

Installation

Hardware Installation

NOTES

- Please pay attention to handling Electrostatic Sensitive Devices, you may use anti-static products such as wrist straps, heel straps, mats to protect your body from electrostatic.
- Make sure you have a personal computer with an open USB port before connecting the drive to your computer.
- Power for all other devices should be turn off before attaching the cables.

Connecting to computer

Connect the drive to the computer as shown in figure.

A. Using an USB 2.0 cable only.

1. Connect the USB 2.0 cable to the External Super Multi DVD Rewriter.
2. Connect the other end of the USB 2.0 cable to your computer.

B. Using USB 2.0 Cable and USB Power cable. (DC-jack type)

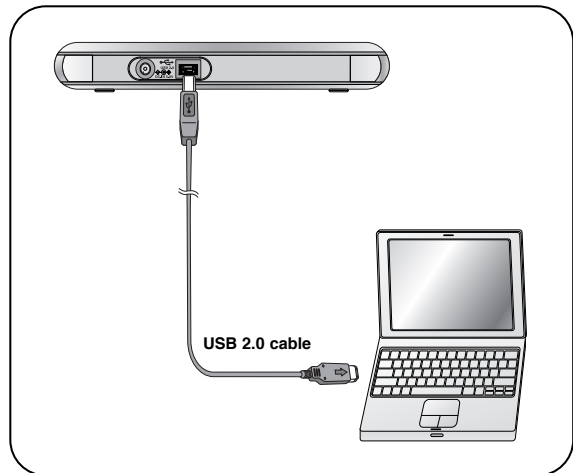
1. Connect the USB 2.0 cable to the External Super Multi DVD Rewriter.
2. Connect the other end of the USB 2.0 cable to your computer.
3. Connect the USB power cable (DC-jack type) to the External Super Multi DVD Rewriter.
4. Connect the other end of the USB power cable to your computer.

NOTES

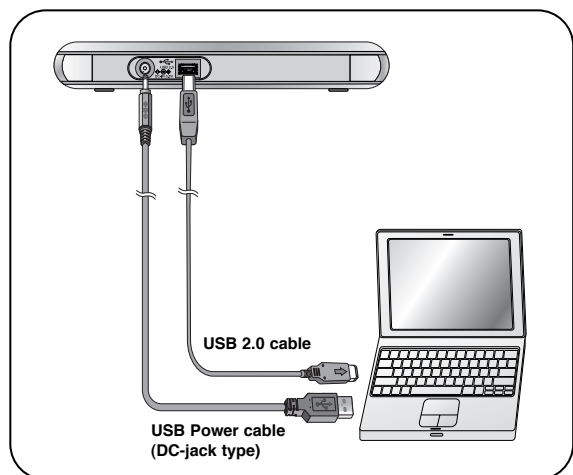
- The Rewriter may get its power from the USB power. All systems may not meet USB power requirements and full performance may not be achieved. In this case, connect to the included USB power cable (DC-jack type).
- Please do not connect the USB cables by any means other than specified above. Using the wrong type of cable with this drive can cause it to malfunction.

When the computer is ready, confirm that the drive is detected. And then, insert the supplied software CD into the External Super Multi DVD Rewriter and install the software.

A. Using an USB 2.0 cable only.



B. Using USB 2.0 Cable and USB Power cable. (DC-jack type)



NOTES

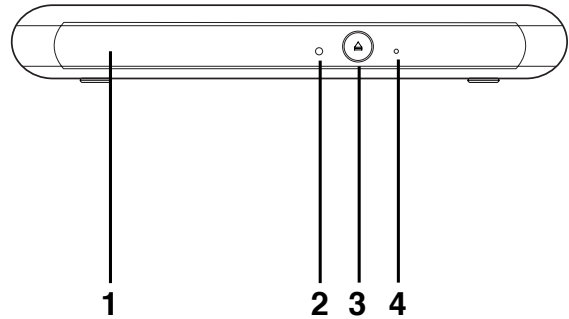
- The machine does not have an ON/OFF switch. As soon as it is connected to the AC power, the power up sequence begins. The power supply cord is intended to serve as the main disconnect device. The power outlet shall be near the equipment and shall be easily accessible.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young Children should be supervised to ensure that they do not play with appliance.
- If the appliance is supplied from a cord extension set or an electrical portable outlet device, the cord extension set on electrical portable outlet device must be positioned so that it is not subject to splashing or ingress of moisture.

Location and function of controls

This following is the general figure of the design of the drive.
The drive's appearance and specifications may change without prior notice.

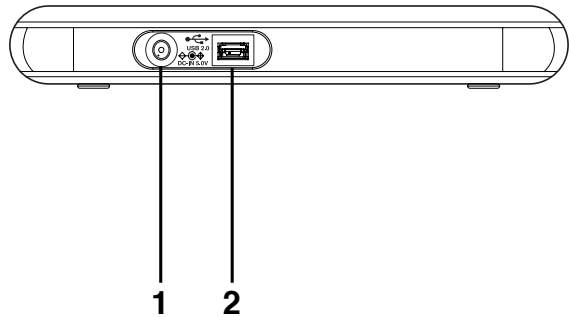
Front

1. **Disc Tray**
2. **Drive activity indicators**
The LED used to indicate the operation of External Super Multi DVD Rewriter.
3. **Stop/Eject Button**
4. **Emergency Eject Hole**



Rear

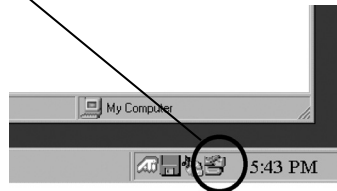
1. **Power Connector**
This connector is used to connect to the USB power cable. (DC-jack type) Or, this connector is used to connect to the AC Power adapter cord (5V, 2A, outside diameter: 4mm, inside diameter: 1.75mm) (Not supplied).
2. **USB Connector**
This connector is used to connect to the USB 2.0 cable.



Removing the USB converter cable

The drive supports the plug and play(not swap) function of Windows, and can be removed and inserted by performing the following operation.

1. Stop the application software being currently used.
2. Click the icon “ ” of the taskbar located on your screen's bottom right side.



3. Click “Safely Remove USB Mass Storage Device-Drive[x:]”.
4. Click “Ok” and then remove the USB converter cable.

NOTE

Don't remove the USB 2.0 cable when the busy indicator on the drive blinks, or during computer startup.

LG Quick Set-up Guide

External
Super Multi DVD Rewriter

GSA-E50N
GSA-E50L

To install your product, please read this guide manual carefully and completely. For the detailed owner's manual of the drive, please refer to the CD manual.

Features

- Universal Serial Bus (USB) 2.0 interface for high-speed data transfer.
- Buffer Under Run error protection technology
- Emergency eject support
- Combination of CD-R/RW, DVD-R/RW, DVD+R/RW, DVD+R DL, DVD-R DL and DVD-RAM drive functions into one drive.
- Supports region playback control Phase II.
- Supports SecurDisc™ Technology.
- Supports LightScribe Direct Label Printing Technology - *Optional.
- * You can use a variety of Drive

	GSA-E50L	GSA-E50N
Light Scribe	●	X
I/F	USB 2.0 only	USB 2.0 only

Package Items

Item	Quantity
- External Super Multi DVD Rewriter	1
- USB 2.0 cable	1
- USB Power cable (DC-jack type)	1
- Software CD	1
- Quick Guide for Drive	1

Cautions

System meeting the following requirements is needed in order to use USB 2.0 operation with this drive.

- Computer that is equipped with a USB 2.0 – compliant USB connector or PCI adapter card, and on which the USB 2.0 EHCI (Enhanced Host Controller Interface) driver software ¹⁾ has been installed.
 - ¹⁾ The USB 2.0 EHCI driver software is supplied with currently available PCI adapter cards that conform to USB 2.0. Further, Microsoft has released the USB 2.0 EHCI driver software for Windows XP, therefore it is also possible to use this driver software with Windows XP.
- If you want to know in detail, please contact your USB 2.0 adapter dealer or consult your PC manufacturer, or consult the Microsoft Corporation Web site.

System Environment

Computer

This unit can be operated in the system environment explained here.

System requirements	CPU	Pentium III 1.0GHz or Higher(with USB 2.0) for basic performance (Recommended for optimal performance: Pentium IV 2.4GHz or Higher).
	Memory	256MB or larger (Recommended: 512MB).
Hard disk		20GB or more free space. (The free space needed for writing depends on the quantity of data.)
Video Memory		64MB (Recommended: 128MB).
Interface		USB 2.0 port
CD-ROM drive		For Software installation
Software Required OS		Windows Vista/Windows 2000 Professional/Windows XP Home Edition/Professional Direct X 9.0 or Higher is required
CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM, DVD±R DL discs		CD-R : LG, Mitsubishi Kagaku Media, Verbatim, That's, TDK, Ritek or HP discs are recommended. CD-RW : LG, Mitsubishi Kagaku Media, Verbatim are recommended. DVD-R : Mitsubishi Kagaku Media, Maxell, That's are recommended. DVD-RW : Victor, JVC, Mitsubishi Kagaku Media, TDK are recommended. DVD+R : Mitsubishi Kagaku Media, That's, Maxell are recommended. DVD+RW : TDK, Mitsubishi Kagaku Media, Ricoh are recommended. DVD-RAM : Maxell, Mitsubishi Kagaku Media are recommended. DVD±R DL : Mitsubishi Kagaku Media, Verbatim are recommended.

* For Windows Vista, 512MB of RAM or large is recommended.

* Compatibility problem in write/read function may occur with some media depending on the media manufacturing quality.

* To achieve maximum Record & Write speed your system may require data to be copied first to the computer's hard drive rather than directly from another source disc or drive.

Specifications

Supported Discs	DVD-ROM(Single/Dual), DVD-RW, DVD-R, DVD+RW, DVD+R, DVD+R Double layer, DVD-R Dual layer, DVD-RAM, CD-Digital Audio & CD-Extra, CD-Plus, CD-ROM, CD-ROM XA-Ready, CD-I FMV, CD-TEXT, CD-Bridge, CD-R, CD-RW, Photo-CD (Single & Multi-Session), Video CD, DVD-VIDEO
Dimensions (WxHxD)	156 x 21 x 165mm
Weight	About 380g
Interface	USB 2.0
Read/Write Speed	Write : (DVD-R): 2x CLV, 4x ZCLV, 8x CAV (DVD-R DL): 2x CLV, 4x ZCLV, 6x ZCLV (DVD-RW): 1x, 2x CLV, 4x, 6x ZCLV (DVD-RAM): 2x, 3x ZCLV, 5x PCAV (Ver. 2.0 & higher) (DVD+R): 2.4x CLV, 4x ZCLV, 8x CAV (DVD+R DL): 2.4x CLV, 4x ZCLV, 6x ZCLV (DVD+RW): 2.4x, 3.3x CLV, 4x ZCLV, 8x ZCLV (CD-R): 10x CLV, 16x, 24x ZCLV (CD-RW): 4x, 10x CLV, 16x ZCLV, 24x ZCLV (High Speed: 10x CLV, Ultra Speed > 16x ZCLV Ultra Speed plus > 16x ZCLV) Read : (DVD-R/RW/ROM): 8x/8x/8x max. (DVD-R DL): 6x max. (DVD-RAM) (Ver.2.0 & Higher): 5x max. (DVD-Video) (CSS Compliant Disc): 4x max. (DVD+R+RW): 8x/8x max. (DVD+R DL): 6x max. (CD-R/RW/ROM): 24x/24x/24x max. (CD-DA (DAE)): 24x max.

* The drive's appearance and specifications may change without prior notice.

- The maximum data transfer rate varies according to the performance capabilities of the PC.
- For the sake of periodic improvements, specifications and appearance are subject to change without notice.
- We have taken all possible measures to assure the quality of our products, but we cannot be responsible for the consequences if defect occurs.

Data transfer rate

Sustained	CD-ROM : 3,600 Kbytes/s (24X max) DVD-ROM : 11.08 Mbytes/s (8X max)
Average Access Time (1/3 Stroke)	CD-ROM : 140msec (Typical) DVD-ROM : 160msec (Typical) DVD-RAM : 360msec (Typical)
Buffer capacity	2 Mbytes
MTBF	60,000 Power On Hours (Duty Cycle 10%)
Supported SecureDiscs	CD-R, CD-RW, DVD+R, DVD+RW, DVD-R, DVD-RW, DVD+R DL, DVD-R DL, DVD-RAM
Power Requirement	5V DC
Operating Environment	Temperature 5 to 40 °C Humidity 15 to 80 %
Storage Environment	Temperature -30 to 60 °C Humidity 10% to 90% RH

Software

Install the appropriate CD Recording Authoring Software before using this unit.

* Please uninstall any previous CD burning software you may have loaded on your PC in order to prevent possible compatibility issues. Once you have installed the application software, you may (if you wish) begin to reinstall previous software, taking note for errors. We recommend using the drive with the latest software as some problems encountered when using the drive can be solved by updating the software.

* For more SecurDisc information, visit <http://www.securdisc.net>

Please visit www.lgservice.com and install the program, "LG ODD Online F/W update." By using the program, you can automatically check the latest information about FirmWares and update the FirmWare.

Worldwide support ; <http://www.LGservice.com>
Worldwide corporate site : <http://www.LGE.com>

Safety Instructions

CAUTION: The laser used in the External Super Multi DVD Rewriter can damage your eyes. Do not attempt to open the cover. To reduce the risk of electric shock, do not remove the cover (or back). There are no user-serviceable parts inside. Refer servicing to qualified service personnel. Use of controls or performance of procedures other than those specified herein may result in hazardous radiation exposure.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

VORSICHT: Der in diesem External Super Multi DVD -Laufwerk benutzte Laser kann Ihre Augen schädigen. Versuchen Sie keinesfalls, die Abdeckung zu öffnen. Um die Gefahr eines elektrischen Schocks zu reduzieren, sollten Sie die Abdeckung (oder Rückseite) keinesfalls entfernen. Im Inneren des Geräts befinden sich keine Teile, die vom Benutzer selbst gewartet werden können. Überlassen Sie die Wartung qualifizierten Kundendiensttechnikern. Beachten Sie bei der Benutzung von Bedienelementen und der Durchführung von Prozeduren unbedingt die Anweisungen dieses Handbuchs, da andernfalls gefährliche Strahlung freigesetzt werden kann.

WARNUNG: Setzen Sie das Laufwerk keinesfalls Regen oder Feuchtigkeit aus, um die Gefahr eines Brandes oder elektrischen Schocks zu reduzieren.

ATTENTION: l'exposition au laser utilisé dans le super graveur multi-DVD présente un danger pour les yeux. N'essayez pas d'ouvrir le capot. Afin de réduire les risques de chocs électriques, ne retirez pas le capot (ni l'arrière du dispositif). Aucune pièce interne ne peut être remplacée par l'utilisateur. Pour la maintenance de l'appareil, adressez-vous au personnel qualifié du service de maintenance. L'utilisation de commandes ou de procédures différentes de celles spécifiées ci-après peut entraîner une exposition à des rayons dangereux.

AVERTISSEMENT: Ne pas exposer ce matériel à la pluie ou à l'humidité (risques d'incendie et d'électrocution).

PERICOLO: Il dispositivo di lettura e scrittura utilizzato in questo masterizzatore utilizza un raggio laser che, se osservato da vicino, può danneggiare la vista. Evitare di smontare il coperchio dell'apparecchio. Al fine di prevenire eventuali folgorazioni, evitare di smontare l'apparecchio. All'interno dell'apparecchio non sono presenti parti che richiedono manutenzione da parte dell'utente. In caso di difetti o guasti, rivolgersi ad un Centro di Assistenza Tecnica. L'esecuzione di procedure diverse da quella espressamente indicate in questo manuale può provocare pericolose esposizioni alle radiazioni laser.

ATTENZIONE: Al fine di evitare cortocircuiti o principi di incendio, evitare di esporre questo apparecchio alla pioggia o ad una eccessiva umidità ambientale.

PRECAUCION: El láser utilizado en la unidad External Super Multi DVD puede dañar sus ojos. No intente abrir la tapa. Para reducir el riesgo de descarga eléctrica, no quite la tapa (ni la parte posterior). No hay piezas internas que deba mantener el usuario. El servicio de mantenimiento debe efectuarlo personal técnico cualificado. El uso de controles o la ejecución de procedimientos distintos de los especificados en este manual pueden ser causa de exposición a radiación peligrosa.

ADVERTENCIA: Para reducir el riesgo de fuego o descarga eléctrica, no exponga este aparato a la lluvia ni a la humedad.

CUIDADO: O laser utilizado na unidade Super Multi DVD pode causar lesões oculares. Não tente abrir a tampa. Para reduzir o risco de choques elétricos, não retire a tampa (quer frontal quer superior). A unidade não contém peças que possam ser reparadas pelo utilizador. Deixe a manutenção para um técnico da assistência qualificada. A utilização de controlos ou a execução de procedimentos que não sejam os especificados neste manual podem causar a exposição a radiações perigosas.

AVISO: Para reduzir o risco de incêndio ou choque elétrico não exponha este aparelho à chuva ou humidade.

This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 89/336/EEC, 93/68/EEC and 2006/95/EC.

Dieses Produkt erfüllt die Funkstörungsanforderungen folgender Normen: 89/336/EEC, 93/68/EEC und 2006/95/EC.

Ce produit a été fabriqué conformément aux prescriptions EEC DIRECTIVE 89/336/EEC, 93/68/EEC et 2006/95/EC.

Questo prodotto risponde alle direttive CEE 89/336, 93/68 e 2006/95/EC, relative alla compatibilità elettromagnetica.

Este producto ha sido fabricado cumpliendo los requisitos sobre interferencias de radio de la DIRECTIVAS CEE 89/336/CEE, 93/68/CEE y 2006/95/EC.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT
CLASE 1	PRODUCTO LÁSER
CLASSE 1	PRODOTTO LASER

CAUTION: CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM.

ADVARSEL: KLASSE 3B SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGA UDSÆTTELSE FOR STRÅLING.

ADVARSEL: KLASSE 3B SYNLING OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPENS. UNNGÅ EKSPONERING FOR STRÅLEN.

WARNING: KLASSE 3B SYNLING OCH OSYNLIG LASERSTRÅLNING NÅR DENNÄL DEL ÄR ÖPPNAD. STRÅLEN ÄR FARLIG.

VARO! KURSSI 3B NÄKYVÄ JA NÄKYMÄTÖN AVATTAESSA OLET ALTTIINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESIN.

Industry Canada requirement

This class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC COMPLIANCE STATEMENT

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

FCC WARNING

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

This External Super Multi DVD Rewriter is for use only with UL listed personal computers that have installation instructions detailing user-installation of card cage accessory.

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