



LCD MONITOR

quick start guide

T200HD / T220HD

Introduction

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



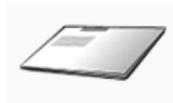
Monitor

With stand



Monitor

Manuals



Quick Setup Guide



Warranty Card



User's Guide

(Not available in all locations)

Cables



D-Sub Cable



Power Cord

Sold separately



DVI Cable



HDMI Cable



Headphones

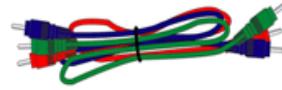
Sold separately



Stereo Cable



TV Antenna Cable
(Coaxial Cable)



Component(P_R, P_B, Y) Cable



Audio cable



Digital audio optic output cable



USB Cable

Others



Remote Control
BN59-00678A



Batteries (AAA X 2)
(Not available in all locations)



Cleaning Cloth



Cable holding ring



Stand Body



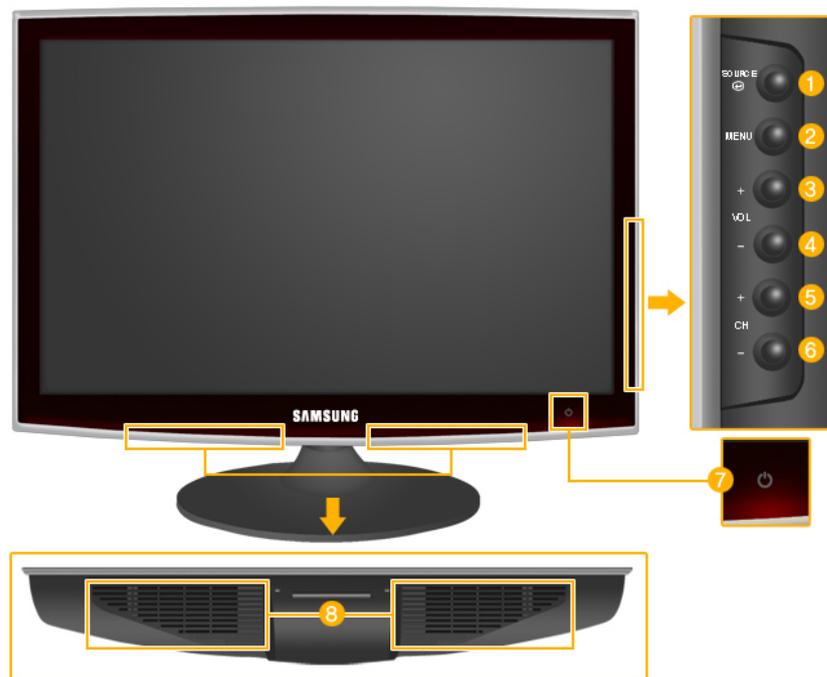
Stand Base

 **Note**

Cleaning Cloth is only provided for highly polished black products as a product feature.

Your Monitor

Front



1 SOURCE

Activates a highlighted menu item.

Push the **SOURCE** button to change the input signal source.

Changing the source is only allowed for external devices connected to the product at the time.

To switch Screen modes:

[PC] → [DVI] → [TV] → [Component] → [HDMI1] → [HDMI2]

>> Click here to see an animation clip

2 MENU

Use this button to open the on-screen menu and to exit from the on-screen menu or to close the screen adjustment menu.

3,4 - VOL+

Moves from one menu item to another horizontally or adjusts selected menu values. Adjusts the audio volume.

5,6 - CH +

Moves from one menu item to another vertically or adjusts selected menu values. In TV/DTV mode, selects TV/DTV channels.

7 Power button [⏻]

Use this button for turning the product on and off.

 **Note**

The buttons to the right of the monitor are touch-sensitive buttons.

Touch a button lightly with your finger.

Power indicator

This light is lit when operating normally, and blinks once when your adjustments are saved.

 **Note**

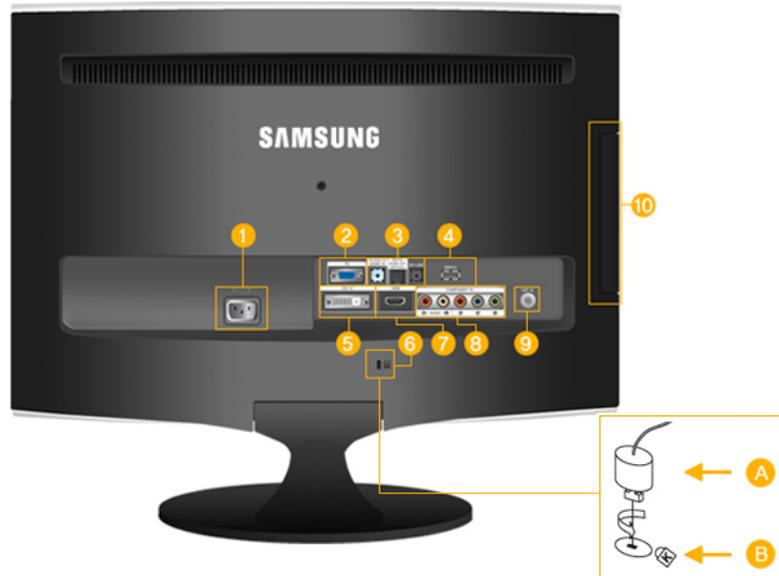
See PowerSaver described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed or when leaving it unattended for long periods.

8 *Speaker*

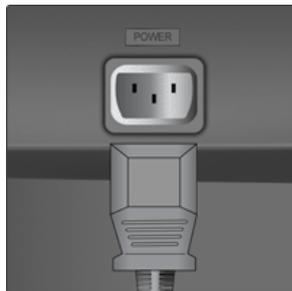
Rear

 **Note**

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



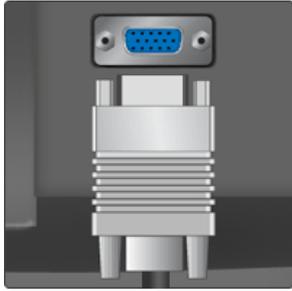
1 *POWER*



 *POWER*

Connect the power cord for your monitor to the *POWER* port on the back of the product.

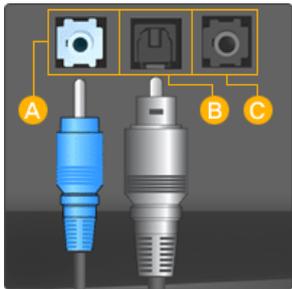
2 *PC*



PC

Connect the *PC* terminal at the back of your monitor to your computer.

3 *PC/DVI-D AUDIO IN / DIGITAL AUDIO OUT(OPTICAL) / EX-LINK*



A *PC/DVI-D AUDIO IN*

Connect the [*PC/DVI-D AUDIO IN*] terminal at the back of your product to your computer's sound card.

B *DIGITAL AUDIO OUT(OPTICAL)*

Connect the [*DIGITAL AUDIO OUT(OPTICAL)*] terminal of your product to the digital sound output or standard sound output terminal of the DVD home theater (or amplifier) using a digital audio optical output cable.

C *EX-LINK*

This is a reserved terminal used for servicing.

4 *SERVICE*



SERVICE

This is a reserved terminal used for servicing.

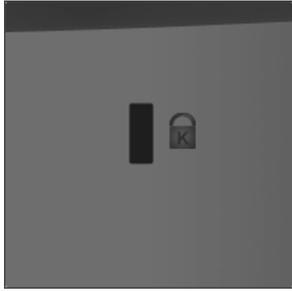
5 *DVI-D*



DVI-D

Connect the DVI cable to the *DVI-D* port on the back of your product.

6  *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. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for proper use. The locking device has to be purchased separately.



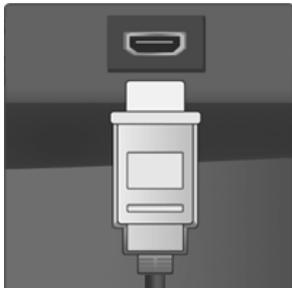
Note

The location of the Kensington Lock may be different depending on its model.

Using the Anti-Theft Kensington Lock

1. Insert the locking device into the Kensington slot on the Monitor (**B**) and turn it in the locking direction (**A**).
2. Connect the Kensington Lock cable.
3. Fix the Kensington Lock to a desk or a heavy stationary object.

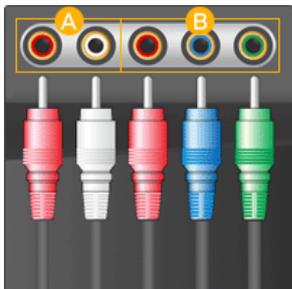
7 *HDMI IN 1*



B *HDMI IN 1*

Connect the [HDMI IN 1] terminal at the back of your monitor to the HDMI terminal of your digital output device using a HDMI cable.

8 *COMPONENT IN*



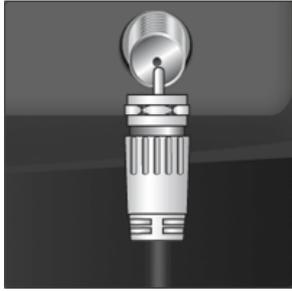
A *R - AUDIO - L*

Connect the port of the DVD, VCR (DVD / DTV Set-Top Box) to the [*R - AUDIO - L*] port of the product.

B *P_R, P_B, Y*

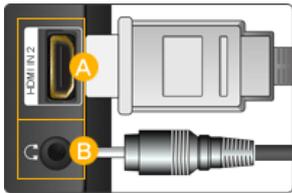
Connect the VIDEO OUT port of the DVD / DTV Set-Top Box to the [*P_R, P_B, Y*] input ports using a component video cable (*P_R, P_B, Y*).

9 *ANT IN*



• Connect the CATV cable or TV antenna cable to the "ANT IN" port on the rear side of the product. Make sure to use a TV antenna cable (sold separately) as the antenna cable.

10 HDMI IN 2 / 



A HDMI IN 2

Connect the [HDMI IN 2] terminal at the back of your product to the HDMI terminal of your digital output device using a HDMI cable.

B 

Connect your headphones to the Headphone connection terminal.

 **Note**

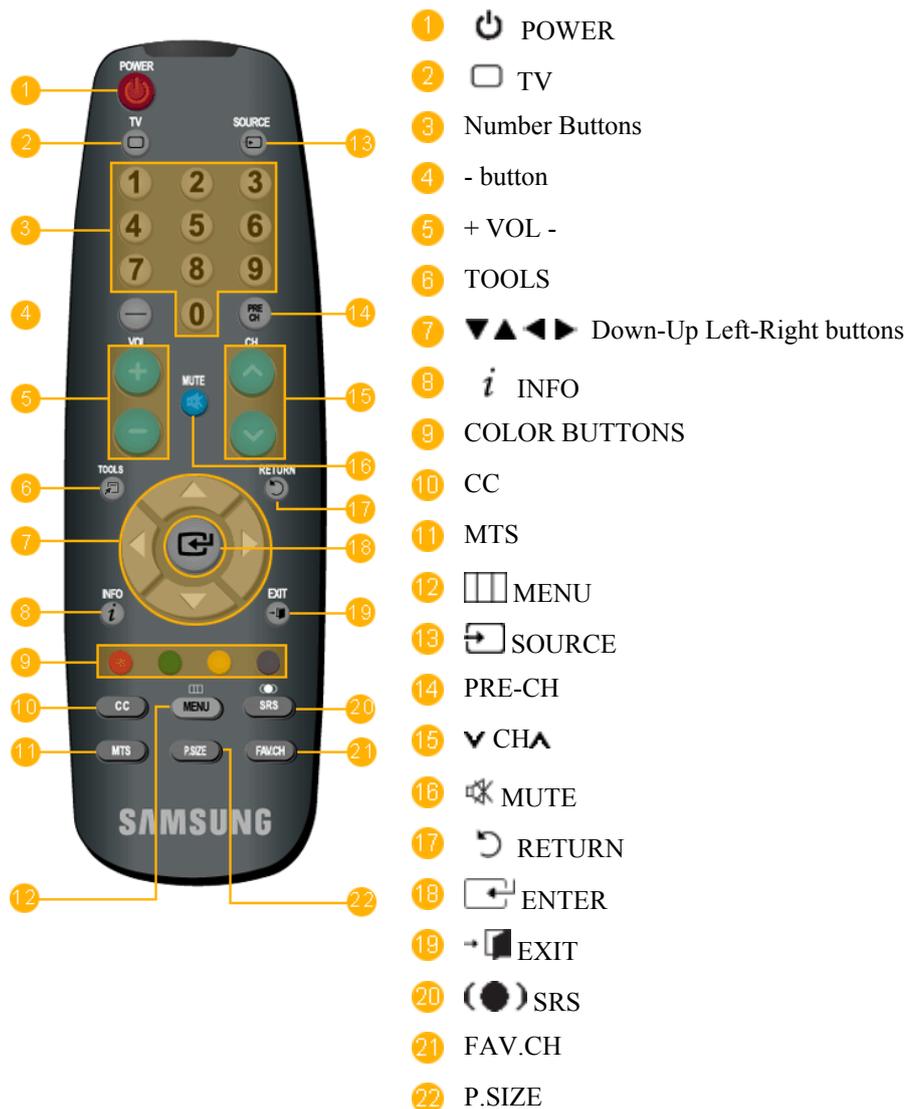
See Connecting Cables for further information regarding cable connections.



Cable holding ring

- Fix the cables using the holding ring, as shown in the figure.

Remote Control



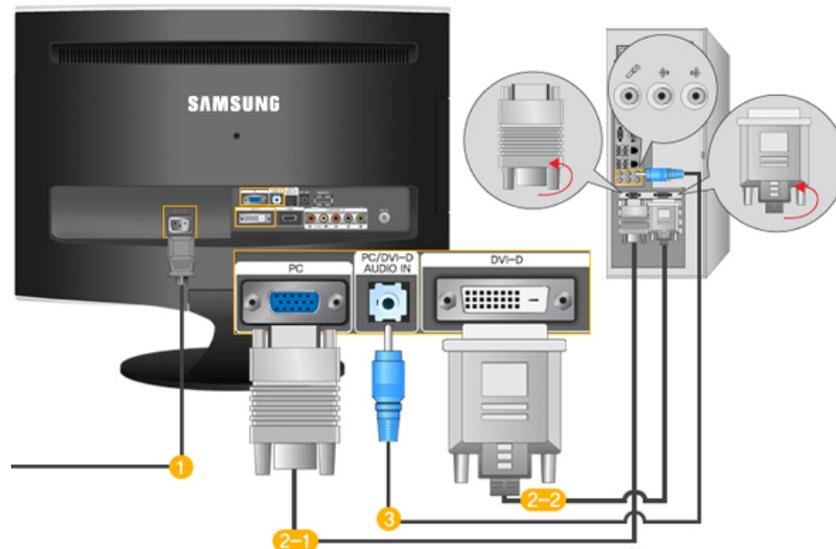
- | | |
|--------------------------------|--|
| 1. POWER | Turns the product On/Off. |
| 2. TV | Selects the TV mode directly. |
| 3. Number Buttons | Press to change the channel. |
| 4. - button | The "-" button operates only for DTV. It is used to select MMS (multi-channel) for a DTV. |
| 5. + VOL - | Adjusts the audio volume. |
| 6. TOOLS | Use to quickly select frequently used functions. |
| 7. Down-Up Left-Right buttons | Moves from one menu item to another horizontally, vertically or adjusts selected menu values. |
| 8. <i>i</i> INFO | Current picture information is displayed on the upper left corner of the screen. |
| 9. COLOR BUTTONS | Press to add or delete channels and to store channels to the favorite channel list in the "Channel List" menu. |
| 10. CC | Controls the caption decoder. |

11. MTS You can select the MTS (Multichannel Television Stereo) mode.
Mono, Stereo, SAP (Separate Audio Program)
Set 'MTS' to ON to choose **Mono, Stereo** or **SAP**.
12.  MENU Opens the on-screen menu and exits from the menu or closes the adjustment menu.
13.  SOURCE Press the button to change the input signal SOURCE. Changing the SOURCE is only allowed for external devices that are connected to the monitor at the time.
14. PRE-CH This button is used to return to the immediately previous channel.
15.  VCHA In **TV** mode, selects TV channels.
16.  MUTE Adjusts the audio volume.
18.  RETURN Returns to the previous menu.
17.  ENTER Activates a highlighted menu item.
19.  EXIT Exits from the menu screen.
20.  SRS Not Available.
21. FAV.CH Press to switch to your favorite channels.
22. P.SIZE Press to change the screen size.
PC / DVI mode : **Wide / 4:3**
TV / Component mode : **Wide / 16:9 / Zoom1 / Zoom2 / 4:3**
HDMI mode : **Wide / 16:9 / Wide Fit / 4:3 / Just Scan**
-

Connections

Connecting Cables

Connecting to a Computer



1 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.

2 Use a connection appropriate for your computer.

2-1 Using the D-sub (Analog) connector on the video card.

- Connect the signal cable to the [PC] port on the back of your monitor.



2-2 Using the DVI (Digital) connector on the video card.

- Connect the DVI Cable to the [DVI-D] Port on the back of your Monitor.



3 Connect the [PC/DVI-D AUDIO IN] port on the rear side of the monitor to the sound card of the PC.

 **Note**

- You may enjoy clear and quality sound from the computer sound card using the monitor speakers. (You don't need to install any separate speakers for your computer.)
 - You may get a blank screen depending on the type of video card you are using, if you connect simultaneously both the D-sub and DVI cables to one computer.
-

- If you connect properly your monitor using the DVI connector but get a blank or fuzzy screen, check to see if the monitor status is set to analogue. Press 'SOURCE []' button to have the monitor double-check the input signal source.

Connecting to a Macintosh



1. Using the D-sub (Analog) connector on the video card.

- Connect the signal cable to the D-SUB port on the back of your monitor.



 **Note**

Turn on the monitor and Macintosh.

Connecting to Other devices

 **Note**

- This monitor allows the user to connect it to such input devices as a DVD player, a VCR or cam-corder, or a DTV or TV without disconnecting the PC.
- The configuration at the back of the monitor may vary from product to product.
- The DVI to HDMI cable, digital audio optic output cable, and RCA to stereo (for PC) cable are all sold separately. Contact a Service Center to purchase any products sold separately.

Connecting TV

 **Note**

You may view television programs on the monitor if it is connected to an antenna or CATV cable without installing any separate TV reception hardware or software on your computer.



1. Connect the CATV cable or TV antenna cable to the "ANT IN" port on the rear side of the monitor.
Make sure to use a TV antenna cable (sold separately) as the antenna cable.
 - *When using an interior antenna terminal:*
Check the antenna terminal on the wall first and connect the antenna cable.
 - *When using an outdoor antenna:*
If you are using an outdoor antenna, use a professional for installation if possible.
 - *To connect the RF cable to the antenna input terminal:*
Keep the copper wire portion of the RF cable straight.
2. Turn on the monitor.
3. Select TV using the TV / DTV.
4. Select a desired TV channel.

 **Note**

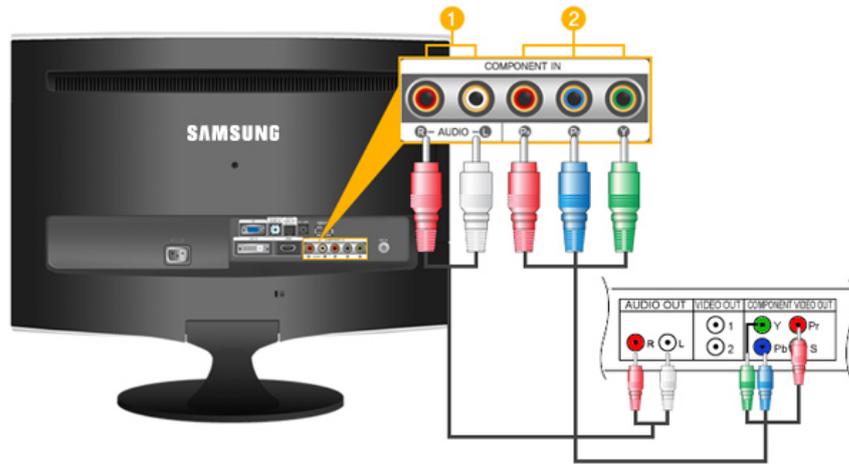
Is weak signal causing poor reception?

Purchase and install a signal amplifier for better reception.

Connecting DVD / DTV Set Top Box

 **Note**

Connect to the DVD / DTV Set Top Box input if the device has a [COMPONENT IN] connector. You can watch Component simply by hooking up the Component with the monitor as long as the power is on.



1 Connect the port of the DVD, VCR (DVD / DTV Set-Top Box) to the [R-AUDIO-L] port of the monitor.

2 Connect the VIDEO OUT port of the DVD / DTV Set-Top Box to the [P_R, P_B, Y] input ports using a component video cable (P_R, P_B, Y).

 **Note**

Select "Component" using the 'SOURCE [

If you connect the P_R, P_B, and Y component cables to the incorrect terminals, the screen will be displayed in red or blue.

For single-family houses, install an UHF antenna to receive digital broadcasting.

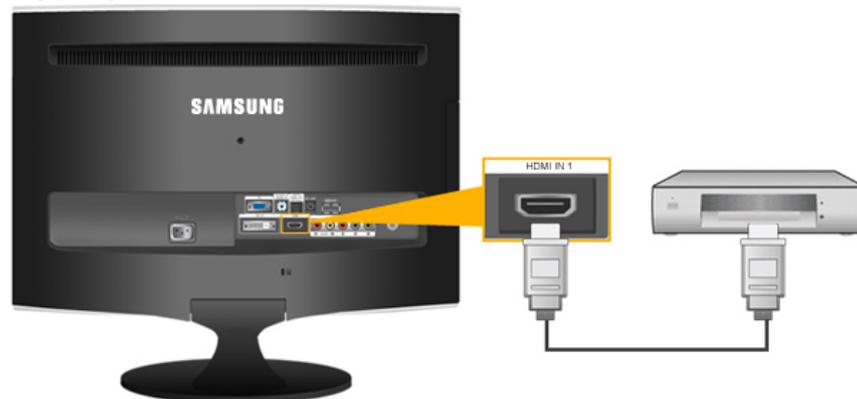
Connecting HDMI

 **Note**

You can connect digital output devices to your monitor.

You can enjoy better screen and sound quality.

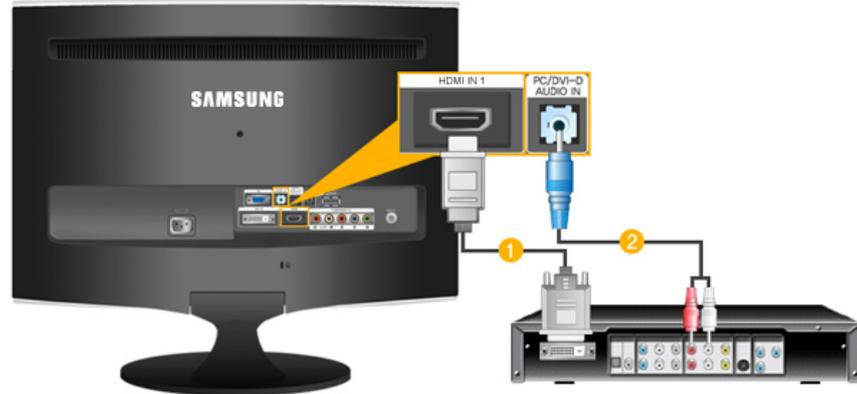
1. Connecting Using a HDMI Cable



- Input devices such as digital DVD are connected to the [HDMI IN 1] terminal of the monitor using the HDMI cable. When all the connections are completed, connect the power cords for the monitor and DVD(or the device connected to the digital output terminal).

Select **HDMI** using the 'SOURCE [

2. Connecting Using a DVI to HDMI Cable



1 Connect the DVI output terminal of a digital output device to the [HDMI IN 1] terminal of the monitor using a DVI to HDMI cable.

2 Connect the red and white jacks of an RCA to stereo (for PC) cable to the same colored audio output terminals of the digital output device, and connect the opposite jack to the [PC/DVI AUDIO IN] terminal of the monitor.

3. When all the connections are completed, connect the power cords for the monitor and DVD (or the device connected to the digital output terminal).

4. Select "HDMI" using the 'SOURCE []' button.

 **Note**

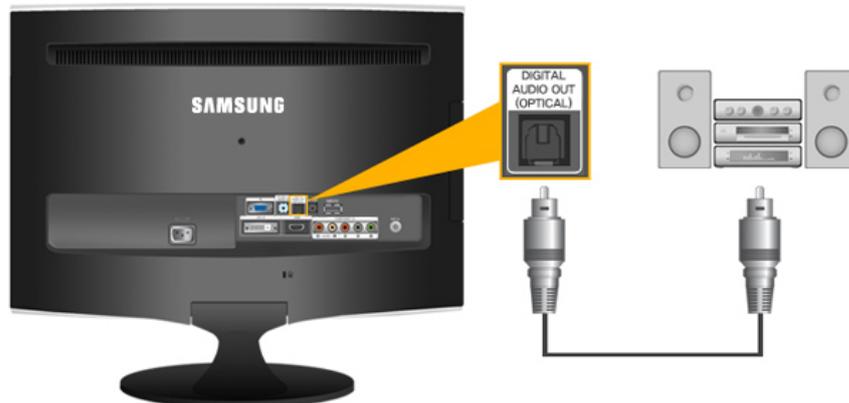
If you just connect using the DVI to HDMI cable without connecting to the sound source, you cannot hear sound.

Connecting the audio output terminal of a digital device to the [R-AUDIO-L] of [COMPONENT IN] of the monitor using an audio cable will not give you sound. Make sure to connect to the [PC/DVI AUDIO IN] terminal of the monitor.

Connecting and Using an Amplifier

 **Note**

You can connect the digital sound input (optical) or standard sound input terminal of your amplifier to your monitor using the correct cable.



1. Connect the [DIGITAL AUDIO OUT (OPTICAL)] terminal of your monitor to the digital sound input terminal of your digital amplifier using an optical cable.

2. Set the Internal Mute On in the Sound menu using the MENU button.
3. Adjust the sound volume using the Volume button of your amplifier.
4. If the connections are set up, power up your monitor and amplifier.

 **Note**

- If no sound is emitted from the monitor, you need to use an amplifier.
- For information on how to connect a speaker and amplifier, refer to the respective user manuals provided by their manufacturers.

Connecting Headphone

 **Note**

You may connect your headphones to the monitor.



- Connect your headphones to the Headphone connection terminal.

Using the Stand

Monitor Assembly



Monitor and Bottom

Tilt angle



 **Note**

You can tilt the monitor upwards at an angle of -1° to 21° .

Troubleshooting

Self-Test Feature Check

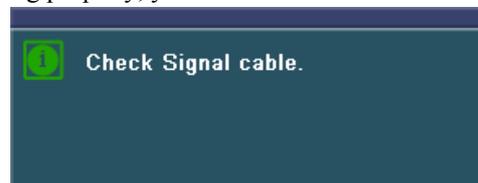


Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly.

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.*

Not Optimum Mode

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.



Refer to Specifications > Preset Timing Modes for the resolutions or frequencies that are supported by the monitor.

Maintenance and Cleaning

1. Maintaining the Monitor Case.

Clean with a soft cloth after disconnecting the power cord.



- Do not use benzene, thinner or other flammable substances, or a wet cloth.
- We recommend a Samsung cleansing agent is used to prevent damage to the screen.

2. Maintaining the Flat Panel Display Screen.

Clean with a soft cloth (cotton flannel) smoothly.



- Never use acetone, benzene or thinner.
(They may cause flaws or deformation of the screen surface.)
- The user will be required to pay costs and related expenses for repair of damages caused by improper cleaning and usage.

Symptoms and Recommended Actions



Note

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 a service center or your dealer.

1. Check if the power cord and the video cables are properly connected to the computer.
2. 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.)

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

4. 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.)

5. 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.

Check List



Note

Before calling for assistance, 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.

1. Problems related to Installation



Note

Problems related to the monitor installation and their solutions are listed.

PC Mode

- Q: It appears the PC does not function normally.
- A: Check if the Display Adapter Driver (VGA Driver) is properly installed. (Refer to Installing Driver)
- Q: The monitor screen flickers.
- A: Check if the signal cable between the computer and the monitor is securely connected and tightened. (Refer to Connecting the monitor)

TV Mode

- Q: TV screen is blurred or shows noise signals.
- A: Check if the TV antenna connector is securely connected to the external antenna. (Refer to Connecting TV)
- Q: TV signal is not received
- A: Select "**Auto Program**" to configure the channel system automatically. (Refer to the Auto Program)

2. Problems related to Screen



Note

Problems related to the monitor screen and their solutions are listed.

- Q: Screen is blank and power indicator is off
- A: Ensure that the power cord is firmly connected and the LCD monitor is on. (Refer to the Connecting the monitor)
- Q: "**Check Signal Cable**" message
- A: Ensure that the signal cable is firmly connected to the PC or video SOURCES. (Refer to the Connecting the monitor)
- A: Ensure that the PC or video SOURCES are turned on.
- Q: "**Not Optimum Mode**" message
- A: Check the maximum resolution and the frequency of the video adapter.
- A: Compare these values with the data in the Preset Timing Modes Chart.
- Q: Picture rolls vertically.
- A: Check if the signal cable is securely connected. Connect it again securely. (Refer to Connecting the monitor)
- Q: Image is not clear. Picture is blurred.
- A: Run Frequency Coarse and Fine tuning.
- A: Turn on again after removing all accessories (video extension cable, etc.)
- A: Set resolution and frequency to the recommended ranges.
-

Q: Picture image is unstable and vibrates.

Ghost images are shown in the picture.

A: Check if the resolution and frequency set for the computer video card falls in the range supported by the monitor. If not, reset them referring to the current Information under the monitor menu and Preset Timing Modes.

Q: The image is too light or too dark

A: Adjust the **Brightness** and **Contrast**. (Refer to the Brightness, Contrast)

Q: The Power Indicator blinks.

A: The monitor is currently saving the changes made in settings to the OSD memory.

Q: The screen is blank and the power indicator light blinks every 0.5 or 1 seconds.

A: The monitor is using its power management system.

A: press a key on the keyboard.

Q: The screen is blank and is blinking.

A: If you see the "TEST GOOD" message on the screen when you press the MENU button, check the cable connection between the monitor and the computer to ensure that the connector is properly connected.

3. Problems related to Audio



Note

Problems related to audio signals and their solutions are listed below.

Q: No sound

A: Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card. (Refer to the Connecting the monitor)

A: Check the volume level. (Refer to the Volume)

Q: The sound level is too low.

A: Check the volume level. (Refer to the Volume)

A: If the volume is still too low after turning the control to its maximum, check the volume control on the computer sound card or software program.

4. Problems related to Remote Control



Note

Problems related to the remote control and their solutions are listed.

Q: The remote control buttons do not respond.

A: Check the battery polarities (+/-).

A: Check if the batteries have been exhausted.

A: Check if the power is on.

A: Check if the power cord is securely connected.

A: Check if a special fluorescent or neon lamp is on in the vicinity

5. You may see small particles if you look closely at the edge of the bezel surrounding the screen.

This is part of the product's design and is not a defect.

Q & A

Q: How can I change the frequency?

A: The frequency can be changed by reconfiguring the video card.

A: 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.)

Q: How can I adjust the resolution?

A: Windows XP:

Set the resolution in the Control Panel → Appearance and Themes → Display → Settings.

A: Windows ME/2000:

Set the resolution in the Control Panel → Display → Settings.

* Contact the video card manufacturer for details.

Q: How can I set the Power Saving function?

A: Windows XP:

Set the resolution in the Control Panel → Appearance and Themes → Display → Screen Saver.

Set the function in the BIOS-SETUP of the computer. (Refer to the Windows / Computer Manual).

A: Windows ME/2000:

Set the resolution at the Control Panel → Display → Screen Saver.

Set the function in the BIOS-SETUP of the computer. (Refer to the Windows / Computer Manual).

Q: How can I clean the outer case/LCD Panel?

A: 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 detergent or scratches on the case. Do not let any water enter the monitor.

Q: What are the benefits of digital broadcasting?

A: Digital TV broadcasting generates less noise and provides clearer visuals and sound than analog TV broadcasting does. As services develop, you can also enjoy various information services because various kinds of data besides video and audio can be sent.

A: For example, while watching a sports game, you can view various data on your favorite player or you can view all or selected screens which have been captured from different angles for a

specific scene. In addition, you can retrieve information on a previous story or drama or you can buy home shopping products such as an accessory currently on TV.

Digital TV broadcasting allows you to easily access various information services in your home creating a more information-oriented home.

Q: What is the difference between HDTV and SDTV?

A: There are various types of digital TVs.

A: The most widely known types of digital TV are HDTV and SDTV. They are classified according to the screen quality and the video specifications.

- HDTV (High Definition TV): High screen quality, very clear TV.
- SDTV (Standard Definition TV): Common standard digital TV.

A: An SDTV has an aspect ratio of 4:3 which is the same as that of an analog TV. HDTV has an aspect ratio of 16:9 which is similar to a cinema screen. This provides a much better screen quality than SDTV. It's like having a theater in your home.

A: Digital TV broadcasting in our country is ultimately orientated towards HDTV.

Q: Can I watch HD broadcasting with all digital TVs?

A: You can receive all digital broadcasts, whether they are SD or HD, using any digital TV. However, you cannot enjoy HD programs, which are the highest quality digital TV programs, using an SD digital TV. Especially, as SD broadcasting has an aspect ratio of 4:3, HD broadcasting has an aspect ratio of 16:9, similar to a cinema screen. Therefore, to enjoy the full benefits of digital TV, it is better to purchase an HD digital TV. (At present, all digital TVs from Samsung Electronics have the 16:9 wide aspect ratio.)

Q: Can I watch digital TV broadcasting with an analog TV?

A: No.

A: The analog TV cannot interpret digital signals. Therefore, a digital TV is required to watch digital TV broadcasting.

Q: Can I use my present antenna to receive digital broadcasting?

A: As for existing analog TV, digital TV is designed so that digital broadcasting signals are received via both indoor and outdoor antennas.

A: If signal reception is very good in your environment, you can watch digital broadcasts with your existing indoor antenna. If not, it is better to install an outdoor UHF antenna.

Q: How do I connect an antenna for an apartment or tenement house?

A: Consult the superintendent's office or broadcasting facility administrator for your apartment or tenement house to check whether UHF reception is available.

A: Even if digital TV broadcasting is available in your area, if you cannot watch it because the superintendent's office or common broadcasting facility does not rebroadcast the signal, you have to install an indoor or outdoor antenna.

A: Alternatively, your local cable broadcasting company provides a digital TV service, and you can subscribe to it.

- A: If a cable broadcasting company is sharing a common broadcasting facility for your apartment or tenement house, it has to adjust and send digital TV signals so that they are compatible to shared viewing which is the original purpose of the common broadcasting facility.