

clarion®

Owner's manual & Installation manual

M505

MARINE Bluetooth® USB/MP3/WMA RECEIVER

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1. FEATURES

- SiriusXM-Ready™
- Weather Band Radio
- Watertight Controller
- Built-In Bluetooth®
- 50Wx4 Built-In Amplifier
- Compatible with iPod® /iPhone®






MP3/WMA



Made for


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.

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

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.
- French
 - 4.1. 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."

CE 0700 MODEL: M505 clarion

FUNCTION	WIRE COLOR	FUNCTION LABEL	U.S.A.
AM	B YELLOW	ANTENNA	AM 530-1710kHz
FM	B RED	ANTENNA	FM 87.5-107.9MHz
AM	B GREEN	LEFT FRONT SPEAKER (+)	Europe:
AM	B WHITE	LEFT FRONT SPEAKER (-)	AM 531-1620kHz
FM	B BROWN	RIGHT FRONT SPEAKER (+)	FM 87.5-108.0MHz
FM	B PURPLE	RIGHT FRONT SPEAKER (-)	Also:
AM	B TAN	ANTENNA	AM 531-1620kHz
FM	B RED	ANTENNA	FM 87.5-108.0MHz
FM	B BLUE	LEFT REAR SPEAKER (+)	Australia:
FM	B BLACK	LEFT REAR SPEAKER (-)	AM 531-1620kHz
FM	B WHITE	RIGHT REAR SPEAKER (+)	FM 87.5-108.0MHz
FM	B PURPLE	RIGHT REAR SPEAKER (-)	12V @ GROUND
RF	B RED	ANTENNA	Rating current: 15A
RF	B BLACK	ANTENNA	CAUTION: OVERHEAT

Blue/White Wire Blue/White Wire for Amplifier, Turn-On and should provide 10-15amp when the radio is ON and may draw 20amp

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.

CLARION CORPORATION OF AMERICA
 1300 GATEWAY DRIVE, CYPRESS, CALIFORNIA 90630, USA

MANUFACTURER:

MANUFACTURER: **SMX**

SERIAL NO:

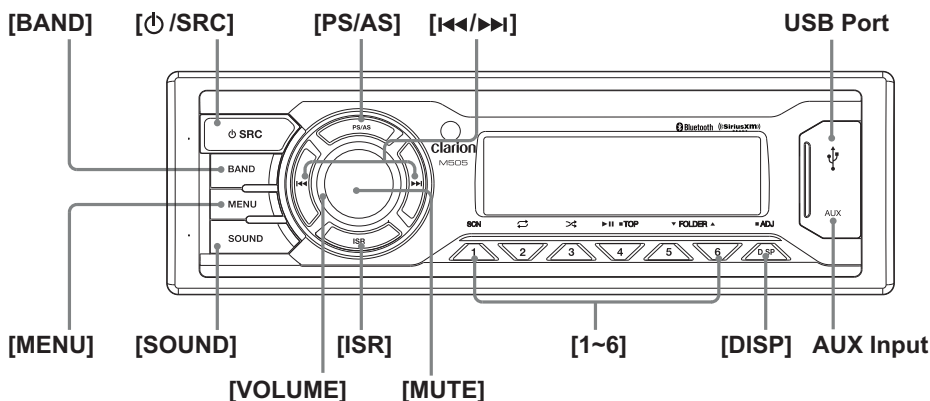
FCC ID: JAB7E-M505
 IC: 1186A-M505
 MADE IN CHINA

3. CAUTIONS ON HANDLING

- Protect from high temperature. Expose to direct sunlight for an extended period of time can produce very high temperature in your vessel. Cool down the interior before starting the playback.

4. CONTROLS

Operational Panel



Name of Buttons and their Functions

[BAND] Button

- **TUNER** mode - Select tuner band
- **SiriusXM** mode - Select tuner band

[SRC] Button

- Toggle the audio source
- Power On / Power Off (Press and Hold)

[PS/AS] Button

- Scan play / Preset scan
- **SiriusXM** mode - Preset scan

[MUSIC] Button

- Preset station up/down
- Previous / next track
- Fast Forward / Backward (Press and Hold)

[MENU] Button

- **USB** mode - Search function
- **iPod** mode - iPod menu
- **SiriusXM** mode - Replay mode / Category search / Direct Select

[SOUND] Button

- Sound effect setting

[VOLUME] Knob

- Adjust volume level

[ISR] Button

- Recall ISR station stored in memory and store current station is ISR memory (Press and Hold)

[MUTE] Button

- Mute or Unmute the audio output / Confirm / Display Off the LCD screen(Press and Hold)
- **SiriusXM** mode - Add Artist Alert / Add Song Alert (Press and Hold)

[1~6] Buttons

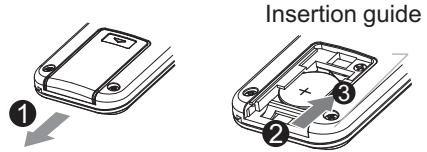
- **[1]** Button: Scan play / Preset station 1
- **[2]** Button: Repeat play / Preset station 2
- **[3]** Button: Random play / Preset station 3
- **[4]** Button: Play / Pause / Top play (Press and Hold) / Preset station 4
- **[5]** Button: Previous folder / Preset station 5
- **[6]** Button: Next folder / Preset station 6

Notes for use of Optional Remote Control

1. Aim the remote control at the remote sensor on the unit.
2. Remove the battery from the remote control or insert a battery insulator if the battery has not been used for a month or longer.
3. DO NOT store the remote control under direct sunlight or in high temperature environment, or it may not function properly.
4. Use "button shaped" lithium battery "CR2025" (3V) only.
5. DO NOT subject battery to recharge, disassemble, heat or dispose in fire or water.
6. Insert the battery in proper direction according to the (+) and (-) polarities.
7. Store the battery in a place where children can not reach to avoid the risk of accident.

Inserting the Battery

1. Slide remote control units rear cover in the direction shown.
2. Insert battery (Cr2025) into insertion guides with printed side (+) up.
3. Press battery into compartment as shown.
4. Replace and slide cover until it clicks into place.



Remote Control

[⏻/SRC] Button

- Toggle the audio source
- Power On / Power Off (Press and Hold)

[⏮/⏭] Button

- Preset station up/down
- Previous / next track
- Fast Forward / Backward (Press and Hold)

[SCN/PS] Button

- Scan play / Preset scan
- **SiriusXM** mode - Channel scan (in current category) / Preset scan (Press and hold)

[BAND/TOP] Button

- **USB** mode - Top play
- **TUNER** mode - Select tuner band
- **SiriusXM** mode - Select tuner band, quit Replay (Replay mode) / Select category (Press and Hold)

[▲ / ▼] Button

- Volume up / down

[▶|] Button

- Play / pause
- **SiriusXM** mode - Replay mode

[MUTE] Button

- Mute or Unmute the audio output

[RDM] Button

- Random play

[RPT] Button

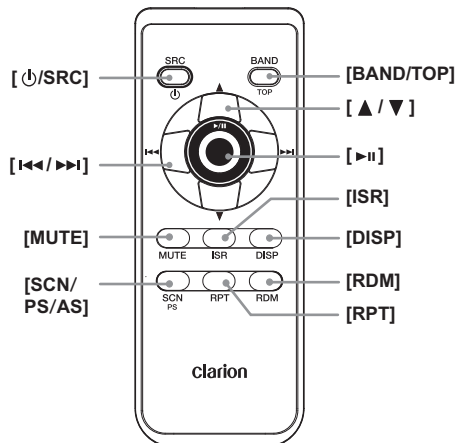
- Repeat play

[ISR] Button

- Recall ISR station stored in memory and store current station is ISR memory (Press and Hold)

[DISP] Button

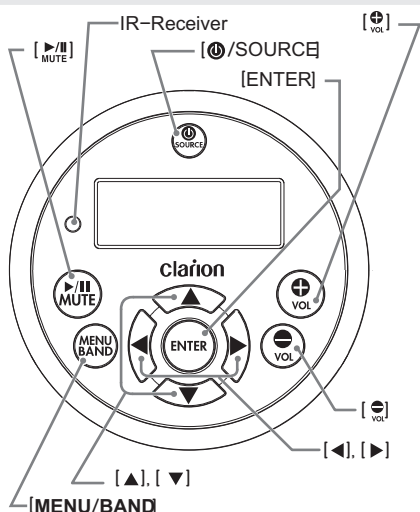
- Display switch



Optional Wired Remote Control Unit Operations

Following operations are enabled by remote control with the separately sold Wired Remote Control Unit MW1 (shown below), MW2 or MW4.

Note: If the remote control is connected with this unit while the power on, please restart this unit again to confirm the normal display.



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!

[⏻ / SOURCE] Button

- Press the [⏻ / SOURCE] button to turn the power on and press and hold it (1 sec.) to turn the power off.
- Each time the [⏻ / SOURCE] button is pressed, the mode switches.

Note: If the above equipment is not connected, corresponding mode cannot be selected.

[ENTER] Button

- **TUNER/Weather Band** mode - Confirm (in Preset and Manual store)
- **USB** mode - Confirm (in Menu mode)
- **iPod/iPhone** mode - Confirm (in Menu mode)
- **SiriusXM** mode - Jump to Alert ch / Confirm ch (in Search mode)

[VOL+] / [VOL-] Buttons

- Press the [VOL+] button to increase the volume.
- Press the [VOL-] button to decrease the volume.

[◀] / [▶] Buttons

- **Tuner/Weather Band** mode - Station Up/Down & Seek Up/Down (Press and hold)
- **USB** mode - Previous/Next track & Fast Forward /Reverse (Press and hold)
- **iPod/iPhone** mode - Previous/Next track & Fast Forward/Reverse (Press and hold)
- **SiriusXM** mode - Channel Tune Up/Down, Fast Channel Tune Up/Down (Press and hold), Move cursor (Direct mode) & **Enter the Parent Code** Window
- **SiriusXM Replay** mode - Press and Release the Left or Right Arrow to skip back or forward one song/track. Press and Hold will Fast Forward/Fast Rewind through the Replay buffered content.

[▲] / [▼] Buttons

- **Tuner/Weather Band** mode - Preset Station Up /Down & Enter into Manual Store (Press and hold)
- **USB** mode - Folder Up/Down & Select (in Folder search mode)
- **iPod/iPhone** mode - Select (in Menu mode)
- **SiriusXM** mode - Preset channel Up/Down, Category Up/Down (in Category mode), Numeric Up/Down (Direct mode), input Parent code interface

[MENU/BAND] Buttons

- **Tuner/SiriusXM** mode - Select the band
- Press this button to access menu items for necessary functions in every mode.
- In different modes, the menu items are different. Please see the operation introduction of every mode for more details.

[MUTE] Buttons

- **Tuner/Weather Band** mode - Mute On / Off
- **USB** mode - Play / Pause
- **iPod/iPhone** mode - Play / Pause
- **SiriusXM** mode - Replay Mode, Press and Hold for 3-seconds to exit Replay Mode.
- **BT Audio** mode - Play / Pause

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.

◆ Power On/Off


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 vehicle 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. The power button / knob illumination on the unit will light up.



Engine ON
position

2. Press the [ / SRC] button to turn on the power under standby mode. Press and hold to turn off the power.

◆ Mute

Press the [MUTE] button to **turn the mute On and Off.**

◆ Adjusting the volume


Rotating the [VOLUME] to increase/decrease the volume.

The adjustable range of volume is 0 to 46.

⚠ CAUTION

While driving, keep the volume level at which external, sounds can still be heard.

◆ Selecting a mode

Press the [ / SRC] button to display source menu.

* External equipment not connected to this unit is not displayed.

◆ Display System information

press the [DISP] button on the front panel to switch the display information, system time and playing source.

◆ Display OFF/ON

This feature will allow the user to turn the display OFF in the event the display is too bright in different lighting conditions.

To use this feature, please follow these steps:

1. To turn the display OFF, Press and hold [MUTE] button and the display will turn OFF, but the audio from the current source will continue to play.
2. To turn the display ON, Press the [MUTE] button and the display will turn back ON.

With the display OFF, the ability to change tracks and adjust volume will still remain.

System Menu

In any mode, press and hold [**DISP**] button to enter System Menu. Press [**I◀◀**] or [**▶▶**] button to select options, rotate the [**VOLUME**] knob to adjust a value / option.

◆ CLOCK

Press the [**MUTE**] button to enter clock setting mode, rotate the [**VOLUME**] knob to set Clock, Press [**I◀◀**] or [**▶▶**] button to select hour or minutes, press and hold the [**MUTE**] to confirm.

◆ Disconnect / Re-connect

Disconnect / Re-connect currently connected mobile phone.

Press the [**MUTE**] button to disconnect / Re-connect.

◆ DIMMER

Rotate the [**VOLUME**] knob to adjust the LCD display backlight level between High or Low.

◆ BEEP ON/OFF

Rotate the [**VOLUME**] knob to choose button BEEP sound On or Off.

◆ TUNE AREA

Rotate the [**VOLUME**] knob to select suitable country region:

- U.S.A (United States)
- EUROPE (Eastern/Western Europe)
- Asia (Asia Pacific)
- AUST (Australia)

◆ 12 / 24H

Rotate the [**VOLUME**] knob to choose time format: 12 or 24 hours.

◆ LOCAL/DX

Rotate the [**VOLUME**] knob to choose radio Local or distant at TUNER mode.

- **LOCAL**: Only stations with strong signal can be received.
- **DX**: Stations with strong and weak signals can be received.

◆ RESET

Press the [**MUTE**] button. Settings will be set to the default value.

Audio Menu

Press [**SOUND**] button to enter sound effect setting mode. Press [**I◀◀**] or [**▶▶**] button to select options, rotate the [**VOLUME**] knob to adjust a value / option.

◆ EQ (Preset Equalizer Setting)

Rotate the [**VOLUME**] knob to change EQ:

Flat->Jazz->Pop->Classic->Rock->News->Urban->Rave->Movie->Techno->User

◆ LOUND On/Off

Rotate the [**VOLUME**] knob to select Loudness between ON and OFF

◆ SUBW On/Off

Rotate the [**VOLUME**] knob to select subwoofer between ON and OFF

◆ SUBW GAIN

Rotate the [**VOLUME**] knob to **adjust the subwoofer gain range: 0 to 12**

◆ SUBW LPF

Rotate [**VOLUME**] knob to **adjust the subwoofer Low Pass Filter range: 80HZ/120HZ/180HZ**

◆ BASS

Rotate the [**VOLUME**] knob to adjust the desired Bass level range from -7 to +7.

◆ MIDDLE

Rotate the [**VOLUME**] knob to adjust the desired Middle level range from -7 to +7.

◆ TREBLE

Rotate the [**VOLUME**] knob to adjust the desired Treble level range from -7 to +7.

◆ BALANCE

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

◆ FADER

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

◆ AUX IN

Rotate the [**VOLUME**] knob to adjust the **Aux In** between HIGH / MID / LOW.

Radio Operation

◆ Select Tuner As Playing Source

Press the [**⏻/SRC**] Source button to select the TUNER mode.

◆ 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	Asia 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

◆ Selecting The Radio Band

Press the [**BAND**] button on the panel to select one radio band.

◆ [▶▶] Tuning Up / [◀◀] Tuning Down Buttons

1. Press the [▶▶] / [◀◀] button change intervals step by step.
2. Press and hold the [▶▶] / [◀◀] button to seek to the next strongest station.

◆ Recalling a Preset Station

Press one numeric button among 1 to 6 on the front panel to select the corresponding stored stations.

◆ Presets Scan

Preset scan receives the stations stored in preset memory in order. This function is useful when searching for a desired station in memory.

1. Press the [**PS/AS**] button.
2. When a desired station is tuned in, press the [**PS/AS**] button again to continue receiving that station.

◆ Manual Store

When one expected radio station has been detected, press and hold number button 1-6 to store it in the memory.

◆ Local seeking

When LOCAL seeking is ON, only those radio stations with strong radio signal could be received. To select LOCAL function, press and hold the [**DISP**] button on the front panel, then press the [▶▶] / [◀◀] button repeatedly until LOCAL or DX display on the LCD, rotate the [**VOLUME**] knob to select local or distant mode.

◆ Area Set

This option allows you to select the appropriate frequency spacing for your area.

1. Press and hold the [**DISP**] button.
2. Press the [▶▶] / [◀◀] button to select "TUNER AREA"
3. Rotate the [**VOLUME**] knob to select: "U.S.A", "Europe", "Asia", "AUST (Australia)"
4. Press the [**MUTE**] button to confirm.

Weather Band Operation

◆ [▶▶] Tuning Up / [◀◀] Tuning Down Buttons

1. Press the [▶▶] / [◀◀] button change intervals step by step.
2. Press and hold the [▶▶] / [◀◀] button to seek to the next strongest station.

◆ Recalling a Preset Station

Press one numeric button among 1 to 6 on the front panel to select the corresponding stored stations.

◆ Presets Scan

Preset scan receives the stations stored in preset memory in order. This function is useful when searching for a desired station in memory.

1. Press the [PS/AS] button.
2. When a desired station is tuned in, press the [PS/AS] button again to continue receiving that station.

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 [**⏏/SRC**] button to enter SiriusXM mode.
2. Press [**⏮**] or [**⏭**] to select channel "0".
The unit displays 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. Activate the SiriusXM Connect Vehicle Tuner using one of the two methods below:
 - Online: Go to "www.siriusxm.com/activatenow".
 - Phone: Call 1-866-635-2349.
 - To activate SiriusXM Canada service go to www.xradio.ca and click on "ACTIVATE RADIO" in the top or call XM customer Care at 1-877-438-9677.

◆ Storing Channel Presets

1. Press the [**BAND**] to select the desired band you want to store the preset in.
There are 3 Satellite Radio Preset bands.
Each press of [**BAND**] changes the band.
2. Tune to the desired channel and then press and hold one of the preset buttons (1~6), to store the channel.
3. Repeat the procedure to store up to 5 other channels on to the same band.

Note:

- A total of 18 channels can be stored in the preset memory, 6 channels on each band (SXM1, SXM2 and SXM3).

◆ Tuning Channel Presets

1. Press the [**BAND**] to select the desired band of Presets you wish to access.
2. Press the preset button (1~6) that has your desired Satellite Radio channel stored in memory.

◆ Category Browsing

1. Press the [**MENU**] button to activate the Category Browsing mode.
2. Rotate the [**VOLUME**] knob to select desired category.
3. Press [**⏮**] or [**⏭**] to select desired channel within the selected Category. You can see channel name, channel number, artist, title or content by pressing [**DISP**].
4. Press the [**MUTE**] to tune to selected channel.

Note:

If no operation is performed for 10 seconds, the Category Browsing mode is canceled.

◆ Presets Scan

Preset scan receives the stations stored in preset memory in order. This function is useful when searching for a desired station in memory.

1. Press the [**PS/AS**] button.
2. When a desired station is tuned in, press the [**PS/AS**] button again to continue receiving that station.

◆ SiriusXM Replay™ function

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

1. While listening to a SiriusXM channel, press the [**MENU**] button to enter Replay mode. The display will show "PAUSE" when entering this mode.
2. Press and hold the [**⏮**] 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 [**⏭**].
 - Returning to the beginning of the current song: Press [**⏮**]. (If you press [**⏮**] in the first 2 seconds of a song, you return to the beginning of the previous song.)
 - Advancing to the beginning of the next song: press [**⏭**].
3. Press the [**MENU**] button to finish 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 is being kept when you change the source than SiriusXM mode.

SiriusXM Satellite Radio Operations

◆ Changing the Display

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:

In SiriusXM mode, press **[DISP]** button. Each time you press this button, the display changes as shown below:

**Channel name => Artist Name => Song Title =>
Content Info => Category Name**

Note:

If there is no text information, nothing will be displayed.


◆ Parental Controls

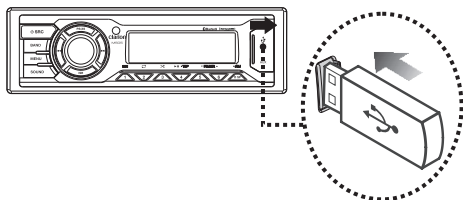
The SiriusXM Parental Control feature allows you with the ability to prevent unauthorized access to mature content channels. When enabled, the Parental Control feature requires you to enter a passcode to tune to the locked mature content channels. Information on setting up the passcode, setting up the mature content channels to be locked, and the method to access the locked channels is described below.

1. For setting up the passcode, press and hold the **[DISP]** button and press the **[◀▶]** button to select "Parental". Press the **[MUTE]** button to change passcode. Enter old passcode, new passcode. To enter code, rotate the **[VOLUME]** button to decide number and press **[◀▶]** to select digit. You after enter the passcode, you need to press and hold the **[MUTE]** button to confirm passcode. The default passcode set for the Parental Lock is "1111". This can be changed, please refer to the Manage Passcode section.
2. For setting up the mature content channels to be locked, press and hold the **[DISP]** button during tuning to the desired channel, and select the "LOCK CH" and press the **[MUTE]** to start to lock channel. You will be asked to input password and "LOCK" will be displayed if it is successful.
3. For unlocking the mature content channels, press and hold the **[DISP]** button, and press **[◀▶]** to select "UNLOCKCH". Enter the password and you can unlock the channel.
4. For accessing the mature content channels, select channel by "DIRECT SELECT". Press the **[MENU]** button and select "DIRECT SELECT" by pressing the **[MUTE]** button. Input desired locked channels and input password, then you can tune to that locked channels.

USB Mode Operation

◆ Connect

1. Open the USB socket cover .
2. Insert the USB device into the USB socket. The unit starts playing from the USB device.
3. 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 take off the USB device.



◆ Selecting a Track

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

◆ Play / Pause

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

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

◆ Folder Select

This function allows you to select a folder containing MP3/WMA files and start playing from the first track in the folder.

Press the [**▼5/6▲**] button to select a folder.

◆ Search Function

1. Press the [**MENU**] button on front panel access the MP3 / WMA file search mode.
2. Rotate the [**VOLUME**] knob to search through all folders on the device then press [**MUTE**] to enter the file list search mode. And then the track list appears in the display.
3. Rotate the [**VOLUME**] knob to select the desired track within the previously selected folder and press [**MUTE**] to start playing.

◆ Display Function

During playback, pressing the [**DISP**] button will automatically cycle through the following information on the file being played on the LCD: **ALBUM -> ARTIST -> TITLE -> CLOCK**

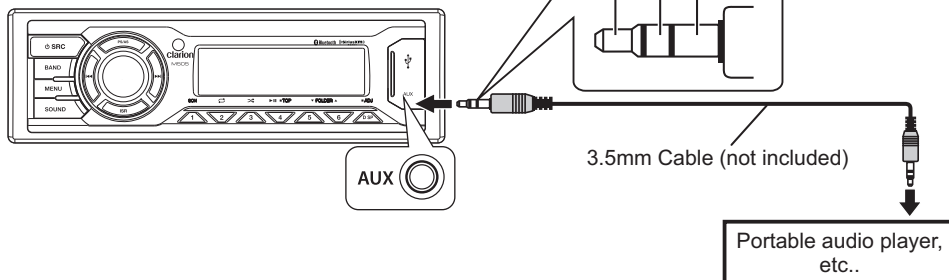
◆ Top Function

The top function resets the MP3/WMA player to the first track of the device. Press and hold [**4**] button to play the first track on the device.

AUX Mode Operation

Press the [**⏻ / SRC**] button on the front panel to select "AUX IN".

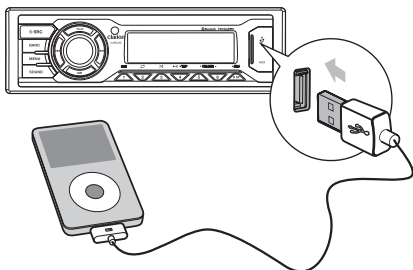
AUX IN is just for audio content with 3.5mm Jack connector plugged into audio-in socket on the front panel.



iPod/iPhone Mode Operation

◆ Connect

Connect an iPod/iPhone to the USB socket on front panel. When connecting a device, the unit will read the files automatically. The track information displays on the screen once playback start.



◆ Compatible iPod/iPhone

You can connect the following iPod/iPhone:

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

◆ Selecting a Track

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

◆ Play / Pause

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

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

◆ iPod/iPhone Menu Search

This function searches the subfolders for desired alphabetical letters.

1. Press the [**MENU**] button on front panel access the iPod menu mode.
2. Rotate the [**VOLUME**] knob to switch between categories.
PLAYLISTS->ARTIST->ALBUMS->SONGS->GENRES->COMPOSERS
3. Press [**MUTE**] button to confirm the selecting.
4. Press and hold the [**DISP**] button, then rotate the [**VOLUME**] knob to select the desired letter to search.
5. Press the [**DISP**] button again to next perform search.
6. Press [**MUTE**] button to confirm.

◆ Display Function

During playback, pressing the [**DISP**] button will automatically cycle through the following information on the file being played on the LCD:
ALBUM -> ARTIST -> TITLE -> CLOCK

Bluetooth Operation

◆ Pairing the Bluetooth Device

1. From your Bluetooth enabled device, turn the Bluetooth ON and search for Bluetooth devices.
2. When a list of available Bluetooth devices appear on your Bluetooth device, select "M505".
3. "BT CONNECTED" will appear on the 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 SSP (Simple Secure Pairing) Profile, please enter the pass code of "0000".

◆ Disconnect / Re-Connect

1. Press and hold the [DISP] button to enter System menu.
2. Press the [◀◀ / ▶▶] button until "DISCONNECT" or "RE-CONNECT" is displayed.
3. Press [MUTE] button to confirm the selection.

◆ Audio Streaming Operations 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 boat's speakers. Please consult your nearest Clarion dealer for more information on the product of wireless audio streaming transmitter offered.

⚠ CAUTION

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

◆ Search Function

1. Press the [MENU] button on front panel access the iPod menu mode.
2. Rotate the [VOLUME] knob to switch between categories.
PLAYLISTS->ARTIST->ALBUMS->SONGS->GENRES->COMPOSERS
3. Press [MUTE] button to confirm the selecting.
4. Press and hold the [DISP] button, then rotate the [VOLUME] knob to select the desired letter to search.
5. Press the [DISP] button again to next perform search.
6. Press [MUTE] button to confirm.

Note: The search feature requires the paired and connected device that the minimum Bluetooth AVRCP1.4 be incorporated to function.

◆ Play / Pause

Press the [▶||] button to pause the track/song that is currently playing.

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

◆ Selecting a Track

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

Note:

Playing order will depend on Bluetooth audio player. When [◀◀] button is pressed, some A2DP devices will restart the current track depends on the duration of playback. During music streaming playback "A2DP" will be shown on the display. When A2DP and HFP device is disconnect, "BLUETOOTH DISCONNECT" will be shown on the display and return to previously selected audio source. 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 MUSIC mode.

◆ ID3 Display

During music streaming playback, press [DISP] to view the ID3 display information:
ALBUM->ARTIST->TITLE->CLOCK

6. TROUBLESHOOTING

GENERAL

Problem	Cause	Measure
Unit can not power on.	Unit fuse blown.	Replace with new fuse of correct rating.
	Car battery fuse blown.	Replace with new fuse of correct rating.
No/low audio output.	Improper audio output connection.	Check wiring and correct.
	Volume set too low.	Increase volume level.
	Speakers damaged.	Replace speakers.
	Heavily biased volume balance.	Adjust the channel balance to center position.
	Speaker wiring is in contact with metal part of car.	Insulate all speaker wiring connections.
Poor sound quality or distortion.	Speaker power rating does not match unit.	Replace speakers.
	Wrong connections.	Check wiring and correct.
	Speaker is shorted.	Check wiring and correct.
Unit resets itself when engine is off.	Incorrect connection between ACC and Battery.	Check the wiring and correct.

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	Check the SiriusXM tuner connection on the back of the unit to ensure that its correctly connected.
CHK ANTENA	Ensure the SiriusXM antenna cable is connected to the SiriusXM tuner correctly. Check the SiriusXM antenna wire for breaks or sharp bends. Replace the antenna if necessary. Press RESET located..... If the message remains, the antenna may have been damaged.
NO SIGNAL	The vehicle must be outside, and the antenna must have a clear view of the southern sky. The magnetic antenna must be mounted on the outside of the vehicle for the best reception.
CHAN UNSUB	This channel is not included in your SiriusXM subscription plan. Call 1-866-635-2349 to subscribe.
CH UNAVAIL	This channel is not a valid SiriusXM channel. The channel number has been entered incorrectly, or the channel was removed from the SiriusXM channel lineup
CH LOCKED	The selected channel has been locked by a mature channel has been selected. A prompt to enter the unlock code will appear.
SUBSCRIPTN UPDATED	An update to your SiriusXM subscription has been received by the SiriusXM tuner. Press any button to continue.

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: 8dBf
 Frequency response: 30Hz-15kHz
 Stereo Separation: >30dB(1kHz)
 Signal/noise ratio: >55dB

AM Tuner

Frequency Range: USA 530 -1710KHz
 Europe 531 - 1602KHz
 Asia 531 - 1620KHz
 Australia 531- 1620KHz

Usable Sensitivity(S/N=20dB): 30dB μ

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

MP3/WMA mode

MP3 sampling rate: 32kHz, 44.1kHz, 48kHz
 MP3 bit rate: 8~320kbps and variable bit rate

WMA bit rate: 8~320kbps
 Logical format: ISO9660, Joliet
 Number of file: Maximum 999
 Max directory depth: 10
 Sorting Method: Tree sorting
 Max File/Directory Name: 64Byte
 ID3 tag: V2.0 or later

USB

USB Host: Host 1.1 compatibles 2.0

Bluetooth

Specification: Bluetooth Version. 2.0+EDR (Enhanced Data Rate)
 Supported Profiles: A2DP (Advanced Audio Distribution Profile)
 AVRCP 1.4 (Audio/Video Remote Control Profile)
 SSP (Simple Secure Pairing)
 Send/Receive Sensitivity: Class 2

General

Power Supply Voltage: 14.4V DC (10.8 to 15.6V allowable)
 Fuse: 15A
 Speaker Impedance: 4-8 ohms per channel
 Power output: 50W x 4 channels
 Aux-in level: \geq 650mV

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

Power Output:
RMS 20W x 4 Channels at 4 Ω
and 1% THD+N
 Signal to Noise Ratio:
 74dB (reference: **LPF 1W into 4 Ω**)



INSTALLATION AND WIRE CONNECTION

1. Before Starting

1. This set is exclusively for use in vehicles 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)

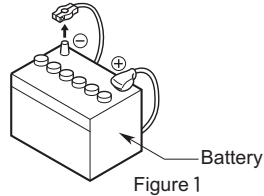


Figure 1

2. General Cautions

1. Do not open the case. There are no user serviceable parts inside. If you drop anything into the unit during installation, consult your dealer or an authorized **Clarion** service center.
2. Use a soft, dry cloth to clean the case. Never use a rough cloth, thinner, benzene, or alcohol etc. For tough dirt, apply a little cold or warm water to a soft cloth and wipe off the dirt gently.

3. Cautions on Installation

1. Prepare all articles necessary for installing the source unit before starting.
2. Install the unit within 30° of the horizontal plane. (Figure 2)
3. If you have to do any work on the car body, such as drilling holes, consult your car dealer beforehand.
4. Use the enclosed screws for installation. Using other screws can cause damage. (Figure 3)

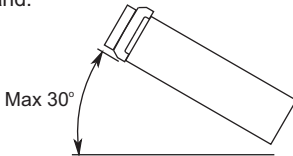


Figure 2

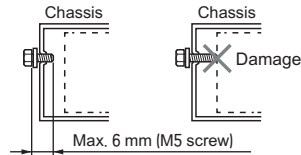
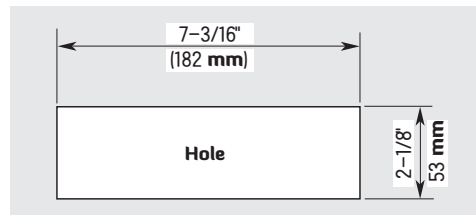


Figure 3

4. Installation the Source Unit

1. Place the mounting bracket into the instrument panel, use a crewdriver to bend each stopper of the mounting bracket inward, then secure the stopper.
2. Wire as shown in Section 7).
3. Insert the source unit into the mounting bracket until it locks.
4. Take care of the top and bottom of the trim ring and mount it so that all the hooks are locked.

● Console opening dimensions



Note: 1. Some car models require special mounting kits for proper installation. Consult your **Clarion** dealer for details.

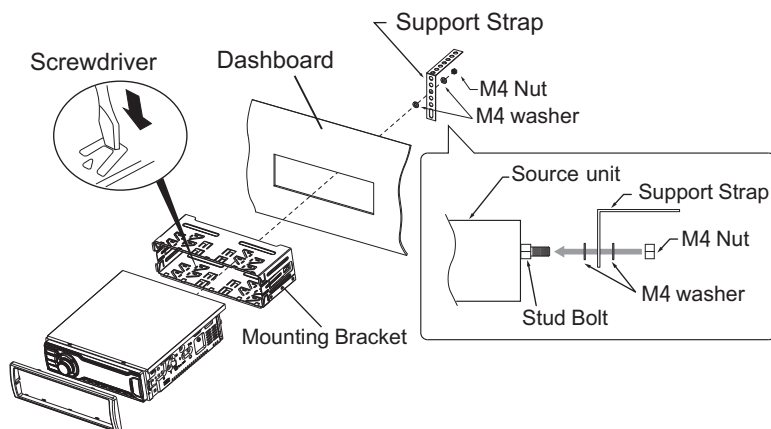
2. Fasten the front stopper securely to prevent the source unit from coming loose.

Notes of installation:

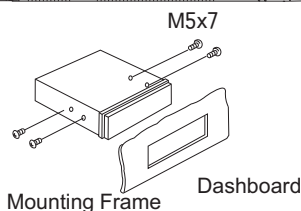
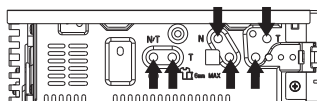
- Before installation, please make sure proper connections are conducted and the unit operates normally. Improper connection may result in damage to the unit.
- Use only accessories designed and manufactured for this unit and other unauthorized accessories may result in damage to the unit.
- Before installation, please fasten all power cables.
- DO NOT install the unit in the place where close to hot area to prevent damage to electrical components such as the laser head.
- Install the unit horizontally. Installing the unit more than 30 degree vertically may result in worse performance.
- To prevent electric spark, connect the positive pole first and then the negative pole.

Unit installation**Method A**

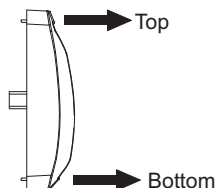
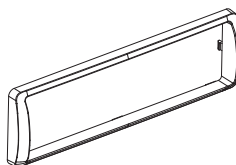
1. Insert mounting bracket into dash board, choose appropriate mounting tab according to the gap width, bending the mounting tab outwards with a screwdriver to fix the mounting bracket in place.
2. Slide the unit into the bracket until you hear a click sound.

**Method B**

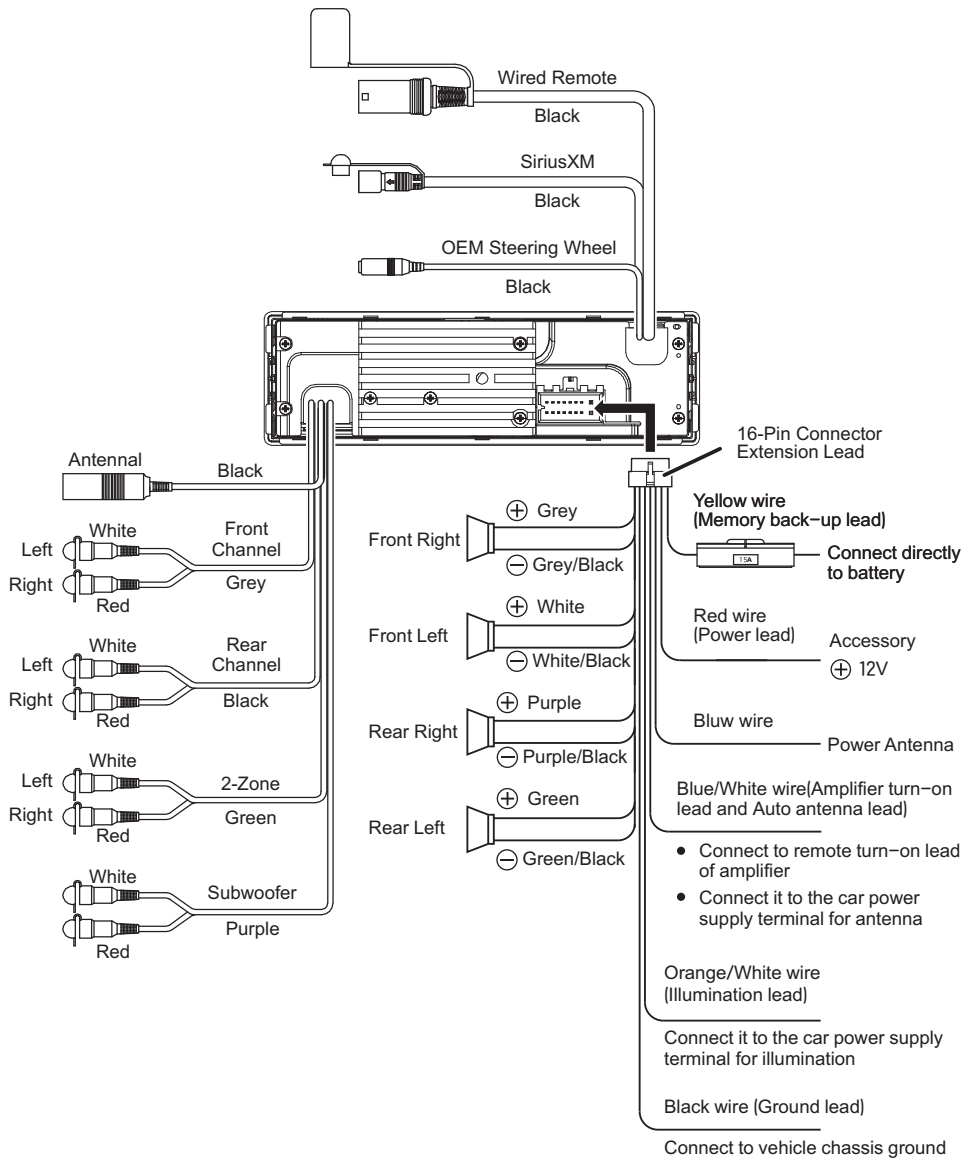
1. Insert this unit directly to the opening of the dashboard.
2. Place M5 × 7 cylindrical screw through the holes of the mounting frame located inside the opening to holes of the unit and fasten the screws to left & right.

**Trim ring installation**

Attach the trim ring around the front panel. Take care of the top and bottom of the trim ring and mount it so that all the hooks are locked.



5. WIRE CONNECTION



Clarion Corporation of America

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