

CD-RW 4816UI
USB 2.0 External Drive

User's Manual

**CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
LUOKAN 1 LASERLAITE
PRODUIT LASER
CATEGORIE 1**

DANGER INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM
VORSICHT INSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN
ATTENTION RADIATION DU FAISCEAU LASER INVISIBLE EN CAS D'OUVERTURE. EVITER TOUTE EXPOSITION
AUX RAYONS.

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.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can emit radio frequency energy and, if not installed or used in accordance with the instructions, may cause interference to radio communications. However, television reception interference can be determined by turning the equipment off and on. The user is encouraged to correct the interference by one or more of the following measures:

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

CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR EUROPE



“The drive is in conformity with the EMC directive and low-voltage directive.”

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INTRODUCTION

Thank you for the purchase of 4816UI, a high-performance external CD-ReWritable drive of USB 2.0 interface. It supports maximum 48x-speed writing ability on CD-R discs, 16x-speed on CD-RW discs and 48x-speed reading performance. The drive backs up all writing modes and different CD formats and it automatically recognizes the media placed in the drive, whether a CD, a CD-R or a CD-RW. With the bundled CD-RW mastering software, 4816UI is an ideal model for creating customized audio and data CDs, and for archiving or distributing big files to achieve data interchange and backup. Here are some important features of this external CD-ReWritable drive:

- ◆ 8X, 16X, 20X, 24X, 32X, 40X and 48X writing speed on CD-R media
- ◆ 4X, 8X, 10X, 12X and 16X writing speed on CD-RW media
- ◆ Adopts Buffer Underrun Prevention technology
- ◆ Supports MultiRead function
- ◆ Supports writing modes of TAO, DAO, SAO and packet writing
- ◆ Large internal buffer: 2MB
- ◆ Low power consumption
- ◆ USB 2.0 interface, easy to connect USB 2.0 port in PC

About USB

USB (Universal Serial Bus), a means of attaching devices to your computer, is basically a standardized intelligent serial connection which provides an expandable, hot-pluggable*¹ interface. Devices suitable for USB range from simple items like mice and keyboards to more complicated devices like printers, MP3 players, and storage devices. One other benefit of USB is plug and play. That is, when you plug the

USB device in, it is automatically detected, drivers installed and then ready for operation

USB 2.0 supports data transfer at up to 480Mbps for high-speed devices. It is backward compatible with USB1.1*² software and peripherals. If your computer doesn't have a built-in USB 2.0 port, you need to install a USB 2.0 PCI host card in your pc for the CD-RW drive to run at USB 2.0 speed. Otherwise, this CD-RW drive will run at standard USB speed.

*¹ You can connect and disconnect devices while the computer is running.

*² USB 1.1 can transfer data at rates up to 12Mb/s.

System Requirements

For IBM compatible PCs, the system requirements recommended are as follows:

- ◆ Pentium II 300MHz above with at least 64MB of memory
- ◆ Sufficient hard disk space (minimum 200MB, 1GB or more is recommended.)
- ◆ Operating system: Microsoft Windows 98SE/ME/2000/XP
- ◆ USB 2.0 PCI host card

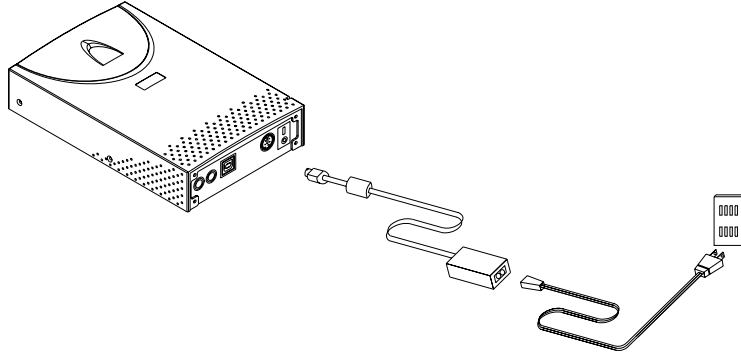
Package Contents

- ◆ USB 2.0 external CD-ReWritable drive
- ◆ Power adapter
- ◆ AC power cable
- ◆ Audio cable
- ◆ USB 2.0 cable
- ◆ Application software disc

INSTALLATION

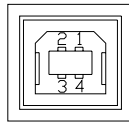
Hardware Installation

1. Connect the power adapter and the AC power cord to the drive.



2. Attach the USB 2.0 cable to the CD-ReWritable drive.

USB Connector



3. Attach the other end of the USB 2.0 cable to the USB port in your computer. The drive is now ready to use.

☞ *If you are installing a USB 2.0 drive, your computer must have a USB 2.0 port to achieve top speed. You may experience slower USB 2.0 drive performance if connected to USB 1.1.*

4. Connect the audio cable to the drive and your computer.

Note:

- ◆ Be sure to use the USB 2.0 cable packed with the drive.
- ◆ Never plug or unplug in any other USB device while the CD-RW drive is transferring data. It's likely to loss data.

- ◆ It's advisable not to disconnect the CD-RW drive or unplug the power to the drive while a CD is inserted.
- ◆ Don't connect more than two CD-RW drives of USB connections to a single computer.

Driver Installation

Windows Environment

This USB 2.0 External Drive, CD-RW 4816UI, is a Plug and Play device, and Windows 98SE/ME/2000/XP can **automatically detect** the drive and load the appropriate driver.

Software Installation

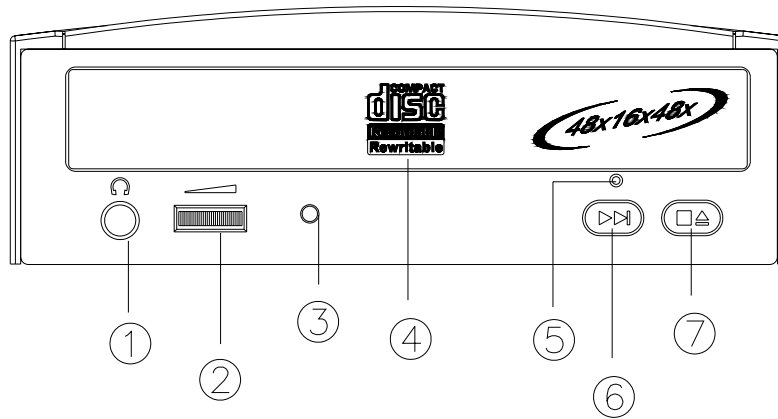
The bundled mastering software gives you the complete solution for making audio/data CDs right from your desktop. It allows you to copy files from your computer to a recordable compact disc. In addition, the audio CDs you create can be played in your home or car CD player. For the CD-RW media, you can write and erase data on the CD as you do with a floppy disk.

Windows Environment

- (1) Run **install.exe** or **setup.exe**
or
- (2) Refer to the **manual** in the software disc.

CONNECTION & OPERATION

Front Panel



1. Headphone Plug

By plugging in the headphone jack here, you can listen to an audio CD (CD-DA disc) directly playing from the CD-ReWritable drive.

2. Headphone Volume Control

This knob adjusts the audio output level. Turn the wheel to the right to increase the audio volume of your headphone.

3. LED Indicator (dual color)

Flashes "green" while verifying or reading a disc.
Flashes "amber" while writing a CD-R/CD-RW disc.

4. Disc Tray

This is the tray for the disc. Place the disc in the tray, then press the Close/Eject button or lightly push the tray to close it.

5. Emergency Eject Hole

When the Close/Eject button can't work properly and the disc tray can't be opened, you can insert a paper clip or a small rod into this hole for manual ejection. Please make sure to power off the system before you do that.

6. Play/Skip button

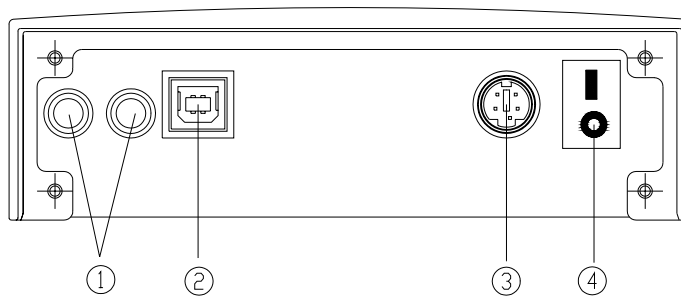
Press this button to play tracks or skip to next track during the playing state.

7. Close/Eject button

This button opens and closes the disc tray. If the tray is closed, pressing the button will eject it. If the drive is playing, pressing this button will stop it.

NOTE: The front panel is subject to change without notice.

Rear View



1. Analog Audio Output Connector (RCA Jack)

2. USB Connector

3. D.C. Power Connector

4. Power (On/Off) Switch

TECHNICAL DATA

Performance

Transfer rate	Read: 7200kb/s (up to 48X) Write: CD-R 7200kb/s (up to 48X) CD-RW 2400kb/s (up to 16X)
Access time	85ms at 1/3 stroke (48X CD-ROM) 180ms at full stroke(48X CD-ROM) 99ms at 1/3 stroke (32X CD-RW) 200ms at full stroke(32X CD-RW)
Data buffer	2MB
CD format support	CD-Audio, CD-EXTRA, CD-ROM, CD-ROM XA, CD-I, Video CD, Photo CD, CD-Text
Writing modes	TAO (Track at once), DAO (Disc at Once), SAO (Session at once), Multi-session, Incremental Packet Writing (fixed and variable packet size)
Writing speed	CD-R: 8X/16X/20X/24X/32X/40X/48X CD-RW: 4X/8X/10X/12X/16X

Specification

Interface	USB 2.0
Disc loading	Tray (motorised)
Power Requirement	input: AC 100~240V, 50/60Hz output: 5V 1.5A, 12V 1.5A

RMS output Voltage 0.6 ± 10%Vrms

Dimensions

Height 44.9~47.6 ± 0.3 mm

Width 152.5 ± 0.3 mm

Depth 234.5 ± 0.3 mm

Weight (Net) 2 kg

Disc Specification

Capacity

120mm disc: 63min 553Mbytes Mode-1

74min 650MBytes Mode-1

80min 700MBytes Mode-1

80mm disc: 18min 158Mbytes Mode-1

21min 184MBytes Mode-1

Disc Type CD-Recordable media (Orange Book Part II), CD-ReWritable media (Orange Book Part III)

Environment

Temperature

Operating 5°C to 45°C

Non-operating -20°C to 60°C

Humidity

Operating 8% ~ 80%RH

Non-operating 5% ~ 95%RH

TROUBLESHOOTING

To help you get more familiar with this USB 2.0 external driver, CD-RW 4816UI, the following FAQ lists some common problems you might have. Please read it for reference before you request RMA support from your dealer.

Q1. 4816UI cannot be recognized.

- (1) The drive might not be connected properly. Please check whether the USB cable and power connector are tightly connected. If yes, do the hot-plugging again.
- (2) Check if the driver of PCI host card connected in the pc has been installed.
- (3) If your pc has a built-in USB 2.0 port, install the driver, check the BIOS setting or consult the motherboard manufacturer.

Q2. 4816UI doesn't have power.

Please check if the power cable is connected securely.

Q3. The CD-RW drive cannot read some general discs.

Please check if the disc has deep scratches, fingerprints, or other contaminants on the surface. Clean the disc if it's necessary.

Q4. There is noise while reading.

If the disc used is eccentric or there are labels sticking on the disc surface, it will cause noise.

Q5. The drive can't read former session(s) of the CD-R disc, which has been written twice or more times.

Before writing CD-R discs with data copy, remember to choose "Import session" so as to read the former sessions.

Q6. The external speaker doesn't have sound when playing music CD.

- (1) Please check if the audio cable is connected to the audio connector properly.
- (2) Check both rear side of the CD-RW drive and sound card on M/B (If Audio chipset is on board). If they are well connected, check if the sound card is working.

Q7. The tray cannot be ejected.

There are two possible reasons:

- (1) Need to be ejected by the application.
Some of the burning or playing application will lock the drive. You have to eject by application and close it so as to restore the use of panel buttons.
- (2) The CD is inserted incorrectly.
Please insert a paper clip or small rod into the emergency hole on the front panel for manual ejection.

Q8. 4816UI cannot write.

We suggest as follows:

- (1) Use the burning software, which is provided by original supplier and bundled with this CD-ReWritable drive or download the updated file from Internet.
- (2) More capacity of hard disk is needed if using hard disk as temporary buffer.
- (3) Place the disc correctly.
- (4) The blank disc needs full format first if using packet-writing software.

Q9. "Buffer underrun" always occurs while writing discs.

Here are some suggestions:

- (1) Close the screen saver & TSR (Terminate and Stay Resident).
- (2) Quit other redundant application when burning.

- (3) Select good quality and high-speed supported blank discs.
- (4) Increase main memory capacity.
- (5) Select other burning software.
- (6) De-fragment the hard disk.
- (7) Keep the source & destination discs clean. (no scratches, fingerprints or contamination.)
- (8) Copy data as image file to hard drive to avoid buffer underrun.
- (9) Keep the system clean. Do not install redundant driver or application to reduce system loading as well as confliction.
- (10) Enable Buffer Underrun Protection mode if your software supports it.

Q10. Does this external CD-RW drive support over-burning?

Yes, but please use burning software which supports this function.

Q11. What burning software supports 4816UI?

Software such as Adaptec EasyCD Creator, Ahead Nero-Burning ROM, NTI CDMaker, etc.

Q12. Does 4816UI support CD-Text & SAO (Session At Once) function?

Yes, it does support CD-Text & SAO function and you may edit the title or content into your music CD.

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Version 1.2
Jan. 2003