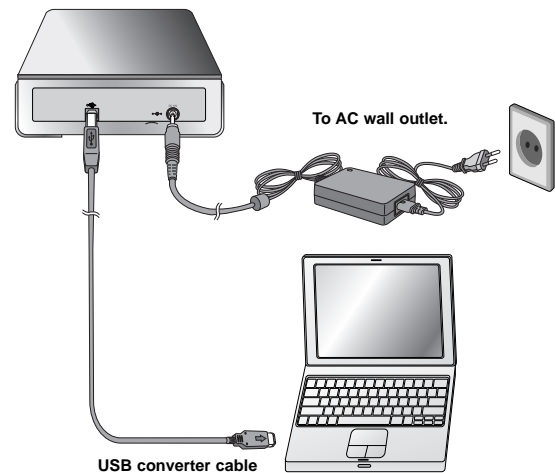


Installation

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 device should be turn off before attaching the cables.



Connecting to computer

Connect the drive to the computer as shown in figure.

- ① Connect the USB converter cable to the External Super Multi DVD Rewriter.
- ② Connect the other end of the USB converter cable to your computer.
- ③ Connect the AC adapter plug to the power connector at the rear of the drive. Attach the AC adapter to the AC wall outlet.
- ④ 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.

NOTES

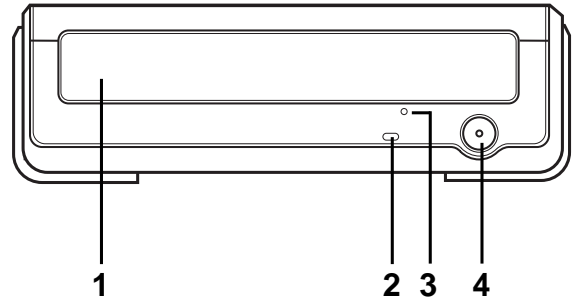
- Please do not connect the AC adapter and USB 2.0 converter cable by any means other than specified above.
- The machine does not have an ON/OFF switch. As soon as it is connected to the AC power, the power up sequence begins. The power supply cord is intended to serve as the main disconnect device. 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.

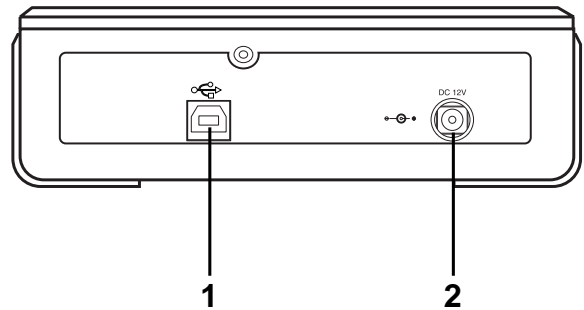
Front

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



Rear

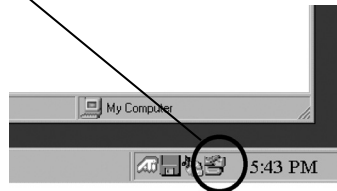
1. **USB Connector**
This connector is used to connect to the USB converter cable.
2. **Power Connector**
This connector is used to connect to the AC Power adapter cord.



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 converter cable when the busy indicator on the drive blinks, or during computer startup.

LG Quick Set-up Guide

External
Super Multi DVD Rewriter

GE20

To install of 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 LightScribe Direct Label Printing Technology - *Optional.
- * You can use a variety of Drive

	GE20LU11	GE20NU11
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 converter cable	1
- AC Power Adapter (with Power supply cable)	1
- Software CD (For Windows only/Not support Mac OS)	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.
	Memory	256MB or larger (Recommended: 1 GB).
Hard disk		20GB or more free space. (The free space needed for writing depends on the quantity of data.)
Interface		USB 2.0 port
CD-ROM drive		For Software installation
Software Required OS		Windows 7/Windows Vista (X86)/Windows 2000 Professional (SP4)/Windows XP Home Edition/Professional (SP1,SP2) Direct X 9.0 or Higher is required. Mac 10.4.10 or Higher.
Recommended Media manufacturer		CD-R : LG, Mitsubishi Kagaku Media, Verbatim, That's, TDK, Ritek, HP CD-RW : LG, Mitsubishi Kagaku Media, Verbatim DVD-R : Mitsubishi Kagaku Media, Maxell, That's DVD-RW : Victor, JVC, Mitsubishi Kagaku Media, TDK DVD+R : Mitsubishi Kagaku Media, That's, Maxell DVD+RW : TDK, Mitsubishi Kagaku Media, Ricoh DVD-RAM : Maxell, Mitsubishi Kagaku Media DVD+R DL : Mitsubishi Kagaku Media, Verbatim, Ritek DVD-R DL : Mitsubishi Kagaku Media, Verbatim

* For Optimal 20x writing, below CPU and Software are recommended.

CPU : Intel Pentium 4 3.4GHz, Intel Pentium D 3.4GHz, Intel Pentium Core2Duo 2.0GHz or higher, AMD Athlon 64 4200+ or higher.

Software : USB Booster (*Please install USB Booster Program with LG external Drive for DVD±R 20x writing.*)

* For Mac System: iMac, Mac mini(2.0GHz, Intel Core2Duo or Higher)

* 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)	160 x 50 x 230mm
Weight	About 1.2Kg
Interface	USB 2.0
Read/Write Speed	Write : (CD-R) : 16X, 24X, 40X, 48X (CD-RW) : 4X, 10X, 16X, 24X, 32X (DVD-R) : 2X, 4X, 8X, 12X, 16X, 18X, 20X (DVD-RW) : 1X, 2X, 4X, 6X (DVD+R) : 2.4X, 4X, 8X, 12X, 16X, 18X, 20X (DVD+RW) : 2.4X, 4X, 6X, 8X (DVD-RAM) : 2X, 3X, 5X, 6X, 8X, 12X (Ver. 2.0 & higher) (DVD+R DL) : 2.4X, 4X, 6X, 8X, 10X, 12X, 16X (DVD-R DL) : 4X, 6X, 8X, 10X, 12X Read : (CD-ROM/R) : 48X max (CD-RW) : 40X max (DVD-ROM)(Single/Dual) : 16X/12X max (DVD±RW) : 13X max (DVD±R) : 16X max (DVD+R DL) : 12X max (DVD-R DL) : 12X max (DVD-RAM) : 12X 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	: 7200 Kbytes/s (48X max)
	DVD-ROM	: 22160 Kbytes/s (16X max)
Average Access Time (Random)	CD-ROM	: 125msec (Typical)
	DVD-ROM	: 145msec (Typical)
Buffer capacity	DVD-RAM	: 270msec (Typical)
	MTBF	: 125,000 Power On Hours (Duty Cycle 10%)
Writing Methods	CD-Disc-at-once, Track-at once, Session at once, Packet Write	
	DVD:Random write, Sequential write	
Power Requirement	AC Adapter	
	Input	: 100-240Vac, 0.6A 47-63 Hz
	Output	: 12Vdc 2A (max 2.5A)
Operating Environment	Temperature	: 5 to 40 °C
	Humidity	: 15 to 85 %
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.

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 qualificado. 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 EMC Directive 2004/108/EC, and Low Voltage Directive 2006/95/EC.

Dieses Produkt erfüllt die Funkstörungsanforderungen folgender Normen: EMC Richtlinie 2004/108/EC und Niederspannungsrichtlinie 2006/95/EC.

Ce produit a été fabriqué dans le respect des normes d'interférences radio selon les directives européennes d'EMC 2004/108/EC et les directives européennes de faible voltage 2006/95/EC.

Questo prodotto è stato realizzato nel rispetto delle Direttive EMC 2004/108/EC (compatibilità elettromagnetica) ed 2006/95/EC (base tensioni).

Este producto está fabricado cumpliendo los requisitos de radio interferencia de la Directiva EMC 2004/108/EC, y la Directiva de bajo voltaje 2006/95/EC.

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

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

ADVARSEL: KLASSE 3B SYNLIIG OG USYNLIIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.

ADVARSEL: KLASSE 3B SYNLIIG OG USYNLIIG LASERSTRÅLING NÅR DEKSEL ÅPENS. UNNGÅ EKSPONERING FOR STRÅLEN.

WARNING: KLASSE 3B SYNLIIG OCH OSYNLIIG LASERSTRÅLNING NÅR DENNALL DEL ÅR ÖPPNAD. STRÅLEN ÅR FARLIG.

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

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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■ The company names and product names written in this manual are trademarks or registered trademarks of the respective companies.