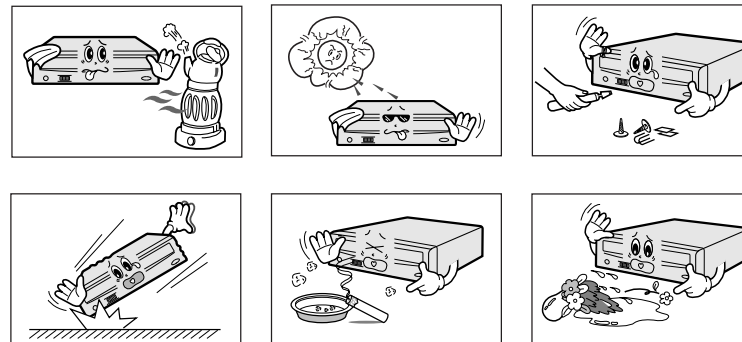


Safety Warnings

The following diagrams illustrate the precautions to be taken when using your DVD-ROM drive.



You must not use the drive in any manner other than that specified in this guide.

CAUTION

Do not attempt to repair the DVD-ROM drive yourself. Contact your dealer or local SAMSUNG representative for all repairs.

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

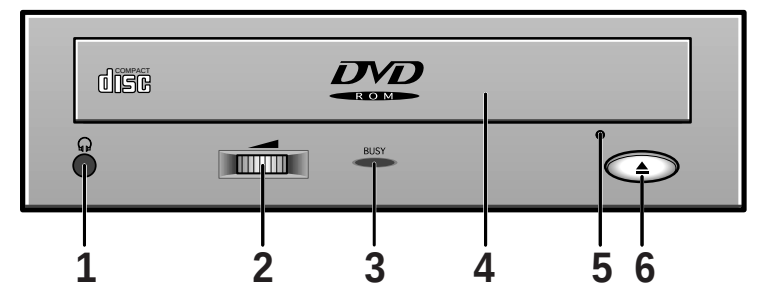
To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

WARRANTY Please refer to the Samsung limited warranty statements.

As SD-604 has a steel ball installed in the turntable for the purpose of reducing the vibration and noises to be generated while the disc shaft rotates, you may hear the ball clicking sounds when the driver is handled manually or when it rotates at a low speed. But it is not a problem.

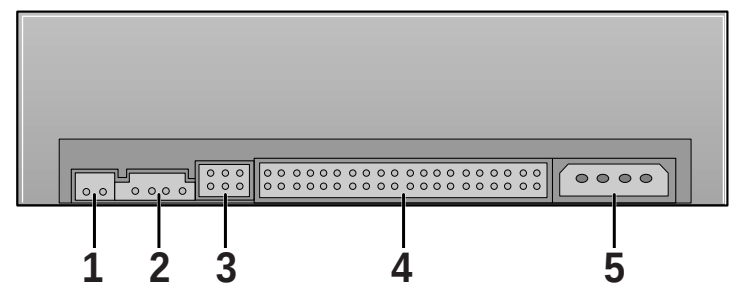
English

Front View of the DVD-ROM Drive



- 1 Headphone Connector**
The audio output connector enables you to plug stereo headphones into the drive. It requires a 3.6 mm stereo mini-jack.
- 2 Volume Control Dial**
This control dial adjusts the volume for your headphones. You can only use the headphone jack and volume control when you have installed the required software utilities. For example, the Microsoft Windows Media player can be used.
- 3 LED**
It lights when a DVD/CD disc is loaded or is worked.
- 4 Disc Tray**
The disc tray opens and closes automatically when you press the Open/Close button.
⚡ When you place a disc in the tray, make sure that the label on the disc is facing upwards. If you are not loading or unloading a disc, the tray should remain closed.
- 5 Emergency hole**
If the tray does not open when you press the Open/Close button, insert a small, metal rod (for example, an unwound paper clip) into this hole to eject the disc.
⚡ This function should only be performed when the computer is powered OFF.
- 6 Stop(Open/Close) Button**
When in play, press the stop key and when in stop, press open/close key.

Rear View of the DVD-ROM Drive



- 1 Digital Output Terminal**
Connect an audio cable of the board that supports digital output to this terminal.
- 2 Audio Output Connector**
You can connect a sound card to your drive using this four-pin connector.
➤ This function is not covered in detail in this guide. Refer to the documentation supplied with your sound card.
- 3 Device Configuration Jumper**
Usually, this is a pre-set configuration as illustrated below:

C S M
S L A

A diagram of a three-pin jumper block. The pins are labeled C, S, M on the top and S, L, A on the bottom. A small rectangular jumper is shown bridging the C and S pins.

⚡ Verify that the setting is as illustrated. If it is not, simply remove the jumper and place it in the correct position.
- 4 Host IDE Interface Connector**
This input/output interface connector is used to connect the 40-pin flat cable from the IDE interface to the drive.
- 5 Power Connector**
The power connector is a four-conductor male plug.

System Requirements

Before you install the DVD-ROM drive, we strongly recommend that you make certain that your set-up meets the system requirements listed below.

Item	Description
Type of computer	Intel Pentium 166MHz, RAM 16MB(or higher) with an IDE interface (or a 100% IBM-compatible computer)
Free expansion unit	5.25 inch
Disk space	100 MB minimum
Windows version	95 OSR2 (or higher)
Playback of DVD Video	PC with Window95 OSR2 DVD-Video playback software and appropriate hardware (MPEG2 card etc.)

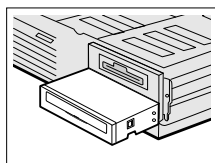
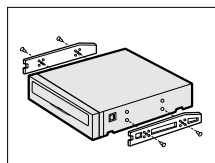
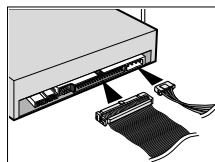
*For further details, refer to the documentation that comes with DVD-Video playback software

Installing the DVD-ROM Drive

Install the drive in your computer horizontally, making sure that the Open/Close button is on the right.

To install the drive, proceed as follows.

- 1 Turn OFF your computer. Remember to verify the configuration jumper on the rear of the DVD-ROM drive.
- 2 Remove the cover of your PC(main unit of the computer).
- 3 Remove the blank cover panel for the 5.25 inch unit in which the DVD-ROM drive is to be installed.
- 4 Connect the DVD-ROM drive to the IDE interface and power cables located inside your computer.
 ⚠ Connectors are keyed so it is impossible to put them in an incorrect position. Do not force the connectors, if they do not seem to fit.
- 5 Install the DVD-ROM drive into the unit and secure it with mounting screws (recommended standard M3x6x4).
 - ◆ Depending on your PC model, you may need to attach guide rails to the drive, so that the drive is held firmly in place. On the ground that the guide rails are parts of the computer, if you don't have these, please purchase separately.
 - ◆ If you use screws that are longer than the recommended standard, you may damage the drive.
- 6 Put the cover back on your PC.



Installing the Software

You can install the device driver for DOS or for Windows.

- 1 Turn on your computer and wait for it to boot.
- 2 Insert the driver disk into a floppy disk drive (usually the A drive).
- 3 If you are a... Then...

DOS user	◆ Type a: at the DOS prompt. ◆ Press the RETURN key.
Windows user	◆ Access the File Manager. ◆ Click on the A icon.
Windows 95 user	◆ When you are in Windows 95, it is not necessary to install Device Driver. Whereas, when you are in Dos Mode of Windows 95, then install as follows. ◆ Click on MY COMPUTER icon. ◆ Click on the A icon.
- 4 Run the program:

If you are a...	Then...
DOS user	◆ Type CDSETUP after the a: prompt. ◆ Press RETURN.
Windows user	Double-click CDSETUP.EXE from the Windows File Manager.
Windows 95 user	Double click on CDSETUP icon. <u>Result:</u> The CD/DVD-ROM Setup Program dialog box is displayed.
- 5 To... Then enter...

Confirm the installation	Y
Exit without installing	N

Result: If you answer Y (Yes), the installation program automatically

 - ◆ Creates a SAMSUNG directory on your hard disk,
 - ◆ Copies the required softwares,
 - ◆ Modifies the CONFIG.SYS and AUTOEXEC.BAT files.
- 6 When the **Setup Completed** screen is displayed, remove the installation floppy disk from the drive.
- 7 Reboot your system.

Result: ◆ The computer restarts

 - ◆ Both the device driver and MSCDEX are loaded.

Changing the Drive and Driver Settings

Your DVD-ROM drive is controlled by:

- ◆ MSCDEX.EXE (a Microsoft CD-ROM extensions program)
- ◆ SSCDROM.SYS (the CD/DVD-ROM device driver)

MSCDEX.EXE Parameters

The MSCDEX.EXE parameters are added to your AUTOEXEC.BAT file. Below is the syntax for each parameter. Information indicated within square brackets [] is optional.

<Drv>:\<path>\MSCDEX.EXE [/E/K/S/V] /D:<drive name> [/L:<drive letter>] [/M:<buffer>]

Example : The default set-up procedure adds the following default settings to your AUTOEXEC.BAT file:
C:\SAMSUNG\MSCDEX.EXE /D:SSCD000

Details for each parameter are listed below.

Parameter	Details
/D:<drive name>	Specifies the name of the top DVD-ROM drive. The <drive name> field must contain the same information as specified by parameter in your CONFIG.SYS file (which loads the corresponding DVD-ROM drive). ◆ The MSCDEX command must have at least one /D parameter. If you add another DVD-ROM device, you must add and specify a corresponding /D parameter for each new drive.
/E	If the EMS memory mode (Expanded Memory Support) is enabled, this parameter specifies that the DVD-ROM driver can save sector buffers using EMS memory.
/K	Specifies that MS-DOS can recognize a DVD-ROM volume written in kanji (Chinese characters). Must be used for all DVD-ROM volumes written in kanji.
/S	Permits the DVD-ROM drive to be shared on the MS-NET or Windows for Work Groups server.
/V:	When MSCDEX.EXE is loaded, this parameter indicates the memory status.
/L:<drive letter>	Specifies the letter of the top DVD-ROM drive. If more than one DVD-ROM drive is connected, the system automatically assigns arbitrary drive names to the additional drives.
/M:<buffer>	Specifies the number of sector buffers.

SSCDROM.SYS Parameters

The SSCDROM.SYS parameters are added to your CONFIG.SYS file. Below is the syntax for each parameter. Information indicated within square brackets [] is optional.

DEVICE=<Drv>:\<path>\SSCDROM.SYS /D:<drive name> [P:<X>]

Example : The default set-up procedure adds the following default settings to your CONFIG.SYS file:
Device=C:\SAMSUNG\SSCDROM.SYS /D:SSCD000 /P:1F0,14,1

Details for each parameter are listed below.

Parameter	Details
/P:<X>	Specifies the port for the interface card. Possible values: 1F0, 170 Default: 1F0.
/D:<drive name>	Changes the name for the DVD-ROM drive. Up to eight characters can be input. Default: SSCD000.

* Refer to README. DOC.

Resolving Technical Problems

Please consult the following table BEFORE contacting your dealer or local SAMSUNG representative.

Problem	Meaning/Solution	
The software installation failed	◆ Check that your hard disk is not full. ◆ The installation floppy disk may be corrupted. Repeat the installation with the backup floppy disk.	
I re-booted my PC and it paused during the start-up program.	After installing the device driver, your system start-up program may take more time than expected. If it does not start-up after 60 seconds, verify your AUTOEXEC.BAT file and, if necessary, contact your local computer dealer.	
The disc tray does not open.	The drive may not be installed correctly. Verify the physical installation.	
In the File Manager, the DVD-ROM icon does not display.	If you have installed the DVD-ROM drive...	Then...
	And the software	Re-boot your PC.
	And have not installed the software	Install the software following the instructions on page 5.
I installed the software and re-booted my PC. The DVD-ROM drive icon/directory still does not appear.	◆ Verify the connections between the drive and your PC. Check that the 40-pin flat cable is connected to an IDE interface (some PCs are equipped with an SCSI disk interface). ◆ Verify your AUTOEXEC.BAT file. Go to page 6 for the verification procedure. ◆ Check the LASTDRIVE= command in the CONFIG.SYS file. The specified letter must take the DVD-ROM volume into account. If you do not know which letter is assigned to the DVD-ROM, enter Z. ◆ Using the documentation provided with your PC, check that the IDE hard disk is set up in MASTER mode.	

Technical Specifications

SAMSUNG continually strives to improve its products. Both the design specifications and these user instructions are thus subject to change without notice.

SD-604

SECTIONS		DVD	CD
DISC	Disc types supported	DVD-ROM, DVD-VIDEO, CD-DA(Audio), CD-ROM, CD-ROM XA, CD-Plus, CD-Extra, Photo-CD(Single,Multi-session), Video CD ready, Enhanced CD, CD-I/FMV, CD-R,CD-RW	
	Disc diameter	12cm or 8cm	
	Rotational speed	2770 r.p.m (linear velocity 3.49m/sec)	6700 r.p.m (linear velocity 1.3m/sec)
DRIVE PERFORMANCE	Data transfer rate	Sustained : Max. 6480KB/sec	Sustained : Max. 4800KB/sec (32X)
		PIO Mode 4 : 16.6MB/sec Multiword DMA mode 2 : 16.6MB/sec	
	Access time(1/3stroke)	100ms(Typical)	95ms(Typical)
	Data buffer capacity	512KB	
	Laser	Semiconductor Laser	
	Slide mechanism	Stepping motor	
	Spindle motor	Brushless motor	
	Loading mechanism	Tray. DC motor(Soft Eject). Horizontal/Vertical	
ERROR RATE		10 ⁻¹⁵	MODE1:10 ⁻¹² , MODE2:10 ⁻⁹
FRONT PANEL	Eject button	Auto eject or Auto inject	
	Indicator(LED)	BUSY	
	Headphone output	Stereo mini-jack(Ø3.6mm) 0.60±0.06V(rms) 33Ω	
	Volume control	Dial type	
REAR PANEL	Required power	+5VDC : 1.0A, +12VDC : 1.5A (Max)	
	Interface connector	ATAPI	
	Audio output	Line out 0.70 ± 0.07V(rms) : 47KΩ	
	Jumper block	Device configuration jumper	
OPERATING ENVIRONMENT	Work area	Temperature : 5 ~ 45°C, Humidity : 8 ~ 80%	
	Storage area	Temperature : -20 ~ 55°C, Humidity : 5 ~ 85%	
GENERAL	Dimensions	149(W) x 41.5(H) x 200(D)mm (Including bezel)	
	Net weight	900g	
RELIABILITY	MTBF	125,000 POH(Duty 20%)	
	Disc tray loading	50,000 times	

Question & Answer

1 What is DVD?

A disc that the data capacity of a single-layer and single-sided DVD, at 4.7GB(Giga Byte), is 7 times that of a CD. The picture data uses the MPEG2 format, one of the worldwide standards of digital compress technology.

2 What is MPEG2 card?

A MPEG2 card decode data of MPEG2 format on a DVD disc.
There is a soft-MPEG2 lately.

3 What is Regional Code?

A MPEG2 card and discs have regional code numbers. It is only possible to play a disc on a DVD-ROM drive when MPEG2 card has the same regional code with the disc.

4 What is the difference of DVD-ROM DRIVE and DVD PLAYER?

A DVD player has a MPEG2 decoder, but a DVD-ROM drive hasn't a MPEG2 decoder, so you need appropriate hardware to decode MPEG2 data on a disc. (MPEG2 card etc.)

5 Where can I get DVD disc or MPEG2 card?

You can get DVD discs at big disc stores, get MPEG2 card at computer stores.