



CD 306/200

CD Transport/Processor

192kHz/24bit D/A Converter

OPERATING MANUAL

NOTE:

Before installing your new CD-306/200 CD Transport/Processor, please read this manual carefully, as it will inform you of the specifications, sample rate conversion, proper installation and operation procedures. Also included in this manual are guidelines on how to properly care for your new player. Thank you for buying a Cary Audio Design CD-306/200 Transport/Processor!

[HDCD], $HDCD^{\circledR}$, High Definition Compatible Digital $^{\circledR}$ and Pacific Microsonics $^{\intercal M}$ are either registered trademarks or trademarks of Pacific Microsonics, Inc. in the United States and/or other countries.

HDCD system manufactured under license from Pacific Microsonics, Inc.

This product is covered by one or more of the following:

<u>Country</u> <u>Patent No.</u>

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.



CD Transport /Processor

O O O O	CD 306/200 192kHz / 24Bit HDCD PLAYER (ではてきが
DIGITAL ANALOG	CD AESEBU COAXIAL TOSLON
POWER SAMPLE-LATE CONVERTER SAMPLE-LATE CONVERTER	OPENCLOSE PLAV STOP PREV. NEXT
DIGITAL INPUT	
TOSLINK AESEBU	**AFI I SCS ** High Duffainer Compuble Digit ** of Paridic Monomeris ** or other appliend undownels or or other appliend Undownels or other contents. IEC Types meaning and the former the princip Monomeris ** or other contents. IEC Types meaning and the former the princip Monomeris (Inc.) The Date State Of the Computer State Of the Computer State Of the Computer State Of the Paridic Monomeris (Inc.) Computer State Of the Computer State Of the Computer State Of the Paridic Monomeris (Inc.) CAPY ADDIO DESIGN, INC., CD 366.200 HDC DP LAYER MADE IN CARY N.C., U.S. A. MADE IN CARY N.C., U.S. A.
AES/EBU AES/EBU	AES/EBU TOSLINK Complies with FDA radiation performance standards, 21CFR Subchapter J
RIGHT LEFT ANALOG OUTPUT	COAXIAL FIRST OF ELECTRIC SHOCK FIRST O

Specifications	P.2
Installation	P.3
Operation	P.4-8
Service and Care	P.9
Warranty	P.10

SPECIFICATIONS

Operating the CD-306/200 CD Transport/Processor is a simple procedure, since each unit is designed for long term stability in virtually any home operating situation. However, if the unit is operated outside the parameters outlined in this owner's manual, damage may result. Please read this manual carefully before putting your new Cary Audio Design CD-306/200 in operation. The following definitions are applicable to this manual. Please follow these definitions carefully.

WARNING

HAZARD PRESENTS PERSONAL INJURY OR DEATH Caution

EQUIPMENT DAMAGE MAY OCCUR BUT NOT PERSONAL INJURY

Note

Proper performance of the CD PLAYER cannot be ensured if disregarded

1.1 Specifications

The following section describes the CD-306/200 CD Transport/Processor basic specifications. Specifications are subject to change without notice or obligation.

CD Mechanism Philips CDM12

Master Clock Jitter Below measurable levels

Digital Filter Pacific Microsonics PMD-200 with HDCD decoding

Digital / Analog Converters (8) Burr Brown PCM1704u

Analog Filter 3rd Order Bessel

Analog Outputs Balanced XLR, Single – Ended RCA

Digital Outputs AES/EBU, Coaxial, Toslink Digital Input AES/EBU, Coaxial, Toslink

Digital Input Sample Rate 32kHz, 44.1kHz, 48kHz, 88.2kHz and 96kHz

Accepts 16, 20 or 24 bits

Frequency Range 2 Hz - 80 kHz (192kHz)

Amplitude Linearity 0.1 dB (20Hz - 20kHz)

Phase Linearity 3°(20 Hz - 20 kHz)

Dynamic Range 120dB (1kHz)

Signal-to-Noise Ratio 122dB (1kHz)

Channel Separation 109dB (1kHz)

Total Harmonic Distortion 0.0008% (1kHz)

Audio Output Level Single-Ended 3.0Vrms

Balanced XLR 6.0Vrms

Power Input Reconfigured at factory

100-120/200-240 Vac, 50-60 Hz

Power Consumption 35 Watts

INSTALLATION

This section describes the unpacking and installation procedures for the CD-306/200 CD.

WARNING

MAKE NO ATTEMPT TO PUT THE CD 306/200 PLAYER IN SERVICE WITH THE TOP COVER REMOVED. CONTACT WITH HIGH VOLTAGE INSIDE THE **CD-306/200 PLAYER CAN BE FATAL !!!!!**

2.1 Unpacking

All shipping containers have been specifically 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 CD-306/200 player mechanism or other damage is found after unpacking and visual inspection, take care not to destroy the evidence so that the shipping agent may inspect the damage. If necessary, document the damage with photographs and contact the shipping company immediately.

Carefully remove your CD-306/200 CD Transport/Processor from its packing carton and examine it closely for signs of shipping damage. It is recommended to save all original packing cartons to protect your CD-306/200 from damage should you wish to store it or ship it for after-sales service.

2.2 Placement

In general, the location of your new CD-306/200 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. Keep the top of the CD-306/200 clear of books, paper or other equipment to protect against overheating!! DO NOT place your CD-306/200 in a completely closed-in bookcase, as overheating will damage the CD Player! Do not stack the CD-306/200 on top of a power amplifier. Allow 8 to 10 inches above the unit for proper ventilation.

2.3 Power Requirement

The CD-306/200CD Transport/Processor is designed to operate from AC mains current. The design voltage is either 100-120V /or 200-240Volts AC, 50-60 Hz.

24 Connections

Digital Outputs: The outputs send a digital signal and should only be connected to the

appropriate digital signal input of an accompanying component.

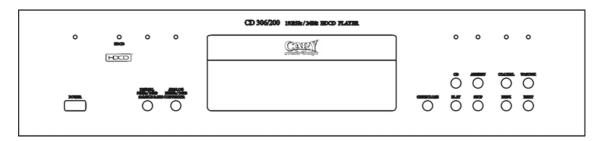
Analog Outputs: These are for connection to the CD or AUX input jacks of an accompanying

Digital Inputs: These are for connection to the CD, CD-R, DAT, MD, MP-3 and DVD player's

digital output jack.

OPERATION

Signal output connection is made via the output jacks on the rear panel of the CD-306/200. 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.



3.1 Operation

Your new CD-306/200 CD Transport/Processor is ready for operation after interconnect cables have been installed.

3.2 Power On and Stand-By Mode

When your CD-306/200 is connected to the power supply, the unit will switch to the Stand-By mode automatically. This is a convenient feature for users to turn the power on with the remote control.

3.3 Front of player

POWER BUTTON: switches the power ON and OFF.

DIGITAL SAMPLE-RATE COVERTER BUTTON: by selecting "on" the output data is 96kHz/24bit. Selecting "off" the output data is 44kHz/16bit or matching input data-rate.

ANALOG SAMPLE-RATE COVERTER BUTTON: For selection of internal D/A sample rate.

The output data of the "ON" setting is

192kHz/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.

PLAY BUTTON: Starting play. Interrupting. Resuming play

STOP BUTTON: Stopping play.

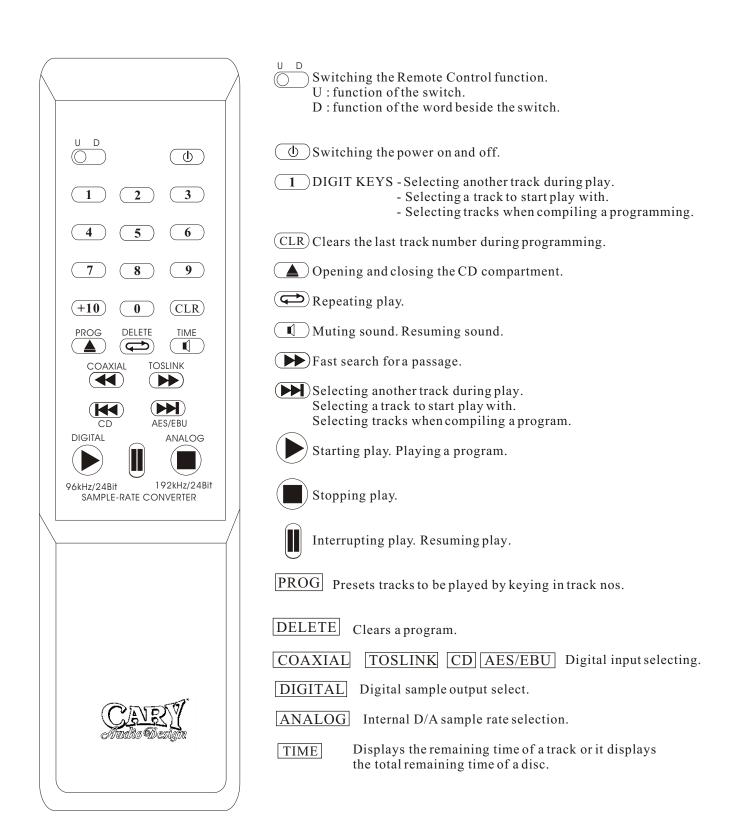
PREV. and NEXT BUTTON: Selecting another track during play.

Selecting a track to start play with.

OPEN / CLOSE BUTTON: Opening and closing the CD compartment. The compartment also closes when the front is pressed briefly.

CD BUTTON, AES/EBU BUTTON, COAXIAL BUTTON, TOSLINK BUTTON: This switches the digital input selections.

3.4 Remote Control



△ CD-306/200 REMOTE LAYOUT

3.5 LED Indicators

POWER LED

LED above the power button illuminates when the player is switched off (stand-by mode).

HDCD LED

LED above the HDCD logo illuminates automatically when HDCD signal is detected from a disc.

CD, AES/EBU, COAXIAL, TOSLINK LED

LED above the button illuminates when the digital input function is "on".

3.6 Display



PROGRAM:

Lights up when a program is being played.

Blinks when compiling a program.

TRACK: Indicates

- What track is being played;
- 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 '-' 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.

AES 00:00 Lights up when AES/EBU digital signal is input.

COA 00:00 Light up when COAXIAL digital signal is input.

Light up when TOSLINK digital signal is input.

3.7 Normal Playback

- Press POWER or \bigcirc on the 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 or \bigcirc on the remote to switch the player off.
- You can interrupt playback by pressing PLAY or • on the remote.
- You can restart play by pressing PLAY or or on the remote.
- You can stop playback by pressing STOP, OPEN/CLOSE or on the remote.

3.8 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 \bowtie \bowtie (less than 0.5seconds).

3.9 Searching For a Passage During Play (★ → on the remote)

- 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.

3.10 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).

3.11 Repeating Play (repeat)

REPEATING A TRACK:

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

3.12 Programming

- Press PROGRAM once on the remote; PROGRAM indicator on the display will blink indicating the program mode is now entered.
- Key in track nos. in 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.

3.13 Break- In Period

The micro-components, capacitors and output transformers take approximately 100 hours of music playing to fully settle in for peak performance. The CD-306/200 will seem OK sounding right out of the box. However, after the first couple of 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

4.1 CD-306/200 Care and Cleaning

The housing and front of the CD-306/200 may be cleaned with a soft cloth and windex or a window cleaner. The frequency of cleaning will be governed by how many hours the CD-306/200 is operated and by operating environment cleanliness. Do not use benzene, harsh or abrasive chemicals to clean the front as they may remove or damage the labels.

4.2 Factory Service

Careful consideration has been given to the design of your CD-306/200 HDCD CD Transport/Processor to keep maintenance problems to a minimum. Any service problems should be referred to our Customer Service Department phone number (919) 481-4494. DO NOT return the CD-306/200 to the factory without a return authorization number (RMA) from the Customer Service Department.

Cary Audio Design, Inc. will assume no responsibility if the shipping company refuses to pay a damage due to your improper packing or lack of insurance should the unit be lost or damaged in shipment. Please retain and always use the original shipping carton for the CD 306/200 in the event that you move or after service is needed.

WARNINGS

MAKE TO **PUT** NO **ATTEMPT** THE CD-306/200 IN SERVICE WITH THE COVER REMOVED. CONTACT WITH POWER SUPPLY SECTION FOUND BE IN THE UNIT CAN FATAL!! COMPLETELY REMOVE ACPOWER PLUG FROM THE WALL BEFORE SERVICING OF THE PLAYER.

CAUTIONS

NEVER REMOVE / INSERT PLUG WHEN UNIT IS ON OR THE AC POWER SWITCH IS IN THE ON POSISTION.

!!PLEASE OBSERVE THE SAFETY DIRECTIONS IN THIS MANUAL!!

UNITED STATES LIMITED WARRANTY

Cary Audio Design, Inc. warrants to the original United States purchaser for use in the United States, that this product shall be free from defects in material (except tubes and AF output transistors) or workmanship for:

Models CAD-211M, SLM-200 and the CAD-805, Five (5) years from date of original purchase.

Amplifiers and Preamplifiers, Three (3) years from the date of the original purchase.

Digital Products, One (1) year from original date of purchase.

During the warranty period, Cary Audio Design, Inc. or an authorized Cary Audio Design, Inc. service facility will provide free of charge both parts (except tubes and AF output transistors) and labor necessary to correct defects in material or workmanship.

To obtain such warranty service, the original purchaser must:

- (1) Complete and send in the warranty Registration Card.
- (2) Notify Cary Audio Design, Inc. as soon as possible after the discovery of a possible defect:
 - (a) The model number and serial number;
 - (b) The identity of the seller and the approximate date of purchase;
 - (c) A detailed description of the problem, including details on the electrical connection in the associated equipment and the list of such equipment.
- (3) Deliver the product to Cary Audio Design, Inc. or the nearest authorized service facility, or ship the same in its original container or equivalent, fully insured and the shipping charges prepaid.

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

- Improper maintenance or repair, including the installation of parts or accessories that does 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, Inc. disclaims all other warranties including, without limitation, all implied warranties of merchantability and fitness for a particular purpose.

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, Inc. Under no circumstances is Cary Audio Design, Inc. liable for incidental or consequential damages. Any implied warranties imposed by law terminate one (1) year from the date of purchase.

FOREIGN PURCHASERS

Cary Audio Design, Inc. warrants its merchandise to purchasers in the United States for use in the United States. It provides no other warranties. If you are a foreign purchaser, consult with your dealer to determine whether your dealer provides any warranty.

The foregoing constitutes Cary Audio Design, Inc.'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 have other rights which vary from state to state.



CARY AUDIO DESIGN INC.

111-A WOODWINDS INDUSTRIAL COURT, CARY, N.C. 27511, U.S.A.

TEL : (919) 481-4494 FAX : (919) 460-3828 www.caryaudio.com