



SLP-50B

OPERATING MANUAL

NOTE:

Before installing your new SLP-50B, please read this manual carefully as it will inform you of the SLP-50B's specifications, proper installation and operation procedures. Also included in this manual are guidelines on how to properly service and care for your new SLP-50B.

Introduction

The Cary Audio Design SLP-50B is built on a chrome chassis with black anodized front panel and matching knobs. The SLP-50B is all hand wired point to point with silver Teflon coated wire. The circuit and parts selection contribute to an incredible listening experience.

SLP-50B Technical Description

For the technically minded, a review of the circuit is in order. The new SLP-50B preamplifier is a vacuum tube based line stage with 20 dB of gain. The class of operation is class A triode featuring a pair of 6922 tubes. The most interesting feature about the circuit is that the circuit in SLP-50B is the same gain stage used on the single-ended CAD-300 SE amplifiers. The 6922 tubes operate in an anode current source configuration.

The SLP-50B has three line level input jacks on the rear apron. From the jack the signal is routed to a silver plated selector switch on the front panel. The wiring used is all Teflon coated silver twisted pairs. After the switch the signal is routed to a dual 100K potentiometer. This is the volume control. A gold plated stepped attenuator may be ordered as an option or field installed. Once the audio signal level is set by the volume control it is directly coupled to one of the grids in the dual section triode 6922 tube. The cathode of the 6922 is biased through a 560ohm resistor to ground. The anode of the first section is coupled to the other section of the 6922 in an anode source plate supply. The amplified signal is coupled through a 5 MFD output coupling capacitor to the output jacks on the rear of the SLP-50B preamplifier.

The power supply is very special in the SLP-50B. The power transformer is wax impregnated in a steel enclosure on the top side of the chrome chassis. The power transformer used is rated at 200% continuous commercial duty cycle for this preamp application. Talk about being built bullet proof! The B+ supply is a center tap full wave DC supply feeding a Pi network supply with filter choke soothing. The filaments of the two 6922 gain tubes are regulated DC for a quiet hum free operation. The filter caps used in the SLP-50B are film and foil and polarized electrolytics. All resistors are 1% metal film, and as an option as on the CAD-50M MkII, oil caps can be ordered for the output cap (2uF).

Utilizing the input stage circuitry from the CAD-300SE, the new SLP-50B yields an amazing offering in a Cary Audio Design line stage preamplifier.

SPECIFICATIONS

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.

1.1 Specifications

This section describes the basic specifications of the SLP-50B at the time of printing. Specifications are subject to change without notice or obligation.

DIMENSIONS: 7"W x 6"h x 12-1/2"D

WEIGHT: 15 lbs.

CIRCUIT: Class A Single-Ended

INPUT IMPEDANCE: 100K ohms

OUTPUT IMPEDANCE: 2.2K ohms

GAIN: 20 dB

SIGNAL/NOISE RATIO: -88dB

RESISTORS: 1% metal film

CAPACITORS: Polypropylene

POWER TRANSFORMER: 400% duty cycle

TUBES: 2 premium 6922 tubes

POWER SUPPLY: Full wave rectified feeding a Pi network and filter choke

AC POWER

REQUIREMENTS: 100-130 volts AC / 50-60Hz at 25 watts
200-245 volts AC / 50-60Hz at 25 watts

WIRE: EE Teflon Silver

WARM-UP TIME: 5 minutes

**INPUT AND
OUTPUT JACKS:** Gold plated with Teflon® insert

1.2 Front Panel Features

SELECTOR: 3 Position rotary switch controlling input selection

OPERATE MUTE: 2 position rotary switch that mutes the output

VOLUME: Master dual volume control equally controlling input signal to line section preamplifier

1.3 Rear Apron Features

- CD, AUX1, AUX2:** These are line level inputs requiring flat frequency response
- OUTPUT:** Connect directly to input of power amps
- POWER SWITCH:** Rocker switch. Turns unit on in the "up" position.
- A.C. POWER INLET:** 3-conductor detachable power cord connector

CAUTION
Never remove/insert AC line cord when the unit is "ON"

INSTALLATION AND UNPACKING

This section describes the unpacking and installation procedures for the SLP-50B preamplifier.

WARNING
**Make no attempt to put the preamp in service
outside of the cabinet.**
Contact with voltage in the SLP-50B can be fatal!!

2.1 Unpacking

All 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 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 SLP-50B from its packing carton and examine it closely for signs of shipping damage. It is recommended to save all original packing cartons to protect your preamplifier from damage should you wish to store it or ship it for after-sales service.

2.2 Warranty Card

If you were the original purchaser of this unit and you purchased it in the United States, you should fill out the enclosed warranty registration card and return it to Cary Audio Design within 10 days of your purchase. Cary Audio Design also suggests that you keep your original packing cartons in case you need to ship the unit. Warranty restrictions apply. Consult the warranty section of this manual for details. **Failure to return warranty card within 10 Days will limit warranty to one year.**

2.3 SLP-50B Placement

The SLP-50B is designed for use inside homes. It must be protected from the elements and temperature extremes. For example, avoid placing the unit in extremely hot locations such as near radiators or other heating units. Its location among the user's audio components is not critical; however, certain precautions must be taken.

2.4 Power Requirements

The SLP-50B is designed to operate from house current mains. The design voltage is 117 VAC at 50/60Hz (Foreign units 234 VAC at 50/60Hz).

2.5 Cables

The interconnect cables from the output jacks of the SLP-50B to the input jacks on the basic amplifiers can be any convenient length your set-up requires. The choice of a high quality interconnect cable is important. Most audio dealers will have proper speaker cable in stock for this purpose.

OPERATION

Your new SLP-50B is ready for operation after all the interconnect cables have been installed. The SLP-50B is provided with functional, useful front panel controls with a logical layout. The listening level is conveniently located in the center. Connect your amplifier out of phase when using this preamp. The output of the SLP-50B is inverting. Connect your speaker wire out of phase ((+) to (-) and (-) to (+)).

3.1 Power Switch

The power switch located on the rear panel. Simply push up to turn on and push down to turn off.

3.2 Selector Switch

The 3-position rotary switch connects a choice of input program source, both channels simultaneously with proper amplification. All program sources are selected by this switch.

3.3 Mute/Operate Mode

This switch allows music to play in the "operate" position and mutes the output in the "mute" position.

3.4 Listening Level

The gain of both left and right channels is controlled simultaneously by this control. The potentiometer is of such high quality that the tracking error is less than 0.5dB from 0 to -60dB. The program source remains in balance over the entire range. The taper rate of the volume control has been chosen to provide a slow increase in gain over the first half of rotation and a more rapid gain increase above 12:00.

CARE AND SERVICE

The stainless steel nickel-chrome plated chassis on the SLP-50B may be cleaned with a household window cleaner and a paper towel. If the SLP-50B has been operated in an extremely dusty or humid environment, automobile chrome polish may also be used to bring up the original luster of the chrome finish. The face plate may be restored to factory fresh condition by spraying and buffing with Armorall®. The tubes may be cleaned with window cleaner. The frequency of cleaning will be governed by how many hours the SLP-50B is operated and by the operating environment.

4.1 Tube Replacement

If it becomes necessary to replace the tubes in the preamp the same brand should be used. A new tube kit is available from Cary Audio Design. Although tube life varies depending on the nature and degree of use, under normal operating condition for home use, the tubes in the SLP-50B should last several years and may last much longer.

4.2 Factory Service

Careful consideration has been given to the design of your SLP-50B to keep maintenance problems to a minimum; however, it is possible that some problems may arise which cannot be cured by tube substitution. At this point, we suggest that you contact our Customer Service Department at phone number (919) 481-4494 to describe your problem in detail. **Do not return the SLP-50B to the factory without a Return Authorization Number from the Customer Service Department.** Cary Audio Design will assume no responsibility if the transportation company refuses to pay damage claim due to your improper packing or lack of insurance should the unit be lost in shipment.

Non-Warranty Repairs

Cary Audio Design will provide repair service for its products charging on a time and expense basis for the repairs.

WARNINGS

**Make no attempt to put the SLP-50B in service outside of the cabinet -
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 to the preamplifier.**

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 SLP-50B will result
in tubes overheating**

PROPRIETARY RIGHTS: Cary Audio Design, Inc. has proprietary right in the design and components of its units. While the purchaser is entitled to use the unit for its intended purpose, use of the unit for its intended purpose, use of the unit for copying, imitation, or reverse engineering is a violation of these proprietary rights and is forbidden.

NOTES

UNITED STATES LIMITED WARRANTY

Cary Audio Design, Inc. warrants to the original United States purchaser for use in the United States, that this product shall be free from defects in material (except tubes and AF output transistors) or workmanship for:

Amplifiers and Preamplifiers, Three (3) years from the date of the original purchase.
Digital Products, One (1) year from the date of original purchase

During the warranty period, Cary Audio Design, Inc. or an authorized Cary Audio Design, Inc. service facility will provide free of charge both parts (except tubes and AF output transistors) and labor necessary to correct defects in material or workmanship.

To obtain such warranty service, the original purchaser must:

- (1) Complete and send in the warranty Registration Card.
- (2) Notify Cary Audio Design, Inc. as soon as possible after the discovery of a possible defect:
 - (a) The model number and serial number;
 - (b) The identity of the seller and the approximate date of purchase;
 - (c) A detailed description of the problem, including details on the electrical connection in the associated equipment and the list of such equipment.
- (3) Deliver the product to Cary Audio Design, Inc. or the nearest authorized service facility, or ship the same in its original container or equivalent, fully insured and the shipping charges prepaid.

Correct maintenance, repair and use are important to obtain optimum performance from this product. Therefore, carefully read the Operating Manual. This warranty does not apply to any defect that Cary Audio Design, Inc. in its sole discretion determines is due to:

- (1) Improper maintenance or repair, including the installation of parts or accessories that do not conform to the quality and the specifications of the original parts.
- (2) Misuse, abuse, neglect or improper installation.
- (3) Accidental or incidental damage.

WARRANTY DISCLAIMER

Except for the express warranties stated herein, Cary Audio Design, Inc. disclaims all other warranties including, without limitation, all implied warranties of merchantability and fitness for a particular purpose.

EXCLUSIVE REMEDY

Notwithstanding the foregoing, the purchaser's exclusive remedy for any breach of warranty, express or implied, is limited to the repair or replacement of the defective unit or the refund of the purchase price, at the option of Cary Audio Design, Inc. Under no circumstances is Cary Audio Design, Inc. liable for incidental or consequential damages. Any implied warranties imposed by law terminate one (1) year from the date of purchase.

FOREIGN PURCHASERS

Cary Audio Design, Inc. warrants its merchandise to purchasers in the United States for use in the United States. It provides no other warranties. If you are a foreign purchaser, consult with your dealer to determine whether your dealer provides any warranty.

The foregoing constitutes Cary Audio Design Inc.'s entire obligation with respect to this product, and the original purchaser and any user or owner shall have no other claim for incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you.

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

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