



# OWNER'S MANUAL

## **CAD-805RS**

Mono Power Amplifier

NOTE: Before installing your new component, please read this manual carefully as it will inform you of the product specifications, proper installation and correct operating procedures for your unit. Also included in this manual are guidelines on how to service and care for your new Cary Audio Design product.

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# IMPORTANT SAFETY INSTRUCTIONS

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.**

**ATTENTION:**  
RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.  
NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED PERSONNEL.

**TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE.**




Protective Earthing

Additional Safety Information specific to this product may be contained in the Owner's Manual supplied with this product



Hot Surface

## Please read these important safety instructions before operating this equipment.

1. Before powering up the equipment, read all safety and operating instructions and follow them as instructed. Retain the safety and operating instructions for future reference.
2. Do not place the unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing injury to a person or damage to the unit. Mount the unit according to the manufacturer's instructions with the suggested mounting accessory.
3. Mount the unit to a wall or ceiling only in the manner recommended by the manufacturer.
4. Do not use the unit near water (for example, near a swimming pool, bath tub, wash bowl, kitchen sink, or laundry tub) or in a damp environment (like a basement or outside in the rain).
5. Clean only with a dry cloth.
6. Do not push objects of any kind into the unit through openings as they could touch dangerous voltage points and short-out parts, possibly resulting in a fire or electric shock. Avoid spilling liquid of any kind on the unit. If water or any metal object (such as a paper clip, coin, or staple) accidentally falls inside the unit, disconnect it from the AC power source immediately and contact Cary Audio Design for further instructions.
7. Position the unit away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.
8. This unit is not intended to be used on soft supported items (like blankets, pillows, etc.).
9. This unit is not suitable for use in locations where children are likely to be present.
10. Slots and openings in the cabinet create ventilation to protect the component from overheating. These openings on the top and bottom panels must remain unobstructed. Allow at least 6 inches (16cm) of clearance above the unit and an opening behind the unit for airflow. Do not place the unit on a bed, sofa, rug, built-in bookcase, or rack without adequate ventilation.
11. Use only those attachments recommended by the unit manufacturer, as others may cause hazards.
12. This unit requires a reliable connection to the socket/outlet with protective earthing by means of the specified power cord set. 
13. As a safety feature, the unit may be equipped with a polarized alternating current line plug in which one blade is wider than the other. This plug will fit into the power outlet only one way. If you cannot insert the plug fully into the outlet, try reversing the plug. If the plug still will not fit, contact a licensed electrician to update your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
14. Operate the unit only from the power source indicated on the marking label. If you are unsure of the type of power supplied to your home, consult your unit dealer or local power company.
15. Arrange power supply cords so that they do not suffer from foot traffic or pinching by items placed on or against them. Pay close attention to cords where plug enter the AC outlet and where they exit from the unit.
16. For added protection during a lightning storm or when the component is idle for long periods of time, unplug the unit from the wall outlet and disconnect the antenna or cable system. This will help protect the unit from lightning and power line surge damage.
17. Do not locate an outside antenna system in the vicinity of overhead power lines or other electric light or power circuits. When installing an outside antenna system, take extreme care to avoid touching the power lines or circuits; contact with them could be fatal.
18. Do not overload wall outlets, extension cords, or integral convenience receptacles as this increases the risk of fire or electric shock.
19. External wiring connected to terminals of this unit shall be installed by a skilled person.
20. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or those having the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock or other hazards.
21. Upon completion of any service or repairs to the unit, ask the service technician to perform safety checks to ensure the unit is in proper operating condition.

# IMPORTANT SAFETY INSTRUCTIONS

22. Before connecting a new product to your audio or home theater system, turn off all other equipment (preferably unplugging them from the AC power source). Many audio components feature automatic turn-on circuits that may activate during an installation, potentially causing damage to electronic components and/or speakers. This type of damage is not covered by product warranties, and Cary Audio specifically disclaims responsibility for any such damage.
23. The removable power cord provided with your unit was specifically designed for use with this product, but other AC cords may be used. Consult your dealer for advice on AC power cords and high quality wire in your system.
24. The fuse is located inside the chassis and is not user serviceable. If the unit does not power up, contact an authorized service representative
25. Cables running inside walls should have the appropriate markings to indicate compliance and listing by the UL, CSA or other standards required by the UL, CSA, NEC or your local building code. Questions about cables inside of walls should be referred to a qualified custom installer, a licensed electrician, or low-voltage contractor.
26. Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.



**CAUTION:** High current. Connect to earth before connecting to supply of unit. Unplug the unit before performing any service.



Unit can be hot. Be careful of burned fingers when handling parts. Wait one half hour after switching off to handle parts.



**NOTE TO CATV SYSTEM INSTALLER:** This reminder is provided to call the CATV system installer's attention to article 820-40 of the NEC, ANSI/NFPA 70, which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

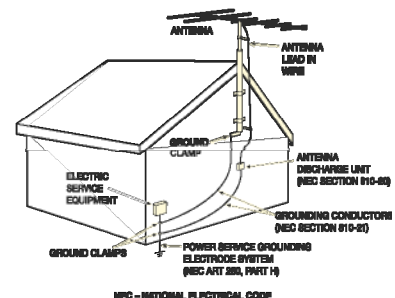
## FCC INFORMATION FOR USER:

- **CAUTION:** Any changes or modifications not expressly approved by Cary Audio Design could void the user's authority to operate the equipment.
- **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules.
- These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy, and if not installed and used in accordance with the instructions it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Connect the equipment into an outlet on a circuit different from where the receiver is connected.



## OUTDOOR ANTENNA INSTALLATION/SAFE ANTENNA AND CABLE CONNECTION:

- If an outside antenna or cable system is connected to the equipment, be sure the antenna or cable system is grounded in order to provide protection against built-up static charges and voltage surges. Article 810 of the National Electrical Code, ANSI/NFPA 70 (in Canada, Part 1 of the Canadian Electrical Code) provides information regarding proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.
- Outside antenna system should be located well away from power lines, electric light or power circuits and where it will never come into contact with these power sources if it should happen to fall. When installing an outside antenna, extreme care should be taken to avoid touching power lines, circuits or other power sources as this could be fatal. Because of the hazards involved, antenna installation should be left to a professional.



# IMPORTANT SAFETY INSTRUCTIONS

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## Disposal Instructions

### **NORTH AMERICAN WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT DIRECTIVE**

When discarding the unit, comply with local rules or regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal.



### **EUROPEAN UNION (EU) WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) DIRECTIVE**

The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trashbin label on the product (or the package in some cases). As defined by the WEEE directive, this cross-out trashbin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste. Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in the country.

# WELCOME

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## THANK YOU

Cary Audio would like to thank you for purchasing our products.

Since its founding in 1989, Cary Audio has stayed at the forefront of home entertainment equipment by stubbornly adhering to the principles of quality and musicality upon which it was founded. It's not enough just to be able to build great sounding gear, but it needs to be well-made, reliable, and maintain its performance and value for many years. Cary Audio has certain criteria that have guided us since we began and are still our primary focus.

We firmly believe in high performance products that offer incredible value for the money, backed by superior engineering and design, and supported by exceptional customer service. Whether a headphone amplifier or a world-class network audio player, Cary Audio uses the highest quality components available within the audio circuit, resulting in extraordinary sound quality. This is a well-known hallmark of all Cary Audio products.

For more than a quarter of a century, Cary Audio has provided the best in high performance music systems. We remain committed to our goals of building the very best products, at real-world prices, and supporting them with world-class service. Let our passion for the very finest sound help you better enjoy your music! Thank you for your continued support!

The Cary Audio Team

## FEATURES

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The CAD-805 Reference Series (CAD-805RS) is the latest edition in the 805 series of single-ended mono block amplifiers that has been in continuous production since 1993.

Here is what you will see with a pair of CAD-805RS moving from front to back. The front panel is a handsome thick machined aluminum that is available in either silver or black anodized finish. The CAD-805RS is equipped with a built-in meter on the front of the chassis. The adjustment pot is located at the rear of the chassis along with a bias jack for an external meter. Looking at the amplifier from above, you see a top-plate, which is finished in a handsome Anthracite Black gloss enamel, with white silkscreened lettering. To the left, the main power switch, to the right the 'standby/operate' switch which powers up the 211 or 845 output tubes. To the left is a rotary switch with a green jewel-like knob that chooses the appropriate bias for your choice of 211 or 845 output tubes. To the right is a similar rotary knob that dials in 'negative feedback' on a global basis and is adjustable from "off" in a continual rotation to a max of 10 dB of feedback. Also, on this top front portion of the amplifier are two 6SN7 input stage tubes, a 300B driver stage tube, and your choice of either an 845 or 211 output tube.

Behind the tubes, the main real-estate of the 805 is occupied by two very impressively sized transformers—one power, and one output, and four electrolytic capacitors. Also, toward the rear of the chassis are the aforementioned setscrew adjustment pot for biasing purposes and the quarter inch bias jack for reading the bias of the 300B driver tube. These are the only user adjustments you will have to worry about, other than choosing your output tube flavor. The back panel offers a choice of 4, 8, or 16 ohm speaker outputs that are very high quality and heavy duty. There is a RCA input jack and a XLR input jack with a user selectable switch, and two visible fuses—one for the 300B and one for the output tube. There is also a built-in fuse within the AC power socket. The power cord is detachable.

To review the circuit, the single-ended audio input signal from the outside world is passed to the control input grid of the first 6SN7 tube. This first 6SN7 stage is operating in a parallel dual triode conventional resistance-coupled Class A amplifier. This first gain stage is directly coupled to the next 6SN7 dual triode gain stage. This second stage is operating in a series anode constant-current Class A amplifier. This amplified audio signal is passed through a coupling capacitor to the grid of the 300B driver stage. The 300B triode tube operates in a Class A single-ended mode utilizing fixed negative grid voltage on the 300B driver stage. This negative grid voltage is user-adjusted by the screwdriver pot at the rear of the CAD-805 AE. The 300B is directly coupled to the grid of either a 211 or 845, 100-watt plate dissipation, triode output tube. The method of coupling at this stage is called an interstage transformer. This is an air-gap design with a flat frequency response from 30Hz to 23 KHz. The audio signal from the 300B interstage transformer will drive the 211/845 output tube to 27 watts Class A output. With additional volume levels, the amplifier goes into a positive grid mode with a power output of 50 watts Class A2. In the case of the 211-output tube, the Class A2 power is on the order of 70 watts at clipping. The high-power output from the 211/845 tube is coupled to the loudspeaker via an air-gapped 150 watt continuous duty output transformer. This transforms the high impedance (8000 ohm primary winding) of the output tube to 4,8, or 16 ohms to drive the loudspeaker.

# SPECIFICATIONS

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This section describes the basic specifications of the CAD-805RS at the time of printing. Specifications are subject to change without notice or obligation. When the following cautionary terms are used in this manual, these definitions apply:

**WARNING**

- **Electrical hazard! Misuse or failure to follow instructions properly may result in personal injury or death!**

**CAUTION**

- **No risk or personal injury; however, misuse or failure to follow instructions may result in damage to equipment.**

**NOTE**

- **No risk of personal injury or equipment damage; however, misuse or failure to follow instructions may prevent proper performance of the equipment.**

<b>Circuit Type</b>	Single-Ended Pure Class A
<b>Power Output</b>	50 Watts Pure Class A
<b>Feedback</b>	0 to 10 dB, continuously variable control
<b>Frequency Response</b>	20 Hz to 20 kHz +/- 0.5 dB at Full Power Output
<b>Power Consumption</b>	230 watts - OPERATE, 76 watts - STANDBY
<b>Input Impedance</b>	150k ohms
<b>Output Impedance</b>	4, 8 and 16 ohm speaker connection terminals
<b>Signal to Noise</b>	> 80 dB below rated output
<b>Sensitivity</b>	1.0 Volt @ zero feedback for full output
<b>Power Supply Capacitors</b>	4 - 1500 $\mu$ Fd @ 450V
<b>Transformers</b>	1 - EI Laminated core power transformer 1 - Special air-gap output transformer 200% duty cycle on all transformers
<b>Tube Complement</b> In each amplifier chassis	2 - 6SN7 input tubes 1 - 300B driver tube 1 - 845 output tube or (Please choose 845 or 211 during install) 1 - 211 output tube (Please choose 211 or 845 during install)
<b>Warm-Up Time</b>	5 minutes, after initial break in period
<b>Break-In Period</b>	100 hours of music playing time
<b>Finish</b>	Jaguar 'Anthracite Black' chassis
<b>Dimensions</b>	10" H x 12-1/4" W x 24" D
<b>Net Weight</b>	85 lbs. (38.6 kg.)



# INSTALLATION

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This section describes the unpacking and installation procedures for your new component.

## UNPACKING

All Cary Audio Design shipping containers have been specially designed to protect their contents and special care has been taken to prevent damage under normal shipping conditions. Mishandling should be evident upon inspection of the shipping container. If shipping damage is found after visual inspection, take care not to destroy the evidence. If necessary, document the damage with photographs and contact the transport carrier immediately.

Carefully remove your new component from its packing carton and examine it closely for signs of shipping damage. We strongly recommend saving all original packing cartons to protect your amplifier from damage should you wish to store it or ship it for after-sales service.

## WARRANTY CARD

**IN THE USA AND CANADA:** If you are the original purchaser of a new unit purchased from an authorized Cary Audio dealer or from CaryDirect.com, please fill out the enclosed warranty registration card and return it to Cary Audio within 15 days of your purchase. Cary Audio also suggests that you keep your original packing cartons in case you ever need to ship the unit. Warranty restrictions apply. Consult the warranty section at the end of this manual for details. Please be certain to keep a copy of the original sales receipt from your direct purchase from Cary Audio or your authorized Cary Audio dealer to validate the warranty if ever needed. The warranty is for the original purchaser only and does not transfer to any subsequent owner.

**OUTSIDE THE USA AND CANADA:** Your local authorized Cary Audio distributor will make his own warranty policy for your country. Please check with them for the terms of warranty for your new amplifier.

## PLACEMENT

In general, the location of your new CAD-805RS is not critical. Certain precautions must be taken to ensure optimum performance. Avoid extremely hot locations such as near radiators or other heating units. Keep the top of the CAD-805RS clear of books, paper or other equipment to protect against overheating! DO NOT place your CAD-805RS in a closed bookcase - overheating will damage the amplifier! Allow 8 to 10 inches above the unit for proper ventilation.

## POWER REQUIREMENTS

The CAD-805RS is designed to operate from house current mains. The design voltage is 120/240 volts AC at 50/60Hz.

## SPEAKER CABLES

The speaker cables from the output posts of the CAD-805RS to the speaker system can be any convenient length your set-up requires. Select speaker cables of sufficient size to preserve the outstanding performance capabilities of your CAD-805RS. Heavy gauge #16 wire is suitable for distances up to 10 feet; #12 for 25 feet. Most audio dealers will have proper speaker cable in stock for this purpose.

# INSTALLATION

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## INTERCONNECT CABLES

Signal input connection is made via the switchable RCA or XLR input jack on the rear of the amplifier located next to the output binding posts. The input interconnect cables from the output of the preamplifier can be any length your installation requires. A shielded high-quality interconnect cable is important to reduce chances for hum or interference. Ask your Authorized Cary Audio dealer for advice.

Your new amplifier is ready for operation after the speaker cables, interconnect cables and the tubes have been installed. Choose either the 211 or the 845 output tube with the top panel tube selector switch, according to the actual one installed. Only change this switch setting with the amplifier OFF.

### **WARNING**

- **FAILURE TO INSTALL THE TUBES CORRECTLY WILL DAMAGE THE UNIT.** Watch the tube pins carefully on the 300B tube during installation as it is possible to force the tube to plug in 'wrong' during installation. The 300B tube has no 'safety key' center pin on the tube to prevent incorrect installation. It has two large pins and two slightly smaller pins. Please look carefully at the tube pins and the tube socket holes to note the two different size connections prior to installation. Incorrectly plugging in the 300B driver tube will possibly damage the amplifier and is not covered by the manufacturer's warranty. Please see the DIAGRAMS section for further instructions on tube placements.

# OPERATION

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## FRONT PANEL

**BIAS METER** The bias meter is preset at the factory for 60 mA (300B driver tube). Check and readjust to 60 mA again after the CAD-805RS is warmed up for 15 minutes, if necessary.

## TOP PANEL

**OFF-ON TOGGLE SWITCH** Push the AC toggle switch toward the rear, to the "ON" position. The 6SN7 input tubes and the 300B driver tube will light up in this setting. The output tube will not light at this point.

**STANDBY SWITCH** Push the toggle switch toward the rear, to the "OPERATE" position. The output tube will light up.

**TUBE SELECTOR SWITCH** Set either to 211 or 845 before installing selected output tube.

**FEEDBACK LEVEL** Adjusts the level of feedback from 0 to 10 dB

## REAR PANEL

**INPUT** Switchable Signal input connection via shielded RCA interconnect cable or XLR cable.

**OUTPUT** Three 5-way binding posts provide output to the speaker system (4, 8 or 16 ohm connections).

**AC FUSE** **WARNING:** When replacing the power fuse, make sure the unit is NOT PLUGGED IN.

The value for the AC fuse in US or non-US countries that support AC voltages from 100V-120V is 3A 250V slow blow fuse.

In countries that support AC voltages from 220V-240V, the AC fuse should be replaced with a 2A 250V slow blow fuse.

The AC fuse is located on the rear panel of the chassis below the AC inlet.

**TUBE FUSE (300B)** Replace with ¼ amp fast blow large fuse only.

**TUBE FUSE (845/211)** Replace with ½ amp fast blow large fuse only.

# OPERATION

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## **BREAK-IN PERIOD**

The tubes, capacitors and output transformers take approximately 100 hours of music playing to fully settle in for peak performance. The CAD-805RS will sound good from the start and after the first couple of hours you will notice increased depth and tighter bass. This break-in period defies all engineering theory but is true with high performance vacuum tube audio amplifiers.

### **WARNING**

- **MAKE SURE AMPLIFIER IS UNPLUGGED FROM AC MAINS BEFORE SERVICING.**

# SERVICE AND CARE

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## CARE AND CLEANING

The cabinet housing and front panel of the CAD-805RS may be cleaned with a soft cloth and Windex or a window cleaner. The frequency of cleaning will be governed by how many hours the CAD-805RS is operated and by operating environment cleanliness.

**CAUTION:**

- Do not let any liquids spill into the vents on top of the unit.

## TUBE REPLACEMENT

If it becomes necessary to replace the tubes in the CAD-805RS amplifier, a matched pair of output tubes of the same brand should be used. A new tube kit is available from Cary Audio Design. You should get a few years or more from the output tubes with every day usage and many, many years of use from the 300B driver tubes and the 6SN7 input tubes.

## AC POWER FUSE REPLACEMENT

**WARNING:** When replacing the power fuse, make sure the unit is NOT PLUGGED IN.

The value for the AC fuse in US or non-US countries that support AC voltages from 100V-120V is 3A 250V slow blow fuse.

In countries that support AC voltages from 220V-240V, the AC fuse should be replaced with a 2A 250V slow blow fuse.

The AC fuse is located on the rear panel of the chassis below the AC inlet.

## FACTORY SERVICE

Careful consideration has been given to the design of your CAD-805RS to keep maintenance problems to a minimum. Any problems or requests for service should be referred to our Customer Service Department at 919-355-0010. DO NOT return the CAD-805RS to the factory without a Return Merchandise Authorization (RMA) number from our online Customer Service Center ([www.caryaudio.com](http://www.caryaudio.com)).

Cary Audio will assume no responsibility if the shipping company refuses to pay for damage due to your improper packing or lack of insurance should the unit be lost or damaged in shipment. Please retain and always use the original shipping carton for shipping the player. Also, Cary Audio reserves the right to return products sent in for service in a new box set at the customer's expense if the original packing material was damaged in the initial shipment, or if it is deemed unsatisfactory to use in return shipping.

# SERVICE AND CARE

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## NON-WARRANTY REPAIRS

Cary Audio will provide repair service for its products charging on a time and expense basis. At this time, the standard non-warranty service bench fee is \$125 for the first hour and \$95 per hour thereafter. Parts used for repairs as well as return shipping are additional. This may change and is not a quote for service. Please call us at 919-355-0010 for more information about out-of-warranty service and repair fees.

### WARNINGS

- **MAKE NO ATTEMPT TO PUT THE CAD-805RS IN SERVICE WITH THE BOTTOM PLATE REMOVED. CONTACT WITH HIGH VOLTAGES FOUND IN THE UNIT CAN BE FATAL. COMPLETELY REMOVE AC POWER PLUG FROM THE WALL AND ALLOW 30 MINUTES FOR THE HIGH VOLTAGE CAPACITORS TO DISCHARGE THROUGH BLEEDER RESISTORS BEFORE ATTEMPTING TO CHANGE TUBES OR CLEAN THE INSIDE OF THE AMPLIFIER**

### CAUTIONS

- **NEVER REMOVE / INSERT AC PLUG WHEN THE UNIT IS ON OR THE AC POWER SWITCH IS IN THE ON POSITION. OBSTRUCTION OF THE TOP PORTION OF THE CAD-805RS WILL RESULT IN TUBES OVERHEATING AND DAMAGE TO THE AMPLIFIER**

# TROUBLESHOOTING GUIDE

<b>SYMPTOM</b>	<b>CAUSE</b>	<b>REMEDY</b>
Hum or "Buzzing" in speakers	Ground loop  300B tube with high plate current too high  Intermittent or poor connection of interconnect	Install 2-pin adapter on AC cord to float the ground  Check bias of 300B. If high, readjust to proper bias setting of 60 mA  Replace bad interconnect cable
"Popping" or "Spitting" noise	Noisy tube  Check bias of output tubes	If noise is in one channel through the speaker, swap one section of tubes at a time until the noise swaps channels. Replace the noisy tube.  If high or fluctuating rapidly, replace output tube
AC fuse blows	Line voltage surge	Replace fuse
Tube fuse blows	Shorted tube (300B & 845 have separate fuses)	Replace tube and tube fuse

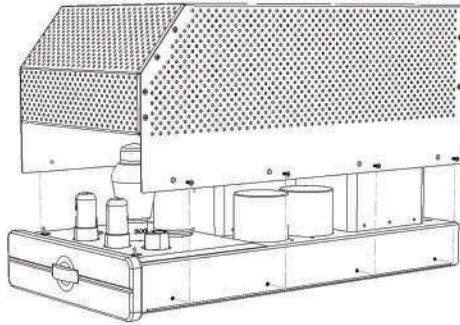
# DIAGRAMS

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## Top Cover Installation

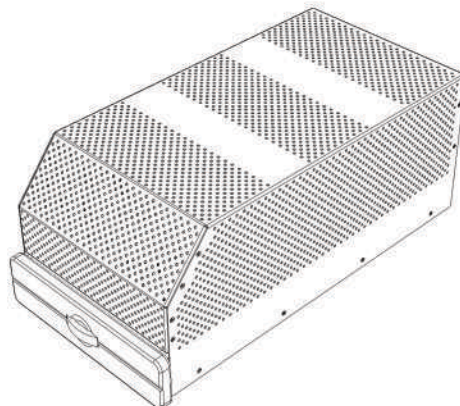
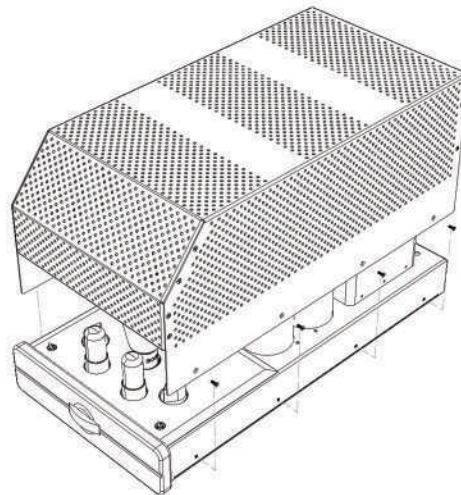
Tools needed:

- (1) Philips head screw driver
- (8) Philips head screws (provided)



1. Take note of the two screw holes on each side of the CAD-805RS chassis and the two countersunk holes on each side of the top cover as they should line up properly on both sides before installation.

2. Align the top cover with the chassis to allow the top cover sides to gently slide into place. Once the top cover holes are aligned with the chassis screw holes, use the provided Philips head screws to secure the top cover in place. Be careful to not over tighten the screws!



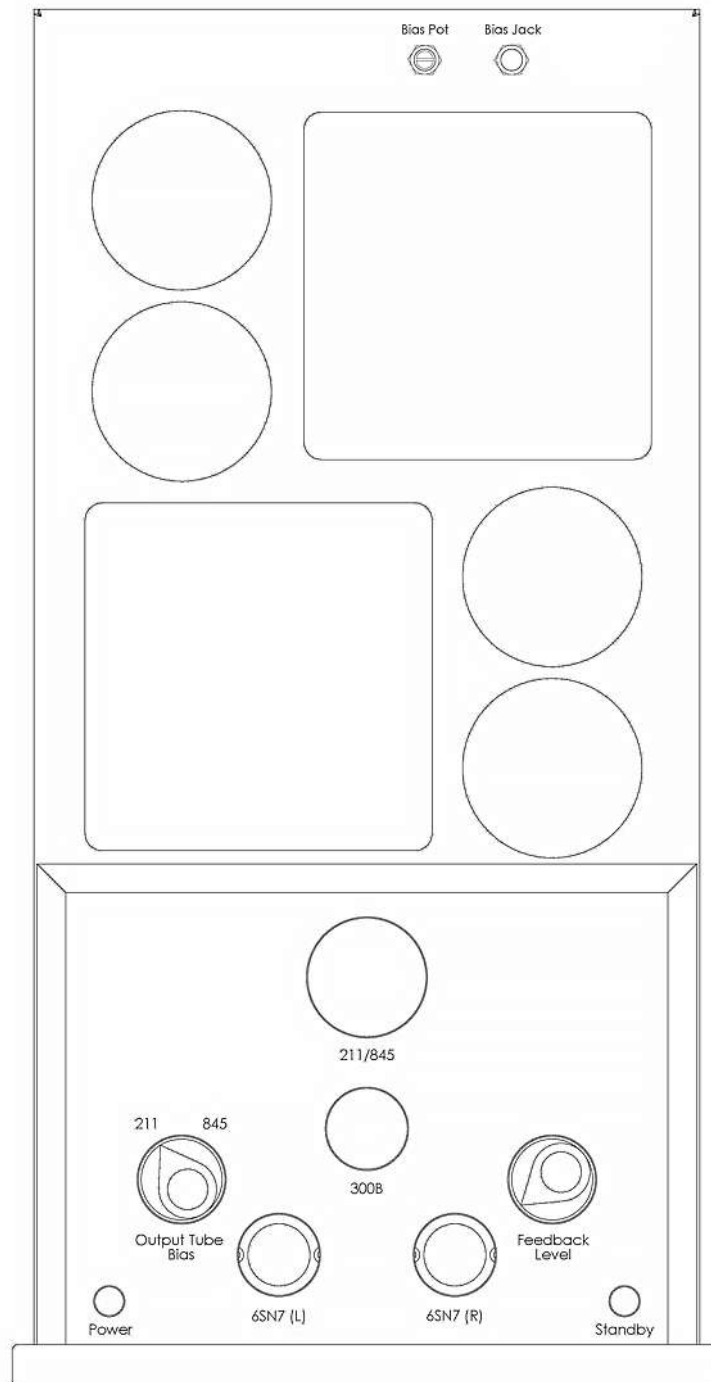
### Caution:

Unit can be hot. Be careful of burned fingers when handling parts. Wait one half hour after switching off to handle parts.



# DIAGRAMS

## TUBE PLACEMENT



**WITH THE POWER OFF:** Set the Output Tube Bias control to the 211 or the 845 position. Install the chosen tube into the chassis. Look at the tube boxes and install the L 6SN7 tube into the Left socket, the R 6SN7 tube into the Right socket.

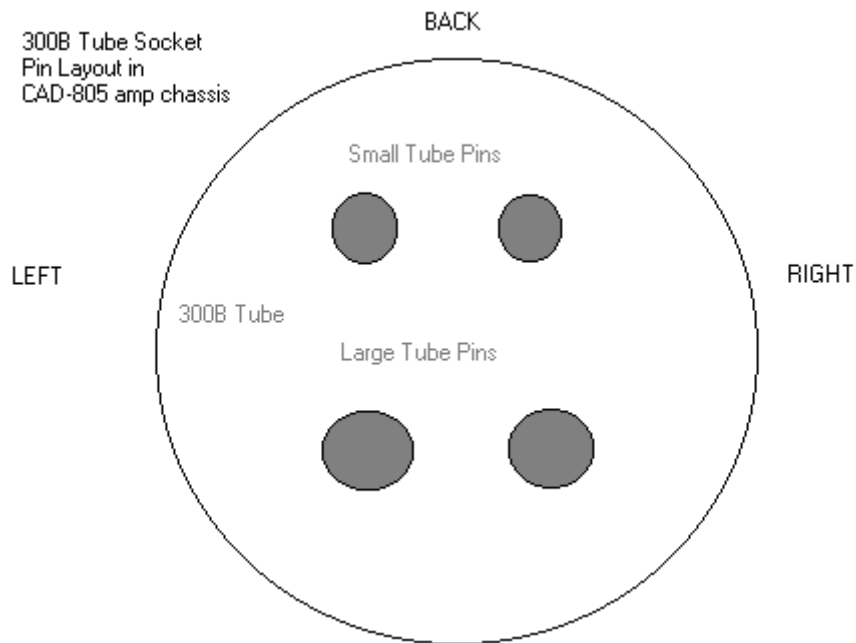
Please see next page for 300B tube placement.

# DIAGRAMS

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## 300B TUBE SOCKET PIN LAYOUT IN CHASSIS

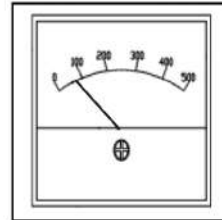
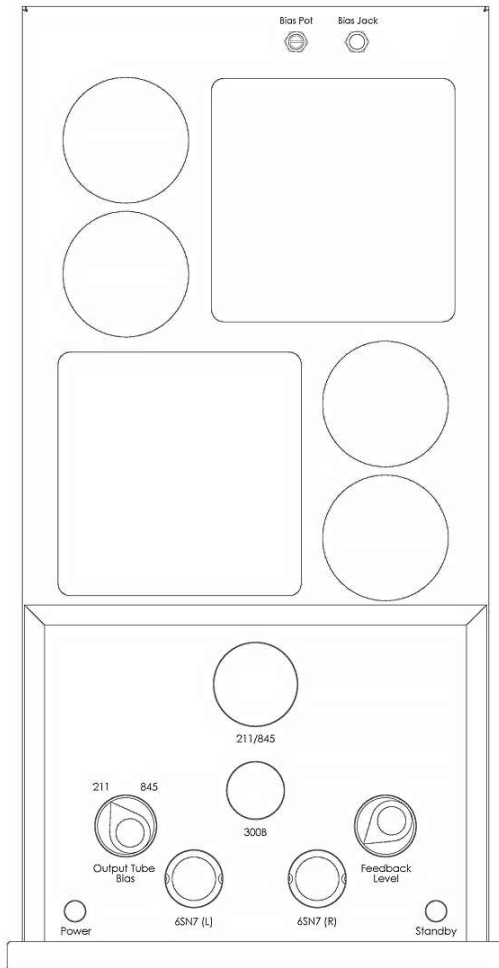
The LARGE pair of 300B tube pins should be installed toward the front of the CAD-805RS amplifier 300B tube sockets. LOOK CAREFULLY at the tube pins to be sure that you insert them correctly. It is possible to force the tube pins into the socket the wrong way if you are not careful! If you install the tube wrong you will probably damage the amplifier and the tube. This damage will not be covered by the manufacturer's warranty for a new amplifier. If you have any doubts about this, have the 300B tube installed by your dealer. If you will look carefully at the pins and install the large pins to the front of the socket all will be fine! These 300B tube pin installation instructions are valid for the CAD-805RS only.



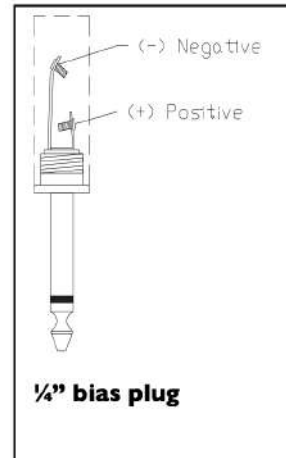
Front of the tube socket installed on the CAD-805RS chassis

# DIAGRAMS

## BIAS ADJUSTMENT



**SET THE 300B TUBE  
BIAS TO 60 mA DC  
CURRENT**



The CAD-805RS is equipped with a built-in bias meter on the front of the chassis. The adjustment pot is located at the back of the chassis along with a bias jack for an external meter. Check the 300B tube bias current and adjust for a 60 mA reading. The meter is marked "SET" at the 60 mA mark. Check and readjust to 60 mA again after the CAD-805RS amplifier is warmed up for 15 minutes.

**Note:**

- **Bias is factory preset to 60 mA. Bias should be reset when installing a new replacement 300B tube.**

# LIMITED WARRANTY

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This warranty has been included with a Cary Audio product that is intended to be sold and used only within the United States and Canada. Accordingly, this Warranty only applies to Products which are purchased in the United States or Canada, and only applies while such products are used in the United States or Canada. Products purchased outside the United States or Canada, and failures occurring outside the United States or Canada, are not covered by this Warranty.

## **Cary Audio Warrants to the Original United States and Canada Purchaser for use in the United States or Canada the Following Cary Audio Products for the Periods Indicated:**

1. Power Amplifiers, Integrated Amplifiers, Surround Sound Processors, and Preamplifiers have a four (4) year for PLATINUM, two (2) year for GOLD, and one (1) year for SILVER, parts and labor warranty from the date of the original purchase from Cary Audio.
2. CD or SACD players, DVD players, Music Servers, or Digital Music Centers have an eighteen (18) month for PLATINUM, twelve (12) month for GOLD, six (6) months for SILVER parts and labor warranty from the date of the original purchase from Cary Audio.
3. Vacuum tubes, if any are used in the component, are offered a 90-day exchange policy against defects with the exception of the 300B vacuum tube that has a one (1) year exchange policy from the date of the original purchase from Cary Audio.

## **Limitations on Non-Cary Audio Provided Services**

Certain Cary Audio Products are designed to employ non-Cary Audio provided services (such as, by way of example only, Spotify, Tidal, etc.), some of which require separate customer subscriptions and some of which do not, as part of the Products' functionality. Because Cary Audio cannot control the providers of such services or the services themselves, the owner of the Product therefore assumes all risks related to the use of services provided by anyone other than Cary Audio itself. Cary Audio cannot and does not warrant against, and shall have no liability of any kind for any of the following that are attributable to non-Cary Audio providers or services: (1) interruption, discontinuance, or other unsatisfactory performance of service, (2) reduced Product functionality that is so attributable, or (3) any other loss or damage of any kind that is so attributable.

## **What is Covered and What is Not Covered**

Except as specified below, this warranty covers parts and labor to correct all defects in materials and workmanship. The following are not covered by the warranty:

1. Damage, deterioration, malfunction or failure to meet performance specifications resulting from:
  - a. Accident, acts of nature, misuse, abuse, neglect or unauthorized product modifications
  - b. Improper installation, removal or maintenance, or failure to follow instructions supplied with the product.
  - c. Repair or attempted repair by anyone not authorized by Cary Audio to repair the product.
  - d. Any shipment of the product (claims must be presented to the carrier).

# LIMITED WARRANTY

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- e. Any cause other than a product defect.
2. Cleaning, initial set-up, check-ups with no defects found, or charges incurred for installation, removal or reinstallation of the product.
3. Any product, on which the serial number has been defaced, modified or removed.
4. Batteries.
5. Accessories, including but not limited to, batteries, cables, mounting hardware and brackets, cleaning accessories, antenna and detachable power cords.
6. Warranty is void if purchase was made from anyone other than directly from Cary Audio or an authorized Cary Audio dealer.

## **Who May Enforce the Warranty?**

This warranty extends to products purchased directly from Cary Audio or an authorized Cary Audio dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

To obtain such warranty service, the original purchaser must complete and send in the Warranty Registration Card within 15 days of purchase.

## **What Will We Pay For?**

We will pay for all labor and material expenses for items covered by the warranty. Payment of shipping charges is discussed in the next section of this warranty.

## **How Can You Get Service?**

In the event that the owner needs to return the unit to Cary Audio for service or repair of a possible defect, he must follow the following steps:

1. Create a new account or login to our Customer Service Center ([www.caryaudio.com](http://www.caryaudio.com)) to obtain a Return Merchandise Authorization (RMA) number. Once the account is set up or you have logged in, click on "Open New RMA" to begin entering the information to create an RMA that is needed to return or exchange a product. You will be given an RMA number, which must appear on the label of the box you ship back.
2. Submit a copy of the original sales receipt. Blank receipts will not validate the limited warranty for service by Cary Audio. The original sales receipt must contain the following information:
  - a. The authorized Cary Audio dealer's name
  - b. The date of purchase
  - c. The unit's sales price
  - d. The buyer's name and address
  - e. Describe in detail the problem.
  - f. Note the unit's model number and serial number.
3. Deliver by either of these methods:

## **LIMITED WARRANTY**

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- a. With all freight and insurance charges prepaid and in its original packing container or equivalent, ship the component to Cary Audio, 6301 Chapel Hill Road, Raleigh, NC 27607.
- b. Hand-deliver the product to Cary Audio (address noted above) or the nearest authorized service facility.

### **Limitation of Implied Warranties**

All implied warranties, including warranties of merchantability and fitness for particular purpose, are limited in duration to the length of this warranty.

### **Exclusion of Damages**

Cary Audio's liability for any defective product is limited to repair or replacement of the product at Cary Audio's option. Cary Audio shall not be liable for damage to other products caused by any defects in Cary Audio products, damages based upon inconvenience or loss of use of the product or any other damages, whether incidental, consequential, or otherwise.

### **How State Law Relates to the Warranty**

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

### **International Purchasers (Export Markets)**

Cary Audio warrants its merchandise to purchasers within the United States and Canada exclusively for use within the United States or Canada. It provides no other warranties, expressed or implied. If you are living outside of the United States and Canada, please consult your local dealer or distributor to determine the details of your local warranty.

**CARY AUDIO**

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