

Modus



USER MANUAL | AIM-7 | 7" Automotive Receiver | Double DIN Chassis | 6-Channel RCA Output | FLAC Playback





Welcome to Modus.

You've chosen precision performance that works seamlessly in the background of every adventure. This user manual will help you unlock your system's full potential.

Take a moment to review this manual and keep it stored in a convenient place for future reference.

If you have any technical questions, please contact:

Customer care: 805-790-7383

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

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

Complete the information below and keep for your records.

Model	
Serial Number	
Date of Purchase	

Serial number is located on the packaging and the top of the product chassis, or can be found in this receiver's general settings menu (P.27) .

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Important Information

About this Manual

To understand how to properly use this product, it is recommended to read this user manual in its entirety, and keep it in a safe place for future reference.

This manual uses illustrations to show you how to use this product safely and alert you to potential dangers resulting from improper connections and operation. It is important to fully understand the meaning of each one of these illustrations in order to use this manual and system properly.



WARNING

The **WARNING** illustration denotes very important instructions. Failure to follow them can result in damage to equipment, serious injury or death.



CAUTION

The **CAUTION** illustration denotes important instructions. Failure to follow them can result in injury or material property damage.



IMPORTANT NOTE

The **IMPORTANT NOTE** illustration denotes important instructions for product features and limitations. Failure to follow them will result in product misuse and/or unexpected behavior.



The **PARKING BRAKE** illustration denotes features that can only be used with vehicle not in motion and parking brake engaged. Failure to follow them will result in product misuse and/or unexpected behavior.

Operation Warnings



WARNING

OPERATION OF THIS PRODUCT WHILE DRIVING IS DANGEROUS

Users should come to a complete stop and in a safe location before using any feature that requires extended periods of time.

PAY ATTENTION TO ROAD CONDITIONS

Avoid operating product under dangerous road conditions and abide by regulations over information contained on the map display. Follow traffic restrictions and circumstances while driving.

Familiarize yourself with your local and state laws regarding mobile devices. Certain functions of the mobile phones might be prohibited and or illegal while driving in your location.

OPERATE AT SAFE VOLUME LEVELS

Excessive volume levels may obstruct sounds such as emergency vehicle sirens or road warning signals; can be dangerous and may result in an accident. Listening at high volume levels can also cause hearing damage.

DO NOT WATCH VIDEO WHILE DRIVING

Watching video content may distract the driver from looking ahead of the vehicle and can potentially cause an accident.

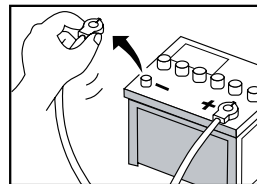
Installation Warnings

CERTIFIED PROFESSIONAL INSTALLATION

Installation and service repair of this product by anyone without professional training and experience in consumer electronics and mobile vehicle accessories may be dangerous and result in electric shock, injury or other hazards.

DISCONNECT BATTERY

To avoid potential shorts in the electrical system, be sure to disconnect the **NEGATIVE (-)** terminal cable before beginning this product installation. Failure to do so may result in electric shock, fire, damage to product and/ or property damage.



Important Information

DO NOT DISASSEMBLE OR ALTER PRODUCT

Disassembly of product may result in an accident, fire or electric shock.

REPLACE FUSE WITH THE CORRECT RATING

Failure to do so may result in fire or property damage.

PARKING BRAKE INSTALLATION WIRING

Installing this product incorrectly may enable the user to watch video while driving. This may cause distraction, preventing the driver to focus on the road and potentially cause an accident. The driver and passengers can be severely injured.



Screen Care

USE

This receiver utilizes a capacitive touchscreen, the same type that is used on high-end mobile devices. It should be used for and cared for like that type of device. As with all capacitive type technology, if your fingers are wet or sweaty, it will not function properly.

Do not allow any sharp objects to come in contact with the screen.

CLEANING

To clean the screen, use a dry or slightly damp micro fiber type cloth. Do not use ammonia, window cleaner, or any other type

of household chemicals to clean the screen. Abrasives should never be used.

Best to clean the screen when the unit is powered off, cool and not in direct sunlight.

Notice



Apple CarPlay is a trademark of Apple Inc. iPhone® is a trademark of Apple Inc., registered in the U.S. and other countries and regions.

Use of the Apple CarPlay logo means that this user interface meets 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 product with iPhone may affect wireless performance.



Android Auto is a trademark of Google LLC.

SiriusXM READY

SiriusXM and all related marks and logos are trademarks of Sirius XM Radio, Inc. All rights reserved.



iDataLink, iDataLink Maestro and iData are registered trademarks of Automotive Data Solutions Inc.



Metra is a trademark of Metra Electronics. Axxess is a trademark of Axxess Integrate.



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Modus is under license. Other trademarks and trade names are those of their respective owners.

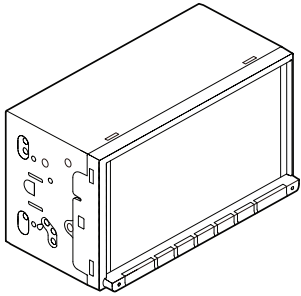


HD Radio™ Technology manufactured under license from iBiquity Digital Corporation, a subsidiary of Xperi Inc., U.S. and Foreign Patents. For patents see <https://xperi.com/hd-radio-patents/>. Xperi, HD Radio, HD, and 'ARC' logos and their respective logos are trademarks or registered trademarks of Xperi Inc. and its subsidiaries in the United States and other countries.

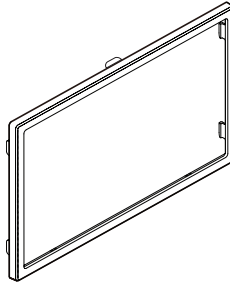
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Delivery Content

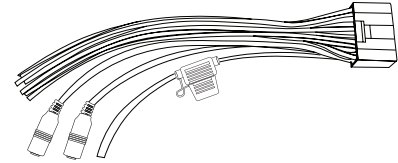
What Comes in the Box



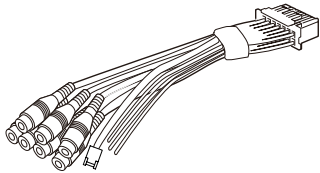
Main unit



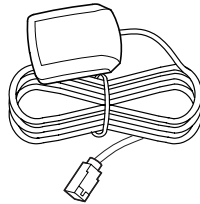
Trim Ring



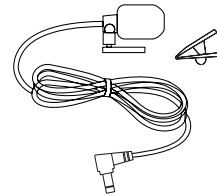
Power/Speaker Harness



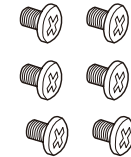
Audio/Camera/Maestro/Axxess
Wiring Harness



GPS antenna with magnetic
base (used for driving direction
and navigation)



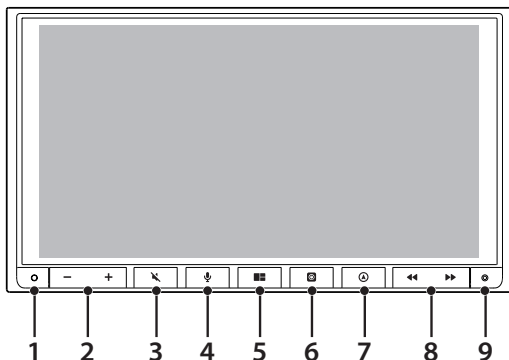
Microphone with 3.5mm plug
+ sponge cover + adhesive
stand + clip




6x Mounting Screws
(M5 x 8mm)

Basic Operation

Control Panel



Tips:

To turn the screen off when powered on, press and hold  on the front panel.

When the unit is powered off, touch the screen to turn on or off time/date display.

Quick access to individual volume controls

Press the volume button (+/-) to access separate volume adjustment for media, phone call, voice assistance, navigation voice and ring tone. (P.25)

1 Built-in microphone

Input sound when using voice assistant or making a phone call.

The built-in microphone is disabled for use when the supplied external microphone is connected.

2 +/- (Volume buttons)

- Press to adjust volume step by step.
- Press and hold to adjust volume quickly.

3 (Mute/Screen off)

- When powered on, press to mute or unmute the volume.
- When powered on, press and hold to turn the screen off.

4 (Voice assistant)

Press to activate voice assistant.

Enable Apple CarPlay or Android Auto to use voice assistant.

5 (Power/Home)

- Press and hold to power off the unit, and time/date is displayed after powered off.
- Press to power on the unit.
- When powered on, press to switch between the home menu and the last selected mode.

6 (Camera)

Quick access to camera view.

7 (Navigation)

Quick access to navigation app.

Enable Apple CarPlay or Android Auto to use the navigation.

8 (Next/Previous)

- During media playback, press to skip to the next/previous media file.
- In FM/AM source, press and hold to tune to a radio station; press to select HD Radio main channel or a sub-channel if receiving HD Radio signal.

9 Reset button

Use a needle or pin to press the button. Reset the unit if the unit fails to function normally.

Basic Operation

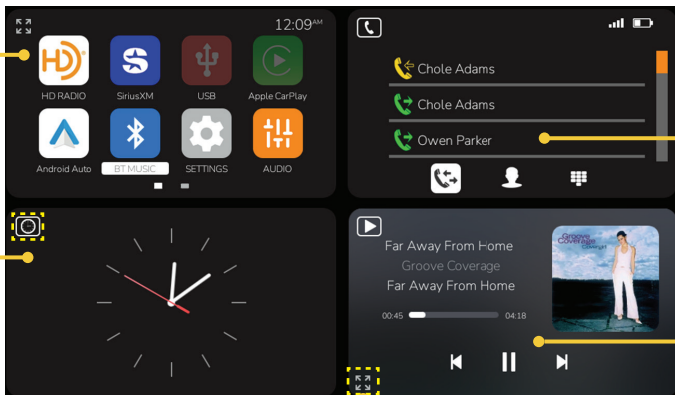
Home Screen Description

Apps window

Select a source or settings option (swipe left/right to access more options), including iDataLink Maestro (P.19) or Metra Axxess (P.21)

Clock window

Touch the clock image to access the clock settings; touch the top left icon (🕒) to display clock on full screen.



Phone/CarPlay/Android Auto window

- Access device connection settings (If no device is connected).
- Display Bluetooth phone call interface (If Bluetooth is connected).
- Display Apple CarPlay/Android Auto icon (If enabled) and touch the icon to switch to CarPlay/Android Auto.

Radio/Media playback window

- Display controls for radio broadcast or media playback.
- Touch the icon to switch to the radio broadcast or media playback screen.

Re-position a Window

Touch and hold a window then drag it to another window position, then two window positions will swap. Repeat the step to further adjust window position.

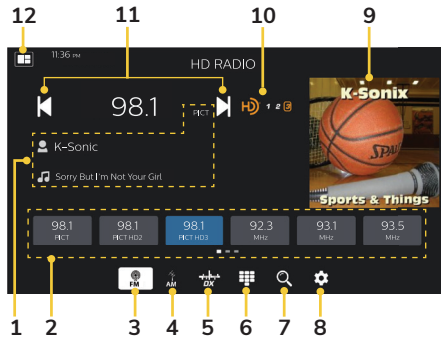
Expand a Window Size

Touch the 📐 icon in the Apps or Radio/Media window to expand the window. Touch the icon again to shrink the window back to normal size.

HD Radio™ Reception

Using HD Radio Features

HD Radio Reception Screen



- 1 Program data service display zone: Display station name, program type, artist/song name when broadcasting an HD Radio station.
- 2 Select a preset station. Touch and hold to save the current station as a preset. Swipe to access more store stations.
- 3 Switch to FM radio.
- 4 Switch to AM radio.
- 5 Switch between local and distant station reception (only applicable to FM).
- 6 Search for a radio station by frequency input.
- 7 Preview each scanned station for 10 seconds.
- 8 Access HD Radio reception settings.

- 9 Album art picture (Artist Experience): Displayed only if the current station supports the service.
- 10 HD logo: Displayed when receiving an FM/AM station with HD Radio signal. Main channel ("1") and sub-channels (e.g. "2" and "3") indicators when receiving HD Radio signal.
- 11 Touch and hold to tune to a radio station. Touch to adjust radio frequency step by step, or if available, switch between main channel and sub-channels of the HD Radio station
- 12 Return to the home screen.

HD Radio Features Introduction

HD Radio®

HD Radio Technology transmits digital signals using the traditional FM and AM stations, providing the following key features:

Program Info

Program Info: Contributes to the superior user experience of HD Radio Technology. Presents song name, artist, station IDs, HD2/HD3 Channel Guide, and other relevant data streams.

HD2/HD3

Adjacent to traditional main stations are extra local FM channels. These HD2/HD3 Channels provide new, original music as well as deep cuts into traditional genre.

Digital Sound

Digital, CD-quality sound. HD Radio Technology enables local radio stations to broadcast a clean digital signal. AM sounds like today's FM and FM sounds like a CD.

Artist Experience

Visual information related to content being played on your HD Radio receiver, such as Album Art, historical photographs, still art from live broadcasts, among other related content.

Visit www.hdradio.com for more about HD Radio stations in your area.

Tune to a Radio Station

Touch and hold **⏪** or **⏩** to tune to a station.

If HD Radio signal is received, HD logo is displayed, and its sub-channels (e.g. "2" and "3") are also displayed adjacent to "1" (main channel).

HD Radio™ Reception

Using HD Radio Features


Select Main and Sub-channels

Many HD Radio stations add sub-channels (e.g. HD2 and HD3) adjacent to the main channel (HD1). The main channel makes digital-analog transmission, and the sub-channels transmit digital signals only.


When sub-channels (e.g. "2" or "3") are displayed, touch **K** or **M** to select a sub-channel or main channel ("1").

Search by Program Type

You can search for radio stations via a program type (e.g. news, sports, talk or music).

Touch  on the bottom screen to access HD Radio reception settings, then **[Search by Genre]** to select a program type for searching.


Search via Frequency Input

Touch  on the screen to display a numeric keypad. Input a station frequency to find your station.

Preset a Radio Station

Touch and hold a channel button on the screen. The current station will be stored as a preset.

Auto Store Radio Stations

Touch  on the bottom screen to access HD Radio reception settings, then **[Auto Presets]** to activate FM or AM station searching. Up to 18 FM or 12 AM stations will be stored.


FM Local and Distant

Touch **"DX"** or **"LOC"** on the screen to select local or distant station reception. "LOC" indicates local reception, "DX" for distant reception.

Select "DX" when most FM stations are weak (e.g. in the countryside). Stations with both strong and weak signals will be received.


Select "LOC" when most FM stations are strong enough (e.g. in urban areas). Only the stations with strong signal will be received.

Adjust Search Sensitivity

Touch  on the bottom screen to access HD Radio reception settings, then **[Receiver Sensitivity Boost]** to adjust search sensitivity levels.

High sensitivity receives most radio channels containing most weak channels. Med/Low sensitivity level receives fewer channels. Select **[Off]** to receive the only channels with the strongest signals.

Turn on/off HD Radio Reception


Touch  on the bottom screen to access HD Radio reception settings, then **[HD Radio™ Features]** for On or Off.

When enabled, the unit will first tune to the station's digital signal, or fall back to the station's analog signal if digital reception is lost.

When disabled, the unit will tune to analog-only radio stations.

If you want to receive a radio station without HD Radio signal or the digital reception is poor, disable HD Radio reception.

Turn on/off Album Art Picture

Touch  on the bottom screen to access HD Radio reception settings, then **[Artist Experience]** for On or Off.

Enabled to turn on display of images (album art) related to a specific program, or station logos.

SiriusXM® Radio

Using SiriusXM Radio

SiriusXM brings you ultimate entertainment.

- Hits before they hit.
- Late game comebacks.
- Exclusive celebrity visits.
- Listen in your car, or on your mobile and home devices with the SiriusXM App.

For more information, visit siriusxm.com.

Preparation

1. Connect a SiriusXM Vehicle Tuner (not included) to the SiriusXM-Ready® connector on the back of this unit. (P.36)

After installing your SiriusXM Vehicle Tuner and antenna, power on this receiver and select SiriusXM mode. Make sure you have a clear view of the sky and then you should be able to hear the SiriusXM preview channel 1.

If you cannot hear the preview channel, please check the installation instructions to make sure your SiriusXM Vehicle Tuner is properly installed.

2. Check your Radio ID for activation.

The SiriusXM Radio ID is required for activation and can be found by tuning to Channel 0 as well as by looking on the label found on the SiriusXM Vehicle Tuner and its packaging.

- The Radio ID does not include the letters I, O, S or F.

3. Activate the subscription.

For users in the U.S.A.:

Visit www.siriusxm.com/activatenow, or call SiriusXM Listener Care at 1-866-635-2349

For users in Canada:

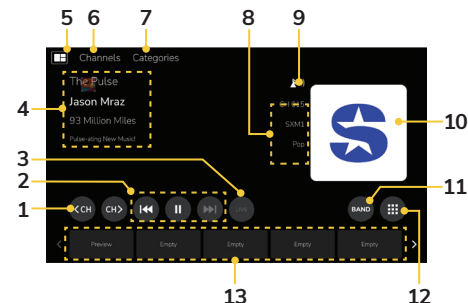
Visit www.siriusxm.ca/activate, or call SiriusXM Customer Care at 1-888-539-7474

4. Confirm the activation.

As part of the activation process, the SiriusXM satellites will send an activation message to your SiriusXM Vehicle Tuner. When this receiver detects that the Tuner has received the activation message, this receiver 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. This receiver will need to be powered on and receive the SiriusXM signal to obtain the activation message.

SiriusXM Home Screen



- 1 Select the previous/next channel.
- 2 Playback control buttons to pause, rewind and replay live satellite radio.
- 3 Return to live music or content.
- 4 Display channel name, song title, artist name, and content info (if available).
- 5 Return to the home menu.
- 6 Access the channel list to select a channel.
- 7 Access the category list to select a channel.
- 8 Display information of the current channel.
- 9 SiriusXM signal strength indicator.
- 10 Album Art: Display the image that represents the current music channel. When album art image is not available, the channel logo or SiriusXM logo will be displayed.


Using SiriusXM Radio

Compatible with SXV200 or later (SiriusXM Vehicle Tuner). Not all music channels contain album art images.

- 11 Select SXM1, SXM2 or SXM3 band.
- 12 Search a channel by input of channel number, or access the parental control settings.
- 13 Select a stored channel; touch and hold to preset the current channel.

Select a Channel

You can select a channel via one of the followings.








- Touch **CH** </> to select the previous or next channel.
- Touch **[Channels]** to access the channel lists. Find a channel by channel number, artist name, song title, or content info.
- Touch **[Categories]** to access the category lists. Find a channel via category name.
- Touch  to display the numeric keypad. Input a channel number.
- Touch a channel button at the bottom of the home screen to select a preset channel.

Preset a Channel

1. Touch **BAND** to select **SXM1**, **SXM2**, or **SXM3**. Each SXM band can store six channels.
2. Touch and hold a channel button at the bottom of the home screen. The current channel will be stored as a preset. Repeat the step to preset more channels.


Replay

The replay feature allows you to pause, rewind and replay live SiriusXM satellite radio programming.

- To skip to the previous or next track, touch   .
- To rewind or fast forward, touch and hold  .
- To play or pause, touch  or .
- To return to live content, touch **LIVE**.


Parental Controls

This feature allows you to restrict access to SiriusXM channels with mature content. A password is required to tune to the locked channels.

1. Touch  on the screen to display the **[Parental Controls]** option.
2. Touch **[Parental Controls]** to access the parental controls settings, and touch **[Lock Mature Channels]**. A numeric keypad is displayed.
3. Input 4-digit password (1234 as default) on the numeric keypad. All the channels with mature content will be locked.

Change Password

You can change the password for the parental control.

From the SiriusXM home screen, touch  > **[Parental Controls]** > **[Set Lock Code]**, enter your current 4-digit password (1234 as default), then enter your new password.

Apple CarPlay®

Using Apple CarPlay

Apple CarPlay Introduction

Apple CarPlay provides a smarter, safer way to use your iPhone while driving. The apps on your iPhone can be loaded and displayed on the screen of this unit. Thus you can navigate, call, control your music, and so more.

For more details about Apple CarPlay, visit <https://www.apple.com/ios/carplay>.

Compatible iPhones

Apple CarPlay works with iPhone 5 and all the way up to the most recent versions.

Wired Connection

To enable Apple CarPlay connection, connect your iPhone to the unit's **USB-C** port (not **USB-A** port), using an Apple-certified USB cable with factory length or shorter (not included). (P.36)

Before the initial connection, enable Wi-Fi and Bluetooth on your iPhone. You will be prompted to enable wireless CarPlay on your iPhone during initial connection.

Wireless Connection

For first-time use of wireless CarPlay, you need to enable wireless CarPlay use on your iPhone via either of the following pairing.


- On your iPhone, enable Wi-Fi, and access **Settings > Bluetooth** then select "**AIM-7 MODUS**" for Bluetooth pairing. When prompted on your iPhone, make sure to enable wireless CarPlay use . When connection options are prompted on the unit's screen, select "**Apple CarPlay**" for connection.
- Initial wired connection to enable wireless CarPlay use on your iPhone.



IMPORTANT NOTE

If you do not allow wireless CarPlay use on your iPhone during initial pairing, wireless CarPlay will be disabled on your iPhone. To use wireless CarPlay later, you need to manually enable CarPlay on your iPhone (access **Settings > General > CarPlay > paired device** then enable CarPlay).

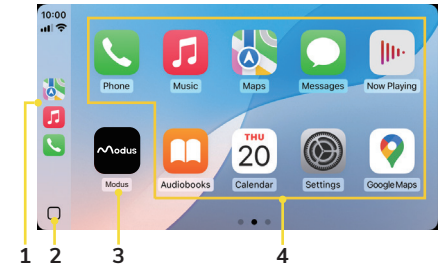
Enabling Apple CarPlay will disable Bluetooth connection and vice versa.

Switch between CarPlay and Bluetooth

From the Apps window on the home screen, select  (**BT PHONE**) to access the Device Connection List.

Touch  to disconnect the current connection. Touch  to re-connect, and select CarPlay or Bluetooth for connection when connection options are prompted on the unit's screen.

CarPlay Home Menu Description



- 1 Menu bar:** Touch an app icon for quick access.
- 2 CarPlay home button:** Return to the CarPlay home screen.
- 3 Unit's home button:** Exit the CarPlay screen and return to the unit's home menu.
- 4 Apps loaded from the iPhone.**

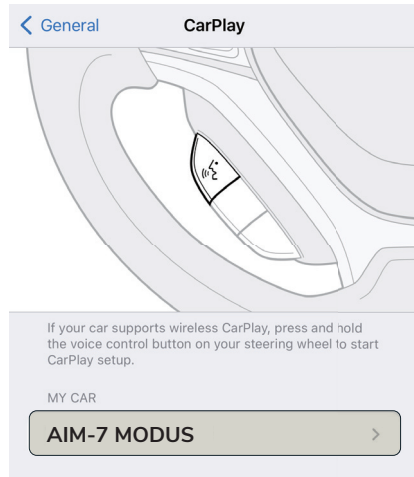
Apple CarPlay®

Using CarPlay

Arrange your CarPlay Apps

You can add, remove, or arrange the order of the apps on the CarPlay screen of the unit.

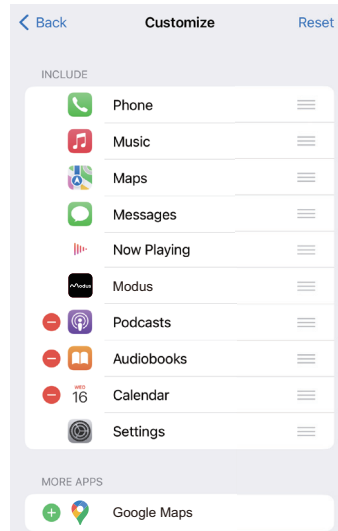
1. On your iPhone, go to **Settings > General > CarPlay**, select this unit's name from the device list (shown below). Then select **Customize** to access CarPlay apps.



2. Touch and drag an app (☰) to change the order of the app.

Touch **−** or **+** to remove and add apps.

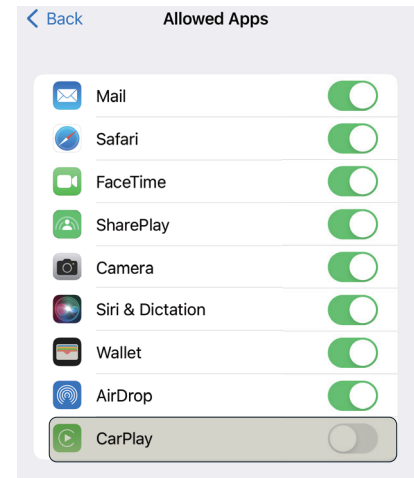
Only apps with **−** or **+** can be removed from CarPlay or added in CarPlay.



Disable CarPlay Apps

You can disable all CarPlay apps to restrict CarPlay use on this unit.

On your iPhone, go to **Settings > Screen Time > Contents & Privacy Restrictions > Allowed Apps > CarPlay**.



Android Auto™

Using Android Auto

Android Auto Introduction

Android Auto allows the apps on your Android phone to be loaded and displayed on the screen of this unit. Thus, you can navigate, call, control your music and so more.

For more details about Android Auto, visit <https://www.android.com/auto>.

Compatible Android Phones

- Wired connection: Android 6.0 and later.
- Wireless connection: Android 11.0 and later.

Android Auto App

- Phones with Android 9.0 and earlier needs Android Auto app downloaded from Google Play Store.
- Phones with Android 10 and above do not need to download Android Auto app.

Wired Connection

To enable Android Auto connection, connect your Android phone to the unit's **USB-C** port (not **USB-A** port), using a certified cable with factory length or shorter (not included). (P.36)

Before the initial connection, enable Wi-Fi and Bluetooth on your phone. Wireless Android Auto use will be enabled on your phone during initial connection.

Wireless Connection


For first-time use of wireless Android Auto, you need to enable wireless Android Auto use on your phone via either of the following pairing.



- On your Android phone, enable Wi-Fi, and access **Settings > Bluetooth** then select "**AIM-7 MODUS**" for Bluetooth pairing to enable wireless Android Auto use. When connection options are prompted on the unit's screen, select "**Android Auto**" for connection.
- Initial wired connection to enable wireless Android Auto use on your phone.

IMPORTANT NOTE

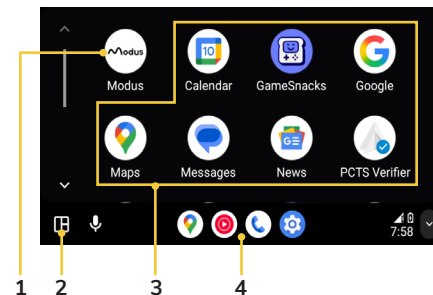
Enabling Android Auto will disable Bluetooth connection and vice versa.

Switch between Android Auto and Bluetooth

From the Apps window on the home screen, select  (**BT PHONE**) to access the Devices List.

Touch  to disconnect the current connection. Touch  to re-connect, and select Android Auto or Bluetooth for connection when connection options are prompted on the unit's screen.

Android Auto Home Menu Description



- 1 Unit's Home button:** Exit the Android Auto screen and return to the unit's home menu.
- 2 Android Auto Home button:** Return to the Android Auto home screen.
- 3 Apps loaded from the Android Phone.**
- 4 Menu bar:** Touch an app icon for quick access

Bluetooth

Connection

Streaming

IMPORTANT NOTE



Bluetooth on the unit is enabled only when Apple CarPlay or Android Auto is disabled. Make sure your Apple CarPlay or Android Auto is disabled for Bluetooth use.

First Time Connection

Before you can stream audio or make phone calls through Bluetooth, pair your device with this unit.

Bluetooth pairing can be made through initial connection to CarPlay (P.13) or Android Auto (P.15).

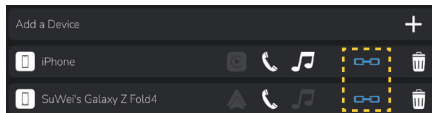
Or, complete Bluetooth pairing as follows.

1. Make sure Bluetooth is enabled on your mobile phone.
 2. From the Apps window on the home screen, select  (BT PHONE) to access the Devices List. Then touch  to search for available Bluetooth devices and select your device name to pair.
- When prompted on your phone screen for phone contacts sync, select "Allow" so that phone contacts can be displayed on the unit's screen.
 - Select Bluetooth for connection when prompted on the unit's screen.

Connect Two Devices Simultaneously

The unit allows you to connect two devices simultaneously in Bluetooth mode. Connect the second by repeating the same steps as the first.

If two devices are connected,  is displayed for each device in the Devices List.






To re-connect the device, touch .

To delete a paired device, touch .

Switch between Bluetooth and CarPlay/Android Auto


Enabling Bluetooth connection will disable CarPlay/Android Auto.

From the Apps window on the home screen, select  (BT PHONE) to access the Devices List.







From the Devices List, touch  to disconnect the current connection then touch  to re-connect. When connection options are prompted on the unit's screen, select Bluetooth or CarPlay/Android Auto for connection.

Audio Streaming

Before you can stream audio from your mobile device to this unit, make sure Bluetooth connection is made.

1. From the Apps window on the home screen, select  (BT MUSIC) to switch to Bluetooth streaming screen.

Playback Control

- To play or pause, touch  or .
- To skip to previous or next track, touch .
- To search fast backward or forward, touch and hold .
- To select a repeat mode, touch .
- To turn on or off shuffle play, touch .

Play from Two Connected Devices


If two devices are Bluetooth connected to the unit simultaneously, the two device names are displayed in the upper right of the Bluetooth streaming screen.

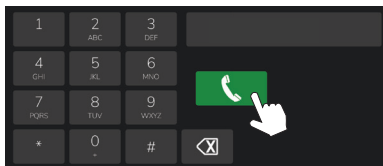
Touch the grayed-out device name to switch the device for Bluetooth streaming.

Bluetooth

Hands-free Call





Make a Call

From the Apps window on the home screen, select  (BT PHONE) to access the phone call screen.



3 Options to Dial a Bluetooth Call

From the phone call screen, select a phone call option.

- Touch **[Keypad]** tab to display the virtual keypad, then input a phone number and touch .
- Touch **[Recent]** tab to access your call history, then touch a number.  (Outgoing),  (Incoming),  (missed)
- Touch **[Contacts]** tab to access your phonebook, then touch a contact.

Dial from Two Connected Devices








If two mobile phones are Bluetooth connected to the unit simultaneously, the two phone names are displayed in upper right of the phone call screen.

Touch the grayed-out phone name to switch the phone for dialing a Bluetooth call.

Dial a Bluetooth Call from Home Screen

If your mobile phone is Bluetooth connected to the unit, the home screen displays the Phone window for you to directly access Call History, Phonebook and Keypad.




Operation During a Call


- To end a call, touch .
- To switch to private mode, touch . The call will move to your mobile device.
- To return to hands-free mode, touch . The call will move back to the unit.
- To mute a call, touch .
- To adjust call volume, touch  / .
- To use a keypad during a call, touch .

Call Waiting


Make sure call waiting feature is enabled on your phone for use.

Calling waiting prompts appear on the unit's screen when there is another incoming call during the call.

- To reject the second call, touch .
- To answer the second call and end the current call, touch .
- To answer the second call and place the current call on hold, touch .

During the call, to switch between the second and current call, touch the double arrow icon (.

Call Volume Setting

From the Apps window on the home screen, select  (BT PHONE) > **[Settings]** to access and set the default call volumes.

[Ring Tone Level]: Set volume level of incoming call ring tone.

[Phone Call Level]: Set phone call volume level.

[Microphone Level]: Set microphone input volume level.

USB


USB Playback

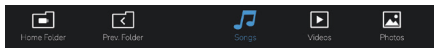
You can play audio, video and photos stored on a USB flash drive.

1. Using extension cable (not included), connect your USB flash drive to one of the unit's USB ports (**USB-A** or **USB-C**). (P.36)
2. From the Apps window on the home screen, select **[USB]** to switch to USB playback screen.

If there are audio, video and photo files in the USB, audio files will play first.

Browse USB for Media Files

1. On the USB playback screen, touch the folder icon (e.g. ) to display the content browser.



2. Touch **[Songs]**, **[Videos]**, or **[Photos]** tab to navigate and select an audio/video/picture file to play. Only audio/video/picture files are visible.







IMPORTANT NOTE

Video and photo cannot be viewed while driving. The vehicle must be stationary and the parking brake applied to enable viewing.

To activate viewing, also make sure the parking brake switch wire (light green) is properly connected to your vehicle. (P.32)

Audio Playback

On the audio playback screen, playback control is displayed.

- To play or pause, touch  or .
- To skip to the previous or next file, touch .
- To search fast backward or forward, touch and hold .
- To select a repeat mode, touch .
- To turn on or off shuffle play, touch .

Video Playback

On the video playback screen, touch the screen to display playback control.













- To play or pause, touch  or .
- To skip to the previous or next file, touch .
- To search fast backward or forward, touch and hold .
- To select a repeat mode, touch .
- To turn on or off shuffle play, touch .

Photo Slideshow with Music

1. Play music stored in the USB flash drive.
2. Navigate and select a photo to display, then touch  on the screen to start slideshow.
3. On the photo screen, touch the screen to display slideshow control.
 - To play or pause slideshow, touch  or .
 - To skip to the previous or next photo, touch .
 - To rotate the photo, touch .
 - To enlarge the photo, touch  then drag the magnifying slider.



Watching video or photo while driving is against Federal, State, and Local laws.

Do not use features of this unit if it cannot be operated safely and legally in your location.

Factory Features Retention

iDataLink Maestro Setup

Maestro functions allow the unit to retain the functionalities that are originally available in your vehicle (e.g. steering wheel controls), and additionally allows for visual display of vehicle features (e.g. vehicle info, gauges, etc.). For more information, visit www.idatalinkmaestro.com

1. Prepare an iDataLink Maestro RR device (not included) as an adapter to data link this receiver and your vehicle.
2. Program the Maestro device. Follow the quick start guide included with your Maestro device to complete programming. When prompted to input the product serial number, refer to the unit chassis or the packaging for the serial number. The serial number can also be attained on the screen of the unit: From the Apps window on the home screen, access [SETTINGS] > [General] > [Version]. (P.27)
3. Connect the unit to the Maestro device using the supplied Maestro wiring (P.35), and complete wiring between the Maestro device and your vehicle according to the installation guide downloaded from Maestro device programming.

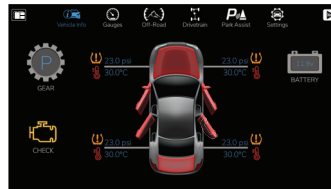
IMPORTANT NOTE

We recommend having your Maestro device installed/wired by a certified technician. Maestro features are vehicle specific. Some features displayed on the screen may not be supported by your vehicle.

For troubleshooting information about iDataLink Maestro, visit www.idatalinkmaestro.com

Vehicle Information

From the Apps window on the home screen, select [VEHICLE] to access Maestro features.



The screen displays vehicle information such as battery voltage and tire pressure (if installed with the tire pressure management system in your vehicle). You can change vehicle information settings.

Performance Gauges



Only the gauges which are supported in your vehicle are activated. You can change gauge settings.

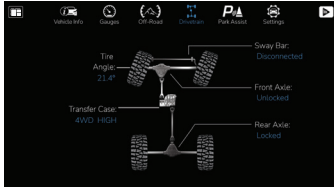
Off-Road Information



The screen displays your vehicle's geographical location in geo-coordinates, position of altitude, driving direction, tipping degrees from front to back (pitch) and from side to side (roll), when supported by your vehicle.

Factory Features Retention

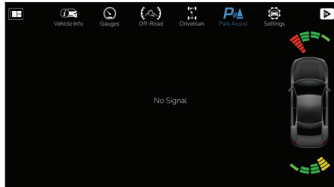
Tire Alignment



The screen displays wheel alignment status, tire angles, condition of sway bar, front/rear axles and transfer case.

Parking Assist

Access Maestro features to select **[Park Assist]**.



When selecting **[Park Assist]**, a camera view will trigger (if installed), and the visual warning for obstacle detection will also display (if installed with parking sensors).

To trigger rear camera, make sure the rear camera is selected for viewing. (P.24)

Climate Control

From the Apps window on the home screen, select **[CLIMATE]**.



Touch the buttons on the screen to adjust the climate options. Only the climate controls which are supported in your vehicle are activated.

IMPORTANT NOTE

Climate control is vehicle-specific. Some features may not be supported by your vehicle.

Change Settings

Access Maestro features to select **[Settings]** for setup, gauges and alerts configuration.

Factory Features Retention

Axxess Data Interface Setup

This unit supports a Metra Axxess data interface which can retain certain features of your vehicle that are normally lost when replacing your factory radio, such as audio controls on the steering wheel, and additionally allows for visual display of vehicle features (e.g. vehicle info, gauges, etc.).

1. Prepare a Metra Axxess radio replacement data interface (not included) which fits your specific vehicle.

Visit www.axxessinterfaces.com and enter your vehicle year, make and model into the **Vehicle Fit Guide** to find a radio replacement data interface for your specific vehicle.

2. Connect the unit to the Axxess data interface using the supplied Metra wiring (P.35), and complete wiring between the Axxess interface and your vehicle according to the installation guide downloaded online for this data interface.



IMPORTANT NOTE

We recommend having your Axxess data interface installed/wired by a certified technician.

Metra features are vehicle specific. Some features displayed on the screen may not be supported by your vehicle.

Vehicle Information

From the Apps window on the home screen, select **[VEHICLE]** to access Metra features.



The screen displays vehicle information such as battery voltage and tire pressure (if installed with the tire pressure management system in your vehicle).

Performance Gauges



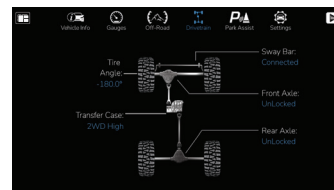
Only the gauges which are supported in your vehicle are activated.

Off-Road Information



The screen displays your vehicle's geographical location in geo-coordinates, position of altitude, driving direction, tipping degrees from front to back (pitch) and from side to side (roll), when supported by your vehicle.

Tire Alignment

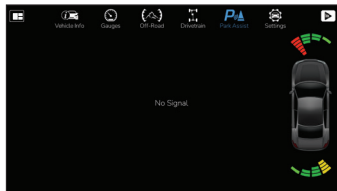


The screen displays wheel alignment status, tire angles, condition of sway bar, front/rear axles and transfer case.

Factory Features Retention

Parking Assist

Access Metra features to select **[Park Assist]**.



When selecting **[Park Assist]**, a camera view will trigger (if installed), and the visual warning for obstacle detection will also display (if installed with parking sensors).

To trigger rear camera, make sure the rear camera is selected for viewing. (P.24)

Climate Control

From the Apps window on the home screen, select **[CLIMATE]**.



Touch the buttons on the screen to adjust the climate options. Only the climate controls which are supported in your vehicle are activated.



IMPORTANT NOTE

Climate control is vehicle-specific. Some features may not be supported by your vehicle.

Change Settings

Access **[Settings]** option to change settings or access vehicle's driving safety systems.

HDMI Input

AUX Input

Using Optical

Playback via HDMI

The unit is equipped with a Micro HDMI input which allows you to play video and audio from a device with HDMI or other AV outputs (e.g. a DVR/dash cam, tablet, or laptop, etc.).

HDMI is used to digitally transmit high-definition video and audio between devices.

HDMI Input Selection

From the Apps window on the home screen, select **[HDMI]** to switch to HDMI source.

HDMI input screen is displayed.

HDMI Cable Connection

Using a Micro HDMI cable (not included), connect the Micro HDMI input on the unit's back to the Micro HDMI output on your device. (P.36)

An adapter (not included), e.g. Micro HDMI to HDMI/USB-C/RCA, is required if your device's AV output is a standard HDMI, USB-C or RCA.



IMPORTANT NOTE

Use the controls on the external device for playback control.

Video and photo cannot not be viewed while driving. The vehicle must be stationary and the parking brake applied to enable viewing.

To activate viewing, also make sure the parking brake switch wire (light green) is properly connected to your vehicle. (P.32)

Playback via Analog Audio

You can listen to audio from an audio device, for example, a mobile phone, MP3 player, CD player, or dash cam.

Audio Input Selection

From the Apps windows on the home screen, Select **[AUX]** to switch to AUX source.

Audio input screen is displayed.

Audio Cable Connection

Connect the RCA audio inputs (labeled **AUX IN_LCH** and **AUX IN_RCH**) on the unit's back to the audio output on your device. (P.35)

If your device does not have an RCA, use the following audio cables (not included).

- For a device with 3.5mm headphone jack, use a 3.5mm to RCA audio cable.
- For a device with USB-C port, use a USB-C to RCA audio cable.

Audio Output via Optical

The unit is equipped with Optical/Toslink output which allows you to output audio to an external amplifier or sound system with optical input.

Optical/Toslink provides high quality audio in digital format.

Activate Optical Output

From the Apps window on the home screen, select **[AUDIO]** to access audio settings, and select **[Toslink]** on the audio settings screen to enable optical output. (P.25)

Optical Cable Connection

Using an optical cable (not included), connect the optical output on the unit's back to the optical input (or labeled "TOSLINK") on an external amplifier or a sound system. (P.36)

Four-Camera System


Using Camera

The unit allows you to connect four cameras at a time. The system provides you with flexibility in location of your cameras as well as the option to trigger them manually or automatically.

You can select a pre-defined camera icon to be displayed for camera identification, depending on a specific camera location. (P.30)

Manual Camera Trigger

You can manually turn on a camera. Make sure each camera is connected through RCA camera input (P.35), and each camera is activated for output (P.29).

1. From the Apps window on the home screen, select **[CAMERAS]**, or press  on the front panel to access the camera screen.
2. Touch the camera screen to display camera options and select the camera you want to view (e.g. front, rear, left or right camera).

You can also manually trigger a camera using the steering wheel control if your steering wheel control is programmed for a camera switch via SWC learning setup. (P.30)

Automatic Camera Trigger

The unit is equipped with four camera trigger wires (P.34). If connected, the camera can trigger automatically.

Rear Camera Trigger

The rear camera will turn on automatically when shifting to the reverse gear, and will turn off automatically when shifting out of the reverse gear.

For automatic rear camera trigger, make sure the purple/white wire (labeled **REVERSE SW**) is connected to the reverse light. (P.34)

When the camera auto triggers, the other cameras are not accessible.

Front Camera Trigger

The front camera will automatically turn on for 3 seconds when shifting out of the reverse gear. Make sure your front camera is activated for output (P.29), and **[Front Camera Timeout]** option is enabled. (P.29)

The front camera does not require a separate trigger wire. (P.34)

To exit the front camera screen during auto triggering, touch the screen.

Left/Right Camera Trigger

The left or right camera will turn on automatically with the left or right turn signal. For automatic left/right camera trigger, make sure a trigger wire is connected. (P.34)

When the left/right camera auto triggers, the other cameras are not accessible.



Never rely solely on the backup camera; always check your surroundings before backing up.

Images may appear reversed if your camera is not properly installed or set up.

Sound Settings

Set Sound Effects

From the Apps window on the home screen, select **[AUDIO]** > **[Audio Settings]** to access the following settings on this page.

Volume Balance Setting

Select **[Audio Settings]** to access the settings.

- **[Balance]**: Touch **◀** or **▶** to adjust right and left volume balance until you are pleased with the sound and a suitable balance is found.
- **[Fader]**: Touch **▲** or **▼** to adjust front and rear volume balance until the sound has a satisfying depth.

Subwoofer Control

Select **[Audio Settings]** to access the settings.

- **[Subwoofer ON/OFF]**: Enable/disable subwoofer output.
- **[Subwoofer 0°/180°]**: Reverse audio phase (0° or 180°) for bass response improvement.
- **Subwoofer Slider**: Adjust subwoofer volume.

Loudness Control

Select **[Audio Settings]** to access the settings.

- **[Loudness]**: Enable to boost output of low and high frequencies.

Optical Output Control

Select **[Audio Settings]** to access the settings.

- **[Toslink]**: Select **ON** to enable audio output via optical cable connection to an external amplifier. (P.36).
When **ON**, EQ, crossover and time alignment settings will be deactivated.
Select **OFF** to disable audio output via Optical connection.

Tone Defeat

Use this feature to hear the differences between the current audio settings and factory default settings.

Select **[Audio Settings]** to access the settings.

- **[Tone Defeat]**: Select **ON** to disable your current audio settings and return to factory settings. Select **OFF** to re-activate your current audio settings.
When **ON**, EQ, crossover and time alignment settings are not possible.

Reset Audio to Factory Settings

Select **[Audio Settings]** to access the settings.

- **[Audio Reset]**: Clear the customized audio settings and restore to factory settings.

Customization of a Source Volume

You can adjust a source volume independently, without affecting volume of other sources.

Select **[Audio Settings]** to access the settings, then swipe the more-options icon (≡) at the bottom of the screen to access Source Gain settings screen.

- **[HD RAADIO]**: Adjust volume for FM/AM radio.
- **[SiriusXM]**: Adjust volume for SiriusXM radio
- **[Apple CarPlay]**: Adjust volume for CarPlay.
- **[Android Auto]**: Adjust volume for Android Auto.
- **[USB Audio]**: Adjust volume for audio playback in USB mode.
- **[USB Video]**: Adjust volume for video playback in USB mode.
- **[BT MUSIC]**: Adjust volume for Bluetooth audio streaming.
- **[AUX]**: Adjust volume for AUX source input.

Sound Settings

Set Sound Effects

Customized EQ Setting

Adjust the volume of certain frequencies of audio signal for optimal sound.

From the Apps window on the home screen, select **[AUDIO]** > **[Equalizer]** to access the settings.

1. Adjust each frequency bar to set decibel output.
2. Touch and hold a **[Preset]** button to save the EQ setting. Up to six EQ presets can be stored.
To clear the settings, touch the **[Flat]** button.

Crossover Setting

From the Apps window on the home screen, select **[AUDIO]** > **[Crossover]** to access the settings.

Front and Rear Speakers Setting

- **[Frequency]**: Adjust High Pass Filter (HPF). Only the frequencies above the one you set will be received to reproduce sound.
- **[Slope]**: Set a high pass filter slope in decibels. An HPF slope determines the rate that attenuates the frequencies below the set one.
- **[Level]**: Adjust output volume of the speakers.

- After completing the settings, touch and hold a **[Preset]** button to save the settings. Up to four crossover presets can be stored.
To clear the settings, touch the **[Flat]** button

Subwoofer Setting

- **[Frequency]**: Adjust Low Pass Filter (LPF). Only the frequencies below the one you set will be received to reproduce sound.
- **[Slope]**: Set a low pass filter slope in decibels. An LPF slope determines the rate that attenuates the frequencies above the set one.
- **[Level]**: Adjust output volume of the speakers.
- After completing the settings, touch and hold a **[Preset]** button to save the settings. Up to four crossover presets can be stored.
To clear the settings, touch the **[Flat]** button.

Time Alignment Setting

Compensate the time delays caused by the different distances between the speakers and your ears. Adjust delay time so that sound from all the speakers arrives at the listener simultaneously.

From the Apps window on the home screen, select **[AUDIO]** > **[Time Alignment]** to access the settings.

1. Touch **[ms]** (millisecond) or **[inch]** to select time or distance measurement.
2. Touch **<** or **>** to set delay time for front and rear speakers, and subwoofer.
3. Touch and hold a **[Preset]** button to save the setting. Up to six presets can be stored as different listening positions.
Experiment with different time values to find the optimal settings for you.
To clear the settings, touch the **[Flat]** button.

Factory EQ Selection

You can select a pre-defined sound mode (EQ settings at factory) to suit your music.

From the Apps window on the home screen, select **[AUDIO]** > **[Factory EQ]** to access the settings to select a factory EQ.


Source Volume Controls

By pressing the volume button (**+/-**) on the front panel, you can access the following separate volume controls:

Main volume (); Phone call ();
Voice assistant (); Navigation voice ();
Ring tone ().

System Settings

General Settings

From the Apps window on the home screen, select  (SETTINGS) > [General] to access the following settings on this page.

Key Tone and Language Setting

Select [General] to access the settings.

- [Beep]: Select a sound volume level (Mid, Low or Off) when touching an icon on the screen or pressing a button on the front panel.
- [Language]: Select English, French or Spanish as menu language.

Set Date and Time Manually

Select [General] > [Clock] to access the settings.

- [Current Time]: Touch to access time setting screen. On the time setting screen, you can set Day, Month, Year, Hour, Minute and hour format.
- [Clock Format]: Select 12 or 24 hour format.
- [Daylight Saving Time]: Enable to adjust daylight saving automatically.
- [Time Zone]: Select a time zone in your current location.

Set Date and Time Automatically

Select [General] > [Clock] to access the settings.

- [GPS]: Enable to automatically set date and time from GPS signals. Make sure the supplied GPS antenna is attached to the unit. (P.36).
- [PHONE SYNC]: Enable to automatically set date and time from Apple CarPlay.
- [MANUAL]: If selected, automatic date/time setting is disabled.

GPS Information Display

Select [General] to access the settings.

- [GPS Information]: Access the navigational information that your vehicle is currently traveling, e.g. vehicle's geographical location in geo-coordinates, satellite signals and vehicle speed.
Make sure the supplied GPS antenna is attached to the unit. (P.36)

Change Menu Bar Position

Select [General] to access the settings.

- [Right Hand Drive]: For driving convenience, you can change the Apple CarPlay menu bar from the left side to the right side of the screen and vice versa. Restart your vehicle to make the change effective.

Startup Warning Message Display

Select [General] to access the settings.

- [Boot Warning Message]: Turn on or off the warning message about driving safety notice when the unit is powered on from vehicle engine ignition.

System Information Display

Select [General] to access the settings.

- [Version]: Display the unit's versions for hardware, software and Bluetooth, etc. You can also find the serial number of this unit.

Firmware Update

We continually try to improve our product. The product can be updated if needed.

Select [General] to access the settings.

- [System]: Touch to prompt firmware update.
Please visit the product page on our website (www.modusglobal.com) to see if there is an update available and pay close attention to the update instructions included online.


Reset the Unit

Select [General] to access the settings.

- [Factory Reset]: Reset the unit to the factory settings.
Reset the unit only when the unit fails to function normally. All your settings will be erased after resetting.

System Settings

Display Settings

From the Apps window on the home screen, select  (SETTINGS) > [Display] to access the settings on this page.

Screen Brightness

Select [Display] to access the settings.

- [Brightness]: Adjust screen brightness.
- [Auto Dimmer]: When enabled and the vehicle light is turned on, the screen brightness and panel button light will automatically dim.



IMPORTANT NOTE

To enable night detection for auto dimming, make sure the orange wire (labeled "ILLUMINATION") is connected to your vehicle's parking light. (P.32)

Panel Button Light Setting

Select [Display] to access the settings.

- [Animation Effect]: Enable to automatically cycle the panel button lights through six different colors.
- [Illumination Color]: Select one of the preset colors for panel button lights.
Make sure [Animation Effect] is disabled to activate light color selection.

Customize Button Light Color

Select [Display] > [Illumination Color] to display button lights setting screen.

Use the Color slider to set a color. Use the Color Intensity slider to set color brightness.

Make sure [Animation Effect] is disabled to activate light color selection.


Theme Color Setting

Select [Display] to access the settings.

- [GUI Color]: Select a display color for the graphic user interface.

System Settings

Camera Settings

From the Apps window on the home screen, select  (SETTINGS) > [Camera] to access the following settings.

Camera Trigger Control

Select [Camera] to access the settings.

- [Camera 1]/ [Camera 2]/ [Camera 3]/ [Camera 4]: Enable or disable camera signal input for a camera (e.g. rear, left, right and front camera).

Parking Assist Guidelines Setting

Select [Camera] to access the settings.

- [Parking Guidelines]: Disable the parking assist guidelines built in the unit if your rear camera view has its own parking assist guides.

Backup Camera Sound

If your camera is equipped with a microphone for sound input, the input sound from your vehicle's surroundings can play through the unit.

Select [Camera] to access the settings.

- [Reverse Cam Audio]: Turn on or off the backup camera sound output.
When enabled, use the slider to adjust backup camera sound level if your backup camera has a microphone.
Backup camera sound is available only when the vehicle is in reverse.

IMPORTANT NOTE

For automatic rear camera trigger, make sure the purple/white wire (labeled "REVERSE SW") is connected to the reverse light. (P.34)


Front Camera View Retention

This feature allows your front camera to automatically turn on for 3 seconds when shifting out of the reverse gear. Make sure your front camera is also activated for output. (P.29)

Select [Camera] to access the settings.

- [Front Camera Timeout]: Turn on or off front camera view retention.

Bluetooth Settings

From the Apps window on the home screen, select  (SETTINGS) > [Device] to access the following settings.

- [Devices]: Access to connect or disconnect a device for Bluetooth, Apple CarPlay/Android Auto, or switch between Bluetooth and CarPlay/Android Auto use.
- [Bluetooth]: Access to enable or disable automatic connection to the paired Bluetooth device when powered on.

System Settings

Advanced Options

From the Apps window on the home screen, select **⚙️ [SETTINGS]** > **[Installer]** to access the advanced options on this page.

You need to input the password ("3451") on pop-up keypad when prompted to access **[Installer]** for setting of steering wheel controls and camera.

Steering Wheel Controls (SWC)

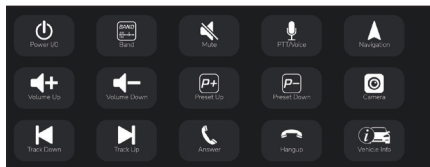
The unit allows you to retain your steering wheel controls through learning setup or fixed setup.

Option 1: Learning Setup

Select **[Installer]** > **[Steering Wheel Control]** to access the function mapping chart.

Retain the steering wheel controls through the mapping chart if your vehicle does not need a steering wheel interface (not included) for SWC setup connection. (P.34)

The mapping chart shows the functions which can be programmed on your steering wheel buttons.



1. Touch a button icon from the mapping chart. The function button will be highlighted.
2. Press a button on your steering wheel to set the function. A green dot will appear in the top left corner of the button icon if the mapping is successful.
3. Repeat the steps above to map the other functions.

To clear the mapping, touch the **Reset** button on the mapping chart screen.

i IMPORTANT NOTE

The mapping chart/tool is resistance based, and not compatible with all vehicles.

Option 2: Fixed Setup

Use the fixed setup if your vehicle needs a steering wheel interface (not included) for SWC setup connection. (P.34)

Follow the instructions of your steering wheel interface to map the steering wheel controls.

Camera View Control

1. Select **[Installer]** > **[Camera]** to access the camera settings screen. Input the password ("3451") on pop-up keypad when prompted to access **[Installer]**.
2. Touch **>** to access camera view control for each camera.

[Mirror Image]: When enabled, the camera view will be laterally (left/right) inverted.

Change Camera Icon

For your convenience of identifying a specific camera location, you can select a pre-defined camera icon.

From the camera settings screen (**[Installer]** > **[Camera]**), touch the icon for Camera 2, Camera 3 or Camera 4 to access multiple camera icons for selection.

The Camera 1 icon is designed to work with the rear camera, and is not able to be changed.

For explanation of **[Reverse Cam Audio]** and **[Parking Guidelines]** options, refer to the Camera Settings section. (P.29)

Unit Installation

Dash Mounting



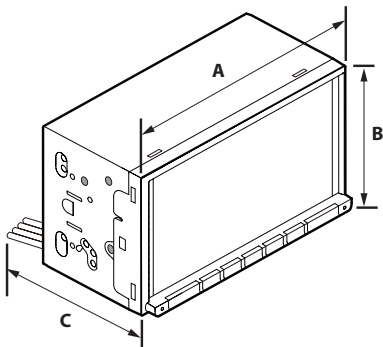
WARNING

See the section "Installation Warnings". (P.4)



Before you mount the unit into the dash, complete the wiring connection (P.31 to 36).

Chassis Mounting Dimensions



Mounting Hole (**A x B**):

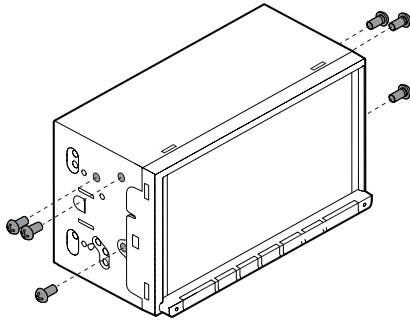
7.01" x 3.94" (178 x 100 mm)

Mounting Depth (**C**): 5.35" (136 mm)

Mounting in Dash

This unit is designed to be a universal double DIN receiver which fits a standard double DIN opening in a vehicle.

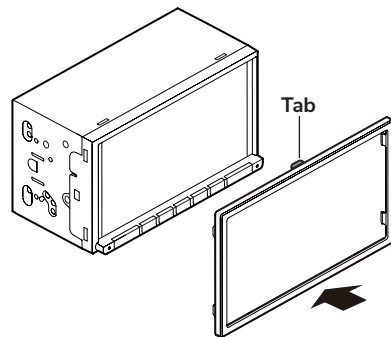
1. Access the factory radio opening, and place the unit in the opening.
2. Secure the unit. Using the six supplied screws (M5 x 8mm), fasten two factory brackets on both sides of the unit to secure.



Attach the Trim Ring

After the unit is mounted into the dash, attach the supplied trim ring to the unit's front panel.

Before attaching, orient the trim ring and make sure the tab on the ring positions upward.



Connections

Power/Parking Brake Wiring



WARNING

See the section "Installation Warnings". (P.4)

Unused input/output wires need to be insulated with tape, heat shrink, or crimp connectors. **Never use wire nuts.**

Always replace the faulty fuse with the same type and rating (15A).

Improper connection or use of the parking brake switch wire (e.g. defeating the safety feature) violates Federal, State, and Local laws. This may lead to injury, property damage, and/or death

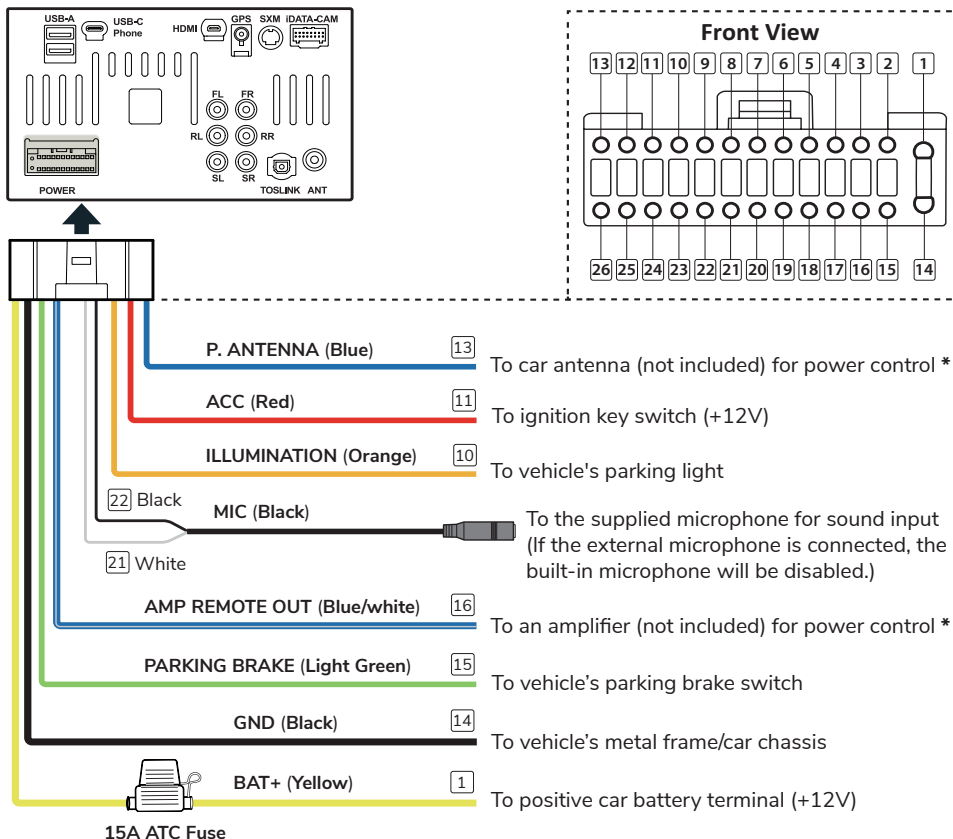


IMPORTANT NOTE

"PARKING BRAKE" wire (light green) must be connected to the vehicle's parking brake switch to enable video and photo playback.

"ILLUMINATION" wire (orange) must be connected to the parking light for night detection to auto dim the screen.

* Power output is max 500mA, 12V. It is recommended to use a relay if additional power is required.



Connections

Speaker Wiring

CAUTION

Do not chassis ground any speaker wire leads.

Only use 4-8 Ω speakers.

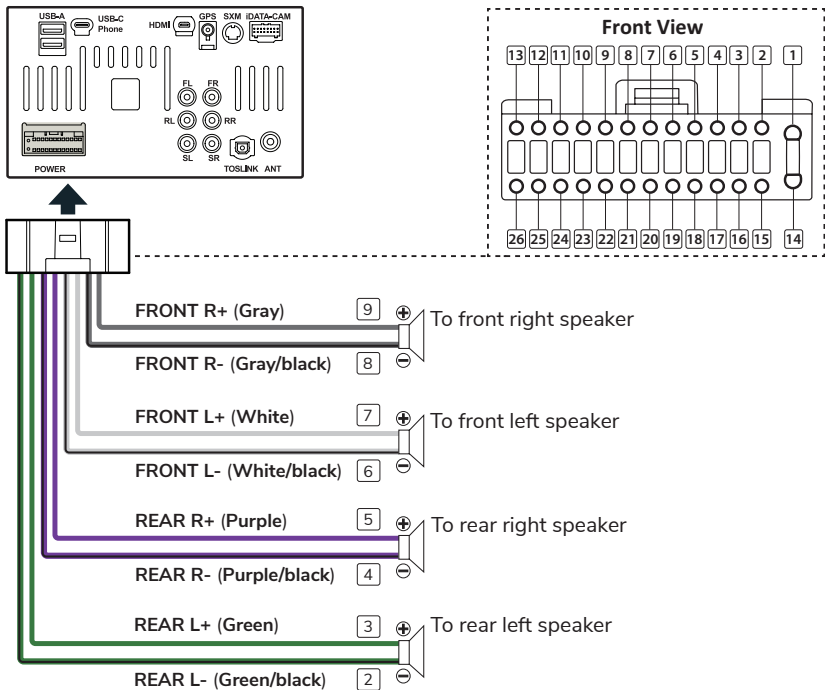
DO NOT use 1-3 Ω speakers.

Do not bridge any of the channels. They are only to be wired in stereo mode.

IMPORTANT NOTE

Unused speaker wires need to be insulated with tape, heat shrink, or crimp connectors to avoid damage to the unit. **Never use wire nuts.**

Double check speaker polarity when making connections.



Connections

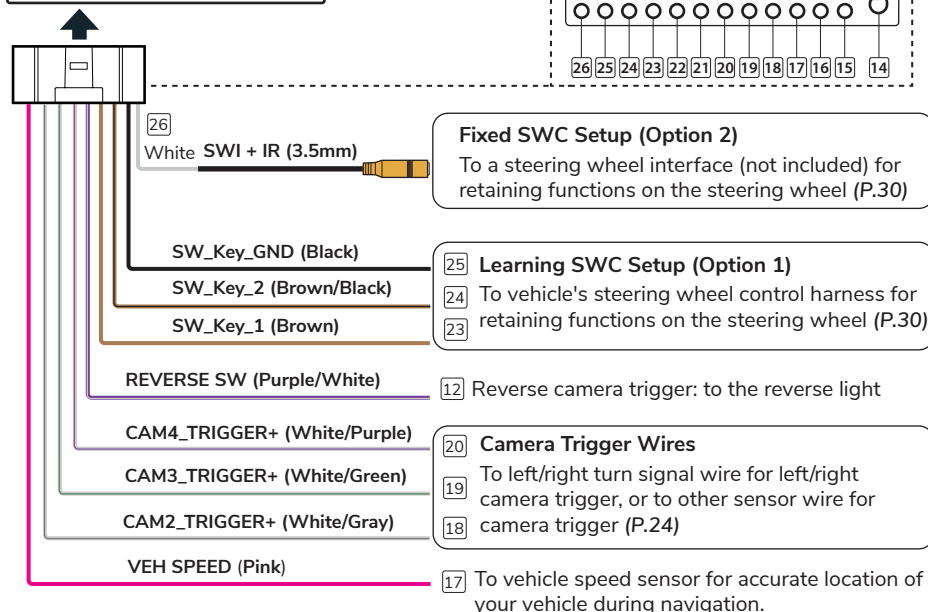
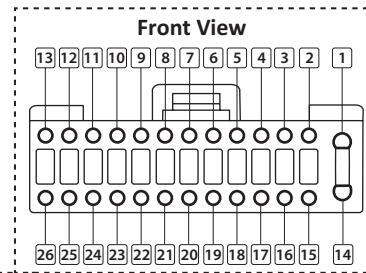
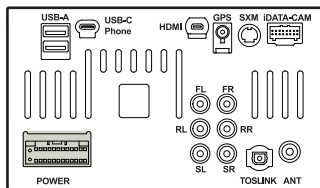
Steering Wheel Control and Camera Trigger Wiring

IMPORTANT NOTE

For fixed SWC setup, consult a professional installer for a correct steering wheel interface to match your vehicle and follow the instructions of the steering wheel interface to complete wiring and button programming.

For learning SWC setup, consult a professional installer for wiring to your vehicle's steering wheel control harness and complete button programming described in this manual. (P.30)

Camera trigger wires must be connected to your vehicle so that a camera can automatically trigger (e.g. rear camera trigger when changing the gear to reverse).



Fixed SWC Setup (Option 2)
To a steering wheel interface (not included) for retaining functions on the steering wheel (P.30)

Learning SWC Setup (Option 1)
To vehicle's steering wheel control harness for retaining functions on the steering wheel (P.30)

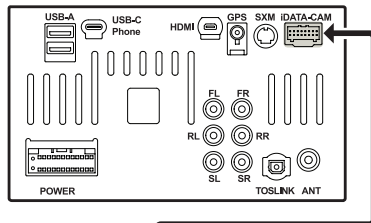
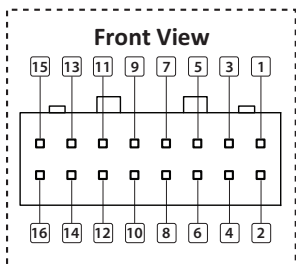
Reverse camera trigger: to the reverse light

Camera Trigger Wires
To left/right turn signal wire for left/right camera trigger, or to other sensor wire for camera trigger (P.24)

To vehicle speed sensor for accurate location of your vehicle during navigation.

Connections

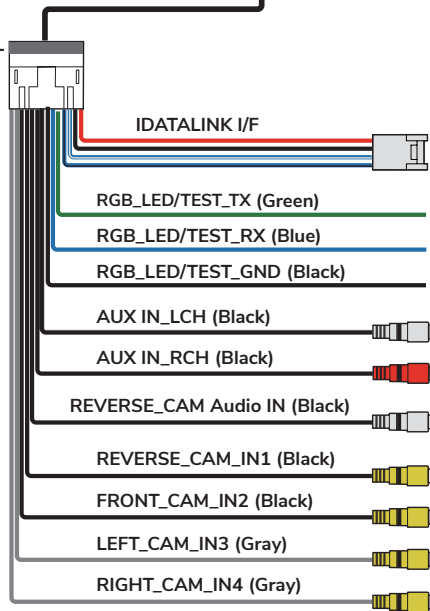
Maestro/Axxess/Camera/Audio Input Wiring



IMPORTANT NOTE

We recommend having your Maestro or Axxess interface installed/wired by a certified technician.

No.	Function /Color
1/3	Cam1_Video In (Red) / GND (Black)
2/3	Cam2_Video In (White) / GND (Black)
4/3	Cam3_Video In (Red) / GND (Gray)
5/3	Cam4_Video In (White) / GND (Gray)
6/3	Reverse Audio (White) / GND (Black)
7/9	Audio In L+ (White) / GND (Black)
8/9	Audio In R+ (Red) / GND (Black)
10	RGB Light_Tx (Green) - For future use
11	RGB Light_Rx (Blue) - For future use
12	RGB Light_GND (Black) - For future use
Maestro/Axxess Connector	
13	Power (Red)
14	iData Tx to Unit (Blue/white)
15	iData Rx from Unit (Blue/black)
16	GND (Black)



Maestro/Axxess Interface Connector

To a Maestro RR device (not included) or Axxess data interface (not included). Consult a professional installer for wiring.

For future use.

To audio outputs on external audio source (P.23)

To RCA audio output on your rear camera for audio input (if a microphone exists on the camera) (P.30)

To RCA plug of the rear camera for video input

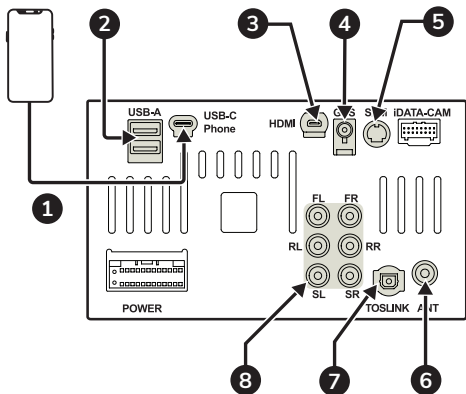
To RCA plug of the front camera for video input

To RCA plug of the left camera for video input

To RCA plug of the right camera for video input

Connections

USB/SXM/GPS/HDMI/Optical/Pre-amp Output Wiring



- 1 USB-C Port:** Using a certified USB-C cable, connect to your mobile phone for wired Apple CarPlay/Android Auto use.
- 2 USB-A Port:** Using a USB cable, connect to a USB flash drive for media playback or to a mobile phone for charging.
- 3 Micro HDMI Input:** Using a Micro HDMI cable or Micro HDMI to standard/USB-C/ RCA adapter, connect to a device with HDMI or other AV output (e.g. a DVR/dash cam, tablet, or laptop, etc.).
- 4 GPS Antenna Connector:** Connect to the supplied GPS antenna for driving direction and navigation.
- 5 SiriusXM Connector:** Connect to a SiriusXM Vehicle Tuner before you can activate and receive satellite radio. For more information on how to install the SiriusXM Vehicle Tuner, consult the SiriusXM Vehicle Tuner Installation Guide.

- 6 FM/AM Antenna Connector:** Connect to an FM/AM antenna for better radio reception.
- 7 Optical Output:** Using an optical cable, connect to an external amplifier with optical input.
- 8 Pre-amp Output:** Using RCA audio cables (not included), connect the audio outputs on the unit to an external amplifier (not included).



IMPORTANT NOTE

Always run signal wires away from power cables to reduce the possibility of noise.

Subwoofer pre-amp is a non-fading mono output.

Connections

Hands-Free Mic Installation

The unit comes with a built-in microphone and an external microphone.

The built-in microphone will be disabled if the external microphone is installed.

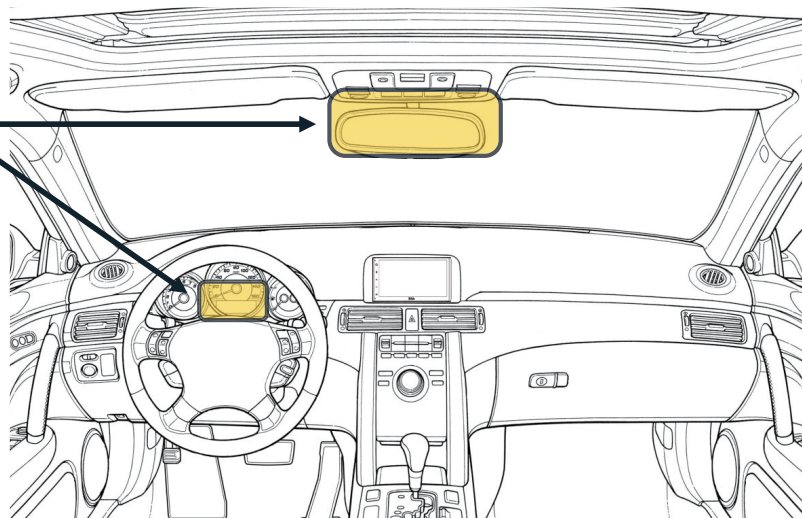
Follow the instructions below to install the external microphone.

Placement

The **Yellow** shaded areas are the recommended locations for best microphone performance.

Items to look for before placement:

- Do not place in front of air vents.
- If the vehicle has tweeters placed on sail panel, do **NOT** install the microphone on steering column area.
- The front of the microphone must not be blocked.
- Microphone should be firmly attached to mounting location.
- Do not cover the grille openings surrounding the microphone.
- To avoid excessive wind noise, do not place near the sunroof opening.



WARNING

Run the microphone wire where it will **NOT** impede with the operation of any safety items (e.g. airbags, knee airbags, etc.)

Option 1: Adhesive Mount

1. Attach the microphone to the supplied adhesive stand.
2. Remove the backing paper from the microphone stand, then stick the stand on a clean mounting surface.
3. Route and secure the microphone wire properly.

Option 2: Clip Mount

1. Attach the microphone to the supplied clip.
2. Attach the clip to a proper position.
3. Route and secure the microphone wire properly.

Troubleshooting

Important!

If the problem persists after checking the list below, turn off the vehicle for 10 seconds and restart. If the issue continues, use a small pin to press the reset button on the front panel. For ongoing problems, contact customer services.

General

No response / Unit not powered on / Bad or incorrect picture quality.

- Restart the unit by turning off the vehicle for ten seconds, then turning the vehicle back on.

No sound from the unit.

- The unit is muted. Adjust the volume.
- Select the correct audio source on the unit.

USB

Cannot play a media file.

- The media format on the USB is not supported. Change media files.
- The file system of the USB is not supported. Change the USB.

No video playback or picture display.

- Video or picture display is enabled only when the parking brake is engaged, and the parking brake switch wire is connected to your vehicle. (P.32)

Apple CarPlay/Android Auto

Cannot start Apple CarPlay/Android Auto.

- CarPlay/Android Auto is disabled. Enable CarPlay (P.13) or Android Auto (P.15).
- For CarPlay, make sure CarPlay is enabled on your iPhone (**Settings > General > CarPlay > Paired device > Enable CarPlay**).
- Delete the paired device on both your phone and the unit. Make the connection again.

Bluetooth

Cannot make Bluetooth connection.

- CarPlay/Android Auto connection disables Bluetooth connection. Disable CarPlay/Android Auto connection. (P.16)
- Delete the paired device on both your phone and the unit. Make the connection again.

Cannot stream via Bluetooth.

- Pair and connect your mobile phone. (P.16)
- Bluetooth connection is disabled. Enable Bluetooth connection. (P.16)
- Delete the paired device on both your phone and the unit. Make the connection again.

Phonebook is not displayed.

- Delete and repair your mobile phone, select "Allow" when prompted on the phone screen for phonebook sync.

Poor hands-free phone call quality/No sound from Microphone.

- Check signal strength on your mobile phone.
- Check that the external microphone is firmly attached and plugged in. Or relocate the microphone for noise reduction. (P.37)

FM/AM Radio

Poor radio reception.

- FM/AM antenna is not connected or extended. Connect and secure an FM/AM antenna (not included). (P.36)
- The antenna output wire is not connected. Connect the wire. (P.32)

Troubleshooting

SiriusXM Radio

"Check Antenna" appears.

- Check that the antenna cable is connected to the SiriusXM Vehicle Tuner.
- Check the antenna cable for damage and kinks. Replace the antenna cable if damaged. SiriusXM products are available at your local car audio retailer or online at <https://shop.siriusxm.com/all-parts/>.

"Check Tuner" appears.

- Check that SiriusXM Vehicle Tuner is securely connected to the unit (P.36), or the Tuner is damaged.

"Subscription Updated" appears.

- Your subscription is updated. Press the appropriate button to clear the message.

"Channel Unavailable" appears.

- The selected channel is not available. For more information about SiriusXM channel lineup, visit www.siriusxm.com.

"No Signal" appears.

- Verify that your vehicle is outdoors with a clear view of the sky.
- Verify that the SiriusXM magnetic base antenna is mounted on a metal surface on the outside of the vehicle.
- Move the SiriusXM antenna away from any obstructions.
- Check the antenna cable for damage and kinks.
- Consult the SiriusXM Vehicle Tuner installation manual for more information on antenna installation.

"Channel Unsubscribed" appears.

- The selected channel is not subscribed. If you have questions about your subscription package or would like to subscribe to this channel, in the USA, visit www.siriusxm.com or call 1-866-635-2349; in Canada, visit www.siriusxm.ca/activate or call 1-888-539-7474.

"Channel Locked" appears.

- The selected channel is locked by the Parental Control feature. Enter the correct password to unlock. (P.12)

Specifications

General

Input voltage	9 – 16 VDC 14.4 VDC (Nominal)
Current consumption.....	Max. 15 A
Fuse	15 A (ATC, blade)
Mounting hole (H x W).....	3.94" x 7.01"
Mounting depth.....	5.35"
Unit weight.....	2.14 lbs.
Operational temperature.....	-4 – 140°F

Display

Screen size.....	7"
Aspect ration.....	16:9
Resolution.....	1024 x 600
Screen type.....	TFT-LED active matrix

Audio

Output power	25 W RMS x 4
Speaker impedance	4 – 8 Ω
Preset EQ.....	Spoken, Vivid, Casual, Tranquil, Heavy, Flat
EQ (15 bands).....	25/40/63/100/160/250/400 /630/1k/1.6k/2.5k/4k/6.3k/10k/16k Hz
EQ boost/cut	±6 dB
High pass filter.....	25/40/63/100/250/500 /1k/3.5k/5k Hz

Low pass filter.....	25/40/63/100/250 Hz
Slope.....	-12/-18/-24 dB/Oc
Gain.....	0 to -12 dB
Pre-amp output.....	2x Front (5V, full range) 2x Rear (5V, full range) 2x Sub (Mono, 5V, LPF)
Audio input	Micro HDMI, digital 2x RCA, analog
Audio output.....	Optical/TOSLINK, digital

Video

Signal system.....	NTSC/PAL
Video Input.....	Micro HDMI, digital

Radio

Frequency range.....	87.5 – 107.9 MHz (FM) 530 – 1710 kHz (AM)
Radio services	Analog FM/AM HD Radio reception SiriusXM radio

Apple CarPlay

Device support.....	iPhone 5 or later
iOS.....	iOS 7.1 or later

Android Auto

Wired	Android 6.0 or later
Wireless	Android 11.0 or later

USB

USB-C 2.0 (1x).....	CarPlay/Android Auto Media/Charging (3A)
USB-A 2.0 (2x).....	Media/Charging (1.5A)
Supported USB device	Max. 128GB
File system.....	FAT32
Audio playback.....	FLAC (192kHz/24bit) MP3, WAV
Video playback.....	AVI, MKV
Picture playback.....	JPG, PNG, BMP

Note: Not all listed media files are guaranteed to play due to different creation methods or file contents.

Bluetooth

Bluetooth version	V5.0 + EDR
Transmission range.....	33ft/10m (line of sight)
Bluetooth profiles.....	A2DP, AVRCP, HFP, PBAP, HSP, HID, GATT, SPP

Wi-Fi

Frequency band	2.4/5 GHz
(Only used in wireless connection for CarPlay/ Android Auto)	

Specifications are subject to change without notice.

Notice

FCC Compliance Statement

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

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

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.

This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

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

USER MANUAL

Modus

www.modusglobal.com

1451 Vanguard Drive, Oxnard, CA 93033

Customer Service 805-790-7383

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



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V:A