

HOGTUNES

Audio Solutions For The Great American Cruiser



NCA 70.2

**REV SERIES 140 WATT 2-CHANNEL AMPLIFIER
INSTALLATION MANUAL**

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INTRODUCTION

Thank you for choosing the Hogtunes NCA-70.2 Amplifier. 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.

All the required harnesses are included for powering front speakers, lowers speakers, or rear speakers. Please note that you WILL have left over harnesses when done! Do not cut any wires—follow the instructions. Wires left in the bike that are not currently used will be required if you want to expand your system later on.

The NCA 70.2 is rated for 70 watts per channel using 2 ohm speakers, at 14.4volts at 1% Total Harmonic Distortion (THD). Although this amplifier makes its highest power with 2 ohm speakers, if Hogtunes 5.75 ohm speakers, or 4 ohm car speakers are used, there will still be a noticeable improvement in volume and sound quality.

If you are not using Hogtunes speakers, chances are the speaker connectors are not the same as stock. If you need to change connectors, please note that on all Hogtunes products, the smaller connector (black wire) is positive (+).

If you are replacing a Hogtunes USA 24.2 you can use the existing 24.2 power harness as long as you change the fuse at the battery to a 15 amp. Locate and cut the “zip tie” that holds the 24.2 power and main audio in/out plug together. Remove the 24.2 audio in/out harness and continue with the NCA 70.2 installation

Adjusting Your System--Please Read!

In order to make your new system perform as good as it was designed, please take a minute to understand and follow these tips:

- 1) Set your "Automatic Volume Control" (AVC) to 3 bars. After extensive on road testing, we found that this AVC position works and sounds best. Your new amplifier has been specifically set-up for this radio setting.
- 2) Your Hochtunes system is designed specifically for a motorcycle at speed. Exhaust noise and wind noise have been taken into careful consideration in how your system performs. How your new system sounds in a driveway or garage is radically different from how it will sound at highway speeds. Although your system was set-up with a factory radio with its bass and treble controls in the middle position, if you feel the need to make adjustments, please do so (carefully) at your normal cruising speed.
- 3) If you have an aftermarket car radio on your bike, everything will work fine, but please remember that car radios are designed to work in an environment with little or no exhaust or wind noise. Many car radios have "features" such as equalizers, loudness contours, surround effects, etc., all designed for a quiet environment, and all of which will hurt your ability to hear your motorcycle system at speed if left on. Please take a minute and turn as much of these "features" off. With a car radio in your bike, the only adjustments you should be able to access for best performance are volume, bass, treble, balance, and fader.
- 4) If your using an external device to supply music through the radios aux port, we have an article on our website that can help make your peripheral audio device sound as good as it can. The article is at http://www.hochtunes.com/techzone_files/Level_matching.pdf



A video version of this manual is available at www.hochtunes.com. If you still need assistance, please consider a professional installation by your motorcycle dealer.

Hochtunes Contact Information

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MOUNTING CONSIDERATIONS/ REQUIRED ADAPTOR KITS

Depending on your model of bike, or what you have for an existing system, you may need a Hochtunes Amplifier Adaptor Kit.

If you have a Standard, EG Classic, Street Glide, or Ultra, and this is the only Hochtunes amp in the system, the amp will adhere to the top of the radio using the supplied "hook and loop adhesive. No adaptor needed.

If you have a Standard, EG Classic, Street Glide, or Ultra, and this will be the 2nd amp in the system, Hochtunes "2CHSP" (Drag Specialties Part # 4405-0234) is required. This kit bolts into your fairing, and locates the NCA 70.2 between the radio and brake side speaker. Please do not continue the install until you have the required parts. 2CHSP can also be used if you prefer not having an amplifier sit on top of the radio.

If you have a Road Glide or Road Glide Ultra, Hochtunes has 2 different RG Adaptor kits, and you will need one of them. If you don't not have the adaptor you need, please do not continue the install until you have the required parts.

- 1) If this is the only amp in the system, or, if you already have a Hochtunes NCA 40.4 and are adding to the system, you will need Hochtunes RG Adaptor Kit (Drag Specialties Part # 4405-0096) which bolts the amp to the main studs that attach the inner fairing to the frame of your bike.
- 2) If you already have a NCA 70.2 in the bike, it should be mounted to a plate attached to the main studs that hold the inner fairing to the frame of your bike. The second amp will bolt in using Hochtunes RG 40.4 Adaptor kit (Drag Specialties Part # 4405-0232) This will locate the second amp off to the extreme brake side of the inner fairing.

If required, please have the amplifier mounted to the appropriate adaptor (but not to the bike yet) before continuing with the install. If you do not have the required adaptor, please consult your retail dealer.



Figure 2.2

In most cases, NCA 70.2 will be mounted on Hochtunes RG Adaptor kit (Drag #4405-0096) as shown in Figure 2.2



Figure 2.3

For bikes with dual NCA 70.2's, 2nd amp will be mounted on Hochtunes RG40.4 Adaptor kit (Drag #4405-0232) as shown in Figure 2.3

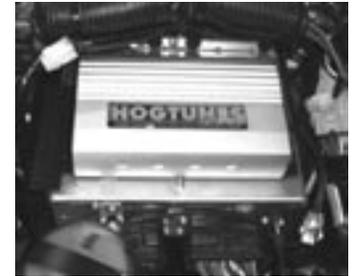
Front Speakers

**BEFORE PROCEEDING, PLEASE MAKE SURE
YOU HAVE READ THE INTRODUCTION, SYSTEM
ADJUSTMENT, AND MOUNTING SECTIONS**

FRONT SPEAKERS (AND TWEETER POD IF PRESENT)

- 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. Expletives will also be kept to a minimum!
- Step #3: Locate the bag with 3 separate harnesses. It has the amps power harness (red, black, and orange wires with a 3 pin green plug), input harness (ending in an 8 pin white plug), and a front out harness (4 pin black plug with blue/black, and brown/black wires). Plug the power harness into the amp, and make sure to secure the screws to prevent the harness from backing out while riding. Plug the input harness into the amp where it says "Audio Input/Exp. Port". Plug the 4 pin output harness into "Amplified Output" on the amp.

- Step #4a: Mounting the amp For Standards, Street Glide, EG Classic, and Ultra Classic- If this is the only amp in the system, the amplifier gets mounted to the top of the factory radio using the supplied "hook and loop" 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 pre-2006 model bikes, it is a tight fit-but will go. 2006+ (Advanced Audio) 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: 2006 and newer Ultras have the CB module on top of the radio. The amp will adhere on top of the CB module so it is "half on/half off this module as shown in Diagram 1.2. The supplied adhesive is plenty strong for this! The amp can adhere on top of CB and XM modules without issue.



*Diagram 1.1
No CB/XM Module Present*



*Diagram 1.2
Shown mounted on top
of CB Module*

If this is the 2nd amp in the system, mount the amp to the Hogtunes 2CHSP plate and install in your bike.

Step #4b: Mounting the amp For Road Glide or Road Glide Ultra – The amp will mount to the plate and the plate will mount to the bike as per the plates instructions. NOTE: Use the harnesses that come in this kit and NOT the harnesses that come as part of your RG adaptor kit.

WIRING THE AMPLIFIER

Step #1a: If this is the only amp in the bike. On the audio input harness, locate the yellow/black pair of wires with the male connectors. Un plug 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. Also on the audio input harness, locate the green/black pair of wires with the male connectors. Un plug the factory speaker wires on the brake side of the bike and plug the green/black wires in to those. Note: The blue 4 pin plug with black wires on the input harness is an “expansion port” which used to send music to a second amp, or is used to send radio power to run other speakers on the bike. You can see how the expansion port can be used further on in this manual.

Step #1b: If this is the 2nd amp in the bike and the “1st” amp is a Hogtunes NCA 40.4. Locate the Blue plug with red/black, and white/black wires on it, and plug this into the “bypass out” (also a blue plug) on the side of the NCA 40.4. Take the white/black wires on the bypass plug, and plug them into the yellow/black wires on the input harness of the NCA 70.2. Take the red/black wires on the bypass plug, and plug them into the green/black wires on the input harness of the NCA 70.2.

Step #1c: If this is the 2nd amp in the bike and the “1st” amp is also a Hogtunes NCA 70.2. Locate the Blue plug with red/black, and white/black wires on it, and plug this into the expansion port (also a blue plug) located on the input harness of the “1st” NCA 70.2. Take the white/black wires on the bypass plug, and plug them into the yellow/black wires on the input harness of the NCA 70.2 your now installing. Take the red/black wires on the bypass plug, and plug them into the green/black wires on the input harness of the NCA 70.2 your now installing.

Step #2: Earlier in the install, you located the black four pin plug with the blue/black and brown/black wires on it, and plugged it into the “amplified output” on the amp. The blue/black wires will plug directly to the speaker on the brake side of the bike. The brown/black wires will plug directly to the speaker on the clutch side of the bike.

Step #3: 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 factory 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. Important: If you do not attach the orange wire from the amp to the center wire at the cigarette lighter, the amplifier will not turn on. If the factory fuse for your cigarette lighter is blown, and your cigarette lighter does not work, your amplifier will not turn on.

Step #4: **Routing the power harness -For Standards, Street Glide, EG Classic, and Ultra Classic**

For 98-06 bikes, the power 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 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. 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. Proceed to Step #6.

Step #5: **Routing the power harness - For Road Glide or Road Glide Ultra**

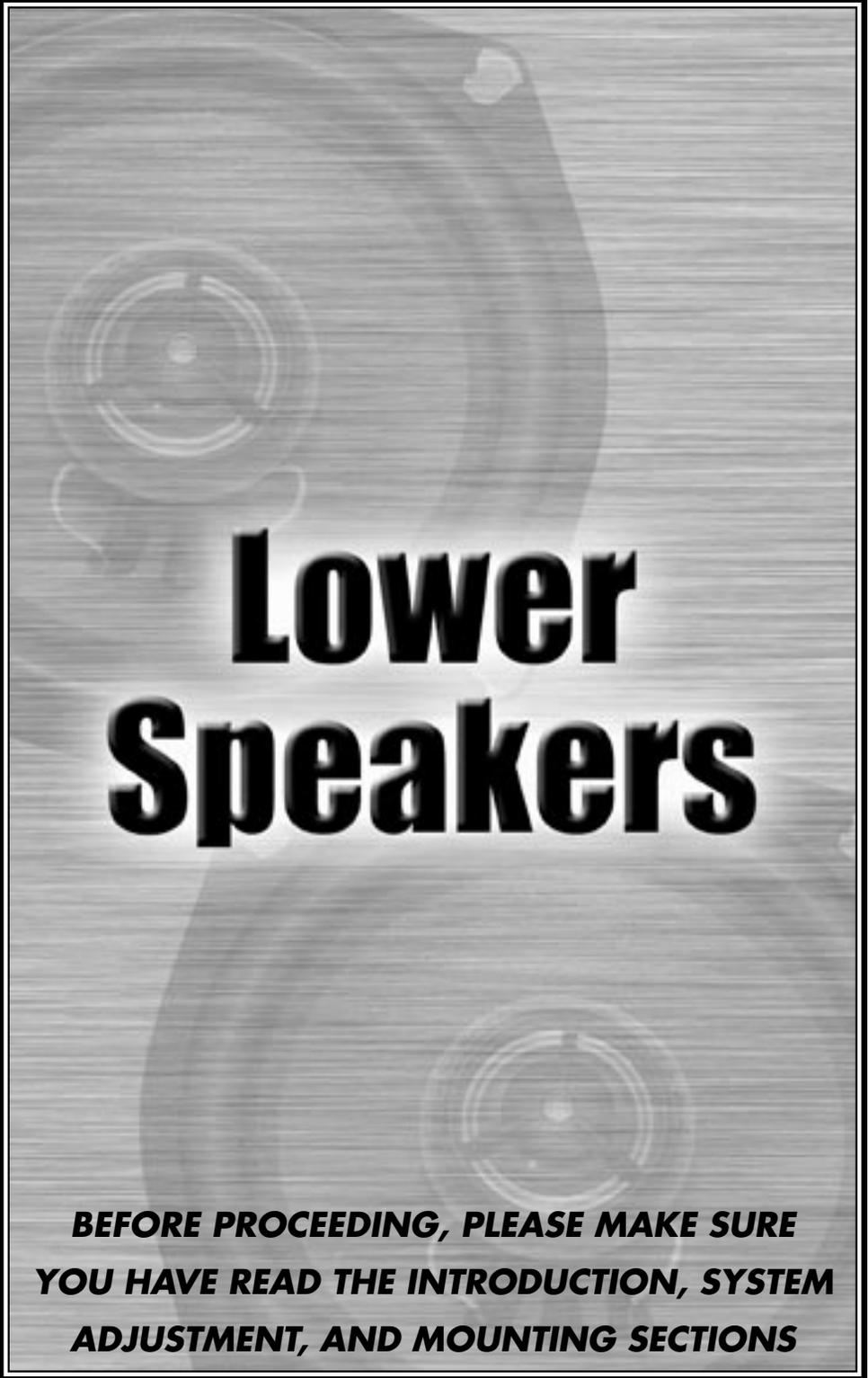
On the brake side of the bike, in front of the gas tank, on the side of the frames backbone, you will see a rectangular opening where a large wire harness, (and throttle/idle cables on 98-07 bikes) pass through from the fairing side of the bike. The red and black wires for the amp will pass from the fairing side through the large opening under the radio, and through the rectangular opening. Take the rubber cover off the fuse holder, and remove the fuse, the fuse holder will pass through the rectangular opening much easier. Be sure to replace the fuse!! "Fishing" a small piece of wire through this opening first, taping the red and black wires to the fish, and then using the fish to feed the wires through may reduce install time! 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, 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. Secure the amplifiers harness to the bikes factory harness' using zip ties. Proceed to Step #6.

Step #6: 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.

IMPORTANT: With all wires 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 side of the amplifier is the amp level switch. The switch has 3 positions labeled -3, 0, and +3. If only 2 speakers are used, put the amp to the +3 position. If the expansion port has been used to power additional speakers, use the switch to set the "balance" between the amplified fairing speakers, and additional speaker powered by the radios built in power. If you have a dual amp system, you can use the switches on each amp to balance the level of sound to each set of speakers as a means to tailor the sound to your liking. In a multi amplifier system, this gives you AWESOME flexibility!

Last but not least—please go back to page 3 and read the "adjusting your system" section. You just spent a bunch of time getting the amp in so please take a minute and adjust your system so it works as well as we know it should!



Lower Speakers

BEFORE PROCEEDING, PLEASE MAKE SURE YOU HAVE READ THE INTRODUCTION, SYSTEM ADJUSTMENT, AND MOUNTING SECTIONS

LOWER SPEAKERS

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. Expletives will also be kept to a minimum.

Step #3: Locate the bag with 3 separate harnesses. It has the amps power harness (red, black, and orange wires with a 3 pin green plug), input harness (ending in an 8 pin white plug), and a front out harness (4 pin black plug with blue/black, and brown/black wires). Put the 4 pin black plug from this bag aside. It will not be used in this installation. Plug the power harness into the amp, and make sure to secure the screws to prevent the harness from backing out while riding. Plug the input harness into the amp where it says "Audio Input/Exp. Port". There is another harness bag marked "lowers". At one end of that harness is a black plug with 4 wires. Plug that into "Amplified Output" on the amp.

Step #4a: Mounting the amp For Standards, Street Glide, EG Classic, and Ultra Classic If this is the only amp in the system, the amplifier gets mounted to the top of the factory radio using the supplied "hook and loop" 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 pre-2006 model bikes, it is a tight fit—but will go. 2006+ (Advanced Audio) 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: 2006 and newer Ultras have the CB module on top of the radio. The amp will adhere on top of the CB module so it is "half on/half off this module as shown in Diagram 1.2. The supplied adhesive is plenty strong for this! The amp can adhere on top of CB and XM modules without issue.

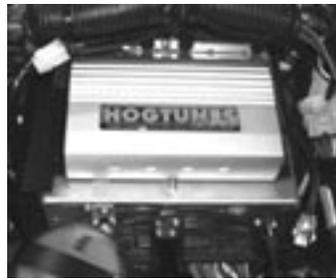


Diagram 1.1
No CB/XM Module Present



Diagram 1.2
Shown mounted on top
of CB Module

If this is the 2nd amp in the system, mount the amp to the Hogtunes 2CHSP and install in your bike.

Step #4b: Mounting the amp For Road Glide or Road Glide Ultra – The amp will mount to the plate and the plate will mount to the bike as per the plates instructions. NOTE: Use the harnesses that come in this kit and NOT the harnesses that come as part of your RG adaptor kit.

WIRING THE AMPLIFIER

Step #1a: If this is the only amp in the bike. On the audio input harness, locate the yellow/black pair of wires with the male connectors. Un plug 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. Also on the audio input harness, locate the green/black pair of wires with the male connectors. Un plug the factory speaker wires on the brake side of the bike and plug the green/black wires in to those. Locate the Blue plug with red/black, and white/black wires on it, and plug this into the "expansion port" which is the empty (also blue) plug on the input harness. Take the white/black wires on the expansion port plug, and plug them directly to the clutch side front speaker. Take the red/black wires on the expansion port plug, and plug them directly to the brake side front speaker.

Step #1b: If this is the 2nd amp in the bike and the "1st" amp is a Hogtunes NCA 40.4. Locate the Blue plug with red/black, and white/black wires on it, and plug this into the "bypass out" (also a blue plug) on the side of the NCA 40.4. Take the white/black wires on the bypass plug, and plug them into the yellow/black wires on the input harness of the NCA 70.2. Take the red/black wires on the bypass plug, and plug them into the green/black wires on the input harness of the NCA 70.2.

Step #1c: If this is the 2nd amp in the bike and the "1st" amp is also a Hogtunes NCA 70.2. Locate the Blue plug with red/black, and white/black wires on it, and plug this into the expansion port (also a blue plug) located on the input harness of the "1st" NCA 70.2. Take the white/black wires on the bypass plug, and plug them into the yellow/black wires on the input harness of the NCA 70.2 your now installing. Take the red/black wires on the bypass plug, and plug them into the green/black wires on the input harness of the NCA 70.2 your now installing.

Step #2: Earlier in the install, you located the black four pin plug as part of the lower harness, and plugged it into the “amplified output” on the amp. You will see two-2 pin black connectors that are heat-shrunk together. This heat-shrunk pair is designed to sit on top of the bikes crash bar, and sit in the center of the bar. From this connector, the appropriate wires will split off to clutch side and brake side.

Getting the wires into your lowers (vented lowers 2005+) Looking from the front side of lower, locate the flat plane approx. 1” towards the motor, directly across from the lower bolt hole for the fairing cap just removed. Drill a 1/8”(3mm) pilot hole in the center of this plane, then a final 5/16”(8mm) hole-you will go through 2 layers. The wires that go into lowers are marked clutch side and brake side. Pass wire into glove box. (large connector first) The sticker can be removed to fit through the hole if needed. Pull up any slack into the glove box so that wire will go along crash bar, making sure to keep quick release plugs in the center. Using the supplied black “gummy” material, seal the hole around the wires inside the glove box.

Step #3: The orange wire on the power harness is the “remote turn on lead” and tells the amp to turn on whenever it sees +12v (.5 amp min.). Unplug the factory 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. Important: If you do not attach the orange wire from the amp to the center wire at the cigarette lighter, the amplifier will not turn on. If the factory fuse for your cigarette lighter is blown, and your cigarette lighter does not work, your amplifier will not turn on.

Step #4a: Routing the power harness -For Standards, Street Glide, EG Classic, and Ultra Classic For 98-06 bikes, the power 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 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. 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.

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.

Step #4b: Routing the power harness – For Road Glide or Road Glide Ultra On the brake side of the bike, in front of the gas tank, on the side of the frames backbone, you will see a rectangular opening where a large wire harness, (and throttle/idle cables on 98-07 bikes) pass through from the fairing side of the bike. The red and black wires for the amp will pass from the fairing side through the large opening under the radio, and through the rectangular opening. Take the rubber cover off the fuse holder, and remove the fuse, the fuse holder will pass through the rectangular opening much easier. Be sure to replace the fuse!! “Fishing” a small piece of wire through this opening first, taping the red and black wires to the fish, and then using the fish to feed the wires through may reduce install time! 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, 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. Secure the amplifiers harness to the bikes factory harness’ using zip ties.

Step #5: 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.

IMPORTANT: With all wires 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 side of the amp is the level switch marked -3, 0 and +3. Using a small flat head screwdriver, you can turn the amp up or down to “balance” between the speakers this amp is powering, and the rest of the speakers on this bike.

Last but not least—please go back to page 3 and read the “adjusting your system” section.

Rear Speakers

BEFORE PROCEEDING, PLEASE MAKE SURE YOU HAVE READ THE INTRODUCTION, SYSTEM ADJUSTMENT, AND MOUNTING SECTIONS

REAR SPEAKERS

- 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. *Expletives will also be kept to a minimum.*
- Step #3: Locate the bag with 3 separate harnesses. It has the amps power harness (red, black, and orange wires with a 3 pin green plug), input harness (ending in an 8 pin white plug), and a front out harness (4 pin black plug with blue/black, and brown/black wires). Put the 4 pin black plug from this bag aside. It will not be used in this installation. Plug the power harness into the amp, and make sure to secure the screws to prevent the harness from backing out while riding. Plug the input harness into the amp where it says "Audio Input/Exp. Port". There is another harness bag marked "rears". At one end of that harness is a black plug with 4 wires and a blue plug with 4 wires. Plug the black one into "Amplified Output" on the amp.
- Step #4a: Mounting the amp For Standards, Street Glide, EG Classic, and Ultra Classic If this is the only amp in the system, the amplifier gets mounted to the top of the factory radio using the supplied "hook and loop" 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 pre-2006 model bikes, it is a tight fit-but will go. 2006+ (Advanced Audio) 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: 2006 and newer Ultras have the CB module on top of the radio. The amp will adhere on top of the CB module so it is "half on/half off this module as shown in Diagram 1.2. The supplied adhesive is plenty strong for this! The amp can adhere on top of CB and XM modules without issue.



Diagram 1.1
No CB/XM Module Present



Diagram 1.2
Shown mounted on top of CB Module

If this is the 2nd amp in the system, mount the amp to the Hogtunes 2CHSP and install in your bike.

Step #4b: Mounting the amp For Road Glide or Road Glide Ultra – The amp will mount to the plate and the plate will mount to the bike as per the plates instructions. NOTE: Use the harnesses that come in this kit and NOT the harnesses that come as part of your RG adaptor kit.

WIRING THE AMPLIFIER

Step #1a: If this is the only amp in the bike and its NOT an Ultra (radio fader does not work). On the audio input harness, locate the yellow/black pair of wires with the male connectors. Un plug 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. Also on the audio input harness, locate the green/black pair of wires with the male connectors. Un plug the factory speaker wires on the brake side of the bike and plug the green/black wires in to those. Locate the Blue plug with red/black, and white/black wires on it, and plug this into the “expansion port” which is the empty (also blue) plug on the input harness. Take the white/black wires on the expansion port plug, and plug them directly to the clutch side front speaker. Take the red/black wires on the expansion port plug, and plug them directly to the brake side front speaker.

Step #1b: If this is the only amp in the bike and it is an Ultra (fader does work) On the Input harness you will need to tape the ends of the individual yellow/black and green/black wires so they do not make contact with anything else. DO NOT cut these wires, as if you want to expand the system later, these wires will be needed!!! Plug the 4-pin blue plug on the rear harness into the blue 4-pin plug on the input harness.

Step #2: The orange wire on the power harness is the “remote turn on lead” and tells the amp to turn on whenever it sees +12v (.5 amp min.). Unplug the factory 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. Important: If you do not attach the orange wire from the amp to the center wire at the cigarette lighter, the amplifier will not turn on. If the factory fuse for your cigarette lighter is blown, and your cigarette lighter does not work, your amplifier will not turn on.

Step #3a: Routing the power and rear speaker harness -For Standards, Street Glide, EG Classic, and Ultra Classic.

For 98-06 bikes, the harnesses will pass under the inner fairing where the throttle and idle cables pass through on the brake side of the bike. The harnesses are 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 wire harnesses 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. 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. Leave the power and ground wires near the battery for now. Continue to step #5.

Step #3b: Routing the power harness – For Road Glide or Road Glide Ultra

On the brake side of the bike, in front of the gas tank, on the side of the frames backbone, you will see a rectangular opening where a large wire harness, (and throttle/idle cables on 98-07 bikes) pass through from the fairing side of the bike. The red and black wires for the amp will pass from the fairing side through the large opening under the radio, and through the rectangular opening. Take the rubber cover off the fuse holder, and remove the fuse, the fuse holder will pass through the rectangular opening much easier. Be sure to replace the fuse!! “Fishing” a small piece of wire through this opening first, taping the red and black wires to the fish, and then using the fish to feed the wires through may reduce install time! 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, 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. Continue to step #5

Step #4: Continue running the rear harness towards the back of the bike making sure it goes UNDER the air line for the rear shocks. When installed correctly, the 8 pin white plug will sit on the brake side rear fender strut. If not already installed, plug in the 8 wire "pigtail" that runs speaker wires into your rear speaker pods. You will see 2 shorter pairs of wires and 2 longer pairs. With your rear speakers/grills removed, run the 2 shorter pairs into the brake side speaker box. The longer 2 pairs will run across the back fender and into the clutch side rear box, and when the install is complete will be pretty well hidden by the passenger backrest.

STEP #6: WIRING THE REAR SPEAKERS

If the bike is an Ultra or RG Ultra (Radio fader works): You will see 2 factory rear speaker wires with female ends. Plug them into the 2 wires on the rear harness with the male ends noting they will only go on one way. The left over 2 wires as part of the amps rear harness have female connectors on them, and will plug directly to the rear speaker. Complete for both side and go to Step #7

If the bike is a Standard, EG Classic, Street Glide or Road Glide (Radio fader does NOT work): The wires inside the rear box with the male connectors are not used, Please leave them inside the rear speaker box. **DO NOT CUT** them, as they may be required if you expand your system later on! The wires with the female connectors on them will plug directly to the rear speakers.

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

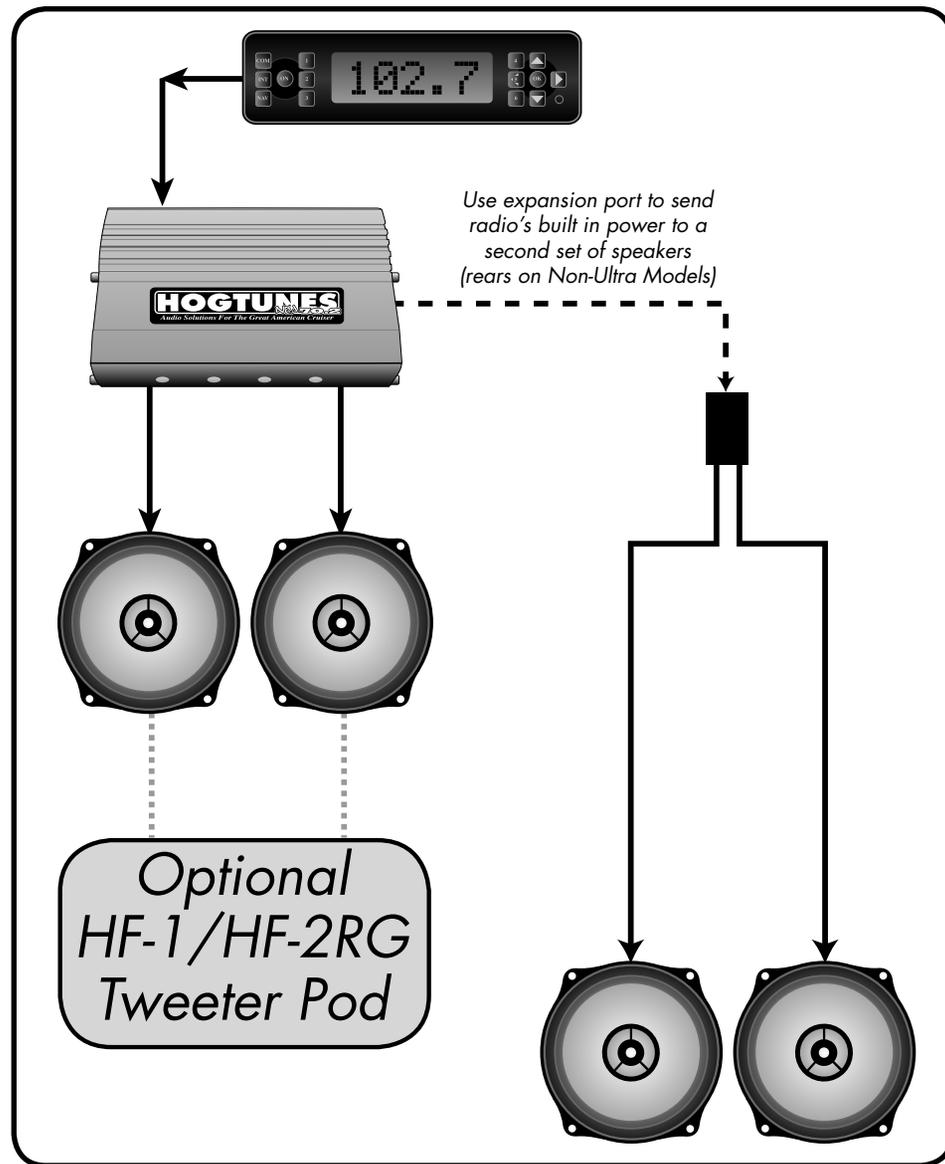
IMPORTANT: With all wires secured, turn the front wheel to each extreme side, making sure that any wires cannot bind or impede the steering of the motorcycle. Failure to do so can cause an accident resulting in serious injury or death!

On the side of the amp is the level switch marked -3, 0 and +3. Using a small flat head screwdriver, you can turn the amp up or down to "balance" between the speakers this amp is powering, and the rest of the speakers on this bike.

Last but not least—please go back to page 3 and read the "adjusting your system" section. You just spent a bunch of time getting the amp in so please take a minute and adjust your system so it works as well as we know it should!

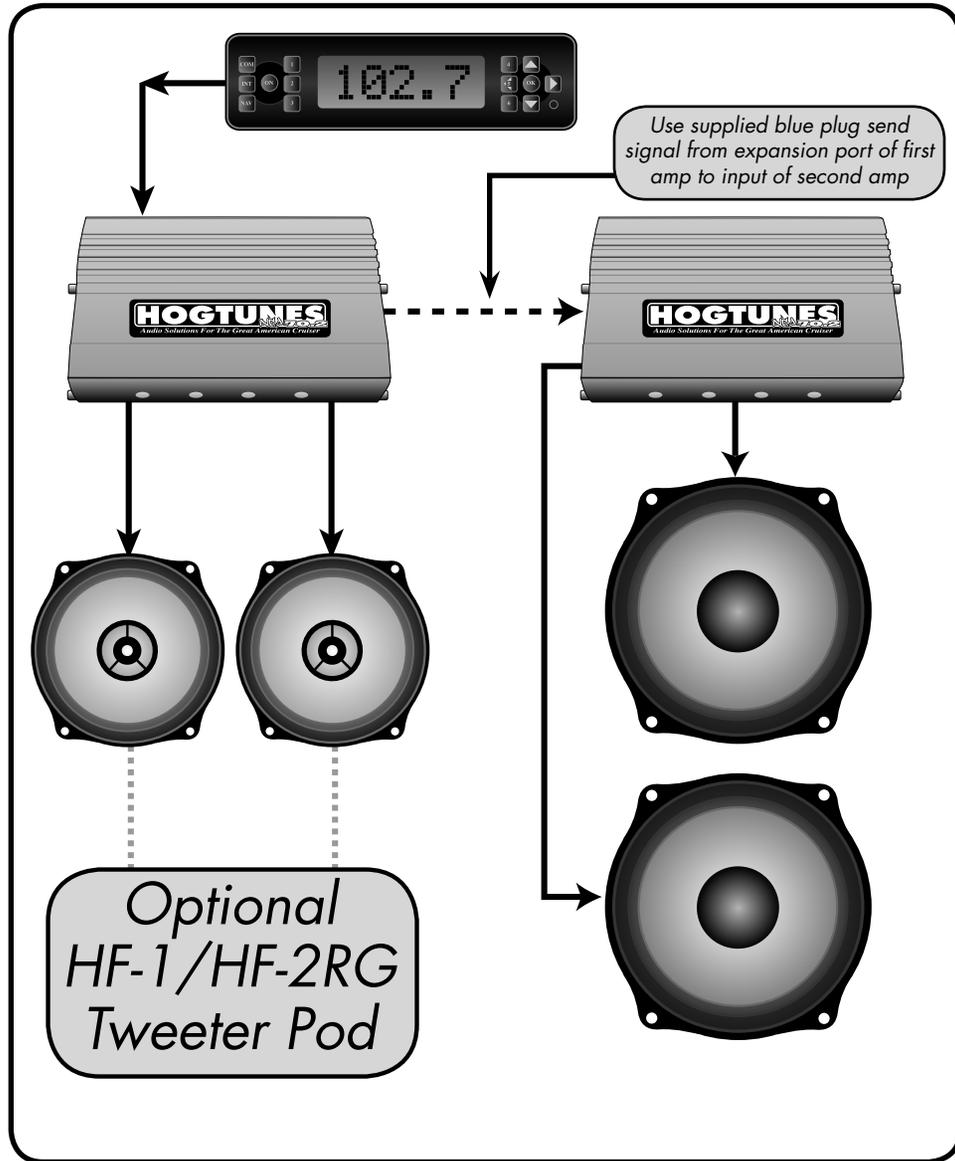
SYSTEM UPGRADE #1

If you're using NCA 70.2 to power front speakers, this system is an easy way to add rear speakers to your bike if you've added a King Tour-Pak®. Hogtunes rear speaker pods come with a wire harness set-up for quick detach tour paks that will plug right into the expansion port on the amp. Important: Since the RADIO power will be used to power the rear speakers, you must use rear speakers specific to your year of bike!!



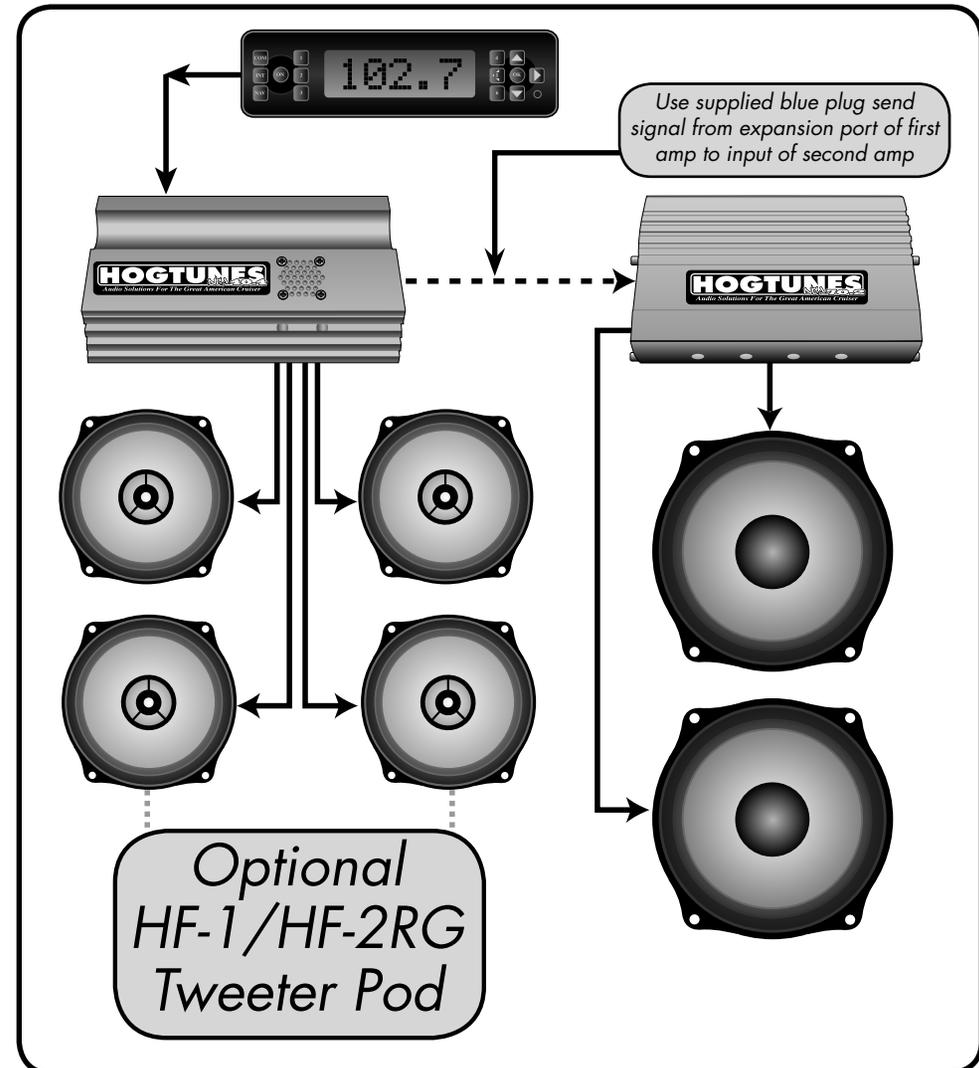
SYSTEM UPGRADE #2

This system has the incredible power of 2 - NCA 70.2 to your bike! The first amp will run the fairing speakers, and HF-1 or HF2-RG Tweeter Pod (if present). The second amplifier is used to power a set of rear speakers, or speakers in your Ultra Classic style fairing lower glove boxes.



SYSTEM UPGRADE #3

This system uses a HOGTUNES NCA-40.4 160 watt 4 channel amp and a NCA 70.2 for the ultimate in power! As shown below, the typical system would have 2 channels of the NCA 40.4 power the fairing speakers, while the other 2 channels power the rear speakers. The bypass out of NCA 40.4 is used to send music to the NCA 70.2 which powers the fairing lower speakers. The beauty of this system is that all plugs that go the speakers are the same. If you decide you would like more amplifier power to your rear speakers, by simply moving a couple of plugs around, you can apply the higher power amp to which ever speakers you like to custom "tune" the system for your requirements.



WARRANTY INFORMATION

Hogtunes speakers are warranted for a period of 20 years to the original purchaser. 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.

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.

TECHNICAL SPECIFICATIONS

Hogtunes NCA-70.2 Amplifier

Rated Power at 2 Ohms:	70 Watts/Channel (@1% THD)
<u>Actual</u> Power at 2 Ohms:	77 Watts/Channel (@1% THD)
<u>Actual</u> Power at 4 Ohms:	> 50 Watts/Channel (@1% THD)
Efficiency:	>66%
Fuse:	15 amp

NOTE: If you are not using Hogtunes speakers, please **BE SURE** the speakers you are using will take the power of this amplifier! Many speaker companies feel they can sell more product by greatly exaggerating their advertised power handling vs. their ACTUAL power handling. Hogtunes does not accept any responsibility for speakers other than ours when NCA 70.2 is installed.

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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.

You are a valued customer so please:

Ride Alert Arrive Alive!

www.hogtunes.com