

Practice Safe Sound!

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.

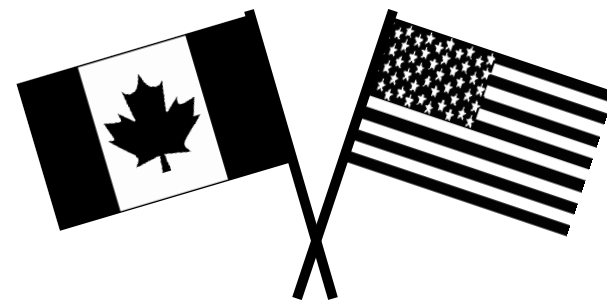
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Ride Alert
Arrive Alive!

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HOGTUNES

Audio Solutions For The Great American Cruiser



Designed and Engineered in Canada For
The Great American Cruiser

Ultrasound[®] Rear Speaker Kit Installation Manual

For Use on 1998 and Newer Harley Davidson[®]
Motorcycles with Original Equipment
Radios, and King Tour-Paks[®]

**Hogtunes “Road Glide Adaptor Kit”
Required For Road Glide Models*

Version 1.2

Thank-you for choosing the Hochtunes Ultrasound® 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@hochtunes.com, or call us during regular business hours (EST) at 705-719-6361. If you still need help, please consider a professional installation by your motorcycle dealer.

Important: The Ultrasound® kit always has the amplifier power the front speakers, and has the built in radio power run the rear speakers.

Whenever installing this kit, model #0914 or 914.2 speakers (as supplied) **MUST** be mounted in the fairing. Depending on the model year factory radio you have, you have a couple of options for rear speakers.

For Radio Sound® Radios (Pre-2006):

- 1) Use your stock front speakers in the rear speaker pods
- 2) Use Hochtunes speakers for 98-05 bikes for the rears (Best Option)

Important: Never Use 2 ohm speakers with the Radio Sound® Radio

For Harman Kardon® Advanced Audio Radios (2006+):

- 1) Use your stock (2 ohm) speakers in the rear speaker pods
- 2) Use Hochtunes 2 ohm speakers for the rear speakers (Best Option)

The Advanced Audio radio is designed for a 2 ohm speaker. Since the radio powers the rear speakers, using a 4, 6, or 8 ohm in the rears is OK, but will typically not play loud enough to balance with your front speakers.

The Hochtunes Road Glide Adaptor Kit is required for installation on Road Glides. Please see your dealer.

Please take a moment to identify all the included components.

- 1 ea. Hochtunes USA 24.2 Motorcycle Amplifier
- 1 ea. Main Wire Harness
- 1 ea. Small “Take Off” Wire Harness for Rear Speakers
- 1 pr. Hochtunes Rear Speaker “Pods”
- 1 pr. Hochtunes Speakers (Shipped Pre-Mounted in Pods)
- 1 pr. Hochtunes Grills (Shipped Pre-Mounted in Pods)
- 1 ea. Assorted Parts (nuts, bolts, washers, zip-ties, etc)
- 2 ea. Hochtunes Helmet Stickers

What Is Not Covered:

- 1) Any expense related to the removal or re-installation of Hochtunes products.
- 2) Repairs to these products performed by anyone other than Hochtunes.
- 3) Subsequent damage to any other components.
- 4) Any product purchased from a non-authorized Hochtunes dealer.
- 5) Damage to Hochtunes products due to an accident or collision.
- 6) Hochtunes Amplifiers with broken or removed “warranty void” stickers.

Technical Specifications:

Hochtunes USA 24.2 Amplifier

RMS Power at 4 Ohms:	>24 watts/Channel
Max Current Draw:	< 4.5 Amps
Freq. Response:	40hz-18khz
Efficiency:	>60%
Fuse:	7.5 amp
Amp (only) weight	450 grams (1lb.)

Hochtunes Speakers

Power Handling:	45 RMS-90 Peak
Frequency Response:	55hz-21Khz
Sensitivity :	90 db 1watt/1meter
Nominal Impedance:	5.75 Ohms

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Mounting The Pods:

The speakers and grills need to be removed from the pods.

Hold each pod up to the bike, finding where you want to mount them, making sure nothing on the bike will be impeded, such as, but not limited to closed lids, back rests, racks etc. Using a drill bit, nail or something similar through the small holes on the back of the pod, make drill marks (scratches) in the tour-paks paint. Drill pilot holes with a 1/8”(3mm) bit, then enlarge each hole on the tour pak and the pods to 5/16”(8mm). Attach the pods using the supplied nuts, bolts and washers. Putting the nuts inside the pods allows tour pak liners to fit! Note: Before drilling any holes, having an extra hand, or using double sided tape you can get back off without paint damage may help the pods end up right where you want them! The 1” (25mm) washers in the kit allow you to enlarge holes in tour pak or pods for final adjustment if needed. These large washers will “hide” adjustments.

Once the pods are mounted to your satisfaction, locate the small 4 pin take off harness with 2 pairs of black wires, and plug into the main wire harness . There is a “slice” in each pods lower side where the wires are meant to pass through to the speaker. Run the shorter of the 2 wires into the brake side pod, and the longer one behind the seat/under the backrest, and into the clutch side pod. Once you are confident the wires are correctly attached to the speakers, sit them in place, put the grills back on, and secure the speakers by reinstalling the 4 screws per “pod”. Note: The small hole on the bottom of each pod acts as a drain.

Turn the stereo on, and test to make sure all 4 speakers are working. The rear speakers will turn on immediately, and the fronts will turn on after the amplifier delay of about 2 seconds. Re-install the fairing. Note: Sound quality is best with the fairing mounted and secured on the bike.

Adjusting the Bass Levels: The Ultrasound® Amplifier yields HUGE bass due to the MaxxBass® feature. MaxxBass® gives so much bass, it is recommended that the bass control on the radio be TURNED DOWN. On Radio Sound® radios, between 5-6 “bars” is all that is needed on the bass level screen. On Harman-Kardon® radios, 4-5 bars 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. Hogtunes Amplifiers are warranted for 1 year from original purchase date. Proof of purchase is required for all warranty claims. 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.

Getting Started:

Remove the seat, and both wires (+ and -) from the battery.

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.

Take the 2 wires off each front speaker by gently pulling one at a time. Undo the screws that attach each speaker/grill assembly to the inner fairing and remove. Pull the stock speaker out of each grill assembly.

“Clip” the supplied Hogtunes speaker into each grill assembly. Position your new speaker/grill assembly onto the inner fairing, and re-attach each one using the OE screws. A hand driven tool is suggested for this.



Diagram 1.1 (Classic Models/”Batwing” Fairings)

Mounting the amplifier: Road Glide Models refer to the RG Adaptor Kit manual. All other models: The amplifier gets mounted to the top of the factory radio using the supplied adhesive, and must sit so you can read the text on top of the amplifier as in diagram 1.1 .The amplifier needs to mount as far back on the radio as possible so the fairing can go back on. The minimum distance from the back of the radio to the most forward edge of the amplifier is 5/8” (15mm). On 98-05 bikes, you can lift the large wire harness under the speedometer and tachometer to give the amplifier more clearance. On pre-2006 model bikes, it is a tight fit—but will go. Advanced Audio (2006+) radios have a “bump” on top of the radio that runs from front to back down the center of the radio. Cut the adhesive in half and apply each piece on either side of this bump. The amp will then mount flush. Most adhesives work best at room temperature or higher. Note: Using the supplied adhesive is a suggestion only. Fabricating a rigid mount MAY be better and is at the sole discretion of the person installing this kit.

Wire Color Codes:

<u>Yellow/Black:</u>	Clutch Side Amplifier Input From Factory Radio
<u>Brown/Black:</u>	Clutch Side Amplified Output to Front Speaker
<u>Green/Black:</u>	Brake Side Amplifier Input From Factory Radio
<u>Blue/Black:</u>	Brake Side Amplified Output to Front Speaker
<u>Orange:</u>	Remote Turn On Lead
<u>Red:</u>	12v Positive--Attaches Directly to "+" Battery Post
<u>Black:</u>	12v Negative--Attaches Directly to "-" Battery Post
<u>4 Pin Connector:</u>	Re-routes Radio Power to Rear Speakers

Wiring the Amplifier:

Plug the 2 connectors of the main wire harness into "Power" and "Audio Input/Output" on the amplifier. Tighten (snug) the 2 small flathead screws on the power connector to prevent it from backing out.



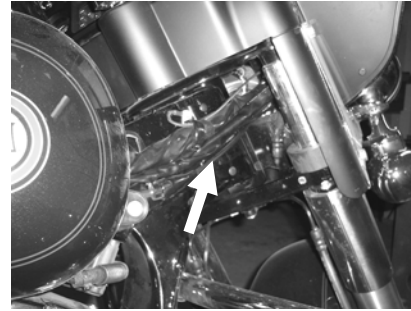
Locate the yellow/black pair of wires with the male connectors. Unplug the factory speaker wires on the clutch side of the bike and plug the yellow/black wires in to those. They will only go in one way. Locate the brown/black pair of wires and plug them directly onto the clutch side speaker--again--they will only go on one way.

Locate the green/black pair of wires with the male connectors. Unplug the factory speaker wires on the brake side of the bike and plug the green/black wires in to those. Locate the blue/black pair of wires and plug them directly onto the brake side speaker.

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 main wire harness: For 98-06 bikes, the balance of the main wire harness will pass under the inner fairing where the throttle and idle cables pass through on the brake side of the bike. The harness is designed to be routed between the frame backbone and gas tank on the brake side of

the bike ,and come out just behind the gas tank. You MAY need to undo the back bolt of the gas tank and pivot the tank up to allow the harness to pass through at the back of the gas tank. Be sure to re-install this bolt and torque to factory specs! For 07+ bikes, 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 tanks "chrome 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.



Stock Harness and Ultrasound® Main Harness Passing From Fairing To Under Tank. Note: 98-06 Bikes: Harness will pass over front gas tank mount/bolt. Wrapping "rings" on power/ground wires with tape is a good idea when running harness to avoid scratching paint!

Secure the amplifiers harness to the bikes factory harness' using zip ties. When correctly installed, the power and ground wires are the right length to connect onto the battery, and the remaining 4 pin harness is the right length to be zip-tied to the brake side fender strut. Be sure to run the 4 pin harness UNDER the air line for the brake side rear shock.

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. Note:The amplifier takes about 2 seconds to turn on.

Take minute to "clean up" and secure all the amp wiring using zip-ties. To make for a really clean install, you may use this time to re-route some of the amplifiers wires within the fairing.

IMPORTANT: With all wires properly secured, turn the front wheel to each extreme side, making sure that any wires cannot bind or impede the steering of the motorcycle. Failure to do so can cause an accident resulting in serious injury or death!

On the clutch side of the amplifier is the amp level. Adjusting the amp level sets the "balance" between front and rear speakers. It is recommended that you start with the level at "0" and turn up (+3)or down (-3) if desired. 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.