



CD-ROM DRIVE  
SC-140/148

## User's Guide - ENGLISH

When handling the drives, you may hear a slight rattle inside the unit.

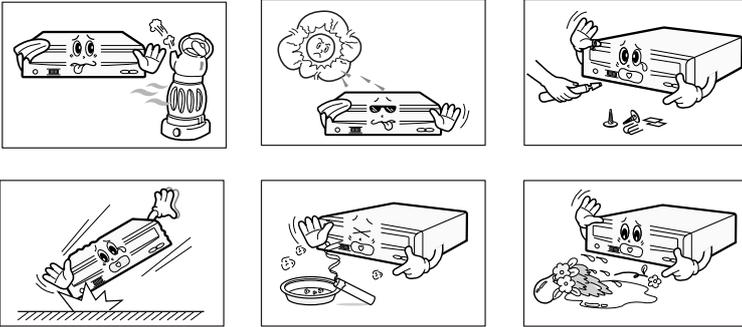
This is **NOT** a problem, it is simply the ball bearings of the **Auto Balancer** shifting.

<http://www.samsungelectronics.com>

BG68-00044A Rev 02

## Safety Warnings

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



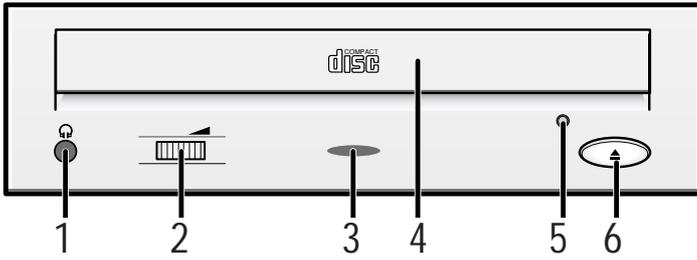
You must not use the drive in any manner other than that specified in this guide.

**CAUTION** Do not attempt to repair the CD-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.

## Front View of the CD-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

### 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 disc tray should remain closed.

### 5 Emergency Hole

If the disc tray does not open when you press the Open/Close button, insert a small, metal rod (an unwound paper clip for example) into this hole to eject the disc.

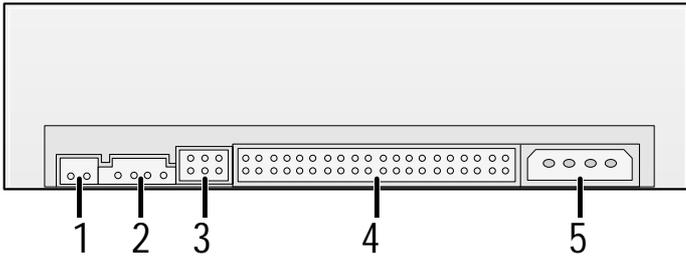
- ⚡ This function should only be performed when the computer is powered OFF.

### 6 Stop/Open/Close-Button

When in play, press the stop key and when in stop, press open/close key.



## Rear View of the CD-ROM Drive



### 1 Digital Audio

You can connect a sound card or MPEG card which support Digital Audio to your drive using this two-pin connector.

### 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.



☛ 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 CD-ROM drive.

### 5 Power Connector

The power connector is a four-conductor male plug.



# System Requirements

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

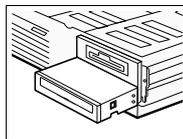
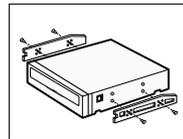
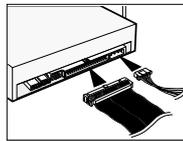
| Item                | Description  |
|---------------------|--|
| Type of computer    | IBM 486SX 20MHz (or higher) with an IDE interface(or a 100% IBM-compatible computer) |
| Free expansion unit | 5.25 inch  |
| Disk space          | 100KB minimum  |
| MS-DOS version      | 5.0(or higher)   |
| Windows version     | 3.1(or higher)   |

## Installing the CD-ROM Drive

Install the CD-ROM drive in your computer horizontally, making sure that the

To install the drive, proceed as follows.

- 1 Turn OFF your computer. Remember to verify the configuration jumper on the rear of the CD-ROM drive.
- 2 Remove the cover of your PC(main unit of the computer)
- 3 Remove the blank cover panel of the 5.25 inch unit in which the CD-ROM drive is to be installed.
- 4 Connect the CD-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 CD-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.
  - ◆ 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

i Do not install DOS Driver when the program of Windows 95 is going on.  
(Remark CD-ROM Driver in the state of Config. Sys.)

- 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        | <ul style="list-style-type: none"><li>◆ Type <b>a</b>: at the DOS prompt</li><li>◆ Press the RETURN key</li></ul>   |
| Windows user    | <ul style="list-style-type: none"><li>◆ Access the File Manager</li><li>◆ Click on the <b>A</b> icon.</li></ul>   |
| Windows 95user  | <ul style="list-style-type: none"><li>◆ 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.</li><li>◆ Click on <b>MY COMPUTER</b> icon.</li><li>◆ Click on the <b>A</b> icon.</li></ul> |
- 4 Run the CDSETUP program:

| If you are a... | Then :  |
|-----------------|---|
| DOS user        | <ul style="list-style-type: none"><li>◆ Type <b>CDSETUP</b> after the <b>a</b>: prompt</li><li>◆ Press RETURN</li></ul> |
| Windows user    | Double-click <b>CDSETUP.EXE</b> from the Windows File Manager   |
- 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 (mscdex.exe and sscdrom.sys)
  - ◆ 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

# Resolving Technical Problems

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

| Problem  | Meaning / Solution  |  |          |                  |                  |                                     |   |
|--|---|--|----------|------------------|------------------|-------------------------------------|---|
| The software installation failed   | <ul style="list-style-type: none"> <li>◆ Check that your hard disk is not full</li> <li>◆ The installation floppy disk may be corrupted. Repeat the installation with the backup floppy disk.</li> </ul>  |  |          |                  |                  |                                     |   |
| 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 CD-ROM icon does not display.   | <table border="1"> <thead> <tr> <th>If you have installed the CD-ROM drive ...</th> <th>Then ...</th> </tr> </thead> <tbody> <tr> <td>And the software</td> <td>Re-boot your PC.</td> </tr> <tr> <td>And have not installed the software</td> <td>Install the software following the instructions on page 5</td> </tr> </tbody> </table>  | If you have installed the CD-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 |
|  | If you have installed the CD-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 CD-ROM drive icon/directory still does not appear. | <ul style="list-style-type: none"> <li>◆ When the program of Windows 95 is broken up, re-stall it as the computer can not read the program anymore.</li> <li>◆ 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)</li> <li>◆ Verify your AUTOEXEC. BAT file. Go to page 6 for the verification procedure.</li> <li>◆ Check the LASTDRIVE = command in the CONFIG. SYS file. The specified letter must take the CD-ROM volume into account. If you do not know which letter is assigned to the CD-ROM, enter Z.</li> <li>◆ Using the documentation provided with your PC, check that the IDE hard disk is set up in MASTER mode.</li> </ul> |  |          |                  |                  |                                     |   |

# Technical Specifications

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

| SECTIONS              |                          | SC-140   | SC-148        |
|-----------------------|--------------------------|--|---------------|
| DISC                  | Disc types supported     | CD-DA, CD-ROM Mode-1, CD-ROM XA Mode-2 Form-1, Form-2, CD-Plus, CD-Extra, Photo-CD(Single, Multi-session), Video CD ready, Enhanced CD, CD-I/FMV, CD-R |               |
|                       | Disc diameter            | 12cm or 8cm  |               |
| DRIVE PERFORMANCE     | Data transfer rate       | Max. 6000KB/s  | Max. 7200KB/s |
|                       |                          | PIO Mode - 4. DMA MW2(option), Ultra DMA   |               |
|                       | Access time (1/3 stroke) | 80ms(typical)  | 70ms(typical) |
|                       | Data buffer capacity     | 128KB  |               |
|                       | Laser                    | Semiconductor Laser  |               |
|                       | Slide mechanism          | Gear motor   |               |
|                       | Spindle motor            | Brushless motor  |               |
|                       | Loading type             | Tray Loading, DC motor(Soft Eject)   |               |
| ERROR RATE            |                          | Mode-1 : 1block / 10 bits, Mode-2 : 1 block/10 bits <sup>-1</sup>  |               |
| FRONT PANEL           | Button                   | PLAY(Open/Close)   |               |
|                       | Indicator(LED)           | Busy   |               |
|                       | Headphone output         | Stereo Mini - jack (Ø 3.6 mm) 0.60 ± 20% (Vrms) 33Ω  |               |
|                       | Volume control           | Dial type  |               |
| REAR PANEL            | Required power           | +5V DC 1.7A,<br>+12V DC 1.0A (Max)   |               |
|                       | Interface connector      | ATAPI  |               |
|                       | Audio output             | Line out 0.70 ± 20%(Vrms), 47kΩ  |               |
|                       | Jumper block             | Device configuration jumper  |               |
| OPERATING ENVIRONMENT | Work area                | Temperature : 5~45 °C, Humidity : 8~80%  |               |
|                       | Storage area             | Temperature : -40~60 °C, Humidity : 5~90%  |               |
| GENERAL               | Dimensions               | 149(W) x 42.5(H) x 200(D)mm<br>(Including bezel)   |               |
|                       | Net weight               | 950g   |               |
| RELIABILITY           | MTBF                     | 125,000 POH(Duty 25%)  |               |
|                       | Disc compartment loading | 30,000 times   |               |