SAMSUNG

LCD MONITOR

quick start guide

245BPLUS

The color and appearance of the product may vary depending on the model, and the product specifications are subject to change without prior notice for reasons of performance enhancement.

■ Safety Precautions   ■ Introduction   ■ Connections   ■ Using the Software
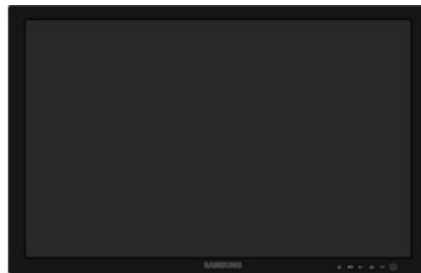■ Adjusting the Monitor   ■ Troubleshooting   ■ Specifications   ■ Information

○ Introduction

Package Contents   Your Monitor

▶ Package Contents

Please make sure the following items are included with your monitor.
If any items are missing, contact your dealer.
Contact a local dealer to buy optional items.
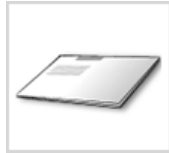
▶ Unpacking

▷ Without Stand

Monitor

▷ With Stand

Monitor & Sliding Stand

▶ Manual

Quick Setup Guide	Warranty Card (Not available in all locations)	User's Guide, Monitor Driver, Natural Color, MagicTune™

▶ **Cable**
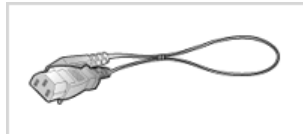
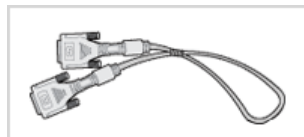|	
Power Cord	D-sub Cable

▶ **Sold separately**

DVI Cable

▶ **Others**

Cleaning Cloth

※ This is only provided for highly polished black products as a product feature.

▶ **Speaker package(option)**

Speaker

Your Monitor

▶ **Front**

❶	MENU button [MENU]	Opens the on-screen menu and exits from the menu.
❷	MagicBright™ button [▲▼]	MagicBright™ is a new feature providing optimum viewing environment depending on the contents of the image you are watching. Currently seven different modes are available: Custom, Text, Internet, Game, Sport and Movie, Dynamic Contrast. Each mode has its own pre-configured brightness value. You can easily select one of seven settings by simply pressing MagicBright™ control button.

1) Custom
Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste.
If this is the case, adjust the brightness and contrast by using the OSD menu.

2) Text
For documentations or works involving heavy text.

3) Internet
For working with a mixture of images such as texts and graphics.

4) Game
For watching motion pictures such as a game.

5) Sport
For watching motion pictures such as a sport.

6) Movie
For watching motion pictures such as a DVD or Video CD.

7) Dynamic Contrast
Dynamic Contrast is to automatically detect distribution of inputted visual signal and adjust to create optimum contrast.

>> Click here to see an animation clip

❸	Brightness button [☼]	When OSD is not on the screen, push the button to adjust brightness. >> Click here to see an animation clip ※ Not available in MagicBright mode of Dynamic Contrast.
❷❸	Adjust buttons [▼/▲]	Adjust items in the menu.

④	Enter button [▣] / Source button	Activates a highlighted menu item. / Push the '▣', then selects the video signal while the OSD is off. (When the ▣ button is pressed to change the input mode, a message appears in the upper left of the screen displaying the current mode -- analog or digital input signal.)

※ If you select the digital mode, you must connect your monitor to the graphic card's DVI IN(HDCP) port using the DVI cable.
>> Click here to see an animation clip

⑤	AUTO button	Use this button for auto adjustment.

>> Click here to see an animation clip

⑥	Power button [⏻]	Use this button for turning the monitor on and off.
	Power indicator	This light glows blue during normal operation, and blinking blue once as the monitor saves your adjustments.

※ See PowerSaver described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.

▶ Rear

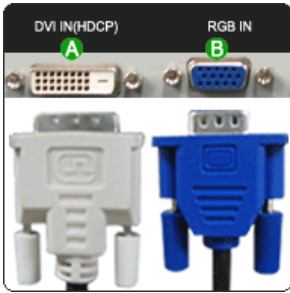※ The configuration at the back of the monitor may vary from product to product.

❶ POWER S/W / POWER

Ⓐ POWER S/W
: Switches the monitor On/Off.
Ⓑ POWER
: Connect the power cord for your monitor to the POWER on the back of the monitor.

❷ DVI IN(HDCP) / RGB IN

Ⓐ DVI IN(HDCP)
: Connect the DVI cable to the DVI IN(HDCP) port on the back of your monitor.

B RGB IN
: Connect the RGB IN terminal at the back of your monitor to your computer.

3 AUDIO POWER

- Connect the speaker power line connected to the speaker to the AUDIO POWER terminal of the monitor

4 Kensington Lock

- The Kensington lock is a device used to physically fix the system when using it in a public place.
  (The locking device has to be purchased separately.)
  ※ For using a locking device, contact where you purchase it.

5 Stand Stopper

- Remove the fixing pin on the stand to lift the monitor up and down.

※ See Connecting Cables for further information regarding cable connections.
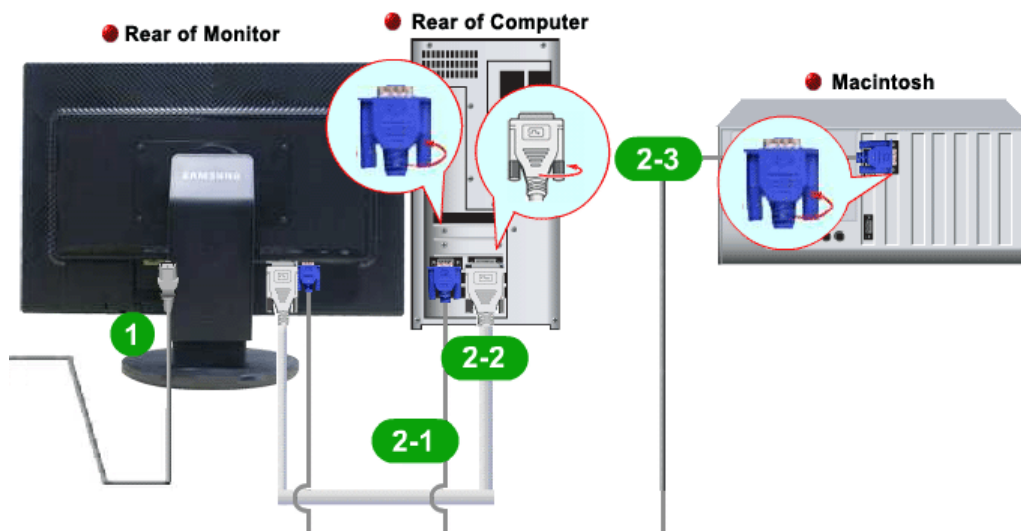
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⭘ Connections

Connecting Cables   Using the Stand

▶ Connecting Cables

●   Connect the power cord for your monitor to the POWER port on the back of the monitor.
Plug the power cord for the monitor into a nearby outlet.

❷   Use appropriate connection for your computer.

2-1 Using the RGB (Analog) connector on the video card.
- Connect the signal cable to the 15-pin, RGB IN port on the back of your monitor.

[RGB IN]

2-2 Using the DVI (Digital) connector on the video card.
- Connect the DVI cable to the DVI IN(HDCP) port on the back of your monitor.
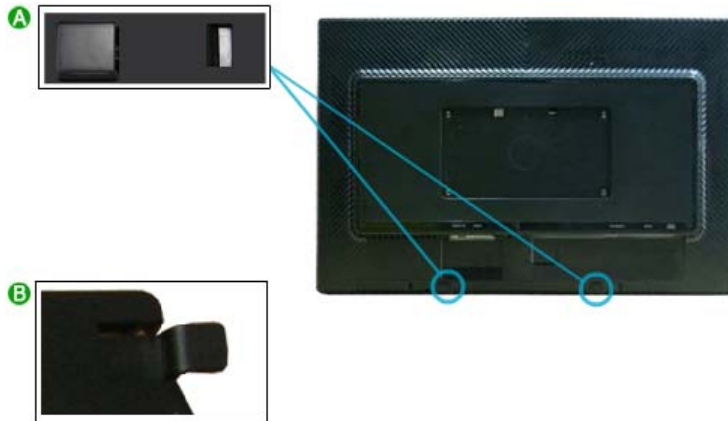
[DVI IN(HDCP)]

2-3 Connected to a Macintosh.
Connect the monitor to the Macintosh computer using the RGB connection cable.

※ If the monitor and the computer are connected, you can turn them on and use them.

▶ **Connecting a Speaker**

※ When connecting a speaker, be careful that the grooves of the monitor and the speaker .
   (**A**)are aligned with each other.
   Adjust the aligned positions until you hear a 'click'. If a speaker is connected correctly,
   you can hear a 'click'.If a speaker is connected without you hearing a 'click', the holding
   part may become damaged.
※ If you need to separate, please pull (**B**) a little and push to the right.

❶ MIC / SPK

   A Connect the red cable of the cables provided when the speaker was purchased to the audio
   output terminal at the back of the computer.
   Connect the other end of the cable to the red terminal at the back of the speaker.

   B Connect the light green cable of the cables provided when purchasing the speaker to the
   audio output terminal at the back of the computer.
   Connect the other end of the cable to the light green terminal at the back of the speaker.

❷ ⌒ / ⎗

   C Connect a headphone to the black terminal at the right of the speaker.

   D Connect a microphone to the red terminal at the right of the speaker.

③ By turning part (+ , -) in the direction shown in the figure below, the speaker turns on and the volume increases.

④ Connect the power line connected to the speaker to the black terminal of the monitor.
This speaker is not connected to an external power source. It is connected to a monitor for the required power.
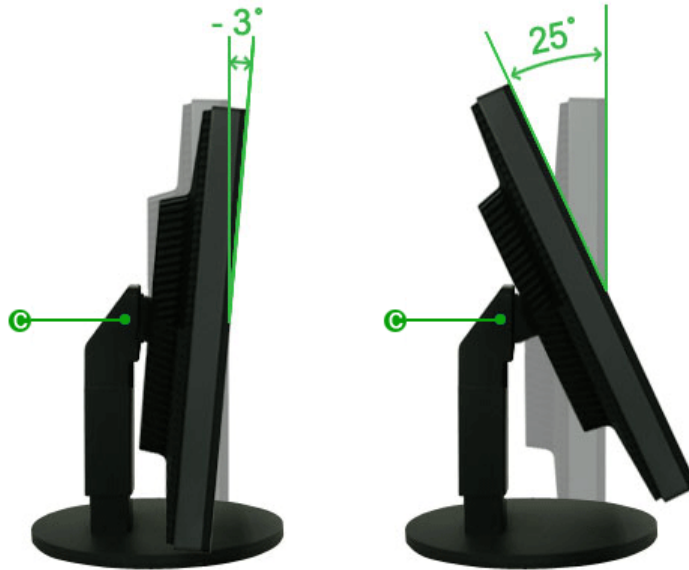
▶ Using the Stand

▷ Sliding stand

Ⓐ Stand Stopper

▷ Swivel stand

※ Using (Ⓑ),You can swivel the monitor left and right at an angle of 350° to set the monitor lengthwise. The rubber under the stand is to avoid the monitor slide.
※ When you try to rotate the monitor in the state of the power cord or cable connecting to the monitor, the power cord of cable can be destroyed.

◘ Tilt angle

※ Using (**C**), You can adjust the tilt anlgle within a range of 3° forward to 25° backward for the most comfortable viewing angle.

◘ Attaching a Base

※ This monitor accepts a 200 mm x 100 mm VESA-compliant Mounting interface pad.

A Monitor

B Mounting interface pad (Sold separately)

1. Turn off your monitor and unplug its power cord.
2. Lay the LCD monitor face-down on a flat surface with a cushion beneath it to protect the screen.
3. Remove four screws and then remove the stand from the LCD monitor.

4. Align the mounting interface Pad with the holes in the rear cover mounting pad and secure it with four screws that came with the arm-type base, wall mount hanger or other base.

    ※
    - Do not use screws longer than the standard dimension, as they may damage the inside of the Monitor.
    - For wall mounts that do not comply with VESA standard screw specifications, the length of the screws may differ depending on their specifications.
    - Do not use screws that do not comply with the VESA standard screw specifications.
      Do not fasten the screws too tightly, as this may damage the product or cause the product to fall, leading to personal injury.
      Samsung is not liable for these kinds of accidents.
    - Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.

    ※
    - To mount the monitor on a wall, you should purchase the wall mounting kit that allows you to mount the monitor at least 10cm away from the wall surface.
    - Contact the nearest Samsung Service Center for more information. Samsung Electronics will not be responsible for damages caused by using a base other than those specified.
    - **Please use Wall Mount according to the International standards.**

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○ Troubleshooting

Check List   Q & A   Self-Test

▶ Check List

Before calling for service, check the information in this section to see
if you can remedy any problems yourself. If you do need assistance,
please call the phone number on the Information section or contact your dealer.

Symptom	Check List	Solutions
No images on the screen. I cannot turn on the monitor.	Is the power cord connected properly?	Check the power cord connection and supply.
	Can you see "Check signal cable" on the screen?	(Connected using the D-sub cable) Check the signal cable connection. (Connected using the DVI cable) If you still see an error message on the screen when the monitor is connected properly, check to see if the monitor status is set to analog. Press '▣' button to have the monitor double-check the input signal source.
	If the power is on, reboot the computer to see the initial screen(the login screen), which can be seen.	If the initial screen (the login screen) appears, boot the computer in the applicable mode (the safe mode for Windows ME/XP/2000) and then change the frequency of the video card. (Refer to the Preset Timing Modes) If the initial screen (the login screen) does not appear, contact the Service Center or your dealer.
	Can you see "Not Optimum Mode", "Recommended Mode 1920 x 1200 60 Hz" on the screen?	You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can handle properly. Adjust the maximum resolution and frequency that the monitor can handle properly. If the display exceeds SXGA or 75 Hz, a "Not Optimum Mode", "Recommended Mode 1920 x 1200 60 Hz" message is displayed. If the display exceeds 85 Hz, the display will work properly but the "Not Optimum Mode", "Recommended Mode 1920 x 1200 60 Hz" message appears for one minute and then disappears. Please change to the recommended mode during this one-minute period. (The message is displayed again if the system is rebooted.)
	There is no image on the screen. Is the power	The monitor is in PowerSaver mode. Press a key on the keyboard to activate the monitor and

	indicator on the monitor blinking at 1 second intervals?	restore the image on the screen. If there is still no image, press the '⌷' button. Then press any key on the keyboard again to activate the monitor and restore the image on the screen.
	Connected using the DVI cable?	You may get a blank screen if you boot the system before you connect the DVI cable, or disconnect and then reconnect the DVI cable while the system is running as certain types of graphic cards do not send out video signals. Connect the DVI cable and then reboot the system.
I cannot see the On Screen Display.	Have you locked the On Screen Display (OSD) Menu to prevent changes?	Unlock the OSD by pressing the [MENU] button for at least 5 seconds.
The screen shows strange colors or just black and white.	Is the screen displaying only one color as if looking at the screen through a cellophane paper?	Check the signal cable connection. Make sure the video card is fully inserted in its slot.
	Have the screen colors become strange after running a program or due to a crash between applications?	Reboot the computer.
	Has the video card been set properly?	Set the video card by referring to the video card manual.
The screen suddenly has become unbalanced.	Have you changed the video card or the driver?	Adjust screen image position and size using the OSD.
	Have you adjusted the resolution or frequency to the monitor?	Adjust the resolution and frequency at the video card. (Refer to the Preset Timing Modes).
	The screen can be unbalanced due to the cycle of the video card signals. Readjust Position by referring to the OSD.	
The screen is out of focus or OSD cannot be adjusted.	Have you adjusted the resolution or frequency on the monitor?	Adjust the resolution and frequency of the video card. (Refer to the Preset Timing Modes).
LED is blinking but no images on the screen.	Is the frequency properly adjusted when checking the Display Timing on the menu?	Adjust the frequency properly by referring to the video card manual and the Preset Timing Modes. (The maximum frequency per resolution may differ from product to product.)
There are only 16 colors shown on the screen. The screen colors have changed after changing the video card.	Have the Windows colors been set properly?	Windows XP : Set the resolution at the Control Panel → Appearance and Themes → Display → Settings. Windows ME/2000 : Set the resolution at the Control Panel → Display → Settings.
	Has the video card been set properly?	Set the video card by referring to the video card manual.
There is a message that	Have you installed the monitor driver?	Install the monitor driver according to the Driver Installation Instructions.

reads "Unrecognized monitor, Plug & Play (VESA DDC) monitor found".	See the video card manual to see if the Plug & Play (VESA DDC) function can be supported.	Install the monitor driver according to the Driver Installation Instructions.
Check when MagicTune™ does not function properly.	MagicTune™ feature is found only on PC (VGA) with Window OS that supports Plug and Play.	* To check whether your PC is available for MagicTune™ feature, follow the steps below (When Windows is XP); Control Panel → Performance and Maintenance → System → Hardware → Device Manager → Monitors → After deleting Plug and Play monitor, find 'Plug and Play monitor' by searching new Hardware. MagicTune™ is an additional software for the monitor. Some graphic cards may not support your monitor. When you have a problem with the graphic card, visit our website to check the compatible graphic card list provided. http://www.samsung.com/monitor/magictune
MagicTune™ doesn't work properly.	Have you changed your PC or video graphic card?	Download the latest program. The program can be downloaded http://www.samsung.com/monitor/magictune
	Did you install the program?	Reboot the computer after installing the program for the first time. If a copy of the program is already installed, remove it, reboot the computer, and then install the program again. You need to reboot the computer for it to operate normally after installing or removing the program.

※ Visit the MagicTune™ website and download the installation software for MagicTune™ MAC.

▣ **Check the following items if there is trouble with the monitor.**

▶ Check if the power cord and the video cables are properly connected to the computer.

▶ Check if the computer beeps more than 3 times when booting.
(If it does, request an after-service for the main board of the computer.)

▶ If you installed a new video card or assembled the PC, please check if the adapter(video) driver and the monitor driver are properly installed.

▶ Check if the scanning ratio of the video screen is set at 56 Hz ~ 75 Hz.
(Do not exceed 60 Hz when using the maximum resolution.)

▶ If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the "Control Panel → System → Device Administrator" and then reboot the computer to reinstall the adapter (video) driver.

※ If problems repeatedly occur, contact an authorized service center.

Check List   Q & A   Self-Test

▣ **Q & A**

Question	Answer
How can I change the frequency?	Frequency can be changed by reconfiguring the video card. Note that video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)
How can I adjust the resolution?	Windows XP : Set the resolution at the Control Panel → Appearance and Themes → Display → Settings.

	Windows ME/2000 : Set the resolution at the Control Panel → Display → Settings. ※ Contact the video card manufacturer for details.
How can I set the Power Saving function?	Windows XP : Set the resolution at the Control Panel → Appearance and Themes → Display → Screen Saver. Set the function at BIOS-SETUP of the computer. Windows ME/2000 : Set the resolution at the Control Panel → Display → Screen Saver. Set the function at BIOS-SETUP of the computer. ※ Refer to Windows/Computer Manual
How can I clean the outer case/LCD Panel?	Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water. Do not leave any remains of the detergent nor scratch the case. Do not allow any water to go inside the monitor.

Check List   Q & A   Self-Test

▶ Self-Test

Self-Test Feature Check | Warning Messages | Environment | Useful Tips

> Your monitor provides a self test feature that allows you to check whether your monitor is functioning
> properly.

▶ Self-Test Feature Check 🔺

1 Turn off both your computer and the monitor.

2 Unplug the video cable from the back of the computer.

3 Turn on the monitor.

   If the monitor is functioning properly, you will see a box in the illustration below.

   This box appears during normal operation if the video cable becomes disconnected or damaged.

4 Turn off your monitor and reconnect the video cable; then turn on both your computer and the
   monitor.

   If your monitor screen remains blank after using the previous procedure, check your video controller
   and computer system; your monitor is functioning properly.

▶ Warning Messages 🔺

   If there is something wrong with the input signal, a message appears on the screen or the screen
   goes blank although the power indicator LED is still on. The message may indicate that the monitor is
   out of scan range or that you need to check the signal cable.

Not Optimum Mode
Recommended Mode : 1920 x 1200 60Hz

?

Analog
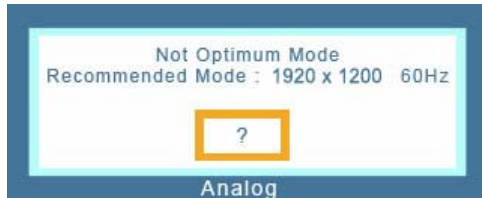
Environment 🔺

- The location and the position of the monitor may influence the quality and other features of the monitor.

  ▶ If there are any sub woofer speakers near the monitor, unplug and relocate the woofer to another room.
  Remove all electronic devices such as radios, fans, clocks and telephones that are within 3 feet (one meter) of the monitor.

Useful Tips 🔺

- A monitor recreates visual signals received from the computer. Therefore, if there is trouble with the computer or the video card, this can cause the monitor to become blank, have poor coloring, noise, Video mode not supported, etc. In this case, first check the source of the problem, and then contact the Service Center or your dealer.

- Judging the monitor's working condition

  If there is no image on the screen or a "Not Optimum Mode", "Recommended Mode 1920 x 1200 60 Hz" message comes up, disconnect the cable from the computer while the monitor is still powered on.

  ▶ If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition.
  ▶ In this case, check the computer for trouble.