



SLP-50

OPERATING MANUAL

NOTE:

Before installing your new SLP-50, please read this manual carefully as it will inform you of the SLP-50'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-50.

OPERATION

Your new SLP-50 is ready for operation after all the interconnect cables have been installed. The SLP-50 is provided with functional, useful front panel controls with a logical layout. The listening level is conveniently located in the center.

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-50 may be cleaned with a household window cleaner and a paper towel. If the SLP-50 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 black front face plate may be restored to factory fresh condition by spraying and buffing utilizing with Armorall®. The tube may be cleaned with window cleaner. The frequency of cleaning will be governed by how many hours the SLP-50 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-50 should last several years and may last much longer.

4.2 Factory Service

Careful consideration has been given to the design of your SLP-50 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-50 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-50 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-50 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.

Introduction

The perfect companion to the CAD-50M-MkII mono-bloc amplifiers is the all new SLP-50 line stage preamplifier. The SLP-50 is built on a matching chrome chassis with a champagne gold front panel and matching knobs. The circuit and parts selection contribute to an incredible listening experience.

For the technically minded, a review of the circuit is in order. The new SLP-50 preamplifier is a vacuum tube based line stage with 10 dB of gain. The class of operation is class A triode featuring a pair of 12AU7 tubes. The most interesting feature about the circuit is that the SLP-50 is the same gain stage used on the single-ended CAD-300SE amplifiers. The 12AU7 tubes operate in an anode current source configuration.

The SLP-50 has three line level input jacks on the rear apron. From the jack the signal is routed to a gold 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 12AU7 tube. The cathode of the 12AU7 is biased through a 2K resistor with a non-polarized 100 mfd capacitor bypassing the signal to ground. The anode of the first section is coupled to the other section of the 12AU7 in an anode source plated supply. This configuration will in essence give the gain stage an infinite resistance load to the power supply. The amplified signal is coupled through a .68 mfd output coupling capacitor to the output jacks on the rear of the SLP-50 preamplifier.

The power supply is very special in the SLP-50. 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 400% 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 12AU7 gain tubes are regulated DC for a quite hum free operation. The filter caps used in the SLP-50 are film and foil all resistors are 1% metal film.

Utilizing the input stage circuitry from the CAD-300SE in the new SLP-50 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-50 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 Triode-Anode current source
INPUT IMPEDANCE:	100K ohms
OUTPUT IMPEDANCE:	1200 ohms
GAIN:	10 dB
SIGNAL/NOISE RATIO:	-88dB
RESISTORS:	1% metal film
CAPACITORS:	Polypropylene and oil filled
POWER TRANSFORMER:	400% duty cycle
TUBES:	2 premium 12AU7 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-50 preamplifier.

WARNING
Make no attempt to put the preamp in service
outside of the cabinet.
Contact with voltage in the SLP-50 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-50 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-50 Placement

The SLP-50 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-50 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-50 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.