

# SLP-98

## OPERATING MANUAL

**NOTE:**

Before installing your new SLP-98, please read this manual carefully as it will inform you of the SLP-98'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-98.

## 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.

### 1.2 Specifications

This section describes the basic specifications of the SLP-98 at the time of printing. Specifications are subject to change without notice or obligation.

**DIMENSIONS:** 12-1/2 W x 5" H x 12" D

**WEIGHT:** 22 lbs.

**CIRCUIT:** Class A Triode

**INPUT IMPEDANCE:** 47,000 ohms phono section with user option on lower resistance

**OUTPUT IMPEDANCE:** 800 ohms

**GAIN:** 1.2 millivolt input = 1 volt output phono stage = 43dB  
110 millivolt input = 1 volt output line stage = 20dB

**RIAA CURVE:** 1,000Hz = 0dB  
20Hz = +20dB  
20,000Hz = 20.5dB

**SIGNAL/NOISE RATIO:** -88dB

**RESISTORS:** 1% metal film

**CAPACITORS:** Polystyrene and polypropylene

**POWER TRANSFORMER:** 200% duty cycle on all transformers enclosed in separate power pack

**TUBES:** 8 total premium tubes  
2-6SN7 buffer cathode followers

2-6SN7 line stage  
2-12AX7 (ECC83) phono section  
2-12AU7 (ECC82) phono section output buffer

**POWER SUPPLY:** Full wave rectification, center-tapped, pi-network featuring a filter choke.

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

**WIRE:** EE Teflon Silver

**WARM-UP TIME:** 5 minutes

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

**DUTY CYCLE:** Continuous duty all modes 24 hours per day

### 1.3 Front Panel Features

**POWER SWITCH:** Rotary 3 position: off, stand-by, operate

**SELECTOR:** 5 Position rotary switch controlling input selection.

**LEFT BLUE LED:** Indicates AC power “ON”

**OPERATE MUTE:** Mutes output of preamplifier

**TAPE MONITOR:** By-passes all inputs to activate incoming tape recorder signals

**RIGHT BLUE LED:** Indicates SLP-98 in tape monitor function

**LISTENING LEVEL:** Master dual volume control equally controlling input signal to line section preamplifier

**INPUT LEVEL LEFT:** Individual control of left channel level feeding to master listening level volume control

**INPUT LEVEL RIGHT:** Individual control of right channel level feeding to master listening level volume control

### 1.4 Rear Apron Features

**PHONO:** These jacks are to be used with moving magnet or high output moving coil cartridges with a recommended minimum output of 1.4 millivolts

**AUX.-CD-TUNER-TAPE:** These are line level inputs requiring flat frequency response

**GND:** Ground lug for turntable chassis

**MONITOR:** For use with tape recorders that employ a third head to monitor a tape as it is being recorded (may be used as a flat frequency response line input)

**TAPE OUT:** Constant output of selected input signal for recording independent of volume control setting on SLP-98

**DUAL OUTPUTS:** 1-Connect directly to input of power amps

**AC:** Multi-conductor power cord to be plugged into SLP-98 external power pack

**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-98 preamplifier.

**WARNING**  
Make no attempt to put the preamp in service  
outside of the cabinet.  
Contact with voltage in the SLP-98 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.



**“Stand-By”**  
  
ready-  
fashion gives  
operating time.)

Provides DC voltage through individual regulators to flow to the filaments of the preamplifier stage. (The SLP-98 may be left in the stand-by position at all times to keep the SLP-98 in a warmed-up, to operate mode without B+ potential. Operating in this peak performance after only a few minutes of

**“Operate”**

Brings up full potential DC voltage within one minute.

### **3.2 Selector Switch**

The 5-position rotary switch connects a choice of input program source, both channels simultaneously with proper amplification (or in the case of phono) RIAA equalization for phono input. All program sources are selected by this switch.

### **3.3 Operate Mode**

To listen to music the operate switch must be in the "UP" position when "DOWN" the output is mute.

### **3.4 Monitor Tape**

In the “Up” position, the rear monitor jack serves as the input source. This function is very useful with tape decks utilizing a third head to monitor the recording directly from the tape. In the “Up” position, the blue LED indicator light will appear.

### **3.5 Listening Level**

The gain of both left and right channels is controlled simultaneously by this control. The control 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 of this control. 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.

### **3.6 Input Level - Right and Left**

The two potentiometers control independently the input level to each channel of the SLP-98. The input level controls on a SLP-98 take the place of an individual dual balance control used on many preamplifiers. Also, these controls may be used to reduce the overall gain of each channel on the SLP-98.

## **CARE AND SERVICE**

The stainless steel nickel-chrome plated chassis on the SLP-98 may be cleaned with a household window cleaner and a paper towel. If the SLP-98 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-98 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-98 should last several years and may last much longer.

#### 4.2 Factory Service

Careful consideration has been given to the design of your SLP-98 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-98 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-98 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-98 will result  
in tubes overheating**

**PROPRIETARY RIGHTS:** Cary Audio Design 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.