

# HOGTUNES

*Audio Solutions For The Great American Cruiser*



## G4 ULTRA KIT-RM

**HIGH PERFORMANCE FRONT & REAR  
SPEAKER KIT WITH 200 WATT AMPLIFIER**

*FOR USE ON ULTRA CLASSIC MODELS*

**INSTALLATION MANUAL**

Thank you for choosing the Hogtunes G4 Ultra KIT-RM speaker and amplifier kit for “Rushmore” platform Ultra Classics. Since positive word of mouth is the best way to grow our business, we want your new system to work as well as it was designed to. If you have any questions or concerns, we are here to help.

### **The installation will be done in 3 major steps.**

**Step 1:** Changing out the Front speakers

**Step 2:** Changing out the Rear speakers

**Step 3:** Installation of the amplifier

Please identify the two pairs of speakers now. Model 462F-RM (with larger magnets) are for the front and 462R-RM (smaller magnets) are for the rear. The rear speakers will fit in the front location but the front speakers will NOT fit in the rear location. If you do not identify the speakers now, there is a serious chance wrenches and expletives will be flying soon!



*A video version of this manual is available at [www.hogtunes.com](http://www.hogtunes.com) If you still need assistance, please consider a professional installation by your motorcycle dealer.*

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### **Hogtunes Contact Information**

Email: [tech@hogtunes.com](mailto:tech@hogtunes.com)

Tel: 705-719-6361

# 462F-RM FRONT SPEAKER INSTALLATION INSTRUCTIONS

Step #1: Remove the seat and both wires (+ and -) from the battery. Remove the outer fairing/headlamp assembly and set aside. Refer to a service manual if you need help with this. NOTE: Placing a towel on the front fender can help prevent scratches or "dings" from dropped tools or fasteners, etc. Expletives will also be kept to a minimum!

Step #2: **Speaker Cabinet Removal:** On the brake side speaker cabinet, carefully remove the cable going into the power port/cigarette lighter assembly. If your bike has the CB module (mounted "sideways" on the clutch side cabinet) undo the antenna cable and main harness. The CB Module will stay attached to the clutch side cabinet when removed. Undo the speaker wire plugs going into each cabinet (pink/pink with black stripe wires).

**The speaker cabinets are vital to the fairing's structure.  
DO NOT operate the bike without the speaker cabinets installed!**

NOTE: We STRONGLY suggest completing the speaker swap on one side and then moving to other side! Figure 1.1 and 1.2 (below) have arrows that point to the factory fasteners that will be removed to allow the cabinets to come out of the bike. Although the Brake Side is shown below, fastener locations are common for both brake and clutch side cabinets.

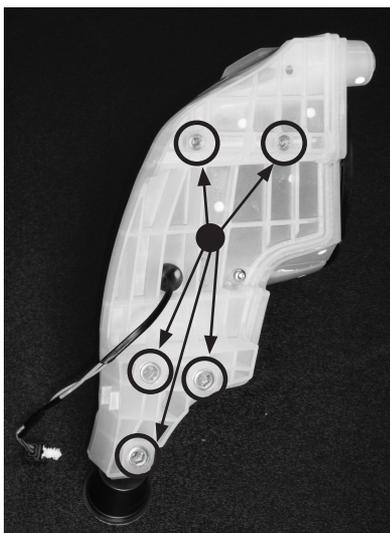


Figure 1.1  
Side view of brake side cabinet

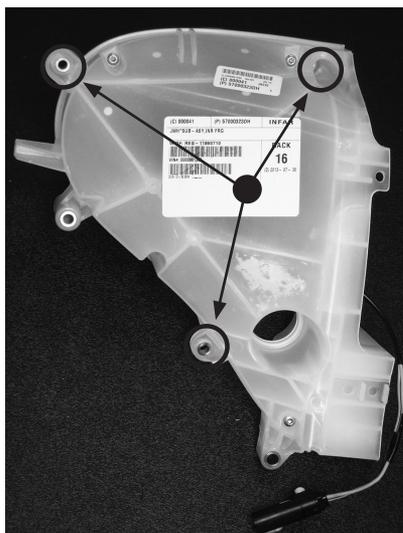


Figure 1.2  
Back view of brake side cabinet

Step #3: **Installing the new speaker:** With the cabinet removed from bike, undo the four screws that hold the factory speaker to the cabinet. Carefully take off each speaker wire by disconnecting one at a time. Take a Hogtunes speaker and re-attach the factory speaker wires noting they will only go on one way. Make sure to use the model 462F-RM speakers (with larger magnets) for the fronts! Using the factory screws, attach the Hogtunes speaker to the cabinet noting that there is a locator "peg" on the cabinet and a hole in the speaker's frame which needs to line up so the speaker sits flush to the cabinet. Bass response will be greatly reduced if the speaker is not flush to the cabinet! The factory speaker grill can be left in or replaced with the supplied metal mesh grill using the three factory screws on the inside of the fairing. On the factory grill, you will see two round holes and one "keyhole" where the screws go through and into the fairing. The keyhole on our grill needs to go in the same spot for proper fitment of the new grill! With the new grills in place and the speaker properly attached to the speaker cabinet, the cabinet can be re-installed to the bike. It's always a good idea to put the factory fasteners back in to specified torque. NOTE: The cloth of the factory grill maintains the stock look but will cause a reduction in high frequency volume!

Repeat Step #3 for the second cabinet. Make sure to plug the power cable back into the power port/cigarette lighter assembly on the brake side. If your bike has the CB module, make sure to re-install the antenna cable and main harness.

# **462R-RM REAR SPEAKER INSTALLATION INSTRUCTIONS**

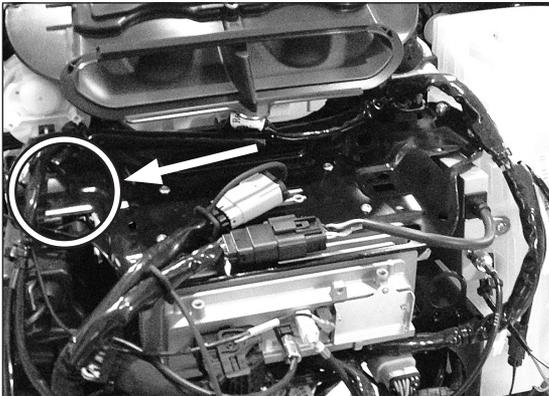
Step #1: Remove the factory speaker grills by undoing the four screws on the front of the grills. Carefully lift up on each speaker and take the two wires off by pulling one at a time from the stock speaker. Remove the speakers.

Step #2: Hochtunes 462R-RM rear speakers are a direct replacement for the OE speakers. The female OE "in-line" connectors mate with the male connectors on each speaker and only go on one way. The #1 reason for tech support calls is due to loose connections at the speaker. Please make sure you have a very good connection to avoid this. You can install the metal mesh rear grills that came with the kit or re-install the factory grills by re-installing the four screws per grill. NOTE: The inside of the factory grill will touch the tweeter and cause a very slight bulge, and like the factory front grill, will maintain the stock look but cause a reduction in high frequency volume. The factory rubber "nutserts" on the rear pod side can be finicky. It's a good idea to get all four grill screws "started" and then get each one snug. Gradually tighten each one down making sure all four screws holding the grill down are secure!

# REV 450-RM AMPLIFIER INSTALLATION INSTRUCTIONS

Step #1: Over top of the radio, pull up to release each wire harness from the black plate via the factory "Christmas Tree" fasteners. If your bike has factory GPS, the small square antenna will need to be relocated just behind the voltmeter as shown in Fig 1.1 below. Remove the four factory T-20 "Torx" screws that go through the top of the black plate and into the top of the radio.

Step #2:



*Figure 1.1 - The white circle shows the new location for GPS Antenna if your bike came factory equipped with this feature.*

Step #3: Remove the four factory T-20 "Torx" screws that go through the top of the black plate and into the top of the radio. Set these screws aside for now.

Step #4: Sit the main amplifier plate over top of the radio noting the 4 holes in the plate will line up with the 4 holes left by the factory screws just removed. The factory screws will now go through the main mounting plate, through the black plate over top of the radio, into the top of the radio. Locate the main power harness that came in the box and plug it into the matching "pig tail" coming out of the amp.

Step #5: On the side of the amp, you will see a "Fader/No fader" Switch. For Ultra Classics where we want the radios built in fader control to adjust the volume between the front and rear speakers, the switch must be set to the "FADER" position. Also on the side of the amp, you will see a "Rear Speaker Selector" Switch. For this application, make sure this switch is set to the "A" Position.



Step #6: Locate the harness with blue/black and brown/black wires, and insert the 4 pin plug into the "front out" socket on the side of the amp. Locate the harness with the green/black and yellow/black wires and install the rectangular 8 pin socket into "audio in" on the side of the amp. Join the plug marked "rear in" on the rear speaker harness to the plug marked "rear in" on the input harness noting they will only go in one way. Make sure to have the "Fader/No Fader" switch set to "Fader" and the "Rear Speaker Selector" switch set to "A". Sit the amp on top of the mounting plate so when standing in front of the bike you can read the REV 450-RM on top of the amp. Like the mounting plate, the amplifier has "hook and loop" material pre applied. When correctly installed, the power harness coming out of the amp will be on your left (brake) side.

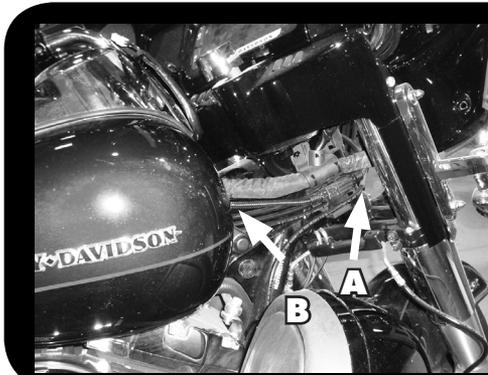
Step #7: If not done already, separate the molex plugs that go directly into each speaker cabinet. The plug with the blue/black wires will install into the factory plug that goes directly into the brake side speaker cabinet. The plug with green/black wires will install into the factory connector that originally plugged directly into the brake side speaker cabinet (has pink/pink black wires).

Step #8: The plug with the brown/black wires will install into the factory plug that goes directly into the clutch side speaker cabinet. The plug with yellow/black wires will install into the factory connector that originally plugged directly into the clutch side speaker cabinet (has pink/pink black wires).

# **ROUTING THE POWER AND REAR SPEAKER HARNESS**

Step #1: The power/ground harness and rear harness will pass together under the inner fairing where the main wire harness passes through on the brake side of the bike. Loosen the tank's "chrome console" and run wires up and over the gas tank, but under the tank's chrome console. There is a provision on the front of the tank console for wires to pass.

NOTE: Although not necessary, the power and rear harnesses can go under the gas tank if you choose to remove and re-install the tank.



***Stock Harness and Amplifier's Harnesses Passing From Fairing To Just In Front Of Tank (Arrow A) . Cable Tying the Harnesses To The Main Bike Harness Just In Front Of The Tank (Arrow B) Allows The Amp Harnesses To Go Up Towards The Tanks Chrome Console Easier And Makes For a Cleaner Install.***

- When correctly installed, the power and ground wires are the right length to connect to the battery. The supplied rear harness for Ultras is the right length so that its two ends can sit on the middle of the back fender just behind the threaded insert for the bolt that holds the back of your seat in place.

Step #2: Just behind the threaded insert that holds the seat bolt on the back fender, you will see a large factory wire plug. One side of the plug has wires that go to each rear speaker pod. Separate this large factory plug. One plug from the Hogtunes rear harness will plug into each side of the factory plug just separated. They will only go together one way.

At this point, all audio connections for this system are made. You will have a left over plug on the amp which is what we call the bypass out. The bypass out is how we get music from the amp in this kit to a second amplifier if you choose to expand your system. Hogtunes has a mounting plate called FLH Side Plate-RM which allows you to easily install a Hogtunes REV 225-RM amplifier between the radio and clutch side speaker. The second amplifier can power speakers in your lower fairing glove boxes, or speakers in Hogtunes saddlebag speaker lids.

- Step #3: Attach the amp's red wire to the positive (+) battery terminal and the amp's black wire to the negative (-) battery terminal. The factory battery wires are also re-installed at this point. When attaching the power and ground wires, it is always a good practice to do the negative first. When the positive connector touches the battery, some sparking is normal. This is a function of the capacitors in the amplifier charging up.
- Step #4: Turn the stereo on and, at low volume, test to make sure all four speakers are working. Make sure the radio's fader control is adjusting the volume between front and rear speakers. If not, double check the "Fader/No Fader" switch.
- Step #5: Re-install the seat making sure the amplifier's "+" and "-" connectors are positioned in such a way so they will not bend or break when the rider's weight is on the seat.

This is the best time to take a few minutes to "clean up" the wiring and secure using supplied zip-ties.

*Before re-installing outer fairing, turn front wheel to each extreme side making sure any wiring is not impeding the steering of the motorcycle. Failure to do so can result in serious injury or death!*

**Re-install the fairing and your system is now ready to enjoy!**

## **ADJUSTING YOUR SYSTEM-PLEASE READ!**

In order to make your new system perform as good as it was designed, please take a minute to understand and follow these tips:

- 1) Set your "Automatic Volume Control" (AVC) to 3 bars. After extensive on-road testing, we found that this AVC position works and sounds best. Your new amplifier has been specifically set-up for this radio setting.
- 2) Your Hogtunes system is designed specifically for a motorcycle at speed. Exhaust noise and wind noise have been taken into careful consideration in how your system performs. How your new system sounds in a driveway or garage is radically different from how it will sound at highway speeds. Although your system was set-up with a factory radio, with its bass and treble controls in the middle position, if you feel the need to make adjustments please do so (carefully) at your normal cruising speed.

## **TECHNICAL SPECIFICATIONS**

### **Hogtunes G4 Ultra KIT-RM**

Amp's RMS Power at 2 Ohms:	50 Watts x 4 Channels
Speakers:	125 Watts RMS 200 Peak
Frequency Response:	40hz - 25khz
Fuse at Amp:	30 amp

## **WARRANTY INFORMATION**

**Please Record Your Amplifier's Serial # Here** \_\_\_\_\_

Hogtunes speakers are warranted for a period of 20 years. The REV 450-RM Amplifier is warranted for 3 years from original purchase date. Proof of purchase is required for all warranty claims. The warranty applies to the original retail customer and is not transferable. Please contact Hogtunes for all warranty claims. Products found to be defective during the warranty period will be repaired or replaced (*with a product deemed to be equivalent*) at Hogtunes sole discretion. Hogtunes complete warranty policy is available on our website at:

**[www.hogtunes.com/warranty.html](http://www.hogtunes.com/warranty.html)**

### **What Is Not Covered:**

- 1) Any expense related to the removal or re-installation of Hogtunes products.
- 2) Repairs to these products performed by anyone other than Hogtunes.
- 3) Subsequent damage to any other components.
- 4) Any product purchased from a non-authorized Hogtunes dealer.
- 5) Damage to Hogtunes products due to an accident or collision.
- 6) Hogtunes Amplifiers with broken or removed "warranty void" stickers.
- 7) Damage due to water from custom installations.
- 8) Damage from incorrect installation, improper use, abuse or modifications.
- 9) Damage to inbound product due to improper packing.

**IMPORTANT: In the event of a warranty claim, please fill out the form in the Warranty section of our website, or contact us by email or by phone. Valid claims will have a Return Authorization Number (RA#) generated which MUST appear on the outside of the box when it arrives to our office.**

**Goods Arriving Without an RA# Will Be Refused!**

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**PRACTICE  
SAFE  
SOUND!**

**Any audio system can be a  
distraction to the rider  
and/or passenger. Please  
use caution when  
playing your stereo,  
ESPECIALLY IN TRAFFIC.**

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