



Thank you for choosing the Cello Rhapsody amplifier. Your Rhapsody has been individually made, from the finest parts and materials available. The Rhapsody utilizes proprietary circuitry and processes, developed by Matthew James, L.L.C., that represent true state of the art in audio electronics. The Rhapsody is designed to perform to specification for decades of enjoyment. We hope the Rhapsody provides you with complete satisfaction. Please read this information carefully, and care for your Rhapsody so that it will retain its value, appearance, and performance.

If you have any questions, contact your authorized Cello representative, or contact Matthew James directly, via phone (860 349-5999), fax (860 349-0579), or email (jimm@matthew-james.net). It is our wish to assist you in any way possible to facilitate your enjoyment. These are the private, home office numbers and email address of Matthew James' Managing Partner. As a result, while you can rest assured that your concerns will be treated with the utmost urgency, the Managing Partner occasionally travels, sleeps, and listens to music, so he may not always be immediately available to respond.

Product Concept and Description

The Cello Rhapsody amplifier contains the most recent thinking in high-powered amplifier circuitry and mechanical design from the staff of Matthew James, L.L.C. The primary design criteria for the Rhapsody is to deliver sound as neutral as possible, while remaining stable under all conditions likely to be encountered in the reproduction of music and film sound in the home. Available as either a two- or three-channel amplifier, the Rhapsody is designed to deliver in excess of 200 watts per channel into an 8-ohm load, and more than 400 watts per channel into a 4-ohm load. When bridged (i.e., two channels, instead of driving two speakers, drive a single speaker, with one channel handling the (+) positive side of the waveform, and the other channel handling the (-) negative side of the waveform), the Rhapsody will develop (4) four times the power that it does under normal operation 800 w/ch into 8 ohms, 1,600 w/ch into 4 ohms.

The Rhapsody is designed to have the lowest possible levels of distortion while under actual use, as opposed to measuring well simply on a test bench. The circuitry is designed to perform well under the complex resistive, reactive and regenerative loading which loudspeakers present to an amplifier. And again, it does so without adding additional forms of distortion before the overload threshold is reached. The design approach has been to place importance on the requirements of actual music and film sound reproduction. Many amplifiers utilize some form of soft-clip circuitry to deal with overload. The problem is that many of these approaches introduce additional forms of distortion before the actual overload threshold is reached. Furthermore, most designs to control overload are not comprehensive in dealing with all of the situations that negatively affect an amplifier's ability to remain stable under demanding situations. They might only control voltage overload, while current and frequency overloads also have a significant impact upon the reproduced sound. The Rhapsody has been designed to control all three forms of overload under all conditions.

Considerable effort has been made to reduce low frequency errors, because most of the energy in music and film sound reproduction is present in this part of the frequency spectrum. It is crucial to maintain low intermodulation distortion of low level, high frequency information in the presence of large low- and mid-frequency signals under complex loading. In the Rhapsody, the driver and output stages are set to have the lowest distortion at small signal levels and to gradually increase with signal level. While this results in slightly higher total harmonic distortion (THD) measurements at full power levels, it conversely allows for the lowest possible distortion under actual listening conditions. Again, the requirements for accurate music and film sound reproduction have taken precedence in all design decisions.

All electrical connections for signal flow within the Rhapsody are accomplished via flat silver cables insulated with Kapton, or by heavy, solid copper buss bars. The chassis is manufactured with heavy aluminum plates on

all six sides. (3) Three specially designed feet, utilizing ball bearings of a similarly hardened steel and a proprietary coating, eliminate the possibility of surface-borne disruptions from affecting the performance of the circuitry.

The input stage of the Rhapsody amplifier remains under control under any overload condition. The design tactics were chosen because they provide wide dynamic range and provide a greater measure of resistance to overload, before loss of control, than other possible choices.

The output stage of the Rhapsody employs six pairs of 250 watt, metal case, bipolar output devices per channel. The number and type of devices were chosen because they remain stable with a less complex circuit, requiring less negative feedback, and are easier to match to each other than other possible choices for this stage. The choice of devices, the location of devices on the heat sinks, and the heat sinks themselves were carefully considered to minimize the temperature variations among the output devices. The power devices are mounted with all metal hardware, compression washers and special graphite and metal composite gaskets to insure maximum thermal conductivity and full utilization of the output devices. Once again, consistent performance, stability and reliability under normal conditions of actual use were the driving factors in the design.

The location of the transformer was carefully considered relative to the other circuitry in the amplifier that can be affected by the magnetic fields that it generates. Heavy nickel plated copper buss bars have been utilized to improve grounding and power distribution within the amplifier. The signal from the amplifier's audio channels is delivered to the speaker buss bars via flat silver cables (AWG 10) insulated with Kapton. Special high temperature filter capacitors, with high current terminals are used to insure the utmost in performance.

Unpacking

The packing box for the Rhapsody amplifier should arrive in good condition. Please inspect for damage to the carton, although this is unlikely due to the strength of the carton construction. Open the packing carefully and save all foam pieces and boxes for re-use in the event the Rhapsody needs to be shipped in the future. Should the box become lost, please contact your dealer for replacement carton and packing material.

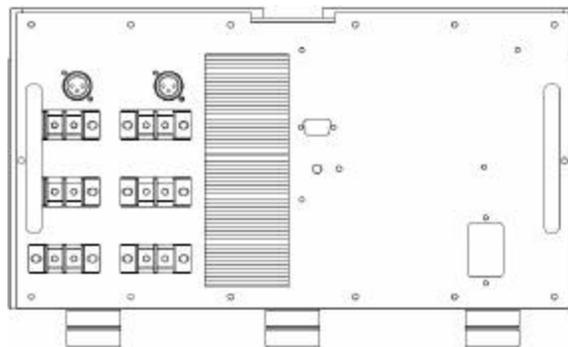
Each carton should contain (1) one Cello Rhapsody amplifier, (1) one AC line cord, (1) one owner's information and warranty registration sheet.

Installation

Be certain that the Rhapsody amplifier is installed so that it has proper ventilation. The ambient temperature should not exceed 122 degrees F (50 degrees C).

Connect inputs 1 & 2 (2-channel version) or 1, 2 & 3 (3-channel version) of the Rhapsody via XLR terminated interconnect cables, and to the line outputs of your preamplifier or other source component.

Connect outputs 1 & 2 (2-channel version) or 1, 2 & 3 (3-channel version) of the Rhapsody via speaker cables and to the corresponding terminals of your speakers. Provisions are made for connections up to tri-amp level.



Connect the AC line cord from the IEC connector on the rear of the amplifier to the power outlet in your home.

Push the front panel power button to turn the unit on. Your Rhapsody should now be functioning and the LED on the front panel should be green in color. If the LED turns red in color, the protection circuitry has been activated indicating a problem with your system or amplifier.

Service

If you believe your Cello Rhapsody amplifier is not functioning properly, please contact your dealer / distributor. If you need to return your component, you will be given a Return Authorization Number (RA#). This number must appear on the outside of the shipping carton. Returns without RA#s will not be accepted. Returns received in original packing material will be returned in original packing. Returns received in non-original Rhapsody packing material will be returned in new Rhapsody packing at the owner's expense. If you need new packing material to return your Rhapsody, please contact your dealer / distributor.

Maintenance

The finish of the Cello Rhapsody amplifier is machined aluminum that has been brushed (top, sides, face, nameplates), glass bead blasted (sides), and powder coat painted (blue center portion, rear and bottom). Ammonia based glass cleaner, or a (3 to 1) three to one mixture of Grain Alcohol and distilled water, applied with a soft white, lint free cloth, works well to remove fingerprints and other dirt. The glass bead blasted sections of the Rhapsody are particularly difficult to clean because of the nature of the finish. Please take care to keep these areas clean. A pair of soft white gloves is provided for removing the Rhapsody from the box and situating it within your room. Take care when cleaning the rear panel as excessive rubbing may remove the silk-screened lettering. Be sure that the amplifier is turned off and disconnected from the AC line before cleaning and always try to keep excess cleaning fluid from getting inside the amplifier.

Limited Warranty

Matthew James, L.L.C. warrants all mechanical and electrical parts of the Cello Rhapsody amplifier for (5) five years from original date of manufacture. Labor expenses associated with the service of the Rhapsody amplifier are the responsibility of the dealer or distributor, if applicable, except as follows:

Any defect in the Rhapsody amplifier within the first (2) two years from the original date of manufacture shall be repaired by the dealer / distributor with labor expenses paid by Matthew James, L.L.C. according to factory rates for a given repair. At Matthew James' discretion, or if the dealer / distributor is unable to perform the repair, the unit may be returned to the factory for service using agreed upon airfreight. After repair the unit will be returned by the same carrier or equivalent. During years (3-5) three through five, if the dealer / distributor is unable to perform the repair, Matthew James will pay the return airfreight from the factory by agreed upon carrier, provided the unit was shipped to the factory with airfreight prepaid.

Matthew James will not pay freight costs if the unit is returned without a Return Authorization Number (RA#).

Matthew James will not pay the freight if the unit is found to be in working order.

There is no reason to register your warranty. It is done so automatically by the factory. We respect owner's privacy and don't try to gather information without the owner's knowledge and consent. Warranty is automatically transferred to a subsequent owner who may wish to verify date of manufacture and remaining warranty period. If you want to register to receive product information, or find out more about Matthew James' or Cello products, we invite you to visit our web page at either www.matthew-james.net or www.cello-audio.net.

Warranty of Repair Work Performed

Any specific repairs or modifications effected by Matthew James, or authorized service facility, shall be guaranteed for 100% parts and labor for the remainder of the original warranty period for this particular unit, or (1) one year, whatever is longer.

Tampering, Abuse or Misuse

Any unauthorized modifications, repairs or tampering, and/or any indication of owner abuse, negligence or improper usage, as determined by Matthew James, L.L.C., will result in the voiding of the warranty. There are no user serviceable parts inside.

Special Features

The Cello Rhapsody amplifier has a number of features that will be useful to certain owners. On the rear panel you will notice a RESET button which is identified and accessed through a hole in the rear panel. In some installations that rear of the unit may be the only part of the amplifier accessible to the user and, if the unit has been shut down through some fault condition, it can be restarted by gently inserting something into the RESET hole to trip the unit back on. Under all circumstances where the front panel button is accessible, it is preferable to turn the Rhapsody on via the front panel on/off button.

The Rhapsody has a 12-Volt turn-on/off trigger located on the back panel and identified as REMOTE. It is included to facilitate placement considerations in all types of installations. High is on and low is off.

There is also an RS-232 port on the rear panel through which the factory can access a microprocessor which controls protection from overheating, shorted speaker cables, DC offset and under-, over-voltage. It also controls certain "house-keeping" functions like diagnostics, soft-start and muting. There are no user accessible features available through this connector. Your amplifier has been set at the factory for certain fault conditions. While the voltage for the unit can be reset by connecting the windings from the transformer to certain connectors on the terminal strip of the Power Supply Board inside the amplifier, the microprocessor has been set at the factory to detect low voltage situations that could be harmful to the amplifier. These have been set appropriately to protect the amplifier at the voltage originally set by the factory. They cannot be changed by anyone except the factory. As a result, the Rhapsody cannot be used at a different voltage than it was originally set for at the time of manufacture, without factory changes to the microprocessor.

Bridged Operation

The Rhapsody amplifier can be configured, at the time of original manufacture, to be a mono amplifier, capable of very high output capability. An existing 2-channel Rhapsody can be re-configured, again, only by the factory, to be a mono amplifier as well. A 3-channel Rhapsody can have two of its channels bridged, while the third channel operates normally. The bridged Rhapsody will always be configured so that Channel 1 is used as the input. Connect the (+) plus side of the speaker cable to the Channel 1 High speaker cable connector on the Rhapsody. Connect the (-) minus side of the speaker cable to the Channel 2 High speaker cable connector on the Rhapsody. *Caution: Bridged operation should only be done with the recommendation of the speaker manufacturer.*

Specifications

Class AB2 with inverting and non-inverting polarity; balanced input, bridgeable.

Continuous Sine Wave Power rated at 200w/ch (800w/ch when bridged) into 8 ohms from 20Hz to 20kHz at maximum .25% THD.

Continuous Sine Wave Power rated at 400w/ch (1600 w/ch when bridged) into 4 ohms from 20Hz to 20kHz at maximum .5% THD.

Power consumption: 1,500 watts at full output.

IMD SMPTE: <.1%

Gain: 23dB

Dynamic Headroom: 2.5dB

Frequency Response: 20Hz to 20kHz +/- .5dB

Input Impedance: 10K ohm inverting, 10K ohm non-inverting

Noise: -100dB below full rated power. C weighted

Dimensions: W: 43cm (17.05") x H 26cm (10.148") x D 55.3cm (23.316")

Weight: (2 channel version) 105lbs; (3 channel version) 115lbs.

It is Matthew James' hope that the Rhapsody amplifier provides evidence of our desire to develop products that are responsive to the audio requirements of the 21st century marketplace, while maintaining our long-held commitment to the highest levels of sonic performance, stability under actual real-world conditions, and unsurpassed long-term reliability.

