

WILD BOAR AUDIO

by **HOGTUNES**

Audio Solutions For The Great American Cruiser



WBA ULTRA KIT INSTALLATION MANUAL

**IMPORTANT! A Radio "Re-Flash" May be Required.
Please Read Manual For More Information**



Thank you for your purchase of Wild Boar Audio's WBA Ultra Kit. We want your new kit 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:

- 1) This manual is written as if your bike has had no previous amplifiers installed.
- 2) The required radio "flash" is called "4 speaker no amp" and is the factory flash on Non CVO Ultra Classic models. If you are putting this on a previously untouched Ultra/Ultra Trike, a radio re-flash is not required. If you are installing this on bike that did have amplifiers previously installed, please **MAKE SURE** the radio flash you have is "4 speakers no amp"! If you are not sure, please visit an OEM dealer or the web link <http://technoresearch.com/index.php/tuning-centers> which is an up to date list of Techno Research dealers that can verify and/or re-flash your radio. If you have questions, **PLEASE CALL US!**

This manual is written in 4 major sections:

Section 1: Front Speaker Installation

Section 2: Rear Speaker Installation

Section 3: Amplifier Installation

Section 4: Final System Adjustments

**Please read the notes on the next page
before proceeding with the installation**

Wild Boar Audio Contact Information

Email: tech@hogtunes.com

Tel: 705-719-6361

BEFORE GETTING STARTED

The amp in this kit (WBA 600.4) is rated to produce 150 watts x 4 using the supplied 4 ohm Wild Boar speakers.

As explained throughout this manual, the required radio flash is called "4 speaker no amp" which is the factory flash on non CVO Ultra/Ultra Trike models.

If you are installing this system on a bike that has had no previous aftermarket audio installed, you do not need to worry about a re-flash. The amplifier was carefully "tuned" to work with the way the '4 speaker no amp" radio flash performs.

If you are installing this on bike that did have amplifiers previously installed, please **MAKE SURE** the radio flash you have is "4 speakers no amp"! If you are not sure, please visit an OEM dealer or the web link <http://technoresearch.com/index.php/tuning-centers> which is an up to date list of Techno Research dealers that can verify and/or reflash your radio. If you have questions, **PLEASE CONTACT US BEFORE PROCEEDING!**

The WBA 600.4 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 600.4 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!

The amplifier has built in protection and will turn itself off if your charging system/battery goes below 10.5 volts. Although the 600.4 has been tested thoroughly in Arizona heat, the system will shut itself off to "protect" itself in extreme heat situations. It will turn itself back on once a safe operating temperature is reached.

SECTION 1

FRONT SPEAKER INSTALLATION

Step #1: Remove Bike's Seat

Remove the bike's seat, and undo the main (+ and -) connectors from the battery. Remove the outer fairing/headlamp assembly and set aside. Refer to a service manual if you need help with this. *NOTE: Placing a towel on the front fender can help prevent scratches or "dings" from dropped tools or fasteners, etc.*

Step #2: Speaker Cabinet Removal

On the brake side speaker cabinet, carefully remove the cable going into the power port/cigarette lighter assembly. If the 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 each cabinet (pink & pink with black stripe wires).

INSTALLATION NOTE:

It is **STRONGLY** recommended to complete the speaker swap on one side before moving to the other side! Figure 1.1 and 1.2 have arrows that point to all 8 factory fasteners (per side) that will be removed to allow each cabinet to come out of the bike. Although the brake side is shown below, all 8 fastener locations are common for both brake and clutch side cabinets. In Fig 1.1 you will see where the speaker wire exits the cabinets. The 3 cabinet fasteners below the speaker wire are 7/16" heads that will also accept a 3/16" allen head. A "ratcheting box end" or "ball end" allen wrench will make removing these 3 fasteners much easier!

Step #3: Installing the Speaker

With the cabinet removed from the bike, undo the 4 screws that hold the factory speaker to the cabinet and put these screws aside. Pull the factory speaker away from the cabinet

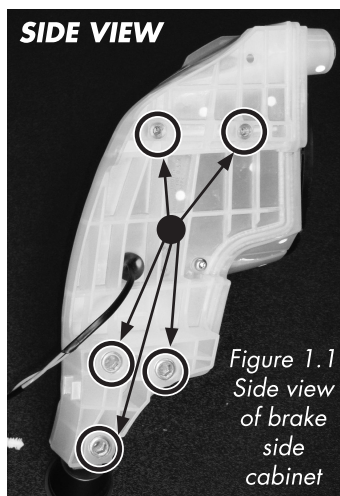


Figure 1.1
Side view of brake side cabinet

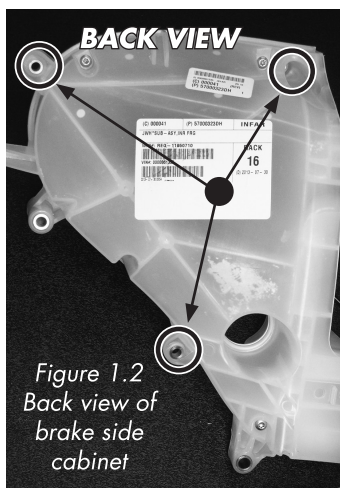


Figure 1.2
Back view of brake side cabinet

and carefully take off each speaker wire by un-doing one at a time. Take a Wild Boar Audio speaker and attach the speaker wires noting the factory speaker wire connectors will lock into place on the speaker. Sit the Wild Boar Audio speaker into the cabinet noting the speaker MUST be oriented so that the wires are in the bottom (6 o'clock) position so the speaker frame will not touch the small locator peg that sticks out from the face of the cabinet. If the speaker is not placed correctly, the speaker may not "seal" correctly to the cabinet and the bass response will suffer! Using the supplied screws (which are longer than the factory screws), attach the new speaker to the cabinet.

Repeat Step #3 for the second cabinet

Make sure to plug the power cable back into the power port/cigarette lighter assembly on the brake side. If the bike has the CB module, make sure to re-install the antenna cable and main harness. Let the factory speaker wires that come out of the cabinets "hang" for now.

SECTION 2

REAR SPEAKER INSTALLATION

Step #1: Factory Speaker Removal

Looking at the factory rear speaker, you will see it is secured to the rear speaker "pod" by 4 T-10 "torx" head screws. Remove these 4 screws. Lift the speaker out of the rear "pod" and carefully remove each speaker wire from the speaker. Repeat this for the other side.

Step #2: Installing the New Speakers

Take one rear speaker and carefully attach the factory speaker wires noting they will only go on one way. In order for the rear speakers to fit in the factory "pods" they must be aligned correctly. If installing on the brake side "pod" the speaker connectors must be in the "3 o'clock" position. On the clutch side, the speaker connectors must be in the "9 o'clock" position. With the speaker in the pod, take one of the plastic grill trim rings and sit it on the speaker. Using the 4 factory torx screws, secure the speaker/grill ring to the "pod". There is no reason to over tighten these screws! Repeat for the other side of the bike and you are done!

SECTION 3

AMPLIFIER INSTALLATION

Step #1: Over top of the radio, pull up to release each wire harness from the black plate via the factory "Christmas Tree" fasteners. If the bike has factory GPS, the small square antenna will need to be relocated just behind the voltmeter as shown in Fig 1.1. Remove the four factory T-20 "Torx" screws that go through the top of the black plate and into the top of the radio.

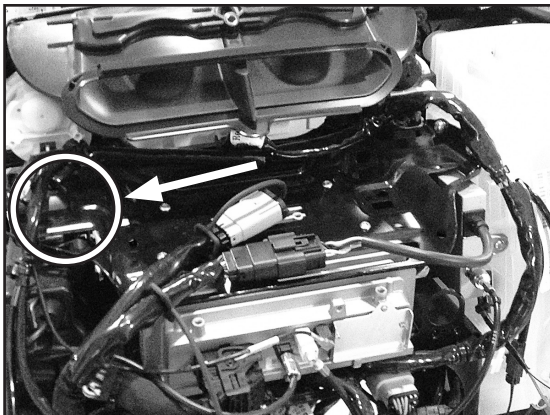


Figure 1.1 - The white circle shows the new location for GPS Antenna if your bike came factory equipped with this feature.

Step #2: As the amplifiers come in the box, they are "stuck" to a mounting plate for use in FLH model bikes. "Peel" the amps off the plate. Take the plate and place it on top of the radio oriented so the tab with the hole in it is closest to the back of the radio (closest to you). Locate and install one of the supplied "star" washers on each factory screw and re-install the screw/washer through the new plate, through the factory black plate and into the top of the radio.

IMPORTANT

In this install we refer to one amp as the "Master" and the other amp as the "Slave". The Master always has the main input harness go into it, and is always the amp that powers the front fairing speakers. When installed, the amp on the left (brake side) of the bike is the Master amplifier.

- Step #3: Take one amp, and make sure its "Radio Flash Selector Switch" on the side of the amp is set to position "A". In the same orientation as it came out of the box, "stick" the amp to the left half of the plate so the power harness is closest to the back of the radio. The "amplified output pigtail" will sit closest to your inner fairing. Have this pig tail so the 4 pin black plug is easy to get to. This first amp goes on the left (brake side) and from here on out is referred to as the MASTER amplifier. The second amp is referred to as the Slave amp and is what will power the rears. It must also have its "Radio Flash Selector" set to "A". With the switch set, take the "Slave" amp and "stick it" on your right (clutch) side so its oriented the same way as the "Master" amp.
- Step #4: Locate the "splitter" power harness included in the kit. Plug one of the "splits" into the power connector on each amplifier. Let the balance of the power harness hang for now.
- Step #5: On each front speaker's cabinet, there is a 2 pin plug that has pink and pink with black stripe wires. The plugs attach the speaker's wiring to the bike's wiring and need to be separated. Locate the "main input" harness and plug its 8 pin plug into the "audio input" on the MASTER amplifier. On this input harness, take the plug with the green heat shrink on the end and install it into the mating plug on the brake side of the bike. Take the plug with the yellow heat shrink on the end and install it into the mating plug on the clutch side of the bike.
- Step #6: Locate a bag with a harness in it that says "Audio Out" and plug it into the amplified out "pigtail" on the Master (left side) amplifier. Take the 2 pin plug with the blue heat shrink on one end and install it into the plug going into the brake side speaker cabinet. Take the 2 pin plug with the brown heat shrink and install it into the plug going into the clutch side speaker cabinet.
- Step #7: Locate the harness in the bag labeled "input link". Take the 8 pin plug on the input link and plug it into "audio input" on the "Slave" (right side) amplifier. Locate the harness labeled "rear". On that rear harness, you will see two 4 pin plugs. The black one will plug into the "amplified output" on the slave (right side) amplifier. On the input link now plugged into the Slave (right side) amplifier, there are 2 empty blue 4 pin plugs. The white 4 pin plug on the rear harness will plug into the mating blue plug on the input link. The leftover blue plug on this input link may be used later to send music to additional amplifiers as they become available. Let the balance of the rear harness hang for now.

ROUTING THE POWER AND REAR HARNESS

Step #1: The power/ground and rear 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. NOTE: During some routine bike services, the fuel tank will be removed. Having the wires going up and over the tank could be an inconvenience for the technician.

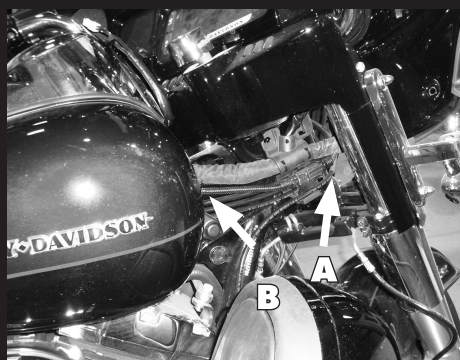


Figure 1.3 - Stock Harness and Amplifier's Harnesses Passing From Fairing To Just In Front Of Tank (Arrow A). Cable Tying the 2 Amp Harnesses To The Main Bike Harness Just In Front Of The Tank (Arrow B) Allows The Amp Harnesses To Go Up Towards The Tank's Chrome Console Easier And Makes For a Cleaner Install.

- The rear harness is the right length so that its two ends can sit on the middle of the back fender, just behind the threaded insert for the bolt that holds the back of the seat in place.

Step #2: Just behind the threaded insert that holds the seat bolt on the back fender, you will see a large factory wire plug. One side of the plug has wires that go to each rear speaker pod. Separate this large factory plug. One plug from the rear harness will plug into each side of the factory plug just separated. They will only go together one way.

At this point, all audio connections for this system are made.

Step #3: Attach the amp's red wire to the positive (+) battery terminal and the amp's brown 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. This is a function of the capacitors in the amplifier charging up.

- Step #4: Turn the stereo on and, at low volume, test to make sure all four speakers are working.
- Step #5: Re-install the seat making sure the amplifier's "+" and "-" connectors are positioned in such away so they will not bend or break when the rider's 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.

INSTALLATION TIP

Before you start to "clean up" the wiring, please MAKE SURE to route the amplifiers wires (blue/silver) that go to the brake side of the bike on top of the amp, but as close to the inner fairing as you can. This is the best time to take a few minutes to "clean up" the wiring and secure using supplied zip-ties. Under NO CIRCUMSTANCES should any of the blue/silver wires be zip tied to any factory antenna cables anywhere on the bike.

SECTION 4

FINAL SYSTEM ADJUSTMENT

This section is VITAL to the correct operation of the system, please make sure you read and understand it, or contact us!

- Step #1: This kit has 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!
- Step #2: The Wild Boar Audio 600.4 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 bike's starter which "starves" the amplifier and may cause damage to your speakers!

*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 the system is now ready to enjoy!

WARRANTY INFORMATION

Wild Boar Audio branded speakers are warranted for a period of 5 years to the original purchaser. 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. Please contact Hogtunes head office 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/Wild Boar Audio's complete warranty policy is available on our 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.

Please record your amplifier's serial #'s here:

"MASTER AMP"

"SLAVE AMP"

**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**