

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 one or two open USB ports before connecting the drive to your computer.

Connection to computer or A/V Device

Connect the drive to the computer as shown in figure.

- ① Connect the USB 2.0 cable (mini plug) to the drive.
- ② Connect the other end of the USB 2.0 cable to your computer.

※ The drive may get its power from the PC USB power. All systems may not meet USB power requirements and full performance may not be achieved. In this case, connect to the USB 2.0 Y type cable (not supplied).

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

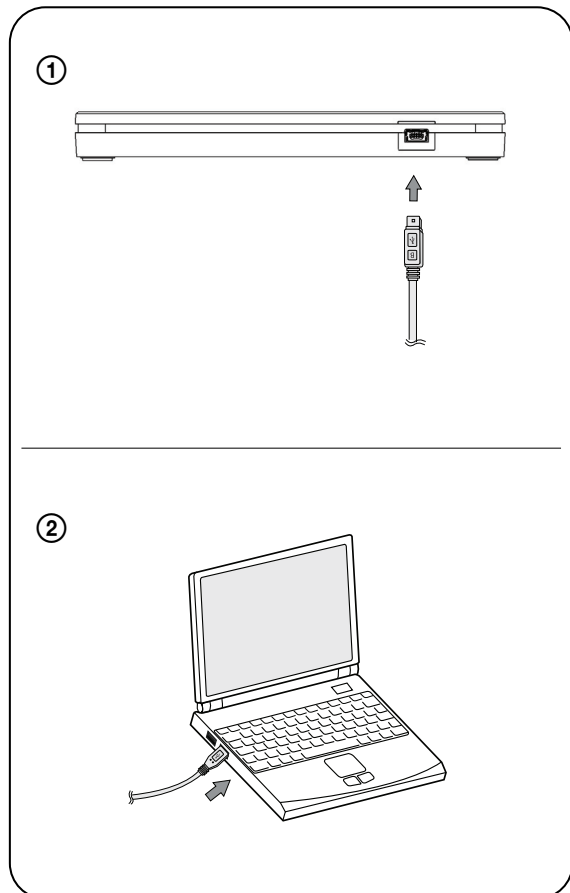
NOTES

- 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.
- 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.

The drive supports both Windows and Mac[®]. To use it properly, please follow directions below.

How to Eject Disc from the drive

- When using with Mac
 - Click the eject button located on Mac OS menu or toolbar.
 - When using with Windows
 - Press the eject button in the front of the product.
- * Software CD (for Windows only)
- The Software CD includes DVD software for usage for Windows.



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.

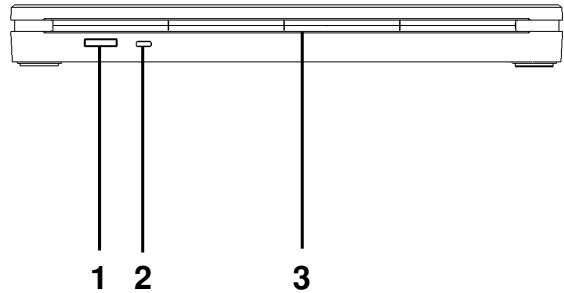
Front

1. Eject Button
2. Drive activity indicator
3. Disc Slot

Insert the disc, label-side up, about quarter-way into the drive slot till a slight resistance is felt. Gently push the disc further into the drive slot until the drive mechanism is heard to engage and draw in the disc.

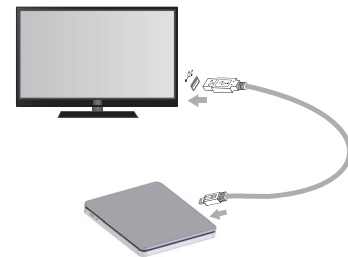
Rear

1. USB Connector (mini)
This connector is used to connect to the USB 2.0 cable.



What is TV Connectivity?

TV Connectivity is a function that allows you to enjoy videos, pictures and music by connecting this product to a compatible A/V device (e.g. DIGITAL TV, DIGITAL PHOTO FRAME, PC) that supports USB connectivity.



How to Use TV Connectivity

* This product is defaulted to ODD mode when it is powered on.

- ① **Without the disc, press and hold the 'Eject' button for 2 seconds.**
(The LED indicator will turn on, switching to TV mode. Press and hold the button again for 2 seconds to return to ODD mode.)
- ② **Insert your supported media into the drive.**
The disc file system will be converted to FAT32 and will be recognized as USB flash memory.
- ③ **Select and play the files from your A/V device to enjoy videos, pictures and music.**
Refer to your A/V device owner's manual for more information.

NOTES

- Normal operation is not guaranteed if you use a USB hub or unspecified USB extension cables.
- Due to compatibility issue of some AV devices and disc, may not work.



Quick Set-up Guide

Slim Portable DVD Writer

AP70/GP70

To install of your product, please read this guide manual carefully and completely.

Features

- Universal Serial Bus (USB) 2.0 interface for high-speed data transfer.
- Buffer Under Run error protection technology
- Slot loading with powered disc pull-in and eject mechanism
- Combination of CD-R/RW, DVD-R/RW, DVD+R/RW, DVD+R DL, DVD-R DL, M-Disc (DVD+R SL) and DVD-RAM drive functions into one drive.
- Supports region playback control Phase II.
- PC USB powered, no AC adapter needed.
- Supports TV Connectivity

Package Items

Item	Quantity
- Slim Portable DVD Writer	1
- USB 2.0 cable	1
- Software Installation disc (for Windows only)	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 SP3.
- 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.
- Under Windows 8 operating system, a specific motherboard with nVidia GeForce 7025 Chipset may cause an abnormal operation.
- Under Mac 10.8.x operating system, built-in DVD Player may not support the USB Drive.



System Environment

Computer

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

System requirements	CPU	Pentium IV 2.4 GHz or Higher(with USB 2.0) for basic performance (Recommended for optimal performance: Pentium IV 3.2 GHz or Higher).
	Memory	256 MB or larger (Recommended: 512 MB).
Hard disk		20 GB or more free space. (The free space needed for writing depends on the quantity of data.)
Video Memory		64 MB (Recommended: 128 MB).
Interface		USB 2.0 port
CD-ROM drive		For Software installation
Software Required OS		Windows 8/Windows 7/Windows Vista (32 bit, 64 bit)/ Windows XP SP3, Mac OS X v.10.5.4 or Higher, Direct X 9.0 or Higher
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. M-Disc (DVD+R SL) : Millenniata DVD±R DL : Mitsubishi Kagaku Media, Verbatim are recommended.

- * For Windows 8/Windows 7/ Windows Vista, 1 GB 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.
- * Please visit <http://www.m-disc.com> to learn more about the M-DISC™.

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, M-Disc (DVD+R SL), 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
Disc Diameter	120 mm only (80 mm disc and non-circular disc are not supported.)
Interface	USB 2.0
Read/Write Speed	Write : DVD-R: 2x, 4x, 8x DVD-R DL: 2x, 4x, 6x DVD-RW: 2x, 4x, 6x DVD-RAM: 2x, 3x, 5x (Ver. 2.2) M-Disc (DVD+R SL): 4x DVD+R: 2.4x, 4x, 8x DVD+R DL: 2.4x, 4x, 6x DVD+RW: 2.4x, 4x, 8x CD-R: 10x, 16x, 24x CD-RW: 4x, 10x, 16x, 24x Read : DVD-R/RW/ROM: 8x/8x/8x max. DVD-R DL: 8x max. DVD-RAM (Ver.2.2): 6x max. M-Disc (DVD+R SL): 8x max. DVD-Video (CSS Compliant Disc): 4x max. DVD+R/+RW: 8x/8x max. DVD+R DL: 8x 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 kB/s (24x max)
	DVD-ROM : 11.08 MB/s (8x max)
Average Access	CD-ROM : 140 ms (Typical)
Time (1/3 Stroke)	DVD-ROM : 160 ms (Typical)
	DVD-RAM : 200 ms (Typical)
Buffer capacity	0.75 MB
MTBF	60,000 Power On Hours (Duty Cycle 10 %)

Power Requirement

5 V DC

Operating Environment

Temperature	5 °C to 40 °C
Humidity	15 % to 85 %

Storage Environment

Temperature	-30 °C 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.LG.com>

Safety Instructions

CAUTION: The laser used in the Drive 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 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 graveur 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 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 pode causar lesões oculares. Não tente abrir a tampa. Para reduzir o risco de choques eléctricos, 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 eléctrico não exponha este aparelho á chuva ou humidade.

EU Conformity Notice



LG Electronics hereby declares that this/these product(s) is/are in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC, 2006/95/EC, 2009/125/EC and 2011/65/EU.

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LG Electronics Inc. - EU Representative
Krijgsman 1, 1186 DM Amstelveen
The Netherlands

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

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

ADVARSEL: KLASSE 3B SYNLIG OG USYNLIG LASERSTRÅLING I ÅBEN TILSTAND OG VED AFBRUDT LÅSEFUNKTION. UNDGÅ AT BLIVE RAMT AF LASERSTRÅLEN.

VARO! LUOKKA 3B AVATTAESSA JA KUMOTTAESSA LUKITUS NÄKYVÄÄ JA NÄKYMÄTÖNTÄ LASERSÄTEILYÄ. VÄLTÄ LASERSÄTEILLE ALTISTUMISTA.

ATTENTION: CLASSE 3B RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE ET ENCLÈCHEMENTS DÉFECTUEUX, ÉVITER L'EXPOSITION AU FAISCEAU.

VORSICHT: SICHTBARE UND UNSICHTBARE LASERSTRALUNG DER KLASSE 3B WENN ABDECKUNG GEÖFFNET UND SICHERHEITSPERRRIEGELUNG ÜBERBRÜCKT VERMEIDEN SIE ES, SICH DEM STRAHL AUSZUSETZEN.

ADVARSEL: KLASSE 3B SYNLIG OG USYNLIG LASERSTRÅLING NÅR ÅPNES OG LÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.

WARNING: KLASS 3B SYNLIG OCH OSYNLIG LASERSTRÅLNING FÖREKOMMER NÅR OCH MELLANLÅSET FÖRSTÖRS. UNDVIK EKSPONERING UNDER STRÅLEN.

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 Drive is for use only with UL listed personal computers that have installation instructions detailing user-installation of card cage accessory.

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