



CELLO ENCORE AMPLIFIER

OWNERS MANUAL



Thank you for choosing the CELLO ENCORE AMPLIFIER

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

If you have any questions, contact your authorized Cello representative, or contact Matthew James' Showroom directly, via phone (860 349-5999) 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, you can rest assured that your concerns will be treated with the utmost urgency.

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS COMPONENT
TO RAIN OR MOISTURE.**

**RISK OF ELECTRICAL SHOCK
DO NOT OPEN**

**CAUTION:
TO REDUCE THE RISK OF ELECTRICAL SHOCK,
DO NOT REMOVE COVER.**

**NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED PERSONNEL.**



Marking by the “CE” symbol (shown left) indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community.

Please read all instructions and precautions carefully and completely before operating your Cello Encore power amplifier.

- 1 ALWAYS** disconnect the entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component.
- 2** AC extension cords are not recommended for use with this product.
- 3 NEVER** use flammable or combustible chemicals for cleaning audio components.
- 4 NEVER** operate this product with any covers removed.
- 5 NEVER** wet the inside of this product with any liquid, or pour/spill liquids directly onto this unit.
- 6 NEVER** block airflow through ventilation slots.
- 7 NEVER** bypass any fuse or replace any fuse with a value or type other than those specified.
- 8 NEVER** attempt to repair this product. If a problem occurs, contact your Cello retailer.
- 9 NEVER** expose this product to extremely high or low temperatures.
- 10 ALWAYS** unplug sensitive electronic equipment during lightning storms or if the unit will not be used for a prolonged period.

Product Concept and Description

Back in 1986, Cello introduced the Performance Amplifier which was designed to provide the most natural sound and widest dynamic range from recordings. The new Cello Encore amplifier is the first amplifier to really sound like a Performance Amplifier because it uses the driver board from the original Performance, updated to modern parts and assembled using traditional techniques.

Rated at 125w/ch @8ohms the stereo Cello Encore amplifier comes in two chasses with the amplifier channels residing separately from the Cello Master power supply in exactly the same way that the Cello Chorale preamplifier is powered by the Cello Master.

The Cello Encore amplifier from Matthew James incorporates a number of engineering advances which allow high performance in a compact and efficient design, providing a practical and appealing product for inclusion in music systems of the highest quality. The circuitry is exceptionally stable and can be used with speakers which present loads as low as 1ohm.

The Encore is designed to have the lowest possible levels of distortion while under actual use, as opposed to simply measuring well 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. The design approach has been to place importance on the requirements of actual music 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. The Encore has been designed to control all 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. The Encore is designed 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 reproduction have taken precedence in all design decisions.

The input stage of the Encore 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 than other possible choices.

The output stage of the stereo Encore employs one pair 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.

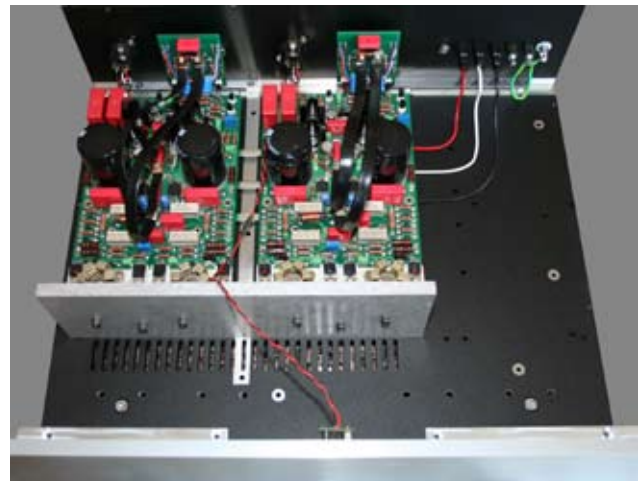
All electrical connections for signal flow within the Encore are accomplished via flat, very pure silver and copper cables insulated with Kapton. The chassis is manufactured with heavy aluminum plates on all six sides. (3) Three specially designed feet, utilizing ball bearings of hardened steel with a proprietary coating, eliminate the possibility of surface-borne disruptions from affecting the performance of the circuitry.

Unpacking

The packing box for the Encore 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 Encore needs to be shipped in the future. Should the box become lost, please contact your dealer for replacement carton and packing material.

Each Encore carton should contain:

- (1) one Cello Encore amplifier,
- (1) one DC cable with
- (5) five color coded conductors,
- (1) one owner's information sheet.



Encore inside chassis

An important part of the Cello philosophy is found in the physical separation of the power supply from the active circuitry of either the preamplifier or the amplifier. The external Master power supply includes a mu-metal shielded transformer and power supply regulation. DC voltages are transported from the Master to the Encore via teflon shielded, copper cables terminated with substantial copper/rhodium spades.

Each Master carton should contain
(1) one Cello Master power supply
(1) one AC cable.



Master inside chassis

Installation

Be certain that the Encore amplifier and Master power supply are installed so that they have proper ventilation. The ambient temperature should not exceed 122 degrees F (50 degrees C).

Check to make certain that the Master power supply is set to be used at the voltage available in your installation. There is a small label on the rear panel, at the bottom left, near the AC IN receptacle, which indicates THIS UNIT IS WIRED FOR, followed by a sticker indicating the voltage at which the unit has been set.

The Encore amplifier and Master power supply are connected with a DC cable that is two meters in length. The Encore and Master can be situated anywhere, relative to each other, allowed by the two meter length of the DC cable. The cables are terminated with substantial copper/rhodium spades at both the Encore and the Master.

Connect the DC cable to the Encore and the Master using the individually colored strands of cable to the screw-connected terminal block with the color coded system as labeled on the back of both the Encore and the Master.



Connect inputs 1 & 2 of the Encore via XLR terminated interconnect cables, and to the line outputs of your preamplifier or other source component.

Connect outputs 1 & 2 of the Encore via speaker cables and to the corresponding terminals of your speakers.



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

Push the rear panel power button to turn the unit on. Your Encore and Master should now be functioning and the LEDs on the front panels should be illuminated and red in color.

Service

If you believe your Cello Encore 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 packing material will be returned in new packing at the owner's expense. If you need new packing material to return your Encore or Master, please contact your dealer / distributor.

Maintenance

The finish of the Cello Encore amplifier is machined aluminum that has been brushed (top, sides, face), and powder coat painted (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. 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' Showroom, L.L.C. warranties all mechanical and electrical parts of the Cello Encore amplifier and Master power supply for (5) five years from original date of manufacture. Labor expenses associated with the service of the Encore amplifier and Master power supply are the responsibility of the dealer or distributor, if applicable, except as follows:

Any defect in the Encore amplifier and Master power supply 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' Showroom, L.L.C. according to factory rates for a given repair. At Matthew James' Showroom's 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' Showroom 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' Showroom will not pay freight costs if the unit is returned without a Return Authorization Number (RA#).

Matthew James' Showroom 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' Showroom 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' Showroom, 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.

Dimensions:

Encore: W: 43cm (17.05") x H 14.5cm (5.70") x D 39.4cm (15.51"). Weight: 32lbs.

Master: W: 43cm (17.05") x H 14.5cm (5.70") x D 41.3cm (16.25"). Weight: 36lbs.

Specifications

Power Output:

Encore stereo amplifier: 125 w/ch @ 8ohms

Encore mono amplifier: 500 w/ch @8ohms

IMD SMPTE (60Hz and 7kHz): <0.3%

THD (20-20kHz): <0.3%

Frequency Response: -.3dB @20kHz

Signal to Noise: -100dB @1kHz

Gain:

28.5dB single ended

34.5dB balanced

Input Sensitivity:

752mV single ended

376mV+/- balanced

Input Impedance: 330kohms non-inverting / 5kohms inverting

It is Matthew James' Showroom's hope that the Encore amplifier and Master power supply provide 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.

Encore Mono Amplifier



The Encore amplifier can be bridged, resulting in a mono amplifier with 4 times the power capabilities of the stereo version. The Encore mono is a no compromise design, combining musical clarity, sonic refinement and power.

The Encore mono achieves ultra-low distortion into any load, exceptional bass control, natural tonal quality and the power to drive any speaker to its maximum impact and dynamic potential. It is the ultimate power amplifier ever produced under the Cello brand.

Bridging is accomplished internally for both maximum performance and so that the user is presented with a very simple connection.



Rear Panels of the Encore mono amplifiers and Master power supplies

The Cello Integrated Amplifier



A stereo Encore amplifier and a Chorale preamplifier can be powered by a single Master power supply providing state of the art performance at a price seldom associated with such a performance level.



*Rear Panels of the Chorale preamplifier,
Encore stereo amplifier and Master power supply*

Cello products are designed and built by hand in
Connecticut, USA by

Matthew James' Showroom, L.L.C.
84 Long Hill Road
Middlefield, CT 06455

Phone 860 349-5999
Email jimm@matthew-james.net

