



# **WBA 300.2 AMPLIFIER**

## **INSTALLATION MANUAL**

**IMPORTANT! A Radio “Re-Flash” Maybe Required For Best Performance!**

Please Read Manual For More Information

Thank you for your purchase of Wild Boar Audio's WBA 300.2 amp. 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](mailto: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!

- A) 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."
- B) This is a powerful amplifier and is made to work with 4Ω (ohm) speakers only.
- C) 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.
- D) In very high heat situations the 300.2 amplifier will shut itself off before it damages itself. Once cooled down to safe operating temperatures, it will turn itself back on.

*The WBA 300.2 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 300.2 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!*

# 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. High volume expletives will also be kept to a minimum.

## Choosing The Amplifier Mounting Location:

The supplied mounting plate included in the box allows the amp to fit between the radio and clutch side factory speaker cabinet as seen in Fig 1.1 below. This is perfect if you are adding this amp to an existing Wild Boar Audio WBA 600.4 or have another accessory already mounted on top of the radio. You can also use the supplied hook and loop material, to “stick” the amplifier to the factory black plate that resides over top of the radio inside the fairing as seen in Fig 1.2 below . If you choose to “stick” the amp over top of the radio, please go to the “Wiring the amplifier” section.



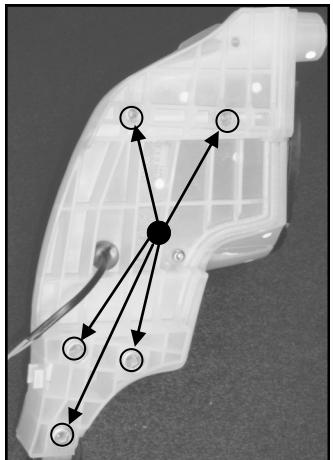
Fig1.1 Amp Mounted On  
Supplied Plate



Fig1.2: Amp Mounted Over  
Top Of Radio

## If Using The Supplied Mounting Plate:

**Step#1: Clutch Side Speaker Cabinet Removal:** Fig 1.3 and 1.4 on the next page show the 8 fasteners that will need to be removed to allow the clutch side cabinet to be removed from the bike. 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 the cabinet (pink & pink with black stripe wires).



Note: Brake Side Shown, But Fastener Location Is Same For Clutch Side

Fig1.3 Side View of cabinet

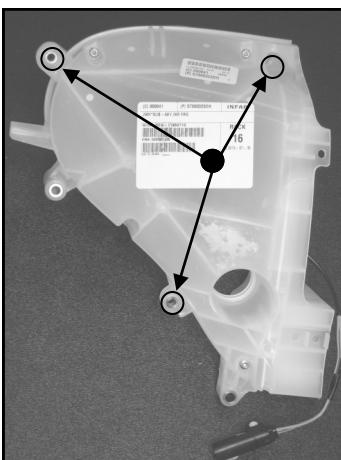


Fig1.4 Back View of cabinet

**Step#2: Attaching the Main Plate To The Speaker Cabinet:** If your bike had the CB Module, remove its mounting plate from the speaker cabinet. On the side of the cabinet, you will see a threaded insert and a locating post as seen in Fig 1.5. Put the main plate on the cabinet so one of the holes in the plate goes over the locating post, and the other sits over the threaded insert. If you removed a CB module from an Ultra you can use the screw that secured that module to the speaker pod. If your bike did not have a CB Module, use the machine screw that came in the kit to secure the side plate to the speaker cabinet. Fig 1.6 on the next page shows the plate correctly placed on the speaker cabinet.

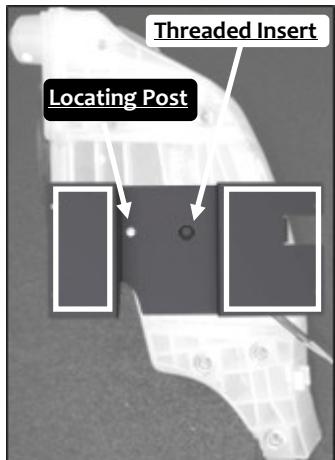
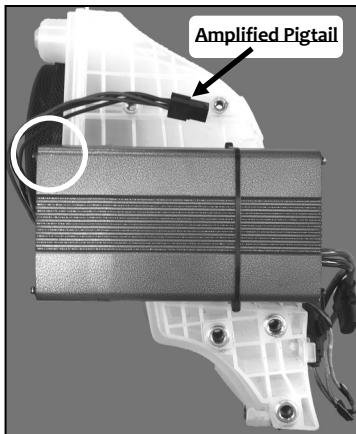


Fig1.5 Plate Correctly Placed

**Step #3: Preparing the Plate For The Amp:** The kit comes with self adhesive “hook and loop” material in the box the mounting plate was shipped in. Separate this so you have 2 pieces. One of the pieces will be applied to the underside of the amp. Refer to Fig 1.5, and cut the remaining piece of hook and loop material so you have 2 smaller pieces close to the size of the metal areas highlighted by white rectangles. Apply the pieces just cut to the correct sections on the plate.



**Step #4: Attaching the Amplifier To The Plate:**  
The amp will “stick” to the plate as shown. See the white circle in Fig 1.6. The “top” and left “end” of the amp must be flush to the “top” and left “end” of the plate, or the amp/factory speaker cabinet assembly will not fit! NOTE: It is CRITICAL that the “amplified pigtail” of the amp be on the speaker side of the cabinet as shown in Fig 1.6. In the kit is a 14” long “zip tie” which will wrap around the plate and around the amp. Tighten the “zip tie” so its snug only. The zip tie is on there as a back up in the unlikely event the hook and loop adhesive fails.

Fig1.6 Amp On Cabinet

**Step #5: Placing the Amp and Cabinet Into The Bike:** As shown in Fig 1.6, the “amplified pigtail” on the amp needs to be positioned over top of the amp. If you do not do this now, you will not have access to this plug when wiring the amp! The cabinet/amplifier assembly will now go in the bike as one unit. Some “finesse” is needed, but it will go without forcing anything. With the cabinet assembly in place, re-install all 8 fasteners and secure the speaker cabinet to the bike.

### Wiring The Amplifier:

This next section is written in 3 sections. Input, Output, and Power. There are several ways the amp can be wired, so for the input and output sections, please read each option and choose the one correct for your installation.

#### Input:

If you are adding this WBA 300.2 to a bike that already has a WBA 600.4 installed. Locate the “input link” which has a small black plug with 8 wires going into it, and 2 blue plugs with 4 wires going into each of those. The 8 pin black plug will plug into the 8 pin socket on the amp. Assuming the WBA 600.4 instructions were followed, the amp on the BRAKE side of the bike is the “MASTER” and is the amp powering the front speakers. For Ultras adding lower speakers, on the MASTER amplifiers input harness, you will see an empty blue, 4 pin plug. On the new WBA 300.2 you are now installing, you will take one of the blue plugs from the input link, and plug it into the empty blue plug on the MASTER amps input harness. For Ultras adding lid speakers plug the blue plug from the 300.2 input link into the empty plug on the SLAVE amp. For Street Glides plug the blue plug from the 300.2 into the input link empty plug on the SLAVE amp.

#### If this is the only amplifier in the system.

Locate the supplied “input harness”, and plug its black 8 pin connector into the side of the amp. 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’s input connector, take the 2 pin plug with the green heatshrink 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 and install it into the mating plug on the clutch side of the bike.

## **Output:**

**If you are adding this WBA 300.2 to a bike that already has a WBA 600.4 installed.**

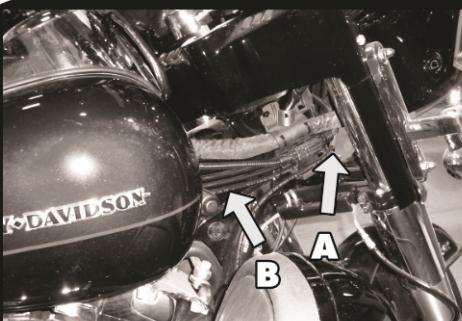
- A) If the new amp is powering Wild Boar Audio saddlebag lids. The harness that came with the lids will be used, and its 4 pin black plug with plug directly into the “amplified output” pigtail on the amp that also ends in a 4 pin black plug.
- B) If the new amp is powering speakers in a Wild Boar Audio fairing lower speaker kit. The harness that came with the lower adaptors will be used, and its 4 pin black plug with plug directly into the “amplified output” pigtail on the amp that also ends in a 4 pin black plug.
- C) If you are using another brands speakers. There is a 16” long “ACC” harness with a 4 pin black plug on one end, and labeled wires on the other. The black 4 pin plug will plug directly into the “amplified output” pigtail on the amp that also ends in a 4 pin black plug. The other end will have to be wired to what ever other speakers you are installing. To avoid unnecessary warranty calls, please take EXTRA CARE in joining the wires together. The wires marked “Left” are for speakers mounted on the brake side.

**If this is the only amplifier in the system.**

Locate the supplied “output harness” which has a 4 pin black connector on one end, and factory style connectors on the other ends. If not already done, 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 and install it into the plug going into the brake side speaker cabinet. Take the 2 pin plug with the brown heatshrink and install it into the plug going into the clutch side speaker cabinet.

## **Power:**

Locate the power harness and plug the 2 pin connector into the mating connector on the amp. The power/ground harness will pass through the inner fairing where the main wire harness passes through on the brake side of the bike. If your comfortable removing and re-installing the fuel tank, the wires can go in the factory wire “chase”. Alternatively, you can 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.



**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 Tank's Chrome Console Easier And Makes For a Cleaner Install.**

If there is already a WBA 600.4 on the bike, do not (**REPEAT DO NOT**) splice into the existing power harness to save time running another harness. The 600.4's wire harness is not adequate in gauge to **PROPERLY** power an additional amplifier.

Attach the power harness' brown wire to the negative (-) battery terminal and the amp's 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 first. When the positive connector touches the battery, some sparking is normal. This is a function of the capacitors in the amplifier charging up. Turn the stereo on and, at low volume, test to make sure the speakers are working. With everything working, re-install the seat making sure the amplifier's "+" and "-" connectors are positioned in such a way that they will not bend or break when the rider's weight is on the seat.

## **IMPORTANT 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 re-flashed, 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.

## Final Installation Notes:

- 1) All Wild Boar Audio amplifiers have been designed to give great sound with the radio bass and treble controls in the middle position. Adjusting the bass and treble up or down no more than 3 bars from center will give excellent and reliable performance for most kinds of music. If you choose to exceed this suggestion and play at high volume levels, you may damage your system!
- 2) The Wild Boar Audio 300.2 amplifier is a HIGH POWER amplifier specifically designed to work on the small charging system of a motorcycle. DO NOT start your motorcycle with the radio past half on the volume dial! When the start button is hit, all available current goes to your bikes starter which “starves” the amplifier and may cause damage to your system!

**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!**

Now is the best time to take a couple of minutes and “clean up” the wiring inside the fairing using supplied zip-ties. For best FM performance, DO NOT attach any of the amplifiers wiring to the antenna cable of the bike!

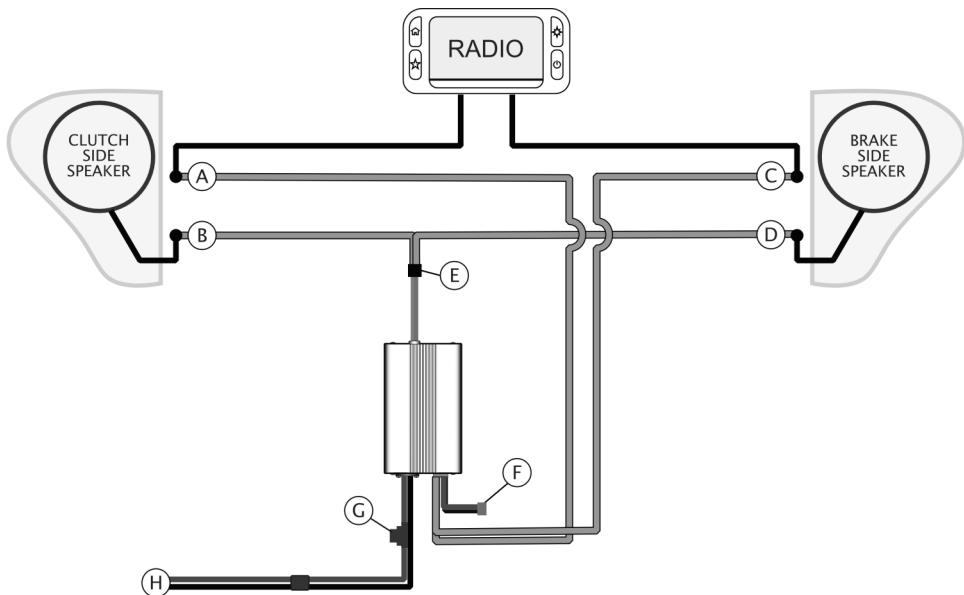
Re-install the fairing and the system is now ready to enjoy!

# WBA 300.2 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



**This Page Is For Quick Reference Only.  
To Avoid Damage To Your System,  
Please Read Entire Manual!**



## **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](http://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](http://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***  


**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!**

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

**Rev 1.0**