

PH-301MM
PHONO EQUALIZER
PREAMPLIFIER

OPERATING MANUAL

NOTE:

Before installing your new PH-301, please read this manual carefully as it will inform you of the PH-301's specifications, proper installation procedures and operation procedures. Also included in this manual are guidelines on how to properly service and care for your new PH 301.

PH 301MM INTRODUCTION

Cary Audio Design presents the ultimate phono head amplifier.

It took over three years of painstaking research, engineering, listening, and refining, before Cary was ready to release the PH-301. But now that it's here, even the most demanding record enthusiasts will realize this exotic unit is dedicated to nothing short of incomparable vinyl playback.

The PH-301 is an all-vacuum tube design utilizing one 12AU7 and two 12AX7 dual triodes. The RIAA equalization curve is derived from a passive RC circuit located between the two gain stages. The PH-301 is supplied with a separate power supply to ensure an extremely quiet operation. It is perfectly matched to any of the high-end Cary integrated amplifiers or pre-amplifiers.

The PH-301 is finished with the beauty and detail that Cary Audio Design is famous for. With its gleaming chrome plated chassis and black anodized front plate, you know immediately it belongs in the Cary family of high-end audio products.

For the analog lover the PH-301 is a magical blend of art and technology that will add to your music listening enjoyment hour after hour. Experience the PH-301, experience what vacuum tubes can do for analog recording playback. We believe it will change the way you listen to music. *Forever.*

SPECIFICATIONS

DIMENSIONS:	3"H x 7.5"W x 13"D
WEIGHT:	16 lbs.
INPUT IMPEDANCE:	MM - 47 K OHMS
OUTPUT IMPEDANCE:	450 OHMS
INPUT TERMINATION:	FEMALE RCA TYPE
OUTPUT CONNECTION:	FEMALE RCA TYPE
AC POWER REQUIREMENTS:	117/234 VOLTS 50-60 HZ
POWER CONSUMPTION:	15 WATTS
TUBE COMPLIMENT:	2 - 12AX7 RIAA EQUALIZER 1 - 12AU7 BUFFER OUTPUT STAGE
HUM AND NOISE:	-76dB
EQUALIZATION CURVE:	RIAA CURVE +/- .5dB
CIRCUIT TYPE:	SINGLE-ENDED CLASS A
RESISTORS:	1% METAL FILM
GAIN MM:	42db
CAPACITORS:	POLYPROPYLENE
POWER TRANSFORMER:	1 EI LAMINATE, 200% DUTY CYCLE
WARM-UP TIME:	3 MINUTES
BREAK-IN TIME:	100 HOURS
FINISH:	Black anodized face plate with chrome plate/stainless steel chassis.

INSTALLATION

- Step 1:** With the unit unplugged, connect the gray cable from the PH301 to the power pack. Tighten collet to hold gray cable in place.
- Step 2:** Plug turntable output connectors into respective left and right inputs and connect turntable ground wire to the ground post on the rear of the chassis.
- Step 3:** Plug interconnects into respective left and right outputs and route to the auxiliary inputs on the rear of a pre-amp or integrated amplifier.
- Step 4:** After completing steps 1-3, flip the switch on the power pack down. Plug in the AC power cord and then flip the switch up. You are now ready to listen.

WARNING

**DO NOT PLAY YOUR NEW PH-301 WITH THE BOTTOM COVER REMOVED
BECAUSE VOLTAGES CONTAINED INSIDE MAY BE LETHAL!!!!**

UNPACKING

All shipping containers have been specifically 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 PH-301 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 amplifier from damage should you wish to store it or ship it for after-sales service.

WARRANTY CARD

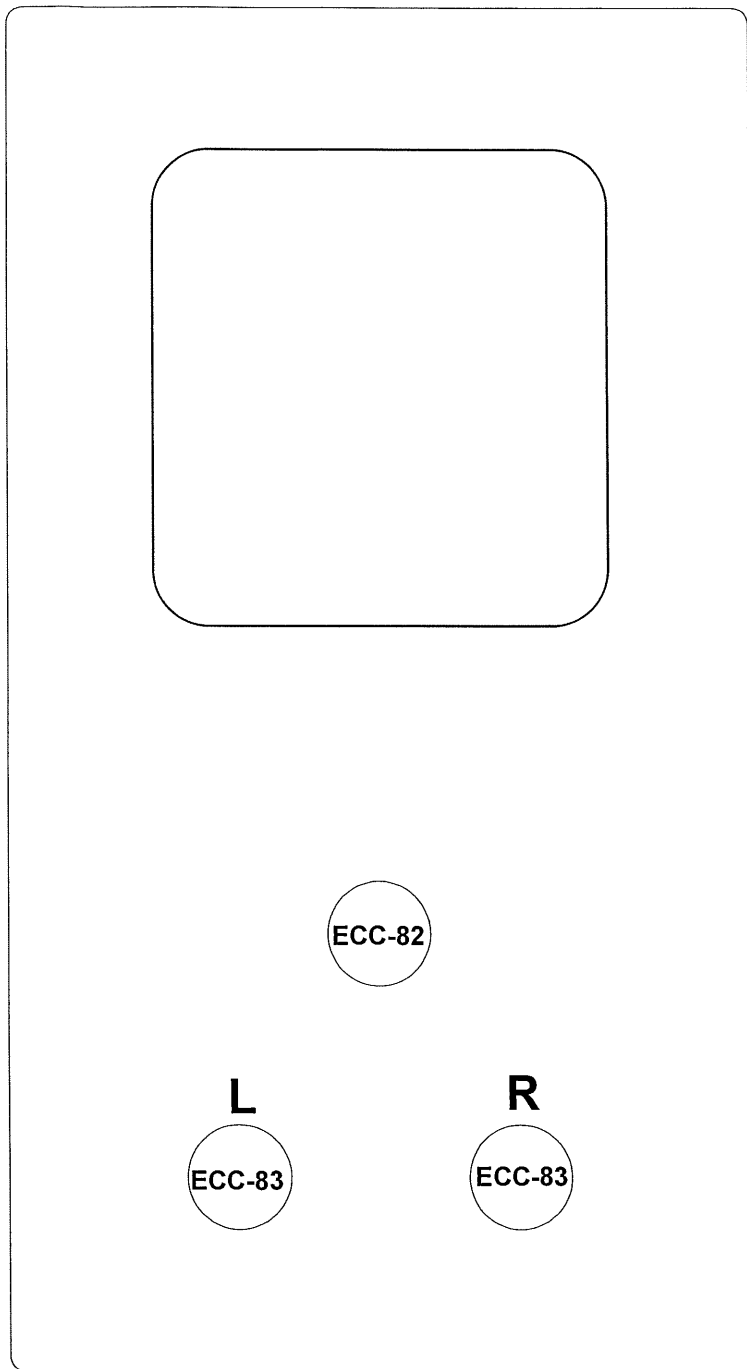
Fill out the enclosed warranty registration card and return it to Cary Audio Design, Inc. within 10 days of original purchase. Keep your original sales slip with the packing cartons should you ever need it for reference. Failure to register warranty will limit the warranty to one year.

BREAK-IN PERIOD

The tubes and capacitors take approximately 100 hours of music playing to fully settle in for peak performance. The PH-301 will seem sterile or thin sounding right out of the box. 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 most audio amplifiers.

WARNING

**MAKE SURE PH-301 IS UNPLUGGED FROM POWER PACK BEFORE
SERVICING.**



PH-301MM Tube Placement Sheet