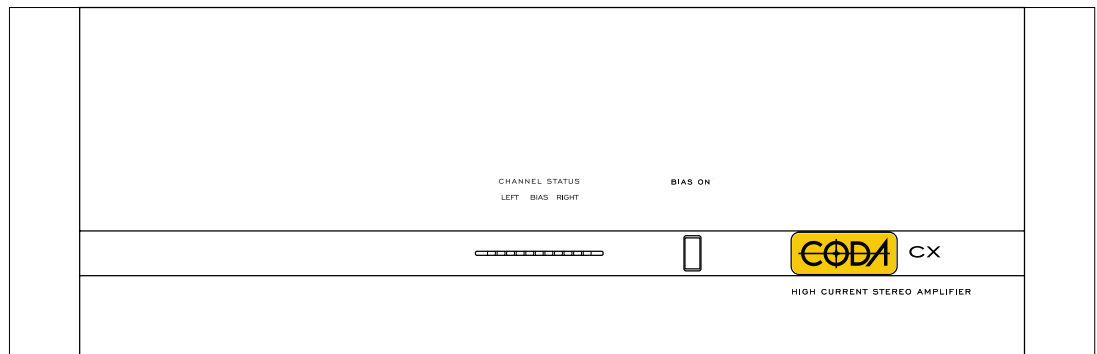


T E C H N O L O G I E S I N C .

# Monoblock Amplifier **CX**

## OPERATION MANUAL



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<b>CAUTION</b>		
	<b>WARNING</b>	
<b>CAUTION:</b> TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		
	THIS SYMBOL IS TO ALERT YOU OF THE PRESENCE OF UNINSULATED DANGEROUS VOLTAGE WITHIN THE UNIT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.	
	THIS SYMBOL IS INTENDED TO ALERT YOU OF THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE UNIT.	

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. TO AVOID ELECTRICAL SHOCK, DO NOT OPEN THE UNIT. REFER SERVICING TO QUALIFIED PERSONNEL.

- CAUTION** -
- Never install or remove the power cord from the chassis unless it has been disconnected from the AC power source first.
  - Never pull on the power cord when removing it from an AC power source. Grasp it by the plug.
  - Do not leave the power cord connected to an AC power source unless it is connected to the unit.
  - It is recommend that during extended periods of nonuse that the units power cord be unplugged from its AC power source.
  - Route the AC power cord so that it will not be damaged or walked on.

This amplifier is a precision device, designed in an effort to provide the listener with unmatched sound quality, design, and construction. In order to operate your amplifier properly and to realize all of the capabilities of the AMPLIFIER CX, we recommend that you read this entire manual carefully.

In early 2004, development began on the long awaited successor to the Stage 3 Amplifier. Our design goals were nothing less than improvements in sonics and industrial design sufficient to raise this product series up into the more prestigious and well known "Coda" product line. At about the same time, another well-known audio manufacturer commissioned Coda to develop a cost-no-object reference monoblock amplifier and reference preamplifier.

During this extensive 2 year development process, many new components and design enhancements were measured and subjectively evaluated on an exhaustive scale. It was during this process of experimentation that it became clear that judicious use of extreme high quality component parts and techniques could extract even greater performance out of our current designs. The resultant design evolution brought a quantum improvement in timbre and resolution to the entire component line. This was the genesis of the new **Coda "X" series**... the Monoblock Amplifier **CX**, Preamplifier **CLX**, and Stereo Amplifier **CSX**.

The **Coda Amplifier CX** features a wide range of design topologies and components ported from both the broad lineage and the most recent advances in the Coda products and design topologies, which include:

- HIGH NON-BRIDGED CURRENT DESIGN · NEW VMOSFET VOLTAGE GAIN STAGE
- TRUE STANDBY MODE TURNS OUTPUT STAGE BIAS CURRENT ON AND OFF FROM THE FRONT PANEL.
- COMPONENT UPGRADES TO HARDWARE AND COMPONENT PARTS, INCLUDING Mills Custom Copper-Nickel Alloy Wirewound Emitter Resistors, IXYS High Speed Rectifier, Black Gate and ReIcap capacitors, Vishay Resistors, WBT Signature Gold Binding Posts, WBT or Vampire OFC RCA connectors, etc. · 3.0 KVA ENCLOSED TOROIDAL TRANSFORMER · GOLD PLATED CIRCUIT BOARDS

The Monoblock **CX** uses a similar output stage topology to that of the flagship Coda Amplifier System 200, where all output devices are paralleled, rather than bridged, to provide exceptional power and low impedance drive capability. In addition, the classic bridged design drawbacks of decreased load intolerance and redistribution of harmonics towards the unfavorable odd harmonics are avoided. The robust power supply provides exceptional peak current with a custom 3.0kVA encased, shielded toroidal transformer with independent windings and IXYS high speed rectifiers and a total of 80,000uf supply capacitance with very low ESR and inductance is used.

Differential JFET inputs and a new Vertical MOSFET voltage gain stage provide exceptional rejection of noise and contributes to the inherent DC stability of the circuit. This allows direct coupling at the Balanced Input without servo circuitry. The front end is designed to provide a slew rate of 50 V/us without entering Class B operation as is common in many other designs. The amplifier's excellent high frequency design insures superlative linear operation.

This latest generation Coda output stage design is capable of producing peak currents in excess of 125 peak Amperes with a degree of linearity and speed which is not matched by other designs when producing only a fraction of this massive amount of current. The bias section is designed to produce a precision transition with no abrupt changes in distortion or output impedance. This "Precision Bias" technique yields seamless performance regardless of the complexity of the load impedance. With such linearity and bandwidth, only 6db of feedback is used to maintain damping factor while permitting the minimal value custom emitter resistors to provide current limiting only under such extreme conditions that would exceed the output stages high current capabilities. One advantage of this is a high degree of immunity from interactions with complex speaker loads or cables.

The sonic and aesthetic value of the **CX** versus the **CS** amplifier is unquestionable. As a complement to the **CSX**, **CLX**, or **05X**, the **X** components provide a rare sonic synergy and represent some of our best efforts to date and provide a clear example of what we mean by our simple mission statement to provide **"Fidelity. Performance. Value."**

The interior of the unit requires no special care. If it becomes necessary to clean the exterior, a simple dusting may be all that is required. If a cleaner is necessary, any dilute commercial ammonia based product will be appropriate. NEVER use any abrasive rags, cleaners or chemical solvents on Coda products.

When handling the unit, take care not to mar the aluminum. Aluminum is a medium hardness metal and can be scratched by the harder tool steels.

Avoid exposing the unit to direct sunlight, and keep it away from sources of intense heat.

Do not throw away the carton or associated packing material. They are ideal if you need to pack the unit for moving and in the unlikely event that servicing is needed, they will be necessary for safe shipment.

Be sure to provide adequate insurance when shipping.

**RATED POWER**

450 Watts x 1, 20 Hz to 20 kHz into 8 Ohms  
900 Watts x 1, 20 Hz to 20 kHz into 4 Ohms  
2 Ohm load stable

**BANDWIDTH**

DC or -3dB at 5 Hz through 100kHz depending on input

**DISTORTION**

Less than .03% from 10Hz to 20kHz at 750 Watts both channels driven into 4 through 8 Ohms

**GAIN**

26dB

**CURRENT CAPABILITY**

150 Amperes peak

**SLEW RATE**

50 Volts/microsecond

**INPUT IMPEDANCE**

50k Ohms unbalanced/1k Ohms balanced

**OUTPUT IMPEDANCE**

.04 Ohms from 20Hz to 20kHz

**NOISE**

More than 110dB referenced to rated output

**POWER SUPPLY**

3.0 kVA toroidal transformer with independant rectifiers and 80,000 uF of capacitance

**DIMENSIONS**

Faceplate: 17 inches wide by 5.5 inches tall  
Chassis: 16.75 inches wide by 6 inches tall by 14 inches deep

**WEIGHT**

62 lbs

# WARRANTY

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I. Warranty- Any failure of Coda products to operate or to meet specifications, applicable at time of manufacture, due to a manufacturing defect or component failure, will be corrected by Coda Technologies, Inc. without charge for parts, or labor for a period of **ten years** from date of original purchase. Coda Technologies, Inc. will provide for surface transportation to the Coda factory from an authorized Coda Technologies, Inc. authorized dealer for a period of one year from date of purchase.

Maximum term for any warranty claim shall be **ten years** from date of original sale, or 11 years from date of manufacture, whichever is shorter. Date of manufacture shall only be defined only manufacture date imbedded in serial number of product.

Warranty shall be transferrable for a period of five years from the date of purchase. Subsequent owners are required to provide proof of sale/transfer from the original owner. Original owner may transfer warranty for the entire period of the warranty. Coda Technologies reserves the right to make the final determination as to validity of warranty claims in cases where ownership or manufacture date is not clear and substantiated in writing.

II. Procedure- If the product should require service under warranty, take it with proof of purchase date, with its carton and packing material, to a Coda Technologies, Inc. dealer. The dealer will arrange for service. Direct shipments to the factory will be not be accepted without advance written authorization (RMA). Coda products purchased outside of the U.S. will be covered by those warranty conditions extended by the importing distributor which may differ in some respects from those given above. Warranty service, if required, is the responsibility of the importing distributor. If a Coda Technologies, Inc. product is removed from the country of original purchase, Coda Technologies, Inc. distributors or dealers are not obligated by the conditions of this warranty and repairs will be affected at their discretion.

III. Exclusion of Coverage- At the sole opinion of Coda Technologies, Inc. the following situations are specifically excluded from coverage:

1. Any product not operated in accordance with the instructions contained in this manual, or otherwise subjected to abuse, tampering, modification, accidental damage, or serial number defacement.
2. Damage to other property caused by any defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss, or any other damage whether incidental, consequential, or otherwise.
3. It is Coda Technologies, Inc. policy to extend coverage when reasonable doubt exist; however, freight and diagnostic charges will be billed for any units returned under warranty and found by the company to be operating according to specification.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Coda Technologies, Inc. continually researches new techniques, designs, and construction methods and so reserves the right to introduce refinements into current product lines without notice or obligation. The company may offer product modifications to make these refinements available to earlier production units.

# WARRANTY REGISTRATION

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Fill in and retain this copy of the warranty registration sheet for your records .  
To validate your registration, please call, mail, email, or FAX a copy of this registration to Coda at 916.386.8296 within 30 days of date of purchase. Please include proof of purchase with your submission.

**MODEL DESIGNATION:** \_\_\_\_\_

**SERIAL NUMBER:** \_\_\_\_\_

**DATE OF PURCHASE:** \_\_\_\_\_

**PLACE OF PURCHASE**

Dealer: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

**PURCHASER**

Name: \_\_\_\_\_

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

City: \_\_\_\_\_ State: \_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

**NOTES:** \_\_\_\_\_  
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Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

**PURCHASER**

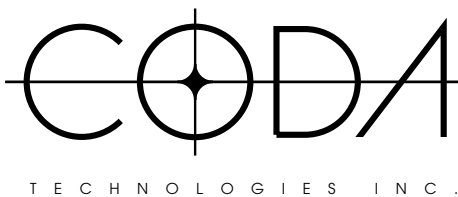
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**NOTES:** \_\_\_\_\_  
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