



# CD 303/200

CD Transport/Processor  
96 kHz/24 Bit Digital to Analog Converter  
HDCD Decoding



## Owner's Manual

**NOTE:** Before installing your new component, please read this manual carefully as it will inform you of the specifications, proper installation and operation procedures. Also included in this manual are guidelines on how to service and care for your new Cary Audio Design products.

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This product is covered by one or more of the following: (*Other patents pending*)

| Country                | Patent No. |           |           |           |
|------------------------|------------|-----------|-----------|-----------|
| United States          | 5,479,168  | 5,638,074 | 5,640,161 | 5,808,574 |
|                        | 5,838,274  | 5,854,600 | 5,864,311 | 5,872,531 |
| Australia              | 669114     |           |           |           |
| Other patents pending. |            |           |           |           |

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# SPECIFICATIONS

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This section describes the basic specifications of the CD 303-200 at the time of printing. Specifications are subject to change without notice or obligation. When the following cautionary terms are used in this manual, these definitions apply:

**WARNING**

Electrical hazard! Misuse or failure to follow instructions properly may result in personal injury or death!

**CAUTION**

No risk or personal injury; however, misuse or failure to follow instructions may result in damage to equipment.

**NOTE**

No risk of personal injury or equipment damage; however, misuse or failure to follow instructions may prevent proper performance of the equipment.

|                             |   |
|-----------------------------|---|
| CD MECHANISM                | Philips CDM12   |
| MASTER CLOCK JITTER         | Below measurable levels   |
| DIGITAL FILTER              | Pacific Microsonics PMD-200 with HDCD decoding                          |
| DIGITAL / ANALOG CONVERTERS | (2) Two Burr Brown PCM 1704u-K grade                                    |
| ANALOG FILTER               | 3rd Order Bessel  |
| ANALOG OUTPUTS              | Balanced XLR, Single-ended RCA  |
| DIGITAL OUTPUTS             | AES/EBU, Coaxial, Toslink   |
| DIGITAL INPUT               | Coaxial   |
| DIGITAL INPUT SAMPLE RATE   | 32kHz, 44.1 kHz, 48kHz, 88.2 kHz, and 96 kHz; Accepts 16, 20 or 24 bits |
| FREQUENCY RESPONSE          | 2 Hz - 44 kHz (96 kHz)  |
| AMPLITUDE LINEARITY         | 0.1 dB (20 Hz - 20 kHz)   |
| PHASE LINEARITY             | 3° (20 Hz - 20 kHz)   |
| DYNAMIC RANGE               | 112 dB (1 kHz)  |

|                              |  |
|------------------------------|--|
| <b>SIGNAL-TO-NOISE RATIO</b> | 118 dB (1 kHz)   |
| <b>CHANNEL SEPARATION</b>    | 107 dB (1 kHz)   |
| <b>THD</b>                   | 0.0009% (1 kHz)  |
| <b>AUDIO OUTPUT LEVEL</b>    | Single-ended 3.0V Vrms or 6.0 Vrms<br>Balanced XLR 6.0 Vrms or 12.0 Vrms |
| <b>POWER INPUT</b>           | Set at factory, 100-120/200-240 Volts AC, 50-60 Hz                       |
| <b>POWER CONSUMPTION</b>     | 35 Watts   |

# INSTALLATION

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This section describes the unpacking and installation procedures for your new component.

## Unpacking

All Cary Audio Design shipping containers have been specially designed to protect their contents and special care has been taken to prevent damage under normal shipping conditions. Mishandling should be evident upon inspection of the shipping container. If shipping damage is found after visual inspection, take care not to destroy the evidence. If necessary, document the damage with photographs and contact the transport carrier immediately.

Carefully remove your new component from its packing carton and examine it closely for signs of shipping damage. We strongly recommend saving all original packing cartons to protect your component from damage should you wish to store it or ship it for after-sales service.

## Warranty Card

**IN THE USA:** If you are the original purchaser of a new unit from an AUTHORIZED CARY AUDIO DESIGN DEALER, please fill out the enclosed warranty registration card and return it to Cary Audio Design within 15 days of your purchase. Cary Audio Design also suggests that you keep your original packing cartons in case you ever need to ship the unit when moving to a new home. Warranty restrictions apply. Consult the warranty section at the end of this manual for details. Please be certain to keep a copy of the original sales receipt from your AUTHORIZED CARY AUDIO DESIGN DEALER to validate the warranty if ever needed. The warranty is for the original purchaser only and does not transfer to any subsequent owner.

**OUTSIDE THE USA:** Your local Authorized Cary Audio Design Distributor will make his own warranty policy for your country. Please check with them for the terms of warranty for your new component.

## Placement

In general, the location of your new CD 303/200 is not critical. However, certain precautions must be taken to ensure optimum performance. Avoid extremely hot locations such as near radiators or other heating units. Avoid getting it wet or using it near water. Do not stack the CD 303/200 on top of a power amplifier. Allow 4-6 inches (10-15cm) above the unit for proper ventilation.

## Power Requirements

The CD 303/200 CD Transport/Processor is designed to operate from AC mains current. The design voltage is either 100-120V or 200-240Volts AC, 50-60 Hz.

## Connections

.....  
**Digital Outputs**      The outputs send a digital signal and should only be connected to the appropriate digital signal input of an accompanying component.

.....  
**Analog Outputs**      The outputs are for connection to the CD, CD-R, DAT, MD, MP-3 and DVD player's digital output jack.

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# OPERATION

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Your new CD 303/200 CD Transport/Processor is ready for operation after interconnect cables have been installed. Signal output connection is made via the output jacks on the rear panel of the CD 303/200. The analog or digital output interconnect cables should go to the input connections on the accompanying preamplifier or Digital to Analog processor. The choice of high quality interconnect cable is important and we recommend them highly. Your audio dealer will have the proper cables in stock for this purpose.

## Power On and Standby Mode

When your CD 303/200 is connected to the power supply, the unit will switch to the Standby mode automatically. This is a convenient feature for users to turn the power on and off with the remote control handset.

## Front Panel Features

|                       |  |
|-----------------------|--|
| POWER                 | This switches the power ON and OFF   |
| INPUT SELECTOR BUTTON | This switches the digital input or CD selections   |
| SAMPLE-RATE CONVERTER | For selection of the internal D/A sample rate; the output data of the "ON" setting is 96kHz/24bit and the data rate of the "OFF" setting is matching the input data. |
| REMOTE SENSOR         | Receives the signals from the remote control   |
| DISPLAY               | Gives information on the functioning of the player   |
| OPEN/CLOSE            | Opening and closing the CD loader tray. The loader tray will close if you press against the front edge briefly   |
| PLAY                  | Start play   |
| STOP                  | Stop play  |
| PREVIOUS and NEXT     | Selecting another track during play. Selecting a track to start play   |

## LED Indicators

|       |   |
|-------|---|
| POWER | LED above the power button illuminates when the player is switched off to indicate the "standby" mode |
| HD CD | LED above the HD CD logo illuminates automatically when HD CD signal is detected from a disc          |
| INPUT | LED above the button illuminates when the digital input function-COAXIAL is "ON"                      |

96 kHz/24Bit

LED above the button illuminates when the sample rate converter function is "ON"

## Display



### PROGRAM

Lights up when a program is being played  
Blinks when compiling a program

### TRACK

Indicates what track is being played  
Shows the total number of tracks on the CD or in a program

### TRACK TIME

Indicates the elapsed playing time of the track being played

### REMAINING TIME

Indicates the remaining time of the CD or a track being played. A-B sign is shown in front the time

### REPEAT

Lights up when you repeat a CD or program. Selection of repeating 'One' or 'All' is possible by pressing the 'REPEAT' button on the remote

### DISPLAY MESSAGES

NO DISC - Lights up when there is no CD in the CD compartment  
OPEN - Lights up when opening the CD compartment  
CLOSE - Lights up when closing the CD compartment  
COA 00:00 - Lights up when COAXIAL digital signal is input

## Normal Playback

- Press POWER on unit or remote
- Open the CD Compartment by pressing OPEN/CLOSE
- OPEN lights up
- Insert an audio CD, printing side up and close the compartment
- CLOSE lights up, the number of tracks and the playing time of the CD are shown on the display
- Press the PLAY or ► on the remote to start play
- The number indicator shows how many tracks are on the CD; when a track has been played its number disappears
- The track being played blinks and its elapsed playing time is shown
- Play will stop after the last track
- Press POWER on unit or remote to switch the player off
- You can interrupt playback by pressing PLAY or II on the remote
- You can restart play by pressing PLAY or II on the remote
- You can stop playback by pressing STOP, OPEN/CLOSE or ■ on the remote

### Selecting another Track during Play (1-10)

- Key in the desired number. The music stops and a moment later the selected track begins to play
- You can also select the number by pressing ◀▶ (less than 0.5 seconds)

### Searching for a Passage during Play (◀▶ on the remote)

- Press ◀ to search backwards to the beginning
- Press ▶ to search forwards to the end
- The searching speed is determined by how long a key is pressed
  - The first 2 seconds fairly slowly, with sound
  - Then at the maximum speed, with no sound

### Starting with a Particular Track (1-0)

- Key in the desired number
- Play starts from the selected track automatically
- You can also select the number by pressing ◀▶ (less than 0.5 seconds)

### Repeating a Track

- Press REPEAT before or during playback
- REPEAT ONE Lights up; the selected track will be repeated continuously
- REPEAT ALL Lights up; all tracks on the disc will be repeated continuously
- Press REPEAT until the indicator goes off to stop the track being repeated

### Programming

- Press PROGRAM once on the remote; PROGRAM indicator on the display will blink indicating the program mode is now entered
- Key in track numbers in the sequence to be played
- Press either CLEAN or DELETE to edit input or cancel the program
- When programming is completed, press PLAY or ▶ on the remote to start playing the programmed tracks

### Break-In Period

The micro-components, precision capacitors and precision resistors take approximately 100 hours of music playing to 'form' and fully settle in for peak performance. The CD 303/200 will sound good right out of the box. However, after the first 100 hours you will notice increased depth and tighter bass. This break-in period contradicts engineering theory, but is true with most HIGH PERFORMANCE audio components.

#### **WARNING**

**MAKE SURE PLAYER IS UNPLUGGED FROM AC MAINS BEFORE SERVICING.**



## SERVICE AND CARE

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The chassis may be cleaned with a soft towel and Windex® or a similar window cleaner. Spray it on the cleaning cloth to moisten it, not on the component. Do not use solvents or harsh chemicals to clean the preamplifier. They may remove the labels from the chassis. The frequency and need of cleaning will be governed by operating environmental conditions. Avoid letting the component become dusty or wet. A 'feather duster' type cleaner will also work well for cleaning the component.

### Factory Service

Careful consideration has been given to the design of this product to keep maintenance problems to a minimum. If the problem is not easily solved, we suggest that you contact our Customer Service Department by phone at (919) 355-0010, 1–5 pm Eastern Standard Time, to describe your problem in detail. DO NOT return the component to the factory without a Return Authorization Number (**RA**) from the Customer Service Department.

Cary Audio Design assumes no responsibility if the transportation company refuses to pay a damage claim due to your improper packing or lack of insurance should the unit be lost in shipment. We strongly suggest using the original packing cartons for shipping any Cary Audio Design component.

### Non-Warranty Repairs

Cary Audio Design will provide repair service for its products charging on a time and expense basis. At this time, the standard non warranty service bench fee is \$125 with all parts used for repair charged extra. This may change with time and is not a quote for service. Please call us at 919-355-0010 for more information about out of warranty service and repair fees.

#### **WARNINGS**

**Do not attempt to put the component in service with the cover removed. Contact with the power supply section found in the unit can be fatal. Completely remove AC power plug from the wall before servicing of the unit.**

#### **CAUTIONS**

**Never remove/insert the AC plug when the unit is on or the AC power switch is in the "ON" position.**

## UNITED STATES LIMITED WARRANTY

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Cary Audio Design warrants to the original United States purchaser for use in the United States, that Cary Audio Design vacuum tube or solid state power amplifiers, surround sound processors or preamplifiers shall be free from defects in parts or workmanship for three (3) years from the date of the original purchase. Vacuum tubes, if any are used in the component, are offered a 90 day from purchase date exchange policy against defects with the exception of the CAVT 300B vacuum tube which has a (1) one year from purchase date exchange policy. Any digital drive design, whether a Cary Audio Design CD or SACD player or a Cary Cinema DVD player, has a limited one year parts and labor warranty against defects in manufacture. This is a limited warrant, for the original purchaser only and does not transfer to any subsequent owner.

During the limited warranty period, Cary Audio Design or an authorized Cary Audio Design service facility will provide free of charge both parts and labor necessary to correct any defects in material or workmanship.

To obtain such warranty service, the original purchaser must:

1. Complete and send in the warranty Registration Card within 15 days of purchase.
2. If claiming service the owner must send a fully filled in copy of the original sales receipt along with any unit sent in for service showing the AUTHORIZED CARY AUDIO DESIGN DEALER'S name, the new selling price, the buyer's name, e-mail or phone number and address on the receipt. Blank receipts will NOT validate the limited warranty for service.
3. Notify Cary Audio Design as soon as possible after the discovery of a possible defect and submit the following information to determine eligibility for warranty:
  - (a) The model number and serial number;
  - (b) A fully filled in copy of the original sales receipt showing the original selling price, purchasers name and address filled in by an AUTHORIZED CARY AUDIO DESIGN DEALER with the original date of purchase shown on the form;
  - (c) a detailed description of the problem.
4. Deliver the product to Cary Audio Design or the nearest authorized service facility or ship with all freight and insurance charges prepaid, in its original packing container or equivalent, to Cary Audio.

Correct maintenance, repair and use are important to obtain performance from this product. Therefore, please carefully read the Operating Manual. This warranty does not apply to any defect that Cary Audio Design in its sole discretion determines is due to:

1. Improper maintenance or repair, including the installation of parts or accessories that do not conform to the quality and the specifications of the original parts.
2. Misuse, abuse, neglect or improper installation.
3. Accidental or incidental damage.

### WARRANTY DISCLAIMER

Except for the express warranties stated herein, Cary Audio Design disclaims all other warranties including, without limitation, all implied warranties of merchantability and fitness for a particular purpose. The

foregoing constitutes Cary Audio Design's entire obligation with respect to this product, and the original purchaser and any user or owner shall have no other claim for incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives legal rights and you may also have other rights, which vary from state to state.

**EXCLUSIVE REMEDY**

Notwithstanding the foregoing, the purchaser's exclusive remedy for any breach of warranty, express or implied, is limited to the repair or replacement of the defective unit or the refund of the purchase price, at the option of Cary Audio Design. Under no circumstances is Cary Audio Design liable for incidental or consequential damages. Any implied warranties imposed by law terminate one (1) year from the date of purchase.

**INTERNATIONAL PURCHASERS (Export markets)**

Cary Audio Design warrants its merchandise to purchasers within the United States exclusively for use within the United States of America. It provides no other warranties, expressed or implied. If you are living outside the USA, please consult with your local dealer or distributor to determine the details of your local warranty.

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