

WILD BOAR AUDIO

By HOGTUNES



WBA 400.2R

400 WATT 2-CHANNEL AMPLIFIER

(A RADIO RE-FLASH MAY BE REQUIRED FOR CORRECT OPERATION!)

FOR USE ON 2014+ STREET GLIDE/ROAD GLIDE/ULTRA MODELS

INSTALLATION MANUAL



Thank you for your purchase of Wild Boar Audio's WBA 400.2R Amplifier. We want your new amp to work as well as it was designed to, so if you have any questions or concerns, please email: tech@hogtunes.com or call us during regular business hours at 705-719-6361 (EST). If you still need help, please consider a professional installation by your dealer.

Important - Please Read Before Proceeding:

- 1) In order for your new amp to work properly, your radio must have the proper "flash" installed. Different radio flashes are used by the "MoCo" based on the factory audio system that comes on different model bikes. Re-flashes can be done at any OEM dealer, or a "Techno Research" dealer. You can find the nearest Techno Research dealer by visiting: <http://technoresearch.com/index.php/tuning-centers> The required flash to make this amp work best is called "4 speaker no amp" and will give highest quality sound and best reliability. It should be noted that non CVO Ultra models and Ultra Trike models come from the factory with the required "4 speaker no amp flash."
- 2) This manual is written so the 400.2R amplifier is powering speakers in the front fairing only.
- 3) This is a powerful amplifier and is made to work with 4Ω (ohm) speakers only.
- 3) The amplifier has built in protection and will turn itself off to protect your charging system if your charging system/battery goes below 10.5 volts.
- 4) In very high heat situations the 400.2R amplifier will shut itself off before it damages itself. Once cooled down to safe operating temperatures, it will turn itself back on.
- 5) Street Glide/Ultra/Trike instructions start on the next page. Road Glide/Road Glide Ultra instructions start on Page 4.

Wild Boar Audio Contact Information

Email: tech@hogtunes.com

Tel: 705-719-6361

The WBA 400.2R 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 WBA 400.2R features a proprietary circuit design called R.E.M.I.T. (Reduced Electro Magnetic Interference Technology) that Wild Boar Audio believes gives the BEST FM reception available for any Class D Amplifier designed for a motorcycle.

If you add additional amplifiers to your system, reduction of FM reception is increased and is considered normal.

Wild Boar Audio 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!

STREET GLIDE/ULTRA INSTRUCTIONS

- 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. High volume expletives will also be kept to a minimum.
- Step #3: 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 4 factory "Torx" screws that go through the top of the black plate and into the top of the radio. Set these screws aside for now.

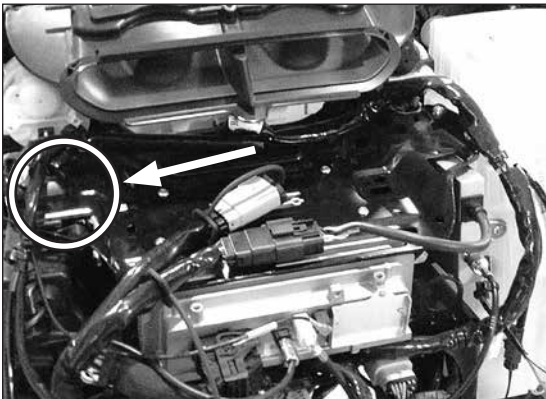


Figure 1.1 - The white circle shows the new location for GPS Antenna if your bike came factory equipped with this feature.

Step #4: The WBA 400.2R amp comes “stuck” to a black steel mounting plate. Separate the amp from the mounting plate. Sit the 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.

Step #5: Locate the “Flash Selector Switch” on the end of the amp and make sure it is in the “A” position. Locate the main power harness and plug it into the matching “pig-tail” on the side of the amp. Locate the supplied “input harness”, and plug its black 8 pin connector into the side of the amp. Locate the supplied “output harness” which has a 4 pin black connector on one end, and factory style connectors on the other ends. Plug the 4 pin black connector in to the black 4 pin connector on the amplified audio out “pigtail.”

Step#6: Place the amp back on the plate as shown in the image. For reference, if you are standing in front of the bike looking down at the plate, the amp will go to the extreme left so the power harness is closest to you. When sticking the amp in place,



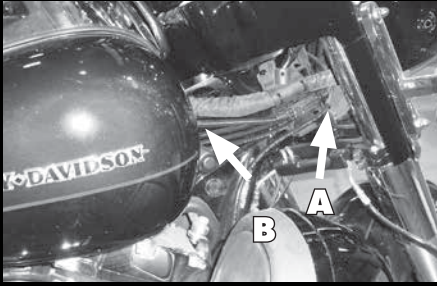
position the 4 pin black plug on the pig-tail so its sitting on top of the amp. This will allow the amp to sit as close to the gauges as possible and allow your outer fairing to go back on. There is a “tab” on the front of the mounting plate which allows you re-attach the wire harness using the factory Christmas tree fastener.

Step #7: On the back of each speaker cabinet, you will see pink wires that go to a plug. Separate these plugs on each side of the bike. From the amp, take the 2 pin plug with the blue heatshrink at the end and install it into the plug going into the brake side speaker cabinet. Take the 2 pin plug with the brown heatshrink at the end and install it into the plug going into the clutch side speaker cabinet.

Step#8: From the amp’s input connector, take the 2 pin plug with the green heatshrink at the end and install it into the mating plug on the brake side of the bike. Also from amp’s input connector, take the 2 pin plug with the yellow heat-shrink at the end and install it into the mating plug on the clutch side of the bike.

Step #9: Locate the main power harness and plug it into the matching “pig-tail” on the side of the amp. 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 on to the battery. **Note:** although not necessary, you can run the harness along the back bone of the bike's frame if you choose to remove and re-install the bikes fuel 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.

Step #10: 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 amplifier is working fine.

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 amplifier's wiring to any factory antenna wires!

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!

Please go to "adjusting your system" near the back of this manual.

ROAD GLIDE / ROAD GLIDE ULTRA INSTRUCTIONS

IMPORTANT RADIO RE-FLASH INFORMATION IF INSTALLING ON A ROAD GLIDE ULTRA

From a sonic point of view, Road Glide Ultra has the correct factory flash, however, the factory flash in Road Glide Ultra makes the radio play considerably QUIETER than it could. Less signal out from the radio means less signal going into the amps. If you install this amp without a re-flash, it will sound great, but will NOT reach its potential volume. A radio re-flash by a **Techno Research dealer** is required to make this amp play to its full volume potential. An OEM Dealer re-flash will not "fix" this, as the OEM flash looks at the bike's VIN and will re-install the same "quiet" flash.

To find a Techno Research dealer near you, please visit:
<http://technoresearch.com/index.php/tuning-centers> or **CALL US!**

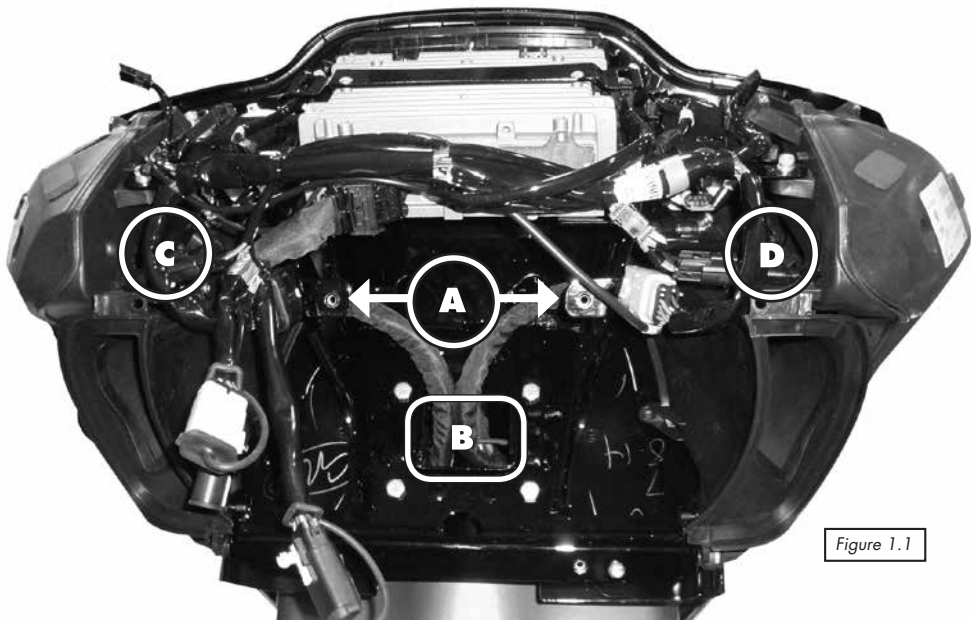


Figure 1.1

Figure 1.1 and its descriptions are referenced throughout the installation.

- A** = Mounting points for Headlight assembly
- B** = Wire passage from fairing to bike
- C** = Brake side speaker harness (Pink and Pink with Black Stripe wires)
- D** = Clutch Side Speaker harness (Pink and Pink with Black Stripe wires)

Step #1: Out of the box, the amplifier comes on a black mounting plate used for Street Glide and Ultra fairings only. Separate the amp from the plate and put that plate aside. As shown in Fig 1.2, locate the Road Glide specific plate and adhere the amp to the plate so it is in the same orientation as shown. When installed, the amp will be on the back of the plate.

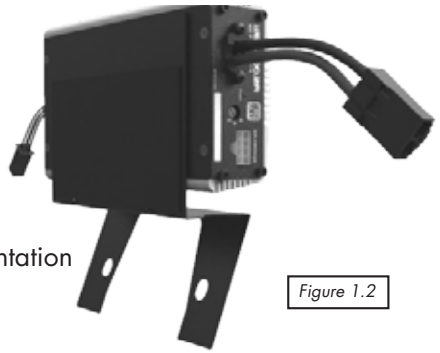


Figure 1.2

Step #2: Locate the power harness for the amplifier. One end has ring terminals and a fuse, and the other has a 2 pin connector. Using Fig 1.1 on Page 4 for reference, to run the "ring terminal end" of the power harness through "B". Make it so the 2 pin power connector is accessible in the inner fairing and the slack can be adjusted later in the installation. Just in front of the tank, there is a structure that attaches the fairing to the frame of the bike. The power harness will pass through this structure and exit through the rectangular opening where the factory harness also exits the structure on the BRAKE side of the bike. Note: it can be easier to pass the wire harness through the rectangular opening if you "open" the fuse holder and remove the fuse before passing the wire harness. 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 harness can go under the gas tank if you choose to remove and re-install the tank.

With the power and ground wires in the vicinity of the battery, move to step #3 **WITHOUT** connecting amp wires to battery.

Step #3: Locate the "audio in" harness and plug its 8 pin white plug into "audio in" on the side of the amp. Locate the amp's "front out" harness and plug it into the 4 pin BLACK pigtail coming out of the side of the amp.

Before proceeding, please locate the "Flash Selector Switch" on the end of the amp and make sure it is in the "A" position.

Step #4: Using Fig 1.1 on Page 4 for reference, locate the 4 bolts around "B" and re-move the top left and top right bolts (only). Also using Fig 1.1 on page 6 for reference, there are 2 large factory harnesses between "A" and "B". You will have to wiggle the amp on the plate into place around these harnesses so that the holes on the "legs" at the bottom of the plate line up with the holes where the factory bolts around "B" were. With the plate in position, reinstall the factory bolts around "B" which will secure the amp on its plate to the bike.

- Step #5: As shown by "C" in Figure 1.1 on Page 4, on the brake side of the bike, there is a 2 pin connector with pink/pink with black stripe wires going through it. The plug is close to where the wires enter the brake side speaker cabinet. Separate the connector so there are 2 plugs. From the amp, take the plug with blue heat shrink on the end and plug it into the mating plug you just separated noting it will only go in one way. Also from the amp, take the plug with green heatshrink on the end and plug it into the mating plug that was just separated noting it will only go in one way.
- Step #6: As shown by "D" in Figure 1.1 on Page 4, on the clutch side of the bike, there is a 2 pin connector with pink/pink with black stripe wires going through it. The plug is close to where the wires enter the clutch side speaker cabinet. Separate the connector so there are now 2 plugs. From the amp, take the plug with brown heatshrink on the end and plug it into the mating plug that was just separated noting it will only go in one way. Also from the amp, take the plug with yellow/ heatshrink on the end and plug it into the mating plug that was just separated noting it will only go in one way.
- Step #7: Attach the black wire to the negative (-) battery terminal and the red wire to the positive (+) 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 (black) first. When the positive connector touches the battery, some sparking is normal. This is a function of the capacitors in the amplifiers charging up.
- Turn the stereo on and, at low volume, test to make sure the speakers are working. Now is a good time to "clean up" and secure the wires using the supplied zip ties. For best possible FM reception, **DO NOT** attach any of the amplifier's wiring to any factory antenna wires!

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!

**Please go to "adjusting your system"
near the back of this manual.**

FINAL SYSTEM ADJUSTMENT

PLEASE NOTE: IN ALL CASES, HAVING THE RADIO FLASHED TO “4 SPEAKERS –NO AMP” WILL GIVE THE BEST PERFORMANCE

As explained at the beginning of this manual, in order for the system to work properly you will need to have the correct “flash” in your radio. Visit an HD dealer, or link: <http://technoresearch.com/index.php/tuning-centers>. Any dealer on that web page should be able to help. You either want to have the correct flash installed, or verify that the correct flash is installed if you are not sure.

There is a 3 position switch “Radio Flash Selector” on the side of the amp marked A, B, and C. Understanding the correct position for your application is VITAL in the proper performance of this system.

If you are installing this amplifier on a Ultra Classic model, the factory flash that came with your bike is the preferred “4 speaker no amp” flash. If your bike has had no previous audio installed, you will not need a re-flash. If you have questions, please call our tech support team before proceeding!

Radio Flash Selector (A/B/C) Switch On Side Of Amp:

- The “Radio Flash Selector” switch positions have been carefully tailored to “work around” the radio flashes, assuming you have the 4 speaker no amp flash, and assuming the speakers you are using can handle the power of this amp.
- If you have your radio flashed to “4 speaker no amp” set the amp (or all Wild Boar Audio Amps on the bike) to “A”.
- If you have installed the amp on a Street Glide or Road Glide but cannot get the radio reflashed, set the amps to “B”. In ALL cases, having the radio flashed to “4 speakers no amp” and amps set to “A” is preferred! If you are not using Wild Boar Audio speakers, and your speakers sound like they “cant take the power”, putting both amps to the B position should make things work better.
- In extreme cases only, depending on how the music you have on your USB source was originally recorded, you may have distortion at around 60-70% of the volume on your radio. If this is a common issue for you, and you want to have “full swing” of the radios volume controls, setting the amps to C will fix the issue.

In all cases, having the bike flashed to “4 speakers no amp” and having the “flash selector switch” set to “A” is the preferred setting!

From time to time, the "Motor Company" will release software updates on their website which can be downloaded, and installed on the bike. For best performance of your audio system, please make the downloads are up to date! Earlier versions of the software could cause any brand of aftermarket amplifier to distort prematurely so this is an important point!

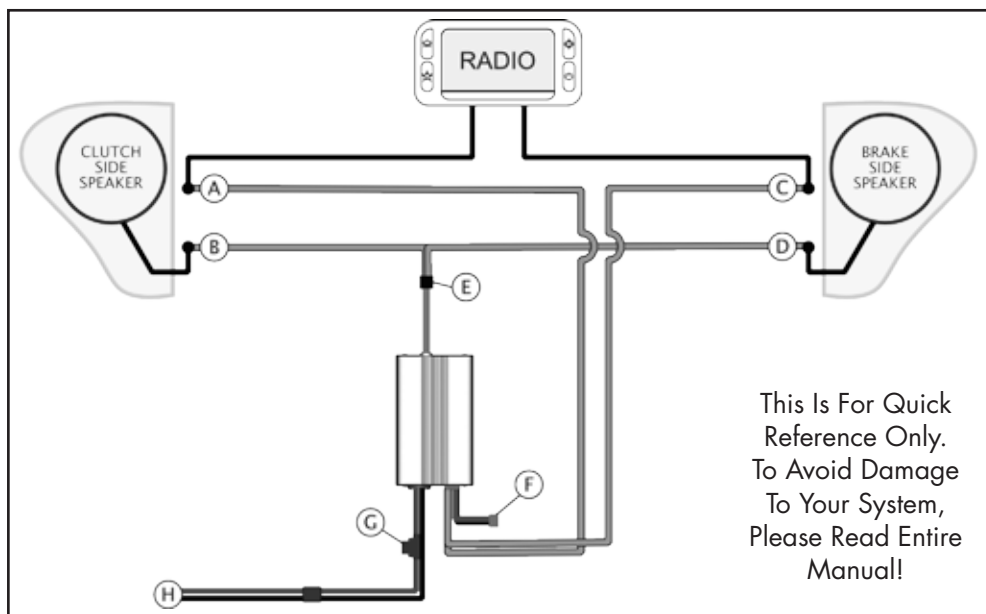
How the system sounds when the bike is running is going to differ from how it sounds when the bike is not running. This is a function of the radios built in software. You may find yourself adjusting the bass and or treble controls if you're listening to the bike without the motor running.

WBA 400.2R QUICK REFERENCE WIRING GUIDE

(If Only Amp On Bike)

Note: From the factory, the plugs at indicators "A" and "B", and "C" and "D" are plugged together but get separated for this install.

- A) Amplifiers Clutch Side Input (Yellow Heatshrink)
- B) Amplifiers Clutch Side Output (Brown Heatshrink)
- C) Amplifiers Brake Side Input (Green Heatshrink)
- D) Amplifiers Brake Side Output (Blue Heatshrink)
- E) Amplified Output "Pigtail" on Amp
- F) Amplifiers Bypass Output For Adding More Amps Later
- G) In Line Fuse On Supplied Power Harness
- H) Amplifiers Main Power/Ground



WARRANTY INFORMATION

Wild Boar Audio branded amplifiers are warranted for a period of 3 years to the original purchaser. Proof of purchase is required 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 Wild Boar Audio's sole discretion. Wild Boar Audio's complete warranty policy is available on the website at www.wildboaraudio.com

What Is Not Covered:

- 1) Any expense related to the removal or re-installation of products.
- 2) Repairs to these products performed by anyone other than Hogtunes, Inc.
- 3) Subsequent damage to any other components.
- 4) Any product purchased from a non-authorized Wild Boar Audio dealer.
- 5) Damage to products from an accident or collision.
- 6) Damage from incorrect installation, improper use, abuse or modifications.
- 7) Reduction of FM reception.
- 8) Damage caused by incorrect factory radio "re-flash" and amp combination
- 9) Damage to inbound warranty 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 www.wildboaraudio.com. Valid claims will have a 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!

Wild Boar Audio is owned by Powersports Audio Inc.

Powersports
AUDIO INC.

**PRACTICE
SAFE
SOUND!**



Wild Boar Audio 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.wildboaraudio.com
www.hogtunes.com**