



**DIAMOND**  
AUDIO



**MSHD14/MSHD9813SG/MSHD9813RG**

**Harley Davidson®  
Digital Media Receiver**

**Owners Manual**

# INTRODUCTION

---

Diamond Audio's MSHD14 is the world's most advanced Plug N-Play Digital Media Receiver radio for Harley-Davidson motorcycles. The MSHD14 is also the first media player to offer iData's Maestro RR2 module built-in. (MSHD14) Diamond redefines your ride with unmatched features and cutting-edge technology. You have purchased the premier media player for your Harley motorcycle with a long list of innovative features and unmatched musical clarity.

Proudly designed in the USA, this high-end Harley radio is engineered to provide years of musical enjoyment. Thank you from the team at Diamond Audio for choosing us for your bike.

## FEATURES

---

- 🔥 **10 CHANNEL:** CLIP-FREE INDEPENDENT OUTPUTS: EXPERIENCE THE CLEAREST AUDIO WITH (6) 5V RMS RCA OUTPUTS AND(4) 50X4@2Ω/25X4@4Ω RMS CLIP-FREE OUTPUTS.
- 🔥 **WIRELESS APPLE CARPLAY:** SEAMLESSLY INTEGRATE YOUR IPHONE WITH THE WIRELESS APPLE CARPLAY FEATURE, PROVIDING YOU WITH EFFORTLESS ACCESS TO MUSIC, NAVIGATION, AND MORE.
- 🔥 **7" ULTRA-BRIGHT, 1000 NIT LCD TOUCHSCREEN:** THIS GLOVE-FRIENDLY TOUCHSCREEN IS DESIGNED FOR VISIBILITY AND EASE OF USE, EVEN UNDER THE BRIGHTEST CONDITIONS.
- 🔥 **INTERNAL MAESTRO RR2 CANBUS INTERFACE:** AS THE WORLD'S FIRST OF ITS KIND, THIS INTERFACE ENSURES SEAMLESS INTEGRATION WITH YOUR HARLEY'S SYSTEMS.
- 🔥 **6 PROGRAMMABLE AUXILIARY TRIGGERS:** CONTROL YOUR LIGHTING, KICKSTANDS, AND ACCESSORIES THROUGH THE TOUCHSCREEN, TIMERS, TRIGGERS, OR HANDLEBAR CONTROLS.
- 🔥 **VEHICLE DATA SCREENS:** MONITOR ESSENTIAL METRICS LIKE SPEED, OIL PRESSURE, VOLTAGE, AND 0-60 TIME WITH USER SELECTABLE DATA SCREENS.
- 🔥 **10CH DSP FEATURES:** INCLUDES TIME DELAY, HP/LP/BP CROSSOVERS WITH ADJUSTABLE SLOPES, WITH INDEPENDENT CHANNELS THAT CAN BE LINKED OR SEPARATED FROM FADER CONTROL.
- 🔥 **IPX6 WATER RESISTANCE:** COMES WITH A WEATHERPROOF TRIM GASKET, ENSURING DURABILITY IN ALL RIDING CONDITIONS.
- 🔥 **MEDIA PLAYER & BLUETOOTH 5.2:** SUPPORTS A WIDE RANGE OF MEDIA FORMATS, INCLUDING MP3, AAC, WMA, AND MORE, WITH BLUETOOTH STREAMING AND HANDS-FREE CALLING.
- 🔥 **USB MEDIA INPUT/CHARGER:** EQUIPPED WITH A 2.1A CHARGER TO KEEP YOUR DEVICES POWERED ON THE GO.
- 🔥 **BACKUP CAMERA INPUT:** ENHANCE YOUR SAFETY WITH A COMPATIBLE BACKUP CAMERA INPUT.
- 🔥 **BOOM2 COMPATIBLE:** DESIGNED TO WORK SEAMLESSLY WITH BOOM2 SYSTEMS. MULTIPLE PATENTED TECHNOLOGIES: BOASTING NUMEROUS PATENTED FEATURES AND TECHNOLOGIES, THE MSHD14 SETS A NEW STANDARD IN MOTORCYCLE AUDIO SYSTEMS.

# CONTENTS

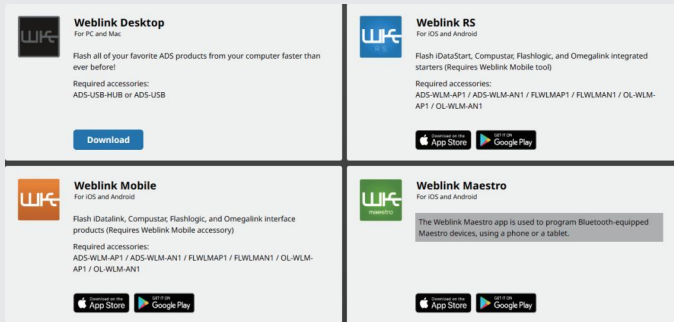
---

Weblink Download	<b>4</b>
iData Internal RR2 Programing	<b>4</b>
iData Internal RR2 MPO Programing	<b>6</b>
Radio Receiver Installation	<b>7</b>
Boom Audio Integration	<b>10</b>
Android Auto & Apple Carplay	<b>12</b>
Setup Sirius/XM	<b>13</b>
Setup Bluetooth Line Driver	<b>14</b>
Setup Time Delay	<b>15</b>
Setup Global EQ	<b>16</b>
Setup Compensation EQs	<b>17</b>
Setup Bluetooth Pairing	<b>17</b>
Setup DSP Crossover	<b>18</b>
Setup Balance and Fader	<b>19</b>
Warranty	<b>20</b>

# Weblink Download

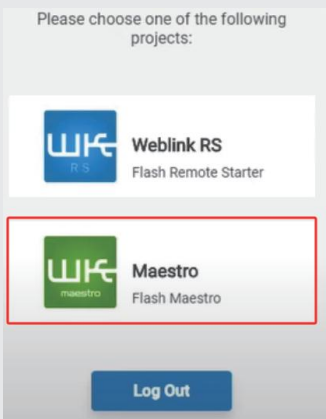
Please download Weblink app.

Download link: <https://www.weblinkupdater.com/apps>

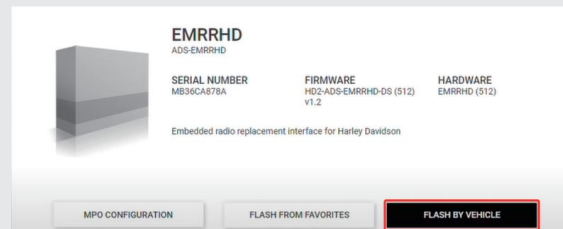


# iData Internal RR2 Programming

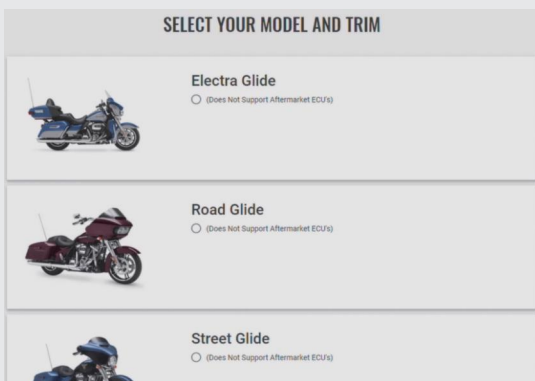
Please follow the steps below to program the internal RR2 of iData.



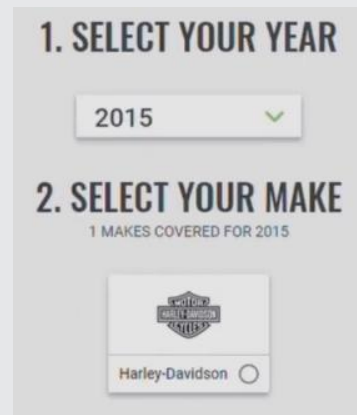
Step 1-Click the green flash Maestro button;



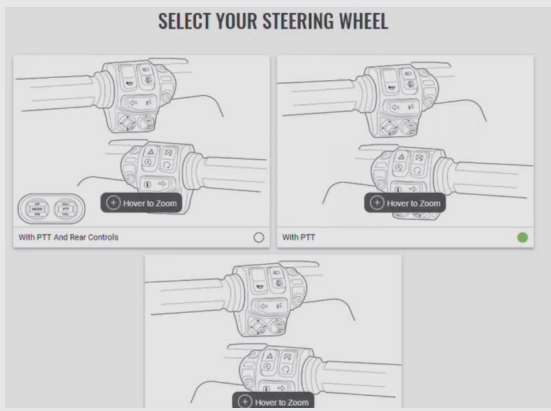
Step 2-Click the Green Flash by vehicle;



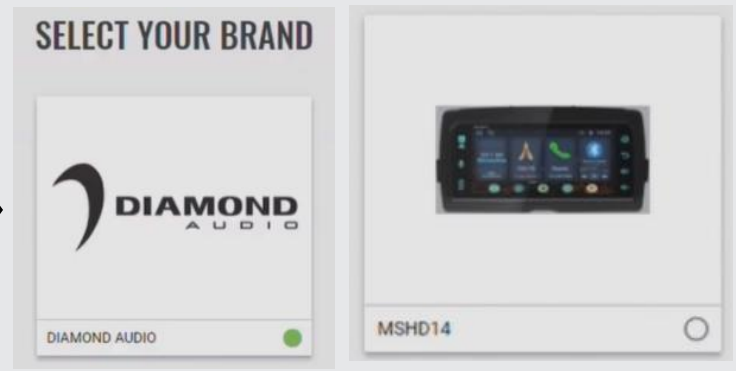
Step 4-Select your model and trim;



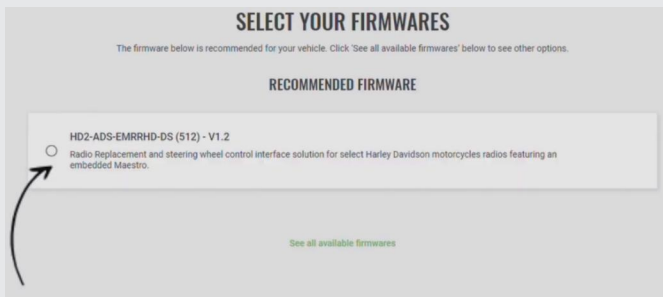
Step 3- Select your model year;



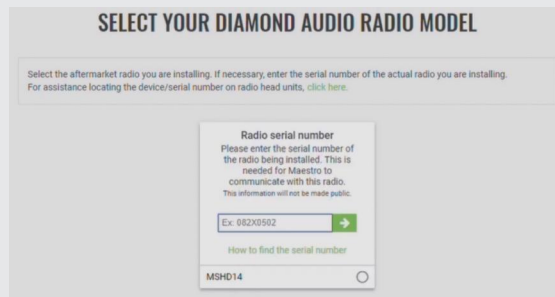
Step 5-Select your steering wheel;



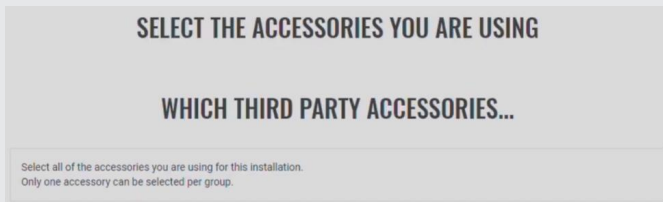
Step 6-Select DIAMOND AUDIO and MSHD14 radio model;



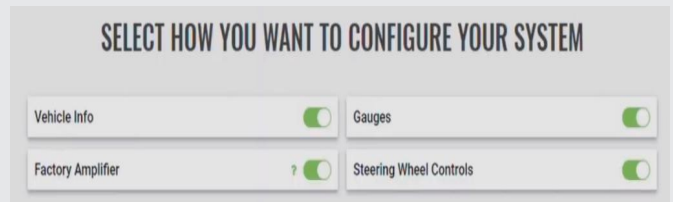
Step 8-Click this button;



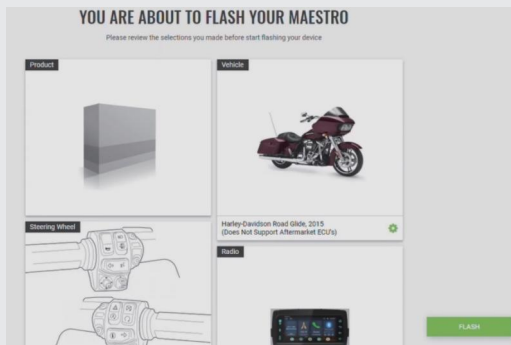
Step 7-Fill in the serial number at the bottom of the box or device.



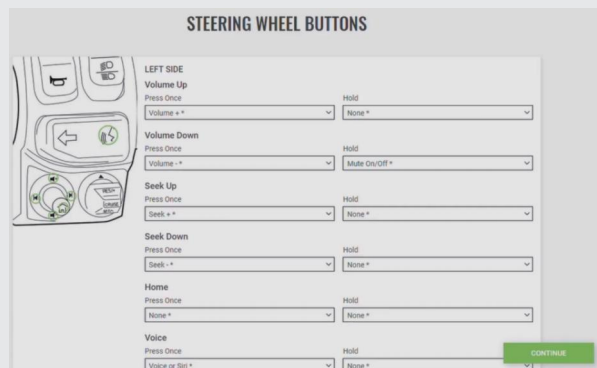
Step 9-Click "CONTINUE" twice;



Step 10-This is where you configure the radio function. Click "CONTINUE".



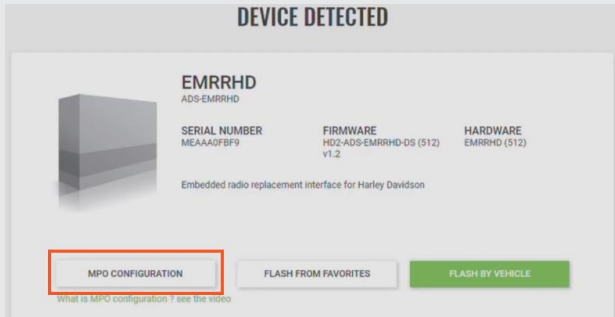
Step 12-Now, you are ready to flash your unit. When the flash is completed, congratulations! You can install the radio now.



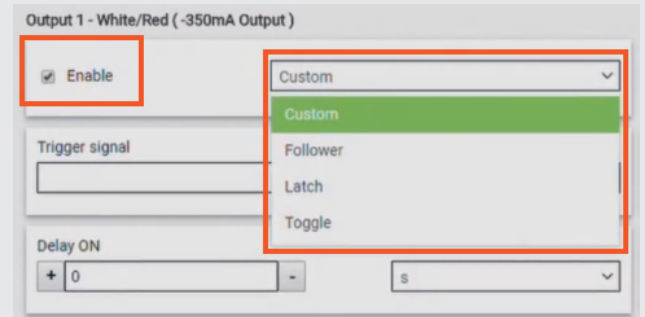
Step 11-On this screen, you can customize your handlebar when you click "CONTINUE".

# iData Internal RR2 MPO Programming

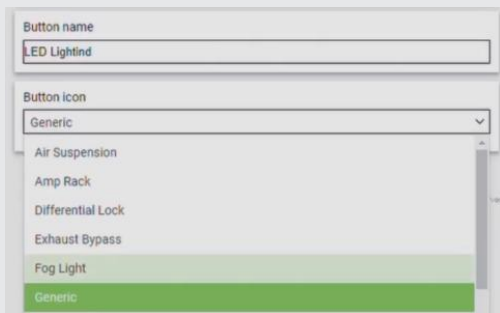
In this page, we are discuss how to program the receiver outputs using the Maestro weblink portal.



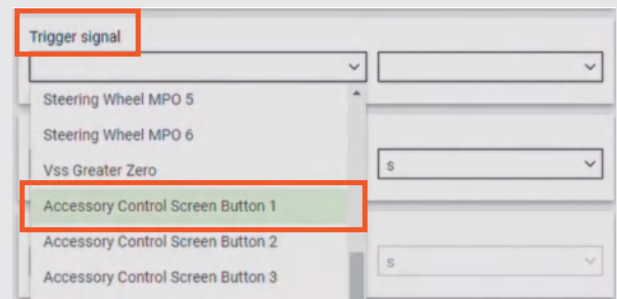
Step 1-Choose the "MPO CONFIGURATION"



Step 2-Click the "Enable" button;  
Click toggle for a simple onoff switch.



Step 4-Enter the name that will appear on screen in your receiver;  
Next you will assign an icon;



Step 3-Click the trigger signal icon;  
Then go down to accessory control screen button.

Repeat the same steps to program the rest of your outputs;  
You can visit the iData link website and YouTube page for more examples.

# Radio Receiver Installation

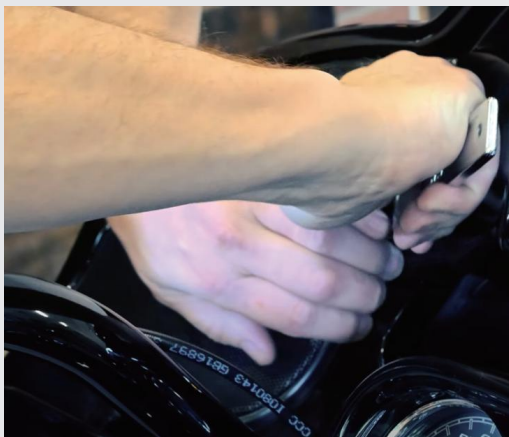
If your radio features **BOOM AUDIO** - refer to **Boom Audio Integration** section before removing original radio.



Step 1-Remove the four screws of the front windshield.



Step 2-Remove the protective plate of the motorcycle.



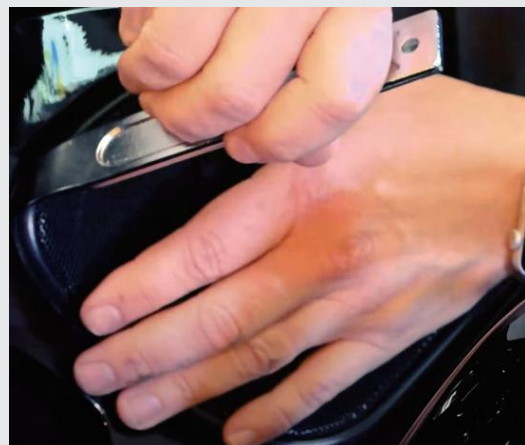
Step 4-Now we will continue to remove the grille so that we can access the T25 screws that secure the fairing.



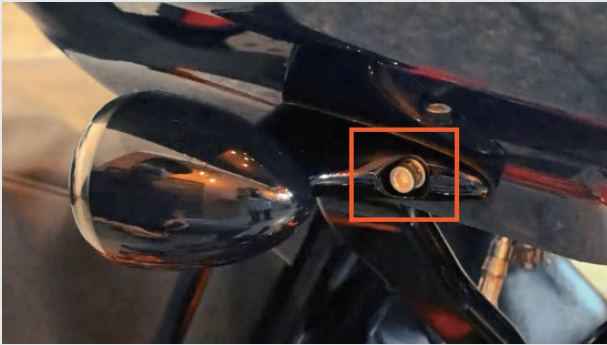
Step 3-Unfasten and remove the whole baffle.



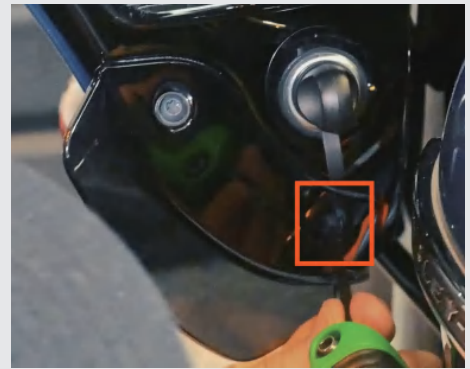
Step 5-Use a panel popper to remove the top part, and then slide out the bottom part for disassembly



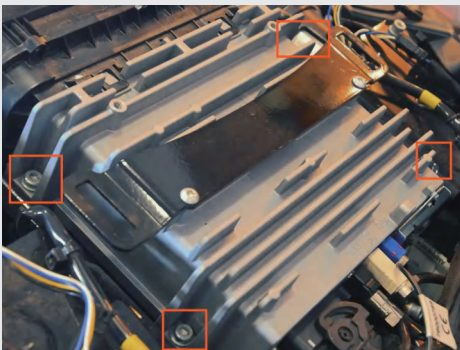
Step 6-Repeat these steps for the other side.



Step 7-Remove the bolt located at the position light on both sides.



Step 8-Remove the bolt located at the bottom of the air duct on both sides.



Step 10-Remove the four screws that fix the receiver.



Step 9-Remove the last two T25 screws. Hold the fairing steady during the disassembly process to prevent it from falling off.



Step 11-Now, we need to remove the factory connector on the back of the radio. There is a small button on it. First, press the button, then slide it downward until it is unlocked, and finally pull it out. Remove the other cable interfaces to take out the radio.





Step 12-Please stick the gasket(Optional) on the outer ring of the receiver.

Step 13-Install the radio, program the iData module BEFORE installation.



Step 15-Congratulations! The installation is complete.

Step 14-We suggest testing whether the radio works properly after installation before proceeding with the final assembly.

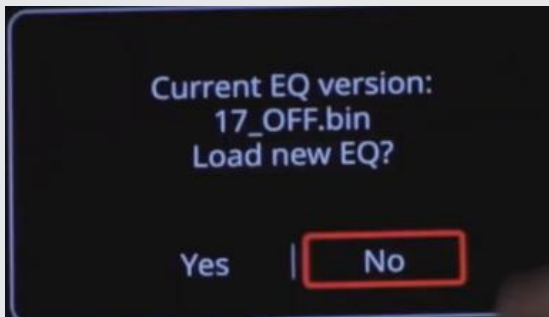
# Boom Audio Integration



Step 1-For new models from 2019 to 2023, simply press and hold the power mute button.



Step 2-For models from 2014 to 2018, please push the power mute button. Click on Audio under the menu, and then click on EQ.



Step 4-Click the No button. Next, you need to record the bin file number.



Step 3-Push the INFO button.

Note: Once you have refreshed the radio using the Idata web link upload tool, you can install the receiver and complete the installation following the steps below.



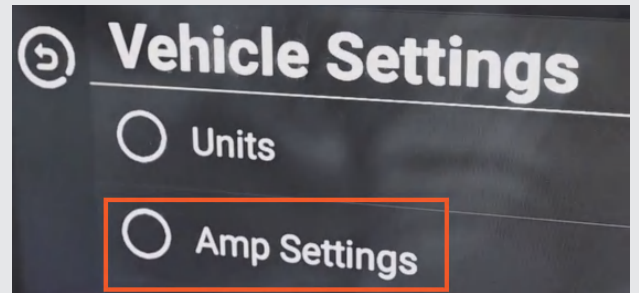
Step 5-Select the MOTORCYCLE INFO icon.



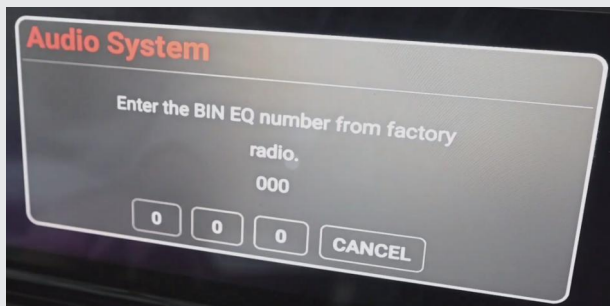
Step 6-Push the SET UP icon.



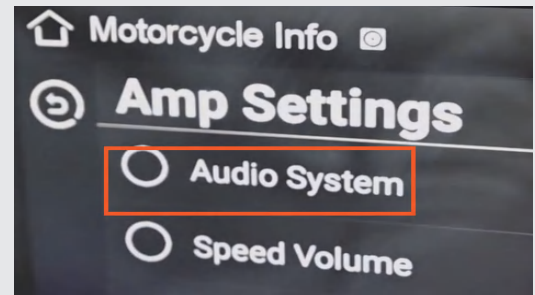
Step 7-Click Vehicle Settings.



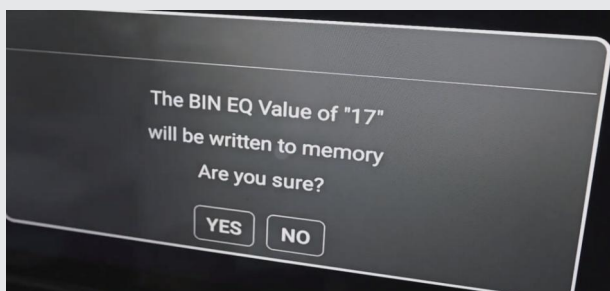
Step 8-Click Amp Settings.



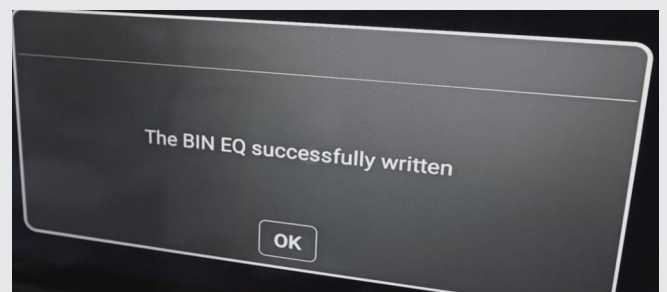
Step 10-Enter the bin file number of the original factory radio.



Step 9-Click Audio System.



Step 11-Even if you enter the correct bin file, please click the YES button after the prompt appears.

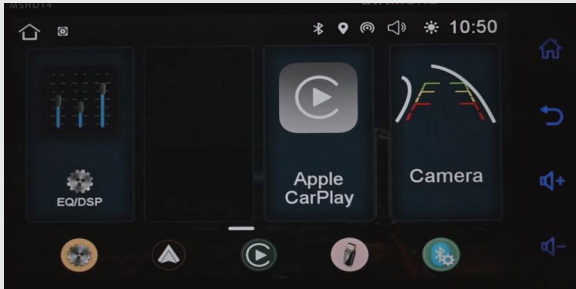


Step 12-Congratulations! Your installation is complete.

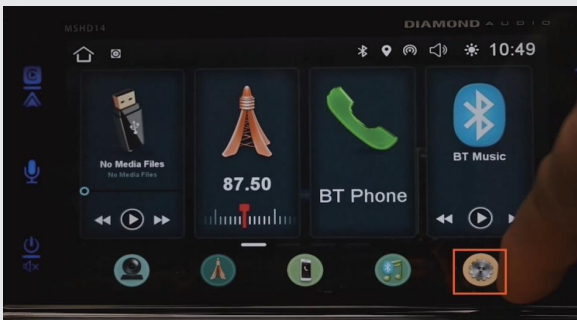
NOTE: In the DSP- Fader @ Bal Link menu, turn on the 5V output adjustment to prevent distortion from the Boom System.

# Android Auto & Apple Carplay

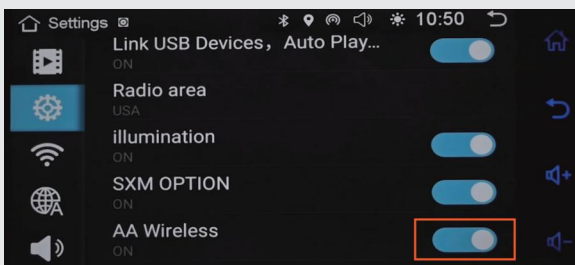
---



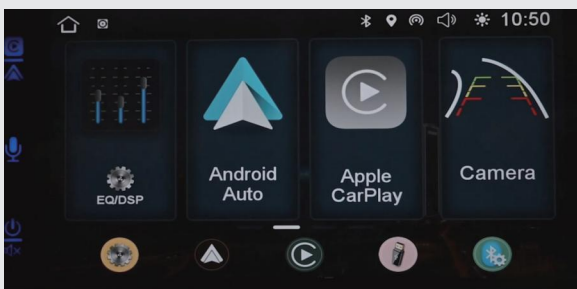
Step 1-By default, Apple CarPlay is active, while Android Auto is disabled.



Step 2-Click the Settings button.



Step 3-Turn on the AA wireless function.



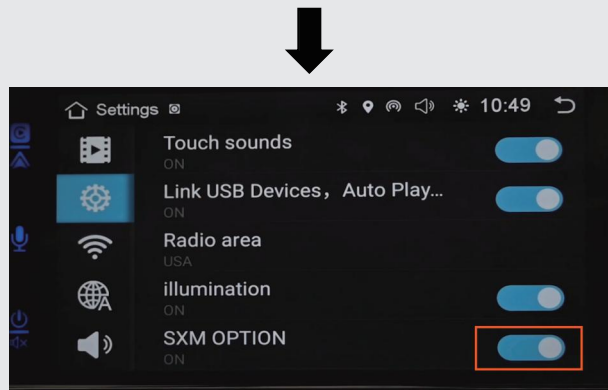
Step 4-Android Auto has been successfully added.

# Setup Sirius/XM

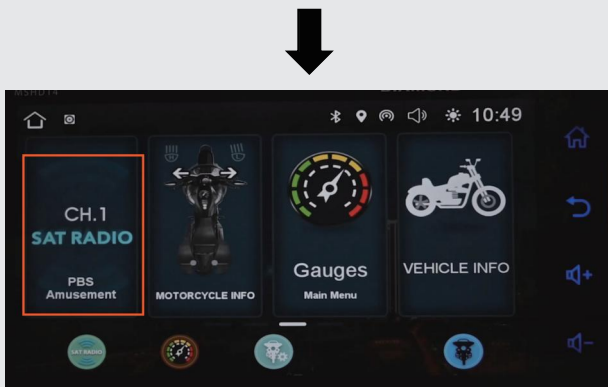
Follow the steps below to activate satellite radio if you have installed the optional tuner.



Step 1-Click the Settings button.



Step 2-Turn on SXM OPTION.

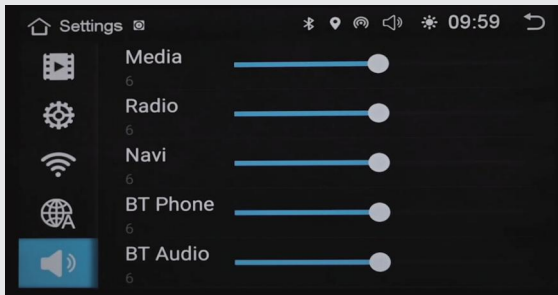


Step 3-Return to the main menu, and you will find that the SXM option is already filled in on the left side of the last page.

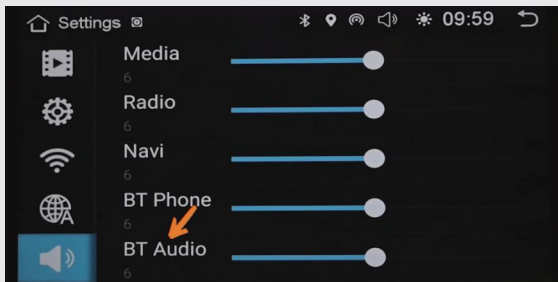
# Setup Bluetooth Line Driver

Warning: This step should be carried out without connecting the speaker.  
We need to play a 1 kHz test tone at 0dB.

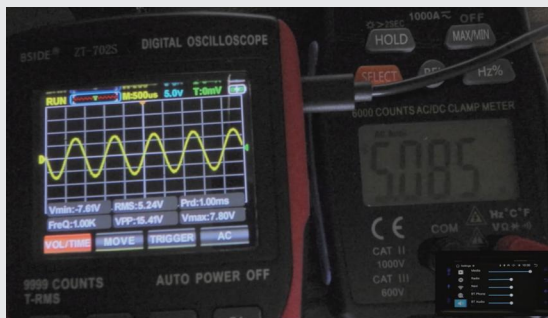
Please use the following link to obtain the test audio: <https://tinyurl.com/MSHD14TEST>  
Test conditions: Set the radio volume to 40 and the mobile phone volume to maximum.



Step 1-Adjust the volume of Android Auto and Apple CarPlay through the media volume.



Step 2-If you want direct Bluetooth transfer without Android Auto and Apple CarPlay, adjust Bluetooth audio separately when disconnected.



Step 3-

- Connect the oscilloscope and multimeter to the RCA output of the radio.
- Let the mobile phone play a 1 kHz test tone at maximum volume.
- Adjust the radio volume until the multimeter outputs 5 volts.

Note: The maximum volumes of mobile phones vary. Therefore, we have added a Bluetooth line driver to the radio. As far as we know, we are the first to put forward this solution, which can provide a clean and low-distortion environment even when the signal is boosted.

# Setup Time Delay

Measure from the center of the speaker to the ear of the rider on the same side.  
(Note: only one side is necessary)

In a 4 speaker setup, take the largest distance and subtract it from the shortest distance.

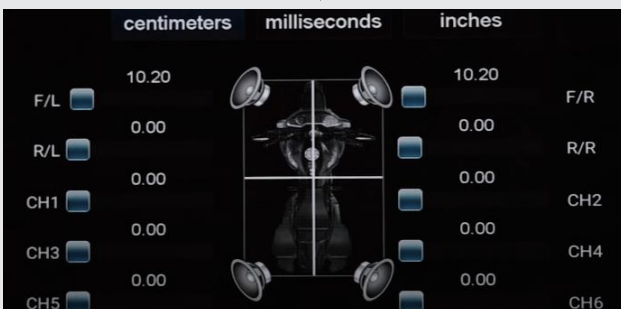
We prefer metric measurements as it doesn't need to be converted from a fraction.



Example:  
front fairing speaker = 50.3cm  
rear lid speaker = 60.5cm  
differential (delay needed) = 10.2cm

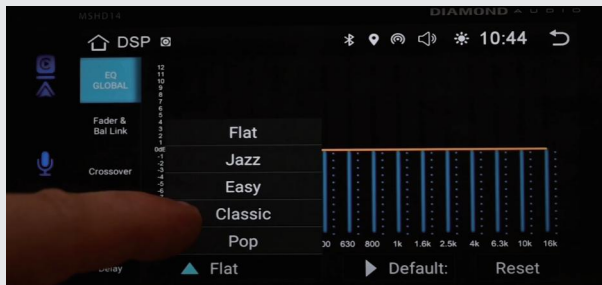


Step 1-After measuring the distance and selecting the unit, enter the difference value.



Step 2-Ensure that the time delays on both sides are consistent.

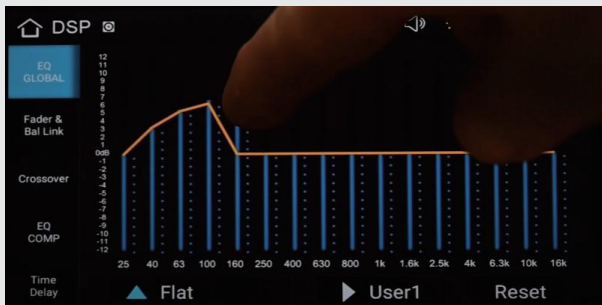
# Setup Global EQ



Step 1-We provide a global equalizer that can affect all 10 channels. We have five simple presets for your easy access.



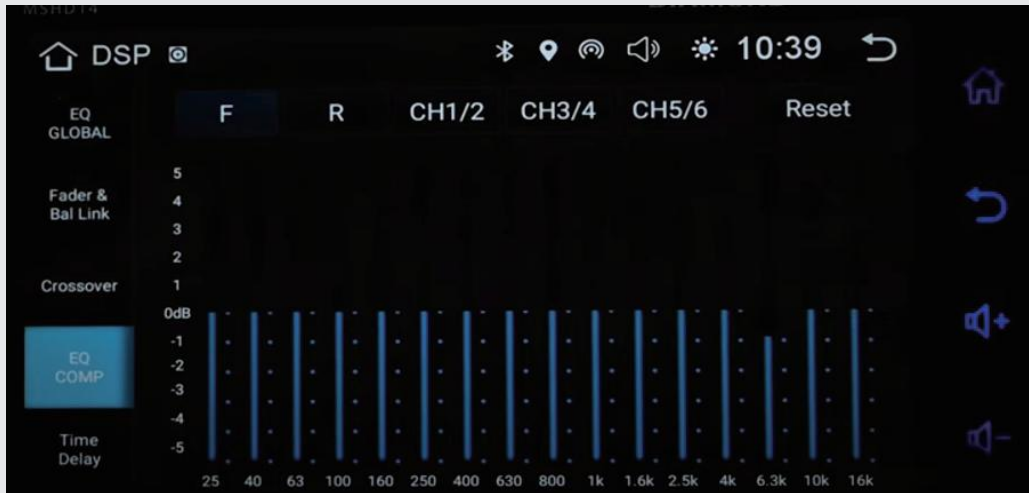
Step 2-We also provide four user presets that you can set according to your preferences.



Step 3-You can easily adjust it just by moving your fingers on the screen. For more precise adjustment, use the popup on the left side of the screen to adjust.

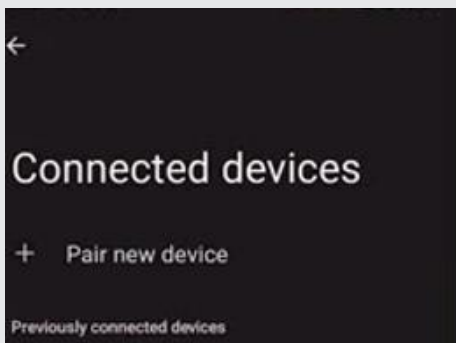
# Setup Compensation EQs

DSP compensation equalizers are equipped with 5 16-band compensation equalizers for each pair of channels. These equalizers serve to repair abnormalities in system performance. For instance, if the tweeters are too bright or the midrange speakers have a dip in a frequency band, these issues can be fixed during the initial setup. The compensation EQ's should only need to be adjusted once at initial setup. The global EQ is for daily "on the fly" adjustments



Simply select the channel you want to adjust and slide the screen to adjust the values of the equalizer.

# Setup Bluetooth Pairing



Step 1-Turn on the Bluetooth settings of your mobile phone and select Connect to a new device.

Step 2-After the search is finished, you can see the name of "radio receiver". Once the connection is successful, you can use Android Auto and CarPlay applications normally.

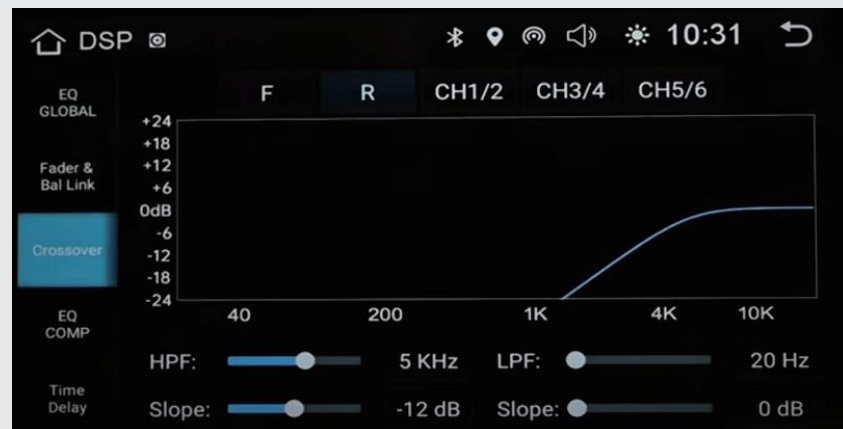
Note: The prerequisite is that you have already added Android Auto to the radio screen.

# Setup DSP Crossover



You have five pairs of channels to adjust to adapt to ten output channels.

Each pair can be adjusted to low-pass, high-pass, band-pass, and full-range.

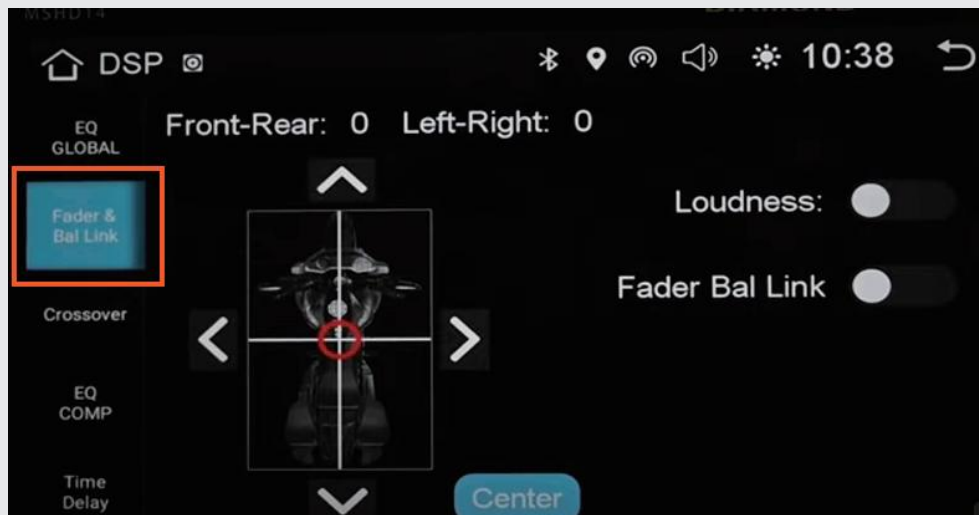


For example, we can set the front power supply output to high-pass, and set the crossover to 5K with a slope of 12dB to drive the tweeters. After that, we can make the same settings for the rear speakers.

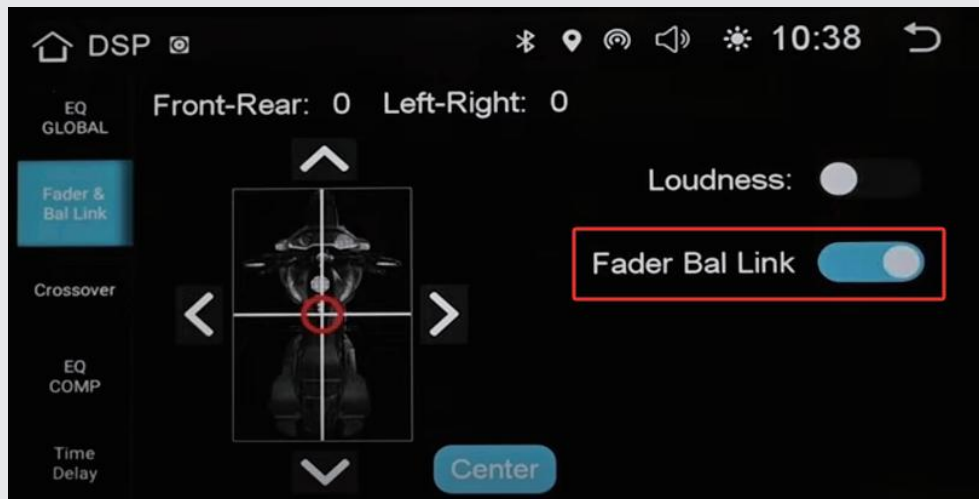


We've added a mid-bass driver. Using frequencies below 80Hz for the mid-bass driver would waste efficiency, so we set the high-pass crossover to 80Hz with a 12dB slope.

# Setup Balance and Fader



By default, the channel link is turned off, so the fader will not affect the front and rear active outputs.



If necessary for the fader, these channels can be connected by activating the fader and balance link buttons in the DSP menu settings.

# Limited Speaker Warranty Statement

---

Diamond Audio (a division of CV & DA Holdings, Inc.) warrants this product to be free from defects in material and workmanship for a period of one (1) year from the original date of purchase provided it was purchased from an authorized DAT retailer within the United States. However, if this product was installed by the authorized DA retailer, the warranty period will be extended to two (2) years.

THIS WARRANTY IS NOT TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL PURCHASER OF THIS PRODUCT IN ITS ORIGINAL INSTALLATION. Original purchaser must reside in the United States and be able to provide proof of purchase and installation with the sales receipt from the authorized DAT retailer and completion of online registration that sold and installed the product.

Should a manufacturing defect occur during above said warranty period, DA will replace or repair the defective product with a product of the same or equivalent value and performance.

Damage or failure caused by any of the following is not covered under this warranty policy: negligence, improper use, abuse, product modification, unauthorized repair attempts, accident, acts of God, misrepresentations by DA retailers, and improper/inadequate packaging during return shipping.

**Warranty is void if serial numbers have been removed, altered or defaced.**

## How to Obtain Warranty Service

---

In the event a DA product should require service, you should visit the authorized DA retailer you purchased the product from and they can expedite your claim. All claims must fall into the guidelines listed above and be accompanied by a copy of the original sales and installation receipt from that authorized DA retailer.

Product returned for warranty service must be freight-prepaid, properly packaged and clearly marked with the Return Authorization (RA) number issued by DA. Any product returned to DAT that is improperly packaged, does not have a RA number clearly marked on the package, or never received a RA number may be refused upon delivery. DA does not assume responsibility for lost or misdirected product.

Repair or replacement under this warranty is the exclusive remedy of the consumer. DA shall not be liable for any incidental or consequential damages for breach of any expressed or implied warranty on this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights that may vary from state to state.

Customers outside the United States should contact their local sales office to obtain information on pricing, exchange unit availability, instructions, service and warranty/non-warranty replacement or repair.

### **Diamond Audio**

3761 South Hill St.  
Los Angeles, CA 90717  
Tel: 213-261-4161  
Fax: 213-947-4767

Web: [diamondaudio.com](http://diamondaudio.com)

[Facebook.com/diamondaudio](https://www.facebook.com/diamondaudio)

### **Service/Tech Support:**

213-261-4161

### **Tech Support Email:**

[helpdesk@dat-cvm.com](mailto:helpdesk@dat-cvm.com)

©2023 Diamond Audio. All rights reserved.  
( a division of CV & DA Holdings, Inc.)



**DIAMOND**

1225 E. 7th Street  
Los Angeles, CA. 90021

©2014 Diamond Audio. All rights reserved.  
(a division of CV & DA Holdings, Inc.)

[www.DiamondAudio.com](http://www.DiamondAudio.com)