



## Atma-Sphere M-60 Mk. 3.2 amplifier setup and operation

### Installation

Place the amps in your system. Allow for adequate cooling- do not set the amp on a carpet, and if in a cabinet you may have to set up a cooling fan as well. Connect the preamp cable to the appropriate input connector on the rear of the amp. If you use the RCA input connector, make sure a shorting jumper is installed between pins 1 & 3 on the XLR connector else a buzz may result. Verify that both power switches are OFF and connect AC power to the AC input connector on the rear of the amp. Connect the negative speaker cable to the negative output terminal and the positive speaker cable to the positive output terminal.

### Setup

Install the tubes in their sockets. The middle four sockets take the 6SN7GT driver tube (if using NOS 6SN7s, the front location should have either a -GTA or -GTB suffix). All other sockets take the 6AS7G output tube. A total compliment of four driver and eight output tubes are required per each chassis. Engage the main power switch (left edge of chassis, amber lamp) and verify that the amber indicator lights. In about 15 seconds, the filaments of all tubes should be visibly glowing orange. Wait at least one minute, then engage the standby switch (right side of chassis) and verify that the red indicator lights. The amplifier is now fully powered up.

### Meter Range/Meter Switch

The meter operates all the time. The middle toggle switch controls its range. Up is the high range- full output from the amplifier will result in full scale deflection. Down is 1 watt for full scale, and is useful on high efficiency speakers and the DC Offset Null adjustment. The meter is calibrated for 8 ohms.

### DC Offset Null adjustment:

Place Meter Switch in the down position. Examine the reading on the VU meter and adjust the DC Offset control to produce a -20db reading (all the way to the left). Note that if you overshoot the setting the meter will rise again- set for the lowest reading. Bias is automatic. Note: It may not be possible to null the DC Offset if there are defective tubes in the amplifier.

### Operation

The amplifier is now completely operational. It can be set in Standby or fully On at will. Some bluish florescence of the output tubes is normal.

The M-60 is the most neutral and musical 60-watt amplifiers available. It is quite transparent. Be prepared to hear things you have not heard before- both good and bad. Many preconceived notions may have to go in order for you to get the most out of the M-60. We recommend that as you make improvements in your system, make only one change at a time in order to understand its significance. Feel free to contact Atma-Sphere for advice.

### Fuses

The first fuse by the power cord entry is the Output section B+ and is 3 Amp Slow (1.5A slow for 235V). The second fuse is for the output filaments and is 3 Amp Slow (1.5A for 235). The last fuse controls the driver circuit and is 0.5 Amp slow (0.25A Slow for 235 Volt). WARNING! To avoid fire hazard, always replace fuses with same type and rating.



#### LIMITED WARRANTY ON ATMA-SPHERE MUSIC SYSTEMS PRODUCTS

This warranty on your ATMA-SPHERE MUSIC SYSTEMS product, which is distributed and warranted by ATMA-SPHERE MUSIC SYSTEMS, shall remain in effect for three (3) years from the date of consumer purchase, provided the enclosed registration form is completed and returned to ATMA-SPHERE MUSIC SYSTEMS within ten days of purchase.

#### WHAT IS COVERED:

Except as specified below, this warranty covers all defects in materials and workmanship. The following are NOT covered by the three year limited warranty:

Vacuum tubes are covered for one (1) year, with the following exclusions, as per the rest of the warranty:

Damage occurring during shipment (present claims to carrier).

Damage resulting from failure or inability to follow proper instructions.

Damage resulting from the performance of repairs or modifications by other than ATMA-SPHERE MUSIC SYSTEMS.

#### WHAT WE WILL PAY FOR:

ATMA-SPHERE MUSIC SYSTEMS will pay for all labor and material expenses for repairs covered by this warranty.

#### HOW TO OBTAIN WARRANTY SERVICE:

If your unit requires repairs covered by this warranty, you MUST obtain a return authorization number from ATMA-SPHERE MUSIC SYSTEMS. You are responsible for transporting the unit to ATMA-SPHERE MUSIC SYSTEMS, 1742 Selby Av., St. Paul, MN 55104. You must pay the initial shipping charges, but ATMA-SPHERE MUSIC SYSTEMS will pay the return charges, if the repairs are covered by the warranty. All products MUST be shipped in the original carton(s) or in replacement cartons supplied by ATMA-SPHERE MUSIC SYSTEMS. Contact ATMA-SPHERE MUSIC SYSTEMS for replacement cartons and cost.

LIABILITY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF ANY DEFECTIVE PRODUCT AND SHALL IN NO EVENT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGE OF ANY KIND.

This warranty is transferable. Implied warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty. This warranty sets forth all expressed warranties made with regard to the above-referenced product. We neither assume nor authorize any other liability in connection with the sale or any shipment of products. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. We reserve the right to make changes and improvements in our products without incurring any obligation to similarly alter products previously purchased.

## WARRANTY REGISTRATION FORM

IMPORTANT: This form must be filled out and returned to ATMA-SPHERE MUSIC SYSTEMS within 10 days of purchase to validate the warranty! Please type or print clearly.

NAME: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ zipcode: \_\_\_\_\_

Country: \_\_\_\_\_

Name of dealership: \_\_\_\_\_

Model **M-60 Mk. 3.2** Date of purchase: \_\_\_\_\_ serial # \_\_\_\_\_ price paid: \_\_\_\_\_

Optional:

Comments concerning your dealer: \_\_\_\_\_

\_\_\_\_\_

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Comments concerning this product: \_\_\_\_\_

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Components in your system: \_\_\_\_\_

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Suggestions: \_\_\_\_\_

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