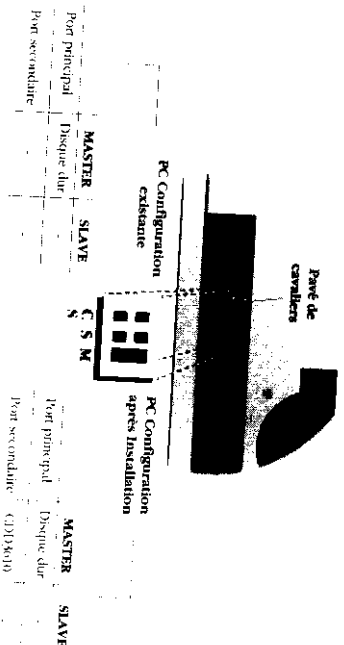
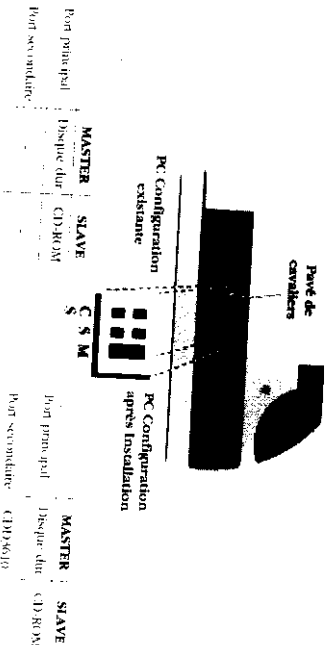


B) Disque dur unique connecté en tant que matrice au port IDE principal:

Connectez le CDD3610 en tant que matrice au port secondaire.



C) Disque dur connecté en tant que matrice au port IDE principal: CD-ROM connecté en tant qu'asservi au port IDE principal: Connectez le CDD3610 en tant que matrice au port IDE secondaire.



REMARQUE: L'INSTALLATION A SERA PRÉFÉRÉE DANS LE CAS DE SYSTÈMES DOTÉS DE DISQUE DUR IDE ET DE CD-ROM.

REMARQUE: L'INSTALLATION B SERA PRÉFÉRÉE DANS LE CAS DE SYSTÈMES DOTÉS UNIQUEMENT DE DISQUE DUR IDE.

INSTALLATION

Précautions

- Cette unité d'enregistrement/Réenregistrables de CD est sensible à l'électricité statique, comme tous les appareils électroniques.
- Veuillez prendre les précautions appropriées lors de la manipulation de l'unité de lecture, par exemple en touchant d'abord le châssis du PC avant de toucher l'unité de lecture.
- Évitez de toucher les broches du connecteur IDE, celles du connecteur audio ainsi que celles du cavalier.
- Conservez l'unité dans son emballage conducteur jusqu'au moment de l'installer dans l'ordinateur.

Mesures de sécurité

- Europe: Cette unité doit être installée uniquement avec une alimentation agréée EN60950 (CEP950).
- États-Unis/Canada: Cette unité doit uniquement être utilisée avec des PC IBM compatibles, agréés par les UL, ou avec des postes de travail Macintosh, agréés par les UL, et pesant moins de 18 kg.

Déclaration de droit d'auteur

Toute reproduction illicite de matériel protégé par le droit d'auteur, y compris les programmes informatiques, les films, les diffusions et les enregistrements sonores, constitue une infraction, conformément aux lois relatives au droit d'auteur en vigueur. Ce matériel ne doit pas être utilisé à de telles fins.

RÉSUMÉ DES COMMANDES ET CONNEXIONS

Façade avant (reportez-vous à la Fig. 1 du rabat de couverture)

1. PRISE CASQUE

Connectez votre casque pour écouter des disques audio ou de musique (plages).

2. COMMANDE DE VOLUME DU CASQUE

Tournez le bouton vers la droite pour augmenter le niveau de volume de votre casque.

3. TÉMOIN D'ENREGISTREMENT

S'allume en orange lors de l'enregistrement d'un disque. Clignote en orange pendant l'émulation d'enregistrement.

4. TIROIR DU LECTEUR

5. TÉMOIN PRÉSENCE DE DISQUE/ACTIVÉ/ERREUR (DEL double couleur)

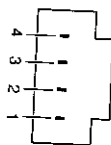
S'allume en vert lorsqu'un disque est présent. Clignote en vert de manière asymétrique lorsque les données sont lues ou enregistrées sur le disque. Clignote en vert de manière symétrique lors du démarrage du disque. S'allume en rouge en cas d'erreur (par exemple après un test automatique non réussi).

6. TOUCHE OUVERTURE/FERMETURE

Appuyez sur la touche d'ouverture/fermeture (OPEN/CLOSE) pour ouvrir le tiroir de chargement du disque. Pour refermer le tiroir, il suffit de repousser doucement la partie frontale du tiroir ou d'appuyer sur la touche d'ouverture/fermeture.

façade arrière (reportez-vous à la Fig. 1 du rabat de la couverture)

7. CONNECTEUR DE SORTIE DE LIGNE AUDIO



- 1: Gauche
2: Masse
3: Masse
4: Droite

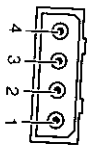
8. PAVÉ CAVALIERS

Ces cavaliers servent à sélectionner le mode Matrice/Asservi ainsi qu'à opter pour la Sélection de câble (reportez-vous à l'annexe pour un complément d'informations).

9. CONNECTEUR IDE

Connecteur IDE à 40 broches pour câble-ruban (reportez-vous à l'annexe pour un complément d'informations).

10. CONNECTEUR HOTE D'ALIMENTATION CC (de type AMP 00641737-1)



- 1: +12V
2: Masse
3: Masse
4: +5V

ZUSÄTZLICHE INFORMATIONEN

Pflege der Platten

- Warten Sie beim Einlegen der Platten, bis die Schutzblende geöffnet ist, und legen Sie dann die Platte vorsichtig in die vorgesehene Aussparung.
- Fassen Sie die Platten nur am äußeren und inneren Rand an.
 - Die Oberfläche der Platten niemals mit einem Kugelschreiber beschriften.
 - Die Platten in ihrer Box aufbewahren, um sie vor Staub, Schmutz, Kratzern, Verformungen und anderen Beschädigungen zu schützen.
- Bewahren Sie die Platten in den Schachteln auf, damit sie gegen Staub und Beschädigung durch Kratzer, Verbiegen usw. geschützt sind.
- Wenn eine Platte verschmutzt ist, wischen Sie sie mit einem Reinigungstuch von der Mitte nach außen sauber. Verwenden Sie keine Lösungsmittel wie Waschbenzin, Verdünnern, handelsübliche Reinigungsmittel oder Antistatik-Flüssigkeit, da die Platte durch diese Mittel beschädigt werden kann.
- Leere Platten können Sie separat über Ihren Händler beziehen.

**UTILISEZ/TESTEZ VOTRE SYSTÈME POUR CD
ENREGISTRABLE/RÉENREGISTRABLE**

Introduction/retrait du disque

1 Pour ouvrir le tiroir: appuyez sur la touche d'ouverture/
fermeture.

②

2 Insérez un CD, l'étiquette orientée vers le haut. Le tiroir accepte des disques de 8 cm de diamètre (CD-Single) ou des disques plus courants de 12 cm.

Dieses Laufwerk unterstützt die Befehle auf der Basis des Industriestandards MMC (MultiMedia Command Set). Eine ausführliche Beschreibung des gesamten Befehlssatzes ist auf Wunsch erhältlich.

③ Pour refermer le tiroir, appuyez soit doucement sur la partie frontale du tiroir, soit sur la touche d'ouverture/fermeture.

REMARQUE: N'UTILISEZ PAS DE DISQUES UNIVERSELS DE NETTOYAGE DES TÊTES QUE L'ON TROUVE DANS LE COMMERCE.

Utilisation de l'enregistrable/Réenregistrable de CD avec l'ordinateur

Installation du logiciel

Toutes les marques déposées sont reconnues

Description des commandes

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BEDIENUNG UND PRÜFUNG DES CD-RECORDABLE/ REWRTABLE-SYSTEMS

Einlegen und Herausnehmen einer Platte

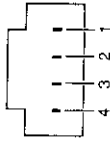
-
- A diagram illustrating the open/close mechanism of the CD player. The top cover is shown in an open position, revealing the disc tray. The tray is labeled "OPEN/CLOSE-Taste" (Taste = button). The disc tray is shown in two positions: open (up) and closed (down). The disc tray is labeled "CD" and "OPEN/CLOSE-Taste". The disc tray is shown in two positions: open (up) and closed (down). The disc tray is labeled "CD" and "OPEN/CLOSE-Taste".

- HINWEIS:** FÜR OPTIMALE ERGEBNISSE PHILIPS CD-R ODER CD-RW-SPEICHERMEDIEN BENUTZEN.

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Rückseite (siehe Umschlagseite Abb.1)

7. AUDIO-LINE-OUT-STECKVERBINDER



- | | |
|----------|-----------|
| 1: Links | 2: Masse |
| 3: Masse | 4: Rechts |

8. JUMPERBLOCK

Diese Jumper dienen zum Wählen des Master/Slave-Modus und zum Wählen des Kabels (Cable Select). Weitere Informationen sind dem Anhang zu entnehmen.

9. IDE-STECKVERBINDER

40 poliger ID5-Flachbandkabel-Steckverbinder.
Weitere Informationen sind dem Anhang zu entnehmen.

10. HOST-GLEICHSPANNUNGS-STECKVERBINDER
(Typ AMP 00641737-1)



- | | |
|----------|----------|
| 1: +12V | 2: Masse |
| 3: Masse | 4: +5V |

BEDIENLEMENTE UND ANSCHLÜSSE

Frontseite (siehe Umschlagseite, Abb.1)

1. KOPFHÖRER-BUCHSE

Schließen Sie den Kopfhörer an diese Buchse an, um Audio- oder Musik-CDs (oder -titel) zu hören.

2. LAUTSTÄRKEREGLER FÜR KOPFHÖRER

Das Rädchen nach rechts drehen, um die Lautstärke des Kopfhörers zu erhöhen.

3. SCHREIBANZEIGE

Leuchtet orange, wenn auf eine Platte geschrieben wird. Blinkt orange während der Schreib-Emulation.

4. PLATTENSCHUBLADE

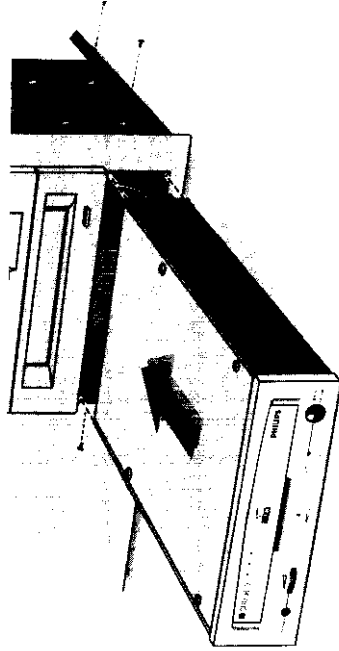
5. Anzeige für PLATTE EINGELEGT/AKTIV/FEHLER (zweifarbige LED)

Leuchtet grün auf, wenn eine Platte eingelegt wurde. Blinkt in unregelmäßigem Takt grün, wenn Daten von die Platten gelesen oder darauf gespeichert werden. Blinkt grün symmetrisch, wenn eine Platte gestartet wird. Leuchtet rot, wenn ein Fehler erkannt wird (z.B. nach einem fehlgeschlagenen Selbsttest).

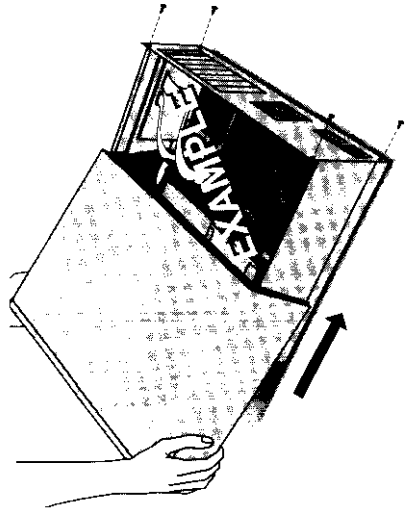
6. TASTE OPEN/CLOSE

Die Taste Open/Close drücken, um die Plattenschublade zu öffnen. Zum Schließen der Schublade leicht gegen die Vorderseite der Schublade drücken oder die Taste Open/Close erneut betätigen.

- 7** Den CDD3610 in den Laufwerkschacht einsetzen und mit allen Schrauben, die dem Gerät beigelegt sind, in dem Schacht befestigen.



- 8** Die Abdeckung wieder anbringen. Den Netzstecker des Systems wieder in die Steckdose stecken. Wenn das Laufwerk richtig eingebaut und alle Verbindungen hergestellt sind, kann jetzt der PC eingeschaltet werden. Sie können jetzt den Selbsttest starten (siehe Anhang) und anschließend die Software installieren.



INTRODUZIONE

Il CDD3610 è un drive per CD Recordable/ReWritable (registrabili e riscrivibili), di tipo integrato, della nuova generazione formato mezza altezza da 5,25", dotato di interfaccia IDE (ottimizzata).

Di fatto, il drive è un'unità multifunzione che può essere utilizzata:

- come veloce lettore di CD-ROM (fino a una velocità di 6,5 volte quella in tempo reale)
- come registratore di CD a singola e doppia velocità, ad esempio per la registrazione di CD-ROM o CD audio
- come unità a doppia velocità per CD ReWritable (riscrivibili), da utilizzare come supporto di memoria personale mediante Incremental Packet Writing.

7

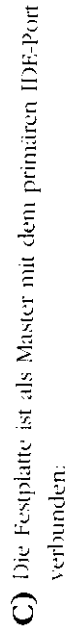
- Das freie Ende des IDE-Datenkabels durch den offenen Laufwerkschacht nach außen führen, ebenso das Stromversorgungskabel und das (optionale) Audiokabel.

9

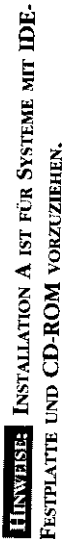
Das (optionale) Audiokabel, das IDEF-Datenkabel und das Stromversorgungskabel an der Rückseite des CDD3610 anschließen. Sicherstellen, daß Pin 1 des Kabels richtig auf Pin 1 des entsprechenden Steckverbinders ausgerichtet ist.



CDD3610 als Master mit dem sekundären Port verbinden.



CID-ROM ist als Slave mit dem primären IDE-Port verbunden;
CID3010 als Master mit dem sekundären IDE-Port verbunden.



HINWEIS: INSTALLATION B IST FÜR SYSTEME MIT NUR EINER IDE-FESTPLATTE VORZUZIEHEN.

Precauzioni

Analogamente a tutti gli apparecchi elettronici, il presente drive per CD-Registrazione/CD-Rewritable risente delle cariche elettrostatiche.

- Nel maneggiare il drive, adottare le necessarie precauzioni - ad esempio toccare lo chassis del PC prima del drive.
- Non toccare i pin del connettore IDE, del connettore audio e dei ponticelli.
- Tenere il drive nella sua busta di protezione fino al momento dell'installazione nel computer.

Norme di sicurezza

- **Europe:** Il presente drive va installato esclusivamente con alimentazione conforme alla Norma EN60950 (IEC950).
- **USA/Canada:** Il presente drive può essere utilizzato esclusivamente con Personal Computer IBM compatibili e certificati UL o con workstation Macintosh certificate UL di peso inferiore a 18 kg.

Copyright

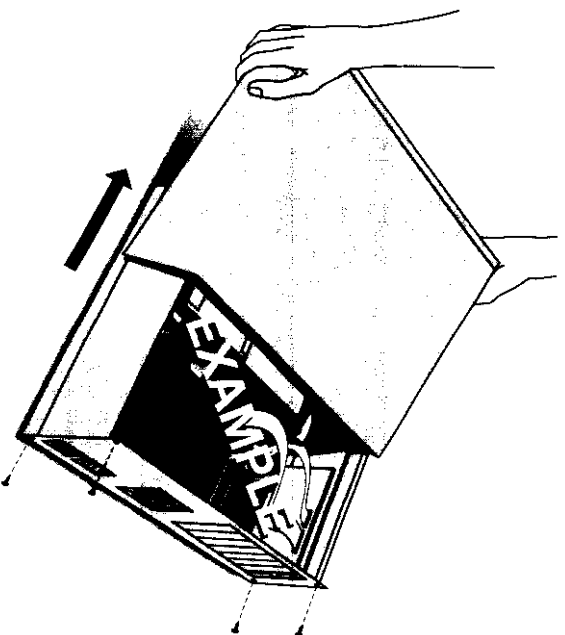
Secondo la legislazione sul copyright applicabile, la riproduzione non autorizzata di materiale protetto da copyright, ivi inclusi i programmi software, film, trasmissioni televisive e registrazioni sonore, è penalmente perseguibile. La presente unità non può essere utilizzata per scopi di questo tipo.

Installazione del drive

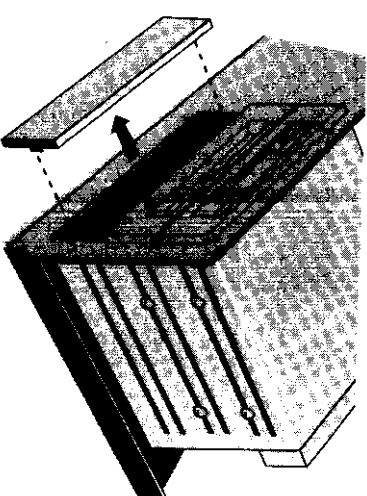
- 1 Spegnere il computer, il monitor e le altre periferiche. Per scollegare completamente il sistema dalla rete di alimentazione, scollegare il connettore di rete.

NOTA: APRIRE IL RISVOLTO DI COPERTEINA DEL PRESENTE LIBRETTO PER INDIVIDUARE LA POSIZIONE DEI CONNETTORI DEL DRIVE E IL RISPETTIVO ORIENTAMENTO.

- 2 Togliere il coperchio dal computer. Per maggiori dettagli, consultare i manuali forniti in dotazione con il computer.

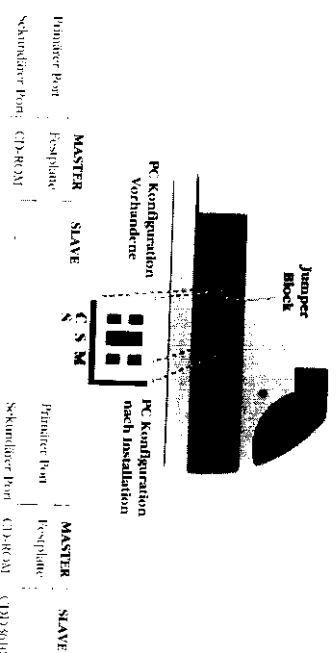


- 3 Um das Laufwerk im PC (oder einem anderen Computer-Typ) zu montieren, suchen Sie einen freien horizontalen 5,25"-Schacht und befolgen Sie die für Ihr Computersystem geltenden Anweisungen zum Einbau des Laufwerks.



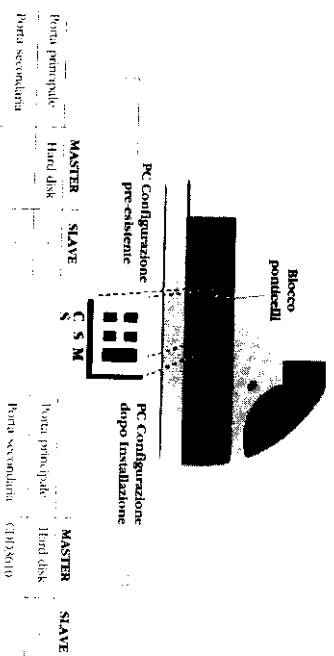
- 4 Sie haben je nach vorhandener Konfiguration verschiedene Möglichkeiten zum Anschließen des IDE-Datenkabels:

A) Die Festplatte ist als Master mit dem primären IDE-Port verbunden:
 CD-ROM ist als Master mit dem sekundären IDE-Port verbunden;
 CDD3610 als Slave mit dem sekundären IDE-Port verbinden.



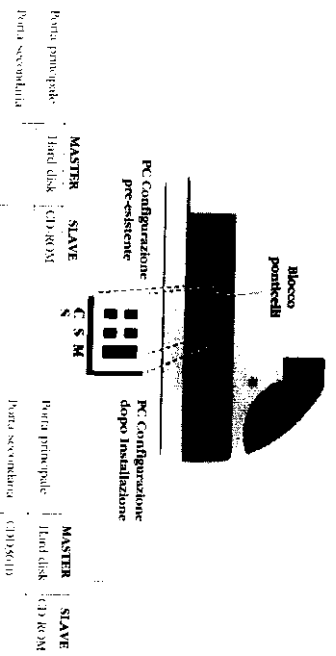
B) Singolo Hard disk collegato come unità master alla porta IDE principale:

Collegare il CDD3610 come unità master alla porta secondaria.



C) Hard disk collegato come unità master alla porta IDE principale:

CD-ROM collegato come unità slave alla porta IDE principale: Collegare il CDD3610 come unità master alla porta IDE secondaria.



NOTA: L'INSTALLAZIONE DI TIPO A E' PREFERIBILE PER I SISTEMI CON HARD DISK IDE E CD-ROM.

NOTA: L'INSTALLAZIONE DI TIPO B E' PREFERIBILE PER I SISTEMI MUNITI ESCLUSIVAMENTE DI HARD DISK IDE.

INSTALLATION

Vorsichtshinweise

Dieses CD-Recordable/Rewritable Laufwerk ist wie alle elektronischen Geräte empfindlich gegen elektrostatische Entladung.

- Bitte treffen Sie die erforderlichen Vorsichtsmaßnahmen beim Umgang mit dem Laufwerk, indem Sie zum Beispiel zuerst das PC-Chassis berühren, bevor Sie das Laufwerk berühren.
- Berühren Sie auf keinen Fall die Pins des IDE-Anschlusses, die Pins des Audio-Anschlusses und die Stifte der Steckbrücken.
- Bewahren Sie das Laufwerk in der leitfähigen Verpackung auf, bis es in den Computer eingebaut werden kann.

Sicherheitshinweise

- Europa: Dieses Laufwerk darf nur mit einer Stromversorgung installiert werden, die Anforderungen der EN 60950 (IEC 950) erfüllt.
- USA/Kanada: Dieses Laufwerk ist nur für die Verwendung mit IBM-kompatiblen, UL-listed Personal Computern oder UL-listed Macintosh-Workstations vorgesehen, die weniger als 18 kg wiegen.

Urheberrechte

Die Anfertigung von unberechtigten Kopien von urheberrechtlich geschütztem Material, einschließlich Computerprogrammen, Filmen, Rundfunkübertragungen und Tonaufzeichnungen ist nach den gültigen Gesetzen zum Urheberrecht eine Straftat. Dieses Gerät darf nicht für solche Zwecke benutzt werden.



CD3610
CDD3610

INSTALLAZIONE

(CONT)

ITALIANO

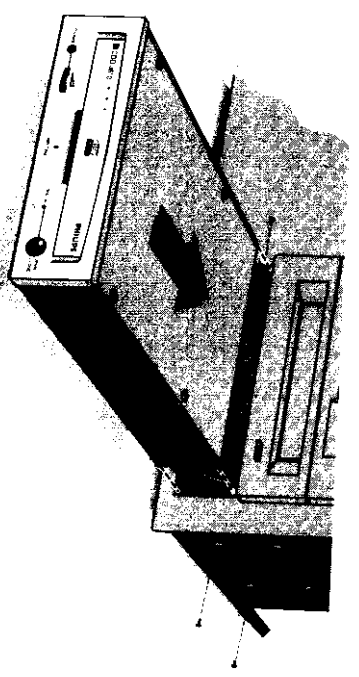


CD3610
CDD3610

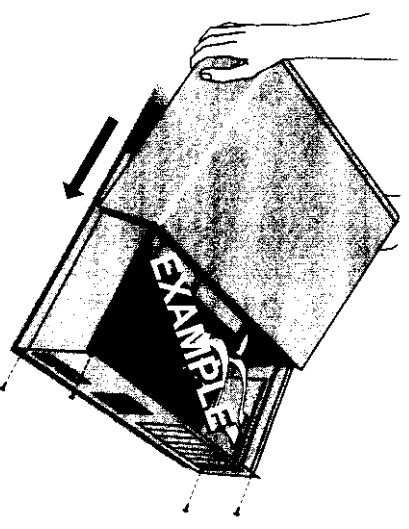
EINLEITUNG

DEUTSCH

- 7 Inserirte il CDD3610 nell'alloggiamento. Fissare il CDD3610 nell'alloggiamento utilizzando tutte le viti comprese nella dotazione.



- 8 Reinstallare il coperchio del computer. Collegare il connettore di rete del sistema. Una volta installato il drive e stabiliti tutti i collegamenti, è possibile accendere lo host e a questo punto è possibile eseguire la routine autodiagnostica (vedere l'appendice) e quindi installare il software.



CDD3610 ist ein halbhohe 51/4-Zoll-CD-Recordable/ReWritable-Einbaulaufwerk der neuen Generation mit der gängigen (Enhanced) IDE-Schnittstelle.

Bei dem Laufwerk handelt es sich eigentlich um ein multifunktionelles Gerät, das es benutzt werden kann als:

- schneller CD-ROM-Leser (bis zu 6,5fache Geschwindigkeit)
 - CD-Recorder mit einfacher und doppelter Geschwindigkeit, zum Beispiel zum Aufzeichnen eigener CD-ROMs oder Audio-CDs
 - CD-ReWritable-Laufwerk mit doppelter Geschwindigkeit zur Verwendung als persönliches Speichermethum mit Hilfe von Incremental Packet Writing.
- Das Laufwerk CDD3610 ist ein ideales Hilfsmittel für die Veröffentlichung großer Datenmengen in kompakter Form auf CD. Die neue "Incremental Packet Writing"-Funktion macht dieses Laufwerk auch für die Datenspeicherung bei allgemeinen Desktop-PC-Anwendungen interessant.

CD-Recordable-Platten können mit einfacher oder doppelter Geschwindigkeit und in allen Standardformaten, unter anderem CD-Audio, CD-ROM (XA), CD-i und Video-CD, aufgenommen werden. Da diese Platten entsprechend der Orange-Book-Spezifikation (Teil II) aufgenommen werden, können sie mit allen kompatiblen CD-Spielern wiedergegeben werden.

CD-ReWritable ist ein neues Leistungsmerkmal, das die Wiederverwendung von beschriebenen Platten (speziellen CD-ReWritable-Platten) erlaubt, indem Bereiche der Platte oder die gesamte Platte in Übereinstimmung mit der Orange-Book-Spezifikation (Teil III) neu beschrieben werden.

SOMMARIO DEI COMANDI E DEI COLLEGAMENTI

Vista anteriore (Vedere il risvolto di copertina, Fig. 1)

1. PRESA CUFFIE

Collegare le cuffie per ascoltare dischi audio o musicali (o brani).

2. REGOLAZIONE VOLUME CUFFIE

Girare la manopola verso destra per aumentare il livello del volume delle cuffie.

3. INDICATORE DI SCRITTURA

Si illumina (colore arancio) durante la scrittura di un disco. Lampeggia (colore arancio) durante l'emulazione di scrittura.

4. VASSOIO PORTA-CD

5. Indicatore DISCO INSERITO/ATTIVO/ERRORE (LED bicolore)

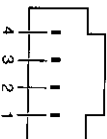
Si illumina in verde quando è inserito un disco. Lampeggia in verde quando vengono letti/scritti dati dal/sul disco. Lampeggia in verde con frequenza regolare quando comincia la lettura del disco. Si illumina in rosso in caso di errore (ad esempio routine autodiagnostica con esito negativo).

6. TASTO OPEN/CLOSE (APERTURA/CHIUSURA)

Premere il tasto OPEN/CLOSE (apertura/chiusura) per aprire il vassoio di caricamento del disco. Per richiuderlo, esercitare una lieve pressione sul bordo anteriore del vassoio oppure premere nuovamente il tasto OPEN/CLOSE.

Vista posteriore (Vedere il risvolto di copertina, Fig. 1)

7. CONNETTORE AUDIO LINE OUT (uscita linea audio)



- 1: Sinistra
2: Massa
3: Massa
4: Destra

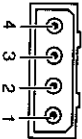
8. BLOCCO PONTICELLI

Questi ponticelli consentono di selezionare il modo Master/Slave e i cavi (per maggiori informazioni, vedere l'Appendice).

9. CONNETTORE IDE

Connettore per cavo piatto IDE a 40 pin (per maggiori informazioni, vedere l'Appendice).

10. CONNETTORE ALIMENTAZIONE CC HOST (tipo AMP 00641737-1)



- 1: +12V
2: Massa
3: Massa
4: +5V

- A track written "at once" has 150 blocks of overhead for run-in, run-out, pre-gap and linking. Packet write, on the other hand, is a method whereby several write events are allowed within a track, thus reducing the overhead.

These "packets" are bounded by 7 blocks for run-in (4), run-out (2) and link (1).

WHAT'S THE DIFFERENCE BETWEEN A "MULTISESSION" DISC AND A "MULTITRACK" DISC?

- A "session" is a unity on a CD which is bounded by lead-in and lead-out. A session contains one or several (up to 99 per disc) tracks.
- There are two types of tracks. A Red Book audio track is usually written in disc at once mode along with several other tracks in one session. These tracks have index numbers in the subchannel which differentiate one from the other and which allow selective playback.
- The other type of track is the incrementally written type described above.

- Disc at Once is a writing mode that requires data to be written continuously, without any interruptions, until the entire data set is transferred to the CD-R.

- The lead-in, program and lead-out are written in a single event. All of the information to be recorded needs to be staged on the computer's hard disk prior to recording in the Disc at Once mode.
- This mode is usually preferred for discs that are sent to a CD-ROM replication facility when CD-R is the source media.
- Recording in the Disc at Once mode eliminates the linking and run-in and run-out blocks associated with multib session and packet recording modes, which often are interpreted as uncorrectable errors during the glass mastering process.

- Track at Once is a writing mode that allows a session to be written in a number of discrete write events, called tracks.
- The disc may be removed from the writer and read in another writer (given proper software) before the session is fixated.

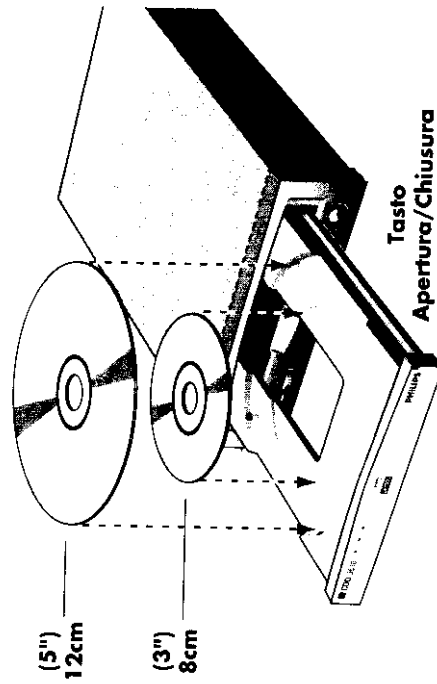
WHAT IS "INCREMENTAL" OR "PACKET" WRITING?

- Track at Once writing is a form of incremental write which mandates a minimum track length of 300 blocks and a maximum of 99 tracks per disc.

USO/VERIFICA DEL FUNZIONAMENTO DEL SISTEMA REGISTRATORE/REWRITABLE

Caricamento ed espulsione disco

- ➊ Per aprire il vassoio: premere il tasto OPEN/CLOSE (apertura/chiusura).
- ➋ Inserirvi un disco con l'etichetta rivolta verso l'alto. Il vassoio è idoneo per dischi con diametro da 8 cm (CD-Single) e per i più comuni dischi da 12 cm.



- 3** Per richiudere il vassoio, esercitavi una lieve pressione oppure premere nuovamente il tasto OPEN/CLOSE.

NOTA: PER RISULTATI OTTIMALE, UTILIZZARE I SUPPORTI PHILIPS CD-R o CD-RW.

NOTA: NON UTILIZZARE USARE DISCHI DI PULIZIA DELLE TESTINE DI TIPO COMMERCIALE.

NOTE NON SPEGNERE IL COMPUTER E/O IL DRIVE DURANTE LA REGISTRAZIONE POICHÉ SI RISCHIEREBBE DI RENDERE IL DISCO ILLEGIBILE. VERIFICARE CHE IL COMPUTER ABBA TERMINATO LA REGISTRAZIONE E CHE L'INDICATORE DI SCRITTURA POSTO SUL LATO ANTERIORE DELL'UNITÀ SIA SPENTO.

Uso del Registratore/Rewritable di CD integrato nel computer

Per un corretto funzionamento del registratore di CD, utilizzare esclusivamente software applicativo di tipo specifico, idoneo per la piattaforma del computer in uso e compatibile con il registratore Philips CDD3610.

Installazione del software

Le modalità di installazione e utilizzo del software necessario dipendono dalla configurazione del computer in cui è integrato il CDD3610, ad esempio PC, Windows 3.11, Windows 95, Windows NT, UNIX o altri sistemi operativi.

Per maggiori informazioni sull'elenco completo delle configurazioni host supportate e sui pacchetti software disponibili, contattare il proprio venditore.

Tutti i diritti riservati.

Descrizione dei comandi

Il drive utilizza comandi basati sullo standard MMC (Multimedia Command set). Una descrizione dettagliata dell'intera serie di comandi è disponibile su richiesta.

COMPACT DISC AVERAGE TRANSFER RATES

*Note 1: The normal CD transfer rate from the disc is 75 blocks per second.
Note 2: The average transfer rates shown are in BYTES PER SECOND.*

Read/Write Speed	Audio (2,352 Bytes/Block)	CD-ROM Mode 1 (2,048 Bytes/Block)	CD-ROM Mode 2 (2,336 Bytes/Block)
1X	176,000	153,600	175,200
2X	352,800	307,200	350,400
4X	705,600	614,400	700,800
6X	1,058,400	921,600	1,051,200

Read/Write Speed	CD-I & (XA) Form 1 (2,048 Bytes/Block)	CD-I & (XA) Form 2 (2,324 Bytes/Block)
1X	153,600	174,300
2X	307,200	348,600
4X	614,400	697,200
6X	921,600	1,045,800

Source: Craig Schwartz, Eastman Kodak Company

WHAT IS THE DIFFERENCE BETWEEN CD-R "FIXATION" AND "FINALIZATION"?

- Fixation is the process of writing the lead-in and lead-out information to the disc. This process finishes a writing session and creates a table of contents.
- Fixation is required for a CD-ROM or CD-Audio player to play the disc. Discs which are "fixated for append" can have additional sessions recorded, with their own session lead-in and lead-out, creating a multisession disc.

- When a disc is "finalized" the absolute lead-in and lead-out for the entire disc is written, along with information which tells the reader not to look for subsequent sessions.

This final table of contents (TOC) conforms to the ISO 9660 file standard.

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can

- Prima di caricare un disco, attendere che il vassoio sia fuoriuscito completamente; dopodiché inserire il disco con la dovuta delicatezza.

Contrast this to the recording structure of a pressed CD-ROM or a CD-R written in "Disc at Once" mode that contains just one lead-in area and one lead-out area.

WHAT IS THE RECORDING SPEED OF CD-R?

The "speed" rating of a CD-Recordable/Rewritable determines how fast it can record data to blank CD-R media.

speed designators, such as "1X", "2X", "4X" and "6X" define multiples of the original playback speed of first generation CD-ROM players;

- For a CD-ROM player or CD-Recordable/Rewritable, a 1X speed translates to 153,600 Bytes per second. This is usually rounded down to 150 Kb per second. Therefore, a "1X" recorder writes 150 Kb per second to the CD-R media.
- Likewise, a "2X" recorder records at 300 Kb per second.
- A "4X" records at 600 Kb per second.
- A "6X" records at 900 Kb per second.

NOTE: THERE ARE SOME VARIATIONS IN MEASURING SPEED, BECAUSE THERE ARE RECORDING MODES THAT PROVIDE MORE THAN 2,048 DATA BYTES PER BLOCK (AUDIO IS RECORDED AT 2,352 BYTES PER BLOCK).

NOTE: SOME CD-RECORDABLE/REWRITABLES HAVE A DIFFERENT READING SPEED THAN THEIR RATED RECORDING SPEED. FOR INSTANCE, A "2X6" CD-RECORDABLE / REWRITABLE CAN WRITE AT 2X SPEED AND READ BACK AT 6X SPEED (900 KB PER SECOND).

WHAT IS THE ORANGE BOOK?

- The Orange Book is a document that describes the specification for CD-Write Once (CD-Recordable)
- It defines both the physical structure and dimensions of a CD-R disc as well as the use of certain portions of the recording surface:
 - to record information (the Program area),
 - to calibrate the recorder laser power (Power Calibration area or PCA),
 - to record track information for all sessions (the Program Memory area or PMA),
 - to record the Lead-in Lead-out areas that precede and follow, respectively, the Program area.
- There are several "parts" to the Orange Book. Part II refers to CD-Recordable.

WHAT DOES ORANGE BOOK CERTIFIED MEDIA MEAN AND WHY?

- The Orange Book, Part II is the primary specification for CD-R media. Accordingly, all CD-R media should meet the Orange Book criteria for recordability and playback.
- Philips and Sony, the originators of the Orange Book, provide Orange Book certification of CD-R media.

WHAT IS MULTISESSION CD?

The principal purpose of multiple sessions is to allow additional data to be appended to a previously recorded disc.

NOTE: SOME OLDER CD READERS CAN READ ONLY THE FIRST SESSION OF A MULTISESSION DISC.

- For compatibility, drives need to do this in a standard way. They also need to interface and interact with their host computer systems in a standard way.
- That standard way is MultiRead. And any CD drive can play all CD media - CD-Digital Audio, CD-ROM, CD-R, and CD-RW - provided that it supports MultiRead.
- What is more, MultiRead extends the same compatibility to DVD. All DVD equipment that supports MultiRead will also be able to retrieve CD-RW data. This means that you can go ahead now with storing valuable data on CD-RW media, safe in the knowledge that it will be future-proof.

Glossary of terms CD-R

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World Wide Web homepage: <http://www.osta.org>

WHAT IS CD-RECORDABLE?

- CD-Recordable is compact disc technology that allows the user to create their own CD's. This is done by means of a recording system that uses "Write once" type optical discs standardized by Philips and Sony and documented in the "Orange Book, Part II" and a CD recording device that is connected to a host system. Typically, the host system is a personal computer which also contains recording software.

INTRODUCCIÓN

El CDD3610 es una unidad integrada de nueva generación de CD grabable/reescribible de 5,25", media altura, equipada con el conocido interfaz IDE (mejorado).

La unidad es en realidad un equipo multifuncional, toda vez que puede utilizarse como:

- lector de CD-ROM de alta velocidad (hasta 6,5x)
- grabador de CD de simple y doble velocidad, para grabar sus propios discos CD-ROM o CD Audio
- unidad de CD-Reescribible para utilizar como soporte de almacenamiento personal mediante la función de escritura incremental de paquetes.

El CDD3610 es la herramienta ideal para la gestión de grandes cantidades de datos grabados en formato compacto de CD. La nueva función de escritura incremental de paquetes hará de ella una unidad atractiva para que el usuario medio de ordenadores de sobremesa pueda almacenar sus propios datos.

Los discos CD-Reescribibles pueden grabarse a velocidad simple o doble y en todos los formatos estándar, es decir, CD-Audio, CD-ROM (XA), CD-i y CD-Vídeo, entre otros.

Estos discos se graban conforme a la especificaciones del Libro Naranja (2ª parte), por lo que podrán reproducirse en cualquier lector de CD compatible.

La capacidad de reescritura es una nueva función que permite volver a utilizar los discos previamente grabados (discos CD-Reescribibles especiales), mediante la regrabación de porciones del mismo o de su totalidad de acuerdo con las especificaciones del Libro Naranja (3ª parte).

Características de la unidad de CD-Grabable/Reescribible CDD3610:

- Equipo multifuncional (lector de CD-ROM, grabador de CD y unidad de CD-Reescribible).
- Soporta la escritura incremental de paquetes para aplicaciones de almacenamiento de datos y compatibilidad con los sistemas de ficheros "drag & drop" (arrastrar y soltar), conforme a la norma CD-UDF aprobada por la OSTA (Optical Storage Technology Association).
- Soporta el juego de órdenes multimedia MMC, homologado por el instituto americano de normalización ANSI.
- Compatibilidad de lectura "Plug & Play" (conectar y usar) en entornos Windows 95 y Windows NT.
- Interfaz directo con el conector IDE (mejorado) estándar de bajo coste de la placa base del ordenador.

Desembalaje

Si el embalaje del CDD3610 muestra signos evidentes de manipulación descuidada o deterioro, y la unidad no funciona debidamente en el arranque inicial, devuelva la unidad y el embalaje dañado a su distribuidor y solicite su sustitución.

Levante el CDD3610 y extraiga las piezas de embalaje. Compruebe que están incluidos los siguientes elementos:

- manual de instrucciones
- tornillos de montaje + puentes

Su distribuidor le puede suministrar un cable IDE plano y otro de audio.

Glossary of terms CD-RW

THE BEST WAY TO CREATE YOUR OWN CDs - WITH RE-USABLE CD-RW.

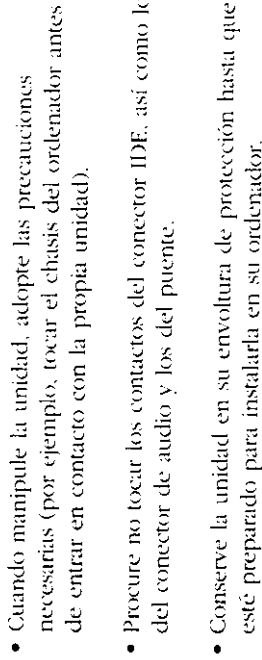
- CD-ReWritable (CD-RW) gives you the opportunity to create your own CDs, in the best and most cost-effective way. CD-RW is, in fact, the logical extension of the promise already made by Philips CD-Recordable (CD-R). Together, they give you the opportunity to run the media that best suits the job in hand.
- CD-RW supports the recording of small packages of data, using incremental packet writing in the universal (UDF) file format. As with floppy discs, you have the option of writing a disc all at once, or building it up bit by bit - and re-using the disc later for other data.
- CD-RW media can be rewritten hundreds, or even thousands of times. This means that the overall running costs, for hardware and software together, can be very economical indeed.
- CD-RW will greatly extend your personal short-term storage capacity, providing space for large-volume files like Internet downloads, backups, and hard disc dumps. It is also excellent for low-quantity multimedia applications, from one-off disc testing to small-scale distribution

MULTIREAD: MAKING CD-RW MEDIA COMPATIBLE WITH CD-ROM AND DVD-ROM.

- Compatibility and interchangeability have always been the cornerstones of CD. To ensure that CD-RW is no exception, Philips and Hewlett-Packard worked together to specify MultiRead.
- CD-RW media reflects less laser light than the other CD media. To play all CD media, drives must be able to adapt to these different reflectivities.

INSTALACIÓN

El CD Grabable/Reescribible, al igual que todos los equipos electrónicos, es sensible a la electricidad estática.



- **Europa:** Esta unidad deberá instalarse exclusivamente con un suministro eléctrico homologado EN60950 (IEC950).
- **EE.UU./Canadá:** Esta unidad es para uso exclusivo con ordenadores personales compatibles con IBM e incluidos en la relación UL, o estaciones de trabajo Macintosh incluidas en la UL, que pesen menos de 18 kg.

Declaración de derechos de autor

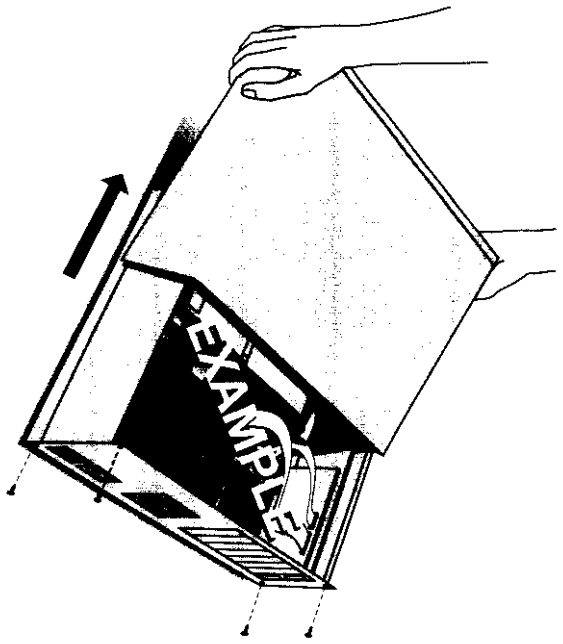
▲ 24 ▲

Instalación de la unidad

- 1 Apague el ordenador, el monitor y el resto de periféricos. Para interrumpir por completo el suministro de alimentación del sistema, deberá desconectar el enchufe de red.

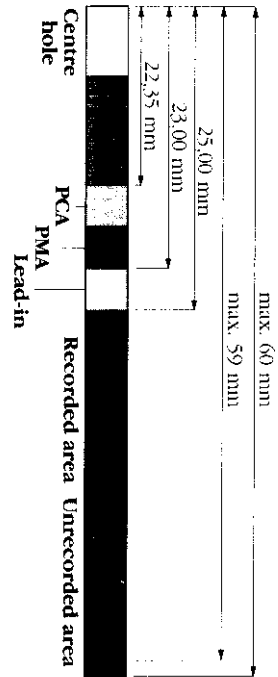
NOTA: DESPLIEGUE LA SOLAPA DE ESTE MANUAL PARA LOCALIZAR LA UBICACIÓN DE LOS CONECTORES Y SU ORIENTACIÓN.

- 2 Retire la cubierta del ordenador. Si precisa información más detallada, consulte los manuales facilitados con el ordenador.



A CROSS-SECTION THROUGH A PARTIALLY RECORDED CD-R DISC.

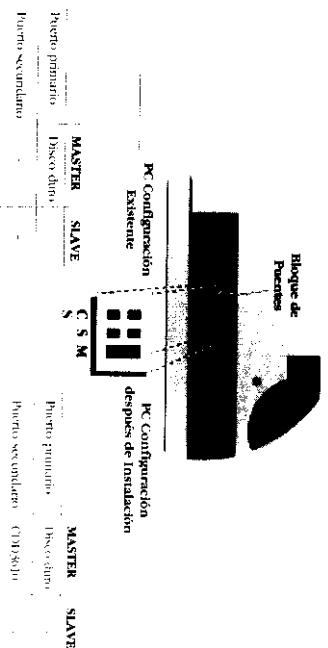
After the first recording the recording area is divided (see figure below).



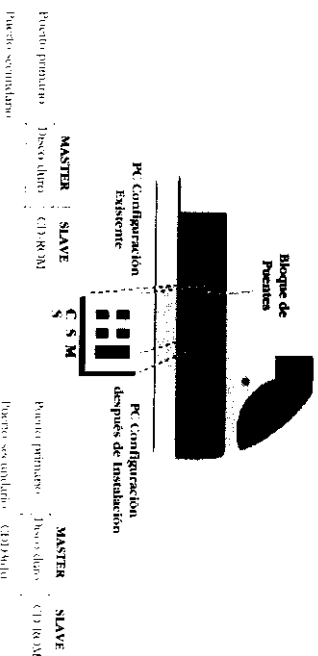
- The "Lead-in", "program area" and "Lead-out" areas are present on every conventional prerecorded CD.
- For the partially recorded CD-R disc, the PCA and PMA areas are incorporated in front of the Lead-in.
- Track numbers with associated absolute start and stop times are stored in the PMA.

The possibility exists of making further recordings later. It would also be possible to declare the disc as fully recorded. In which case, the definitive table of contents (TOC) is written into the Lead-in.

- B) El disco duro simple conectado como puerto IDE maestro a primario:
 Conecte el CDD3610 como puerto maestro a secundario.



- C) El disco duro conectado como puerto IDE maestro a primario.
 El CD-ROM conectado como puerto IDE esclavo a primario.
 Conecte el CDD3610 como puerto IDE maestro a secundario.

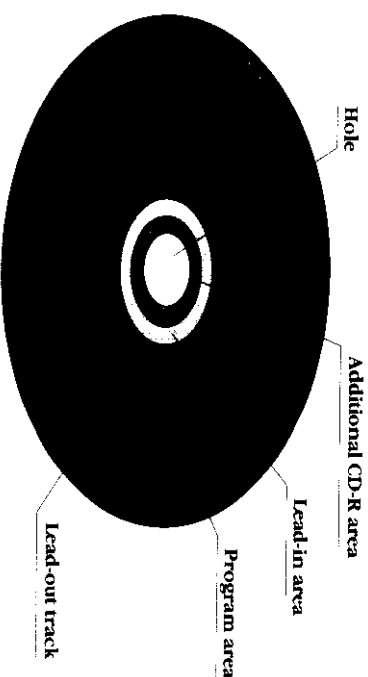


OBSERVACIÓN: LA INSTALACIÓN A ES PREFERIBLE EN LOS SISTEMAS PROVISTOS DE DISCO DURO IDE Y CD-ROM.

OBSERVACIÓN: LA INSTALACIÓN B ES PREFERIBLE EN LOS SISTEMAS PROVISTOS ÚNICAMENTE DE UN DISCO DURO IDE.

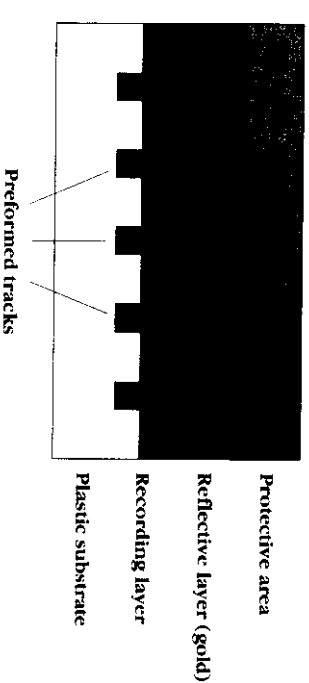
Basic principles of CD-R media

A blank CD-R disc is divided into areas (see figure below). This differs from a prerecorded disc by the additional CD-R area, which lies in front of the lead-in area.



A CROSS-SECTION THROUGH A CD-R DISC

The disc comprises different layers.



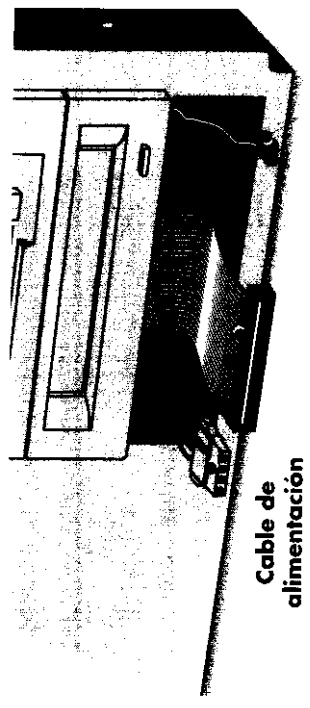
- Transparent plastics material (the same as conventional CD's) is used as the substrate.

Example : Execution of test number 4

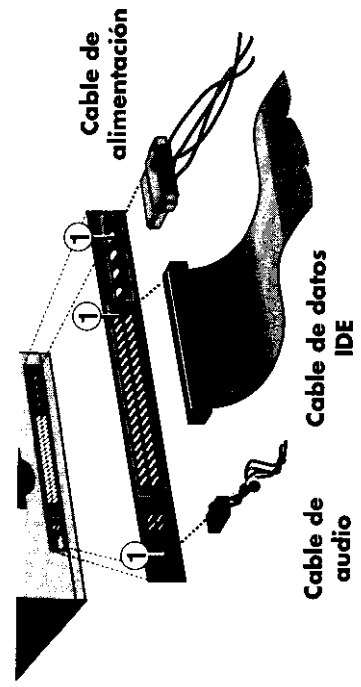
- disc-in LED is ORANGE
 - ▶ Test 4 is being executed
 - disc-in LED flashes 4 times GREEN
 - ▶ Test 4 is executed successfully
- OR
- disc-in LED flashes 4 times RED
 - ▶ Test 4 failed

• After completion of the whole selftest, a final indication of the testresults will be given: The LED will flash GREEN-ORANGE for about 3 seconds if the test is successful. Otherwise, the LED will be RED until a new command has to be executed.

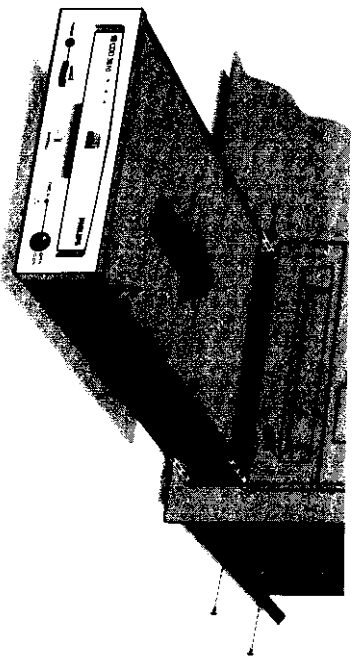
- ⑤ Inserte el extremo libre del cable de datos IDE en la bahía abierta, y haga lo mismo con los cables de alimentación y de audio (opcional).



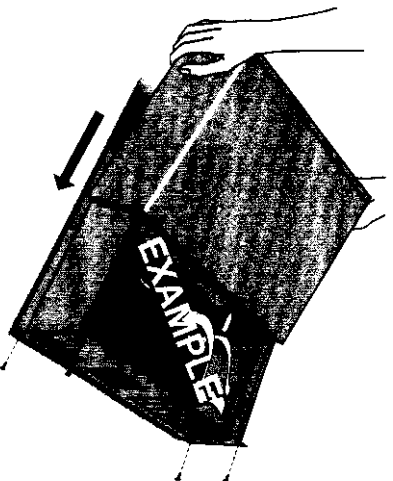
- ⑥ Conecte los cables de audio (opcional), datos IDE y alimentación al panel posterior del CDD3610. Compruebe que quedan correctamente alineados el contacto 1 de cada cable y el contacto 1 de cada conector.



- 7 Introduzca el CDD3610 en la bahía, y utilice todos los tornillos incluidos para asegurarlo.



- 8 Vuelva a colocar la cubierta y conecte el enchufe de red del sistema. Una vez instalada correctamente la unidad y establecidas todas las conexiones, es el momento de encender el ordenador. Ahora está preparado para llevar a cabo la autocomprobación (véase Apéndice) y, a continuación, instalar la aplicación.

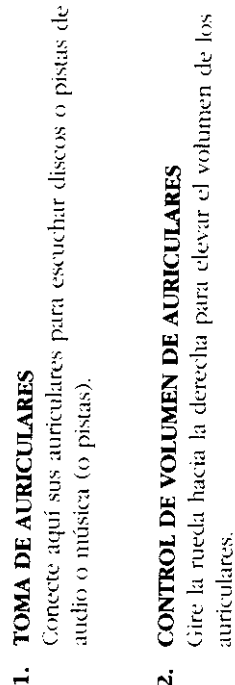


Auto selftest

- The auto selftest will execute a number of diagnostic tests and will be activated by pushing and holding Open/Close button for one complete Open/Close cycle of the tray.
- The auto selftest can also be executed by holding the Open/Close button for about 4 seconds during power-up.
- The disc-in LED and the write-LED will be tested before the actual selftest:
 - The disc-in LED will flash three times: The first time RED, the second time GREEN and the last time ORANGE.
 - The write-LED will flash ORANGE.
- This is repeated once.
- During execution of a particular test 0, the right LED is ORANGE. After execution of this test, the right LED will flash a number of times. If this part of the test failed, then the LED will flash RED a number of times. The number of flashes, corresponds to the sequence number of the test.
- In case of a failing selftest, it may helpful to report the number of the failing test to your supplier.

RESUMEN DE CONTROLES Y CONECTORES

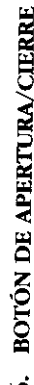
Vista frontal (véase fig. 1 en la solapa)



- When a shorting jumper is in the "CS" (CSEL) position, the device will use the host interface signal CSEL to configure the device.

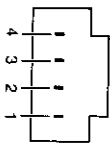


- When the shorting jumper is placed in the "M" (MASTER) or "S" (SLAVE), the drive will be configured accordingly.



Vista posterior (véase fig. 1 en la solapa)

7. SALIDA DE LÍNEA DE AUDIO



- 1: Izquierda
- 2: Tierra
- 3: Tierra
- 4: Derecha

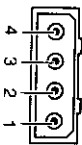
8. BLOQUE DE PUENTES

Estos puentes se utilizan para la selección del modo maestro/esclavo y para la selección de cables (más información en el Apéndice).

9. CONECTOR IDE

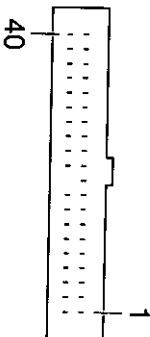
Conector de cable plano IDE de 40 contactos (más información en el Apéndice).

10. CONECTOR DE ALIMENTACIÓN DE C.C. DEL ORDENADOR (tipo AMP 00641737-1)



- 1: +12V
- 2: Tierra
- 3: Tierra
- 4: +5V

Interface Pin Table



SIGNAL	PIN NUMBER	SIGNAL	PIN NUMBER
RESET	01	DMA REQUEST	21
GROUND	02	GROUND	22
-DB(7)	03	I/O WRITE	23
-DB(8)	04	GROUND	24
-DB(6)	05	I/O READ	25
-DB(9)	06	GROUND	26
-DB(5)	07	I/O READY	27
-DB(10)	08	SPSYNCSSEL	28
-DB(4)	09	DMACK-	29
-DB(11)	10	GROUND	30
-DB(3)	11	INTRQ	31
-DB(12)	12	16 BIT I/O	32
-DB(2)	13	DA1	33
-DB(13)	14	PI/DAG-	34
-DB(1)	15	DA0	35
-DB(14)	16	DA2	36
-DB(0)	17	CHIP SELECT 0	37
-DB(15)	18	CHIP SELECT 1	38
GROUND	19	DASP-	39
Removed	20	GROUND	40

Audio performance

- **Audio specification for line out:**

	On pressed CD	On recordable CD
Output Voltage	1 V rms	1 V rms
Imbalance	max 0.25 dB	max 0.25 dB
Output Impedance	<70 Ohm	<70 Ohm
Amplitude Linearity	1.5 dB (20 Hz - 20 kHz)	2.5 dB (20 Hz - 16 kHz)
S/N-ratio	81 dB (84 dB A-weight)	80 dB (82 dB A-weight)
Total Harmonic	65 dB	55 dB
Distortion + Noise	(1 kHz)	(1 kHz)
Outband attenuation	min. 50 dB above 25 kHz	min. 50 dB above 25 kHz
Channel separation	min. 70 dB (20 kHz)	min. 65 dB (16 kHz)
Muting level during random access	min. 70 dB (BW = 20 kHz)	min. 70 dB (BW = 20 kHz)

- **Audio specification for headphone:**

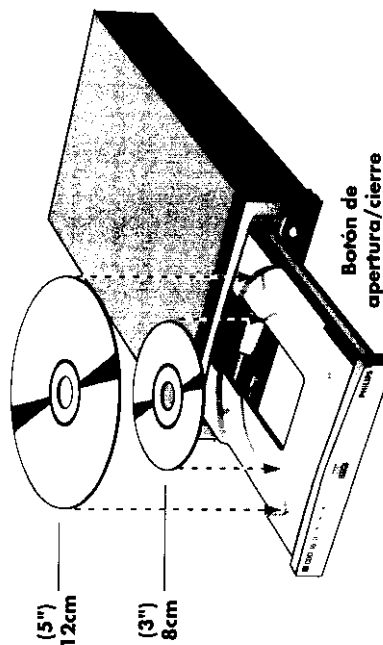
	On pressed CD	On recordable CD
Output Voltage (max volume)	3.1 V rms	3.1 V rms
Unbalance	max 0.25 dB	max 0.25 dB
Output Impedance	120 Ohm	120 Ohm
Amplitude Linearity	1.5 dB (20 Hz - 20 kHz)	2.5 dB (20 Hz - 16 kHz)
S/N-ratio	81 dB (84 dB A-wgt)	80 dB (82 dB A-wgt)
Total Harmonic	60 dB	45 dB
Distortion + Noise		
Outband attenuation	min. 50 dB above 25 kHz	min. 50 dB above 25 kHz
Channel separation	min. 67 dB (20 kHz)	min. 65 dB (16 kHz)
Muting level during random access	min. 60 dB (BW = 20 kHz)	min. 60 dB (BW = 20 kHz)

NOTE: THE SOMEWHAT REDUCED AUDIO QUALITY WHEN PLAYING BACK AUDIO TRACKS ON CD-R DISCS HAS NO RELATION TO THE DIGITAL QUALITY OF THE AUDIO TRACKS AS THEY HAVE BEEN RECORDED ONTO THE CD-R DISC.

**FUNCIONAMIENTO/PRUEBA DEL SISTEMA DE
CD-GRABABLE/REESCRIBIBLE**

Operación de carga y descarga de disco

- ➊ Para abrir la bandeja, pulse el botón de apertura/cierre (OPEN/CLOSE).
- ➋ Inserte un disco con la etiqueta hacia arriba. La bandeja acepta discos de 8 cm de diámetro (CD-Single) y los más habituales de 12 cm.



- 3** Para cerrar la bandeja, presionar ligeramente la parte frontal o pulsar el botón de apertura/cierre (OPEN/CLOSE).

OBSERVACIÓN: PARA OBTENER LOS MEJORES RESULTADOS, UTILICE DISCOS GRABABLES O REGRABABLES (CD-R o CD-RW) DE PHILIPS.

OBSERVACIÓN: NO UTILICE DISCOS DE LIMPIEZA DE CABEZALES DE USO GENERAL DISPONIBLES EN EL MERCADO.

OBSERVACIÓN: NO APAGUE EL ORDENADOR Y/O LA UNIDAD DURANTE LAS OPERACIONES DE GRABACIÓN, O DE LO CONTRARIO EL DISCO PODRÍA QUEDAR ILEGIBLE. AGUARDE A QUE EL ORDENADOR HAYA FINALIZADO EL PROCESO DE GRABACIÓN Y A QUE SE HAYA APAGADO EL INDICADOR DE ESCRITURA DE LA UNIDAD.

Control de CD-Grabable/Reescribible desde el ordenador

Deberá utilizarse un programa de aplicación específico, cargado en la plataforma en uso y diseñado para operar con el CDD3610 de Philips, para poder controlar correctamente la unidad.

Instalación del programa

La instalación y puesta en marcha del programa requerido depende de la configuración del ordenador base en que se vaya a utilizar el grabador de CD, es decir, PC, Windows 3.11, Windows 95, Windows NT, UNIX u otros sistemas operativos. Solicite a su distribuidor la relación completa de configuraciones soportadas y de paquetes informáticos disponibles.

Marcas comerciales reconocidas.

Descripción de órdenes

La unidad admite órdenes basados en la norma industrial MMC (juego de órdenes para sistemas multimedia). Hay disponible una amplia descripción del juego de órdenes a solicitud del interesado.

DIMENSIONS	Height: 41.5 mm (1.64 inch) Width: 146 mm (5.75 inch) Depth: 206 mm (8.11 inch)
WEIGHT	less than 1 kg
POWER DISSIPATION	max. 8W
Power Supply:	
→ Voltage requirements:	+12V (± 5%) +5V (± 5%)
→ Current requirements:	+12V 160 mA typ. +5V 200 mA max. 1 A typ. 1.5 A max.
ENVIRONMENTAL	
Operating temp ⁽¹⁾	5 to 40 °C (41 to 104 °F)
Non operating temp	-25 to 70 °C (-13 to 158 °F)
RELIABILITY	MTBF (hours 20% duty cycle) 120.000 POH
MEDIA	CD-R conform to "Orange Book" part II (CD-Recordable) and part III (CD-ReWritable).
CERTIFICATION	FCC Compliance: Class B. UL, CUL listed and CEBEC. FDA-CDDRH.

⁽¹⁾ **Specifications for the "under pressure" case** (incoming air flow through the front bezel) : A flow of at least 2 l/sec. of air at maximum 40° must be realised. This will be achieved by realising at least -180 Pascal of pressure difference between inside the apparatus and outside.

Specifications for the "over pressure" case (outgoing air flow through the front bezel) : A flow of at least 2 l/sec. of air at maximum 40° must be realised. This will be achieved by realising at least +180 Pascal of pressure difference between inside the apparatus and outside. Additionally, the measured temperature of the bottom plate of the drive must not exceed 50° C.
Remark: under an environmental temperature of the drive between 5° to 30° C no airflow is necessary.

INFORMACIÓN ADICIONAL

Cuidado de los discos

- Cuando cargue el disco, aguarde a que la bandeja se abra por completo e insértelo con cuidado.
- Sustenga los discos únicamente por los bordes interior y exterior.
 - No escriba nunca con un bolígrafo sobre la superficie el disco.
 - No guarde los discos en lugares sometidos a niveles elevados de temperatura o humedad. No exponga nunca los discos a la luz solar directa.
- Guarde los discos en sus estuches para evitar la acumulación de polvo, rayados, deformaciones u otros daños.
- Cuando el disco presente suciedad, límpielo pasando un paño desde el centro hacia afuera. No utilice disolventes como la bencina, el aguarrás o productos de limpieza disponibles en el mercado. Tampoco aplique fluidos antiestáticos, ya que podrían ocasionar daños en el disco.
- Puede adquirir por separado discos vacíos en su distribuidor.

Technical data

PERFORMANCE

Capacity 120mm disc 80mm disc	600 Mbytes/700 Mbytes 200 Mbytes
Access time average 1/3 data (t_d) Access time max (t_h)	350 msec. < 750 msec.
Data-transfer-rate (recording/reading)	352.8 Kbytes/sec sustained (double speed, mode 2 data) 176.3 (single speed, mode 2 data)
Data-transfer-rate (read only)	Up to 1145 Kbytes/sec (zoned-6 speed, mode 2 data) (see note)
Max. burst rate	$\geq$ 2.5 Mbytes/sec
Interface	(Enhanced) IDE
Form factor	5.25" Half Height (drive should be mounted and used horizontally)
Data integrity from drive, assuming new discs	10-16
Data buffer	1Mb
Disc loading	Trav (motorised)

NOTE: When the drive is in zoned-6 read speed mode, this means that the momentary speed will increase linearly from 4 times speed at the inner diameter of the disc (ie. at beginning of Lead In) to the maximum of 6.5 times speed from 27 minutes disctime onwards.

(1) After spin up, including latency and command overhead, at 6 speed (only valid for reading).

CD3610

OBSERVACIONES

ESPAÑOL

CD3610

ADDITIONAL INFO

ENGLISH

ADDITIONAL INFORMATION

Care of discs

- When loading a disc, allow time for the door to open and then gently insert the disc.
- Handle discs only by the outer and inner edges.
 - Never write with a ballpoint on the surface of the disc.
 - Do not store a disc in places with high temperature and humidity. Do not place the disc under direct sunlight.
- Store discs in their cases to prevent dust contamination, scratches, bending and other damages.
- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the centre out. Do not use solvents such as benzene, thinner, commercially available cleaners, or anti-static fluids. Using fluids of these types may damage the disc.
- Empty discs are separately available through your dealer.

NOTE: DO NOT SWITCH OFF THE COMPUTER AND/OR THE DRIVE DURING THE RECORDING PROCESS, SINCE THIS MIGHT RESULT IN AN UNREADABLE DISC. PLEASE MAKE SURE THAT THE COMPUTER HAS FINISHED IT'S RECORDING PROCESS AND THAT THE WRITE INDICATOR ON THE FRONT OF THE DRIVE IS OFF.

Operating the CD-Recordable/Rewritable on the computer

Specific Application Software running on the computer platform in use, designed to work with the Philips CDD3610, must be used in order to be able to operate the CDD3610 correctly.

Software installation

The installation and operation of the necessary software is dependent off the computer configuration in which the CDD3610 is to be used, e.g. PC's, Windows 3.11, Windows 95, Windows NT, UNIX or other Operating Systems. Contact your supplier for the full list of supported host configurations and available software packages.

All trademarks acknowledged.

Command description

This drive supports commands based on the industry standard MMC (MultiMedia Command set). An extensive description of the total command set is available on request.

INLEIDING

De CDD3610 is een ingebouwde half-height 5,25 inch CD-Recordable / ReWritable die tot een nieuwe generatie CD-R drives behoort en voorzien is van de populaire Enhanced IDE-interface.

De drive is multifunctioneel en kan gebruikt worden als:

- snelle CD-ROM lezer (tot 6,5x-speed)
- 1x- en 2x-speed CD-Recorder om zelf CD-ROM's of Audio-CD's te kunnen opnemen.
- 2x-speed CD-ReWritable die met behulp van Incremental Packet Writing als persoonlijk opslagmedium gebruikt kan worden.

De CDD3610 is het ideale hulpmiddel voor het uitgeven van grote hoeveelheden data in een compacte vorm op CD. De nieuwe functie Incremental Packet Writing maakt deze drive vooral aantrekkelijk voor de gewone desktop-PC gebruiker, die daarmee persoonlijke gegevens kan opslaan.

CD-Recordable disks kunnen met enkel- en tweevoudige snelheid opgenomen worden in alle standaardformaten, waaronder CD-Audio, CD-ROM (XA), CD-i en Video-CD. Omdat deze CD's worden opgenomen conform de specificaties van het Oranje boek (deel II), kunnen deze schijfjes op alle compatibele CD-spelers worden afgespeeld.

CD-ReWritable is nieuw. Met deze functie is het mogelijk eerder beschreven (CD-ReWritable) disks opnieuw te gebruiken door delen van de CD te herschrijven conform de specificaties van het Oranje boek (deel III).

Mogelijkheden van de CDD3610 CD-Recordable/ReWritable drive:

- Meerdere functies (CD-ROM lezer, CD-Recorder- en CD-ReWritable drive)
- Ondersteuning van Incremental Packet Writing voor data-opslagapplicaties en drag & drop File System door de CD-UDF standaard, die goedgekeurd is door de OSTA (Optical Storage Technology Association).
- Ondersteuning van MultiMedia Commandset (MMC), die door de ANSI (American National Standards Institute) gestandaardiseerd is.
- Plug & Play-lezen onder Windows 95 en Windows NT.
- Direct gekoppeld aan voordelige, gestandaardiseerde Enhanced IDE-connector op PC-moederbord.

Uitpakken

Als de CDD3610 verpakking beschadigd of anderszids nuw behandeld blijkt te zijn, en wanneer de drive niet goed functioneert bij het opstarten, ga dan met de drive en de verpakking terug naar de leverancier en vraag om een nieuw exemplaar.

Nem de CDD3610 uit de verpakking.
Ga na of de volgende zaken aanwezig zijn:

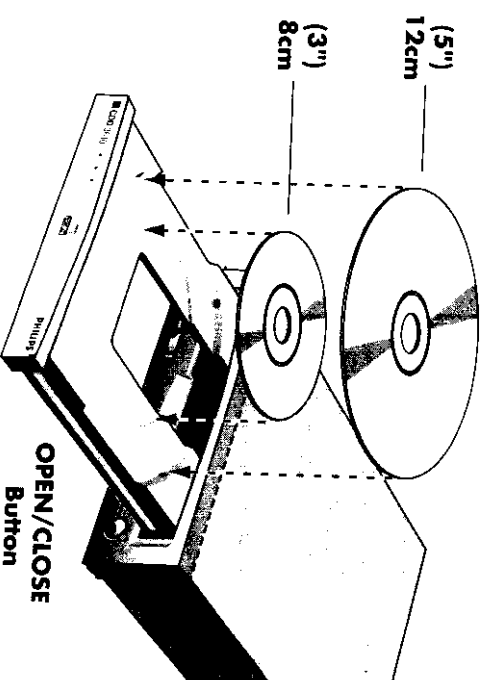
- Gebruiksaanwijzing
- Montageschroeven + jumpers

Een IDE-kabel en een audiokabel zijn verkrijgbaar bij uw leverancier.

OPERATING/TESTING YOUR CD-RECORDABLE/REWRITABLE SYSTEM

Loading and unloading a disc

- 1 To open the tray: Press the Open/Close button.
- 2 Load a disc, with the label facing upwards. The tray accommodates discs with 8 cm diameter (CD-Single) or the more usual 12 cm discs.



- 3 To close the tray, either push gently at the front of the tray or press the Open/Close button.

NOTE: FOR OPTIMAL RESULTS, USE PHILIPS CD-R OR CD-RW MEDIA.

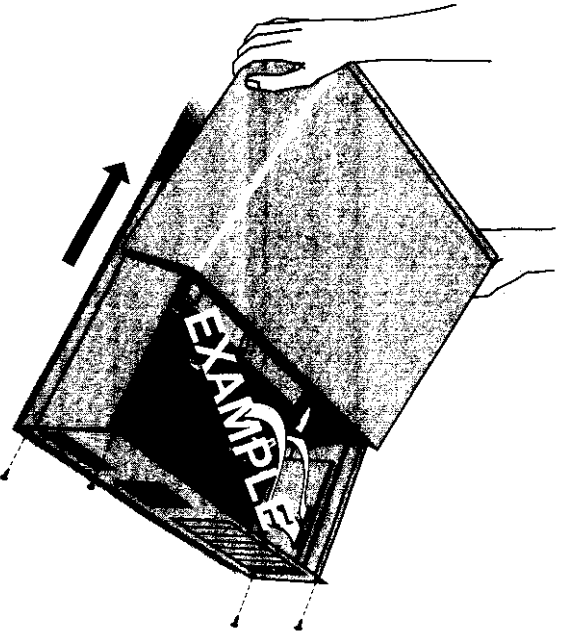
NOTE: DON'T USE GENERAL PURPOSE COMMERCIAL HEAD CLEANING DISCS.

Installeren van de drive

- 1 Schakel computer, monitor en eventuele randapparatuur uit. Om de apparatuur volledig van het lichtnet los te koppelen, dient u de stekker uit het stopcontact te nemen.

OPMERKING: VOOR DE OMSLAG VOÓR IN DIT BOEKJE OPEN OM DE POSITIONERING VAN DE DRIVE-CONNECTORS TE KUNNEN ZIEN.

- 2 Verwijder de kap van de computer; raadpleeg de handleiding van de computer voor specifieke informatie.

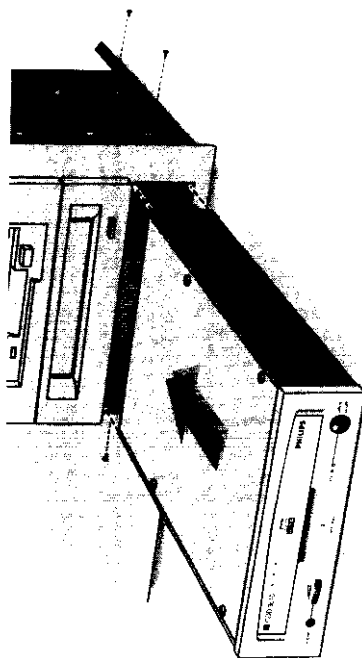


SUMMARY OF CONTROLS AND CONNECTIONS

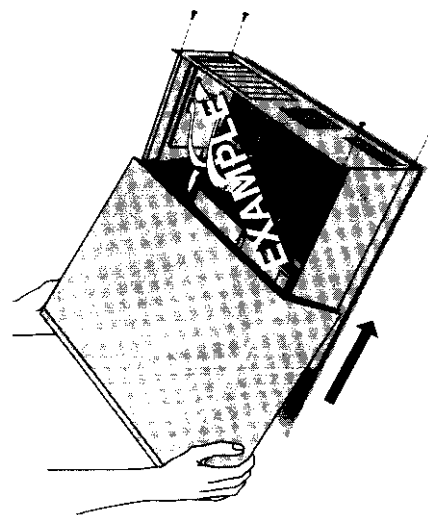
Front view (See Cover Flap Fig.1)

1. **HEADPHONE PLUG**
Connect your headphone to listen to audio or music discs (or tracks).
2. **HEADPHONE VOLUME CONTROL**
Turn the wheel to the right to increase the audio volume of your headphone.
3. **WRITE INDICATOR**
Lights "orange" when writing of a disc occurs.
Flashes "orange" during writc emulation.
4. **DISC TRAY**
5. **DISC IN/ACTIVE/ERROR indicator (dual color LED)**
Lights "green" when a disc is present. Flashes "green" asymmetrically when data is being read from disc or written to the disc. Flashes "green" symmetrically when starting up a disc. Lights "red" upon error (e.g. after failed selftest).
6. **OPEN/CLOSE BUTTON**
Press the OPEN/CLOSE button to open the disc loading tray. To close the disc loading tray, gently push the front of the tray or press the Open/Close button.

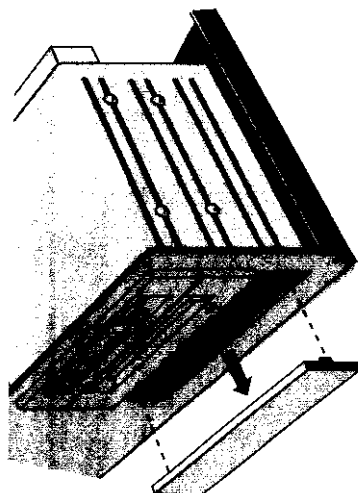
- 7** Insert the CDD3610 into the drive bay. Using all the screws included in the bag to secure the CDD3610 into the bay.



- 8** Replace the cover. Connect the mains plug of your configuration. When you have successfully installed the drive and established all connections, it is now time to switch on the PC. You are ready to run the selftest (See appendix) and then install the software.



- 3** Voor het monteren van de drive in uw (personal) computer dient u een horizontale 5,25 inch inbouwopening vrij te maken. Monteer de drive volgens de instructies die bij uw computersysteem geleverd zijn.

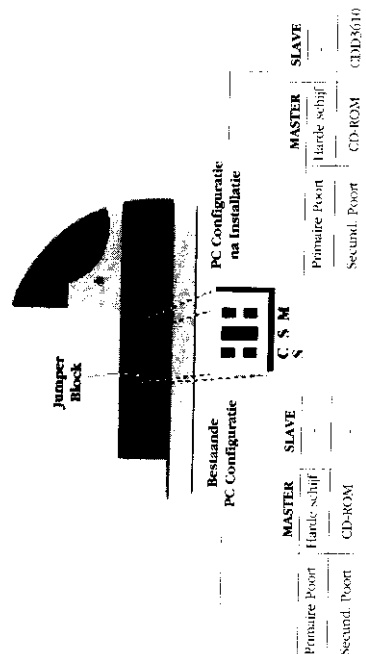


- 4 Afhankelijk van de bestaande configuratie zijn er verschillende mogelijkheden voor het aansluiten van de IDE-databel:

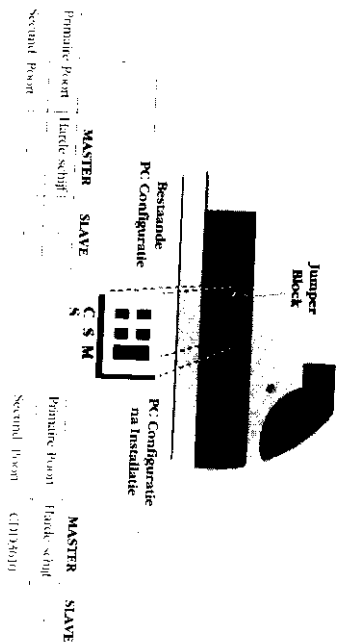
A) Harde schijf is als Master op de primaire IDE-poort aangesloten,

CD-ROM is als Master op de secundaire IDE-poort aangesloten:

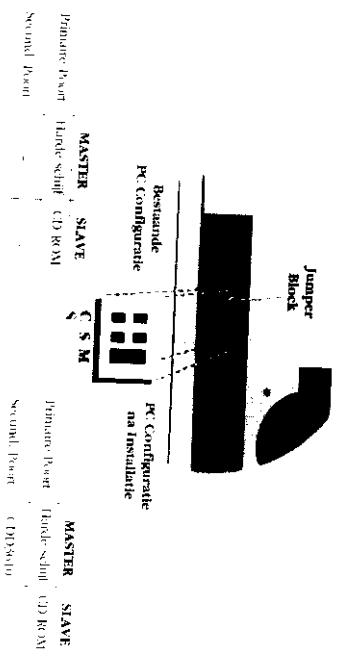
Sluit de CDD3610 als Slave op de secundaire IDE-poort aan.



- B)** Enkele harde schijf is als Master op de primaire IDE-poort aangesloten:
 Sluit de CDD3610 als Master op de secundaire poort aan.

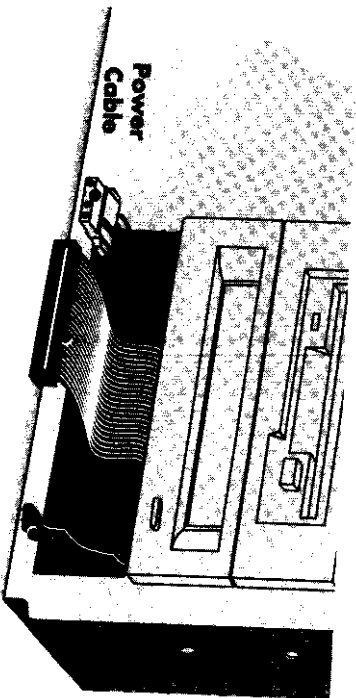


- C)** Harde schijf is als Master op de primaire IDE-poort aangesloten, CD-ROM is als Slave op de primaire IDE-poort aangesloten:
 Sluit de CDD3610 als Master op de secundaire IDE-poort aan.

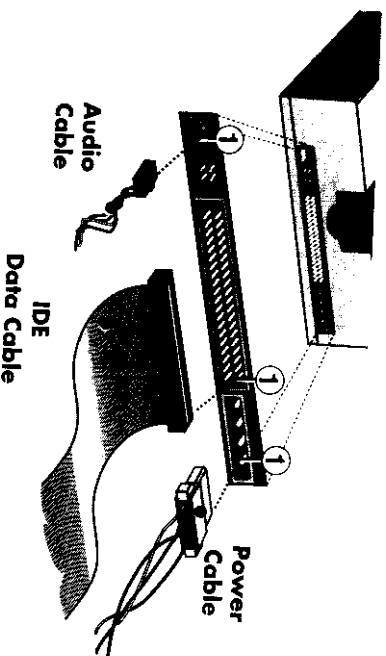


OPMERKING: INSTALLATIE A WORDT AANBEVOLEN BIJ SYSTEMEN MET EEN IDE HARDE SCHIJF EN CD-ROM.
OPMERKING: INSTALLATIE B WORDT AANBEVOLEN BIJ SYSTEMEN MET UITSLUITEND EEN IDE HARDE SCHIJF.

- 5** Locate the free end of the IDE data cable and thread it out through the open drive bay. Do the same with the power cable and the (optional) audio cable.

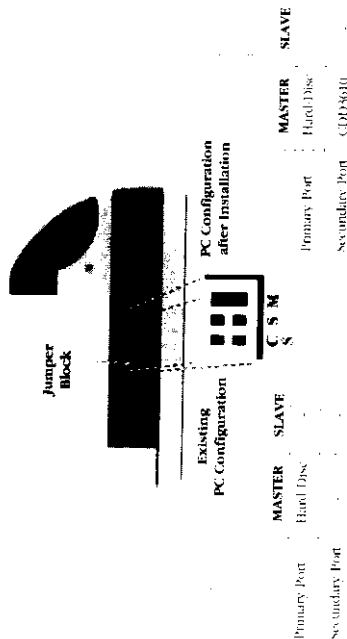


- 6** Connect your (optional) audio cable, IDE data cable and the power cable into the back of the CDD3610. Make sure you correctly align pin 1 of the cable to pin 1 of the connectors.



B) Single Hard-disc connected as master to Primary IDE Port:

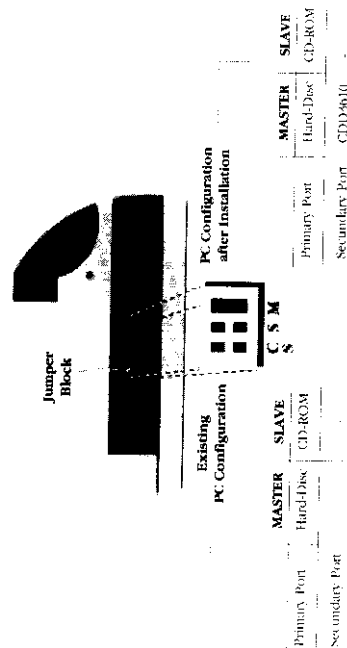
Connect CDD3610 as Master to Secondary Port.



C) Hard-disc connected as Master to Primary IDE Port,

CD-ROM connected as Slave to Primary IDE Port:

Connect CDD3610 as Master to Secondary IDE Port.



NOTE: INSTALLATION A IS PREFERRED FOR SYSTEMS WITH AN IDE HARD-DISC AND CD-ROM.

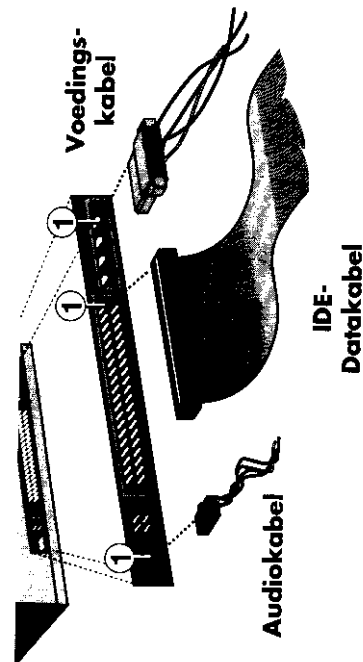
NOTE: INSTALLATION B IS PREFERRED FOR SYSTEMS WITH ONLY AN IDE HARD-DISC.

5 Voer het vrije uiteinde van de IDF-databel door de lege

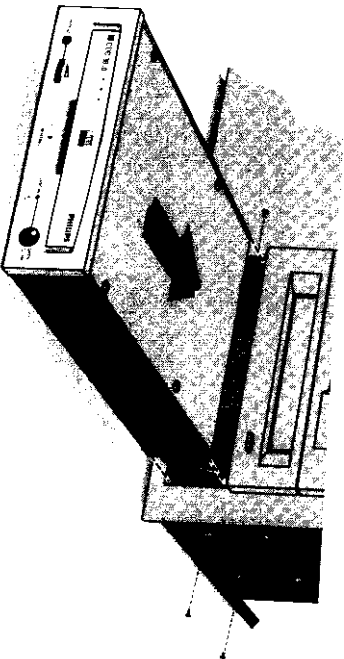


⑨

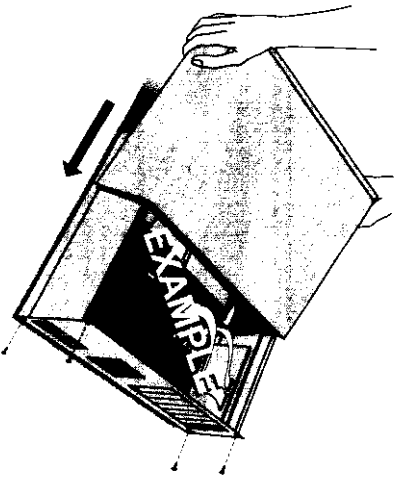
Sluit de (eventuele) audiokabel, de IDE-datakabel en de voedingskabel aan de achterzijde van de CDD3610 aan. Zorg ervoor dat u pen 1 van de kabel aansluit op pen 1 van de connectors.



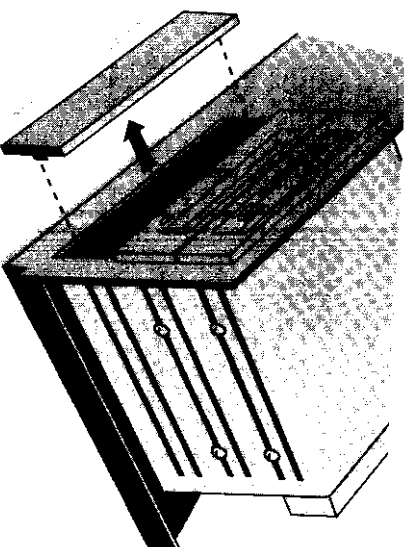
- 7 Schuif de CDD3610 in de opening en bevestig hem met gebruikmaking van alle meegeleverde schroeven.



- 8 Breng de kap weer op zijn plaats en doe de netstekker in het stopcontact. Wanneer u de drive en de verbindingen goed hebt aangebracht, is het nu tijd om de zelftest uit te voeren (zie Appendix) en vervolgens de software te installeren.

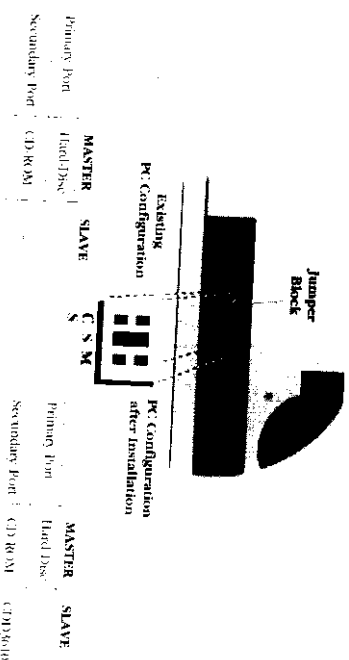


- 3 In order to mount the drive inside your PC (or other type of computer), locate a free horizontal 5.25" bay and follow the instructions, as provided with your computer systems, for installing the drive.



- 4 You have several possibilities to install your IDE data cable depending on your existing configuration:

- A) Hard-Disc connected as Master to Primary IDE Port, CD-ROM connected as Master to Secondary IDE Port. Connect CDD3610 as Slave to Secondary IDE Port.

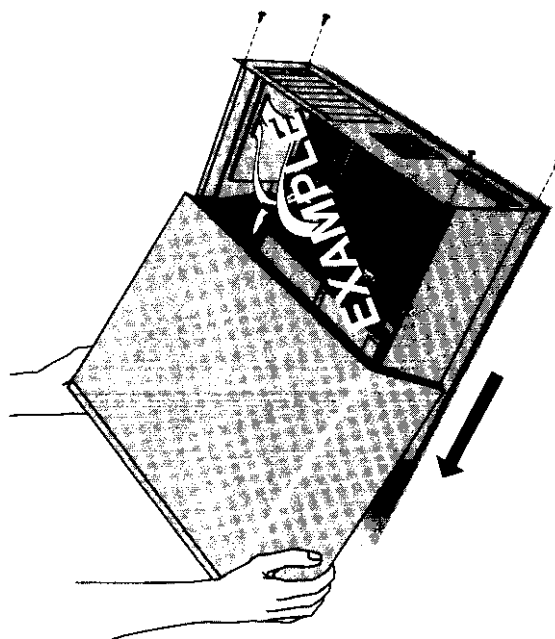


Installing the drive

- 1 Turn off your computer, monitor and other peripherals.
To disconnect your configuration completely from the mains, the mains plug has to be disconnected!

NOTE: OPEN THE COVER FLAP OF THIS BOOKLET FOR LOCATING THE DRIVE-CONNECTORS AND THEIR ORIENTATION.

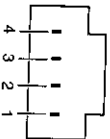
- 2** Remove the cover from your computer.
Please consult the manuals that came
with your computer for specific details.



BEDIENINGSOVERZICHT EN AANSLUITINGEN

Voorzijde (zie omslag afb. 1)

1. **HOOFDTELEFOONAANSLUITING**
Sluit de hoofdtelefoon aan om audio- of muziekdisks (of sporen) te beluisteren.
2. **HOOFDTELEFOONVOLUME**
Draai de knop naar rechts om het volume van de hoofdtelefoon harder te zetten.
3. **INDICATIELAMPJE (oranje)**
Het lampje brandt tijdens het beschrijven van een CD.
Het lampje knippert tijdens schrijffemulatie.
4. **CD-LADE**
5. **DISK IN / ACTIEF / FOUT (2-kleurig indicatielampje)**
Het lampje brandt 'groen' als er een CD in de drive zit. Het knippert groen als gegevens van de CD gelezen of naar de disc geschreven worden. Het lampje knippert symmetrisch 'groen' bij het opstarten van een CD. Het brandt 'rood' bij een foutmelding (b.v. bij een mislukte zelftest).
6. **Toets OPEN / CLOSE**
Druk op toets OPEN / CLOSE voor het openen van de CD-lade. Duw zachtjes tegen de voorzijde van de CD-lade om deze weer te sluiten of druk nogmaals op toets OPEN / CLOSE.

Achterzijde (zie omslag afb. 1)**7. AUDIO-LIJNUITGANG**

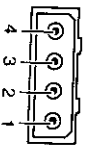
- 1: Links
3: Massa
- 2: Massa
4: Rechts

8. JUMPERBLOK

Deze 'jumpers' worden gebruikt voor het selecteren van Master / Slave en Cable Select (zie appendix voor meer informatie).

9. IDE-AANSLEUTING

40-Pens IDE-linkkabel aansluiting (zie appendix voor meer informatie).

10. AANSLEUTING VOOR GELIJKSTROOMVOEDING
(type AMP 00641737-1)

- 1: +12V
3: Massa
- 2: Massa
4: +5V

INSTALLATION**Precautions**

This CD-Recordable/Rewritable drive, like all electronic equipment, is static sensitive.

- Please take the proper precautions when handling the drive, for example by touching the PC - chassis before touching the drive.
- Avoid touching the IDE connector pins as well as the audio-connector pins and the jumper pins.
- Keep the drive in its conductive wrapping until you are ready to install the drive in your computer.

Safety Precautions

- Europe: This drive shall be installed only with an EN60950 (IEC950) approved Power supply.
- USA/Canada: This drive is for use only with IBM compatible UL listed Personal Computers or Macintosh I.L. listed workstations weighing less than 18 kg.

Copyright Statement

It is a criminal offence, under applicable copyright laws, to make unauthorised copies of copyright-protected material, including computer programs, films, broadcasts and sound recordings. This equipment should not be used for such purposes.

Features of the CDD3610 CD-Recordable/ReWritable drive:

- Multi-function device (CD-ROM reader, CD-Recorder and CD-ReWritable drive)
- Supports Incremental Packet Writing for data storage applications and "drag & drop" File System support through the CD-UDF standard (endorsed by Optical Storage Technology Association or OSTA)
- Supports standardised Multi Media Commandset (MMC) as standardised by the American National Standards Institute (ANSI)
- Plug & Play read compatibility under Windows 95 and Windows NT
- Interfaces directly to low cost standardised (Enhanced) IDE connector on PC motherboard

Unpacking

If the CDD3610 package shows evidence of rough handling or damage and the drive does not function properly on initial startup: return the drive and damaged package to your supplier and request a replacement.

Lift out the CDD3610 and remove the packing pieces. Check that the package contains following items :

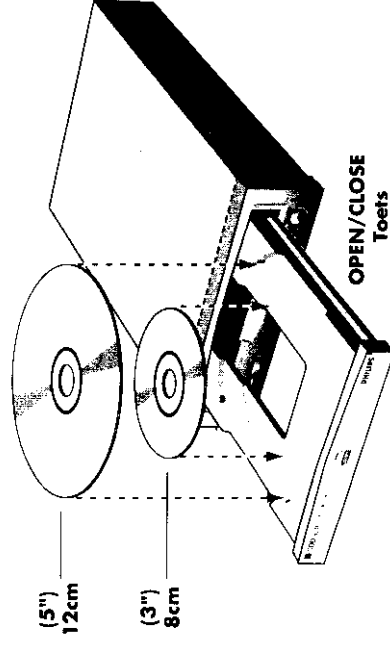
- User manual
- Mounting screws + jumpers

An IDE flatcable and audio cable can be obtained from your supplier.

BEDIENEN/TESTEN VAN UW CD-RECORDABLE/REWRITABLE DRIVE

Plaatsen en verwijderen van een CD

- 1 Druk op toets Open/Close om de CD-lade te openen.
- 2 Plaats een disk met het label naarboven. De lade is geschikt voor CD's met een diameter van 8 cm (CD-Single) en 12 cm (het gebruikelijke formaat).



- 3 Duw zachtjes tegen de voorzijde van de CD-lade om deze te sluiten of druk op toets OPEN / CLOSE.

OPMERKING: VOOR EEN OPTIMAAL RESULTAAT DIEN U CD-R- OF CD-RW- MEDIA VAN PHILIPS TE GEBRUIKEN.

OPMERKING: GEBRUIK GEEN IN DE HANDEL VERKRIJGBARE KOPEREENIGINGS-DISKS

OPMERKING: SCHAKEL DE COMPUTER EN/OE DE DRIVE TIJDENS HET OPNEMEN NIET UIT; DE CD KAN HIERDOOR ONTIESBAAR WORDEN. SCHAKEL DE APPARATUUR PAS UIT ALS DE COMPUTER HET OPNAMEPROCES VOLTOOID HEEFT EN HET ORANJE INDICATIELAMPJE AAN DE VOORZIJDJE VAN DE DRIVE UIT IS.

Bedienen van de CD-Recordable/Rewritable op de computer

Het spreekt voor zich dat er op de betreffende computer specifieke applicatiesoftware aanwezig dient te zijn om met de CDD3610 te kunnen werken.

Installeren van software

De werkwijze bij de installatie en bediening van de benodigde software hangt af van de computerconfiguratie waar de CDD3610 NT, UNIX of andere besturingssystemen. Raadpleeg uw leverancier voor een volledig overzicht van geschikte hostconfiguraties en beschikbare softwarepakketten.

Alle handelsmerken zijn erkend

Commandobeschrjving

Deze drive ondersteunt commando's die gebaseerd zijn op de industriestandard MMC (MultiMedia Command set). Een uitgebreide beschrijving van de gehele commandoset is op verzoek leverbaar.

INTRODUCTION

CDD3610 is a new generation Half Height 5.25" Built-in CD-Recordable/Rewritable drive with the popular (Enhanced) IDE interface.

The drive is in fact a multi-function device, since it can be used as:

- fast CD-ROM reader (up to 65x speed)
- 1x and 2x speed CD-Recorder, e.g. to record your own CD-ROM's or Audio-CD's
- 2x speed CD-ReWritable device to use as your personal storage medium, by using Incremental Packet Writing

The CDD3610 is the ideal tool for publishing large amounts of data in compact form on CD. The new Incremental Packet Writing function will make this drive attractive to the general desktop PC-user for personal data storage.

CD-Recordable discs can be recorded at single and double speed, and in all standard formats, e.g. CD-Audio, CD-ROM (XA), CD-i and Video-CD among others.

Since these discs are recorded in accordance with the Orange Book (part II) specification, these discs can be played back on all compatible CD-players.

CD-ReWritable is a new feature which allows re-use of previously written (special CD-ReWritable) discs, by rewriting portions or the complete disc in accordance with the Orange Book (part III) specification.

LASER SAFETY

This unit employs a laser. Do not remove the cover or attempt to service this device when connected due to the possibility of eye damage.

LASER-SICHERHEIT

In das Gerät ist ein Laser eingebaut. Nehmen Sie die Abdeckung nicht ab und versuchen Sie nicht, das Gerät zu reparieren, solange es angeschlossen ist. Es besteht die Gefahr einer Augenverletzung.

CAUTION

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS LASER RADIATION EXPOSURE.

WARNING

DIE VORNAHME VON REGELUNGEN ODER EINSTELLUNGEN ODER DIE DURCHFÜHRUNG VON VERFAHREN, DIE NICHT IN DIESEM DOKUMENT (DIESER BESCHREIBUNG; IM NACHSTEHENDEN TEXT) ANGEZEIGT SIND, KANN EINE GEFÄHRliche EINWIRKUNG VON LASERSTRAHLUNG ZUR FOLGE HABEN.

CLASS 1
LASER PRODUCT

LUOKAN I
LASERLAITE

KLASS 1
LASERAPPARAT

KLASSE 1
LASER-PRODUKT

CAUTION INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM

VARO! AVATTAESSA OLET ALTUINA NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLÄ ÄLÄ KATSO SÄTEESIEN

VARNING OSYNLIG LASERSTRÄLNING NÄR DENNA DEL ÄR ÖPPNAD BETRÄKTA EJ STRÄLEN

ADVERSEL USYNLIG LASERSTRÄLNING VED ÅBNING. UNDGÅ UNSAETTELSE FOR STRÄLING

DANGER INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM

VORSICHT INSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN

LASER

Type Semiconductor laser GaAlAs
Wave length 775~795 nm (at 25° C)
Output Power 2.5 mW (Read)
35 mW (Write)
Beam divergence 60 degree.

EXTRA INFORMATIE

Behandelen van CD's

- Laat de CD-lade helemaal opengaan en doe het schijfje er vervolgens rustig in.
- Neem CD's alleen bij de randen vast.
- Schrijf nooit met een balpen op de CD.
- Stel CD's niet bloot aan hoge temperaturen, vochtige omstandigheden of direct zonlicht.
- Berg de CD na gebruik steeds in het doosje op om hem tegen stof, krassen, doorbuigen of andere beschadigingen te beschermen.
- Maak vuil geworden CD's schoon met een reinigingsdoek. Veeg vanuit het midden naar de rand toe. Gebruik geen oplosmiddelen zoals benzine, verdunner, in de handel verkrijgbare cleaners of anti-statische vloeistoffen. Deze middelen kunnen een CD beschadigen.
- Blanco CD's zijn los verkrijgbaar bij uw leverancier.

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