MediaMaster® 105-HR

OWNER'S MANUAL
MANUEL D'UTILISATION
MANUAL DEL PROPIETARIO
BEDIENUNGSANLEITUNG
MANUALE DEL PROPRIETARIO

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.

FCC RADIATION EXPOSURE STATEMENT

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and any part of your body.

CANADA STATEMENT

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
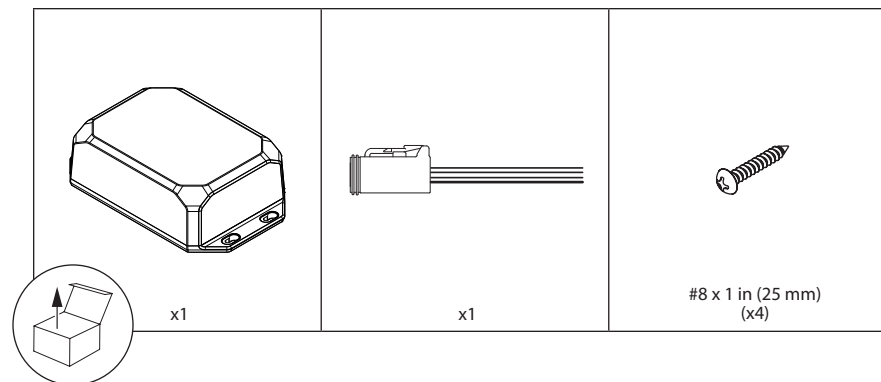
The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance. This equipment meets the exemption from the routine evaluation limits in section 2.5 of RSS-102. It should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

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.
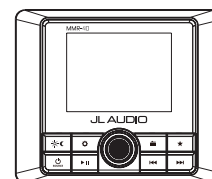
INSTALLATION CONSIDERATIONS

• 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.

x1   x1   #8 x 1 in (25 mm)
(x4)

MM105-HR CONTROL OPTIONS[1]

To operate, the MM105-HR must be connected with a compatible NMEA 2000® device (not included) using applicable NMEA 2000® cables and connectors (sold separately).

MMR-40
NMEA 2000® Network Controller
with Full-Color LCD Display
Full-function, water-resistant
(IP66 rated) controller

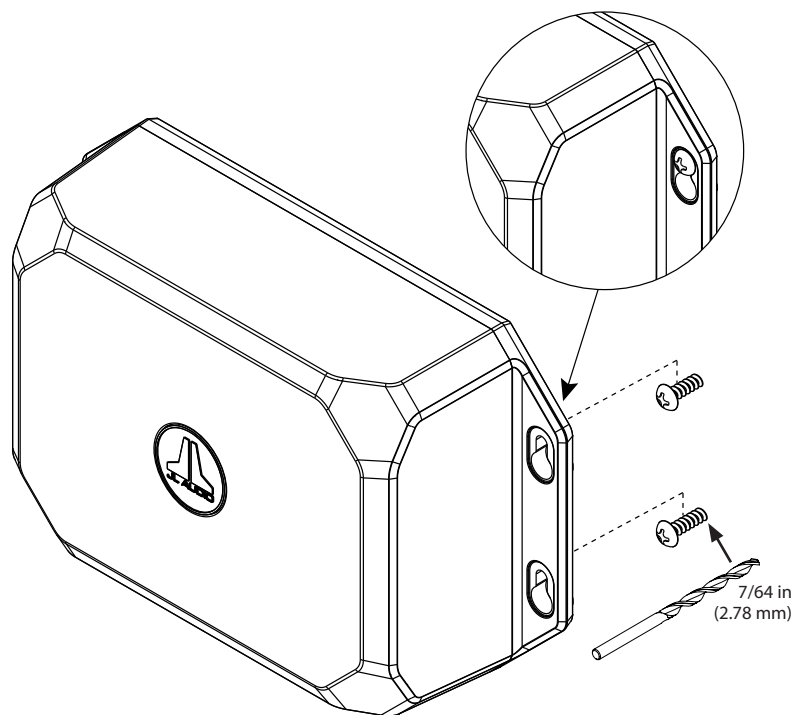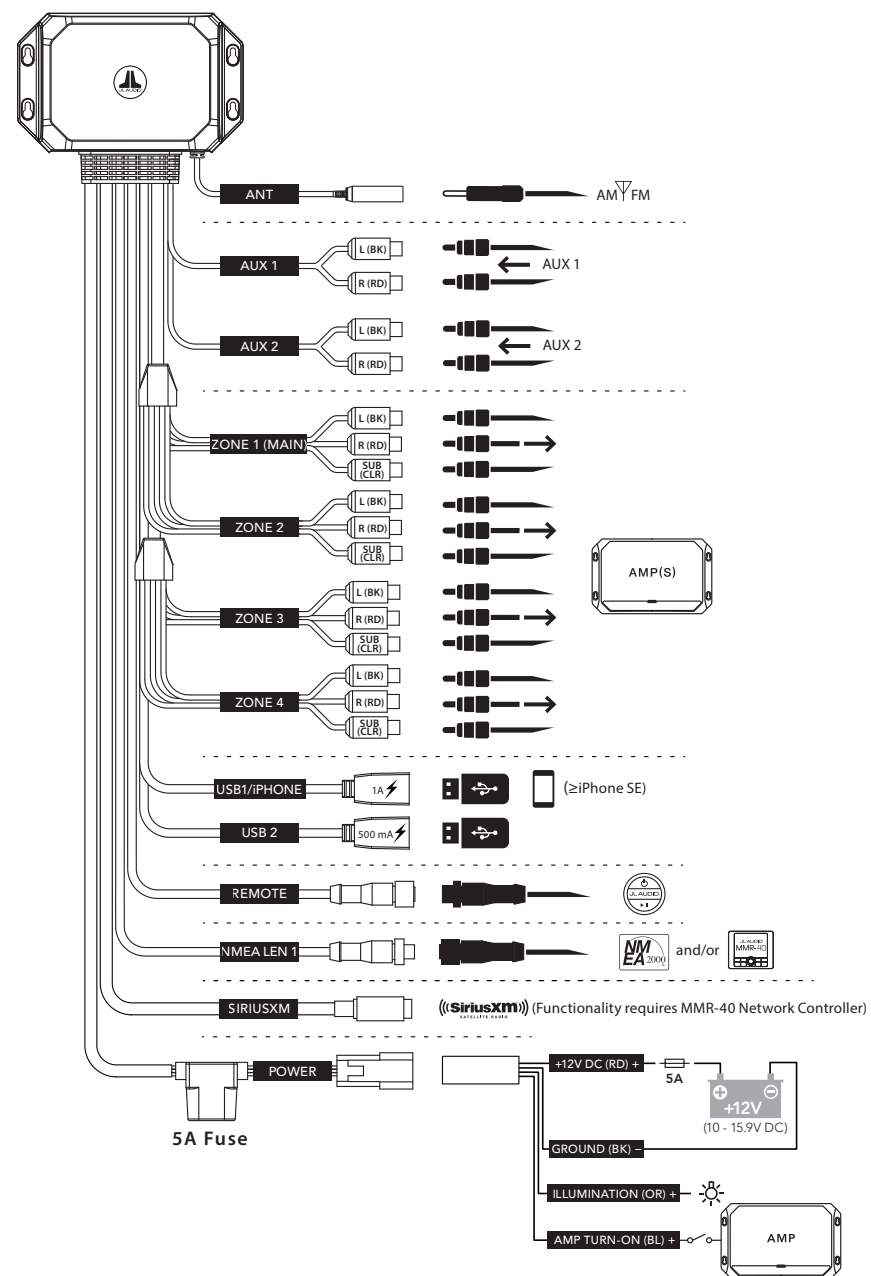**NMEA 2000® MFD Control**
Achieve control capabilties from compatible multi-function displays (MFD). Functionality requires compatible NMEA 2000® entertainment protocols (PGN) and may require a software upgrade of connected MFD devices. Refer to your MFD's manufacturer for device compatibility info.

1. Control functionality will vary depending on the connected MFD and/or remote controller. Full SiriusXM® functionality requires connection to an MMR-40 Network Controller (sold separately).
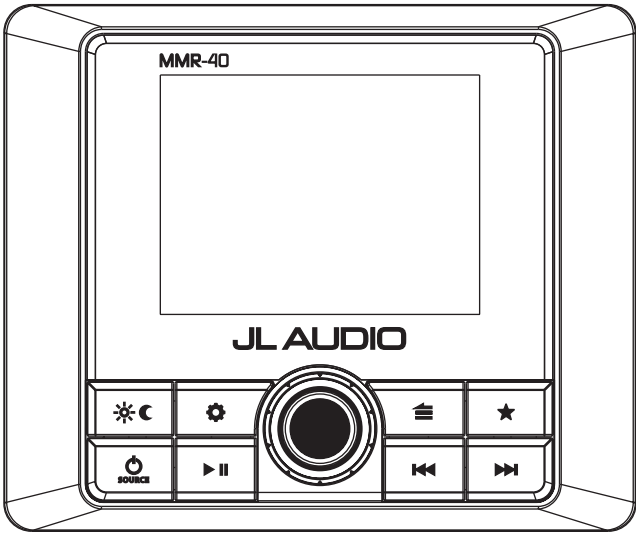
GENERAL MOUNTING

GENERAL CONNECTIONS

7/64 in
(2.78 mm)

ANT — AM FM

AUX 1 — L (BK) / R (RD) — ← AUX 1

AUX 2 — L (BK) / R (RD) — ← AUX 2

ZONE 1 (MAIN) — L (BK) / R (RD) / SUB (CLR)

ZONE 2 — L (BK) / R (RD) / SUB (CLR)

ZONE 3 — L (BK) / R (RD) / SUB (CLR)

ZONE 4 — L (BK) / R (RD) / SUB (CLR)

AMP(S)

USB1/iPHONE — 1A — (≥iPhone SE)

USB 2 — 500 mA

REMOTE — JL AUDIO

NMEA LEN 1 — NMEA 2000 and/or MMR-10

SIRIUSXM — ((SiriusXM)) SATELLITE RADIO (Functionality requires MMR-40 Network Controller)

POWER

5A Fuse

+12V DC (RD) + — 5A — +12V (10 - 15.9V DC)

GROUND (BK) −

ILLUMINATION (OR) +

AMP TURN-ON (BL) + — AMP

CONTROL PANEL (using MMR-40)

GENERAL CONTROL FUNCTIONS (using MMR-40)

Control		Function
⏻ SOURCE	Source/ Power	• Short press to turn ON; Long press to turn OFF • When on, short press to display the **SOURCE: Select** menu
(knob)	Volume/ Select	• Rotate to adjust volume • Rotate/press for navigation and making selections • Long press to access **Subwoofer Trim Level** settings
⚙	Settings	• Short press to access the **Tone & Balance** settings • Long press to access the **System Settings: Main Menu**
≣	Back/ Menu	• Short press to go back one step or access source specific menus
★	Favorites	• Short press to access stored presets • Long press to store a frequency as a preset (up to 24)
▶ ❚❚	Mute/ Pause	• Short press to mute/unmute audio (AM/FM/SiriusXM/DAB+/AUX1/ AUX2) or pause/resume the current selection (USB1/USB2/Bluetooth) • When the **Audio Zone Levels** screen is displayed, press to mute all audio (AM/FM/SiriusXM/DAB+/AUX1/AUX2/USB1/USB2/Bluetooth)
▶▶❙	Forward	Short press to: • Manually adjust tuner forwards (AM/FM/SiriusXM/DAB+) • Select the next track (USB1/USB2/Bluetooth) Long press to: • Seek to the next channel (FM); Skip forward ten frequency steps (AM) • Initiate Rapid Channel Browsing forward (SiriusXM) • Fast-forward (USB1/USB2)
❙◀◀	Backward	Short press to: • Manually adjust tuner backwards (AM/FM/SiriusXM/DAB+) • Restart track/select the previous track (USB1/USB2/Bluetooth) Long press to: • Seek to the previous channel (FM); Skip backwards ten frequency steps (AM) • Initiate Rapid Channel Browsing backward (SiriusXM) • Fast-rewind (USB1/USB2)
☀ ☾	Day/ Night	• Short press to switch between Day/Night display settings • Long press to access the **System Settings: Display** menu

SYSTEM MENU SETTINGS (using MMR-40)

⚙	• Long press to access the **System Settings: Main Menu**
(knob)	• Rotate to navigate • Press to make selections

Setting	Function	
Name this Device	Create a custom name to display on connected Bluetooth devices and NMEA 2000® networks	
Audio Zone Setup	Configures each set of audio zone outputs	
AUX Input Sensitivity	Configures AUX input sensitivity: 2V or 1V RMS (default)	
Diagnostic	Displays serial number, hardware and software version info	
Display	Configures display and brightness settings	
Battery Monitor	Built-in alert notifies when +12VDC supply voltage drops below 10 volts or above 16 volts	If triggered, the unit will enter Safe Mode with a message to turn the unit off until normal operating voltage is restored.
Scrolling Text	Enables continuous scrolling of available RDS/track text info	
Tuner Region	Configures AM/FM tuner range/scale for a specific region; DAB+ replaces SiriusXM outside of North America	
Power-up Settings	Configures display activation upon connection to power	

AUDIO ZONE MENU SETTINGS (using MMR-40)

⚙	• Long press to access the **System Settings: Main Menu**
(knob)	• Rotate to navigate • Press to make selections

Zone	Function	Setting 1	Setting 2
Z1: Zone 1 Z2: Zone 2 Z3: Zone 3 Z4: Zone 4	Level Control Mode	Absolute: Creates an independent level control for selected zones, each with its own separate volume level slider.	
		Relative: Links the volume levels of Zones 2 - 4 with the level of Zone 1. (Linked zones will proportionally follow Zone 1's volume.) Each zone's offset level is independently adjustable, allowing you to create a customized level controller, specific to a vessel's layout.	
		Fixed	4V RMS Max (default) 2V RMS Max 1V RMS Max
		Off	
	Max Volume Limit	Max Vol Limit	
	Rename Zone	Bow, Bridge, Cabin, Cockpit, Galley, Helm, Stateroom 1, Stateroom 2, Tower, Transom	
		Custom	Alphanumeric Input
		Factory Default	
	Sub 1 Sub 2 Sub 3 Sub 4	LPF (Low Pass Filter)	Off (default) 60 Hz 80 Hz 100 Hz
		Sub Off	
Z2: Zone 2 Z3: Zone 3 Z4: Zone 4	Tone Control Mode	Same as Zone 1	
		Independent Tone Control	

BLUETOOTH® AUDIO

You may wirelessly stream audio from a Bluetooth compatible device from up to 35 ft. away (11 m). Up to 8 devices can be paired to the MM105-HR, but only one streaming device can connect at one time.

BLUETOOTH MENU SETTINGS (using MMR-40)	
⏏	• With Bluetooth selected as a source, short press to display the **Bluetooth: Main Menu**
◉	• Rotate to navigate • Press to make selections
Setting	**Function**
Now Playing	Return to the Now Playing Screen
Pair New Device	Initiates Pairing Mode (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 a Paired Device	Select from paired devices for removal
Delete All Paired Devices	Removes all paired devices from memory

NOTE: When connected to +12V DC, the MM105-HR will automatically connect to any previously paired device. If a paired device is out of range, or if there are no previously paired devices, the MM105-HR will enter Bluetooth® device pairing mode for sixty seconds.

USB CONNECTIONS

The MM105-HR includes two ports to connect with USB storage class devices (thumb drive, digital audio player, etc.).
USB 1: High-speed connection for use with iPhone®/iPod® (MFi Certified) or USB storage device (1 A charging output)
USB 2: Full-speed USB storage device connection (500 mA charging output)

USB MENU SETTINGS (using MMR-40)	
⏏	• With USB1 or USB2 selected as a source, short press to display the **USB: Main Menu**
◉	• Rotate to navigate • Press to make selections
Setting	**Function**
Now Playing	Return to the Now Playing Screen
Shuffle	Activate Shuffle: On or Off (default)
Repeat	Activate Repeat: All, Song or Off (default)
Playlists	Displays Playlists in library
Artists	Displays Artists in library
Songs	Displays Songs in library
Albums	Displays Albums in library
Genres	Displays Genres in library
Composers	Displays Composers in library

⚠ **IMPORTANT**

• Properly secure the connected device before driving to prevent damage from dropping or sudden acceleration/braking.
• Control, functionality and display may vary depending on the model and version of iPhone® connected.
• When connected via USB port, make sure to unpair or disable the Bluetooth connection to avoid possible playback conflicts.
• If you experience abnormal performance during operation, disconnect the iPhone® and check its condition. Restart your iPhone® if performance does not improve.
• "Made for iPhone" means that an electronic accessory has been designed to connect specifically to an iPhone® 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. Please note that the use of this accessory with an iPhone® may affect wireless performance.
• iPhone® and all related marks and logos are trademarks of Apple Inc., registered in the U.S. and other countries.

SIRIUSXM® SATELLITE RADIO

(Note: Functionality requires MMR-40 Network Controller.) 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. (SiriusXM service is only available in the continental US and Canada.)

Activating Your SiriusXM Subscription
After installing your SiriusXM Connect tuner and antenna, power on your MM105-HR and select SiriusXM mode. You should be able to hear the SiriusXM preview channel on Channel 1. If you cannot hear the preview channel, please check the installation instructions to make sure your SiriusXM Connect tuner is properly installed.

After you can hear the preview channel, tune to Channel 0 to find the Radio ID of your tuner. In addition, the Radio ID is located on the bottom of the SiriusXM Connect Vehicle Tuner and its packaging. You will need this number to activate your subscription. Write the number down for reference.
Note: the SiriusXM Radio ID does not include the letters I, O, S or F.

In the USA, you can activate online or by calling SiriusXM Listener care:
• Visit www.siriusxm.com/activatenow
• Call SiriusXM Listener Care
  at 1-866-635-2349

For Canadian Subscriptions, please contact:
• Visit www.siriusxm.ca/activate
• Call SiriusXM Customer Care
  at 1-888-539-7474

As part of the activation process, the SiriusXM satellites will send an activation message to your tuner. When your radio detects that the tuner has received the activation message, your radio will display: "Subscription Updated". Once subscribed, you can tune to channels in your subscription plan.

Note: The activation process usually takes 10 to 15 minutes, but may take up to an hour. Your radio will need to be powered on and receiving the SiriusXM signal to receive the activation message.

Parental Controls
Some SiriusXM channels contain mature content. When the Parental Controls feature is enabled, channels with mature content are restricted and will require a 4-digit lock code to access.

Enabling Parental Controls
1. Press **BACK/MENU** to access the **SiriusXM: Main Menu**.
2. Turn **VOL /SEL** to **Parental Controls** and press to enter.
3. Press **VOL /SEL** to select **Lock Mature Channels**. After, you must enter a 4-digit lock code to lock mature content channels. (Parental Control default passcode: 0000)
4. Use **VOL /SEL** to enter the 4-digit lock code and select **Save** when finished.

Changing the Lock Code
1. Press **BACK/MENU** to access the **SiriusXM: Main Menu**.
2. Turn **VOL /SEL** to **Parental Controls** and press to enter.
3. Turn **VOL /SEL** to **Edit Lock Code** and press enter.
4. Use **VOL /SEL** to enter the current 4-digit lock code and select **Enter** when finished.
5. Use **VOL /SEL** to enter the new lock code and select **Enter** to confirm. **Make sure to save your 4-digit lock code for future reference.**

SIRIUSXM MAIN MENU
This allows access to the SiriusXM operational menu options. Refer to the table below for available settings and functionality.

1. Press **BACK/MENU** to access the **SiriusXM: Main Menu**.
2. Turn **VOL /SEL** to highlight one of the menu settings listed in the table below and press to enter.
3. Use **VOL /SEL** to make selections.

Setting	Function
Now Playing	Return to the Now Playing Screen
Browse By Channel	View list of available SiriusXM channels
Browse By Category	View list of available SiriusXM channels by category
My Account	View your SiriusXM account status, Radio ID and Reset SiriusXM command
Parental Controls	Settings for access to Lock and Unlock Mature SiriusXM channels
Direct Tune	Allows entry for direct channel selection

Resetting SiriusXM Settings
A reset will restore all presets and settings, including parental controls, back to their factory defaults.
1. Press **BACK/MENU** to access the **SiriusXM: Main Menu**.
2. Turn **VOL /SEL** to **My Account** and press to enter.
3. Turn **VOL /SEL** to **Reset SiriusXM** and press to enter.
4. Use **VOL /SEL** to select **Confirm**.

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SIRIUSXM TROUBLESHOOTING

Advisory messages may appear on the display when a SiriusXM-Connect Vehicle Tuner is connected to the MM105-HR. Refer to the table below for an explanation and suggested corrective actions.

Advisory Message	Description
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 audio retailer or online at www.shop.siriusxm.com.
Check 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.
No Signal	The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal. • Verify that your vehicle/vessel is outdoors with a clear view of the sky. • Verify that the SiriusXM antenna is mount on the exterior. • 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 audio retailer or online at www.shop.siriusxm.com.
Subscription Updated	The radio has detected a change in your SiriusXM subscription status. Press **VOL/SEL** to clear the message. In the U.S.A., visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription. In Canada, visit www.siriusxm.ca or call 1-888-539-7474 if you have questions about your subscription.
Channel Unavailable	The channel that you have requested is not a valid SiriusXM channel or the channel 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 Unsubscribed	The channel that you have requested is not included in your SiriusXM subscription package of the channel that you were listening to is no longer included in your SiriusXM subscription package. In the U.S.A., visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription package or would like to subscribe to this channel. In Canada, visit www.siriusxm.ca or call 1-877-438-9677.
Channel Locked	The channel that you have requested is Locked by the radio Parental Control feature. See Parental Controls, page 13 for more information on the Parental Control feature and how to access locked channels.

SPECIFICATIONS

Electrical	
Operating Voltage	14.4V DC (10V – 15.9V)
Operating Temp Range	-4 F to +158 F (-20 C to +70 C)
Current Draw / Fuse Value	5 A (max) / 120 mA (standby) / 1.5 A
NMEA 2000® LEN	1 (Micro-C connector)
Compatible MFDs	Simrad, Lowrance, Raymarine, Garmin
Audio Outputs/Inputs	
Output Channels	One stereo pair and mono subwoofer RCA plugs per zone
Output Configuration	Relative, Absolute, Fixed or Off
Maximum Output Voltage	Relative or Absolute: 4V RMS Fixed: Selectable 4V/2V/1V RMS
Output Impedance	250 Ω
Auxiliary Input Channels	Two stereo pairs of RCA plugs (2V/1V RMS Input Sensitivity)
Tuner	
FM Tuner with RDS	87.5 MHz to 107.9 MHz (0.2 MHz step)
AM Tuner	530 kHz to 1710 kHz (10 kHz step)
DAB+ Tuner	170 MHz to 230 MHz
Favorites	24 presets across all tuners/bands
Bluetooth®	
Profile	A2DP v1.2, AVRCP v1.4
Core Specification	Version 2.1 + EDR
Codec	SBC, Qualcomm® aptX™ audio
Connection Range	Up to 35 ft / 11 m
USB	
Interface	USB 2.0
Charging Output	USB1: 1 A / USB2: 500 mA
Supported Audio Formats	MP3, MP4, WAV, AAC, M4A, M4B
Apple Compatibility	iPhone SE (2nd generation), iPhone 11 Pro Max, iPhone 11 Pro, iPhone 11, iPhone XS Max, iPhone XS, iPhone XR, iPhone X, iPhone 8 Plus, iPhone 8 (functionality contingent upon compatible iOS release)
Dimensions	
Unit W x H x D	7.70 in. x 2.32 in. x 4.96 in. (196 mm x 59 mm x 126 mm)

CONTROL OPTIONS

The MM105-HR includes various options for adding control capabilities from auxiliary locations. Refer to the supplied Owner's Manual of each controller (sold separately) for specific user and installation instructions.
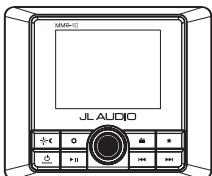
NMEA 2000® Connection

NMEA 2000®, Micro-C connector interfaces directly with NMEA 2000® networks using applicable NMEA 2000® cables and connectors (sold separately).

NMEA 2000® MFD Control
Achieve control capabilties from compatible multi-function displays (MFD). Functionality requires compatible NMEA 2000® entertainment protocols (PGN) and may require a software upgrade of connected MFD devices. Refer to your MFD's manufacturer for device compatibility info.
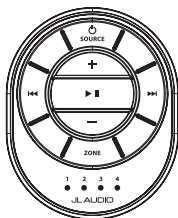

MMR-40
NMEA 2000® Network Controller with Full-Color LCD Display
Full-function, water-resistant (IP66 rated) controller

MMR-5N2K
NMEA 2000® Volume Controller
Auxiliary, water-resistant (IPX7 rated) volume controller

BTLE Connection

Ultra-efficient Bluetooth® Low Energy technology permits wireless control from up to 35 ft (11 m) away. Add up to eight remotes (sold separately) to a single MediaMaster®.

MMR-25W
Bluetooth® Remote Controller
Auxiliary, water-resistant (IP68 rated) controller.

MediaMaster® Remote Controller App
Free, full-function, app based controller using your compatible wireless device.

Note: App functionality requires update of source unit software. Visit: www.jlaudio.com/support

REMOTE Connection

Permits direct connection of MediaMaster® wired controllers (sold separately) using accessory controller cables and splitters (sold separately). Add up to three remotes to a single MediaMaster®, at up to 75 ft (23 m) away.

MMR-20-BE
Wired Remote Controller
Auxiliary, water-resistant (IP67 rated) controller