



# DVD-ROM DRIVE

**MODEL : DRD-8160B**

**OWNER'S MANUAL  
BEDIENUNGSHANDBUCH  
MODE D'EMPLOI  
MANUALE D'USO  
MANUAL DE USUARIO**

To enjoy fully all the features and functions of your DVD-ROM drive, please read this owner's manual carefully and completely.

Questo manuale include, tagliando  
la garanzia (pagina n. 10)

website : <http://www.LGService.com>  
e-mail : <http://www.LGService.com/techsup.html>

## DECLARATION OF CONFORMITY

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.

Trade Name/Model : **LG or GoldStar/ DRD-8160B**

Responsible Party : **LG Electronics U.S.A. Inc.**  
Address: **6133 N. River Road, Suite 1100**  
**(Riverway Plaza) Rosemont, IL 60018**  
Contact Person : **Mr. P. H. Byun, General Manager**  
**Tel. No. (847) 993-4529**

Equipment Classification : **FCC Class B Peripheral Device (JBP)**  
Type of Product (EUI) : **DVD-ROM Drive**  
Manufacturer : **LG Electronics Inc.**  
Address : **19-1, Cheongho-Ri, Jinwuy-Myon**  
**Pyungtaek-Si, kyunggi-Do, 451-713 Korea**  
Attention : **Mr. TKLee - General Manager**  
**Multimedia Standards Team**

We hereby declare that the equipment bearing the trade and model number specified above was tested conforming to the applicable FCC Rules under the most accurate measurement standards possible, and that all the necessary steps have been taken and are in force to assure that production units of the same equipment will continue to comply with the Commission's requirements.



CAUTION : The laser used in the DVD-ROM drive can damage your eyes.  
Do not attempt to open the cover.  
To reduce the risk of electric shock, do not remove cover (or back).  
No user-serviceable parts inside.  
Refer servicing to qualified service personnel.

This unit uses CD-ROM discs  
marked with this symbol:



Use of controls or performance of procedures other than those specified here in may result in hazardous radiation exposure.



PRODUCT COMPLIES WITH DHHS  
RULES 21 C.F.R. SUB-CHAPTER J,  
IN EFFECT AT THE DATE OF MANUFACTURE.

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

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

Industry Canada requirement  
This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.  
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 89/336/EEC, 93/68/EEC and 73/23/EEC.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

CLASS 1 LASER PRODUKT  
VARNING-NÄR APPARATEN ÖPPNAS KAN MAN UTSÄTTAS FÖR BÅDE SYNLIIG OCH OSYNLIIG LASER STRÄLNING. UNDVIK ATT SE DIREKT MOT LASERSTRÅLEN OCH UNDVIK ATT BETRAKTA STRÅLEN MED OPTISKA INSTRUMENT.  
Laser - stråldata :  
Våglängd → 780nm/650nm  
Uteffekt → 4.3mW/5mW  
Pulstle → Continuous

## Features

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### Features

- E-IDE interface
- Data transfer rate (DVD-ROM max-16X-speed:21,600KB/sec, CD-ROM max-48X-speed : 7,200KB/sec)
- Random access time (DVD-ROM: 120ms Typical, CD-ROM:100ms Typical)
- Intelligent 512KB data buffering system
- Small CPU bandwidth (MPC spec.)
- Motorized tray loading system
- Horizontal/Vertical mounting support
- Designed for internal mounting
- Emergency eject support
- Supports Windows 95, 98, 2000 & ME Plug-and-Play ATAPI protocol
- Multimedia PC MPC III compliant
- Photo CD multisession support
- Supports Region playback control Phase II

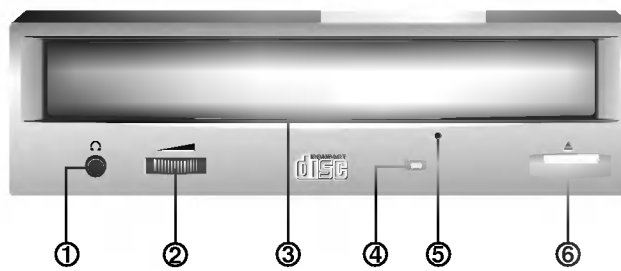
### System Requirements\*

- IBM PC AT or compatible, Pentium-266MHz processor or higher (higher recommended).
- A minimum of 16MB memory (higher recommended).
- A suitable free standard 5¼" internal drive bay.
- MS-DOS version 3.1 or higher. (Windows 95 and above recommended).
- 3½" 1.44 Mb Floppy Drive.
- An existing IDE controller with an available cable connector or a new IDE controller (recommended with IDE PIO Mode 4 capability) that you will need to install.

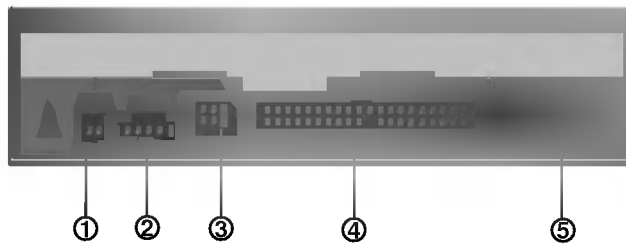
\* Please note: Certain software (i.e. particularly those including Video playback) may require a considerably increased specification PC to give acceptable results. While this DVD-ROM drive can read DVD-video discs, decoding them to display on your pc's monitor requires separate MPEG decoding that is done by separate hardware (either an MPEG decoder card or MPEG decoding done by your video card), or separate software that you install to do MPEG decoding. These items are separate and are not included with this DVD-ROM drive.

## Location and Function of Controls

### Front View



### Back View



### Supplied Accessories

Owner's Manual



Audio Cable



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## **Front View**

1. Headphone Jack  
Standard 1/8" (3.5mm) stereo jack for listening to the audio signal from audio CDs.
2. Headphone Volume Control  
Adjusts the headphone sound level.
3. Disc Drawer  
Accepts a CD-ROM/DVD-ROM disc on its tray.
4. Busy Indicator  
The Busy Indicator lights during initialization and data-read operations.
5. Emergency Eject Hole  
Insert a paper clip here to eject the drawer manually or when there is no power.
6. Open/ Close/ Stop Button  
This button is pressed to open or close the CD tray.  
If an audio CD is playing, pressing this button will stop it, and pressing it again will open the tray.

## **Back View**

1. Digital Audio Output Connector  
This is a digital audio output or Video CD output connector.  
You can connect this to a digital audio system or a Video CD Board.
2. Analog Audio Output Connector  
The Audio Output Connector connects to a sound card.
3. Master/Slave/CSEL Jumper  
These three jumpers are used to set the DVD-ROM Drive to either a Master, Slave, or CSEL device.
4. Interface Connector  
This 40-pin connector is used to transfer data and control signals between the DVD-ROM Drive and your PC.
5. Power-in Connector  
Attach a power cable from the computer to this connector.

## Installing the Drive

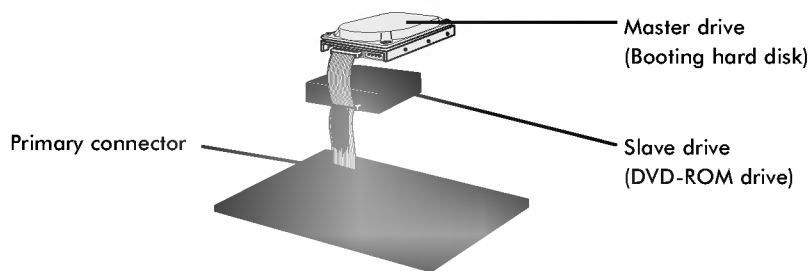
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Before installing the drive, turn off the system power. Follow the steps below to install the DVD-ROM drive:

1. Remove the cover from your computer system. Refer to manual for the computer for details about removing the cover.
2. Adjust the Master/Slave jumpers on the back of the DVD-ROM drive as necessary. Connect the DVD-ROM drive to the IDE port of your motherboard. In general, the hard drive will be in Primary IDE port and Master device for booting the operating system. There are two possible alternate connection for DVD-ROM drive installation.

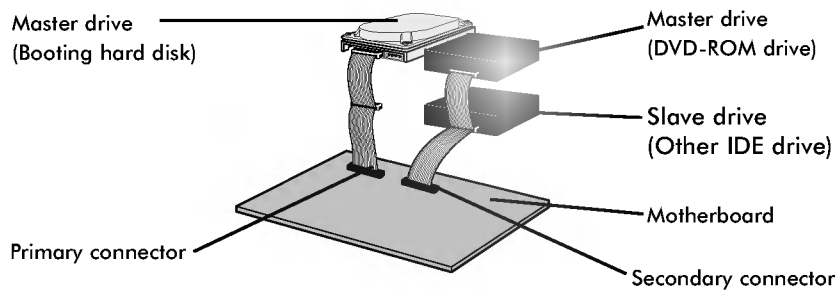
### A) When using a Primary IDE port

If you need to connect your DVD-ROM drive to the same Primary IDE port, the DVD-ROM drive should be set to Slave position.



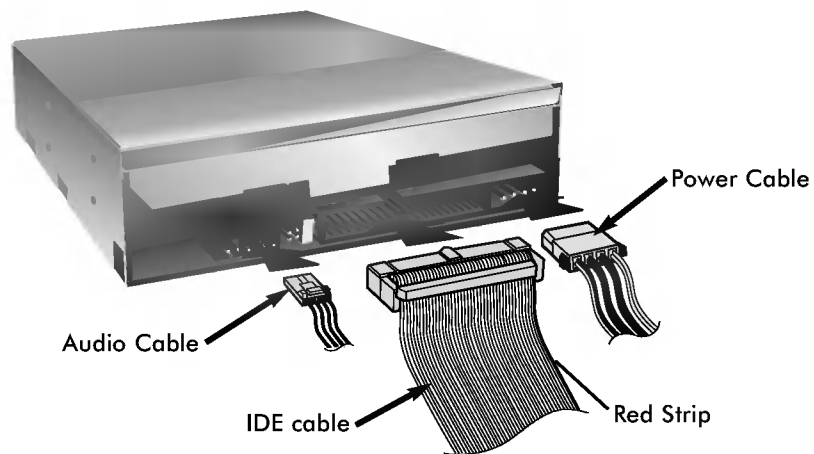
### B) When using a Secondary IDE port

You can also connect DVD-ROM drive to the Secondary IDE port and set to Master position.





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3. Insert the DVD-ROM drive unit into a free 5.25-inch drive bay. Secure the DVD-ROM drive to the drive bay rails with the mounting screws (supplied).
  4. Connect the 4-pin power cable and 40-pin IDE interface cable to the back of the DVD-ROM drive.



Notes: If there is no spare power cable available in the computer, you will have to purchase a splitter cable of a suitable type.

The red edge of the IDE cable corresponds to pin 1 of the IDE interface on the DVD-ROM drive.

Please Note: an IDE cable is not supplied and may need to be purchased separately.

If the computer is using a sound card, the drive is connected to the sound card with an audio cable. This DVD-ROM drive is supplied with a Creative Labs SoundBlaster® compatible audio lead, if this is not suitable for your sound card, it may be necessary for you to purchase a suitable lead from your retailer. Refer to the manual for the sound card for detailed information regarding connection.

5. When the installation of the drive unit is complete, replace the computer cover.
6. Reconnect the computer power cord and turn on the computer.

## Device Drivers

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When using Windows 95/98/2000/ME or Window NT Workstation Ver. 4.0, the installation of any software driver or special device is not required.

The DOS and Windows 3.1 users can download the DOS Device drivers anytime via internet. For your information, please consult the following internet sites:


<http://www.lge.com>

<http://www.lgservice.com>

### For Windows 95/98/2000 Users

- In order to ensure normal drive operation, please check the following:
  - The drive is displayed in
    - Windows 95/98 : [Control Panels]-[System]-[Device Manager]-[CD-ROM]
    - Windows 2000 : [Control Panels]-[System]-[Hardware]-[Device Manager]-[DVD/CD-ROM-Drive]
  - 32-bit is displayed in  
[control panels]-[system]-[performance]
- If the drive is not recognized by your computer, please check the following items.
  - If a  indicator is displayed on the IDE controller in [control panels]-[system]-[device manager]-[harddisk controller], you will need to contact your PC's manufacturer or the motherboard's manufacturer and get the appropriate IDE controller driver.
- Run ADD NEW HARDWARE in Control Panel to let PC search again for new device.

### For Windows NT Workstation Ver. 4.0 Users

- In order to ensure normal drive operation, please check the following:
  - The drive is displayed on the IDE controller in  
[control panels] - [SCSI adapter] - [devices]
- If the drive is not recognized by your computer, please check the following items.
  - If a  indicator is displayed on the IDE controller in [control panels]-[SCSI adapter]-[devices], you will need to contact your PC's manufacturer or the motherboard's manufacturer and get the appropriate IDE controller driver.

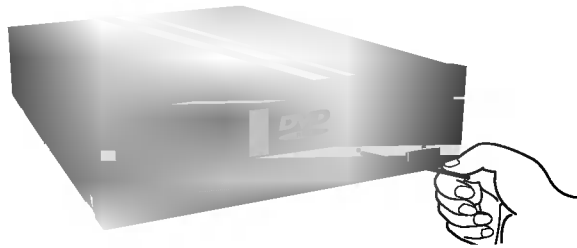
## Emergency Eject

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This drive has a function that allows the CD to be ejected manually if this becomes necessary in an emergency, such as failure of the drive or a power outage. Follow this procedure in such a case.

NOTE: Don't use this feature except in an emergency.

- 1) Turn the power to OFF.
- 2) Poke a fine-tipped object (such as a straightened heavy duty paper clip) into the small hole at the front. The front door will pop open and the disk tray will come partway out.
- 3) Pull the front door to open it all the way, then grip the disc tray between thumb and forefinger and gently pull it straight out.



NOTE: This feature is a last measure to be used only in an emergency. Using it excessively will cause malfunction.

## Installation, Usage and Handling Precautions

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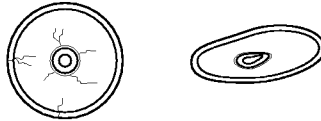
### ■ Installation

Avoid placing the drive in a location subject to :

- high humidity
- high temperature
- mechanical vibration
- direct sunlight

### ■ Operation

- During operation, excessive vibration or a sudden jolt to the drive may cause a malfunction.
- Avoid exposing the drive to sudden changes in temperature. This may cause condensation to collect inside the drive.
- Do not play a CD having other shape than a circular disc, such as heart shaped disc, or malfunction may occur.
- Do not use damaged, cracked, or warped discs. If they break inside the unit, they may damage the optics. The disc in the drive unit rotates at high speed.



- Do not use non-standard discs, or these may adversely influence this unit and other equipment.

### ■ Transportation

- Always remove the disc before moving the drive.

### ■ Notes on CD-RW/DVD-RW discs

This product can read CD-RW/DVD-RW disc data. Note the following:

- A little longer time is needed to sense a CD-RW/DVD-RW disc when the operation starts, compared with standard CD-ROM/DVD-ROM discs.
- Since playback signal level of CD-RW/DVD-RW is lower than the replicated CD/DVD discs, reading speed of those discs is lower than that of the replicated discs to ensure data reading.
- Blank discs, discs that you failed to write data or discs that session close processing has not been made-these discs cannot be used.
- Operation may not start, or the data may not be read under the following conditions:

The quality of the recorded signal has deteriorated due to the dirt or scratches on the disc, or frequently rewrote discs. If the drive fails to read the disc, open the disc drawer, check the data side of the disc (side opposite the label side) for dust or scratches, and reinsert the disc and close the drawer to try to read the disc again.

## Troubleshooting

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- \* When the DVD-ROM drive does not work with the hard disk drive in primary IDE channel.

(SOLUTION)

1. Check the DVD-ROM drive Master/Slave Jumper setting.  
The DVD-ROM drive should be set to the Slave mode if it is on the same IDE cable as your Hard Drive that is set to the Primary Master mode.
2. Check to be sure your hard disk Interface type is IDE type.
3. Check your hard disk Master/Slave Jumper setting.  
Some old-version IDE type hard disks were set to Master Only mode.  
In that case, contact your hard disk company and change your hard disk jumper setting to master mode.
4. If the DVD-ROM drive does not work with above methods, you may need a secondary IDE card. If you use the secondary IDE card, you should set the DVD-ROM drive jumper to the master mode if the DVD-ROM drive is the first device you are connecting to the secondary IDE card.

- \* When the DVD-ROM drive does not install in OS/2 warp.

(SOLUTION)

1. Select *NON-LISTED IDE CD*.

- \* DVD-ROM drive is not present in Windows 3.1 or 3.11 or DOSSHELL.

(SOLUTION)

1. When the WIN or DOSSHELL command lines are present in your AUTOEXEC.BAT, make sure that the MSCDEX.EXE command line appears before the WIN or the DOSSHELL command lines.

Please Note: Since this product supports Region Playback Control Phase II, a certain MPEG decoder card or Software without regional code setting may cause this drive not to read DVD-ROM discs. This DVD-ROM Drive enables you to change the regional code up to 5 times.

## Specifications

Items		CD-ROM	DVD-ROM
General	Data Capacity (User Data/Block)	Yellow Book: 2048 bytes/block (Mode1 & Mode2 Form1) 2340, 2336 bytes/block (Mode2) 2332 bytes/block (Mode2 Form2) 2352 bytes/block (CD-DA)	Book A,B: 2048 bytes/block
	Rotational Speed	22X~48X (CAV) Approx. 10,200 rpm	6X~16X (CAV) Approx. 9,200 rpm (single layer) 3X~8X (CAV) Approx. 3,800 rpm (dual layer)
	Disc Diameter	12cm/8cm	
	Supported Disc	DVD, DVD-ROM, DVD-R, CD-Digital Audio & CD Extra, CD-ROM, CD-ROM XA-Ready, CD-I FMV, CD-R, CD-RW, CD-Bridge, Photo-CD (Single & Multi-Session), Video CD	
Performance	Access Time (Random Access)	100ms Typical (48X max)	120ms Typical (16X max)
	Transfer Rate * Sustained	Outer side:Approx 7,200 Kbytes/sec Inner side:Approx 3,300 Kbytes/sec	Outer side:Approx 21,600 Kbytes/sec Inner side:Approx 8,100 Kbytes/sec
	* Burst (ATAPI)	16.67 Mbytes/sec (PIO Mode4) 16.67 Mbytes/sec (Multiword DMA Mode2) 33.3 Mbytes/sec (Ultra DMA)	
	Interface	ATAPI/E-IDE	
	MTBF	125,000 Power On Hours (Duty Cycle 10%)	
	Buffer size	512 Kbytes	
Audio	Frequency Response Line Output Level Headphone Level Line Out Jack Headphone Jack	20Hz ~ 20 KHz $\pm$ 3dB 0.75 Vrms $\pm$ 20% (47K $\Omega$ ) 0.75 Vrms $\pm$ 20% (33 $\Omega$ ) 4-Pin terminal (Rear) $\phi$ 3.5 mm (Front)	
Environment	Temperature	5° ~ 45 °C (41 °F ~ 113 °F)	
Power Requirements	12V $\pm$ 5% Ripple<100m Vpp	1.3A (Maximum)	
	5V $\pm$ 5% Ripple<100m Vpp	1.2A (Maximum)	

NOTE : Specifications are subject to change without notice for improvement.

## DVD-ROM LIMITED WARRANTY

LG Electronics will repair or at LG Electronics option replace\*, without charge, your product which proves to be defective in material or workmanship under normal use, during the warranty period listed below from the date of original purchase. **This warranty is good only to the original purchaser of the product during the warranty period as long as it is in the U.S. including Alaska, Hawaii, and U.S. Territories.**

### WARRANTY PERIOD

<u>MODEL #</u>	<u>LABOR</u>	<u>PARTS</u>	<u>HOW SERVICE IS HANDLED</u>
DRD-8160B	1 Year	1 Year	If the unit is defective, a replacement* will be sent by 2-day air for the first year. After one year, repair or a 2-day swap at a fixed labor charge. For service, please call 1-800-243-0000 (Mon.-Fri. 7AM-7PM CST)

No other express warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. WE SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY APPLICABLE TO THIS PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

### THE ABOVE WARRANTY DOES NOT APPLY:

1. To damages or problems which result from delivery or improper installation.
2. To damages or problems which result from misuse, abuse, accident, alteration, or incorrect electrical current or voltage.
3. To service calls which do not involve defective workmanship or material and explaining the operation of the unit.

**Therefore these costs are paid by the consumer.**


### CUSTOMER ASSISTANCE NUMBERS:

- To Prove Warranty Coverage: → Retain your Sales Receipt to prove date of purchase.  
→ Copy of your Sales Receipt must be submitted at the time warranty service is provided.
- To Obtain Product, Customer, or Service Assistance: → Call 1-800-243-0000 24 hrs/7 days  
Push appropriate menu code,  
or <http://www.LGService.com/techsup.html> for support by E-mail.
- For Exchange Service: → Call 1-800-243-0000 (Mon-Fri 8am-5pm CST)  
Push appropriate menu code.

\* Replacement is a factory-reconditioned unit. Free replacement applies only within the initial one-year period. Factory-reconditioned units are available at a low, fixed cost after the one-year warranty expires.

\* Although the information (specifications, contacts, etc.) was correct at the time of printing, anything in this manual is subject to change without notice.



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P/NO : 3828HM1027A

Printed in Korea