

# HOGTUNES

*Audio Solutions For The Great American Cruiser*



## 225 SG KIT-XL

**XL SERIES FRONT SPEAKER AND AMPLIFIER KIT**

*FOR USE ON 1998-2013 E.G. CLASSIC, STREET GLIDE, ULTRA OR ULTRA TRIKE*

**INSTALLATION MANUAL**

Thank you for choosing the Hogtunes 225 SG KIT-XL for 1998-2013 FLH (Batwing) Model Bikes. 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 REV 225-AA amplifier is a Class D design. It should be understood that ALL Class D amplifiers, REGARDLESS OF BRAND, cause a reduction in FM reception. The REV 225-AA features a proprietary circuit design called R.E.M.I.T. (Reduced Electro Magnetic Interference Technology) that Hogtunes believes gives the BEST FM reception available for any Class D Amplifier designed for a motorcycle. If you add a 2nd or 3rd model amplifier to your system, reduction of FM reception is increased and is considered normal.***

***Hogtunes understands that some riders prefer the cosmetics of in-fairing antennas, however it should be noted that NOTHING WORKS AS WELL AS THE FACTORY ANTENNA. If FM is an important part of your riding experience, we strongly advise against the use of any in fairing type antenna!***

To help protect your bike's electrical system and battery, the amp has a built in feature where it will turn itself off if it sees less than 10.5 volts, whether the bike is running or not. If you're listening to your stereo while not riding, this feature can help protect your battery so the bike can still start. If you're riding and the amp shuts off, this could be showing a potential issue with your charging system. If this feature is activated and the amp shuts off, it will turn the amp back on again if the voltage exceeds the 10.5 volt threshold.

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

**STEP 1: INSTALLATION OF THE FRONT SPEAKERS**

**STEP 2: MOUNTING THE AMPLIFIER**

**STEP 3: WIRING THE AMPLIFIER**

---

### ***Hogtunes Contact Information***

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

*Telephone (USA) 608-554-7631*

*Telephone (Canada) 705-719-6361*

# 352-XLF FRONT SPEAKER INSTALLATION INSTRUCTIONS

Step #1: Make sure your ignition switch stays in the "OFF" position. Remove your outer fairing/headlamp assembly, and set aside. Refer to a service manual if you need help with this. It's always a good idea to



have a towel or something similar on your front fender to avoid dings or scratches if anything is dropped—this can and most likely will happen!

Step #2: Take the 2 wires off each speaker by gently pulling one at a time. Undo the screws that attach each speaker/grill assembly to the inner fairing and remove. Gently pull the stock speaker out of each grill assembly.

Step #3: Although the 352-XLF speakers will work behind the factory grill cloth, the metal mesh grills in this kit are designed to replace the front speaker grill cloth on 1998-2013 FLH Model bikes. The factory grill cloth is glued to a plastic mesh, and together, is two way taped to the main body of the grill assembly. You can usually peel away the mesh from the body of the grill by hand. With the factory grill cloth/mesh off, you should see the exposed two-way tape used to hold the factory mesh on the main grill body. Before applying the new mesh, have a look as you will see it only "lines up" one way.

Step #4: Clip the XL Speaker into the grill body so the terminals are adjacent to the thickest part of the main grill body. When installed in the bike, this has the speaker terminals in the 12 o'clock position. Place your new speaker/grill assembly onto the inner fairing and re-attach each one using the OE screws. A hand screwdriver is recommended for this step.

# REV 225-AA AMPLIFIER INSTALLATION INSTRUCTIONS

Step #: 1 Locate the main power harness and plug it into the matching connector on the amplifier. Locate the 8 pin harness and plug it into "Audio Input" on the side of the amp. Locate the 4 pin harness ending in a black plug and plug it into the black 4 pin connector on the amp. Make sure to plug this into the black plug and NOT the blue plug on the 8 pin input connector.

Step #2a: Mounting the amp For Standards, Street Glide, EG Classic and Ultra Classic  
If this is the only amp in the system, the amplifier gets mounted to the top of the factory radio using the supplied "hook and loop" adhesive and must sit so if in front of the bike looking down, the power connector is on your left and the amplified output 4 pin black "pigtail" is on your right. The amplifier needs to mount as far back on the radio as possible so the fairing can go back on. On 1998-2005 model bikes, it is a tight fit, but will go. 2006-2013 (Advanced Audio) radios have a "bump" on top of the radio that runs from front to back down the center of the radio. Cut the adhesive in half and apply one piece on either side of this bump. The amp will then mount flush as shown in Fig 1.1. Most adhesives work best at room temperature or higher.

*NOTE: 2006-2013 Ultras have the CB module on top of the radio. The amp will adhere on top of the CB module so it is "half on/half off" this module as shown in Diagram 1.2. The supplied adhesive is plenty strong for this! The amp can adhere on top of CB and XM modules without issue.*



Diagram 1.1  
No CB/XM Module Present



Diagram 1.2 - Shown  
mounted on top of CB Module

## WIRING THE AMPLIFIER

Step #1: On the audio input harness, locate the yellow and black wires and plug them into the factory speaker wires on the clutch side of the bike. Locate the green and black wires on the same harness and plug them into the factory speaker wires on the brake side of the bike. You will see these only plug in one way. Note: The blue 4 pin plug with black wires on the input harness is an “expansion port” which is used to send music to a second amp or is used to send radio power to run other speakers on the bike. You can see how the expansion port can be used further on in this manual.



Step #2: Earlier in the install, you located the black 4 pin plug with the blue/black and brown/black wires on it and plugged it into the “amplified output” on the amp. The blue/black wires will plug directly to the speaker on the brake side of the bike. The brown/black wires will plug directly to the speaker on the clutch side of the bike. Please double check that this harness is plugged into the BLACK plug on the amp and not the blue 4 pin plug on the input harness.

Step #3: Routing the power harness - For 98-06 bikes, the power harness will pass under the inner fairing where the throttle and idle cables pass through on the brake side of the bike. The harness is designed to be routed between the frame backbone and gas tank on the brake side of the bike and come out just behind the gas tank. You MAY need to undo the back bolt of the gas tank and pivot the tank up to allow the harness to pass through at the back of the gas tank. Be sure to re-install this bolt and torque to factory specs! For 2007-2013 bikes, the balance of the main wire harness will pass under the inner fairing where the main wire harness passes through on the brake side of the bike. Loosen the tank console and run wires up and over the gas tank, but under the tank console. There is a provision on the front of the tank console for wires to pass. When correctly installed, the power and ground wires are the right length to connect onto the battery. NOTE: although not necessary, the power harness can run along the back bone of the frame if you choose to remove and reinstall the bikes fuel tank. Attach the red wire to the positive (+) battery terminal and the black wire to the negative (-) battery terminal. The factory battery wires are also re-installed at this point. Turn the ignition of the bike to the “on” position and play the stereo at low volume to verify the system is working fine.

Step #4: Now is a good time to “clean up” and secure any wiring inside your fairing using supplied zip ties. **FOR BEST POSSIBLE FM RECEPTION, DO NOT ATTACH ANY OF THE AMPLIFIERS WIRING TO ANY FACTORY ANTENNA WIRES.**

Doing so will hurt the radio’s ability to receive FM signals!

***IMPORTANT: With all wires secured, turn the front wheel to each extreme side making sure that any wires cannot bind or impede the steering of the motorcycle. Failure to do so can cause an accident resulting in serious injury or death!***

**NOTE:** If you are installing this kit only, you will have a leftover harness with red/black, and white/black wires. This harness is used to send music from the amp in this kit to additional amplifiers

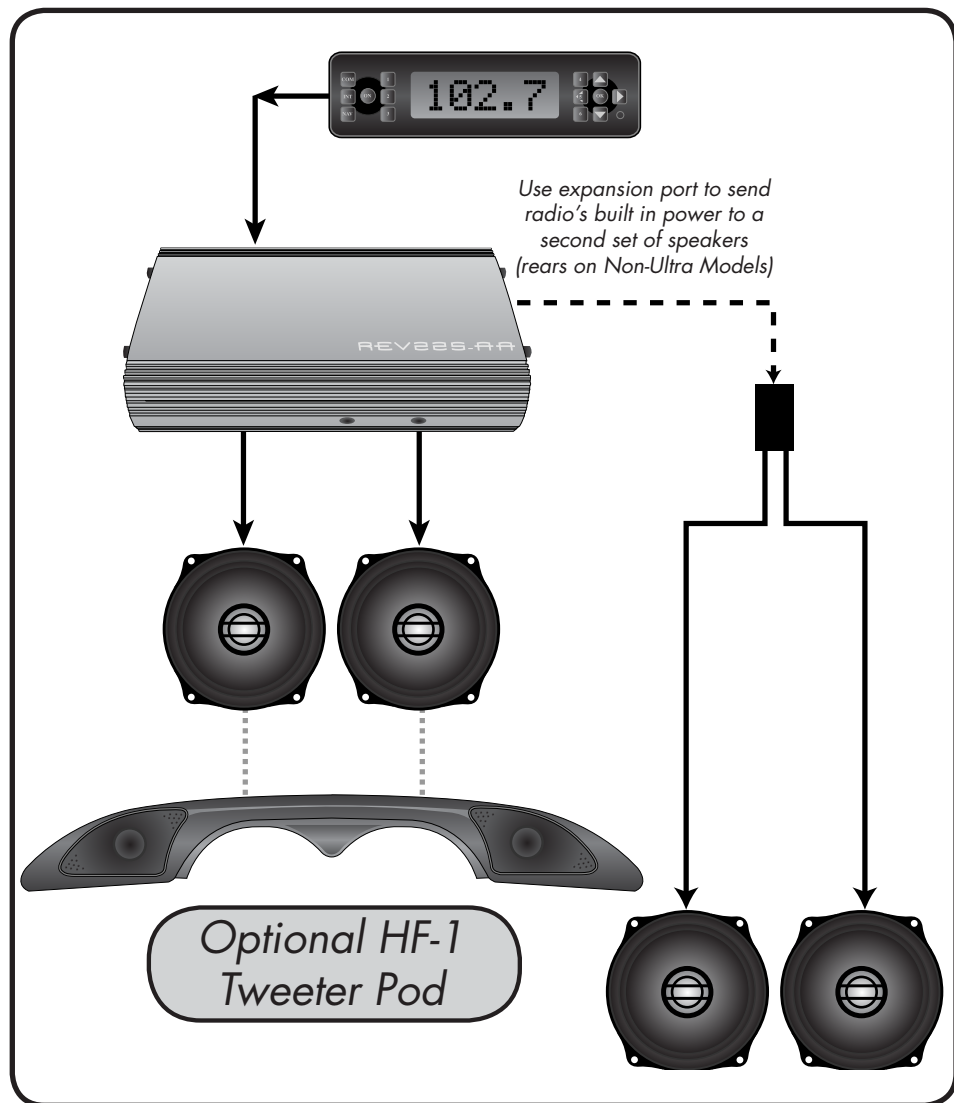
Please see how you can easily add on to the system if you want over the next 3 pages. We strongly suggest you read the “Adjusting Your System” section on page 10.



*The REV 225SG KIT-AA is easily expandable if you want to install additional speakers in saddlebag lids, fairing lower glove boxes, or in-rear speaker pods on a King Tour-Pak. Depicted is a bike with dual REV 225-AA amplifiers. Using Hootyunes “2CHSP” mounting plate, the second amp easily installs between the brake side speaker and the radio. 100% bolt in, 100% plug & play. See the next 3 pages for how this system is easily expanded.*

# SYSTEM UPGRADE #1

This system is an easy way to add rear speakers to your bike if you've added a King Tour-Pak®. Hogtunes rear speaker pods come with a wire harness set up for quick detach Tour Paks that will plug right into the expansion port on the amp. **IMPORTANT:** Since the RADIO power will be used to power the rear speakers, you must use rear speakers specific to your year of bike!

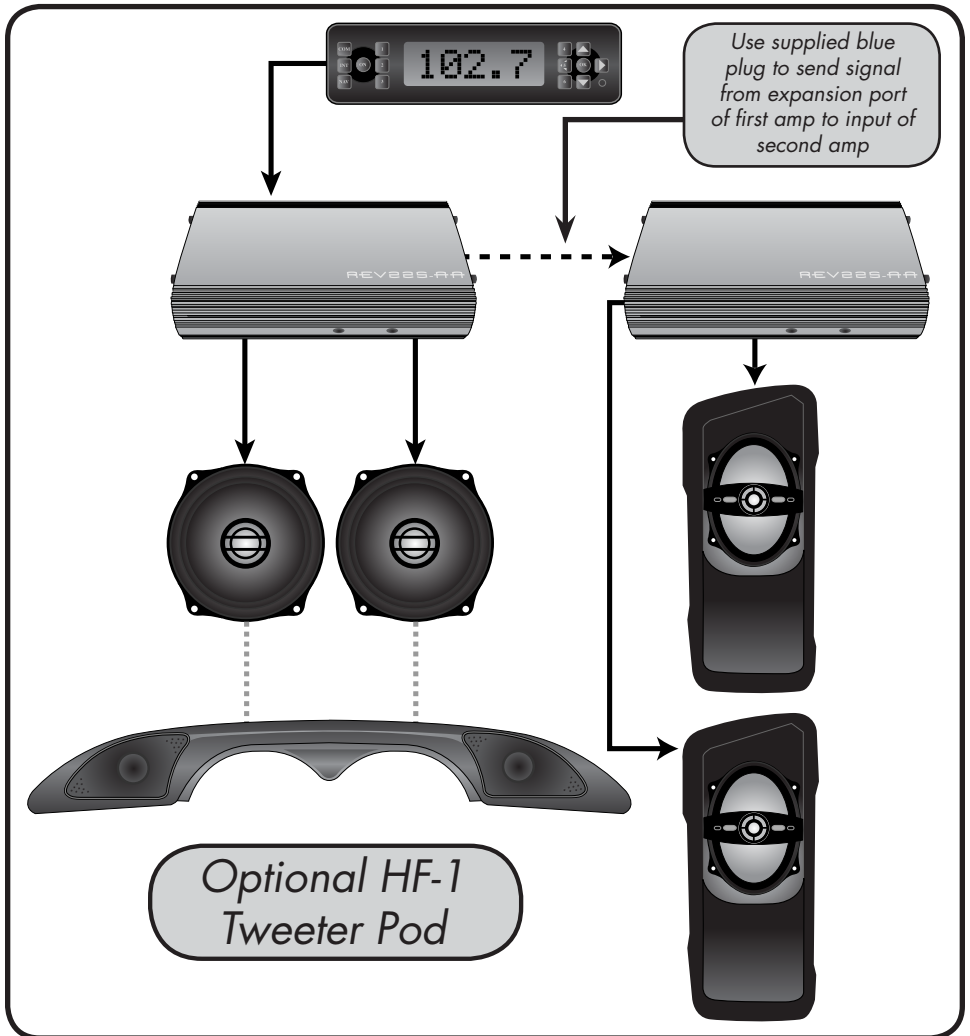




## SYSTEM UPGRADE #2

This system has the incredible power of 2 REV 225-AA Amplifiers to the bike! The first amp will run the 5.25" fairing speakers and HF-1 Tweeter Pod (if present). The second amplifier is used to power Hogtunes 692.2/Lids, FL-7W fairing lower woofers or rear Tour Pak speakers.

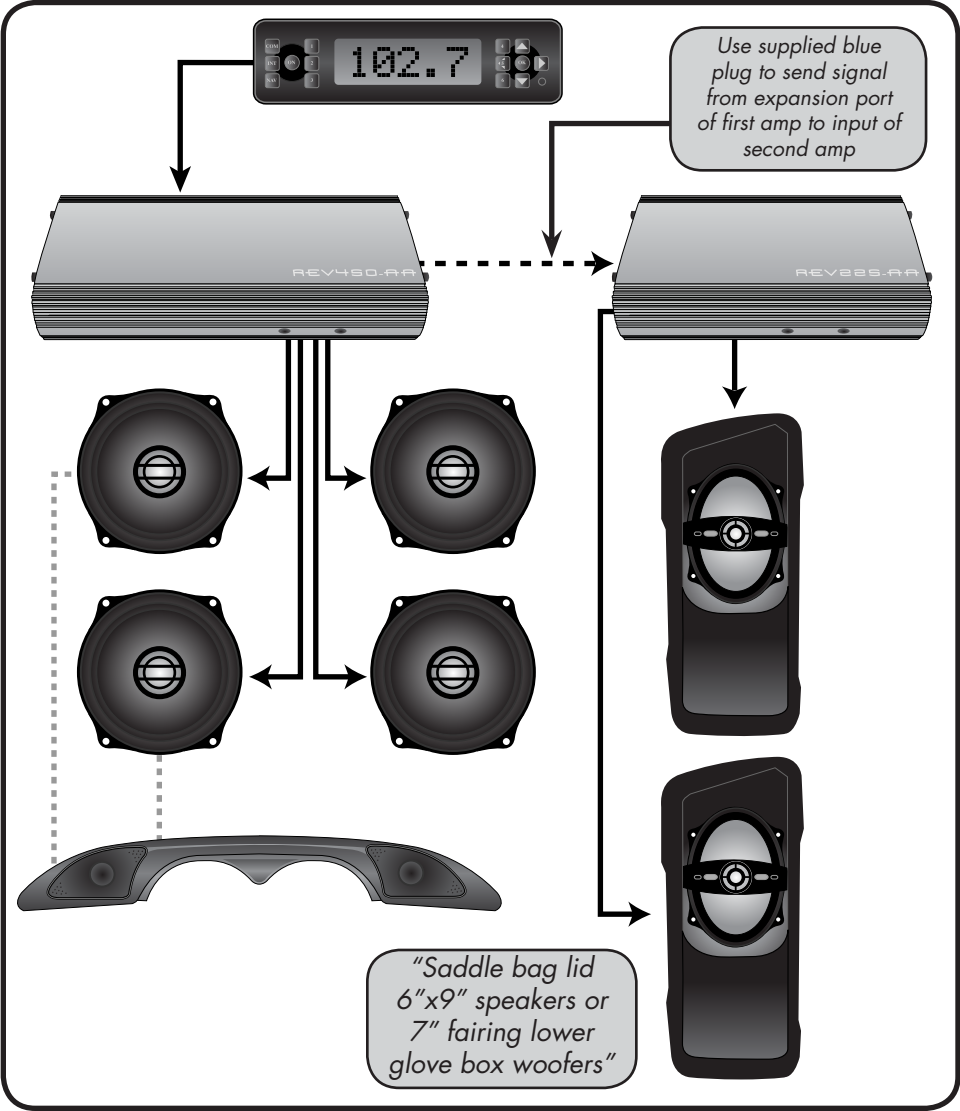
For all Standard/Classic/Ultra/Street Glide models, the purchase of Hogtunes 2CHSP adaptor kit is required! The metal plate in that kit is used to bolt the second amplifier into the fairing between the brake side speaker and radio.





# SYSTEM UPGRADE #3

This system adds a Hogtunes 4 channel amp; where 2 of its channels would power the front speakers (and tweeter pod if present) and the other 2 channels would power rear speakers or fairing lower woofers. The original 2 channel amp would power 692.2/lids or lower speakers. You can literally build the system the way you want based on the body work you have on your bike. This can be done at any time, all bolt in, all plug and play! Hogtunes 2CHSP mounting plate is required to bolt the REV 225-AA into the fairing.



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

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

- 1) You will see a 3 position switch on the side of the amp marked +3/0/-3. When using this amp in coordination with other amps, this switch allows you to turn this amp up or down to “blend” the speakers it powers with other speakers on bike powered by other amps, or the radios built in power.
- 2) Set this “Automatic Volume Control” (AVC) to 3 bars. After extensive on-road testing, we found that this AVC position works and sounds best. This new amplifier has been specifically set-up for this radio setting.
- 3) This 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 this 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.
- 4) If there is an aftermarket car radio on your bike, its functions will work fine. Please remember that car radios are designed to work in an environment with little or no exhaust or wind noise. Many car radios have features such as equalizers, loudness contours, surround effects, etc. These are all designed for a quiet environment and all of which will hurt the ability to hear your motorcycle system at speed if left on. Please take a minute and turn as much of these features off. With a car radio in your bike, the only adjustments you should be able to access for best performance are volume, bass, treble, balance and fader.

## **TECHNICAL SPECIFICATIONS**

### **Hogtunes REV 225-AA Amplifier**

RMS Power at 2 Ohms:.....112.5 watts x 2  
Freq. Response: .....30hz-25khz  
Fuse at Amp: .....15 amp

### **Hogtunes 352-XLF Front Speakers**

Power Handling: .....150 RMS-200 Peak  
Frequency Response: .....40hz-25Khz  
Sensitivity: .....94 db 1 watt/1 meter  
Nominal Impedance: .....2.0 Ohms

## **WARRANTY INFORMATION**

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

---

XL Series speakers are warranted for a period of 5 years. The REV 225-AA 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.

*Hogtunes Inc. is owned by PowerSports Audio Inc.*

**PowerSports**  
**AUDIO INC.**

Harley-Davidson, Electra Glide, Road Glide, Street Glide, Ultra Classic, Tri Glide, CVO, Screamin Eagle and Tour-Pak® are Trademarks, and/or Registered Trademarks of Harley-Davidson, Inc., Milwaukee, Wisconsin, USA, and if Used or Implied are for Reference Only. There is No Affiliation Between Harley-Davidson, Inc., and Hogtunes Inc.



**Hogtunes products will play much louder than the Original Equipment, which can be a distraction to the rider and/or passenger. Please use caution when adjusting, or playing your stereo at high volume, especially in traffic.**

***You are a valued customer so please:***

**Ride Alert  
Arrive Alive!**

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