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# Safety Precautions

## Notational

The following are basic precautions to ensure user safety and reduce the risk of property damage. Please read this carefully and follow the precautions at all times for proper use of the device.



### Warning / Caution

- Warning** : This symbol indicates explanations about extremely dangerous matters. If users ignore this symbol and handle the device the wrong way, serious injury or death could result.
- Caution** : This symbol indicates explanations about dangerous matters. If users ignore this symbol and handle the device the wrong way, damage to home or property could result.

### Notational

	Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.
	Prohibited
	Important to read and understand at all times
	Do not disassemble

■	Any change or modification not expressly approved by designated qualified personnel could void your authority to operate this device.
■ ■	Always make sure that the disc does not have a crack before use. If the disc has a crack (especially around the center hole), it is recommended to make a copy immediately and use the copy instead. When a cracked disc is used continuously, the size of the crack is likely to grow and this will eventually result in irreparable damage to the disc.
■ ■	Important to read and understand at all times.

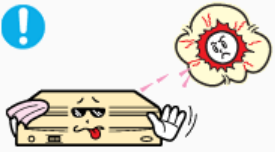
# Safety Precautions

## Installation

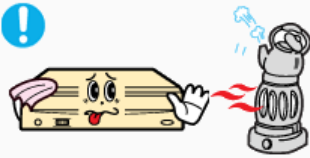
### When you install the drive



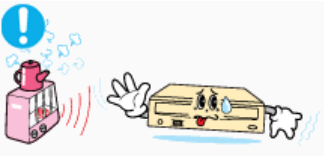
- Place the drive on a level surface.
- Failure to do so may cause the device to fall onto a hard surface, resulting in damage or malfunction.



- Do not place the drive in direct sunlight.



- Avoid low- or high-temperature environments.

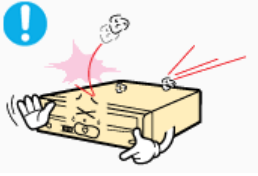


- Avoid high-humidity environments.

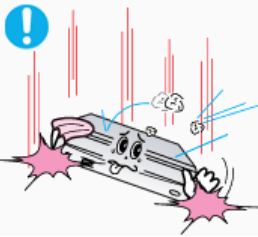
## Safety Precautions

### While Operating

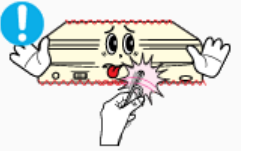
#### While Operating



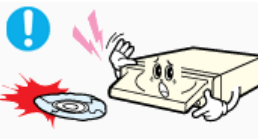
- ❖ Handle with caution to prevent damage from external shock.



- ❖ Do not drop the drive, and protect it from severe shocks.
  - It can damage the drive or cause it to malfunction.



- ❖ Do not move the drive while in operation and do not attempt to open the disc tray by force.
  - Make sure to close all working programs before attempting to open the tray and always use the open/close button.
  - Do not insert a pin into the emergency opening while in operation.



- ❖ Do not use cracked, distorted or damaged discs.
  - In particular, a disc with a crack on the inner tracks may break while in use.

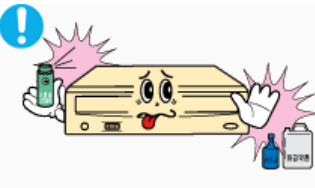
## Safety Precautions

### Other

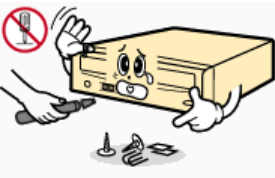
#### Other



- Never allow food particles or foreign substances to enter the drive casing.



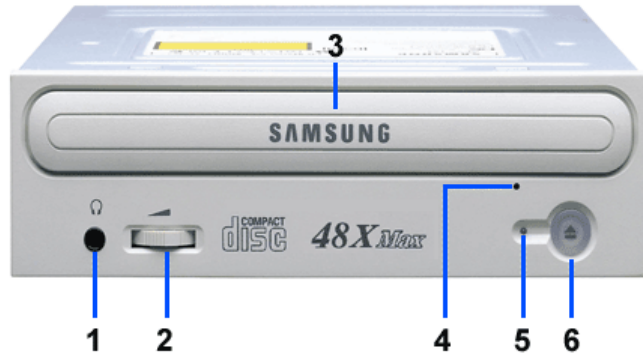
- To protect against the risk of fire, do not spill such liquids as alcohol and benzene on the drive.



- Do not disassemble, attempt to repair or modify the device without express approval as directed in the manual.
- To reduce the risk of damage, electric shock, and fire,

# Introduction

## Front



**1. Headphone Connector**

The sound output terminal enables you to plug stereo headphones into the drive. It requires a 3.6 mm stereo mini-jack.

**2. Headphone volume control**

This headphone volume control 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. Disc compartment**

The compartment opens and closes automatically when you press the Eject button.

**4. Emergency eject hole**

If the compartment does not open when you press the Eject button, power off the computer, insert a pin or unfolded paper clip in the hole and push firmly)

**5. LED**

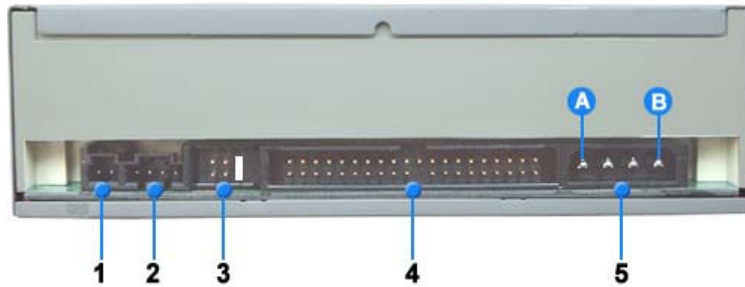
**6. Eject Button**



**Design and specifications are subject to change without prior notice.**

# Introduction

## Rear



**1. Digital output terminal**

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

**2. Sound output terminal**

You can connect a sound card to your drive using this four-pin terminal.  
This function is not covered in detail in this guide. Refer to the documentation supplied with your sound card.

**3. Master/slave select terminal**

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. Interface terminal**

This input/output interface terminal is used to connect the 40-pin flat cable from the IDE interface to the CD-ROM drive.

**5. Power terminal**

The power terminal is a four-conductor male plug.  
(A : +5V DC)  
(B : +12V DC)

## Setup

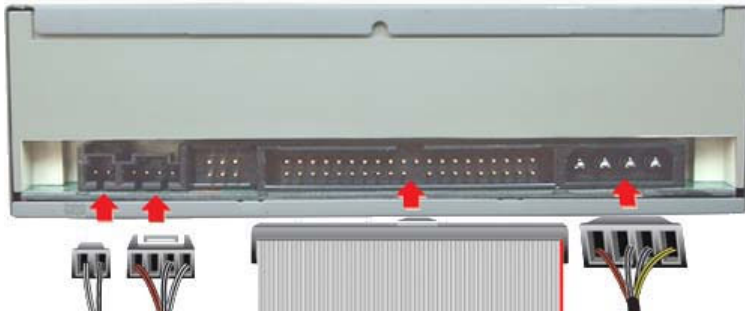
### ● Installing the CD-ROM Drive

To install your CD-ROM Drive in the PC, proceed as follows.



1. Make sure that the PC is powered off and disconnected from any power source.
2. If necessary, attach a horizontal bracket to both sides of the drive.
3. Remove the cover from a free expansion slot and install the CD-ROM drive, as shown in the illustration.

### ● Connecting the Cables

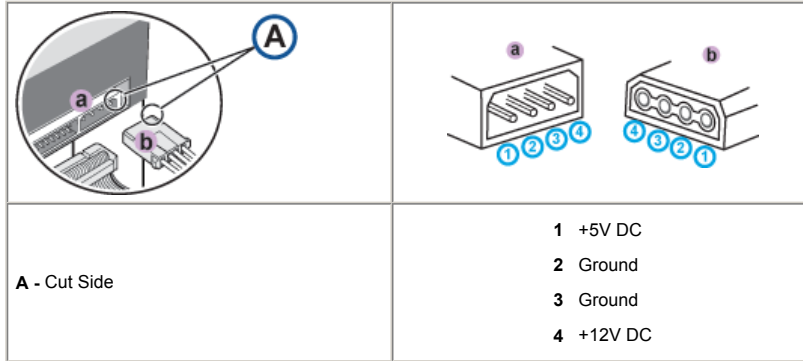




# Setup

## 1. Connecting the power cable

- ✦ The 4-pin power cable from the internal power unit of your computer must be connected to the power terminal on the rear of the CD-ROM drive.



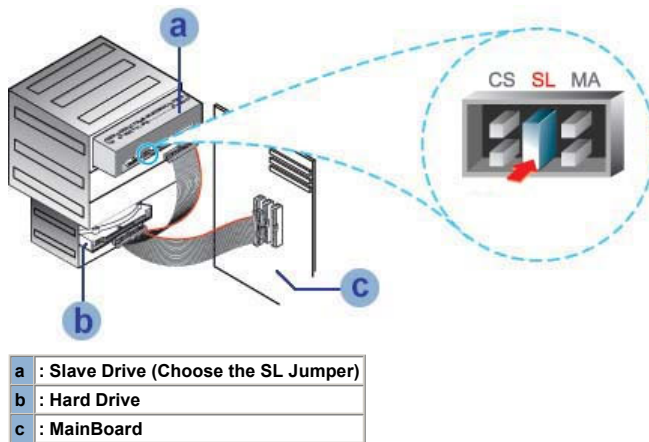
**Note:** An improperly connected power cable may cause trouble. Check the direction of the power connector and the incline side of the CD-ROM drive before connecting.

## 2. Connecting the IDE cable

Insert the IDE cable (40-pin), which is connected to the hard disk to the interface terminal. (Place the red line of the cable close to the Pin 1.)

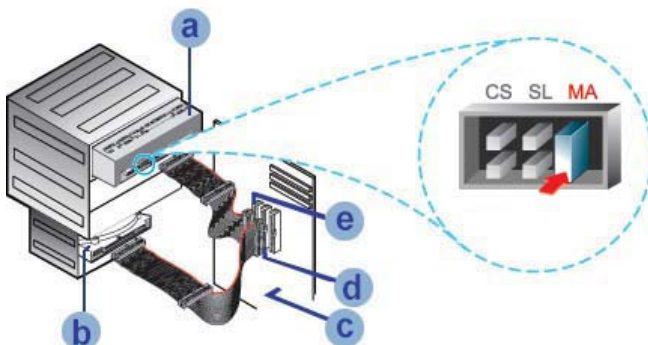
### • When using one IDE cable

Connect the cable to the SL (Slave) of the Master/Slave Select Terminal at the rear of the CD-ROM drive.



### • When using two IDE cable

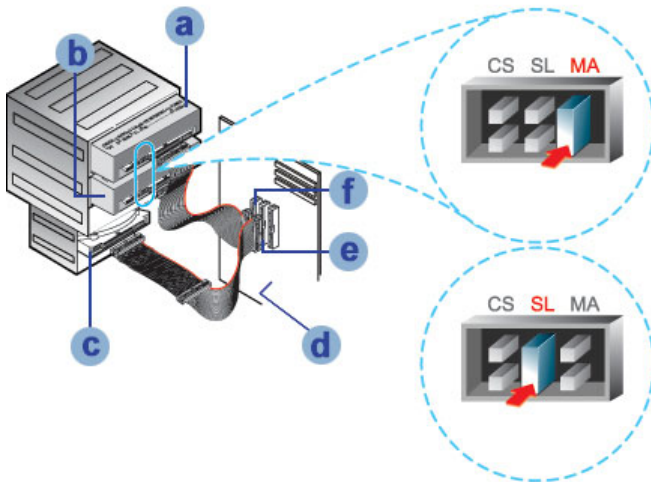
- ✦ If there is only one CD-ROM drive, select MA (Master).



# Setup

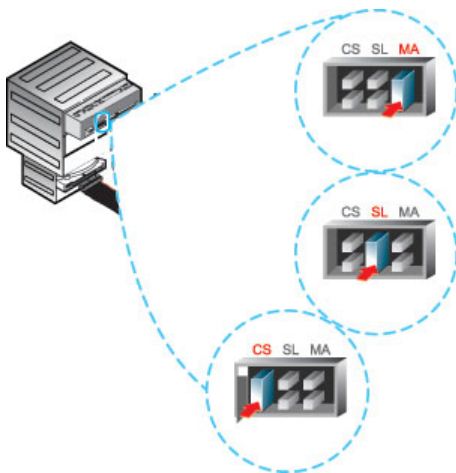
a : Master Drive (Choose the MA Jumper)	b : Hard Drive
c : MainBoard	d : Primary 1
e : Secondly 1	

- ✦ If there is two CD-ROM drive, select MA (Master) / SL (Slave).



a : Master Drive (Choose the MA Jumper)	b : Slave Drive (Choose the SL Jumper)
c : Hard Drive	d : MainBoard
e : Primary 1	f : Secondly 1

### 3. Installing a jumper on the master/slave select terminal



Connect a jumper to the rear side of the CD-ROM.

If the jumper is connected to MA (Master), it will work in the Master mode.

If the jumper is connected to SL (Slave), it will work in the Slave mode.

If the jumper is connected to CS (CSEL), you can control the device by using the host interface signal CSEL. (In general, connection to MA is recommended.)

### 4. Connecting the audio cable from a sound card

- ✦ Connect the 4-pin audio cable between the sound output terminal on the CD-ROM drive and the audio input terminal on the sound card.
- ✦ For clearer sound, use a digital output terminal. (Available only for the CAID that supports digital output) This may not be available for general sound cards.

# Setup

## ● Installing the Device Driver

No additional device driver is needed for Windows 95/98/2000/ME/XP/NT4.0, as the default Windows device driver is used. You can check that the CD-ROM drive has been correctly detected by Windows. To do so, proceed as follows.

1. Double-click on the **My Computer** icon on your desktop.
2. Double-click on the **Control Panel** folder.
3. Double-click on the **System** icon.
4. Click on the Device **Manager** tab.
5. Expand the CD-ROM branch.  
The **SAMSUNG CD-ROM SC - \*\*\*** device name is displayed.

## ● Setting Up the Device Driver

### > Automatic Setup

The device driver is located in the Ddriver folder of the User's guide disc which is provided in the package.

1. Insert the setup diskette in the diskette drive and change the directory to A:, where A: is the diskette drive.  
To do so, type **A:** after the **C:\** prompt and press **[Enter]**.
2. Type **CDSETUP** and press **[Enter]**.
3. Reboot the computer.

### > Manual Setup

1. Make the **C:\SAMSUNG** directory.
2. Copy the files from the diskette to the **C:\SAMSUNG** directory.  
To do so, type **COPY D:\Ddriver \* . \* C:\SAMSUNG** after the **C:\** prompt and press **[Enter]**.
3. Edit the **CONFIG.SYS** file.  
Add the **DEVICE=C:\SAMSUNG\SSCDROM.SYS \D:SSCD000/V** entry.

```
LAST DRIVE = Z
.....
DEVICE = C:\SAMSUNG\SSCDROM.SYS \D:SSCD000/V
```

4. Edit the **AUTOEXEC.BAT** file.  
Add the **C:\SAMSUNG\MSCDEX/D:SSCD000** entry.

```
.....
C:\SAMSUNG\MSCDEX /D:SSCD000
```

5. Reboot the computer.

## Using the Drive

### ● Using the CD-ROM Drive

To play audio or video CDs in your CD-ROM drive, proceed as follows.



1. Push the power button and boot the computer.
2. After booting the computer, open the disc compartment by pressing the Eject button.
3. Insert the disc (CD) with the label on the disc facing upwards and close the disc compartment by pressing the Eject button. The indicator light comes on.
4. Play the disc (CD).
5. Accessories
  - The type of accessories varies depending on product model.



Audio cable.



User Manual & Setup Guide.



Screws.



Device Driver.

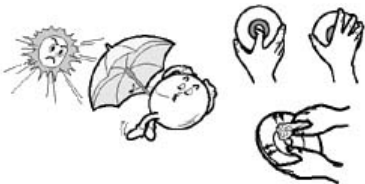
#### Playing Audio CDs

Run the CD player supplied with Windows or your sound card.

You can listen to the CD by connecting hearphone to the earphone connector. If you have installed the appropriate player, such as Microsoft Windows Media Player, you can adjust the volume using the headphone volume control on the drive front panel.

### ● Storing and Cleaning Your Discs

To ensure a long service life for your discs and drive, follow the pre-cautions below when storing and cleaning your discs.



1. Do not place a disc in direct sunlight.
2. Store a disc vertically in a well-ventilated and stable location.
3. Do not write or attach a label on a disc.
4. Do not drop a disc or place heavy objects on it.
5. Do not touch the surface of a disc; hold it by the edges.
6. To clean a disc, polish lightly from the inside of the disc to the outside with a soft cotton cloth.
7. Do not leave the disc compartment open when you are not using it.

## Using the Drive

### ● Upgrading the Firmware Flash Memory

The product firmware can be upgraded by downloading the updated file from the following Web site:

<http://samsung-ODD.com>

<http://samsung.com>

### ● System Requirements

Before you install the CD-ROM drive, we strongly recommend that you check that your setup meets the system requirements listed below.

Item	Description
Type of computer	Intel Pentium II 166MHz(or higher), 16 MB of RAM (or higher) with an IDE interface
Free expansion unit	5.25 inch
Disk space	100MB minimum
MS-DOS version	5.0(or higher)
Windows version	Windows 95 / 98 / 2000 / ME / XP Windows NT 4.0 (or higher)

## Troubleshooting

Problem	Meaning / Solution
<p>The CD-ROM drive is not detected by the computer.</p> <p>After installing the CD-ROM drive, the PC gets slower.</p>	Check that the power, audio and IDE cables are correctly connected to the computer.
	Change the IDE cable and reconnect it to the computer. Preferably, connect a second IDE cable to the CD-ROM drive in master mode.
	Check the position of the jumper in the master/slave select terminal.
<p>The CD-ROM drive is not recognized by MS-DOS.</p>	<p>Reinstall the device driver or update it with the latest version by downloading it from the Samsung Web site.</p> <p>- <a href="http://samsung-ODD.com">http://samsung-ODD.com</a></p> <p>- <a href="http://samsung.com">http://samsung.com</a></p>
<p>The CD-ROM drive is not detected by Windows.</p>	<p>This case may occur when there is a Windows installation problem; reinstall Windows.</p>
<p>No sound is heard from an audio CD.</p>	Check whether the audio cable is correctly connected to the sound output terminal on the CD-ROM drive and the sound card CD-IN terminal.
	Check that the sound card is operational.
	Adjust the volume control.
	Run the CD player supplied with Windows or your sound card. You can listen to the CD by connecting headphones to the appropriate connector. If you have installed the appropriate player, such as Microsoft Windows Media Player, you can adjust the volume using the headphone volume control on the drive front panel.
	If you select DIGITAL at CD Audio Play in Media Player of Windows ME/XP, the earphone does not appear in the Digital Mode.
<p>A CD is not read or is read too slowly.</p>	Check whether the CD is of good quality and clean it, if necessary.
<p>The disc compartment will not open.</p>	Check that the power cable is correctly connected.
	Power off and disconnect the PC. Insert a pin or unfolded paper clip in the emergency hole and push firmly until the disc compartment opens.
<p>When the MPEG software plays a Video CD, the pictures are not regular and the running speed is too slow.</p>	Adjust the size of the replay screen.
	After checking the display resolution, adjust it, if necessary.
<p>The Disc is not in message is displayed even though a disc has been inserted.</p>	The computer may not recognize the disc if you start playback too quickly after inserting the disc. Open and close the disc compartment and try again.
	Clean the disc and try again.
<p>The CD-ROM drive is not detected after it is connected to a sound card.</p>	<p>The interface mode of the sound card is AT-BUS. You must therefore connect the CD-ROM drive to the IDE port on the PC mother board, rather than to the sound card, or install an IDE compatible sound card.</p>

# Specifications



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

## ● Technical Specifications

ITEM	
<b>Model Name</b>	SC-148A
<b>Disc</b>	
<b>Disc types supported in read mode</b>	CD-DA, CD-ROM Mode-1, CD-ROM XA Mode-2 Form-1, Form-2, Photo-CD(Single, Multi-session), Video CD ready, CD-Plus, CD-Extra, Enhanced CD, CDI/FMV, CD-R/RW
<b>Disc diameter</b>	120mm or 80mm
<b>DRIVE PERFORMANCE</b>	
<b>Data transfer rate</b>	
48X / Max. 7800KB/s	
PIO Mode 4, DMA MW2, Ultra DMA (Option)	
<b>ACCESS TIME(typical)</b>	90ms(typical)
<b>Data Buffer capacity</b>	128KB
<b>Laser</b>	Semiconductor laser
<b>Slide mechanism</b>	Gear motor
<b>Spindle motor</b>	Brushless motor
<b>Load mechanism</b>	Tray, DC motor(Soft Eject)
<b>ERROR RATE</b>	
Mode-1 : 1block / $10^{12}$ bits, Mode-2 : 1block / $10^9$ bits	
<b>FRONT PANEL</b>	
<b>Eject button</b>	Auto eject or Auto inject
<b>Indicator(LED)</b>	POWER ON/BUSY
<b>Headphone output</b>	Stereo mini-jack (Ø3.6mm) $0.60 \pm 20\%$ (Vrms) 33 ohm
<b>Volume control</b>	Wheel type
<b>REAR PANEL</b>	
<b>Required power</b>	+5VDC, 1.3A, +12VDC, 1.5A
<b>Interface connector</b>	ATAPI
<b>Audio output</b>	Line out $0.7 \pm 20\%$ (Vrms) : 47Kohm
<b>Jumper block</b>	Molex 70203 or other compatible models
<b>OPERATING ENVIRONMENT</b>	
<b>Operations</b>	Temperature: 5~45°C Humidity: 10~80%
<b>Storage</b>	Temperature: -25~60°C Humidity: 10~90%
<b>GENERAL</b>	
<b>Dimensions</b>	148.2(W) x 42(H) x 184(D)mm
<b>Net weight</b>	740g (set only)
<b>RELIABILITY</b>	
<b>MTBF</b>	125,000 POH(Duty 20%)