



OWNER'S MANUAL

STUDIO STANDARD 350 WATT MONOBLOCK AMPLIFIER

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INTRODUCTION

THANK YOU!...

for choosing the Manley Laboratories Studio Standard 350 watt monoblock amplifiers. Designed around the concept that less is more, the Studio Standard 350 uses the best available parts with the shortest, cleanest, signal path possible. With the use of our own C.N.C. milling machine, we can provide you with a superb sounding machine with elegant packaging. Please take a few moments to read through this manual, there may be features and information about this amplifier that you do not know, and it is in your, and our here at Manley Labs, best interest that you do.

Thank you again, and please enjoy!

GENERAL NOTES

LOCATION & VENTILATION

The Studio Standard 350 watt monoblocks must be installed in a stable location with ample ventilation. Allow a minimum of 2 inches of clearance on the top and sides of the amplifier, such that a constant flow of air can flow through the ventilation openings. We also recommend that the amplifier if driven by a preamplifier be placed at least 10 inches apart. Do not place amplifiers directly on high pile carpet or any other surface that will block the ventilation vents.

WATER & MOISTURE

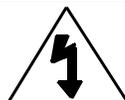
As with any electrical equipment, this amplifier should not be used near water or moisture. If liquid enters the amplifier, it must be immediately returned to your dealer for servicing.

SERVICING

The user should not attempt to service the amplifier beyond that described in the owner's manual. Refer all servicing other than biasing and tube replacement to Manley Laboratories

SPECIAL NOTES

Tubes may become loose during transit. Straighten and press down each tube before plugging the amplifier into the mains socket. Furthermore, NEVER touch the tubes after the amplifier has been switched on, the tubes become very hot during operation and should only be handled after the power has been turned off and the tubes have cooled.



WARNING!



**TO PREVENT THE RISK OF ELECTRIC SHOCK
DO NOT OPEN THE CABINET
REFER SERVICING TO
QUALIFIED PERSONEL**

MAINS CONNECTIONS

The Manley Laboratories Studio Reference 350 watt monoblocks requires a significant amount of AC current to operate properly. For best operation, plug the amplifier directly into the wall outlet, avoiding extension cords and other devices which restrict the current supply to amplifier. If extension cables are required, be certain that they are high quality, heavy duty (14-12 guage) cables.

Your amplifier has been factory set to the correct mains voltage for your country. The voltage setting is marked on the serial badge, located on the rear panel. Check that this complies with your local supply.

Export units for certain markets have a moulded mains plug fitted to comply with local requirements. If your unit does not have a plug fitted the coloured wires should be connected to the appropriate plug terminals in accordance with the following code.

GREEN/YELLOW	EARTH	terminal
BLUE	NEUTRAL	terminal
BROWN	LIVE	terminal

As the colours of the wires in the mains lead may not correspond with the coloured marking identifying the terminals in your plug proceed as follows;

The wire which is coloured GREEN/YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or coloured GREEN or GREEN and YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked by the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked by the letter L or coloured RED.

DO NOT CONNECT/SWITCH ON THE MAINS SUPPLY UNTIL ALL OTHER CONNECTIONS HAVE BEEN MADE.

CONNECTING YOUR AMPLIFIER

Setting up your amplifier is rather easy.

1. Connect all source components (turntable, CD, Tuner, Tape DAT, etc.) to your preamplifier.
2. Connect the interconnects from the output of the preamplifier or switching center to RCA input.
3. Connect the hot or "+" speaker cable to the top binding post and the common or "-" speaker cable to the bottom binding post (See diagram III). Ensure that the other end of the cable is connected correctly to the speaker. Tighten the binding posts by hand. If you use a nut-driver (3/8") **do not over-tighten** the posts or you may break the connection inside the amplifier.
4. Turn on Preamplifier and any source components you plan to use.
5. Ensure that the "mains" switch on the front panel is in the "off" or "0" position.
6. Plug amplifier into wall outlet.
7. Turn on one amplifier at a time so as not to trip a circuit breaker or blow a fuse.
8. Turn up the volume and enjoy.

BIAS PROCEDURES

The Manley Studio Standard 350 is a fixed bias system that requires very little attention. If you wish to adjust or check the bias, follow the following steps.

1. On diagram 1, which depicts the front panel of the Manley 350, you can see two measurement tip jacks labeled "READ BIAS". Place the probes of a standard volt meter in these sockets and set the volt meter to read 'millivolts'.
2. Directly below these tip jacks is a knob labeled with sixteen points. Since the Manley Studio Standard 350 only has 8 output tubes, only half of these sixteen positions can be obtained. The switch when set at 1 o'clock will read output tube one's voltage drop across the cathode resistor. Similarly, as you continue clockwise you will continue until you reach tube eight's bias voltage.
3. On diagram 2, which depicts the top view of the Manley 350, you will see the tube numbering sequence and the bias adjust pots used to alter the bias of each tube.
4. The first step to setting the bias is to turn on the amplifier and ensure that there is zero signal input. Also, leave your loudspeakers connected as these provide an ideal load on the output. It is recommended that you leave the amplifier on long enough to ensure that the tubes have reached their stable current draw.
5. Set the switch to the one o'clock position and adjust the first trim pot (furthest left) until you measure 300 to 350 mV. Since you are measuring across a 10 ohm cathode resistor, this would correspond to 30 to 35 mA of bias current.
6. If you are unable to bring the bias down to 30 to 35 mA on any tube then we recommend that the tube be carefully watched or replaced.
7. Follow step five with the remaining tubes. Once they are all set, your amplifier should be in perfect operation.

NOTE: There are two red tip jacks and one pot on the top of the amplifier which should not be altered. These tip jacks are used to measure the AC balance which is factory set and should never need adjustment.

OPERATIONAL NOTES

SWITCHING ON

The power switch is located on the lower right hand corner of the front panel. Push the top of the rocker switch (1) to turn on the amplifier and the bottom of the rocker to turn off the amplifier.

With monoblocks we suggest that you turn on one amplifier first allowing about thirty seconds to pass before powering the other one. Also, ALWAYS turn ON your preamplifier or console FIRST and let this settle before turning on the amplifiers.

RUNNING

It is not recommended that you leave your amplifier permanently switched on. This only wastes electricity and tube life. Your amplifier has solid state rectification and reaches peak operating condition in approximately 30 minutes.

TUBELIFE

As with all tubes, their quality degrades with age. This is due to cathode emission, a natural process found in all tubes. We recommend that you have your amplifier checked every 3-4 years, depending on usage, usually the amplifier will require re-tubing after this time has elapsed.

SPECIFICATIONS

Vacuum Tubes:	8 x 6550, 1 x 6350, 1x 12AT7		
Output Power	380 W 3%T.H.D. feedback MAXIMUM		
20 Hz - 20 KHz, 4 Ohm Load	376 W 3%T.H.D. feedback STANDARD		
	360 W 3%T.H.D. feedback MINIMUM		
Slope Adjustment	+1 dB slope = MINIMUM		
20 KHz, (Ref. to 0dB @ 1K)	+0.97 dB slope = STANDARD		
	+0.88 dB slope = MAXIMUM		
Input Sensitivity			
Full power, feedback	MAX	1.8	Vrms
	STAND	1.44	Vrms
	MIN	1.2	Vrms
Input Impedance	82 Kohm		
Load Impedance	5 ohm / 2.5 ohm		
S/N Ratio @350W			
feedback	MIN.	-90.69 dB (120Hz)	
	STAND.	-91.90 dB (120Hz)	
	MAX	-93.70 dB (120Hz)	
Power Consumption	300 W Quiescent		
	900 W Full Power		
Mains Fuse	100, 110, 120V	= 10A (Slo-Blo)	
	220, 240 V	= 5A (Slo-Blo)	
B+ Fuse	1.5 A		
Dimensions	W=19, D=10, H=8.5 inches		
Weight	75 lbs		

WARRANTY

All Manley Laboratories equipment is covered by a limited warranty against defects in materials and workmanship for a period of 90 days from date of purchase to the original purchaser only. A further optional limited 5 year warranty is available to the original purchaser upon proper registration of ownership within 30 days of date of first purchase.

Proper registration is made by filling out and returning to the factory the warranty card attached to this general warranty statement, along with a copy of the original sales receipt as proof of the original date of purchase. Only 1 card is issued with each unit, and the serial number is already recorded on it.

If the warranty registration card has already been removed then this is not a new unit, and is therefore not warranted by the factory. If you believe this to be a new unit then please contact the factory with the details of purchase.

This warranty is provided by the dealer where the unit was purchased, and by Manley Laboratories, Inc. Under the terms of the warranty defective parts will be repaired or replaced without charge, excepting the cost of tubes. No warranty is offered on tubes, unless:

1. a Manley Laboratories preamplifier is used with a Manley Laboratories amplifier, and
2. the warranty registration card is filled out.

In such a case a 6 month warranty on tubes is available with the correct recording of the serial number of the preamplifier on your warranty registration card.

If a Manley Laboratories product fails to meet the above warranty, then the purchaser's sole remedy shall be to return the product to Manley Laboratories, where the defect will be repaired without charge for parts and labour. The product will then be returned via prepaid, insured freight, method and carrier to be determined solely by Manley Laboratories. All returns to the factory must be in the original packing, (new packing will be supplied for no charge if needed), accompanied by a written description of the defect, and must be shipped to Manley Laboratories via insured freight at the customer's own expense. Charges for unauthorized service and transportation costs are not reimbursable under this warranty, and all warranties, express or implied, become null and void where the product has been damaged by misuse, accident, neglect, modification, tampering or unauthorized alteration by anyone other than Manley Laboratories.

The warrantor assumes no liability for property damage or any other incidental or consequential damage whatsoever which may result from failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of the expressed warranty. All warranties apply only to Manley Laboratories products purchased and used in the USA.

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

WARRANTY REGISTRATION

We ask that you please fill out this registration form and send the bottom half to:

MANLEY LABORATORIES
REGISTRATION DEPARTMENT
13880 MAGNOLIA AVE.
CHINO CA, 91710

Registration entitles you to product support, full warranty benefits, and notice of product enhancements and upgrades. You MUST complete and return the following to validate your warranty and registration. Thank you again for choosing to use Manley Laboratories.

MODEL _____ SERIAL No. _____

PURCHASE DATE _____ SUPPLIER _____

PLEASE DETACH THIS PORTION AND SEND IT TO MANLEY LABORATORIES

MODEL _____ SERIAL No. _____

PURCHASE DATE _____ SUPPLIER _____

NAME OF OWNER _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE NUMBER _____

Serial #'s of Associated Manley Laboratories Equipment _____

NOTES