



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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HOGTUNES

Audio Solutions For The Great American Cruiser



**Designed and Engineered in Canada For
The Great American Cruiser**

NCA 450-AA Installation Manual

**For Use On 1998-2013 Harley Davidson
Street Glide, E.G. Classic and
Ultra Models**

Version 1.1

Thank-you for choosing the Hogtunes NCA 450-AA Amplifier. Since positive word of mouth is the best way to grow our business, we want your system to work as well as it should. If you have any questions or concerns, we are here to help. Email info@hogtunes.com, or call us during regular business hours (EST) at (705) 719-6361. Reading the manual before starting will make things pretty easy and help you configure the amp correctly for your system. If you need extra help, please consider a professional installation by your local motorcycle dealer.

IMPORTANT NOTES: *The NCA 450-AA makes its best power when powering 2 Ohm speakers. This amplifier is made to sound best and fit 1998-2013 bikes and should not be used on 2014 + "Rushmore" models!*

This amp features a "low level" input which allows the amp to run using a MP3 type device instead of a conventional radio and allows the amp to be used for custom applications. If your installing this amplifier in a bike with a conventional radio, please go to Step #1 below. If using for a custom application, please got to the "Low Level Instructions" section on Page 6

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.

Step #3: Take the 2 wires off each front speaker by gently pulling one at a time. If installing on an Ultra, remove each rear speaker grill by undoing the 4 screws on the front of the grills. Carefully lift up on each speaker and take the 2 wires off by pulling one at a time from the stock speaker. Put the rear grills, fasteners, and speakers aside.

Step#5- Adjusting the "Fader/No Fader" switch on the amp:

On the side of the amplifier is a "Fader/No Fader" switch. This amplifier gets its music from the radio via the factory speaker wires. Street Glide, EG Classic, (and Standards with factory radio) only have factory speaker wires for the front speakers. Ultra Classics have an "active" fader control in the radio that allow the rider to control the volume levels between the front and rear speakers. If you have an Ultra and want the amp to run front and rear speakers, you will put the switch to the "Fader" position. This will also work if you have a "non-Ultra" and have added rear speakers, factory rear speaker harness and the fader function has been activated by the dealer. In all other cases, the switch will go to the "No Fader" position. This allows all channels of the amp to be driven equally with no fader. On a Non Ultra, where there is no fader function, this is perfect if your adding front speakers, and either speakers in fairing lowers, or speakers in the saddlebag lids.

Technical Specifications:

RMS Power at 2 Ohms:	50 watts x 4
If rated like other guys rate theirs:	>100 watts x 4 :)
Freq. Response:	30hz-25khz
Fuse at Amp:	30 amp

Warranty Information:

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 an Return Authorization Number (RA#) generated which MUST appear on the outside of the box when it arrives to our offices.*

Goods Arriving Without an RA# will be refused!

Please Record Your Amps Serial # Here _____

Hogtunes Amplifiers are 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

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.

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Attach the amps red wire to the positive (+) battery terminal, and the amps 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.

Step#7: Turn the stereo on, and at low volume, test to make sure all speakers are working and the fader on the radio (if present) works. Note: Sound quality is best with the fairing mounted and secured on the bike. 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!

Adjusting the Bass and Treble: The way the system sounds sitting still or at a stop light will be **RADICALLY** different from how it sounds "at speed". Your able to use the radios controls to adjust the sound, but please do so carefully when riding.

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

Low Level Instructions. When this is used, we are assuming the amp is going in a custom install. Everything you need to know to "make" the amp work is in the manual, but the majority of info required is in this section.

The low level input on the amp uses a standard 3.5mm jack and when used, the fader/no fader switch must go to "no fader". All 4 channels of the amp will play, and the 3 position switch on the side of the amp will allow volume adjustment to the rear output of the amp.

When mounting, please give careful consideration for the amplifier to cool itself as this amp will shut itself off as a means to protect itself if overheated. Also pay careful attention to water or other elements the amp may see.

WATER DAMAGE IS NOT COVERED BY WARRANTY!

Power is Red and Ground is Black. The orange wire is remote turn on and requires a switched +12 volt from the bike to turn the amp on/off.

Music Input is via the 3.5mm jack. The Black plug with blue/black and brown/black wires is typically used for front output. Blue/black is brake side (right) Brown/Black is clutch side (left) The **BLACK WIRE IS THE POSITIVE**. The amp comes with long wires and white plugs typically used for rears. If these will not work, you can locate the blue plug with white/black and red/black wires and use it. Red is brake side (right) and black is positive. When using the low level input, the bypass output on the amplifier will not work.

This will also be the position to choose if you are using this amp to run front speakers and lowers on an Ultra where a separate amp or radio power will drive the rears. In "No Fader" mode a 3 position switch on the side of the amp becomes active. This switch allows you to adjust the "balance" between the different speakers when no fader on the radio is present as a "set it and forget it" deal. The switch adjusts the speakers plugged into the rear channel output of the amplifier only.

Step#6: The power harness ends in a black plug with 1 larger (10awg) red wire, 1 larger (10awg) black wire, and 1 smaller orange wire. Locate this and plug it into the matching black "pigtail" on the amplifier. The input harness has a smaller black 8 pin plug with smaller gauge wire. Plug this into the black "pigtail" socket on the amplifier marked "hi level input". 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 "pigtail" ending with a 4 pin black socket.

A) If installing on an Ultra where the amp will power fronts and rears:

Locate the long "rear speaker" harness with 8 black wires in it. One end has a white 8 pin connector that will go to the rear of the bike, the other end has two 4 pin connectors that will remain in the fairing. 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. The other 4 pin plug on the rear harness will plug into the "rear out" which is a "pigtail ending in a white plug. Remember to have the "Fader/No Fader" switch set to "Fader".

B) If installing on a EG Classic or Street Glide where the amp will power

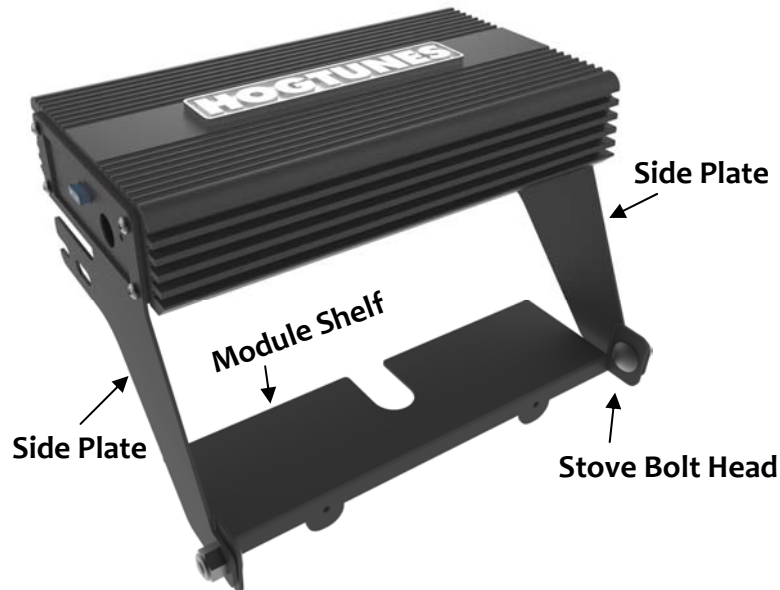
fronts and rears: Locate the long "rear speaker" harness with 8 black wires in it. One end has a white 8 pin connector that will go to the rear of the bike, the other end has two 4 pin connectors that will remain in the fairing. The 4 pin plug on the rear harness will plug into the "rear out" which is a "pigtail ending in a white plug. The other white 4 pin plug is not used. Remember to have the "Fader/No Fader" switch set to "No Fader".

C) If installing on a EG Classic or Street Glide where the amp will power fairing speakers, and saddlebag lid or fairing lower glove box speakers:

For Hog-tunes lowers or saddlebag 6x9" lid speakers use the harness's that come in that kit. Plug the white plug on this harness into the rear out "pigtail" on the side of the amp. If adding rears locate the long "rear speaker" harness with 8 black wires in it. One end has a white 8 pin connector that will go to the rear of the bike, the other end has two 4 pin connectors that will remain in the fairing. One 4 pin plug on the rear harness will plug into the "bypass out" which is the "pigtail" with a blue socket. The other white 4 pin connector on the same end of this harness is not used. Remember to have the "Fader/No Fader" switch set to "No Fader". **IMPORTANT** In this configuration, the amp is powering 4 speakers and the radio is powering the rears.

The radio power is diverted to this set of speakers, so the speakers ohms (Ω) used in this location MUST match the ohms the radio works with. For 2006-2013 factory radios, 2 ohm speakers are required. For 1998-2005 factory radio's, 4-8 ohm speakers are required.

The amplifier mounts inside the fairing "over" the radio using the side plates shown below. The side plates are attached to the side of the amplifier by removing 4 screws on each side of the amp, positioning the plates as shown below, and re-installing the screws into the amp. Factory CB, XM, and other similar modules (if present) are mounted on top of the radio and secured with a screw that goes into the back of the radio. Remove the screw and let the module(s) hang for now. If required, the module shelf is NOT installed yet! Each side of the radio has 2 large allen head bolts that secure the radio into the fairing. You will loosen the bolts on each side that are farthest away from you (closest to the inner fairing) and remove the bolts closest to you. The amp will "clip in" to the back bolts, and the bolts removed will go back in over the plates to secure the amp. Re tighten all 4 bolts to factory specs. If you have modules that are now hanging, install the module shelf as shown noting that the "stove bolt" heads must be positioned as shown. Your module(s) will screw into the shelf using the factory screw(s) you removed from the back of the radio.



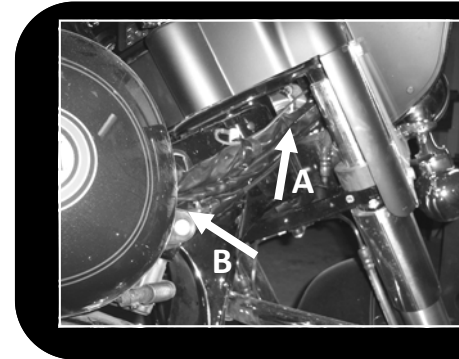
Wiring the amplifier: Step #1: With amplifier in place, take the yellow/black wires on the input connector of the amplifier, and plug them into the front factory speaker wires on the clutch side of the bike. They will only go in one way. Take the brown/black wires on the "front out" connector and plug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



Stock Harness and Amplifiers Harnesses Passing From Fairing To Just In Front Of Tank (Arrow A) . Cable-tying 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, and if used, the rear wire 8 pin harness is the right length to be zip-tied to the brake side fender strut. Be sure to run the 8 pin harness UNDER the air line for the brake side rear shock.

If running a supplied harness to the rears 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 brake side rear box.

If Installing on an Ultra these wires will enter where the factory wires enter the rear speaker box. Plug the factory rear speaker wires into the male wires of the amp harness-they will only go on one way. Take a Hogtunes 2 ohm rear speaker (model 352R-AA or 117.2-AA) and plug the female connectors of the amp harness into the speaker. Again, they will only go one way. Repeat this step using the longer wires on the clutch side of the bike. If using Hogtunes Rear Speaker Pods, the wires enter through a "slice" in the vinyl on the lower inside part of the box.