a dry, well-ventilated location that does not interfere with your factory-installed systems. If a dry environment is not available, a location that is not exposed to heavy splashing may be used.
- Before cutting or drilling, check for potential obstacles behind mounting surfaces.
- Carefully route all system wiring away moving parts and sharp edges; secure with cable ties or wire clamps and use grommets and loom where appropriate to protect from sharp edges.



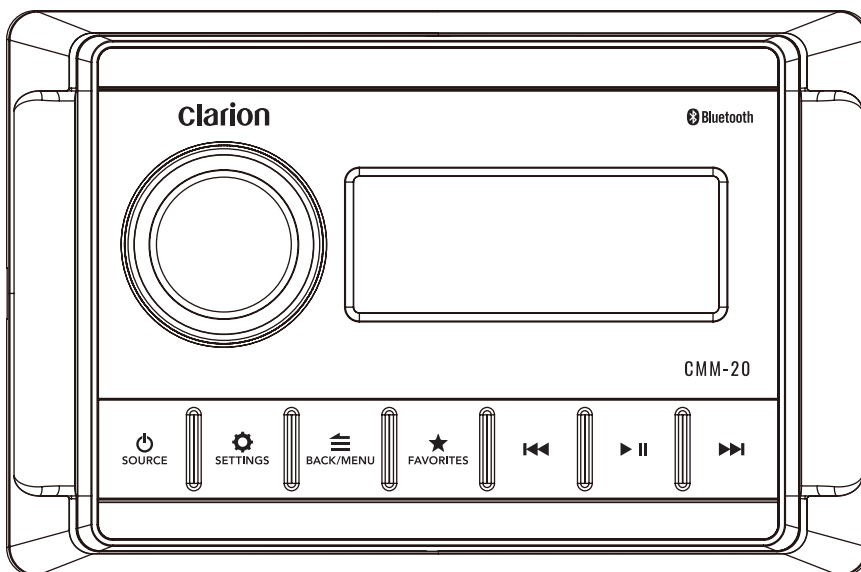
### GENERAL MOUNTING





# GENERAL CONNECTIONS







## GENERAL CONTROL FUNCTIONS







Control		Function
	<b>Volume/ Select</b>	<ul style="list-style-type: none"> <li>• Rotate to adjust volume</li> <li>• Rotate/press for navigation and making selections</li> </ul>
	<b>Source/ Power</b>	<ul style="list-style-type: none"> <li>• Short press to turn ON; Long press to turn OFF</li> <li>• Short press to advance through available sources</li> </ul>
	<b>Settings</b>	<ul style="list-style-type: none"> <li>• Short press to access audio settings (Bass/Treble/Balance/Fader/EQ)</li> <li>• Long press to access system settings (Z2-Sub/Beep/Area/Diagnostic)</li> </ul>
	<b>Back/ Menu</b>	<ul style="list-style-type: none"> <li>• Short press to go back one step or access source specific menus</li> <li>• Long press to advance through source specific menus</li> </ul>
	<b>Favorites</b>	<ul style="list-style-type: none"> <li>• Short press to access stored presets</li> <li>• Long press to store a frequency as a preset (up to 9)</li> </ul>
	<b>Mute/ Pause</b>	<ul style="list-style-type: none"> <li>• Short press to mute/unmute audio (AM/FM/WB/AUX) or pause/resume the current selection (USB/Bluetooth)</li> </ul>
	<b>Forward</b>	Short press to: <ul style="list-style-type: none"> <li>• Manually adjust tuner forwards (AM/FM/WB)</li> <li>• Select the next track (USB/Bluetooth)</li> </ul> Long press to: <ul style="list-style-type: none"> <li>• Seek to the next channel (AM/FM/WB)</li> <li>• Fast-forward (USB/Bluetooth)</li> </ul>
	<b>Backward</b>	Short press to: <ul style="list-style-type: none"> <li>• Manually adjust tuner backwards (AM/FM/WB)</li> <li>• Restart track/select the previous track (USB/Bluetooth)</li> </ul> Long press to: <ul style="list-style-type: none"> <li>• Seek to the previous channel (AM/FM/WB)</li> <li>• Fast-rewind (USB/Bluetooth)</li> </ul>



SYSTEM MENU SETTINGS	
 <b>SETTINGS</b>	<ul style="list-style-type: none"> <li>• Long press to access settings</li> </ul>
	<ul style="list-style-type: none"> <li>• Rotate to navigate</li> <li>• Press to make selections</li> </ul>
Setting	Function
<b>Z2/SUB</b>	Configures preamp outputs: Z2 (rear) or Subwoofer
<b>BEEP</b>	Audible button press confirmation: On or Off
<b>AREA</b>	Configures tuner region: USA, Europe, Australia or Other
<b>DIAG</b>	Displays software version for diagnostics

AUDIO MENU SETTINGS		
 <b>SETTINGS</b>	<ul style="list-style-type: none"> <li>• Short press to access settings</li> </ul>	
	<ul style="list-style-type: none"> <li>• Rotate to navigate</li> <li>• Press to make selections</li> </ul>	
Setting	Function	Note
<b>BASS</b>	Bass level control from -10 to +10	EQ must be set to Off
<b>TREBLE</b>	Treble level control from -10 to +10	
<b>BALANCE</b>	Balance control from full left (L10) to full right (R10)	
<b>FADER</b>	Fader control from full front (Z1:10) to full rear (Z2:10)	
<b>SUB</b>	Subwoofer preamp level control from 0 to +10	Z2/SUB must be set to SUB
<b>EQ</b>	Select EQ presets: Off, Flat, Pop, Classic, Rock	

FAVORITES MENU SETTINGS	
 <b>FAVORITES</b>	<ul style="list-style-type: none"> <li>• Short press to access settings/stored presets</li> <li>• Long press to store a frequency as a preset (up to nine)</li> </ul>
	<ul style="list-style-type: none"> <li>• Rotate to navigate</li> <li>• Press to make selections</li> </ul>
Setting	Function
<b>DELETE</b>	Select from stored presets for removal
<b>REPLACE</b>	Permits replacement when all nine preset locations are occupied

BLUETOOTH MENU SETTINGS	
 BACK/MENU	<ul style="list-style-type: none"> <li>• Short press to access settings</li> </ul>
	<ul style="list-style-type: none"> <li>• Rotate to navigate</li> <li>• Press to make selections</li> </ul>
Setting	Function
PAIR NEW DEVICE	Initiates Pairing Mode (current connected devices will be disconnected)
CONNECT PAIRED DEVICE	Display all paired devices for connection
SET PRIMARY DEVICE	Assign priority to a paired device for automatic connection
DELETE PAIRED DEVICE	Select from paired devices for removal
DELETE ALL DEVICES	Removes all paired devices from memory

USB MENU SETTINGS	
 BACK/MENU	<ul style="list-style-type: none"> <li>• Short press to access settings</li> </ul>
	<ul style="list-style-type: none"> <li>• Rotate to navigate</li> <li>• Press to make selections</li> </ul>
Setting	Function
RANDOM	Random playback of all tracks within all folders: On or Off
REPEAT	Repeats playback of the current track: On or Off
REPEAT FOLDER	Repeats playback of all tracks within a folder: On or Off
PLAY ALL	Plays all tracks within all folders: On or Off
FOLDERS LIST	Displays folders within the USB
TRACKS LIST	Displays tracks not located within a folder

AUX MENU SETTINGS	
 BACK/MENU	<ul style="list-style-type: none"> <li>• Short press to access settings</li> </ul>
	<ul style="list-style-type: none"> <li>• Rotate to navigate</li> <li>• Press to make selections</li> </ul>
Setting	Function
SENS	Configures AUX input sensitivity from -5 to +5

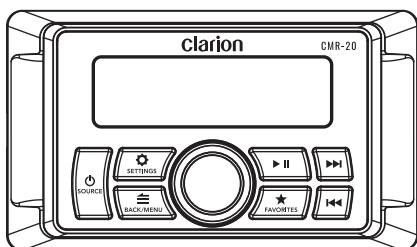
## SPECIFICATIONS

Electrical	
Operating Voltage	14.4V DC (10V – 16V)
Operating Temp Range	-22 F to +167 F (-30 C to +75 C)
Current Draw / Fuse Value	15 A (max) / 33 mA (standby) / 15 A
Remote Turn-On Output	500 mA
Display	2.37 in. TFT LCD backlit
Tuner	
FM Tuner	USA: 87.9 MHz to 107.9 MHz (0.2 MHz step) EUR: 87.50 MHz to 108.00 MHz (0.05 MHz step) AUS: 87.50 MHz to 108.00 MHz (0.10 MHz step) OTHER: 87.50 MHz to 108.00 MHz (0.05 MHz step)
AM Tuner	USA: 530 kHz to 1710 kHz (10 kHz step) EUR: 531 kHz to 1602 kHz (9 kHz step) AUS: 531 kHz to 1629 kHz (9 kHz step) OTHER: 531 kHz to 1629 kHz (9 kHz step)
NOAA Weatherband	USA: 162.400 MHz - 162.550 MHz (0.025 MHz step)
Favorites	9 presets across all bands
Bluetooth®	
Profile	5.0
Core Specification / Codec	Version 2.1 + EDR / SBC
Connection Range	Up to 35 ft / 11 m
USB	
Interface	USB 2.0 High Speed
Supported Audio Formats	MP3, WMA, FLAC, WAV
File Limits	Folders: 255 Files in a single folder: 3,000 Total Files: 9,999
Charging Output	1 A
Preamp Audio Outputs/Inputs	
Output Channels	One stereo pair of RCA plugs (1.5V RMS)
Output Configuration	Selectable: Zone 2 or Subwoofer
Auxiliary Input Channels	One stereo pair of RCA plugs (2V RMS Max)
Amplified Audio Outputs	
Rated RMS Power @ 14.4V	25W x 4 @ 4 Ω
Audio Control Options	
Tone & Balance	Bass, Treble, Balance, Fader (Zone 1 / Zone 2 or Subwoofer)
EQ	Selectable: Off, Flat, Pop, Classic, Rock
Dimensions	
Unit W x H x D	5.95 in. x 3.90 in. x 3.15 in. (151 mm x 99 mm x 80 mm)
Mounting Hole W x H	3.68 in. x 3.09 in. (94 mm x 79 mm)



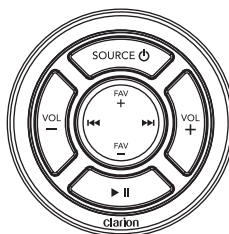
## OPTIONAL REMOTE CONTROLLERS

Add control capabilities from auxiliary locations with optional wired remotes (sold separately). Connect up to three controllers to a single source unit, at up to 75 ft (23m) away (cumulative cable length). Each wired remote connects directly using controller cables and 2-way splitters (sold separately). Refer to the supplied Owner's Manual for specific user and installation instructions.



### CMR-20 Wired Remote Controller with LCD Display

Full-function, water-resistant (IP67 rated) controller



### CMR-10 Wired Remote Controller

Auxiliary, water-resistant (IP67 rated) controller



©2021 Clarion Marine Audio  
Printed in China