

# HOGTUNES

*Audio Solutions For The Great American Cruiser*



DESIGNED AND ENGINEERED IN CANADA FOR  
THE GREAT AMERICAN CRUISER

## BIG RG

*speaker and amplifier kit*

# INSTALLATION MANUAL

**For Use On Road Glide Ultras or  
Road Glides With King Tour Paks  
And Rear Speaker Boxes**

*\*Do not install this kit if any external amplifier to the radios built in power is present. This includes "CVO" models with factory amplifier under the tour-pak!*

Version 1.0

*Thank you for choosing the Hogtunes Big RG Kit. 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.*

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

*Tel: 705-719-6361*

*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.*

**IMPORTANT:** *The NCA-40.4 amplifier cannot be used if any external amplifier is already on the bike. This includes CVO Models with the factory amplifier under the tour-pak!! This kit will work on CVO models if the factory amplifier and of its wiring have been removed.*

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# GETTING STARTED

- Step #1: Remove the seat, and both wires (+ and -) from the battery.
- Step #2: Remove the outer fairing/headlamp assembly. Refer to a service manual if you need help with this. **Note:** 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 #3: Unplug the factory wires at each front speaker. Locate and remove the 3 torx head screws, and single “speed nut” that holds each speaker grill to the bike. The speakers and grills will come off as one unit. Put these aside.
- Step #4: Remove 4 small Phillips screws to separate 5’x7” speakers from new grills. Locate the bag of screws in the kit. Using these longer Philips screws, install each Hogtunes grill to the bike, and re-install the stock “speed nut” on each side. **DO NOT use the stock screws** for this, or you will damage your inner fairing. Re-install the 5”x7” speakers to the grills using the shorter screws just removed, noting that the speakers must be oriented so the wire connectors are closest to the radio.
- Step #5: If installing on a RG Ultra, remove the rear grills and speakers. On any other model of FLTR without factory wires already in the rear speaker boxes, go to the next step.
- Step #6: Locate the 2ch/4ch switch on the side of the amplifier.

## **If installing on a RG Ultra:**

make sure this switch is in the “4ch” position. In this position, the amplifiers front and rear channels are controlled independently by the Road Glide Ultra radios built in fader.

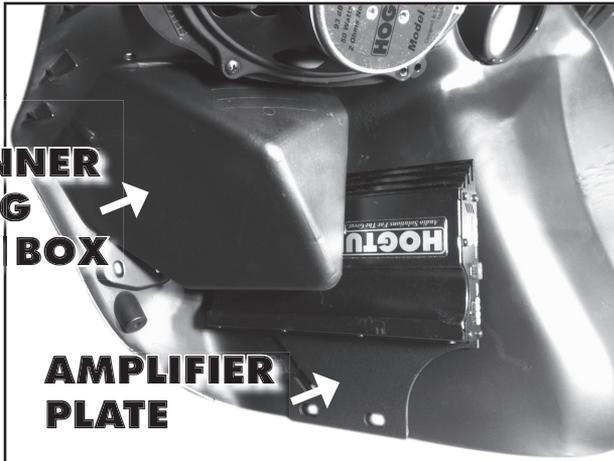
## **For all other models without factory wires already in the rear speaker boxes:**

Put the switch in the “2ch” position. Locate the 3 position switch on the side of the amplifier marked “GAIN”, and start with this switch is in the “+3” position. With the amp in “2ch” mode, the gain switch becomes active, and is used to adjust the volume of what ever is plugged into the rear channels. This is ideal for “Non RG Ultras” where there is no fader. The gain switch allows the rear speakers to be adjusted versus the fronts, and acts as a quasi “set it and forget it” fader.

Step #7: The power harness has an 8 pin white plug with 3 red wires, 3 black wires, and 1 orange wire. Locate this and plug it into the white socket on the amplifier marked "power". The input harness has a smaller black 8 pin plug with smaller gauge wire. Plug this into the black socket on the amplifier marked "hi level input". Locate the long "rear speaker" harness with 8 black wires in it. One end has a white 8 pin connector, the other end has two 4 pin connectors.

- **If mounting in a RG ULTRA:** One of the 4 pin connectors on this long harness will plug into the empty 4 pin plug on the input harness. It will only go on one way.
- **If mounting on any other model of RG:** the white plug on the rear harness that fits the empty white plug on the input harness does not get plugged in. Let it hang. The other 4 pin plug on the rear harness will plug into the "rear out" which is a white socket on the other side of the amp. Locate the 4 pin black plug with black/brown, and black/blue wires. This will plug into the "front out" on the amp, which is a 4 pin black socket. Note: There is a blue socket on the amp labeled "bypass out". This carries the radios built in power (front channels) and although not used in this kit, is there for future system expansion.

**BRAKE  
SIDE INNER  
FAIRING  
GLOVE BOX**



**AMPLIFIER  
PLATE**

Diagram 1.1 (Amp mounts to brake side of inner fairing "behind" glove box)

The amplifier on its plate is designed to mount on the brake side of the fairing as show in Diagram 1.1 above. Apply one side of the supplied "hook and loop" adhesive to the back of the amp plate. The other side will attach direct to the fairing inner. Line the plate up as shown in Diagram 1.1 and set the amp/amp plate in place by joining both halves of the hook and loop adhesive together. When re-assembling the fairing to the bike, the bolts that hold the front turn signal in place will secure the plate in place, even though the adhesive does most of the work. *Note: Most adhesives work best on clean surfaces and at room temperature!*

## **WIRING THE AMPLIFIER**

On all input/output and speaker connectors, it's a good idea to take the female spade connector and gently squeeze the connector together. Doing so insures a solid connection when the male spade connector goes in. DO NOT have the male and female connectors together, and then squeeze, as this will make for a loose connection!

**Step #1:** With the amplifier in place, take the yellow/black wires on the input connector of the amplifier, and plug them into the front factory speaker wires on the clutch side of the bike. They will only go in one way. Take the brown/black wires on the "front out" connector and plug them into the front clutch side speaker. They will only go in one way.

**Step #2:** Take the green/black wires on the input connector and plug them into the front factory speaker wires on the brake side of the bike. Take the blue/black on the front out plug, and plug them into the brake side front speaker. Again, these will only go on one way.

The amps orange wire is the "remote turn on lead" and tells the amp to turn on whenever it sees +12v (.5 amp min.). Unplug the center wire (+) from the back of the cigarette lighter. Plug the orange lead from the amplifier directly onto the lighter using the female connector. Plug the factory lighter wire to the male "take off" connector which is part of the amps orange turn on lead.

## **ROUTING THE MAIN WIRE HARNESS**

**Step #1:** Just in front of the tank, on the brake side of the bike, on the back bone of the frame is a rectangular opening where factory wires pass from the inner fairing to the rest of the bike. The power and ground wires, and rear speaker wires will pass through this opening. Note: install time will be cut down if another wire is "fished" through from the opening side into the fairing, taped to the Hogtunes wires, and pulled through.

**Step #2:** Loosen the tanks "chrome console" and run wires up and over the gas tank, but under the tanks chrome 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 run down the brake side, and connect to the battery. The remaining 8 pin harness is the right length to run down the clutch side, and be zip-tied to the clutch side fender strut. Be sure to run the 8 pin harness UNDER the air line for the clutch side rear shock.

Step #3: On the 8 pin rear harness "end" you will see 2 pairs of black shorter wires in a sheath, and 2 pairs of black longer wires in a second sheath. Put the ends of the shorter wires into the clutch side rear speaker



box and the longer wires into the brake side. These wires will enter where the factory wires enter the rear speaker box.

### **If Installing on a RG Ultra:**

Plug the factory rear speaker wires into the male wires of the amp harness—they will only go on one way. Take a Hogtunes rear speaker (model 117.2-AA) and plug the female connectors of the amp harness into the speaker. Again, they will only go one way.

### **If Installing on any other model of Road Glide:**

Take a Hogtunes rear speaker (model 117.2-AA) and plug the female connectors of the amp harness into the speaker. The male connectors of the Hogtunes harness will not be used.

Step #1: Once you are confident the wires are correctly attached to the rear speakers, sit them in place, put the grills back on, and secure the speakers by reinstalling the 4 screws on each grill. Join the 8 pin plug that carries wires into the rear speaker boxes to the 8 pin plug on the long rear speaker harness sitting on the rear fender strut.

Locate the in line fuse holder, and crimp to the red wire. Attach the amps black wire to the negative (-) battery terminal, and the amps red wire to the positive (+) battery terminal. The factory battery wires are also re-installed at this point.

**Note:** *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 #2: Turn the stereo on, and at low volume, test to make sure all 4 speakers are working. Note: the system will sound radically different at speed than it does in your garage. We suggest leaving the system with the bass and treble in the center position (flat), and adjusting while at speed. Re-install the seat making sure the amplifiers "+" and "-" connectors are positioned in such away so they will not bend or break when the riders 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 the Bass levels:***

*The MAXXBASS feature built into this amp has almost as much power as a 386 computer! This feature allows us to "tune" the amps sound for the motorcycle application. On Radio Sound (1998-2005 model ) radios, between 5-6 "bars" is all that is needed on the bass level screen. On Harman-Kardon(2006+) radios, 1-3 bars above center is what we have found works best. This is a suggestion only. Adjust the system for what sounds best to you!*

## **WARRANTY INFORMATION**

Hogtunes speakers are warranted for a period of 20 years to the original purchaser. Hogtunes Amplifiers are warranted for 1 year 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. All Warranty claims must be made through the dealer this product was originally purchased from. Speakers found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at Hogtunes sole discretion. Amplifiers will be repaired. Hogtunes complete warranty policy is available at <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.

## **TECHNICAL SPECIFICATIONS**

### **Hogtunes NCA 40.4 Amplifier**

RMS Power at 2 Ohms:	40 watts x 4
Max Current Draw:	< 8 Amps
Freq. Response:	40hz-18khz
Efficiency:	>60%
Fuse at Amp:	15 amp
Amp (only) Weight:	1 KG (2.2 lbs.)

### **Hogtunes #572.2-AA Front Speakers**

Power Handling:	50W RMS-100W Peak
Frequency Response:	45hz-25Khz
Sensitivity :	92 dB 1watt/1 meter
Nominal Impedance:	2.0 Ohms

### **Hogtunes #117.2-AA Rear Speakers**

Power Handling:	50W RMS-100W Peak
Frequency Response:	55hz-25Khz
Sensitivity :	91 dB 1watt/1 meter
Nominal Impedance:	2.0 Ohms

***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.***