

Warning

Owner's Record

The model and serial numbers are located on the top side of the drive. Record these numbers in the spaces provided below. Refer to them whenever you call upon your sales representative regarding this product.

Model No. _____

Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION

The use of optical instruments with this product will increase eye hazard.

The use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This unit uses CD-ROM discs with the following mark.

When you use this unit as an audio CD player, use compact discs with the following mark.



CAUTION	INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT IN DEN STRAHL BLICKEN, AUCH NICHT MIT OPTISCHEN INSTRUMENTEN.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.
VARNING	OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.
VARO!	AVATTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ TUIJOTA SATEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LAPSI.

This label is located on the top of the drive.

Dieser Aufkleber befindet sich an der Oberseite des Gehäuses.

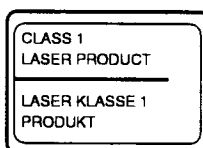
Information

You are cautioned that any changes or modifications not expressly approved in this manual could void your warranty covering this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



This CD-ROM Drive Unit is classified as a CLASS 1 LASER PRODUCT. The CLASS 1 LASER PRODUCT label is located on the top of the drive.

LUOKAN 1
LASERLAITE
KLASS 1 LASER
APPARAT

Bei diesem CD-ROM-Laufwerk CDU711 handelt es sich um ein Laser-Produkt der Klasse 1.

Ein entsprechender Aufkleber mit der Beschriftung LASER KLASSE 1 PRODUKT befindet sich auf der Oberseite des Geräts.

Diese Ausrüstung erfüllt die Europäischen EMC-Bestimmungen für die Verwendung in folgender/folgenden Umgebung(en):

- Wohngegenden
- Gewerbegebiete
- Leichtindustriegebiete

(Diese Ausrüstung erfüllt die Bestimmungen der Norm EN55022, Klasse B.)

Trademarks

- MS-DOS is a registered trademark of Microsoft Corporation.
- IBM PC, PC/XT, and PC/AT are registered trademarks of International Business Machines Corporation.
- HP Vectra is a registered trademark of the Hewlett-Packard Company.
- Molex is a registered trademark of Molex, Inc.
- AMP is a registered trademark of AMP, Inc.

Precautions

■ Installation

- Avoid placing the drive in a location subject to:
 - high humidity
 - high temperature
 - excessive dust
 - mechanical vibration
 - direct sunlight
- Do not force the power cable. It is keyed to protect the drive.

■ Operation

- Do not move the drive when it is in use. Doing so may cause data error and damage the optical pick-up.
- Avoid exposing the drive to sudden changes in temperature as condensation may form on the lens inside the drive. Should the surrounding temperature suddenly rise while the drive is turned on, stop using the drive and leave the power on at least one hour before operating it or turning it off. Operating the drive immediately after a sudden increase in temperature may result in a malfunction.

■ Transportation

- Close the disc drawer before moving the drive.
- Keep the original packing materials. When you need to ship the drive to another location, repacking it in its original container will help you transport it safely.

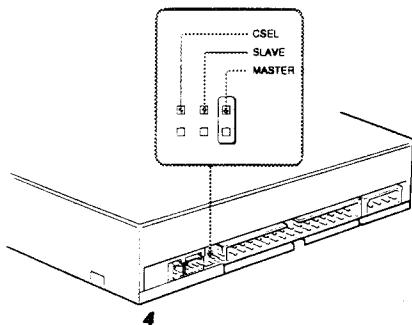
Installing the Drive in Your computer

This section provides an example of installing the CD-ROM drive unit into your personal computer using the IDE Host Adaptor (ATA-Compliant). To connect the CDU711 directly to the PC's IDE port, consult your PC manufacturer for instruction.

Setting the Jumpers

Set the jumpers on the rear of the drive in accordance with the configuration of your computer system.

The jumpers are preset at the "MASTER" position as illustrated at the factory.



Notes for configuration jumpers:

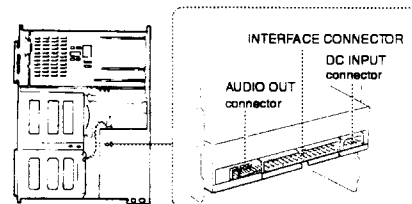
- Designation of the Drive Number is generally set by inserting a jumper pin on either the MASTER or the SLAVE pin.
- When the CDU711 is daisy-chained with a Hard Disk Drive on an IDE Card, set the Hard Disk Drive as MASTER and the CDU711 as SLAVE.
- If the CDU711 is the only device connected to the IDE Card, set the CDU711 as MASTER.

However, some personal computers may use CSEL in lieu of the MASTER/SLAVE selection. In this case, remove the existing jumpers from MASTER and SLAVE, and set a jumper on CSEL. When the CSEL signal of the interface connector is set low, the drive is designated as Drive 0. When the CSEL is set high, the drive is designated as Drive 1. Consult your PC manufacturer, IDE Card manufacturer or dealer for further details.

Connecting the Drive

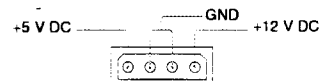
Connect the drive to the computer with the following connectors:

- DC INPUT connector
- AUDIO OUT connector (if you plan to connect audio equipment)
- INTERFACE CONNECTOR.

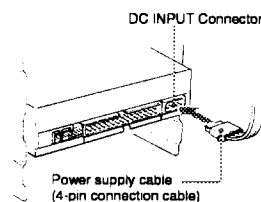


■ DC INPUT connector

The pin assignment is as follows.



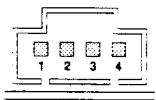
After matching the beveled edges, insert the plug of the power supply cable into the DC INPUT connector and push it firmly in place.



Caution: Improper connection may damage the drive and void the warranty.

■ **AUDIO OUT connector**

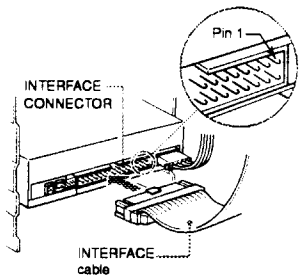
The pin assignment is as follows:



pin	Audio Signal
1	R signal
2	ground
3	ground
4	L signal

■ **INTERFACE CONNECTOR**

- 1 Firmly insert one end of the interface cable into the INTERFACE CONNECTOR.



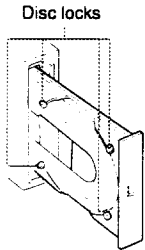
Operating the Drive

This section describes how to start the drive and eject a disc.

Starting the Drive

- 1 Turn on the power of your computer.
- 2 Press the eject button.
The drawer comes out automatically.
- 3 Place a disc in the drawer with its label side up.

Note:
When the drive is set up in the vertical position, use the disc locks to prevent your disc from falling. To set a disc lock in the locked position, turn it inwards with your fingers until you hear a click.



- 4 Gently push the drawer or press the eject button to close the drawer.
The drive may begin reading the Table of Contents (TOC) data when it accepts the disc. The busy indicator lights up in amber while the drive is reading the TOC.
For subsequent drive operations, follow the instructions provided with the application software you are using.

Note:

The busy indicator stays lit in amber if:

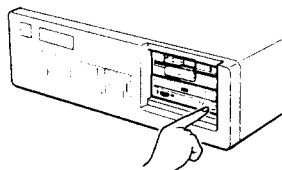
- the disc is not properly placed on the loading tray.
- a malfunction occurs.

In either case, eject the disc and place it in the loading tray again making sure that it sits properly in the tray. If doing this does not solve the problem and the busy indicator still remains lit in amber, consult your dealer or qualified service personnel.

Caution: Do not forcibly close the disc drawer. Applying excessive force may damage the loading mechanism. The tray's mechanism is designed to operate with a "feather touch".

Ejecting the Disc

To eject the disc, press the eject button on the front panel. The drawer comes out automatically.



Note:

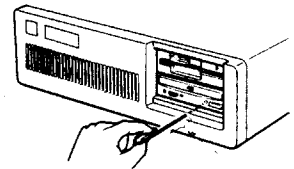
The eject button does not work if it is disabled by the software you are using.

■ Opening the drawer manually in an emergency

You can open the drawer manually when it fails to come out by means of the eject button or software commands. To do this, follow the procedure below:

- 1 Turn off the power of your computer.

- 2 Insert a pointed object, such as a paper clip, into the emergency eject hole and push.

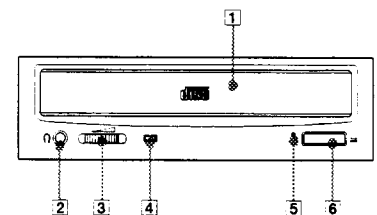


Approx. 40 mm

After removing a disc from the drive unit, consult your dealer or qualified service personnel.

Location and Function of Parts and Controls

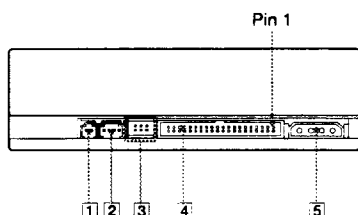
Front Panel



- 1 **Disc drawer**
Accepts a CD-ROM disc on its tray.
- 2 **Headphones jack**
Accepts a stereo headphones plug. Analog audio signals are output.
- 3 **Volume control**
Controls the volume level of sound output from the headphones jack [2].
- 4 **Busy indicator**
This amber indicator lights or flashes to indicate one of the following unit conditions.
 - Lit: TOC (table of contents) read, seek data read, or audio playback in progress.
 - Flashing: Drawer in motion.

- 5 Emergency eject hole**
Used to open the disc drawer manually when neither the eject button **6** nor a software command works. Insert a pointed object, such as a paper clip, into this hole and push.
- 6 Eject button**
Opens and closes the disc drawer.

Rear Panel



- 1 Unused**
- 2 ANALOG AUDIO connector**
Outputs analog audio signals.
- 3 Configuration Jumpers**
See page 4 for details.
- 4 INTERFACE CONNECTOR (IDE bus)**
Connect to IDE host adapter using a connecting cable.
- 5 DC INPUT (power-in) connector**
Connect to the power supply of the host computer.

Specifications

■ Modes Supported

CD-Digital Audio discs
CD-ROM mode-1 data discs
CD-ROM mode-2 form1/form2 data discs
CD-ROM XA discs (readable)
Audio-combined CD-ROM discs
CD-I discs (readable)
CD-I Ready discs (readable)
CD Bridge discs
Photo CD discs (single and multi session)
CD EXTRA discs
Video CD discs, CD TEXT discs

■ Sustained Data Transfer Rate

600-1350 kbytes (4-9× CAV)
1200-2700 kbytes (8-18× CAV)
2100-4800 kbytes (14-32× CAV)

■ Burst Data Transfer Rate

16.7 Mbytes/s (ATA PIO Mode 4 and
ATA Multiword DMA Mode 2)
33.3 Mbytes/s (Ultra DMA)

■ Random Access Time

90 ms (10 ~ 24X CAV, typical, including latency)

■ Buffer Memory

256 kBytes

■ Read Error Rate

1 block/10¹² bits (ECC ON)
1 block/10⁹ bits (ECC ON)

■ MTBF

100,000 POH (duty 25%)

■ Host Interface

IDE (ATAPI)

■ Audio Line Out

0.75 ± 0.15V rms at 47 k ohms, equivalent to
Molex 70553G connector

■ Headphone Out

0.55 ± 0.1/-0.15 V rms at 32 ohms, stereo minijack

■ Operating Mount

Horizontal or vertical

■ Temperature

Operating: 5° C to 50° C (41° F to 122° F)
Non-operating: -30° C to 50° C (-22° F to 122° F)

■ Relative Humidity

Operating and non-operating: 10% to 90% (no
condensation)

■ Voltage

DC 5V ± 5% or DC 12V ± 10%

■ Current

Hold Track: 500 mA (typical) at DC 5V, 230 mA
(typical) at DC 12V
Seek: 500 mA (typical) at DC 5V, 650 mA (typical)
at DC 12V

■ Ripple

0.1V pp (DC5V) 0.2V pp (DC12V)

■ Dimensions

146.0 (W) x 41.4 (H) x 203.0 (D) mm (5.75 x 1.63
x 7.99 inches)

■ Weight

0.82 kg (1 lb. 13 oz.)