

## AudioControl LC8i Black 8 Channel Line Output Converter **User Guide**

Home » AudioControl » AudioControl LC8i Black 8 Channel Line Output Converter User Guide The Con



#### **Contents**

- 1 AudioControl LC8i Black 8 Channel Line Output Converter
- 2 AudioControl LC8 TM
- 3 Key Features
- **4 Product Usage Instructions**
- 5 Key Features of The LC8i
- 6 Features and Highlights
- 7 Placement & Mounting of the Dash Control
- **8 Dual Dash Control LEDs**
- 9 Troubleshooting
- **10 THE WARRANTY**
- 11 LC8i SPECIFICATIONS
- 12 Documents / Resources
  - 12.1 References
- **13 Related Posts**



AudioControl LC8i Black 8 Channel Line Output Converter



## **AudioControl LC8 TM**

The AudioControl LC8 TM is an eight channel line output converter with auxiliary input designed to interface with factory installed audio systems. It allows users to connect their external amplifiers and processors to their car's factory audio system, ensuring optimal sound quality.

## **Key Features**

- Auxiliary Source Input: A set of auxiliary RCA inputs for connecting a stereo source such as an iPod.
- 12-Volt Trigger Output: A high current 12-volt output trigger for turning on external amplifiers and processors.
- Summable Outputs: Ability to combine multiple input signals from the factory source unit into two channels.
- Level Matching Controls: Level controls for each pair of channels, allowing users to adjust the signal level from their factory-installed amplifier or source unit.
- Remote Level/Source Control: A unique dash mount control for choosing between the main input and auxiliary input, and controlling the subwoofer output level.
- Bulletproof Warranty: AudioControl products are designed and manufactured in the Pacific Northwest with a focus on quality and longevity.

## **Product Usage Instructions**

- 1. Before using the LC8 TM, read through the product manual to familiarize yourself with its features and capabilities.
- 2. Connect the LC8 TM to your car's factory audio system using the provided wiring harness and RCA cables.
- 3. Connect your external amplifiers and processors to the LC8 TM using RCA cables.
- 4. If desired, connect a stereo source such as an iPod to the auxiliary RCA inputs on the LC8 TM.
- 5. Use the included remote control to choose between the main input and auxiliary input, and to control the subwoofer output level.
- 6. Adjust the level matching controls on the LC8 TM to ensure optimal sound quality.
- 7. If needed, use the summable outputs feature to combine multiple input signals from the factory source unit into two channels.

# Eight Channel Line Output Converter with Auxiliary Input For interfacing with factory installed audio systems

Greetings from the rainforests of the Pacific Northwest. We would like to congratulate you on your purchase of the LC8i; a compact eight-channel, high-performance, line-output converter. This unique product will accept two, four, six or eight channels of speaker-level signal from a factory-installed amplifier or source unit and convert it to a high-quality, low-noise pre-amp signal. It will also accept an auxiliary source so you can integrate an iPod, Satellite Radio, or other source into your system. In addition, the remote of the LC8i allows you to control the volume of the auxiliary input and the Bass Output (Channel 4). Therefore, the LC8i is an ideal OEM interface component. Whether this is your first product from the rainforest dwellers of AudioControl or you are already a firm believer, you will definitely enjoy how great the LC8i can make your performance system sound. Now before you start salivating just thinking about the benefits and all of the nifty applications for your LC8i, take a few minutes to sit back, have a cold beverage, and read through this manual. We always love to hear from our customers, but have tried to answer all of your questions in this manual so it contains lots of useful facts and information — and besides, we spent a lot of time writing it!

## **Key Features of The LC8i**

Here are some of the cool features that your LC8i offers:

- · Eight input and output channels
- Speaker-level inputs can accept 400-watts per channel
- · Auxiliary input for iPod, Satellite radio, or other source
- Dash control for subwoofer level, auxiliary volume and source selection
- Compact size for easy installation
- · Channel summing
- GTO<sup>™</sup> signal sensing inputs (selectable)
- · Level matching controls
- 12 volt trigger output
- · Recyclable cardboard box for easy storage

## Features and Highlights

#### Speaker-Level Inputs

If you are like many people who like the look and features of their fac-tory-installed source unit, but feel your system overall is lacking power and bass, we have good news. The LC8i has high-impedance speaker-level inputs that allow it to accept amplified signals (up to 400 watts per channel) from most factory-installed source units (even Bose) and output a high-quality pre-amp signal via standard RCA connectors. This will allow you to add better-quality amplifiers, processors and speakers while keeping the convenience features of your factory-installed source unit. Unlike inexpensive speaker-level and line-output converters available, the LC8i offers high sound quality.

## **Auxiliary Source Input**

A set of auxiliary RCA inputs connects the audio signal of an iPod or other stereo source into the system through the LC8i. Tapping the in-cluded LC8i remote knob will change from Main input to the Aux inputs and tapping again will change the knob function from subwoofer level control to auxiliary volume control it easy to upgrade with really good-sounding, performance after-market products. One of those key features is a 12-volt trigger that will turn on devices like the LC8i and your external amplifiers. Therefore, we have equipped your LC8i with our unique GTO<sup>TM</sup> (Great Turn On) Signal sensing inputs. Once the GTO<sup>TM</sup> inputs of your LC8i detects a speaker-level signal on its main inputs, it powers up. When the speaker-level signal goes away, your LC8i will automatically turn-off. Optionally, you can defeat the GTO<sup>TM</sup> with an internal jumper and use the +12-volt trig-ger (Remote In) which is

also provided.

it easy to upgrade with really good-sounding, performance after-market products. One of those key features is a 12-volt trigger that will turn on devices like the LC8i and your external amplifiers. Therefore, we have equipped your LC8i with our unique GTO™ (Great Turn On) Signal sensing inputs. Once the GTO™ inputs of your LC8i detects a speaker-level signal on its main inputs, it powers up. When the speaker-level signal goes away, your LC8i will automatically turn-off. Optionally, you can defeat the GTO™ with an internal jumper and use the +12-volt trigger (Remote In) which is also provided.

### **12-Volt Trigger Output**

Since you will be using an external amplifier and processor in your system, you will need the ability to "trigger" or turn-on these devices (a romantic dinner and drinks won't quite work here). Your LC8i has a high current 12-volt output trigger (labeled Remote Out) that will provide a 12-volt output to trigger these remote devices, when the LC8i is powered up. Please note that this output is not to be used as the main power for these devices.

### **Summable Outputs**

The LC8i has the capability to combine together multiple (2, 4, 6, or 8) input signals from the factory source unit into 2 channels. This is particularly handy when using the LC8i with a factory system that has multiple, actively crossed over signals being sent from an OEM source unit or amplifier(s). For example, in some vehicles there is an actively crossed over tweeter, midrange, and woofer all in the front of the ve-hicle. The LC8i lets you take all of those signals and sum them together to get a high quality, full range, pre-amp signal without the use of any additional cables or hardware.

## **AutoMode Inputs**

Sometimes in life (and car audio) we need more outputs than inputs. Therefore we have equipped your LC8i with an AutoMode input that takes the channel 3 (rear) input signal and automatically feeds it to the channel 4 outputs to drive a subwoofer amp and crossover, when there is no signal present on the channel 4 inputs. This means your LC8i will accept two input channels and give you four output channels. Or it can accept four input channels and give you six output channels...or it can accept six and give you eight!! It stops at eight by the way. Option-ally, you can bypass the AutoMode, with an internal jumper, for certain custom installations.

## **Level Matching Controls**

Your LC8i has level controls for each pair of channels. These controls allow you to adjust the signal level from your factory-installed amplifier or source unit to match up with your after-market amplifier or processor. The Auxiliary input also has a level-matching control to balance it with the main inputs.

#### **Remote Level/Source Control**

A very unique dash mount control is provided with the LC8i. This is a multi-function control, and serves to let the user choose between the Main input (factory head unit) and the Auxiliary input (iPod, satellite radio, or other source). The remote also serves to control the Channel 4 (subwoofer) output level. When you are using the Auxiliary input the remote will independently control either the Aux Volume or the Channel 4 (subwoofer) output level.

## **Bulletproof Warranty**

The most important feature of all. Every AudioControl product is selflessly designed and manufactured by the occupants of our factory located in the rainforest of the Pacific Northwest. We take every effort to ensure that you will have many years of enjoyment out of your LC8i. To ensure optimal performance we highly recommend that you allow your authorized AudioControl dealer to perform the installation. Not only do they have all the right knowl-edge and tools, but also in the unlikely chance your LC8i should stop working, we will back it with a limited five years parts and labor war-ranty. Should you choose to install it yourself we will still give you a one-year parts and labor warranty. To activate your warranty, simply go to <a href="https://www.audiocontrol.com">www.audiocontrol.com</a>, click on "Mobile Audio", click on "Warranty Registration" and fill in the form. Quick, easy and no stamp needed.

We also recommend that you save your invoice or sales slip as proof of installation and ownership. Not only is it necessary for warranty purposes, but should your LC8i "walk away" one day while your car is parked at your local latte' stand, you will find insurance companies very unforgiving without proof of purchase.



#### **Quick Installation Information**

For those of you short on time but high on ambition, we offer the fol-lowing section to speed up your installation of the LC8i:

- 1. Physically mount the LC8i in a location that keeps it away from soda spills, food crumbs, and curious fingers. You will want to select a location that allows you access to the level controls. In many cases you can find factory speaker leads in the rear of the vehicle that are easy to access.
- 2. The LC8i needs to be installed in the signal path between your OEM source unit or factory-installed amplifier(s) and an after-market amplifier and/or processor(s). Locate the speaker wires that are coming from your factory source unit and/or amplifier and connect them to the speaker-level inputs on your LC8i. If you will be using an iPod or other auxiliary source you will plug the Aux source into the "Aux In" RCA plugs.
- 3. Connect the Output RCA connectors to cables that run to your after-market signal processors and/or amplifiers. If this is not obvious to you, quickly pack up your LC8i and run to your nearest authorized AudioControl dealer to have them perform the installation. You will thank us later.
- 4. Mount and connect the dash remote in an easy to reach position
- 5. Connect +12 power, ground, and (if applicable), remote turn-on.
- 6. Level match your LC8i to your source unit, signal processor and amplifiers.

**Note:** You will want to turn the gains DOWN on your aftermarket amplifiers to maximize your systems performance and minimize any HISS (or an occasional Boo!)

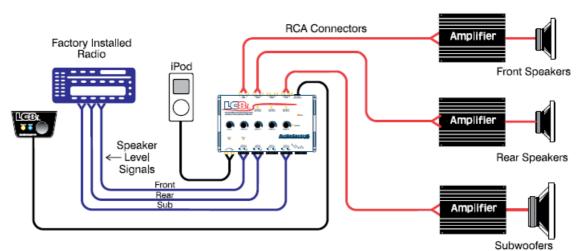
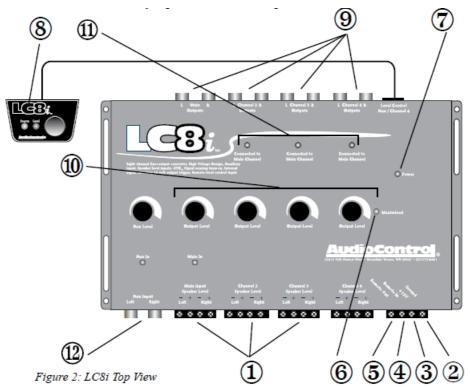


Figure 1: Basic LC8i System

If you need to know more, then read on. Heck, if you don't need to know more, still read on, because you can never know too much. As much as we would like to get your calls and e-mails, most of the answers to your questions are in this manual!

- 1. Speaker-level Inputs: The LC8i has eight speaker-level inputs.
  - These inputs get their signals from the speaker-level outputs of your factory-installed source unit or amplifier. If your source unit has front, rear, and subwoofer speaker-level outputs, connect them to the first three sets of inputs on your LC8i. If the source unit only has front and rear outputs, the Auto Mode circuitry in your LC8i automatically routes the Channel 3 input channels to the (Channel 4) subwoofer channels.
- 2. Ground: Connect to a good, verified chassis ground (the battery comes to mind.) Warning: Factory ground wires typically already have multiple devices connected to them and are not recommended.
- 3. +12V: Power Connect to a good source of 12-volt power (the battery comes to mind again)
- 4. Remote In: In some unusual installations, you may not want to use the GTO<sup>™</sup> to turn on your system. For these cases the LC8i can be turned on remotely with a +12-volt trigger. When you use the +12-volt remote in, you can to set the internal GTO<sup>™</sup> jumper to "Default". This will prevent the car's computer from turning the system on unexpectedly.
- 5. Remote Out: Outputs 12 volts when the LC8i is powered up, so you can turn on external devices like signal processors and amplifiers.
- Maximized Indicator: This brightly colored LED indicates when your signal level is just below clipping your LC8i.
   When properly level matched, this LED should flicker occasionally when your system is playing at its maximum volume level.
- 7. Power: If you have connected all of your power wires correctly, this light should be bright red when your system turns on.
- 8. Remote Source/Level Control: This multi-function dash control allows you to select the input source and set the level of the subwoofer. It also controls the auxiliary input volume. "Source" and "Level" LEDs let you know the status of the controls. See Figure 9: Dash control LEDs for an explanation of LED functions.
- 9. Pre-Amp Outputs: These are the RCA plugs on the output side and should be connected to the next component after the LC8i, such as a signal processor, crossover or amplifier. Do not connect any speakers directly to your LC8i. (Definitely don't connect to any home appliances, like your microwave.)
- 10. Level Controls: These knobs allow you to adjust the signal level from your source unit to match that of your after-market amplifiers. Be-cause they are amplified, most factory-installed source units have relatively high signal voltage output, which will require you to decrease the signal level. There is also an Auxiliary input level control to allow you to balance the auxiliary input with the main input.



- 11. Channel Summed Indicators: Under the cover of your LC8i are jumpers that will allow you to sum selected channels into the main (#1) channels. This is especially useful for factory-installed systems with actively crossed over speaker systems. These indicator LED's let you know which channels are being summed into the main inputs.
- 12. Auxiliary Input: This RCA connection can accept any two-channel audio signal that comes from secondary source devices like an iPod, MP3 player, or Satellite radio. We are told that products like this are get-ting popular. To activate this input, you need to tap the remote mounted dash control and the LC8i will switch between the main inputs and this auxiliary input. An LED indicator on the LC8i chassis will identify which source unit is being used.

## **Under the Covers – Internal Jumpers**

**Output Summing Jumpers:** Allow you to select which input signals will be summed into the Main outputs. When the jumper is in the Summed position, there will also be a corresponding green indicator light on the front of the LC8i. The shipped-from-the-factory setting is in the non-summed (Separate) position.

	Shipped	Options
Ground isolation	Isolated (but not lonely)	200 ohm or Ground
Summing Jumpers	Separate	Summed to Channel #1
GTO™ Turn-on	Engage	Defeat
AutoMode Subwoofer	Engage	Defeat
Aux Input Grounding	Unbalanced	Balanced
Weather	Rainy	Overcast/Snowy

**Ground Isolation Selector:** Occasionally alternator noise may ap-pear in a system because the source unit and amplifier are using different grounding schemes. To help in this situation, we have provided alter-native grounding connections. Make sure your system is turned OFF before you move these jumpers.

GTO™: Some cars can turn on the factory amplifier even if the source unit is off (Alarms, Cell phones, etc). To prevent this from turning your system on unexpectedly, you can bypass the GTO™ circuit by moving the GTO™

jumper, and using an applied 12-volts at the Remote In terminal. Using the jumper may result in some factory features not working fully.

**AutoMode:** Some cars have unusual signals on their speaker leads and will not be read by the AutoMode circuit. When this oc-curs you can manually turn off the AutoMode function. This is done by moving the internal AutoMode jumper to "Defeat". In this mode, you will need signal on the Chan-nel 4 inputs to output signals on the output.

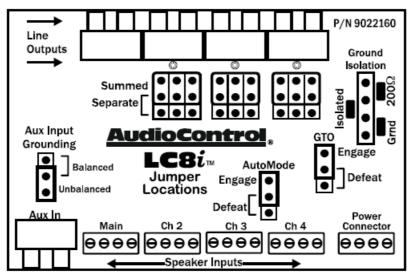
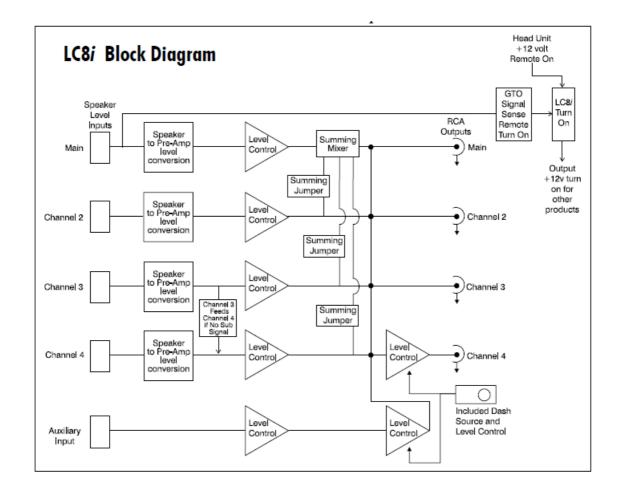


Figure 3: Inside view of LC8i



## **Installing Your LC8i**

By this time we are sure that you are chomping at the bit to install your LC8i. Everything you have read up to this point, has served to educate you on the operations of LC8i. Therefore if you are still with us we recommend you read the following sections very carefully.

## Placement & Mounting of the LC8i

Your LC8i can be physically installed in numerous locations like behind your dashboard, under a seat, or even in the trunk. Since you will be connecting to the speaker wires from the factory source unit or its amplifier(s), you should select a location that is convenient for wiring. Once you have selected a permanent mounting location, position the unit and mark the appropriate mounting holes with a felt-tip pin or scratch awl. Before doing anything else, make sure you are not about to drill a hole in a gas tank or pierce any existing wiring. Nothing ruins your day more than an expensive repair bill. Drill a few small pilot holes and secure the chassis of the LC8i with self-tapping screws.

## **Placement & Mounting of the Dash Control**

## **Placement And Mounting**

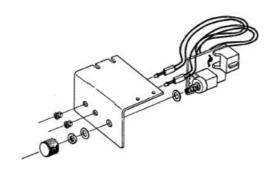
The dash control may be mounted under the dash using its own bracket or through a custom hole in the dash. It should be within reach of the driver and in a spot where the LEDs are plainly visible. We don't want to cause any car crashes

#### **Dash Bracket Installation**

The dash control mounts with two screws, which attach to the under-side of the dashboard. Slide under the dash and place the dash control in its mounting position, mark the two mounting holes, drill pilot holes, and secure with two screws.

#### **Custom Installation**

For that custom, finished look, the dash control can be flush mounted directly on the dashboard (or anywhere else). We have provided an extra label to help make this happen. Referencing Figure 5, disassemble the dash control from the mounting bracket. Start by pushing the LEDs from their holders, then remove the knob (pull off) and the nut holding the ro-tary control and circuit board to the bracket. Remove the control from the bracket. Drill a 9/32 hole in the dashboard for the control along with a 1/8 hole for the lock tab and two 13/64 holes for the LED holders. Reassemble the dash control components on the dashboard and apply the new label over the openings.



#### LC8i Power Wiring

**WARNING:** Failure to disconnect the negative terminal of your battery prior to the installation of your LC8i can result in a warm tingly feeling. (+12V) Positive Connection: Insert a 12 to18 gauge wire into the connector labeled "+12" on the nifty connector of your LC8i. Connect it to a good constant source of 12 volts (we suggest the battery), fused at 2 amps.

**Ground Connection:** Use the same gauge wire as you did for the positive connector and run it from the "Ground" connector on your LC8i to the negative terminal of the battery, a ground bus, or a verified ground location. The factory head unit ground is not a good ground. One; it's usually noisy, and two; it's hard to get to so why bother.

Remote In (optional): Connect a 22 to 18 gauge wire from the source unit's remote turn-on or other trigger to the Remote In connector on the LC8i. As we previously mentioned, your LC8i is equipped with GTO™ signal sensing which allows it turn on when it detects a signal at the front (number 1) speaker-level inputs so you normally will not need to use the "Remote In" circuit.

Remote Out: If you are going to use the LC8i to turn on any external signal processors or amplifiers, connect an

18 to 22 gauge wire from the Remote Out on the LC8i to the remote turn-on of the processors or amplifiers. Depending upon how many you are turning on, you may need to connect this wire to a relay and route 12 volts from another source.

Once the electrical connections are complete, you may reconnect the negative terminal to your battery. (However continue to act positively.)

#### LC8i Audio Wiring

The LC8i needs to be installed in the signal path after your factory source unit or amplifier but definitely before your after-market amplifiers and/or any signal processors. You may already have guessed there are numerous ways to configure the LC8i in your audio system so we recommend you spend a little quality time planning out your system and even sketching it out on paper.

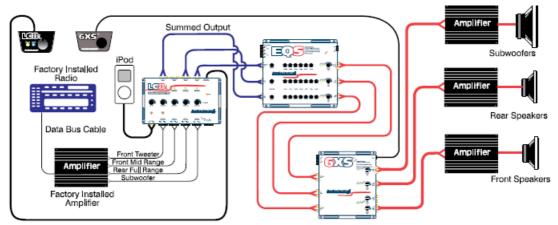


Figure 6: LC8i system using summing functions plus active equalization and crossover

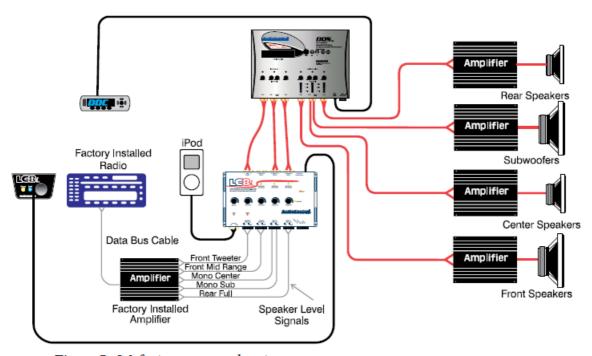


Figure 7: 5.1 factory surround system

#### **Speaker-Level Inputs**

The LC8i is designed to accept an amplified, speaker-level signal from a factory source unit or amplifier. You will want to refer to a factory service manual or wiring-harness schematic to determine which wires are the speaker wires for your system. This information is also available on several car audio web sites for a small fee. If you are unsure which wires are the speaker wires, it is recommended you look at the color of the speaker wire connected to the speakers and follow them back to the fac-tory source or amplifier. Connect the speaker wires to the Speaker-Level Inputs on your LC8i. Make sure to get your "pluses" and "minuses" connected properly.

#### **Pre-Amp Outputs**

Connect good quality RCA connectors from these outputs to the inputs of your amplifiers. While we won't get into the discussion as to whether plutonium cables sound better than un-obtainium cables. We will tell you that well-constructed cables are less problematic in rugged environment like your car system.

## **Summing The Outputs**

Under the cover are connection jumpers that allow the Main outputs of the LC8i to receive signals from the inputs of Channels 2, 3, and/or 4. These jumpers allow you to select which input signals will be summed into the Main output. When one of the jumpers is in the Summed position, the corresponding green indicator light on the front of the LC8i will be lit up. The shipped-from-the-factory setting is in the non-summed (Separate) position. When you have summed several channels together, you will want to make sure the output levels are providing a balanced frequency response. A simple technique involves using a pink noise cd and a real time audio analyzer (AudioControl happens to make a great one!)

- 1. Perform all of the steps necessary to install your LC8i.
- 2. Connect a channel of the Main Outputs from your LC8i to the audio input on your real time analyzer. "Yes" your amplifiers will be discon-nected from the LC8i at this time.
- 3. Start playing pink noise on your cd player and raise the volume level until signal is displayed on your real time audio analyzer (RTA).
- 4. Adjust the input level controls for each pair of channels until your RTA is displaying a smooth or relatively flat response curve.

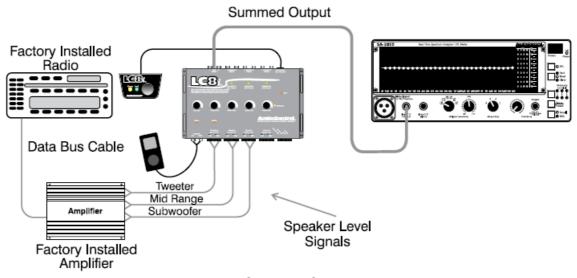


Figure 8: Using an RTA to meaure the summed response

5. If you wish to make any additional frequency response adjustments you may want consider adding an equalizer to your system (we happen to know someone who makes some really good ones).

## **Level Matching**

If you have ever listened to a friend's "killer" car audio system and heard lots of hiss, clicks or pops, then you have probably experienced an improperly level-matched system. When a performance autosound system is properly level matched, you should get the maximum output from your source unit and amplifiers without any clipping or that annoy-ing hiss! The following steps will help you through the process, although at the end of the day, your ears will be your guides!

- 1. Set your source unit's fader and balance controls to their center posi-tions. If your source unit has subwoofer output (and you are using it), set the output level at minimum or fully counter-clockwise.
- 2. Disconnect the RCA cables between your LC8i and the amplifier(s). Otherwise get some earplugs.
- 3. Start playing some relatively dynamic music and set the volume on your source unit to about 3/4 of maximum. You should not be hearing anything at this point. If you are hearing music, go back to step #2; if you are

hearing voices go see a doctor!

- 4. Adjust the output level controls until the "Maximized' light starts to flicker. If the Maximized LEDs do not come on as you adjust, fear not. The signal level from your source unit is probably low so it is not triggering the LEDs.
- 5. Set the input gains on the amplifier(s) at minimum! This is known as turning down your gains.
- 6. Double check that you performed Step #5!
- 7. Decrease the volume control on your source unit and re-connect the RCA's between the LC8i and the external amplifier(s).
- 8. Now increase the volume on your source unit to your normal listen-ing level. For some of you, this may be louder than others!
- 9. At this point you may find yourself going back and adjusting the Output Level controls on your LC8i to balance the front, rear, and sub-woofer sections of your system to accommodate speaker placement and efficiency. Speakers on the rear deck of your car will probably sound louder that the ones in your doors!
- 10. Still need clarification on level matching? Check out the "Tech Videos" on the AudioControl web site.

#### **Dual Dash Control LEDs**

The LEDs on your dash control let you know the status of the control and the source of the sound. With only the orange LED lit you are listen-ing to the main input and the knob will control the subwoofer (Channel 4) output. When only the blue LED is lit, you are listening to the Auxiliary input and the knob controls the Aux volume. When both LEDs are lit you are listening to the Auxiliary input and the knob controls the subwoofer (Channel 4). Pressing the knob cycles the control through its functions. See chart below



Figure 9: Dash Control LEDs

## **Troubleshooting**

It is important to remember when installing your LC8i that the engi-neers who work for the car manufacturers don't spend too much time thinking about interfacing after-market products. Therefore you will most likely have to "modify" your traditional wiring and installation techniques when working with these types of systems. Many times traditional 12 volt "turn-on" wires or pre-amp audio signals that you are used to with aftermarket systems don't exist on these newer vehicles.

**No Power:** If the Power LED on your LC8i will not turn on, check to make sure that the power wire is connected or a fuse has not blown, and there is plenty of signal present. Are you using a +12v turn on? If so make sure it has the proper voltage.

LC8i Turns Off Intermittently or Turns On Unexpectedly: If you are using the GTO™ signal sensing to turn on your LC8i yet your system is turning on or off, this may be due to a cellular phone interface or navigation system built in to your factory installed source unit. These are known to stop the audio signal to your source units outputs and to some-times turn on the amplifier even while the audio system is off. In these situations it is recommended that you connect the Remote In terminal on the LC8i to a +12-volt switched wire, and set the internal GTO™ jumper to "Defeat".

**Sounds Distorted:** Should your system sound distorted or your speakers are moving way too much, you should make sure you have your levels matched properly and that your amplifier gains are set at minimum. System Hiss:

Check to make sure that your amplifier gains are set at the minimum level. Possibly revisit "Level Match" instructions on page 10.

**Turn-On Pop or Turn-Off Pop:** This generally occurs when your amplifiers are turning-on or off at a different time than your LC8i. There-fore it is recommended that you use the "Remote Out" on your LC8i to turn your amplifiers on or off and eliminate any timing issues

**Low Output:** Depending on the design of your factory-installed system, you may actually be connecting to a preamp signal instead of a speaker-level signal. Since the LC8i is a line output converter you may need to turn up the gains on the LC8i or consider adding a pre-amp line driver like the AudioControl Matrix to increase the signal level to your aftermarket amplifiers.

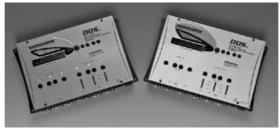
**Maximized LED Does Not Light Up:** If your system is playing music but the Maximized LED is not coming on, there is a good chance that the output voltage of your source unit is not that high. Try increasing the input level controls on the top of your LC8i.

## If You Like the LC8i, You'll Love...

The EQS six-channel equalizer, is the perfect trunk mount processor for those of you who want to improve the sound and detail of your vehicle. Less than ideal factory speaker locations can make even the best speaker systems cry out for help. The equalization controls on the EQS provide you with an ideal amount of tone control to tame even the most challenging acoustical situations.



If you want to add the ultimate in system equalization and are ready to step into the digital domain, than the AudioControl DQS six channel digital equalizer with memories is just for you. The DQS offers six channels of equalization with 30 bands of precise control per channel, for a total of 180 filters.



If you need a crossover for your system that keeps up with your LC8i, the 6XS is a 6-channel, 3-way crossover with breathtakingly steep 24dB-per-octave slopes. If performance is important to you, then you will appreciate the 6XS. Of course if you are just looking for deeper, chest-thumping bass, then The Epicenter, our patented (U.S. patent # 4,698,842) bass restoration processor, is just the hot ticket. It puts the woof back in your woofers!



And now a word from the legal department...

People are scared of warranties. Lots of fine print. Months of waiting around. Well, fear no more, this warranty is designed to make you rave about us to your friends. It's a warranty that looks out for you and helps you resist the temptation to have your friend, ...who's "good with electronics", try to repair your Audio-Control product. So go ahead, read this warranty, and then take a few days to enjoy your LC8i before visiting our website and posting your comments.

"Conditional" doesn't mean anything ominous. The Federal Trade Commission tells all manufacturers to use the term to indicate that certain conditions have to be met before they'll honor the warranty. If you meet all of these conditions, we will warrant all materials and workmanship on your LC8i for one year from the date you bought it (five years if it is installed by an authorized United States Audio Control dealer). We will fix or replace it, at our option, during that time.

Here are the conditional conditions:

- 1. You have to visit our website and register your information within 15 days after purchasing your LC8i.
- 2. You must keep your sales receipt for proof of purchase, showing when and from whom the unit was bought. We're not the only ones who require this, so it's a good habit to get into with any major purchase.
- 3. Your LC8i must have originally been purchased from an authorized Au-dioControl dealer. You do not have to be the original owner, but you do need a copy of the original sales slip.
- 4. You cannot let anybody who isn't (A) the AudioControl factory; (B) some-body authorized in writing by AudioControl to service your LC8i. If anyone other than (A) or (B) messes with your LC8i, that voids your warranty.
- 5. The warranty is also void if the serial number is altered or removed, or if v has been used improperly. Now these sound like big loopholes, but here is all we mean by it.

  Unwarranted abuse is (A) physical damage (don't use the LC8i for a jack stand); (B) improper connections (120)
  - volts into the power jack can fry the poor thing); (C) sadistic things. This is the best mobile product we know how to build, but if you mount it to the front bumper of your car, something will go wrong.
- 6. If an authorized United States AudioControl dealer installs your LC8i, the warranty is five years, otherwise the warranty is one year.
  - Assuming you conform to 1 through 6, and it really isn't all that hard to do, we get the option of fixing your old unit or replacing it with a new one.

Validate your warranty: Visit <a href="http://audiocontrolregistration.com">http://audiocontrolregistration.com</a> to register your LC8i

## **LEGALESE SECTION**

This is the only warranty given by AudioControl. This warranty gives you specific legal rights that vary from state to state. Promises of how well the LC8i will perform are not implied by this warranty. Other than what we have covered in this warranty, we have no obligation, express or implied. Also, we will not be obligated for direct or indirect consequential damage to your system caused by hooking up the LC8i.

Failure to register warranty information negates any service claims.

## **LC8i SPECIFICATIONS**

All specifications are measured at 14.4 VDC (standard automotive voltage). As technology advances, AudioControl reserves the right to continuously change our specifications, like our Pacific Northwest weather although we are working on it.

- Maximum speaker-level input...... 400 watts per channel @ 4 ohms

Input Impedance	20 Kohms	
Output Impedance	150 Ohms	
Power supplyHigh headroom PWM switching		
Power draw	350mA	
Recommended fuse rating	2 Amps	
Remote trigger max output current	1 Amp	
• Size	8.6"W x 4.75"D x 1.2"	
Weight	3 lbs	

©2009 AudioControl, a division of Electronic Engineering and Manufacturing, Inc. All rights reserved AudioControl, Making Good Sound Better, LC8i, The Epicenter, EQS, 6XS, GTO and AutoMode are all trademarks of Electronic Engineering and Manufacturing, Inc.

This manual was conceived, designed, and written while on a road through the Pacific Northwest on a spectacularly rare, sunny, and cloudless day. Country music was playing on the radio and the kid's were texting in the back seat.

making good sound better® 22410 70th Avenue West Mountlake Terrace, WA 98043 USA Phone 425-775-8461 • Fax 425-778-3166

## **Documents / Resources**



<u>AudioControl LC8i Black 8 Channel Line Output Converter</u> [pdf] User Guide LC8i Black 8 Channel Line Output Converter, LC8i, Black 8 Channel Line Output Converter, Line Output Converter, Output Converter

## References

- audiocontrolregistration.com
- Mome AudioControl

Manuals+,