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1. Introduction

The PlexWriter 40/12/40A is a device, which you can use to read CDs, write and rewrite to CDs. It is an internal type ATAPI model; the device cannot be connected externally, but should be fitted inside your PC and connected to your motherboard via an E-IDE cable.



Most PCs use the E-IDE (Enhanced Integrated Device Electronics) interface to communicate with the hard disc. ATAPI (AT Attachment Packet Interface) is part of this interface and consists of a set of instructions, which enables the PC to communicate with “more recent” devices such as CD-readers and CD-R/RW stations.

The numbers in the name of the product (40/12/40A) represent the device’s specifications. Consequently, with the PlexWriter 40/12/40A you can:

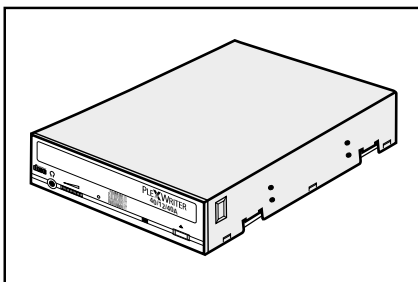
- write CDs at 40x speed;
- rewrite CDs at 12x speed;
- read CDs at 40x speed.



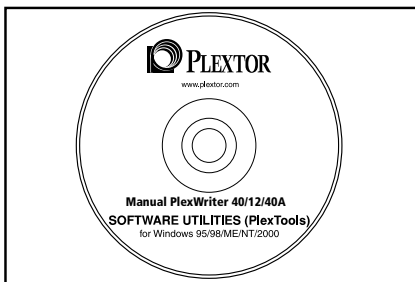
The data transfer rate for the first CD readers was at 1x speed (Single Speed), which corresponds to 150 Kb per second. You can therefore calculate the maximum transfer speed of your device by multiplying the specified figures by 150 Kb/s.

1.1 Contents of the package

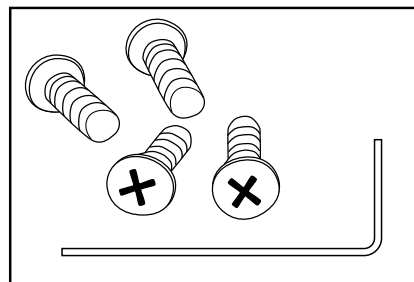
The PlexWriter 40/12/40A is supplied with the following parts and accessories:



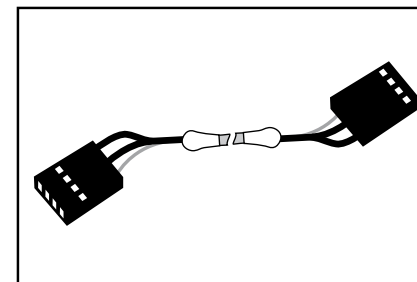
PlexWriter 40/12/40A



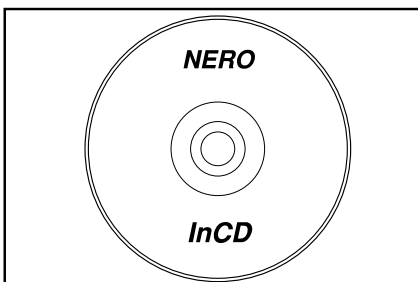
Manual
Software Utilities (PlexTools)



Screws (4)
Eject pin



Audio cable



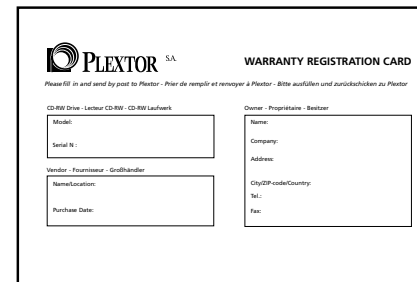
CD-Recording software*



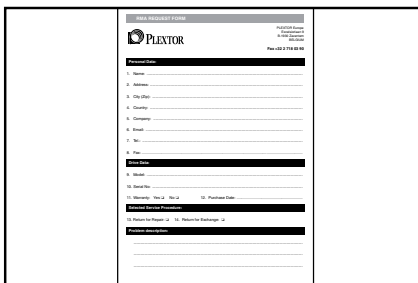
Blank CD-R disc* (5 pieces)



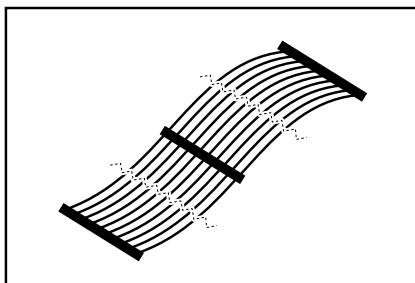
Blank CD-RW disc*



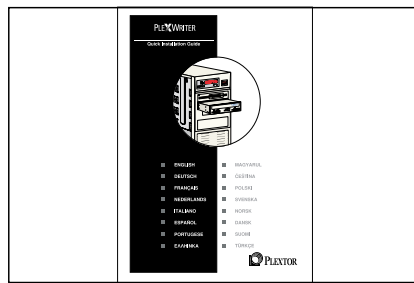
Warranty card



RMA form



E-IDE cable



Quick Install Guide

* Only in retail box

1.2 System requirements

To install the PlexWriter 40/12/40A and to guarantee stable operation, your system must meet the following minimum conditions:

- Be an IBM/AT-compatible PC with a 300 MHz processor or faster
- Have a minimum of 64 MB of RAM
- Have a free 5.25 inch bay for fitting the PlexWriter 40/12/40A
- Have Windows 95, Windows 98, Windows Me, Windows 2000, Windows NT 4.0 or higher, Windows XP
- Have a free E-IDE (ATAPI) connector
- Have a hard disc with enough free space (at least 15 MB to install the software)

1.3 CD types

CD-R and CD-RW

With the PlexWriter 40/12/40A you can write and rewrite to CDs. However, remember that only CD-RWs are rewritable. What is more, you must use a so-called High Speed Rewritable disc to write to a CD-RW at a speed greater than 4x.

CD-R discs can only be written to once in full. However you can write to one CD over several sessions. Consult your software manual for more information on writing to CDs over multiple sessions.

Compatibility with various CD types

The PlexWriter 40/12/40A is compatible with the formats summarised here. Remember also that, depending on the manufacturing quality and the software used, some CDs cannot be written to.

Type	Writing	Reading	Playing
CD-DA (Audio CD)	✓	✓	✓
CD-ROM (Mode 1)	✓	✓	✗
CD-ROM (Mixed Mode)	✓	✓	✓
CD-ROM XA (Mode 2, Form 1/Form 2)	✓	✓	✗
Photo-CD	✓	✓	✗
Video-CD	✓	✓	✗
CD-I	✓	✓	✗
CD Extra (CD Plus)	✓	✓	✓
CD-G	✓	✓	✓
CD-Text	✓	✓	✗

✓	Yes
✗	No

1.4 BURN-Proof

One of the biggest problems with the current CD recording technology is that the storage media can often be damaged during the write process. This can often be attributed to a Buffer underrun. To avoid this problem Plextor has fitted the PlexWriter 40/12/40A with BURN-Proof technology (see below).

Buffer underrun

To write to a CD, a constant flow of data must be sent from the PC to the CD-R/RW station. The transfer rate of this data flow must match the speed at which the CD is being written to, but because most operating systems are not designed to process large quantities of data in real time, the speed of the data flow is often unstable.

To overcome this problem, the CD-R/RW device first places the data, which comes from the PC, in a buffer. The data are then retrieved by the device from the buffer at a constant speed and written to the CD.

It doesn't matter now if the data flow from the PC is temporarily interrupted or delayed, which will only result in the data located in the buffer being used up. The CD writer will then no longer be able to continue the recording procedure resulting in errors occurring on the CD and it possibly becoming unusable. Such errors in the recording process are called Buffer underrun errors.

BURN-Proof

BURN-Proof (Buffer UnderRuN Proof) is a technology, which protects storage media against this type of error. The CD-R/RW station checks the status of the buffer and if there is any risk of a buffer underrun, the write process is suspended at the correct point. Whilst the write process is idle, the station continues to try to receive data from the PC in order to refill the data buffer. Then the station prepares to restart the write process. Writing then continues from the end of the data already recorded.

1.5 PoweRecII

Low Quality media (CDs) are very often the source of disk errors during high-speed CD-recording. The PoweRecII technology checks the quality of the media and automatically selects the optimum (maximum) writing speed, giving the highest quality result.

1.6 VariRec

With the VariRec technology, the user can select some settings, to obtain a more personalised sound tone. This VariRec technology can work only at 4x CD-DA Recording.

1.7 Precautionary measures

To gain maximum, long-term benefit of the PlexWriter 40/12/40A you should take the following precautionary measures:

- Keep the packaging for the device. If you ever have to return your device to Plextor, you can reuse the original protective packaging.
- Install and use the device as specified in this manual.
- Do not use the device in places with a high level of humidity, excessive dust or poor ventilation.
- Do not place the device in direct sunlight or close to heating appliances.
- Do not place the device close to appliances, which consume a lot of electricity (microwave ovens, hairdryers, toasters, ...)
- Do not place the device close to radio or TV sets; it may interfere with their reception.
- Do not place heavy objects on the device or on CD-R/RW discs.
- Do not open the enclosure for your device.
- Never switch off the power whilst your device is working.
- Never place damaged CDs in the device.
- Make sure that no fluids or foreign objects get into the device.
- Maintain your device and your CD-R/RW discs as specified in “Maintenance” on page 22.

2. Installation

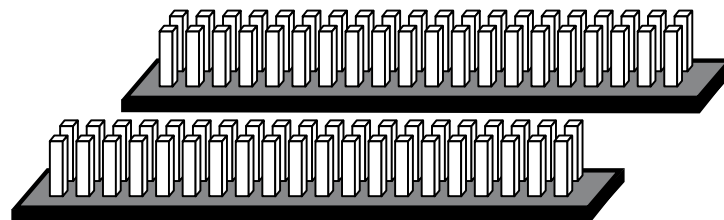
Follow the steps set out below to simply and safely install your device.

2.1 Before installing your device

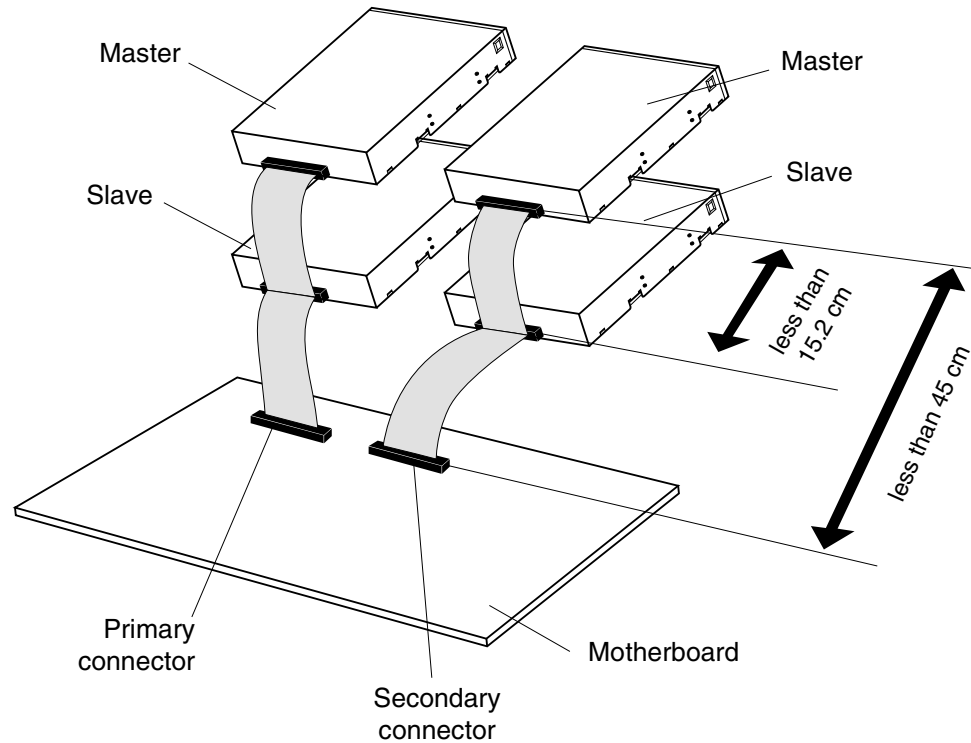
- Switch off your PC and any peripheral equipment and remove the plugs from the wall socket.
- Discharge any static electricity from your PC by touching the enclosure. Do this to the peripheral equipment too.
- Undo the cables, which are still connected to the PC. Make sure that when you come to reconnect you still know which cables belong where.

2.2 MASTER/SLAVE setting

A PC is usually fitted with two E-IDE connectors, which are designated as a primary and secondary connector. These connectors consist of 40 pins (divided into two rows) and are located on your motherboard or on a separate card, which is located on your motherboard.



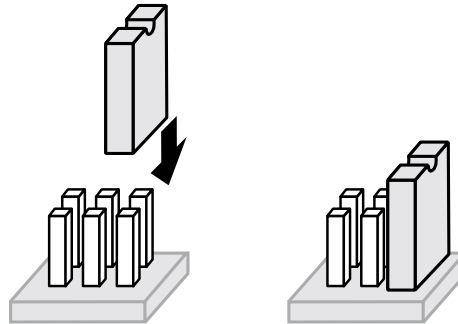
A maximum of two devices can be connected to each of the two connectors using a 40 pin flat ribbon cable. You can therefore connect a total of four E-IDE devices to your PC.



Generally speaking, a hard disc is connected to the primary connector and a CD-ROM device to the secondary connector. The devices, which are connected to the E-IDE connectors, should be correctly set up so that the computer is able to distinguish between them. This setting is called the MASTER/SLAVE setting and it is usually modified using a jumper switch on the back of the device.



A jumper switch consists of two metal pins across which a metal cover can be placed. By placing the cover across the two pins, the pins are interconnected and the current bridge circuit is closed.

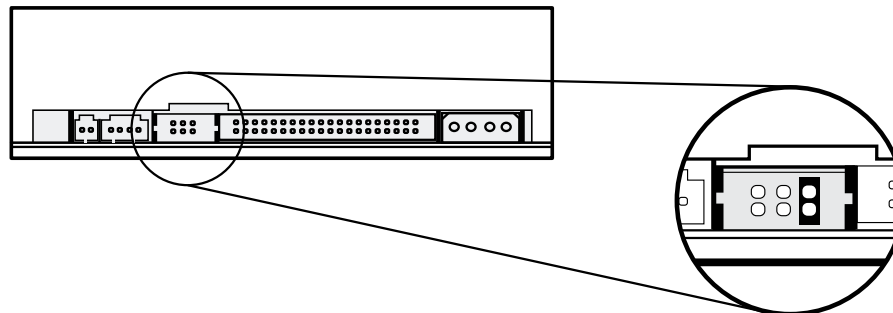


The hard disc is usually installed as the MASTER to the primary connector. If you now wish to connect a second device to the same connector (and therefore to the same cable), this device must be set up as the SLAVE. It is strongly recommended that you set up your CD-R/RW device as the MASTER and connect it to the secondary connector. If necessary you can connect a second device to this cable as a SLAVE, but we advise against this as it can affect the performance of your CD-R/RW.

Use a pair of long nose pliers to adjust the jumper switch at the back of your device. By default, the jumper switch is set as the MASTER.

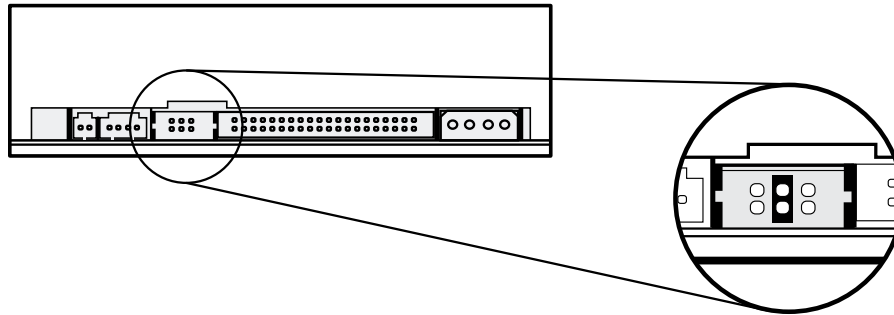
MASTER setting

Place the cover across the two right-hand pins.



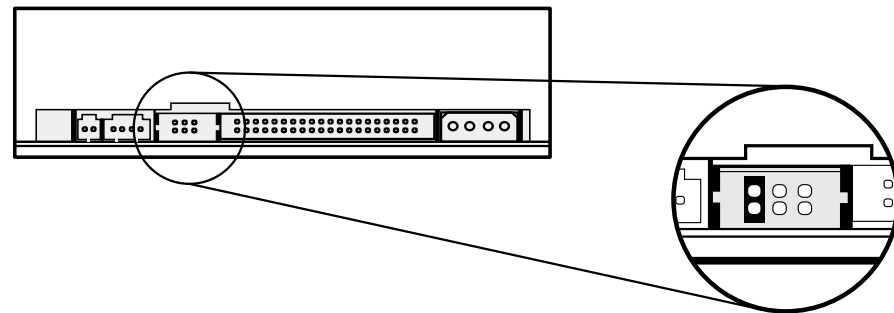
SLAVE setting

Place the cover across the two centre pins.



CSEL (Cable Select) setting

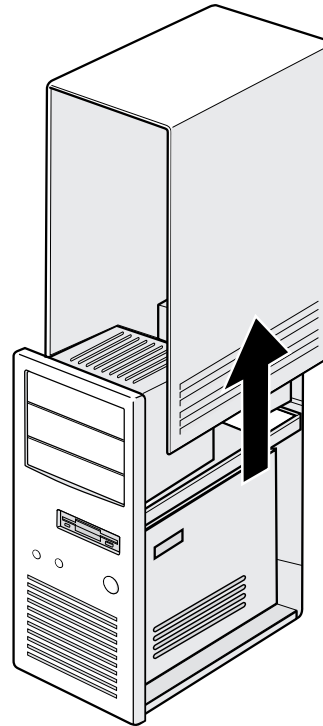
If you use this setting, the MASTER/SLAVE setting is made automatically. If another device is connected to the same connector, this also has to be set up to Cable Select. Moreover, you must ensure that you use an E-IDE cable, which supports Cable Select. Place the cover across the two left-hand pins to select this option.



2.3 Mounting and connecting the device

Step 1: Remove the cover from your computer.

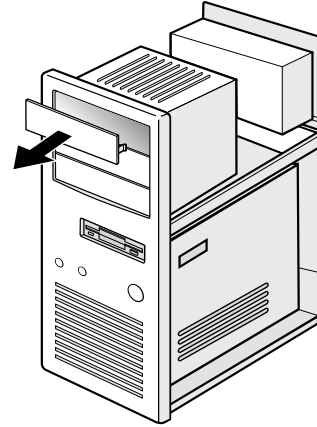
In most instances the system case is secured with screws at the rear. Sometimes screws are also located on the side or the bottom. Use a crosshead screwdriver to loosen the screws. Make sure that when doing this you only undo the screws securing the cover. Then slide or lift the cover off your PC.



Some covers should be opened using push buttons on the side.

Step 2: Remove the front plate from a free 5.25 inch bay.

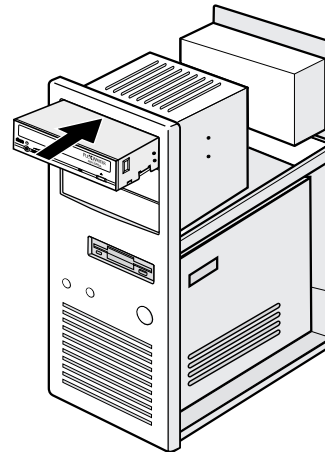
The front plates are usually secured by means of a click system. For further details consult your PC manual.



Step 3: Place the device into the free 5.25 inch bay.

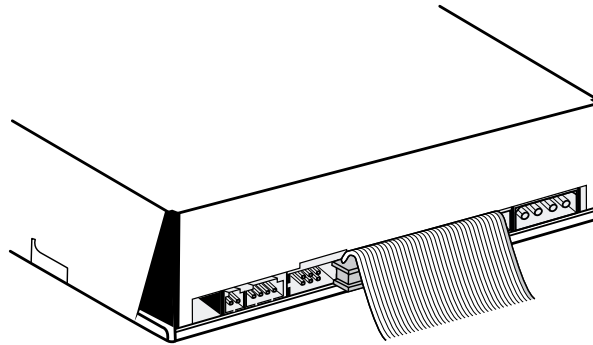
Slide the device into the front of the bay.

If you notice that there isn't much space left at the rear to work in, then first of all connect the cables as specified in the next steps and then slide the device fully into the bay.



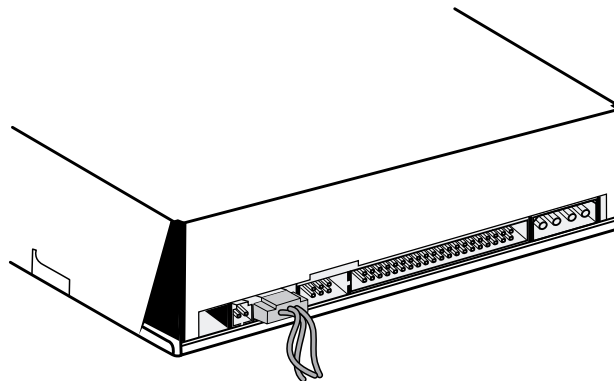
Step 4: Connect the 40-pin E-IDE cable to the rear of the CD-R/RW device.

Two E-IDE connectors are located on the cable. Although you are not obliged to do so, we advise you to connect the device to the end of the cable. The ribbon cable also has a red line on it. Make sure that the red line is located at pin 1 (on the right-hand side).

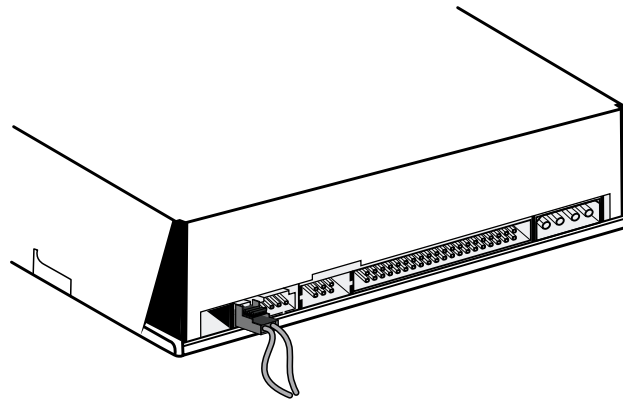


Step 5: Connect the audio cables.

If your PC is fitted with a sound card, you can relay the sound that your CD-R/RW device produces to your sound card via the supplied 4-pin analog audio cable. Connect one end of the cable to your sound card. Connect the other end to your CR-R/RW device. For further details consult the manual for your sound card.

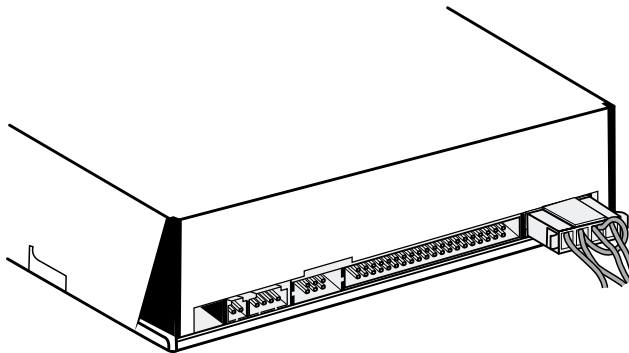


If your sound card supports digital sound and is fitted with an SPDIF connector, you can also connect your CD-R/RW device to it here. To do this use the 2-pin SPDIF cable, which is supplied with your sound card. Connect the other end of the cable to your CR-R/RW device.



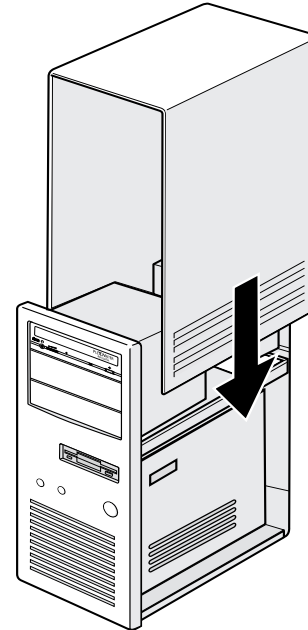
Step 6: Connect the power cable.

A number of 4-pin power cables consisting of a red, two black and a yellow wire, leave your PC's power supply unit. Connect one of these cables to your device. Because the connector on the power cable has two rounded corners, there is only one way that it will fit into the device.



Step 7: Secure the device in position using the supplied screws.

Step 8: Replace the cover on the computer and screw it back into position.



Step 9: Reconnect all cables, plug in the plugs into the wall socket and switch the computer on.

2.4 Installing the software

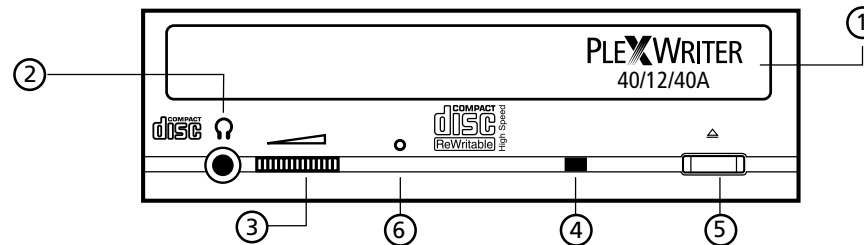
Two software programs are supplied with the PlexWriter 40/12/40A with which you can write and rewrite to CDs. To install the software, insert the CD into the CD reader (or the CD-R/RW device) on your PC. The installation program launches itself.

If the installation does not start by itself, then click on **Run...** in the Start menu. Type X:\Setup, where X is the letter assigned to your CD reader. Then click on **OK** and follow further instructions.

3. Operation and maintenance

3.1 The control panel

The control panel at the front of the PlexWriter consists of the following elements:



1. CD disc tray

This disc tray is used to insert CDs into the CD-R/RW device (see “Loading a CD” on page 18). Press the eject button to open and close the disc tray.

2. Telephone headset connection

Here you can connect your stereo telephone headset or your mini loudspeakers to listen to your audio CDs.

3. Telephone headset volume control

You can adjust the volume of the telephone headset using this dial. This dial does not affect the audio output at the rear of your PC.

4. CD indicator

The CD indicator shines green when a CD is loaded, yellow when a CD is being read and orange when it is writing to a CD. The cd indicator blinks orange at different speeds, depending on the write and rewrite speed.

Write speed CD-R	Rewrite speed CD-RW	Indicator speed
40x		40 ms
32x	12x	80 ms
< or = 24x	< or = 10x	150 ms

5. Eject button

Press this button to open or close the CD disc tray.

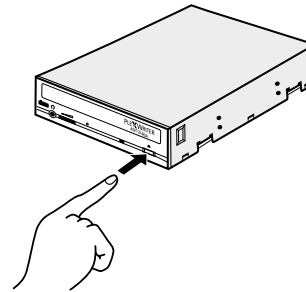
6. Opening for manual operation

This opening may only be used to remove a CD if it is no longer possible to remove it in the usual way (using the eject button). To do this use the supplied eject pin (see “Opening the device manually to remove a CD” on page 20).

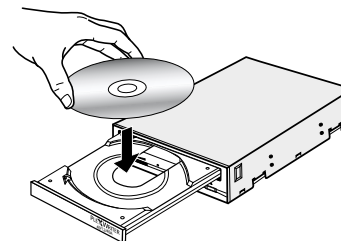
3.2 Using the CD disc tray

Loading a CD

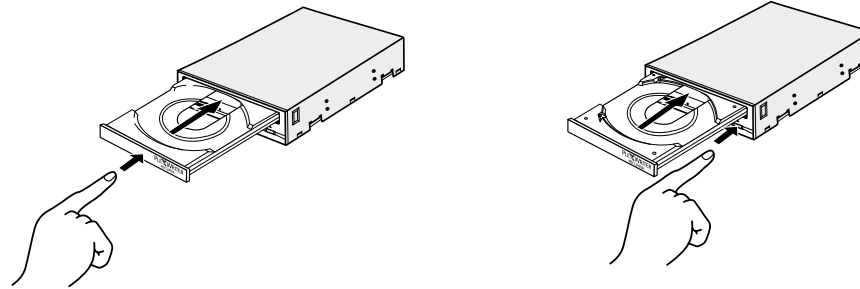
Step 1: Press the eject button on the control panel to open the CD disc tray.



Step 2: Insert the CD in the disc tray.

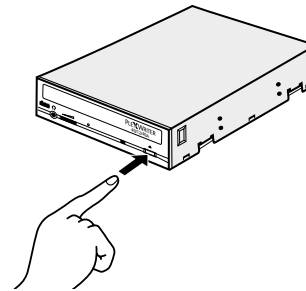


Step 3: Gently press against the front edge of the disc tray or press the eject button again to close the disc tray.

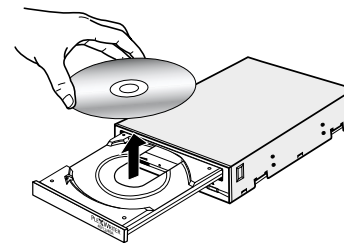


Removing a CD

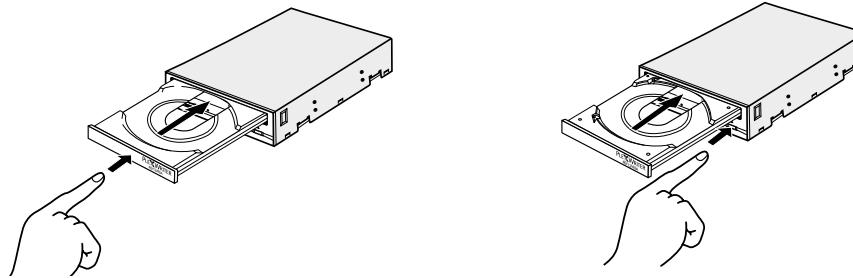
Step 1: Press the eject button on the control panel to open the CD disc tray.



Step 2: Carefully remove the CD from the disc tray.



Step 3: Gently press against the front edge of the disc tray or press the eject button again to close the disc tray.



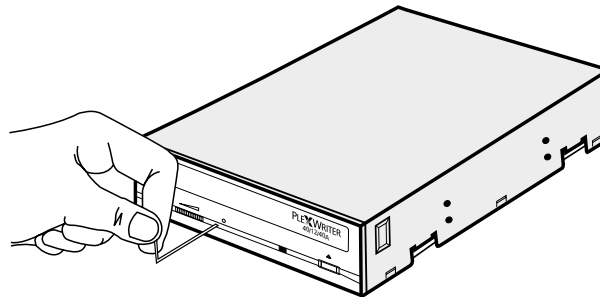
Never leave the disc tray open for long periods of time. Dust or dirt, which gets into the device, can cause read or write errors.

Opening the device manually to remove a CD

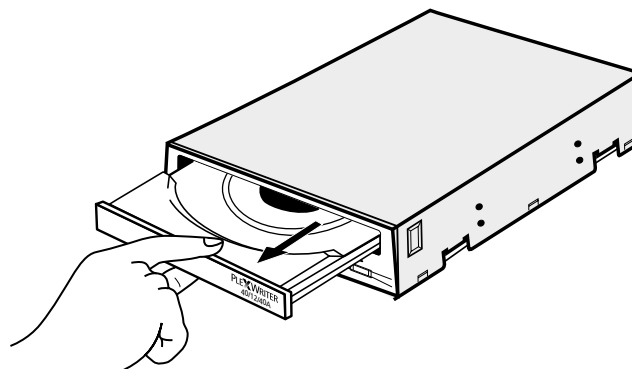
It can happen that the disc tray cannot be opened in the usual way as a result of a power outage or a mechanical defect. When this is the case follow the steps set out below to manually open the disc tray and remove the CD.

Step 1: Switch off the power to your PC and remove the plugs from the wall socket.

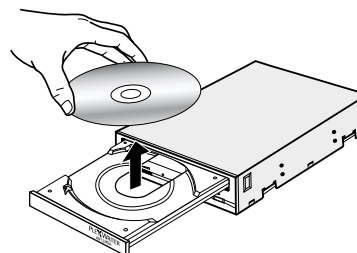
Step 2: Push the eject pin into the opening for manual operation until the disc tray on the device clicks open.



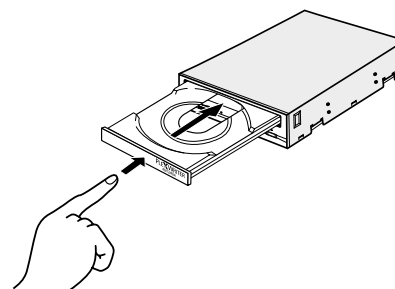
Step 3: Carefully continue to slide the disc tray open.



Step 4: Remove the CD from the disc tray.



Step 5: Carefully push the disc tray shut.



3.3 Maintenance

Maintaining the device

Use a soft, dust-free cloth to maintain your device. Never use water or cleaning products to clean your device. Some solvents may damage the enclosure of your device.

Maintenance of CDs

You can clean your CDs using a commercially available CD anti-static spray or CD cleaning kit. Make sure that you do not scratch the CDs whilst cleaning them.



Always handle your CD's carefully. CD's are very sensitive to fingerprints, dust and scratches. Dirty or damaged CDs may cause damage to your device and result in read or write errors.

4. Troubleshooting

4.1 Resolving problems yourself

Problems during installation

- Press the eject button to check whether or not the device is getting any power. If this is not the case, then check that the power connector is correctly connected.
- When booting the system check whether the device is identified by the system. If this is not the case, then check whether the E-IDE connector is correctly connected and whether the MASTER/SLAVE setting is correct. Also check whether the device is connected to the end of the E-IDE cable.
- Make sure that the most recent bus master drivers for your IDE controller have been installed. These are normally supplied together with your motherboard or your PC. For further details consult your motherboard or PC manual.
- Check whether DMA (Direct Memory Access) has been activated. Click in Windows on **Start | Settings... | Control Panel**. Then double-click in the Control Panel on **System** and select the **Device Manager** tab. Select the PlexWriter in the CD-ROM group and click on **Properties**. Next select the **Settings** tab and check that the box for DMA is checked.

Problems when reading a CD

- Press the eject button to check whether or not the device is getting any power. If this is not the case, then check that the power connector is correctly connected.
 - Check that the E-IDE connector is correctly connected and that the MASTER/SLAVE setting is correct. Also check whether the device is connected to the end of the E-IDE cable.
 - Make sure that the most recent bus master drivers for your IDE controller have been installed. These are normally supplied together with your motherboard or your PC. For further details consult your motherboard or PC manual.
 - Check whether DMA (Direct Memory Access) has been activated.
-

Click in Windows on **Start | Settings... | Control Panel**. Then double-click in the Control Panel on **System** and select the **Device Manager** tab. Select the PlexWriter in the CD-ROM group and click on **Properties**. Next select the **Settings** tab and check that the box for DMA is checked.

- Make sure that the CD is placed correctly in the disc tray.
- Check that the CD that you wish to read is not dirty or damaged.
- Check that the most recent firmware version is installed. To do this consult the Plextor web site: <http://www.plextor.com>.

To check which firmware version is installed on your PC, click in Windows on **Start | Settings... | Control Panel**. Then double-click in the Control Panel on **System** and select the **Device Manager** tab. Select the PlexWriter in the CD-ROM group and click on **Properties**. Then select the **Settings** tab and make a note of the number stated in the Firmware Revision field.

Problems when writing to a CD

- Press the eject button to check whether or not the device is getting any power. If this is not the case, then check that the power connector is correctly connected.
 - Check that the E-IDE connector is correctly connected and that the MASTER/SLAVE setting is correct. Also check whether the device is connected to the end of the E-IDE cable.
 - Make sure that the most recent bus master drivers for your IDE controller have been installed. These are normally supplied together with your motherboard or your PC. For further details consult your motherboard or PC manual.
 - Check whether DMA (Direct Memory Access) has been activated.
Click in Windows on **Start | Settings... | Control Panel**. Then double-click in the Control Panel on **System** and select the **Device Manager** tab. Select the PlexWriter in the CD-ROM group and click on **Properties**. Next select the **Settings** tab and check that the box for DMA is checked.
 - Make sure that the CD is placed correctly in the disc tray.
 - Check that you have placed the correct type of CD in the disc tray.
 - Check that the CD that you wish to write to has not already been written.
 - Check that the capacity of your CD has not been exceeded (usually a maximum of 74 min./650 MB).
 - Check that the CD that you wish to write to is not dirty or damaged.
-

- Check that the most recent firmware version is installed. To do this consult the Plextor website: <http://www.plextor.com>.

To check which firmware version is installed on your PC, click in Windows on **Start | Settings... | Control Panel**. Then double-click in the Control Panel on **System** and select the **Device Manager** tab. Select the PlexWriter 40/12/40A in the CD-ROM group and click on **Properties**. Then select the **Settings** tab and make a note of the number stated in the Firmware Revision field.

- Switch off all other applications.
- Check that your screensaver has been switched off.

4.2 Technical support

If you are not able to resolve your problem yourself (see “Resolving problems yourself” on page 23), then contact our technical support department:

Opening hours: 8.00-18.00

For local telephone numbers: check www.plextor.be

Tel.: +32 2 718 03 99

Fax: +32 2 718 03 90

E-mail: support@plextor.be

To pass on a description of your problem to us as efficiently as possible, download pxinfo.exe from <http://www.plextor.be/English/technical/infoprogram.html> and forward the result of this program to support@plextor.be. You may then expect a response within 48 hours (except during weekends and Belgian public holidays). For more information you can reach us on week days between 8.00 and 18.00 on the numbers listed above.

5. Warranty

5.1 Warranty conditions

Plextor Europe (Plextor) guarantees your PlexWriter 40/12/40A CD-R/RW device against all material and manufacturing faults for a period of two* years from the date of purchase. During the warranty period Plextor offers free support for faults, which occur assuming normal use of the equipment. In the event that defects are found within the warranty period, Plextor, at its own discretion, shall repair or replace the defective CD-R/RW device.

This warranty shall no longer apply if; a) the device is operated or stored under conditions of abnormal operation or maintenance; b) the device is repaired, adapted or modified, unless this repair, adaptation or modification was expressly authorised by Plextor; c) the device was subjected to misuse, neglect, a lightning strike, an electrical fault, incorrect packaging or accident; d) the device was incorrectly installed, or e) the device's serial number is no longer legible or is missing; f) the enclosed warranty card cannot be submitted; g) the defective component is a replacement part, such as the sound recorder, disc tray, etc.

Plextor can under no circumstance be held liable for direct, special or indirect damages, such as, but not limited to, data loss, damage or loss of property or equipment, loss of profit or income, costs for the replacement of goods or expenses or inconvenience caused by an interruption in operation. Under no circumstance shall one be entitled to a sum, which is greater than the purchase price of the device.

If a Plextor product shows signs of a defect during the warranty period, it can be returned to Plextor for repair or exchange. The following options are available to you with respect to this service: **Return for repair** (the returned product is repaired and sent back to you) or **Return for exchange** (the product is exchanged and sent to you). Follow the specified procedure (see "RMA procedures" on page 27) for sending back your device to Plextor.



Plextor reserves the right to exchange the returned product if it cannot be repaired within a reasonable period and at an acceptable price. If it is found that a returned drive is no longer under warranty, as set out in the warranty conditions, Plextor reserves the right to invoice the user in respect of all costs for repair and transportation.

*Only in Europe, Middle-East and Africa

5.2 RMA procedures

Before a product is returned to Plextor, an RMA (Return Material Authorization) must be requested. Using the RMA request, the owner confirms that he/she is aware of the warranty conditions and accepts them.



No goods shall be accepted, which are sent without a valid RMA number.

To return a Plextor product, you should observe the following procedure.

RMA request

Send in your RMA request in one of the following ways:

- Fill in the attached RMA request form in full and send it to Plextor Europe, Technische Dienst, Excelsiorlaan 9, B-1930 Zaventem, Belgium, or fax it to +32 2 718 03 90.
- Visit <http://www.plextor.be/english/technical/rma.html> on the internet and fill in the RMA request form online.

Confirmation

After receiving the RMA request, Plextor will send a confirmation message within 24 hours (except during weekends and on Belgian public holidays). This document contains an RMA number, the address to which the product has to be returned and further instructions on how you can return goods to Plextor Europe.

Despatch

If you qualify for the On-site collect & return service see “On-site Collect & Return service” on page 28, after checking the contents of the confirmation message you should contact the specified local courier service, which will come to pick up the equipment. The transportation costs in this instance are at the expense of Plextor. If you do not qualify for this service, you yourself must be responsible for sending your device to Plextor.

For deliveries to Plextor from countries outside the European Community, a signed pro forma invoice must accompany the returned goods.

The device must be safely packaged (preferably like the original packaging). If you wish to keep the original packaging, the device must be sent in some alternative, equivalent packaging. Accessories (screws, cables, floppy discs, manuals, ...) should not be enclosed. The RMA number must be quoted on the outside of the postal package.

5.3 On-site Collect & Return service

The On-site Collect & Return service is a service from Plextor, in which products, which show signs of a defect during the warranty period, are picked up from you and returned to you free of charge. Follow the procedure set out above (see “RMA procedures” on page 27) for using this service.



This service is only applicable for Plextor products distributed throughout Plextor Europe and purchased in the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

5.4 DOA Handling

If a Plextor product shows signs of a defect during the first 15 days following purchase (Dead On Arrival), Plextor shall immediately replace this product with a new device. The purchase date should be demonstrated using a purchase invoice. In this case also follow the specified procedure (see “RMA procedures” on page 27).