



SyncMaster 320PX



[Install Programs](#)

[PDF Manuals](#)

[Registration](#)

MDC System

Safety Instructions

Introduction

Connections

Using the Software

Adjusting the LCD Display

Troubleshooting

Specifications

Information

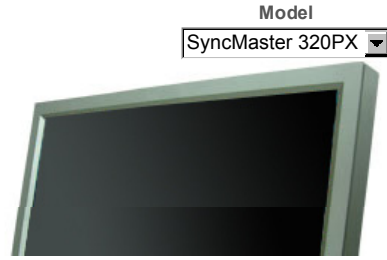
Appendix



- Safety Instructions
- Notational
- Power
- Installation
- Clean
- Others
- Introduction
- Connections
- Using the Software
- Adjusting the LCD Display
- Troubleshooting
- Specifications
- Information
- Appendix

SyncMaster

www.samsung.com




Model
SyncMaster 320PX

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 Instructions

Notational

 Please read the following safety instructions as they are designed to prevent damage to property and harm to the user.

Warning / Caution



Failure to follow directions noted by this symbol could result in bodily harm or damage to the equipment.

Notational Conventions



Prohibited



Important to read and understand at all times



Do not disassemble



Disconnect the plug from the outlet



Do not touch



Ground to prevent an electric shock

Power



When not used for an extended period of time, set your computer to DPMS. If using a screen saver, set it to active screen mode.


[Shortcut to Anti-Afterimage Instructions](#)



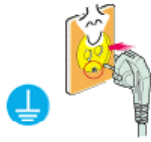
 **Do not use a damaged or loose plug.**

- This may cause electric shock or fire.



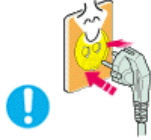
 **Do not pull the plug out by the wire nor touch the plug with wet hands.**

- This may cause electric shock or fire.



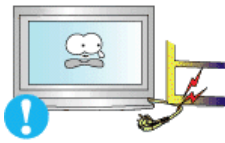
▶ **Use only a properly grounded plug and receptacle.**

- An improper ground may cause electric shock or equipment damage.



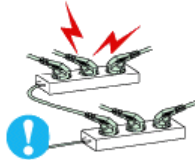
▶ **Insert the power plug firmly so that it does not come loose.**

- A bad connection may cause fire.



▶ **Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.**

- This may cause electric shock or fire.



▶ **Do not connect too many extension cords or plugs to one outlet.**

- This may cause fire.



▶ **Do not disconnect the power cord while using the LCD Display.**

- A surge may be caused by the separation and may damage the LCD Display.



▶ **Do not use the power cord when the connector or plug is dusty.**

- If the connector or plug of the power cord is dusty, clean it with a dry cloth.
- Using the power cord with a dusty plug or connector may cause an electric shock or fire.

Installation



Be sure to contact an authorized the Service Center, when installing your LCD Display in a location with heavy dust, high or low temperatures, high humidity, and exposed to chemical substances and where it operates for 24 hours such as at airports, train stations etc.

Failure to do so may cause serious damage to your LCD Display.



▶ **Place your LCD Display in a location with low humidity and a minimum of dust.**

- Failure to do so may cause electric shock or fire inside the LCD Display.



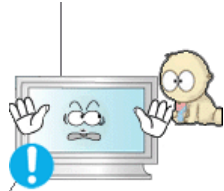
- ▶ **Do not drop the LCD Display when moving it.**
 - This may cause damage to the product or the person carrying it.



- ▶ **Install the LCD Display base in a showcase or shelf so that the end of the base does not protrude from the showcase or shelf.**
 - Dropping the product may cause damage to the product or the person carrying it.



- ▶ **Do not place the product on an unstable or small surface area.**
 - Place the product on an even and stable surface ,as the product may fall and cause harm to someone walking by, specifically children.



- ▶ **Do not place the product on the floor.**
 - Take care, as someone, specifically children may trip over it.



- ▶ **Keep any flammable objects such as candles, insecticides or cigarettes away from the product.**
 - Otherwise, this may cause fire.



- ▶ **Keep any heating devices away from the power cable.**
 - A melted coating may cause electric shock or fire.



- ▶ **Do not install the product in places with poor ventilation, for instance, a bookshelf, closet, etc.**
 - Any increase in the internal temperature may cause fire.



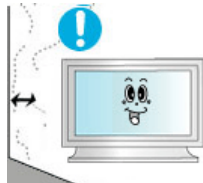
- ▶ **Put down the LCD Display carefully.**
 - Failing to do so may damage the LCD Display.

- ▶ **Do not place the LCD Display face down.**
 - This may damage the TFT-LCD surface.



▶ **The installation of the bracket must be done by a qualified professional.**

- Installing the bracket by unqualified personnel may result in injury.
- Always use the mounting device specified in the owner's manual.



▶ **When installing the product, make sure to keep it away from the wall (more than 10 cm / 4 inches) for ventilation purposes.**

- Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.



▶ **Keep the plastic packaging (bag) out of children's reach.**

- The plastic packaging (bag) may cause suffocation if children play with it.

Clean



When cleaning the LCD Display case or the surface of the TFT-LCD screen, wipe with a slightly moistened, soft fabric.



▶ **Do not spray water or detergent directly onto the LCD Display.**

- This may cause damage, electric shock or fire.



▶ **Use the recommended detergent with a smooth cloth.**



▶ **If the connector between the plug and the pin is dusty or dirty, clean it properly using a dry cloth.**

- A dirty connector may cause electric shock or fire.

▶ **Make sure to unplug the power cord before cleaning the product.**



- Otherwise, this may cause electric shock or fire.



- ▶ **Unplug the power cord from the power outlet and wipe the product using a soft, dry cloth.**

- Do not use any chemicals such as wax, benzene, alcohol, thinners, insecticide, air freshener, lubricant or detergent.



- ▶ **Contact the **SAMSUNG customer care center** or Customer Center for interior cleaning once a year.**

- Keep the product's interior clean. Dust which has accumulated in the interior over an extended period of time may cause a malfunction or fire.

Others



- ▶ **Do not remove the cover (or back).**

- This may cause electric shock or fire.
- Refer to a qualified servicing company.



- ▶ **If your LCD Display does not operate normally - in particular, if there is any unusual sound or smell coming from the LCD Display - unplug it immediately and contact an authorized dealer or the **Service Center**.**

- This may cause electric shock or fire.



- ▶ **Keep the product away from places exposed to oil, smoke or moisture; do not install inside a vehicle.**

- This may cause a malfunction, electric shock or fire.
- In particular, avoid operating the LCD Display near water or outdoors where the LCD Display could be exposed to snow or rain.



- ▶ **If the LCD Display is dropped or the casing is damaged, turn the LCD Display off and unplug the power cord. Then contact the **Service Center**.**

- The LCD Display may malfunction, causing electric shock or fire.

- ▶ **Disconnect the plug from the outlet during storms or lightning or if it is not used for a long period of time.**

- Failure to do so may cause electric shock or fire.



▶ **Do not try to move the LCD Display by pulling only the wire or the signal cable.**

- This may cause a breakdown, electric shock or fire due to damage to the cable.



▶ **Do not move the LCD Display right or left by pulling only the wire or the signal cable.**

- This may cause a breakdown, electric shock or fire due to damage to the cable.



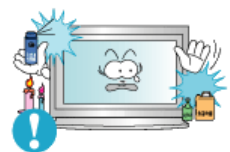
▶ **Do not cover the vents on the LCD Display cabinet.**

- Bad ventilation may cause a breakdown or fire.



▶ **Do not place water containers, chemical products or small metal objects on the LCD Display.**

- This may cause a malfunction, electric shock or fire.
- If a foreign substance enters the LCD Display , unplug the power cord and contact the [Service Center](#).



▶ **Keep the product away from combustible chemical sprays or inflammable substances.**

- This may cause an explosion or fire.



▶ **Never insert anything metallic into the LCD Display openings.**

- This may cause electric shock, fire or injury.

▶ **Do not insert metal objects such as chopsticks, wire and tools or inflammable objects such as paper or matches into the vent, headphone port or AV ports or etc.**

- This may cause electric shock or fire. If an alien substances or water enters the product, turn the product off, unplug the power connector from the wall



outlet and contact the Service Center.



▶ **When viewing a fixed screen for an extended period of time, residual image or blurriness may appear.**

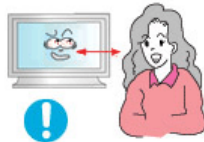
- Change the mode to energy saving mode or set a screensaver to a changing picture when away from the LCD Display for an extended period of time.



▶ **Adjusts the resolution and frequency to the level appropriate for the model.**

- An inappropriate resolution may cause undesirable picture quality.

32 inch (80 cm) - 1360 X 768



▶ **Viewing the LCD Display continuously at a too close angle may result in damage to your eyesight.**



▶ **To ease eye strain, take at least a five-minute break after every hour of using the LCD Display.**



▶ **Do not install the product on an unstable, uneven surface or a location prone to vibrations.**

- Dropping the product may cause damage to the product or the person carrying it. Using the product in a location prone to vibrations may shorten the lifetime of the product or may cause the product to catch fire.



▶ **When moving the LCD Display, turn off and unplug the power cord. Make sure that all cables, including the antenna cable and cables connected to other devices, are disconnected before moving the LCD Display.**

- Failure to disconnect cables may damage it and cause fire or electric shock.

▶ **Make sure there are more than two people when moving the product.**

- Dropping the product may cause a malfunction or injury to the person carrying it.



- ▶ **Place the product out of children's reach, as they could damage by hanging onto it.**

- A falling product may cause injury to the person or even fatality.



- ▶ **When not using the product for an extended period of time, keep the product unplugged.**

- Otherwise, this may cause heat emission from the accumulated dirt or degraded insulation, causing electric shock or fire.



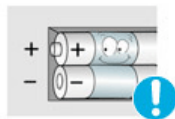
- ▶ **Do not place your children's favorite toys or any other objects of interest on the product.**

- Children may try to climb on the product to retrieve an object. The product could fall, causing injury or even fatality.



- ▶ **When removing batteries from the remote control, be careful that they are not swallowed by children. Keep the batteries out of children's reach.**

- If the batteries are swallowed, see a doctor immediately.



- ▶ **When replacing batteries, place the batteries in the correct +/- polarity position as indicated on the battery holder.**

- The incorrect polarity may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



- ▶ **Use only specified standard batteries. Do not use new and used batteries together.**

- This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).

- ▶ **The batteries (and rechargeable batteries) is not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling purposes as the consumer.**

- The customer can return used or rechargeable batteries to a nearby public



recycling center or to a store selling the same type of the battery or rechargeable battery.

CALIFORNIA USA ONLY

This Perchlorate warning applies only to primary CR(Manganese Dioxide) Lithium coin cells in the product sold or distributed ONLY in California USA

*Perchlorate Material - special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate."



- Safety Instructions
- Introduction
- Package Contents
- Your LCD Display
- Mechanical Layout
- Connections
- Using the Software
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Introduction

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Package Contents

Note

- Please make sure the following items are included with your LCD Display.

If any items are missing, [contact your dealer](#).
[Contact a local dealer](#) to buy optional items.

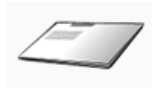
Note

- This stand is not for the Floor Standing Type.



LCD Display

Manuals



Quick Setup Guide



Warranty Card
(Not available in all locations)



User's Guide, MDC Software

Cables



D-Sub Cable



Power Cord



Speaker Wire Cable

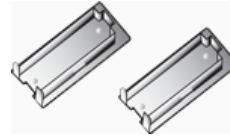
Other



Remote Control



Batteries (AAA X 2)



Cover-Hole

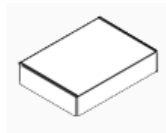


BNC to RCA
Adaptor Jack



Semi Stand

Sold separately



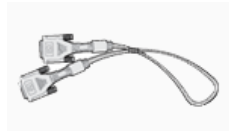
Wall Mount KIT



Speaker Set



Stand KIT



DVI Cable



BNC Cable

Your LCD Display

» Front



- 1) **MENU**
Opens the on-screen menu and exits from the menu or closes the adjustment menu.
- 2) **Navigate buttons (Up-Down buttons)**
Moves from one menu item to another vertically or adjusts selected menu values.
- 3) **Adjust buttons (Left-Right buttons)/ Volume buttons**
Moves from one menu item to another horizontally or adjusts selected menu values.

Adjusts the audio volume.

4) **ENTER**

Activates a highlighted menu item.

5) **SOURCE**

Switches from PC mode to Video mode.

Changing the source is only allowed for external devices that are connected to the LCD Display at the time.

[PC] → [BNC] → [DVI] → [AV] → [S-Video] → [Component]

>> [Click here to see an animation clip.](#)

6) **PIP**

Push the PIP button to turn the PIP screen On / Off.

More than one PIP cannot overlap on screen as BNC and the component use the same terminal.

>> [Click here to see an animation clip.](#)

• **PC**

AV / S-Video / Component Mode

• **BNC**

AV / S-Video Mode

• **DVI**

AV / S-Video / Component Mode

• **AV / S-Video**

PC / BNC / DVI Mode

• **Component**

PC / DVI Mode

7) **Power button**

Turns the LCD Display On/Off.

8) **Power indicator**

Shows PowerSaver mode by blinking green.

9) **Remote Control Sensor**

Aim the remote control towards this spot on the LCD Display.

Note

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

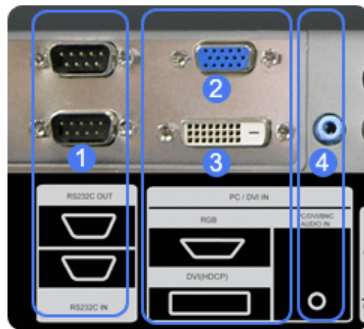
➤ **Rear**

Note

- For detailed information concerning cable connections, refer to Connecting Cables under Setup. The LCD Display 's configuration at the back may vary slightly depending on the LCD Display model.

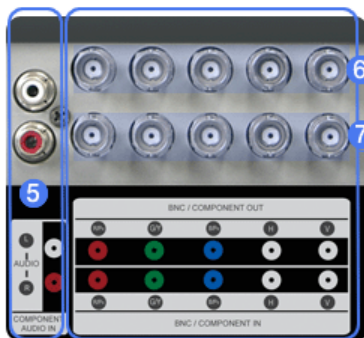


A



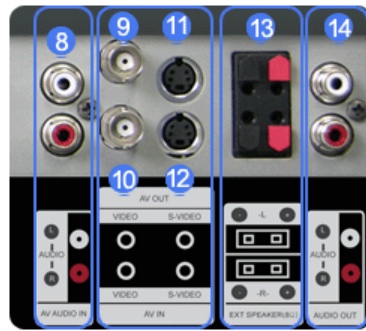
- 1) **RS232C OUT/IN (RS232C Serial PORT)**
MDC(Multiple Display Control) Program Port
- 2) **DVI / PC IN [RGB] (PC Video Connection Terminal)**
Using a D-Sub Cable (15 pin D-Sub) - PC mode (Analog PC)
- 3) **DVI / PC IN [DVI(HDCP)] (PC Video Connection Terminal)**
Using a DVI Cable (DVI-D to DVI-D) - DVI mode (Digital PC)
- 4) **DVI / PC IN [PC/DVI/BNC AUDIO IN] (PC/DVI/BNC Audio Connection Terminal (Input))**

B



- 5) **COMPONENT AUDIO IN [L-AUDIO-R] (Component Audio Connection Terminal (Input))**
- 6) **BNC/COMPONENT OUT [R/P_R, G/Y, B/P_B, H, V] (BNC/Component Connection Terminal (Output))**
BNC (Analog PC) Connection: connecting the R, G, B, H, V ports
Component Connection: connecting the PR, Y, PB ports
- 7) **BNC/COMPONENT IN [R/P_R, G/Y, B/P_B, H, V] (BNC/Component Connection Terminal (Input))**
- 8) **AV AUDIO IN [L-AUDIO-R] (LCD Display Audio Connection Terminal (Input))**
- 9) **AV OUT [VIDEO] (VIDEO Connection Terminal): AV mode (Output)**
- 10) **AV IN [VIDEO] (VIDEO Connection Terminal) (Input)**
- 11) **AV OUT [S-VIDEO] (S-VIDEO Connection Terminal): S-VIDEO mode (Output)**
- 12) **AV IN [S-VIDEO] (S-VIDEO Connection Terminal) (Input)**

C



13) EXT SPEAKER(8 Ω)[- - L - +, - - R - +] (EXT Speaker Connection Terminal)

14) AUDIO OUT [L-AUDIO-R] (LCD Display Audio Connection Terminal (Output))

AUDIO OUT is the terminal for sound output of PC, DVI or BNC.

D



15) POWER S/W ON [I] / OFF [O]

Switches the LCD Display On/Off.

16) POWER IN

The power cord plugs into the LCD Display and the wall plug.

Note

- The number of LCD Displays that can be connected to loopout may differ depending on the cables, signal source etc. With cables where there is no degradation or signal source, up to ten LCD Displays can be connected.

E



17) Kensington Lock 

The Kensington lock is a device used to physically fix the system to something when using it in a public place. (The locking device has to be purchased separately.)

For using a locking device, contact the place of purchase.

Note

- See [Connecting the LCD Display](#) for further information regarding cable connections.

▸ Remote Control

Note

- The performance of the remote control may be affected by a TV or other electronic device operating near the LCD Display , causing a malfunction due to interference with the frequency.

- 1. ON / OFF
- 2. MAGICNET
- 3. MDC
- 4. LOCK
- 5. MagicNet buttons
- 6. +100 -/-
- 7. VOL
- 8.  MUTE
- 9.  TTX/MIX
- 10.  MENU
- 11.  ENTER
- 12. M/B P.MODE
- 13. AUTO
- 14.  PRE-CH
- 15.  CH/P 
- 16.  SOURCE
- 17.  INFO
- 18.  EXIT




- 19. Up-Down Left-Right buttons
- 20. S.MODE
- 21. STILL
- 22. FM RADIO
- 23. P.SIZE
- 24. SRS
- 25. DUAL/MTS
- 26. PIP
- 27. SOURCE
- 28. SWAP
- 29. SIZE
- 30. REW
- 31. STOP
- 32. PLAY/PAUSE
- 33. FF

- 1) **ON / OFF**
Turns the LCD Display On/Off.
- 2) **MAGICNET**
MagicNet Quick Launch Button.
- This function does not work for this monitor.
- 3) **MDC**
MDC Quick Launch Button.
- 4) **LOCK**
Activates or deactivates all function keys on both the remote control and the LCD Display except for the Power and LOCK buttons.
- 5) **MagicNet buttons**
Used for MagicNet.
 - Alphanumeric: Used to enter the Internet address.
 - DEL: Functions as the backspace.
 - SYMBOL: Used to enter the symbols. (.O_-)
 - ENTER: Used to enter values.
 - This function does not work for this monitor.
- 6) **+100 -/-**
Press to select channels over 100.
For example, to select channel 121, press "+100", then press "2" and "1".
- This function does not work for this monitor.
- 7) **VOL**
Adjusts the audio volume.
- 8) **MUTE**
Pauses (mutes) the audio output temporarily.
This is displayed on the lower left corner of the screen.
The audio resumes if MUTE or - VOL + is pressed in the Mute mode.
- 9) **TTX/MIX**

TV channels provide text information services via teletext.

- This function does not work for this monitor.

10)  MENU

Opens the on-screen menu and exits from the menu screen or closes the screen adjustment menu.

11)  ENTER

Activates a highlighted menu item.

12) **M/B P.MODE**

When you press this button, current picture mode is displayed on the lower center of the screen.

AV / S-Video / Component : P.MODE

The Monitor has four automatic picture settings that are preset at the factory.

Then push button again to circle through available preconfigured modes.

(Dynamic → Standard → Movie → Custom)

PC/DVI/BNC : M/B (MagicBright™)

MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.

Then push button again to circle through available preconfigured modes.

(Entertain → Internet → Text → Custom)

13) **AUTO**

Adjusts the screen display automatically in PC mode.

By changing the resolution in the control panel, auto function is performed.

14)  PRE-CH

Returns to the immediately previous channel.

- This function does not work for this monitor.

15) **▼ CH/P ▲**

In TV mode, selects TV channels.

- This function does not work for this monitor.

16)  SOURCE

Changes the video source.

17)  INFO


The current picture information is displayed in the top left corner of the screen.

18)  EXIT

Exits from the menu screen.

19) **Up-Down Left-Right buttons**

Moves from one menu item to another horizontally, vertically or adjusts selected menu values.

20)  S.MODE

When pressing this button, the current mode is displayed at the bottom centre of the screen.

The LCD Display has a built-in high fidelity stereo amplifier.

Then press the button again to circle through available preconfigured modes.

(Standard → Music → Movie → Speech → Custom)

21) **STILL**

Press the button once to freeze the screen. Press it again to unfreeze.

22) **FM RADIO**

Turns the FM Radio on/off.

In PC/DVI mode, sets the SOUND to FM Radio.

In general Video mode, selects FM Radio, and turns off the screen.

In areas where the signal is weak, noise may occur during FM radio broadcasts.

- This function does not work for this monitor.

23) **P.SIZE**

Press to change the screen size.

24)  SRS

SRS

25)  DUAL/MTS

DUAL-

STEREO/MONO, DUAL I / DUAL II and MONO/NICAM MONO/NICAM STEREO can be operated depending on the broadcasting type by using the DUAL button on the remote control while watching TV.

MTS-

You can select MTS (Multichannel Television Stereo) mode.

	Audio Type	MTS/S_Mode	Default
FM Stereo	Mono	Mono	Manual Change
	Stereo	Mono ↔ Stereo	
	SAP	Mono ↔ SAP	Mono

- This function does not work for this monitor.

26)  **PIP**

Every time you press the button, a PIP screen appears.

27)  **SOURCE**

Changes the source of the PIP window signal.

28) **SWAP**

Swaps the contents of the PIP and main image.

The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.

29)  **SIZE**

Switches the PIP Picture Size.

30)  **REW**

Rewind

31)  **STOP**

Stop

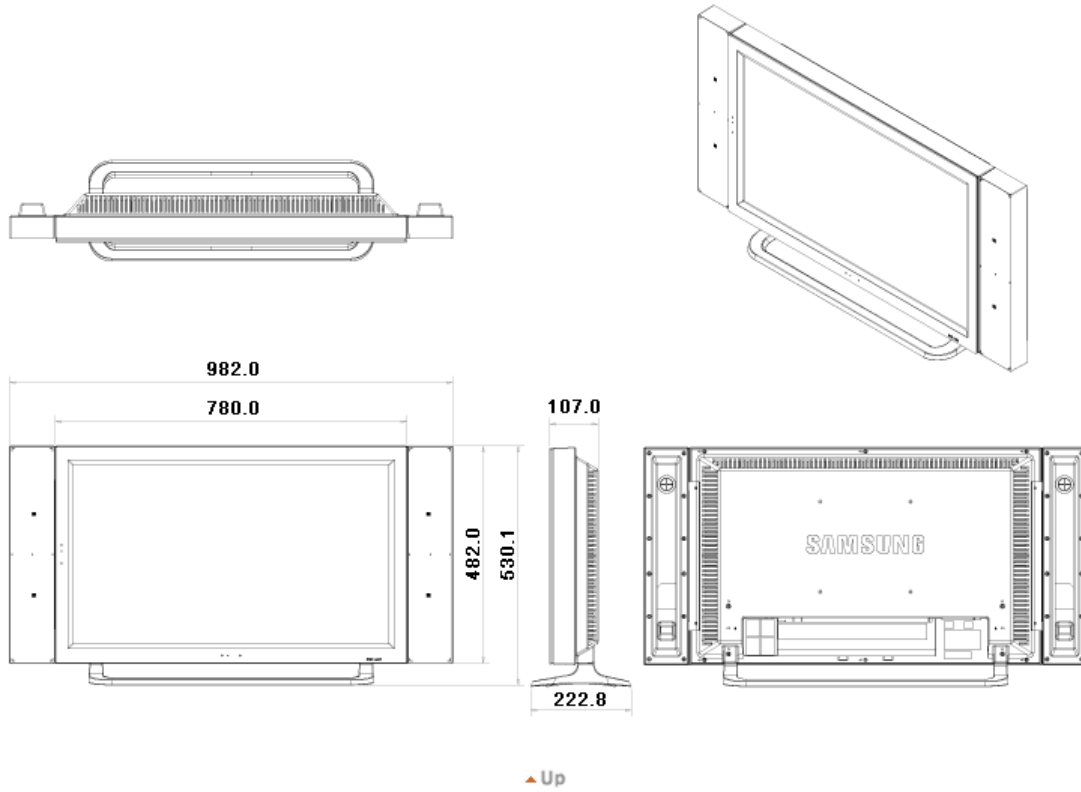
32)  **PLAY / PAUSE**

Play/Pause

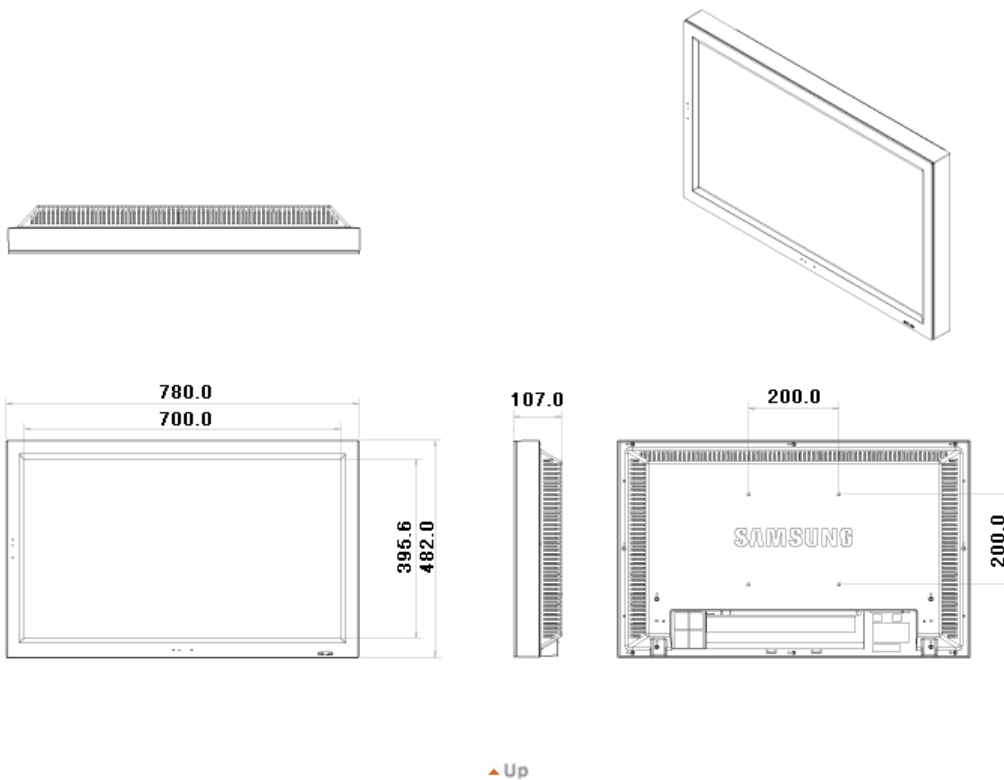
33)  **FF**

Fast forward

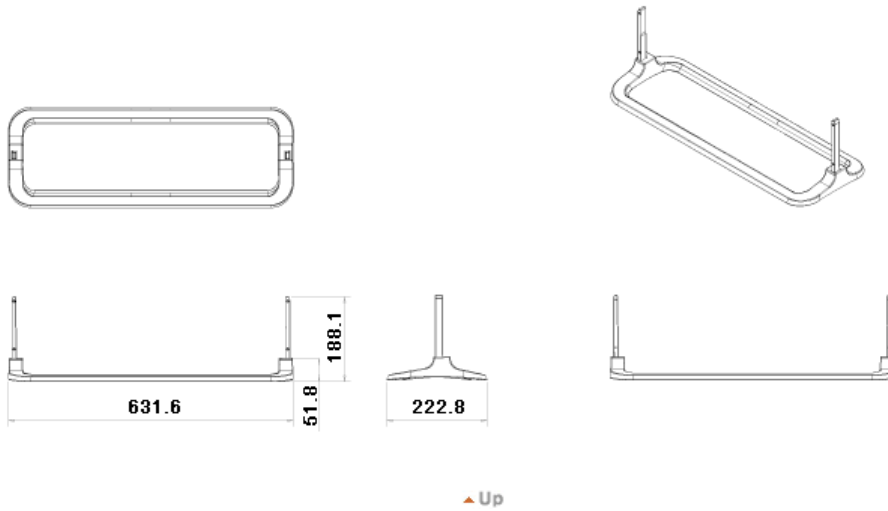
1. Mechanical Layout



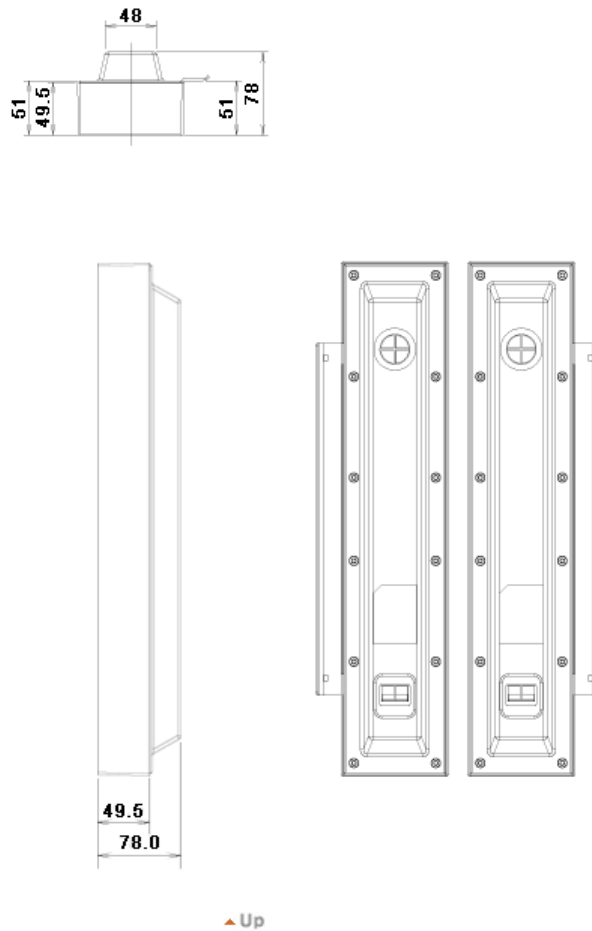
2. Monitor Head



3. Stand

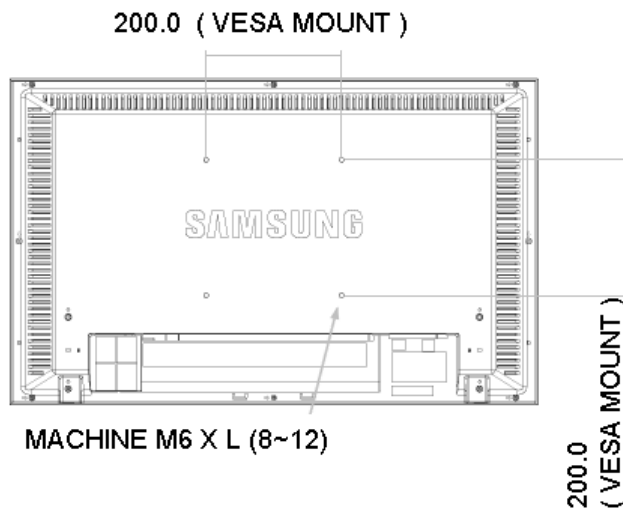


4. Speaker



5. Installation VESA Bracket

- When installing VESA, make sure to comply with the international VESA standards.
- Purchasing VESA Bracket and Installation Information : Please contact your nearest Samsung Distributor to place an order. After your order is placed, installation professionals will visit you and install the bracket.
- At least 2 persons are needed in order to move the LCD Monitor.
- Samsung is not responsible for any product damage or any injury caused by installation at customer's discretion.



For securing the bracket on a wall, use only machine screws of 6 mm diameter and 8 to 12 mm length.

▲ Up

6. Wall Bracket Installation

- Contact a technician for installing the wall bracket.
- Samsung Electronics is not responsible for any damages to the product or harm to customers when the installation is done by the customer.
- This product is for installing on cement walls. The product may not stay in place when installed on plaster or wood.

Components(Sold separately)

Only use the components and accessories shipped with the product.



A Wall-Bracket B Set-Bracket C Screw: 8 EA D Screw: 3 EA E Wood Screw: 7 EA F Anchor: 7 EA G Installation Guide

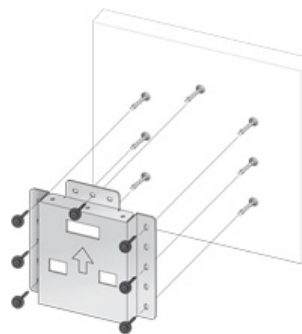
How to assemble the Wall Mount Bracket

1

1. Mark the location of hole on the wall.
2. Make over 35mm-depth-hole on the marked location using drill.
3. Fix anchors **F** on each hole on the wall.
4. Connect wall-bracket **A** to the wall with wood screws **E** after fitting anchors **F** into the wall-bracket **A**.

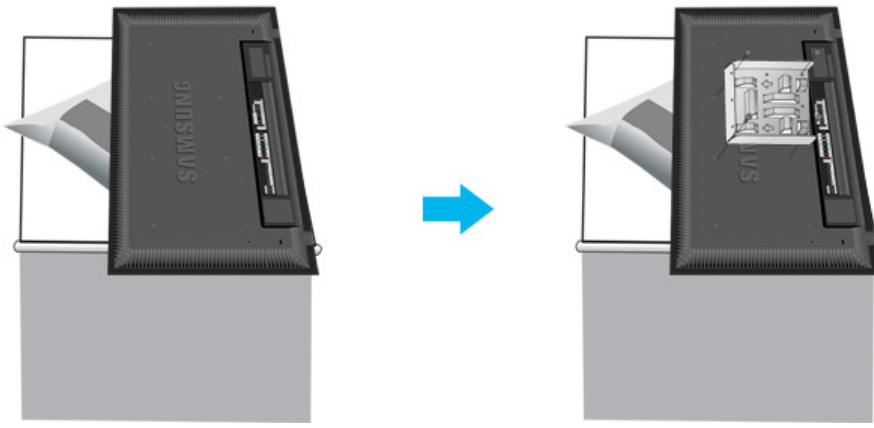


If the bracket is not firmly fixed to the wall, set can fall off.



2

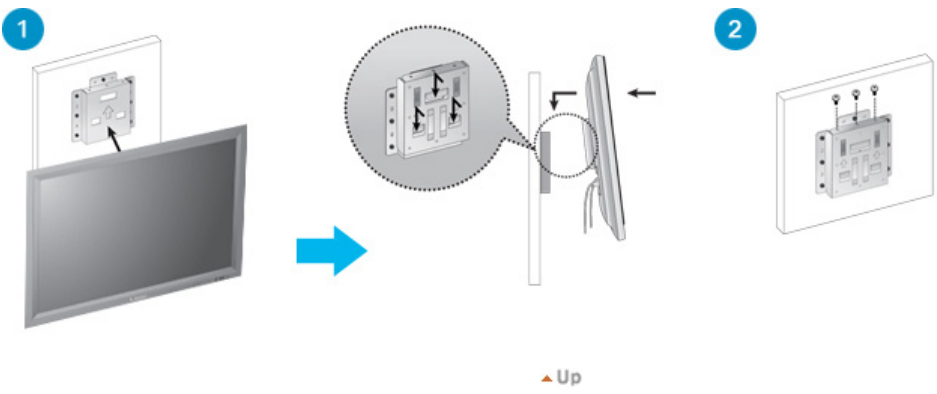
1. Turn the power off and unplug the power cord from the outlet.
2. Place the monitor faced down on a soft cloth or cushion on a table.
3. Attach the set-bracket **B** onto the rear side of the monitor set and secure the screws **C**.



- 3
1. Insert three Hangers of the set-bracket **B** into the grooves of the wall-bracket **A**.
 2. Fix set-bracket **B** and wall-bracket **A** with screws **D**.



Before installing the set on the wall, connect the cables to the set first.





- Safety Instructions
- Introduction
- Connections
- Installing the Stand KIT
- Connecting the LCD Display
- Using the Software
- Adjusting the LCD Display
- Troubleshooting
- Specifications
- Information
- Appendix

SyncMaster

www.samsung.com

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.

Connections

Model
SyncMaster 320PX



Installing the Stand KIT

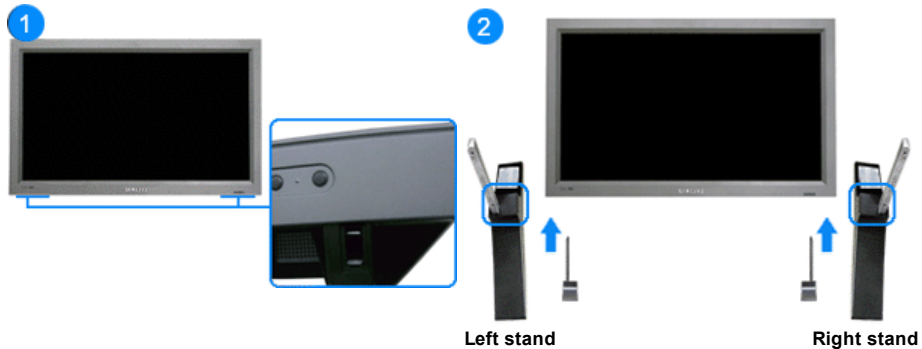
Note

- Only the supplied bolts should be used.

Caution

Samsung Electronics will not be responsible for damages caused by using a base other than those specified.

▸ Installing the Semi Stand



Caution

Make sure to install the stand with the Caution label folded backwards.

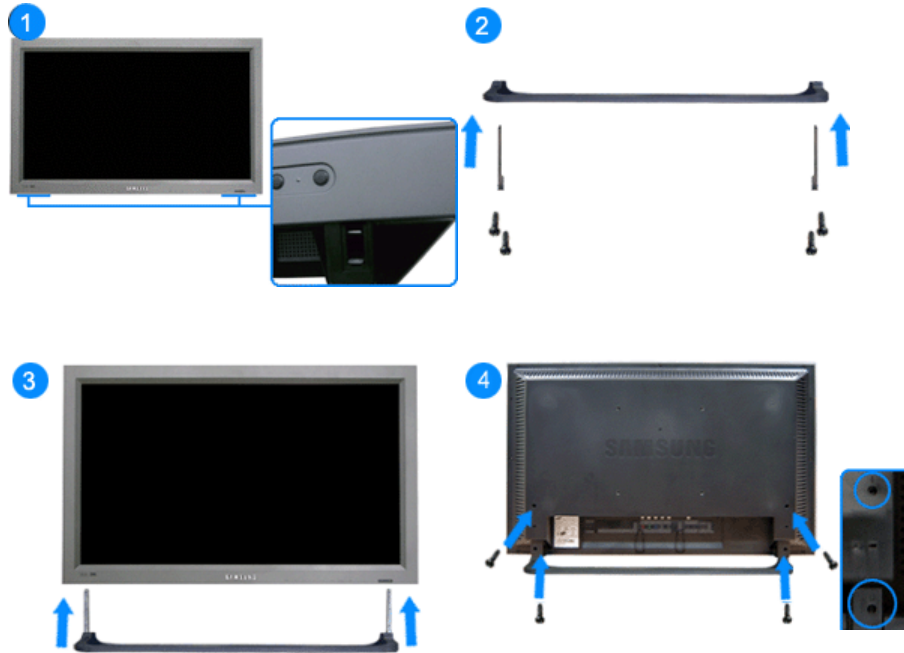


- 1) A 'Cover-Protector' is used to protect the hole at the bottom of the LCD Display, where the stand is inserted. Be sure to remove the 'Cover-Protector' when attaching the provided Semi Stand or Stand KIT (sold separately) and cover the hole using the 'Cover-Hole' when attaching the wall mount kit.
- 2) Set up the left and right stands respectively.
- 3) Insert the stand into the hole at the bottom of the LCD Display. Insert the screw into the hole indicated and tighten it. (M4 x L15)

Caution

This stand is designed for adjusting the screen angle. The company is not responsible for any problem caused when using this stand. Under no circumstances use the product as a stand for placing something on.

› **Installing the Stand KIT (sold separately)**



- 1) A 'Cover-Protector' is used to protect the hole at the bottom of the LCD Display , where the stand is inserted. Be sure to remove the 'Cover-Protector' when attaching the provided Semi Stand or Stand KIT (sold separately) and cover the hole using the 'Cover-Hole' when attaching the wall mount kit.
- 2) Ensure that the parts are inserted in the right direction and in the right place. (M4 x L15)
- 3) Insert the stand into the hole at the bottom of the LCD Display.
- 4) Insert the screw into the hole indicated and tighten it. (M4 x L15)

Connecting the LCD Display

▶ **Using a Power cord with Earth**

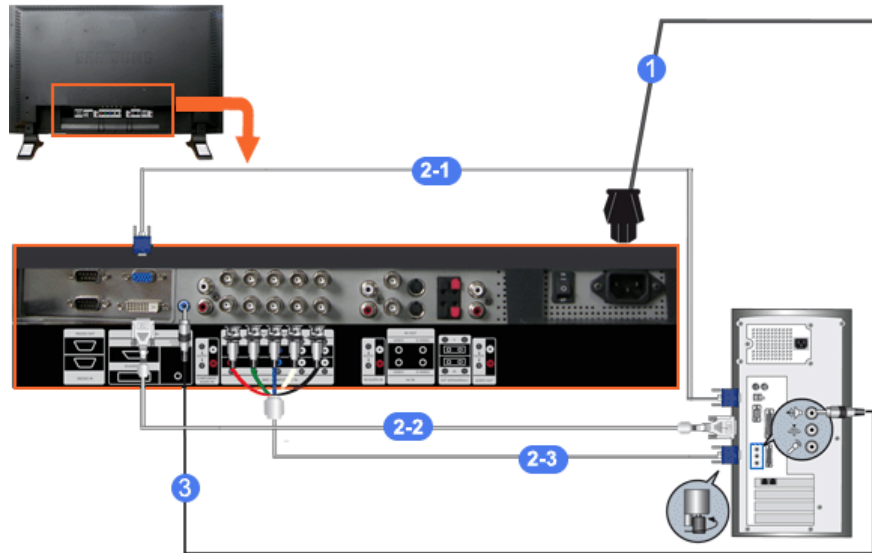
In the event of failure, the earth lead may cause electric shock. Make sure to wire the earth lead in correctly, before connecting the AC power. When un-wiring the earth lead, make sure to disconnect the AC power in advance.



☑ **Note**

- AV input devices such as DVD players, VCR's or camcorders as well as your computer can be connected to the LCD Display. For detailed information on connecting AV input devices, refer to the User Controls under Adjusting Your LCD Display.

› **Connecting to a Computer**



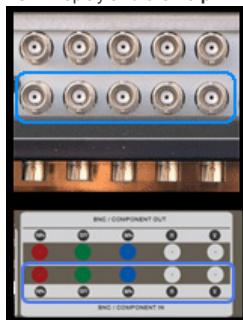
- 1) Connect the power cord for your LCD Display to the power port on the back of the LCD Display. Turn on the power switch.
- 2) There are 3 ways to connect the D-sub to your LCD Display. Choose one of the following:
 - 2-1) Using the D-sub (Analog) connector on the video card. Connect the D-sub to the 15-pin, **RGB port** on the back of your LCD Display and the **15 pin D-sub Port** on the computer.



- 2-2) Using the DVI (Digital) connector on the video card. Connect the DVI Cable to the **DVI(HDCP) port** on the back of your LCD Display and the **DVI port** on the computer.



- 2-3) Using the BNC (Analog) connector on the video card. Connect the BNC Cable to the **BNC/COMPONENT IN - R, G, B, H, V ports** on the back of your LCD Display and the **15 pin D-sub Port** on the computer.



- 3) Connect the audio cable for your LCD Display to the audio port on the back of your computer.

Note

- Turn on both your computer and the LCD Display.

Note

- The DVI cable or BNC cable is optional. Contact a local Samsung Electronics [Service Center](#) to buy optional items.

› Connecting Digital DVD



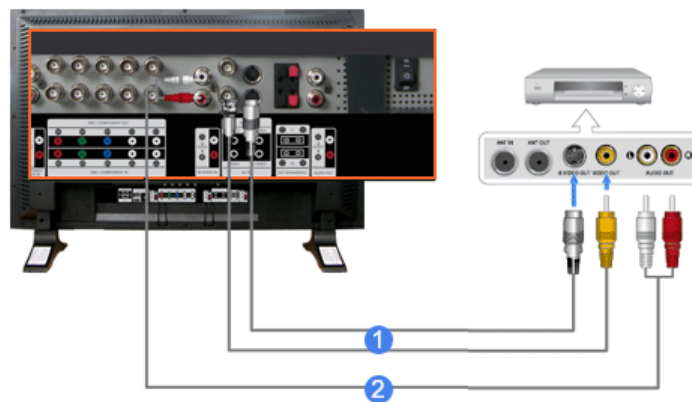
☑ Note

- Input devices such as digital DVD are connected to the DVI IN terminal of the monitor using the DVI cable.
- Then, start the DVD with a DVD disc inserted.
- Select Digital using the SOURCE button.

☑ Note

- The monitor has DVI IN connection terminals to connect DVI input devices digital DVD.

› Connecting to a VCR



- 1) AV input devices such as VCRs or Camcorders are connected via the **AV IN [VIDEO]** or **AV IN [S-VIDEO]** of the LCD Display using an S-VHS or BNC cable.
- 2) Connect the Audio (L) and Audio (R) terminals of a VCR or Camcorders to the LCD Display's **AV AUDIO IN [L-AUDIO-R]** using audio cables.

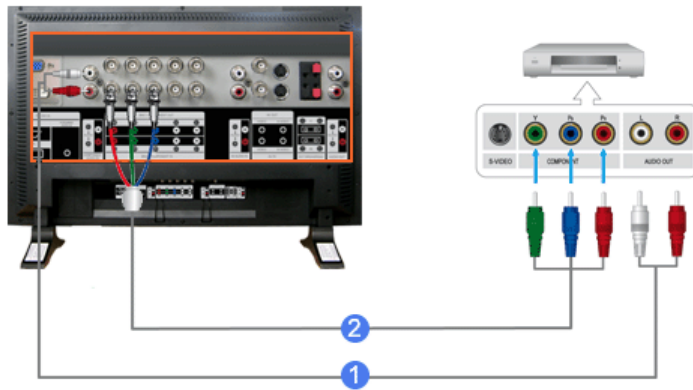
☑ Note

- Select **AV** or **S-Video** for a connected VCR or Camcorder using the SOURCE button on the front of the LCD Display or on the remote control.
- Then, start the VCR or Camcorders with a tape inserted.

☑ Note

- The S-VHS or BNC cable is optional.

› Connecting to a DVD Player



- 1) Connect a set of audio cables between the **COMPONENT AUDIO IN [L-AUDIO-R]** on the LCD Display and the **AUDIO OUT** jacks on the DVD player.
- 2) Connect a Component cable between the **BNC/COMPONENT IN - PR, Y, PB port** on the LCD Display and the **PR, Y, PB jacks** on the DVD player.

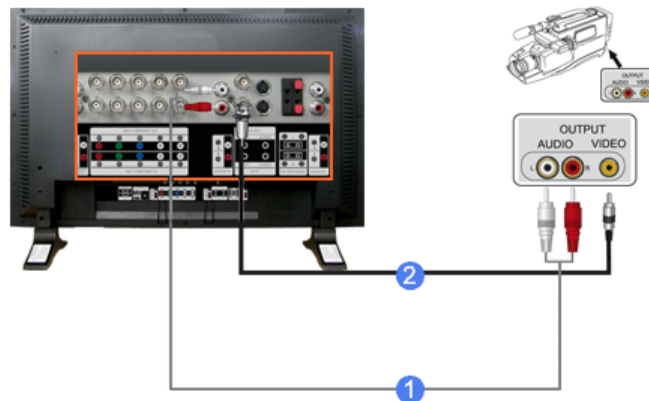
Note

- Select **Component** for the connection to a DVD player using the **SOURCE** button on the front of the LCD Display or on the remote control.
- Then, start the DVD Player with a DVD disc inserted.

Note

- A component cable is optional.
For an explanation of Component video, consult your DVD manual.

✦ **Connecting to a Camcorder**



- 1) Locate the A/V output jacks on the camcorder. They are usually found on the side or back of the camcorder.
Connect a set of audio cables between the **AUDIO OUTPUT** jacks on the camcorder and the **AV AUDIO IN [L-AUDIO-R]** on the LCD Display.
- 2) Connect a video cable between the **VIDEO OUTPUT** jack on the camcorder and the **AV IN [VIDEO]** on the LCD Display.

Note

- Select **AV** for the Camcorder connection using the **SOURCE** button on the front of the LCD Display or on the remote control.
- Then, start the Camcorders with a tape inserted.

Note

- The audio-video cables shown here are usually included with a Camcorder.

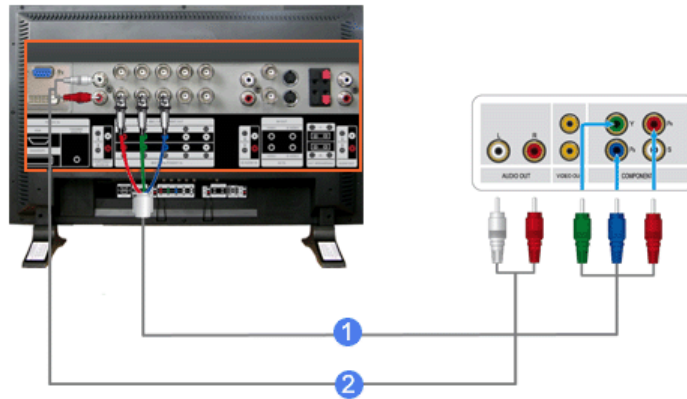
(If not, check your local electronics store.)

If your camcorder is stereo, you need to connect a set of two cables.

› Connecting to a DTV Set Top Box

Note

- The connections for a typical Set Top Box are shown below.



- 1) Connect a Component cable between the **BNC / COMPONENT IN - PR, Y, PB** port on the LCD Display and the PR, Y, PB jacks on the Set Top Box.
- 2) Connect a set of audio cables between the **COMPONENT AUDIO IN [L-AUDIO-R]** on the LCD Display and the AUDIO OUT jacks on the Set Top Box.

Note

- Select **Component** for the connection to a DTV Set Top Box using the SOURCE button on the front of the LCD Display or on the remote control.

Note

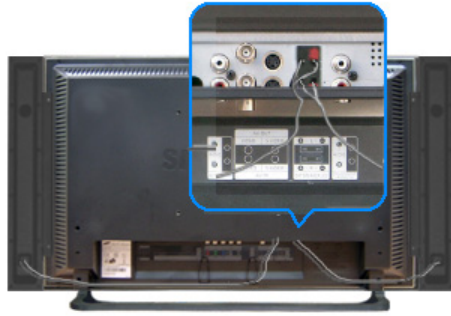
- For an explanation of Component video, see your Set Top Box owner's manual.

› Connecting Speakers



Note

- Fasten the SET and the speaker using the screws.
* Mount the speaker set without the speaker stand.



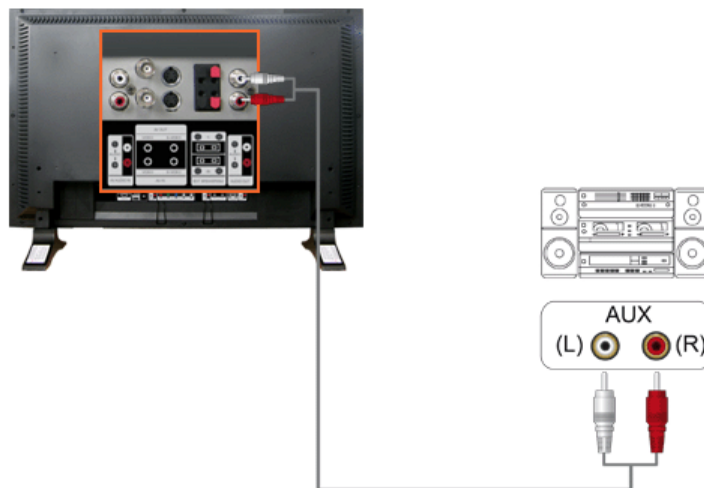
☑ Note

- Connect the speaker connection cable between the speaker connection jack on the back of the SET and the speaker connection jack on the back of the speaker.

☑ Note

- Do not move the SET while the SET is connected to the speakers.
The speaker-bracket for connecting the SET speaker may become damaged.

➤ Connecting to an Audio System



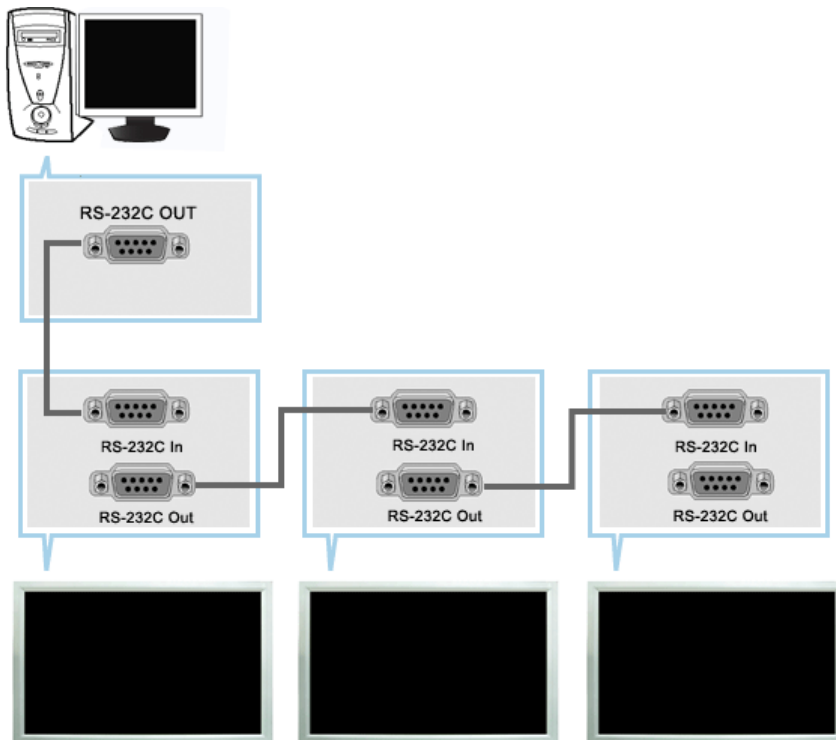
☑ Note

- Connect a set of audio cables between the AUX L, R jacks on the **AUDIO SYSTEM** and the **AUDIO OUT [L-AUDIO-R]** on LCD Display.

Multiple Display Control

MDC System

Introduction



A Multiple Display Control (MDC) is an application allowing various displays to be easily and simultaneously operated on a PC. RS-232C, a standard of serial communication, is used for the communication between a PC and a display. Therefore, a serial cable should be connected between the serial port on a PC and the serial port on a display.

Main Screen

Click Start > Program > Samsung > MDC System to start the program.

Select a set to see the volume of the selected set within the slider.

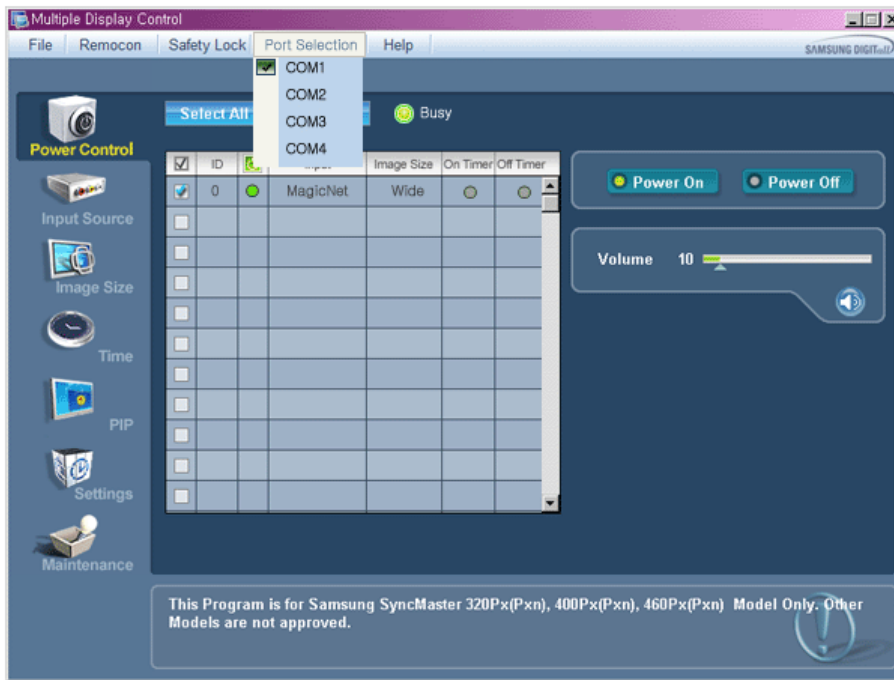


- | | |
|-------------------------|----------------------------|
| 1 Main Icons | 5 Select Button |
| 2 Remocon | 6 Info Grid |
| 3 Safety Lock | 7 Display Selection |
| 4 Port Selection | 8 Control Tools |

1. Use the main icons to switch into each screen.
2. Allows you to enable or disable the remote control signal receiving function of the display unit.
3. Set the Safety Lock function.
When setting the Lock function, you can only operate power and lock buttons on the remote control and set.
4. The setting for the PC Serial Port can change. The original value is COM1.
5. Click Select all or Clear to select or clear all displays.
6. Use Grid to view brief information on selected display.
7. Select a display from Display Selection.
8. Use Control Tools to control displays.

<Note> The remote control Enable/Disable function operates whether or not the power is On/Off, and this applies to all displays connected to the MDC. However, regardless of the status at the time the MDC is shut down, the remote control signal receiving function of all displays is initialized to Enable when the MDC is closed.

Port Selection

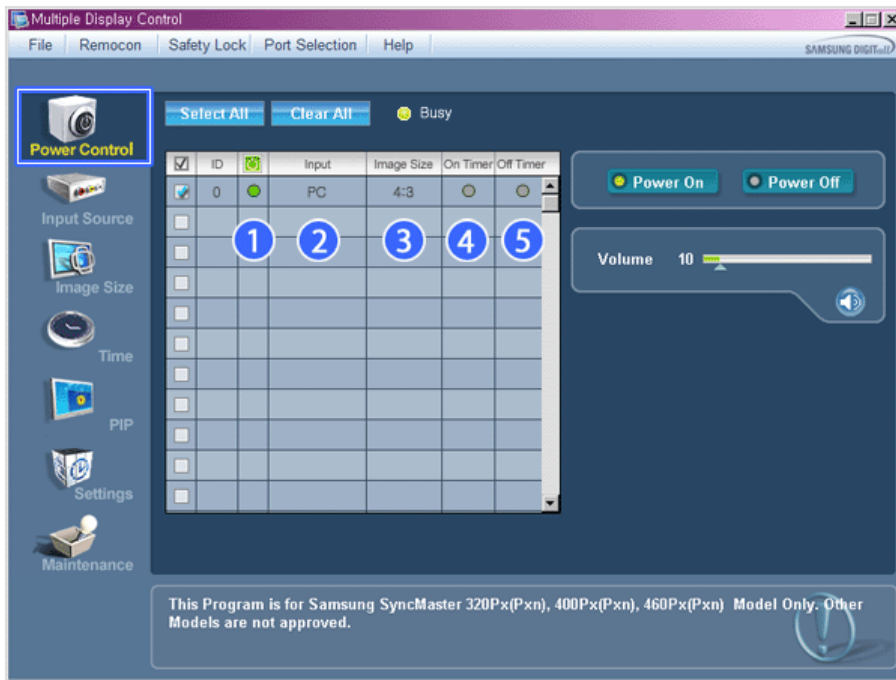


1. The Multiple Display Control is originally set to COM1.
2. If any port other than COM1 is used, COM1 through COM4 can be selected in the Port Selection Menu.
3. If the exact port name that is connected to the LCD Display using a serial cable is not selected, communication will be unavailable.
4. The selected port is stored in the program and used for the next program as well.



Power Control

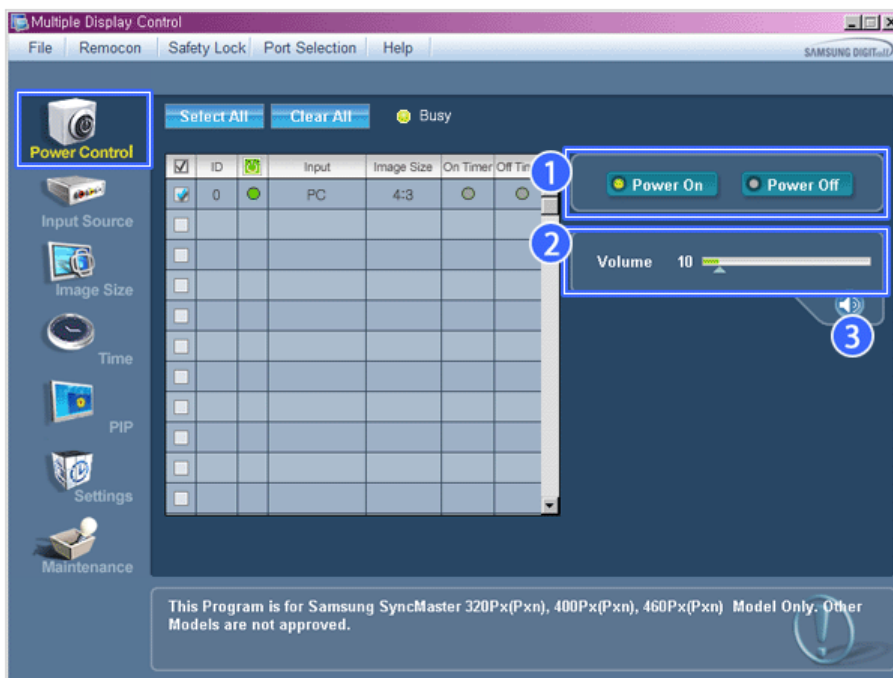
1. Click Power Control of the main icons and the Power Control screen appears.



* Info Grid shows some basic information necessary to Power Control.

- 1) (Power Status)
- 2) Input
- 3) Image Size
- 4) On Timer
- 5) Off Timer

2. Use the Select All button or Check Box to choose a display to control.



* Power Control allows controlling some of the functions of the selected display.

- 1) Power On/Off

- Turns the power of the selected display On/Off.

2) Volume

- Controls the volume level of the selected display.

It receives the volume value of the selected display from the sets and displays it in the slider.
(When you cancel the selection or choose Select All, the value returns to the default value 10)

3)  (Mute On/Off)

- Turns on/off the Mute function of the selected display.

When selecting one set at a time, turn on the Mute function for the selected set.

The Mute function is disabled automatically when you adjust the volume level.

(The values return to the default settings when you undo the selections or choose "Select All".)

* **The Power Control feature is available for all displays.**

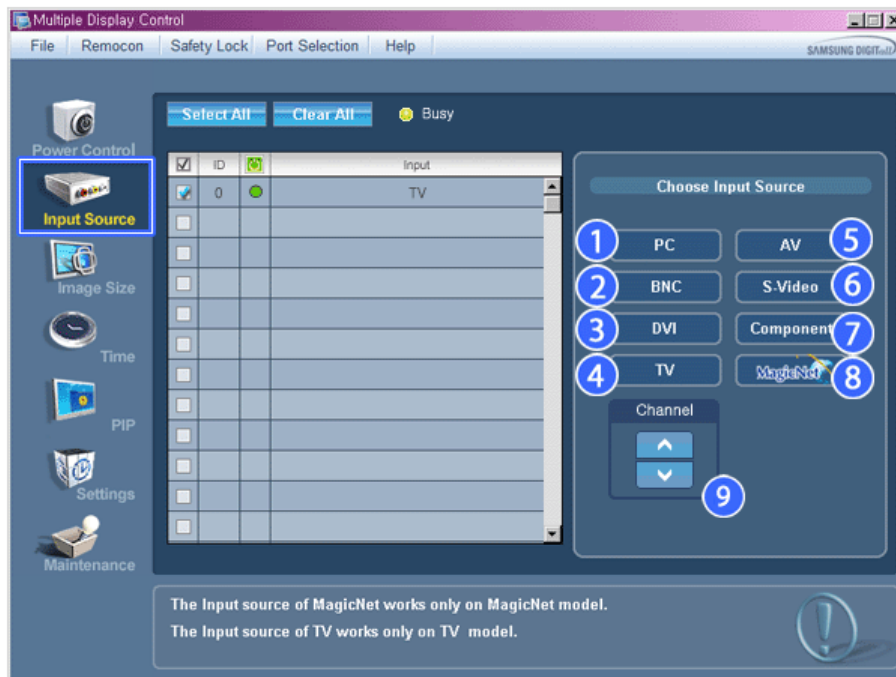
* **The Volume Control and Mute features are available only for the displays whose power status is ON.**



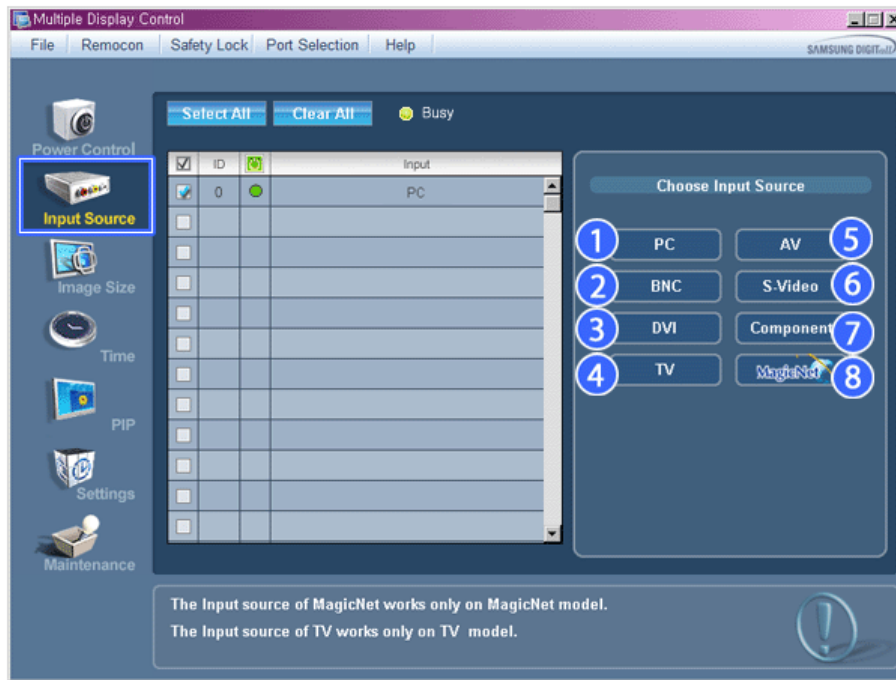
Input Source

1. Click Input Source of the main icons and the Input Source control screen appears.
Click Select All or use Check Box to select a display to control.

- TV Mode



- PC Mode



* Info Grid shows some basic information necessary to Input Source Control.

- 1) PC
 - Changes the Input Source of the selected display to PC.
- 2) BNC
 - Changes the Input Source of the selected display to BNC.
- 3) DVI
 - Changes the Input Source of the selected display to DVI.
- 4) TV
 - Changes the Input Source of the selected display to TV.
- 5) AV
 - Changes the Input Source of the selected display to AV.
- 6) S-Video
 - Changes the Input Source of the selected display to S-Video.
- 7) Component
 - Changes the Input Source of the selected display to Component.
- 8) MagicNet
 - The Input source of MagicNet works only on MagicNet model.
- 9) Channel
 - Channel arrow appears when the Input Source is TV.

* **TV Source can be selected only in products with TV and controlling channels is allowed only when Input Source is TV.**

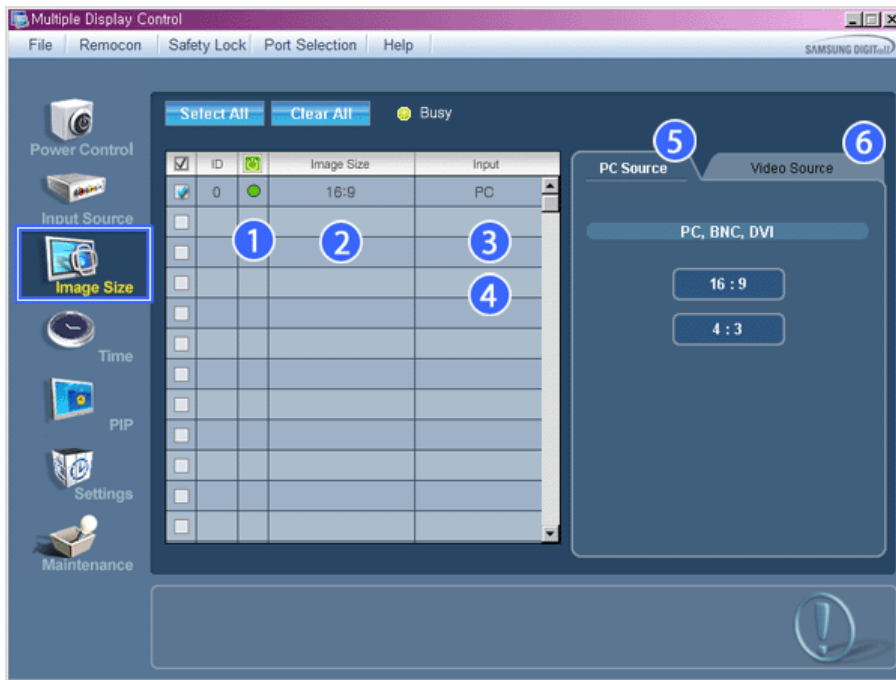
* **The Input Source Control feature is available only for the displays whose power status is ON.**



Image Size

PC, BNC, DVI

1. Click Image Size of the main icons and the Image Size control screen appears.



* Info Grid shows some basic information necessary to Image Size Control.

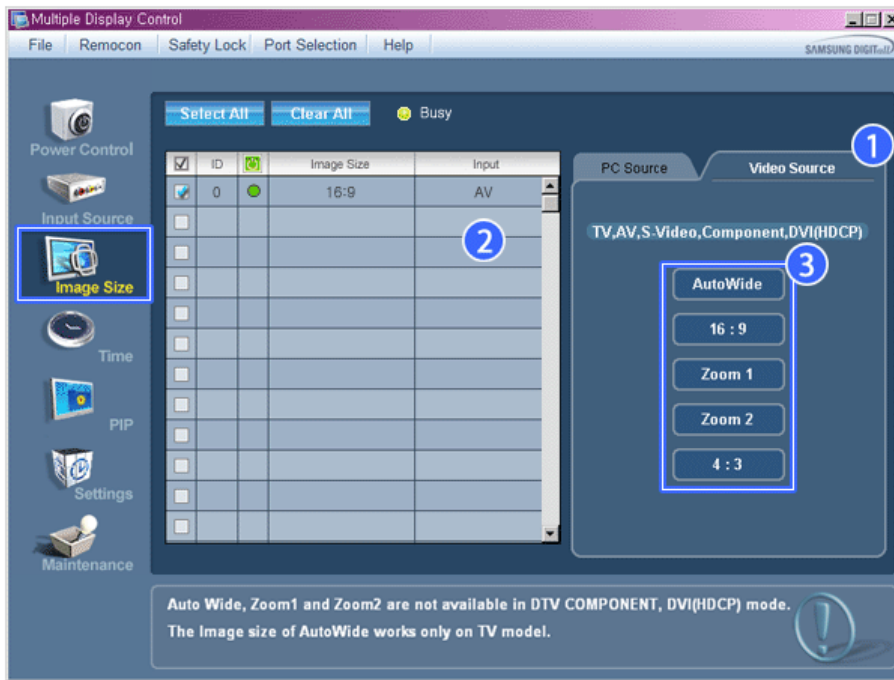
- 1) (Power Status)
 - Shows the power status of the current display.
- 2) Image Size
 - Shows the current Image Size of the display in use.
- 3) Input
 - Shows the current Input Source of the display in use.
- 4) Info Grid displays only the displays whose Input Source is PC, BNC, DVI.
- 5) PC Source - When you click Image Size, the PC Source tab first appear.
 - The Image Size Control button controls Image Size available for PC, BNC, DVI.
- 6) Video Source
 - Click the Video Source tab to control Image Size for respective Input Source.

- * **The Input source of MagicNet works only on MagicNet model.**
- * **The Input source of TV works only on TV model.**
- * **Image Size Control is available only for the displays for which power status is ON.**

Image Size

TV, AV, S-Video, Component, DVI(HDCP)

1. Click Image Size of the main icons and the Image Size control screen appears.



* Info Grid shows some basic information necessary to Image Size Control.

- 1) Click the Video Source tab to adjust Image Size for TV, AV, S-Video, Component, , DVI(HDCP).
Click Select All or use Check Box to select a display to control.
- 2) Info Grid displays only the display having TV, AV, S-Video, Component or DVI(HDCP) as input source.
- 3) Switch Image Size of the selected display randomly.

**Note: Auto Wide, Zoom1 and Zoom2 are not available for selection when the input signal type for Component and DVI (HDCP) is 720p or 1080i.
(The Auto Wide mode is available only for TV, AV, and S-Video.)**

* The Input source of MagicNet works only on MagicNet model.

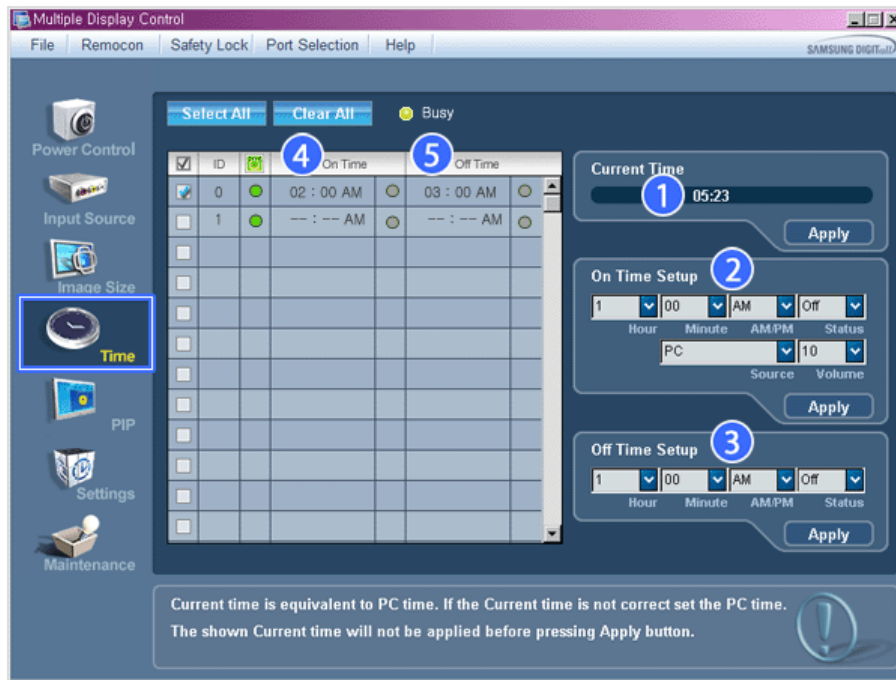
* The Input source of TV works only on TV model.

* The Image Size Control feature is available only for the displays whose power status is ON.



Time

1. Click Time of the main icons and the Time Control screen appears.



* Info Grid shows some basic information necessary to Time Control.

- 1) Current Time
 - Set the current time for the selected display (PC Time).
 - To change the current time, first change the PC Time.
- 2) On Time Setup
 - Set the Hour, Minute, AM/PM of On Time Setup, Status, Source, Volume of the selected display.
- 3) Off Time Setup
 - Set the Hour, Minute, and AM/PM, Status for Off Time Setup of the selected display.
- 4) Shows the On Time settings.
- 5) Shows the Off Time settings.

* **The Input source of MagicNet works only on MagicNet model.**

* **The Input source of TV works only on TV model.**

* **Time Control is available only for the displays for which the power status is ON.**

* **At On Time Setup, TV Source functions only for TV Model.**

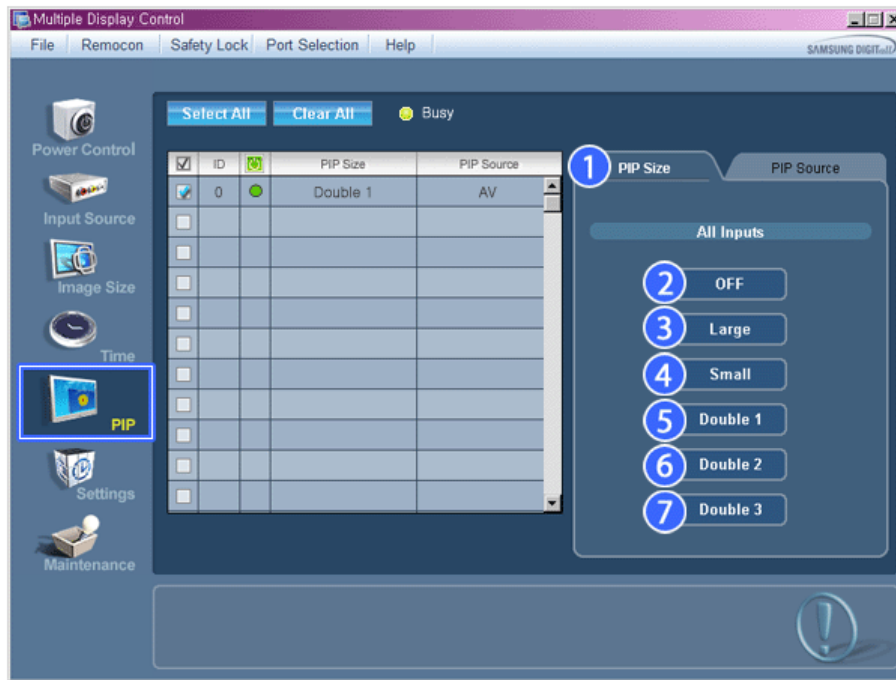
* **At On Time Setup, MagicNet Source functions only for MagicNet Model.**



PIP

PIP Size

1. Click PIP of the main icons and the PIP control screen appears.
Click Select All or use Check Box to select a display to control.



* Info Grid shows some basic information necessary to PIP Size Control.

- 1) PIP Size
 - Shows the current PIP Size of the display in use.
- 2) OFF
 - Turns off the PIP of the selected display.
- 3) Large
 - Turns on the PIP of the selected display and changes the size to Large.
- 4) Small
 - Turns on the PIP of the selected display and changes the size to Small.
- 5) Double 1
 - Turns on the PIP of the selected display and changes the size to Double 1.
- 6) Double 2
 - Turns on the PIP of the selected display and changes the size to Double 2.
- 7) Double 3 (Picture By Picture)
 - Turns on the PBP of the selected display and changes the size to Double 3.

* **The Input source of MagicNet works only on MagicNet model.**

* **The Input source of TV works only on TV model.**

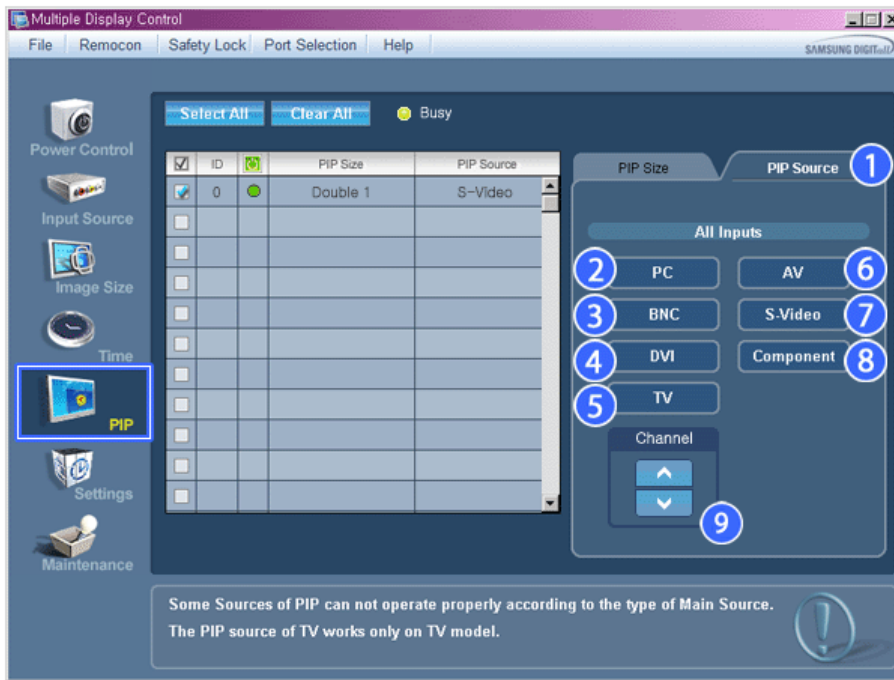
* **PIP Size can be controlled with turning on the LCD Display power.**



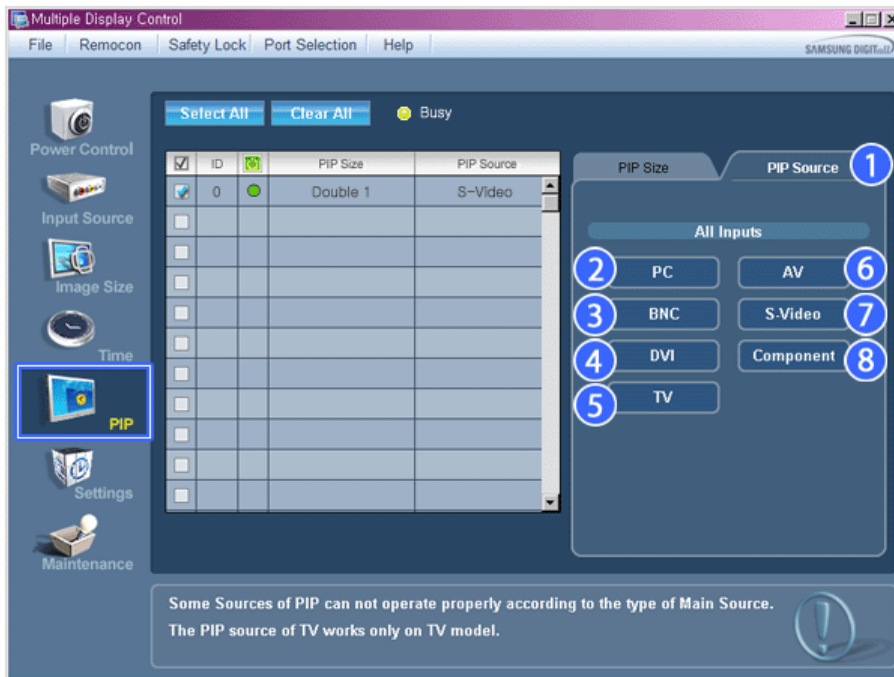
PIP Source

1. Click PIP of the main icons and the PIP control screen appears.

- PIP TV Mode



• PIP S-Video Mode



★ Info Grid shows some basic information necessary to PIP Source Control.

- 1) PIP Source
 - PIP Source can be controlled with turning on the LCD Display power.
- 2) PC
 - Changes the source of the PIP of the selected display to PC.
- 3) BNC
 - Changes the source of the PIP of the selected display to BNC.
- 4) DVI
 - Changes the source of the PIP of the selected display to DVI.
- 5) TV
 - Changes the source of the PIP of the selected display to TV.

- 6) AV
- Changes the source of the PIP of the selected display to AV.
- 7) S-Video
- Changes the source of the PIP of the selected display to S-Video.
- 8) Component
- Changes the source of the PIP of the selected display to Component.
- 9) Channel
- Channel arrow appears when the PIP Source is TV.

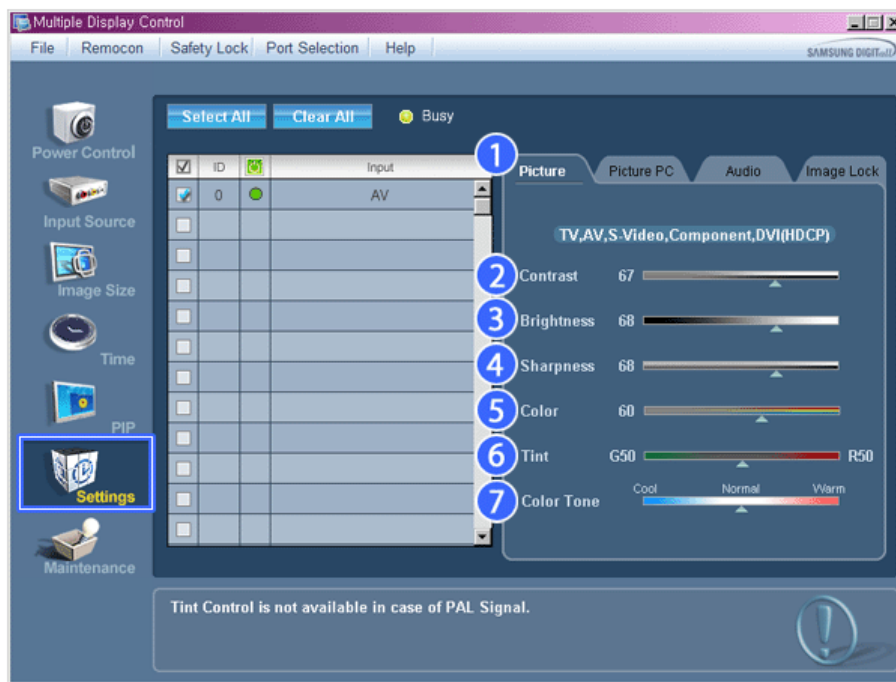
Note: Some of the PIP Sources may not be available for selection, depending on the input source type of the Main Screen.

- * **The Input source of MagicNet works only on MagicNet model.**
- * **The Input source of TV works only on TV model.**
- * **TV Source can be selected only in products with TV and controlling channels is allowed only when PIP Source is TV.**
- * **The PIP Control feature is available only for the displays whose power status is ON and the PIP function is set to ON.**

Settings

Picture

1. Click Settings of the main icons and the Settings Control screen appears.



- * **Info Grid shows some basic information necessary to Settings Control.**
When each function is selected, the set value of the selected function is displayed in the slide. When selected, each function fetches the value for the set and displays it on the slide bar. When "Select All" is chosen, the default value is displayed. Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Picture
- Available only for TV, AV, S-Video, Component, DVI(HDCP).
- 2) Contrast
- Adjusts Contrast of the selected display.
- 3) Brightness
- Adjusts Brightness of the selected display.
- 4) Sharpness
- Adjusts Sharpness of the selected display.
- 5) Color
- Adjusts Color of the selected display.
- 6) Tint

- Adjusts Tint of the selected display.
- Available only for NT.

7) Color Tone

- Adjusts the Color Tone for the selected display.

* The Input source of MagicNet works only on MagicNet model.

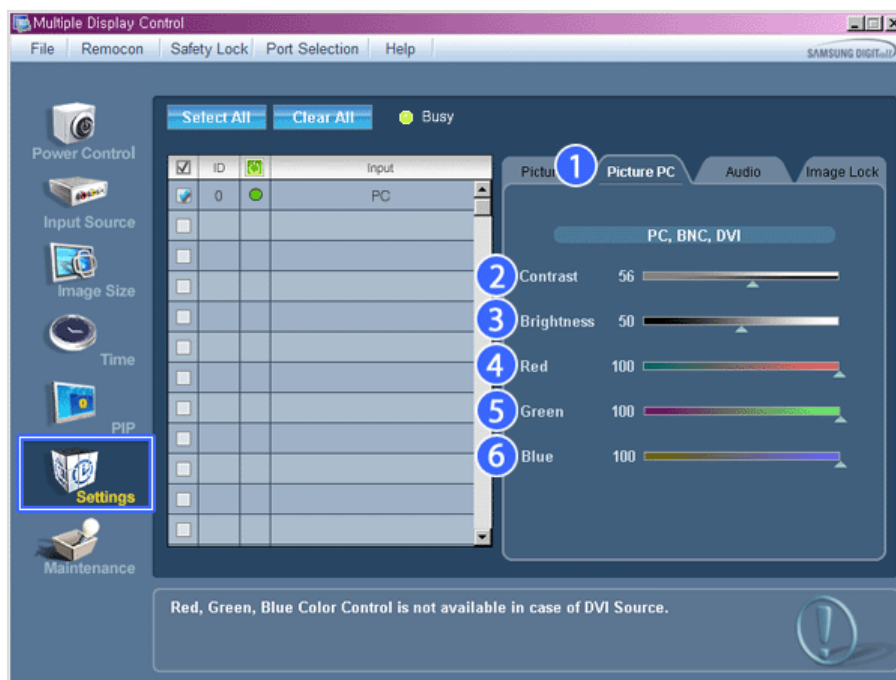
* The Input source of TV works only on TV model.

* This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.

Settings

Picture PC

1. Click Settings of the main icons and the Settings Control screen appears.



* Info Grid shows some basic information necessary to Settings Control. When each function is selected, the set value of the selected function is displayed in the slide. When selected, each function fetches the value for the set and displays it on the slide bar. When "Select All" is chosen, the default value is displayed. Changing a value in this screen will automatically change the mode to "CUSTOM."

1) Picture PC

- Available only for PC, BNC, DVI.

2) Contrast

- Adjusts Contrast of the selected display.

3) Brightness

- Adjusts Brightness for the selected display.

4) Red

- Adjusts red Color of the selected display.
- Available only for NT.

5) Green

- Adjusts green Color of the selected display.
- Available only for NT.

6) Blue

- Adjusts blue Color of the selected display.
- Available only for NT.

* The Input source of MagicNet works only on MagicNet model.

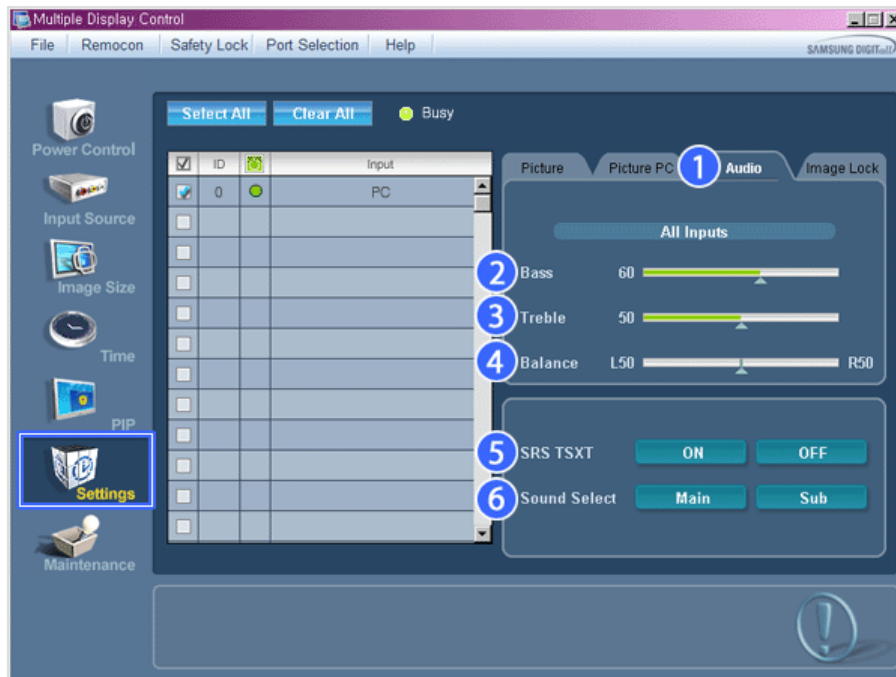
* The Input source of TV works only on TV model.

* This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.

Settings

Audio

1. Click Settings of the main icons and the Settings Control screen appears.



* Info Grid shows some basic information necessary to Settings Control. When each function is selected, the set value of the selected function is displayed in the slide. When selected, each function fetches the value for the set and displays it on the slide bar. When "Select All" is chosen, the default value is displayed. Changing a value in this screen will automatically change the mode to "CUSTOM."

- 1) Audio
 - Controls audio settings for all input sources.
- 2) Bass
 - Adjusts Bass of the selected display.
- 3) Treble
 - Adjusts Treble of the selected display.
- 4) Balance
 - Adjusts Balance of the selected display.
- 5) SRS TSXT
 - SRS TSXT Sound ON/OFF of the selected display.
- 6) Sound Select
 - Select either Main or Sub when PIP is On.

* The Input source of MagicNet works only on MagicNet model.

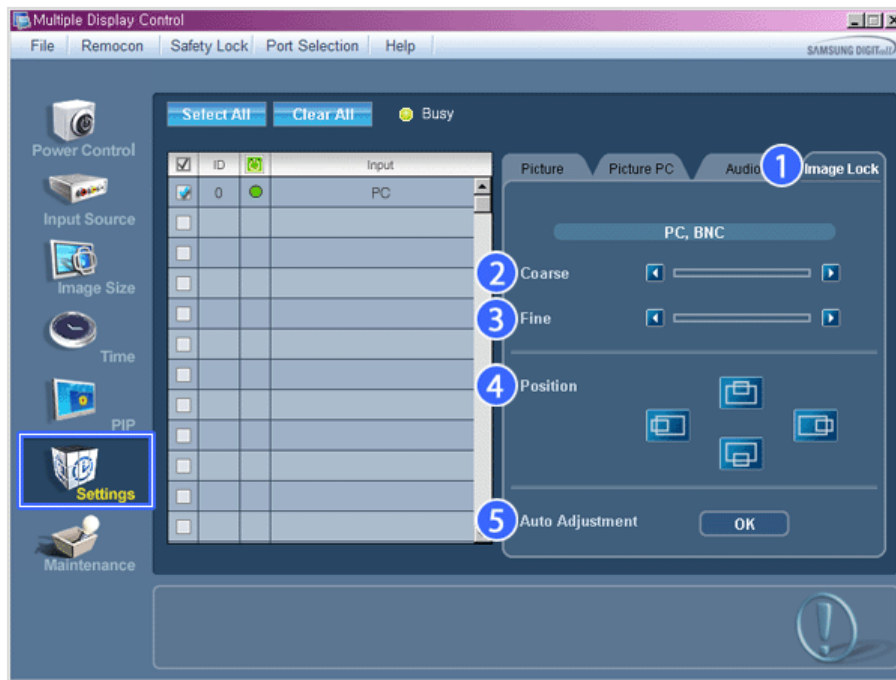
* The Input source of TV works only on TV model.

* This feature is available only for the displays whose power status is ON and if no selection is made, the factory default is displayed.

Settings

Image Lock

1. Click Settings of the main icons and the Settings Control screen appears.



* Info Grid shows some basic information necessary to Settings Control.

- 1) Image Lock
 - Available only for PC, BNC.
- 2) Coarse
 - Adjusts Coarse of the selected display.
- 3) Fine
 - Adjusts Fine of the selected display.
- 4) Position
 - Adjusts Position of the selected display.
- 5) Auto Adjustment
 - Self-Adjust to the incoming PC signal.

* **The Input source of MagicNet works only on MagicNet model.**

* **The Input source of TV works only on TV model.**

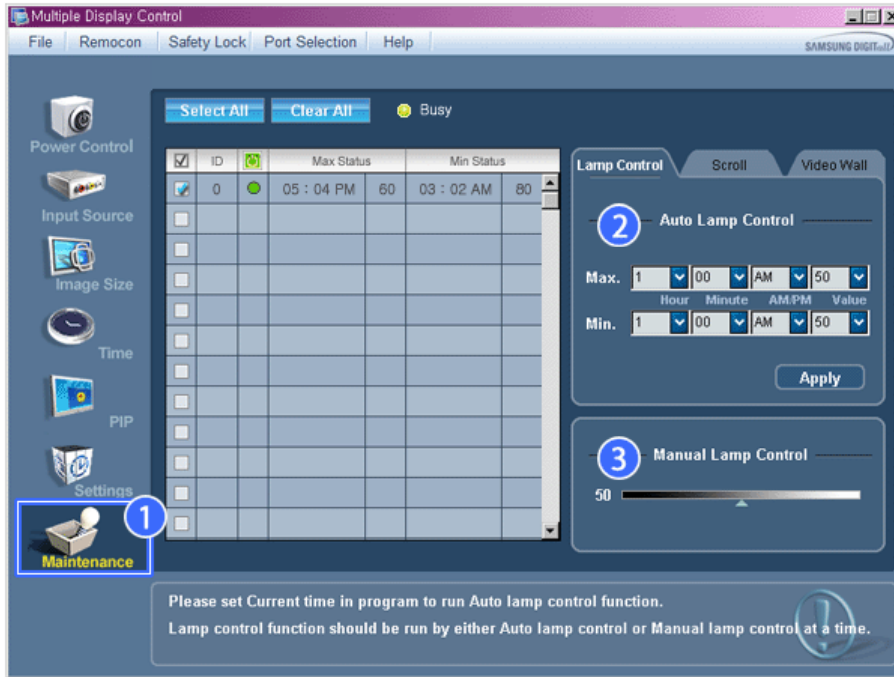
* **Settings Control is available only for the displays for which the power status is ON.**



Maintenance

Lamp Control

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



* An "Info Grid" showing several basic data items appears.

- 1) Maintenance
 - Allows the Maintenance Control function for all input sources.
- 2) Auto Lamp Control
 - Automatically adjusts the backlight of the selected display at a specified time.
 - The Manual Lamp Control automatically turns off if you adjust using the Auto Lamp Control.
- 3) Manual Lamp Control
 - Allows you to adjust the backlight of the selected display regardless of the time.
 - The Auto Lamp Control automatically turns off if you adjust using the Manual Lamp Control.

* **The Maintenance Control feature is available only for the displays whose power status is ON.**

* **The Input source of MagicNet works only on MagicNet model.**

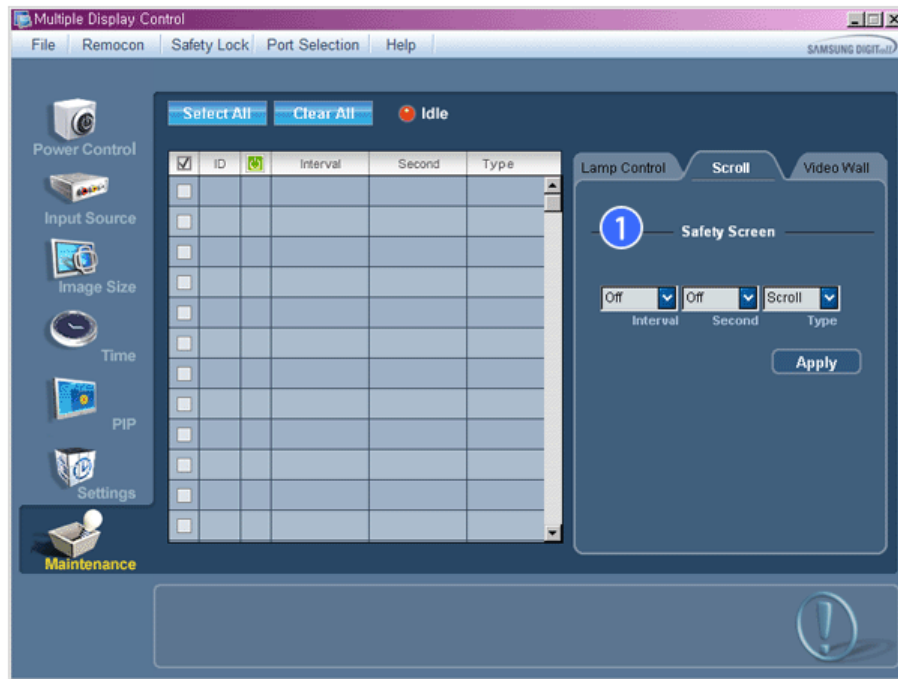
* **The Input source of TV works only on TV model.**



Maintenance

Scroll

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



1) Safety Screen

- Eliminates the afterimages that can result when the selected display stays in Pause mode for an extended period of time. You can set the repeat cycle timer by selecting the "Interval" by hour and "Second" by second. It can be set to Scroll, Pixel, Bar and Eraser by Screen Type.

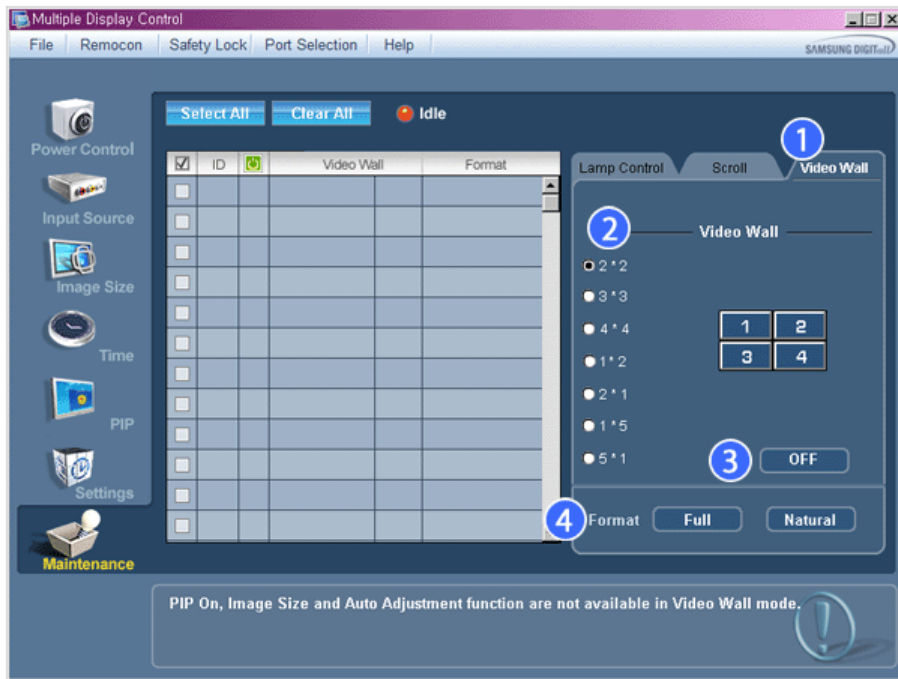
- * **The Input source of MagicNet works only on MagicNet model.**
- * **The Input source of TV works only on TV model.**
- * **Setting Second, you can set to 1, 2, 3, 4, 5 for Scroll Type and to 10, 20, 30, 40, 50 for Pixel, Bar, and Eraser Type.**
- * **The Maintenance Control feature is available only for the displays whose power status is ON.**



Maintenance

Video Wall

1. Click on the "Maintenance" icon in the Main Icon column to display the Maintenance screen.



1) Video Wall

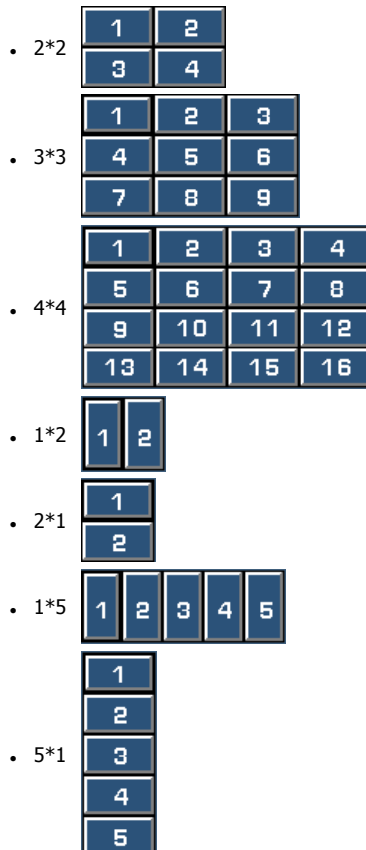
- A Video Wall is a set of video screens that are connected together, so that each screen shows a part of the whole picture or so that the same picture is repeated on each screen.

2) Video Wall (Screen divider)

- The screen can be divided into.

You can select a number of screens with a different layout when dividing.

- Select a mode from Screen divider.
- Select a display from Display Selection.
- The place will be set up by pressing a number in the selected mode.
- The MDC program supplied by Samsung supports over 4*4.

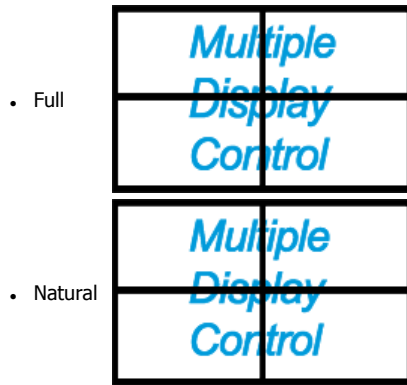


3) On / Off

- Turns on/off the Video Wall function of the selected display.

4) Format

- The format can be selected to see a divided screen.



* You may not operate this function in MagicNet.

* The Input source of TV works only on TV model.

* The Maintenance Control function is available only for the displays where the power status is ON.

Troubleshooting

- The display you wish to control does not appear on the Power Control Info Grid
 - Check the connection of RS232C. (Check if it is properly connected to the Com1 port)
 - Check the displays to see if any of the other displays connected have the same ID. If more than one displays have the same ID, those displays are not properly detected by the program due to data conflict.
 - Check if the Display Set ID is a number between 0 and **16** . (Adjust using the Display menu)

Note : A Display Set ID must be a value between 0 and **16** .
- The display you wish to control does not appear on the other Control Info Grids
 - Check to see if the display power is ON. (You can check this in Power Control Info Grid)
 - Check if you can change the input source of the display.
- The dialogue box appears repeatedly.
 - Check to see if the display you wish to control is selected.
- Both On Timer and Off Timer have been set but different time is showing.
 - Apply current time to synchronize the display clocks.
- The remote may not function properly when you turn off the remote Function, disconnect the RS-232C cable, or exit the program in an Irregular manner. Rerun the program and turn the remote function again to Restore normal functions.

<Note> This program may malfunction due to problems in communication circuits or interference from electronic appliances nearby.



Settings Value Display In Multiple Display Mode

* When there are more than one displays connected, the settings values are displayed as follows.

- No selection: Displays the Factory Default Value.
- Selected one display: Fetches and displays the settings value for the selected display.
- Selected one display (ID1) and add another display (ID3): The program, which was displaying the settings value of ID 1, fetches and displays the value of ID3.

4. Selected all sets using Select All: Returns to the Factory Default Value.



- Safety Instructions
- Introduction
- Connections
- Using the Software
- Adjusting the LCD Display
- Input
- Picture
- [PC / BNC /DVI Mode]
- Picture
- [AV / S-Video / Component / DVI-Video Mode]
- Sound
- Setup
- Multi Control
- Direct Functions
- Troubleshooting
- Specifications
- Information
- Appendix

SyncMaster

www.samsung.com



Model
SyncMaster 320PX

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.

Adjusting the LCD Display

Input



Available Modes

- P** PC / BNC / DVI
- A** AV
- S** S-Video
- C** Component
- D** DVI-Video

Source List **PASCD**



[MENU] → [ENTER] → [ENTER] → [^ / v] → [ENTER]

Use to select PC, BNC, or other external input sources connected to the LCD Display.
Use to select the screen of your choice.

- 1) PC
- 2) BNC
- 3) DVI
- 4) AV
- 5) S-Video
- 6) Component

[The direct button on the remote control is the 'SOURCE' button.]

Note

- PIP turns off when the LCD Display is switched to an external source.

PIP **PASCD**

When external A/V devices such as VCRs or DVDs are connected to the LCD Display, PIP allows you to watch video from those devices in a small window super-imposed on the PC Video signal. (Off/On)

Note

- More than one PIP cannot be overlapped on screen as BNC and the component use the same terminal.

1) PIP



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [^ / ∨] → [ENTER]

Turns the PIP Screen Off/On.

- Off

- On

[The direct button on the remote control is the 'PIP' button.]

2) Source



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Selects the input source for the PIP.

- PC : AV / S-Video / Component Mode

- BNC : AV / S-Video Mode

- DVI : AV / S-Video / Component Mode

- AV / S-Video : PC / BNC / DVI Mode

- Component : PC / DVI Mode

[The direct button on the remote control is the 'SOURCE' button.]

3) Swap



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Swaps the contents of the PIP and main image.

The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.

[The direct button on the remote control is the 'SWAP' button.]

4) Size



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Changes the Size of the PIP window.

[The direct button on the remote control is the 'SIZE' button.]

5) Position



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Changes the Position of the PIP window.

6) Transparency



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Adjusts the Transparency of PIP windows.

- High

- Medium

- Low

- Opaque

Note

- If you select , ,  in Size, Position and Transparency will not be activated.

Available Modes: PIP ON

Edit Name **PASCD**



[MENU] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Name the input device connected to the input jacks to make your input source selection easier.

1) PC

2) BNC

3) DVI

4) AV

- 5) S-Video
- 6) Component

Picture [PC / BNC / DVI Mode]



Available Modes

- P** PC / BNC / DVI
- A** AV
- S** S-Video
- C** Component
- D** DVI-Video

MagicBright™ P



[MENU] → [^ / ∨] → [ENTER] → [ENTER] → [^ / ∨] → [ENTER]

MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.

Currently four different modes are available: Entertain, Internet, Text and Custom.

Each mode has its own pre-configured brightness value. You can easily select one of the four settings by simply pressing the MagicBright™ control button.

1) Entertain

High brightness
For watching motion pictures such as a DVD or VCD.

2) Internet

Medium brightness
For working with a mixture of images such as the text with graphics added.

3) Text

Normal brightness
For documentations or work involving a lot of text.

4) Custom

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

[The direct button on the remote control is the 'M/B' button.]

Custom P



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [^ / ∨] / [< / >] → [ENTER]

By using the on-screen menus, the contrast and brightness can be changed to your personal preference.

1) Contrast

Adjusts the Contrast.

2) Brightness

Adjusts the Brightness.

Note

- By adjusting the picture using the Custom function, MagicBright will change to Custom mode.

Color Tone **P**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

The color tones can be changed.

1) Cool

2) Normal

3) Warm

4) Custom

(Available in PC, BNC mode only)

Color Control **P**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [< / >] → [ENTER]

Adjusts the individual R, G, B color controls.

(Available in PC, BNC mode only)

1) Red

2) Green

3) Blue

Note

- If you adjust the picture by using the Custom function, Color Tone will turn to the Custom mode.

Image Lock **P**

Image Lock is used to fine-tune and get the best image by removing noise that creates unstable images with jitters and shakiness. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again.

(Available in PC, BNC mode only)

1) Coarse



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [< / >] → [ENTER]

Removes noise such as vertical stripes. Coarse adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu.

2) Fine



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [< / >] → [ENTER]

Removes noise such as horizontal stripes. If the noise persists even after fine tuning, repeat it after adjusting the frequency (clock speed).

3) Position



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [< / >] / [^ / ∨] → [ENTER]

Adjusts the screen location horizontally and vertically.

Auto Adjustment **P**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER]

The values of Fine, Coarse, Position are adjusted automatically.

By changing the resolution in the control panel, the auto function is performed.

(Available in PC, BNC mode only)

[The direct button on the remote control is the 'AUTO' button.]

Signal Balance **P**

This is used to make up for the weak RGB signal transmitted by a long signal cable.

(Available in PC, BNC mode only)

1) Signal Balance



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [ENTER] → [^ / √] → [ENTER]

Selects either On or Off with the signal control.

2) Signal Control



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] →

[^ / √] → [< / >] → [ENTER]

Adjusts the R Phase, G Phase, B Phase, Gain and Sharpness manually.

Size **P**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER]

The Size can be switched.

1) **16:9**

2) **4:3**

PIP Picture **P**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [< / >] → [ENTER]

Adjusts the PIP Screen Settings.

1) Contrast

Adjusts the Contrast of the PIP window on the screen.

2) Brightness

Adjusts the Brightness of the PIP window on the screen.

3) Sharpness

Adjusts the difference between the lightest and darkest areas of the PIP window.

4) Color

Adjusts the Color of the PIP window on the screen.

5) Tint

Adds a natural tone to the PIP window.

You can view a picture from AV, S-Video through the PIP screen in PC, BNC and DVI (PC) mode.

Operates only if the video signal is NTSC.

Available Modes: PIP ON

Picture [AV / S-Video / Component / DVI-Video Mode]



Available Modes

- P** PC / BNC / DVI
- A** AV
- S** S-Video
- C** Component
- D** DVI-Video

Mode **A S C D**



[MENU] → [^ / ∨] → [ENTER] → [ENTER] → [^ / ∨] → [ENTER]

The LCD Display has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory.

Dynamic, Standard, Movie, or Custom can be activated.

- 1) **Dynamic**
- 2) **Standard**
- 3) **Movie**
- 4) **Custom**

[The direct button on the remote control is the 'P.MODE' button.]

Custom **A S C D**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [< / >] → [ENTER]

By using the on-screen menus, the contrast and brightness can be changed to your personal preference.

- 1) **Contrast**
Adds a natural tone to the PIP window.
- 2) **Brightness**
Adjusts the Brightness.
- 3) **Sharpness**
Adjusts the picture Sharpness.
- 4) **Color**
Adjusts the picture Color.
- 5) **Tint**
Adds a natural tone to the display.
Operates only for AV and S-Video mode. Operates only if the video signal is NTSC.

Color Tone **A S C D**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

The color tones can be changed. The individual Color components are also user adjustable.

- 1) Cool 2
- 2) Cool 1
- 3) Normal
- 4) Warm1
- 5) Warm2

Size **A S C D**



[MENU] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER]

The Size can be switched.

- 1) 16:9
- 2) Zoom 1
- 3) Zoom 2
- 4) 4:3

[The ZOOM1, ZOOM2 are not available in 1080i (or over 720p) of DTV.]

Digital NR (Digital Noise Reduction) **A S C D**



[MENU] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER]

Turns the Digital Noise Reduction feature Off/On.

The Digital Noise Reduction feature allows you to enjoy clearer and crisper images.

- 1) Off
- 2) On

Film Mode **A S C**



[MENU] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER]

Turns Film Mode Off/On.

The Film Mode feature offers you a theater-quality viewing experience.

(Not available in DVI-Video Mode)

- 1) Off
- 2) On

PIP Picture **A S C D**



[MENU] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER] → [^ / ∇] → [ENTER] → [< / >] → [ENTER]

Adjusts the PIP Screen Settings.

- 1) **Contrast**
Adjusts the Contrast of the PIP window on the screen.
- 2) **Brightness**
Adjusts the Brightness of the PIP window on the screen.

Available Modes: PIP ON

Sound



Available Modes

- P** PC / BNC / DVI
- A** AV
- S** S-Video
- C** Component
- D** DVI-Video

Mode **PASCD**



[MENU] → [^ / ∨] → [ENTER] → [ENTER] → [^ / ∨] → [ENTER]

The LCD Display has a built-in high fidelity stereo amplifier.

- 1) **Standard**
Selects Standard for the standard factory settings.
- 2) **Music**
Selects Music when watching music videos or concerts.
- 3) **Movie**
Selects Movie when viewing movies.
- 4) **Speech**
Selects Speech when watching a show that is mostly dialogue (i.e., news).
- 5) **Custom**
Selects Custom if you want to Adjusts the settings according to your personal preferences.

Custom **PASCD**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [< / >] → [ENTER]

The sound settings can be adjusted to suit your your personal preferences.

- 1) **Bass**
Emphasizes low frequency audio.
- 2) **Treble**
Emphasizes high frequency audio.
- 3) **Balance**
Allows you to Adjusts the sound balance between the left and right speakers.

[You can hear the sound even when sound value is set to 0.]

Note

- If you adjust picture using Sound Custom function, Sound Mode will turn to Custom mode.

Auto Volume **PASCD**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Reduces the difference in volume control between broadcasters.

- 1) Off
- 2) On

SRS TSXT **PASCD**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

SRS TSXT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

- 1) Off
- 2) On

[The direct button on the remote control is the 'SRS' button.]

Sound Select **PASCD**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Selects either Main or Sub when PIP is On.

- 1) Main
- 2) Sub

[Available Modes: PIP ON]

Setup



Available Modes

P PC / BNC / DVI

A AV

S S-Video

C Component

D DVI-Video

Language **PASCD**



[MENU] → [^ / √] → [ENTER] → [ENTER] → [^ / √] → [ENTER]

You can choose from 11 languages.

Note

- The language chosen affects only the language of the OSD.

It has no effect on any software running on the computer.

- English, Deutsch, Español, Français, Italiano, Svenska, 日本語, 中国語, Русский, 한국어, Português

Time **PASCD**

Selects from one of 4 time settings, Clock Set, Sleep Timer, On Timer, and Off Timer.

1) **Clock Set**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [ENTER] → [< / >] → [ENTER]

Current Time Setting.

2) **Sleep Timer**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [< / >] → [^ / √] → [ENTER] → [< / >] → [^ / √] → [ENTER]

Turns the LCD Display off automatically at certain times. (Off, 30, 60, 90, 120, 150, 180)

3) **On Timer**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [< / >] → [^ / √] → [ENTER]

Turns the LCD Display on automatically at a preset time.

Controls the mode and the volume level at the time the LCD Display turns on automatically.

4) **Off Timer**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [< / >] → [^ / √] → [ENTER]

Turns the LCD Display off automatically at a preset time.

Note

- When selecting Yes for the On Timer or Off Timer when the Clock is not set up, a guiding message pops up: "Set the clock first."

Menu Transparency **PASCD**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER]

Changes the opaqueness of the OSD background.

- 1) High
- 2) Medium
- 3) Low
- 4) Opaque

Safety Lock PIN **PASCD**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [0~9] → [0~9] → [0~9]

The password can be changed.

Energy Saving **PASCD**



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [MENU]

The picture parameters are replaced with the factory default values.

- 1) On
- 2) Off

Video Wall **PASCD**

A Video Wall is a set of video screens connected together, so that each screen shows a part of the whole picture or where the same picture is repeated on each screen.

When the Video Wall is on, you can adjust the Video Wall screen setting.

1) Video Wall



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [ENTER] → [^ / √] → [ENTER]

Turns Off/On the Video Wall function of the selected display Off/On.

- Off
- On

2) Format



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER]

The format can be selected to see a divided screen.

- Full
Provides a full screen without any margins.
- Natural
Displays a natural image with the original aspect ratio intact.

3) Screen Divider



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER]

The screen can be divided into several images.

A number of screens can be selected with a different layout when dividing.

- Select a mode in Screen Divider.
- Select a display in Display Selection.
- The selection will be set up by pressing a number in the selected mode.
 - 2 x 2
 - 3 x 3
 - 4 x 4
 - 5 x 5
 - 1 x 2
 - 2 x 1
 - 1 x 5
 - 5 x 1

Note

- When Video Wall is running, the PIP, Auto Adjustment, Image Lock, and Size functions are not available. Launching Video Wall while PIP is running, will switch PIP Off. Video Wall does not operate in MagicNet mode.

Safety Screen **PASCD**

The Safety Screen function is used to prevent afterimages that may appear when a still picture is displayed on the screen over a long time.

- The Screen Scroll function scrolls the screen for the specified period of time.
- This function is not available when the power is turned off.

1) Safety Screen



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [ENTER] → [^ / √] → [ENTER]

Determines whether to turn the Screen Scroll function Off or On.

- Off
- On

2) Interval



[MENU] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER] → [^ / √] → [ENTER]

Determines the time interval to run the Screen Scroll operation. (1~10 Hour)

The time is calculated on the basis of the power on time.

By default, the time is set to 10 hours.

- 1~10 Hour

3) Second



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

Determines the time period to run the Screen Scroll operation. (1~5 Second)

By default, the time is set to 5 seconds.

- **Type-Scroll : 1~5 Second**

- **Type-Pixel, Bar, Eraser : 10~50 Second**

4) Type



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

You can change the Safety Screen Type.

- **Scroll**

- **Pixel**

- **Bar**

- **Eraser**

Resolution Select **P**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER]

When the picture is not displayed properly on the screen when setting the graphics card resolution of the computer to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768 @ 60Hz or 1366 x 768 @ 60Hz, by using this function(Resolution Select), you can have the picture displayed on the screen in the specified resolution.

Available in PC/BNC mode only

1) **Off**

2) **1024 X 768**

3) **1280 X 768**

4) **1360 X 768**

5) **1366 X 768**

Note

- Selecting the menu is only allowed when the graphics resolution is set to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768 @ 60Hz or 1366 x 768 @ 60Hz.

Lamp Control **P A S C D**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [< / >] → [ENTER]

Adjusts the inverter lamp in order to reduce energy consumption.

Power On Adjustment **P A S C D**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [^ / ∨] → [ENTER]

Adjusts the Power On time for the screen.

***Caution: Set the Power On time to be longer to avoid overvoltage.**

Reset

The picture parameters are replaced with the factory default values.

1) Image Reset **P**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [< / >] → [ENTER]

Available in PC/BNC mode only

2) Color Reset **P**



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [< / >] → [ENTER]



Available Modes

P PC / BNC / DVI

A AV

S S-Video

C Component

D DVI-Video

Multi Control

Assigns an individual ID to the SET.

1) ID Setup



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [0~9]

Assigns distinctive IDs to the SET.

2) ID Input



[MENU] → [^ / ∨] → [ENTER] → [^ / ∨] → [ENTER] → [ENTER] → [0~9]

Use to select the transmitter functions of the individual SET. Only a SET where the ID corresponds to the transmitter setting becomes activated.

Direct Functions



Available Modes

- P** PC / BNC / DVI
- A** AV
- S** S-Video
- C** Component
- D** DVI-Video

MDC **PASCD**



Moves to the Multi Control OSD screen.

LOCK **PASCD**

Sets the Safety Lock function.

1) Lock On



It will be locked.

2) Lock Off



It will be unlocked.

Note

- When setting the Lock function, you can only operate the power and lock buttons on the remote control and set.

The preset password on the LCD Display is "0000".

Note

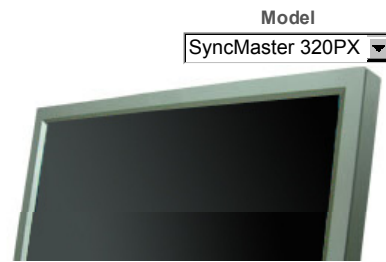
- Resetting the password for the function key lock.
Press INFO → EXIT → MUTE. The password will be reset to '0000'. **The remote control is required for resetting the password.**



- Safety Instructions
- Introduction
- Connections
- Using the Software
- Adjusting the LCD Display
- Troubleshooting
- Self-Test Feature Check
- Check List
- Q & A
- Specifications
- Information
- Appendix

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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.

Troubleshooting

Self-Test Feature Check

Note

- Check the following items yourself before calling for assistance. Contact a Service Center for problems that you cannot solve by yourself.

▸ Self-Test Feature Check

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

- 1) Turn off both your computer and the LCD Display.
- 2) Unplug the video cable from the back of the computer.
- 3) Turn on the LCD Display.

The figure shown below ("Check Signal Cable") appears on a black background when the LCD Display is working normally even though no video signal is detected: While in the Self-Test mode, the LED power indicator remains green and the figure moves around on the screen.

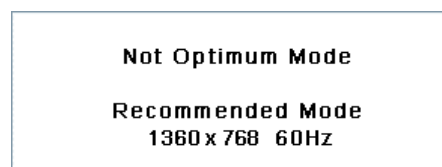


- 4) Turn off your LCD Display and reconnect the video cable; then turn on both your computer and the LCD Display

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

▸ Not Optimum Mode

You can even view the screen at a resolution of 1360 X 768. However, you will receive the following message for a minute; You can choose to change the screen resolution or stay in the current mode during that time. And if the resolution is more than 85Hz, you will see the black screen because the LCD Display does not support over 85Hz.



Note

- Refer to [Specifications](#) > [Preset Timing Modes](#) for the resolutions or frequencies supported by the LCD Display.

▸ Maintenance and Cleaning

- 1) Maintaining the LCD Display 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 that 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 repairing damages caused.

▸ Symptoms and Recommended Actions

Note

- A LCD Display recreates visual signals received from the computer. Therefore, if there is a problem with the computer or the video card, this can cause the LCD Display to become blank, have poor coloring, become noisy, and 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 a 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 Adaptor(video).
- 4) Check if the scanning ratio of the video screen is set to between 50 Hz ~ 85 Hz.
(Do not exceed 60Hz when using the maximum resolution.)
- 5) If you have problems in installing the Adaptor (video) driver, boot the computer in Safe Mode, remove the Display Adaptor in the "Control Panel, System, Device Administrator" and then reboot the computer to reinstall the Adaptor (video) driver.

Check List

Note

- The following table lists possible problems and their solutions. Before calling for assistance, check the information in this section to see if you can remedy any problems for yourself. If you do need assistance, [please call the phone number on the Information section or contact your dealer](#).

▸ Problems related to the Installation (PC Mode)

Note

- Problems related to the LCD Display installation and their solutions are listed.

Problems

Solutions

The LCD Display screen flickers.

- Check if the signal cable between the computer and the LCD Display is securely connected.

(Refer to [Connecting to a Computer](#))

▸ Problems related to the Screen

Note

- Problems related to the LCD Display screen and their solutions are listed.

Problems	Solutions
The screen is blank and the power indicator is off.	<ul style="list-style-type: none">• Ensure that the power cord is firmly connected and the LCD LCD Display is on. (Refer to the Connecting the LCD Display)
"Check Signal Cable" message.	<ul style="list-style-type: none">• Ensure that the signal cable is firmly connected to the PC or video sources. (Refer to the Connecting the LCD Display)• Ensure that the PC or video sources are turned on.
"Not Optimum Mode " message.	<ul style="list-style-type: none">• Check the maximum resolution and the frequency of the video Adaptor.• Compare these values with the data in the Preset Timing Modes Chart.
The picture rolls vertically.	<ul style="list-style-type: none">• Check if the signal cable is securely connected. Re-connect it, if necessary. (Refer to Connecting to a Computer)
The image is not clear; picture is blurred.	<ul style="list-style-type: none">• Run Frequency Coarse and Fine tuning.• Turn on again after removing all accessories (video extension cable, etc.)• Set the resolution and frequency to the recommended ranges.
The picture image is unstable and shakes.	<ul style="list-style-type: none">• Check if the resolution and frequency set for the computer video card falls in the range supported by the LCD Display. If not, reset them referring to the current Information under the LCD Display menu and Preset Timing Modes.
Ghost images are shown in the picture.	
The image is too light or too dark.	<ul style="list-style-type: none">• Adjusts the brightness and contrast. (Refer to the Brightness, Contrast)
The screen color is inconsistent.	
The color image is distorted by dark shadows.	<ul style="list-style-type: none">• Adjust color using Custom under OSD Color Adjustment menu.
The color white is poor.	
The power Indicator blinks green.	<ul style="list-style-type: none">• The LCD Display is currently saving the changes made to the settings to the OSD memory.
The screen is blank and the power indicator light is steady green or blinks every 0.5 or 1 seconds.	<ul style="list-style-type: none">• The LCD Display is using its power management system.• Press a key on the keyboard.
The screen is blank and it is blinking.	<ul style="list-style-type: none">• If you see the "TEST GOOD" message on the screen when you pressing the MENU button, check the cable connection between the LCD Display and the computer to ensure that the connector is properly connected.

▸ Problems related to Audio

Note

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

Problems	Solutions
No sound.	<ul style="list-style-type: none"> • Ensure that the audio cable is firmly connected to both the audio-in port on your LCD Display and the audio-out port on your sound card. (Refer to the Connecting the LCD Display) • Check the volume level.
The sound level is too low.	<ul style="list-style-type: none"> • Check the volume level. • 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.
The sound is too high or too low.	<ul style="list-style-type: none"> • Adjusts the Treble and Bass to the appropriate levels.

▸ Problems related to the Remote Control

Note

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

Problems	Solutions
The remote control buttons do not respond.	<ul style="list-style-type: none"> • Check the polarities (+/-) of the batteries. • Check if the batteries are empty. • Check if the power is on. • Check if the power cord is securely connected. • Check if a special fluorescent or neon lamp is on in the vicinity.

Q & A

Question	Answer
How can I change the frequency?	<p>The frequency can be changed by reconfiguring the video card.</p> <p>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.)</p>
How can I Adjusts the resolution?	<ul style="list-style-type: none"> • Windows XP: Set the resolution in the Control Panel → Appearance and Themes → Display → Settings. • Windows ME/2000: Set the resolution in the Control Panel → Display → Settings. * Contact the video card manufacturer for details.
How can I set the Power Saving function?	<ul style="list-style-type: none"> • 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). • 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).
How can I clean the outer case/LCD Panel?	<p>Disconnect the power cord and then clean the LCD Display with a soft cloth, using either a cleaning solution or plain water.</p> <p>Do not leave any detergent or scratches on the case. Do not let any water enter the LCD Display.</p>



[Safety Instructions](#)
[Introduction](#)
[Connections](#)
[Using the Software](#)
[Adjusting the Monitor](#)
[Troubleshooting](#)
[Specifications](#)
[General](#)
[PowerSaver](#)
[Preset Timing Modes](#)
[Information](#)
[Appendix](#)

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Model

SyncMaster 320PX

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.

Specifications

General

General

General

Model Name SyncMaster 320PX

LCD Panel

Size 32 " Diagonal (80 cm)

Display area 697.6845 mm (H) x 392.256 mm (V)

Pixel Pitch 0.51075 mm (H) x 0.51075 mm (V)

Synchronization

Horizontal 30 ~ 81 kHz

Vertical 56 ~ 75 Hz

Display Color

Display Color 16.7 M Colors

Resolution

Optimum resolution 1360 x 768 / 1366 x 768 @ 60 Hz depends on graphics card used

Maximum resolution 1360 x 768 @ 60 Hz

Input Signal, Terminated

RGB Analog, DVI(Digital Visual Interface) Compliant Digital RGB.

0.7 Vp-p Positive at 75 Ω \pm 10 %

Separate H/V sync, Composite sync, SOG, TTL level, positive or negative.

Maximum Pixel Clock

100 MHz

Power Supply

AC 100 - 240 V~ (+/- 10 %), 50/60 Hz

Signal Cable

15pin to 15pin D-sub cable, Detachable

DVI-D to DVI-D connector, Detachable (option)

Signal Connectors

D-sub, BNC, DVI-D, YPbPr, S-VHS, VCR

Dimensions (WxHxD)/ Weight

780 X 482 X 107 mm / 30.1 X 19.0 X 4.6 inch (without Stand), 16.1 kg / 35.4 lbs

780 X 530 X 223 mm / 30.1 X 20.9 X 8.8 inch (with Stand)

VESA Mounting Interface

200 mm x 200 mm (for use with Specialty(Arm) Mounting hardware.)

Environmental considerations

Operating Temperature: 50 °F ~ 104 °F (10 °C ~ 40 °C)
Humidity: 10 % ~ 80 %, non-condensing

Storage Temperature: -4 °F ~ 113 °F (-20 °C ~ 45 °C)
Humidity: 5 % ~ 95 %, non-condensing

Audio Characteristics

Audio Input 1 RCA Jack Red(R) White(L), 0.5 Vrms (-9 dB)

Audio Input 2	RCA Jack Red(R) White(L), 0.5 Vrms (-9 dB)
PC Audio Input	3.5 Ø Stereo Jack, 0.5 Vrms (-9 dB)
Frequency	RF: 80 Hz ~ 15 kHz (at -3 dB)
Response	AV: 80 Hz ~ 20 kHz (at -3 dB)

Plug and Play Capability

This monitor can be installed on any Plug & Play compatible system. The interaction of the monitor and the computer systems will provide the best operating conditions and monitor settings. In most cases, the monitor installation will proceed automatically, unless the user wishes to select alternate settings.

Dot Acceptable

TFT LCD panels manufactured by using advanced semiconductor technology with precision of 1ppm (one millionth) above are used for this product. But the pixels of RED, GREEN, BLUE and WHITE color appear to be bright sometimes or some black pixels may be seen. This is not from bad quality and you can use it without any problems.

- For example, the number of TFT LCD sub pixels contained in this product are 3,133,440.

Note

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

Class B Equipment (Information Communication equipment for residential use)

- This product complies with the Electromagnetic Compatibility Directives for residential use and can be used in all areas including common residential areas. (Class B equipment emits less electromagnetic waves than Class A equipment.)

PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor to low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use the software utility installed on your computer to set up this feature.

State	Normal Operation	Power saving mode	Power off EPA/ENERGY 2000	Power off
Power Indicator	Green	Green, Blinking	Amber	Black
Power Consumption	Less than 160 W	Less than 1 W (Off-mode)	Less than 1 W (Power button)	0 W (Power Switch)



This monitor is EPA ENERGY STAR[®] compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality.

As an ENERGY STAR[®] Partner, SAMSUNG has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency.

Preset Timing Modes

▸ Preset Timing Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and Adjusts the screen as follows.

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	49.500	+/+
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-

IBM, 720 x 400	31.469	70.087	28.322	-/+
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 800 x 600	53.674	85.000	56.250	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1024 x 768	68.677	85.997	94.500	+/+
VESA, 1360 x 768	47.712	60.000	85.500	+/+



Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called the Horizontal Cycle and the inverse number of the Horizontal Cycle is called the Horizontal Frequency. Unit: kHz

Vertical Frequency

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called the Vertical Frequency or Refresh Rate. Unit: Hz



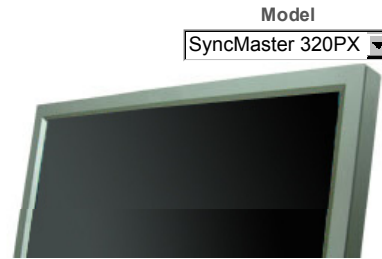
[Safety Instructions](#)
[Introduction](#)
[Connections](#)
[Using the Software](#)
[Adjusting the LCD Display](#)
[Troubleshooting](#)
[Specifications](#)
[Information](#)
[For Better Display](#)
PRODUCT INFORMATION
 (Image Retention Free)
[Appendix](#)

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Information



For Better Display

- +

Adjust the computer resolution and screen inection rate (refresh rate) on the computer as described below to enjoy the best picture quality. You can have an uneven picture quality on screen if the best picture quality is not provided for TFT-LCD.

 - Resolution: 1360 x 768
 - Vertical frequency (refresh rate): 60 Hz
- +

TFT LCD panels manufactured by using advanced semiconductor technology with a precision of 1ppm (one millionth) and above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen. This is not from bad quality and you can use it without any problems.

 - For example, the number of TFT LCD sub pixels contained in this product are 3,133,440.
- +

When cleaning the monitor and the panel outside, please apply the recommended small amount of cleaner by using a soft cloth to polish. Do not force the LCD area but rub softly.
If excessive force is applied, you may stain it.
- +

If you are not satisfied with the picture quality, you can get better quality of picture by performing the "auto adjustment function" in display screen that is appeared as window termination button is pressed.
If there's still noise after the automatic adjustment, use the FINE/COARSE adjustment function.
- +

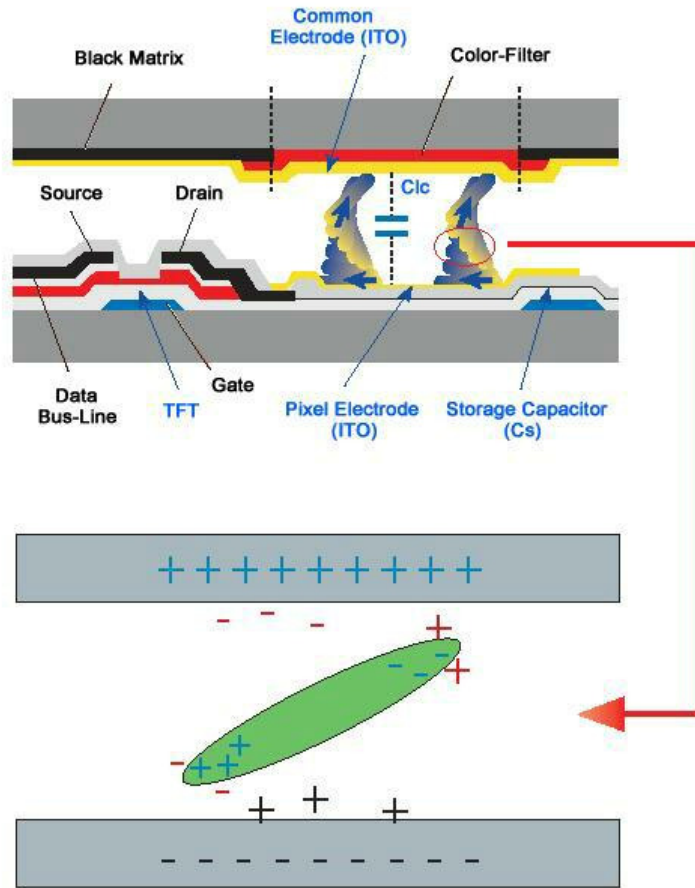
When viewing a fixed screen for an extended period of time, a residual image or blurriness may appear.
Change the mode to energy save or set a screensaver to move the picture when you need to be away from the LCD Display for an extended period of time.

PRODUCT INFORMATION (Image Retention Free)

- +

What is Image Retention ?

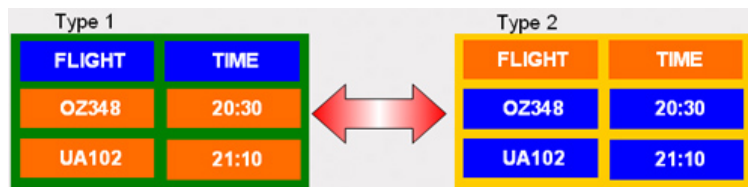
Image retention may not occur when a LCD panel is operated under normal conditions.
Normal conditions are defined as continuously changing video patterns. When the LCD panel is operated for a long time with a fixed pattern (over 12 hours), there may be slight difference in voltage between electrodes that work the liquid crystal (LC) in a pixel. The voltage difference between electrodes increases with time, forcing the liquid crystal to lean. When this occurs, the previous image may be seen when the pattern is changed. To prevent this, the accumulated voltage difference must be decreased.



• Power Off, Screen Saver, or Power Save Mode

- Turn the power off for 4 hours after 20 hours in use
- Turn the power off for 2 hours after 12 hours in use
- Set the Monitor to power off with the PC Display Properties Power Scheme.
- Use a Screen saver if possible - Screen saver in one color or a moving image is recommended.

• Change the Color Information periodically



☑ Note

- Use Two different colors
Rotate the Color Information with 2 different colors every 30 minutes.
- Avoid using a combination of characters and background color with large difference in luminance.
Avoid using Grey colors, which can cause Image retention easily.
Avoid: Colors with big difference in luminance (Black & White, Grey)



• Change the characters color periodically

- Use Bright colors with little difference in luminance
- Cycle : Change the characters color and background color every 30 minutes

FLIGHT : TIME	FLIGHT : TIME	FLIGHT : TIME	FLIGHT : TIME
OZ348 : 20:30	FLIGHT : TIME	OZ348 : 20:30	OZ348 : 20:30

- Every 30 minutes, change the characters with movement.



- All area display Moving image together with Logo periodically.
 - Cycle: Display moving image together with Logo for 60 seconds after 4 hours in use.
- The best way to protect your monitor from Image retention is to turn Power off, or set your PC, or System to operate a Screen Saver program when you are not using it. Also Warranty service will be limited based on instruction guide.

➤ Apply the Screen Scroll function on Product

- Apply the Screen Scroll function
 - Symptom: Horizontal Bar with Black Color move up and down.



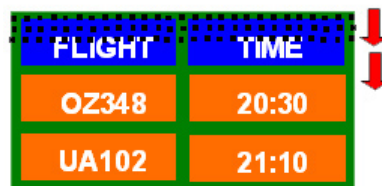
- Select method
 - . Instruction Guide : OSD Menu -> Set Up -> Safety Screen -> Screen Scroll
 - . Time Interval : 1 ~ 10 hours (Recommend : 1)
 - . Time Period : 1 ~ 5 second (Recommend : 5)

Note

- (Please check CD's User Guide at "OSD Function", some model's will not available)

➤ Apply the Screen Pixel function on Product

- Apply the Screen Pixel function
 - Symptom: Dot with Black Color move up and down.



- Select method
 - . Instruction Guide : OSD Menu -> Set Up -> Safety Screen -> Pixel
 - . Time Interval : 1 ~ 10 hours (Recommend : 1)
 - . Time Period : 10 ~ 50 second (Recommend : 50)

- Apply the Screen Bar function
 - Symptom: Horizontal / Vertical Bar with Black Color move up and down.



- Select method

. Instruction Guide : OSD Menu -> Set Up -> Safety Screen -> Bar

. Time Interval : 1 ~ 10 hours (Recommend : 1)

. Time Period : 10 ~ 50 second (Recommend : 50)

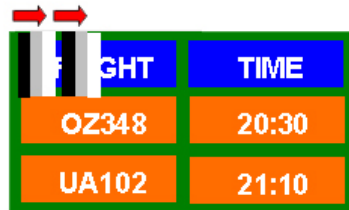
Note

- (Please check CD's User Guide at "OSD Function", some model's will not available.)

Apply the Screen Erasing function on Product

- Apply the Screen Erasing function

- Symptom: 2 Vertical blocks move with erasing the display



- Select method

. Instruction Guide : OSD Menu -> Set Up -> Safety Screen -> Eraser

. Time Interval : 1 ~ 10 hours (Recommend : 1)

. Time Period : 10 ~ 50 second (Recommend : 50)

Note

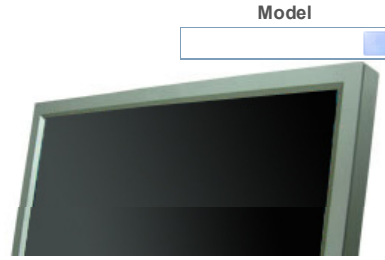
- (Please check CD's User Guide at "OSD Function", some model's will not available)



- Safety Instructions
- Introduction
- Connections
- Using the Software
- Adjusting the LCD Display
- Troubleshooting
- Specifications
- Information
- Appendix
- Contact SAMSUNG WORLDWIDE
- Terms
- Correct Disposal Authority

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Appendix

Contact SAMSUNG WORLDWIDE

Note

- If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

North America

U.S.A	1-800-SAMSUNG (7267864)	http://www.samsung.com
CANADA	1-800-SAMSUNG (7267864)	http://www.samsung.com/ca
MEXICO	01-800-SAMSUNG (7267864)	http://www.samsung.com/mx

Latin America

ARGENTINE	0800-333-3733	http://www.samsung.com/ar
BRAZIL	4004-0000	http://www.samsung.com/br
CHILE	800-726-7864 (SAMSUNG)	http://www.samsung.com/cl
COLOMBIA	01-8000112112	http://www.samsung.com.co
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin
ECUADOR	1-800-10-7267	http://www.samsung.com/latin
EL SALVADOR	800-6225	http://www.samsung.com/latin
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin
JAMAICA	1-800-234-7267	http://www.samsung.com/latin
PANAMA	800-7267	http://www.samsung.com/latin
PUERTO RICO	1-800-682-3180	http://www.samsung.com/latin
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/latin
TRINIDAD & TOBAGO	1-800-7267-864	http://www.samsung.com/latin
VENEZUELA	1-800-100-5303	http://www.samsung.com/latin

Europe

BELGIUM	02 201 2418	http://www.samsung.com/be
	844 000 844	http://www.samsung.com/cz
CZECH REPUBLIC		

Distributor pro Českou republiku:
Samsung Zrt., česká organizační složka Vyskočilova 4,
14000 Praha 4

DENMARK	38 322 887	http://www.samsung.com/dk
FINLAND	09 693 79 554	http://www.samsung.com/fi
FRANCE	08 25 3260 (€ 0,15/min)	http://www.samsung.com/fr
GERMANY	01805-121213 (€ 0,14/Min)	http://www.samsung.de
HUNGARY	06-80-SAMSUNG (7267864)	http://www.samsung.com/hu
ITALIA	800 SAMSUNG (7267864)	http://www.samsung.com/it
LUXEMBURG	02 261 03 710	http://www.samsung.lu
NETHERLANDS	0900 20 200 88 (€ 0,10/Min)	http://www.samsung.com/nl
NORWAY	231 627 22	http://www.samsung.com/no
POLAND	0 801 801 881	http://www.samsung.com/pl
PORTUGAL	80 8 200 128	http://www.samsung.com/pt
REPUBLIC OF IRELAND	0818 717 100	http://www.samsung.com/uk
SLOVAKIA	0800-SAMSUNG (7267864)	http://www.samsung.com/sk
SPAIN	902 10 11 30	http://www.samsung.com/es
SWEDEN	08 585 367 87	http://www.samsung.com/se
SWITZERLAND	1-800-SAMSUNG (7267864)	http://www.samsung.com/ch
U.K	0870 SAMSUNG (7267864)	http://www.samsung.com/uk

CIS

ESTONIA	800-7267	http://www.samsung.ee
LATVIA	800-7267	http://www.samsung.com/lv
LITHUANIA	800-77777	http://www.samsung.lt
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Terms

Sync Signal

Sync (Synchronized) Signals refer to the standard signals that are required to display desired colors on the LCD Display. They are divided into Vertical and Horizontal Sync Signals. These signals display normal color images by the set resolution and frequency.

Types of Sync Signals

Separate	This is a scheme of transmitting individual vertical sync signals to the LCD Display.
Composite	This is a scheme of combining vertical sync signals into one composite signal and transmitting it to the LCD Display. The LCD Display displays the color signals by separating the composite signal into original color signals.

Dot Pitch

The image on a LCD Display is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm

Vertical Frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called the Vertical Frequency or Refresh Rate. Unit: Hz

Example:	If the same light repeats itself 60 times per second, this is regarded as 60 Hz.
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Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called the Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

Interlace and Non-Interlace Methods

Showing the horizontal lines of the screen from the top to the bottom sequentially is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of LCD Displays to ensure a clear image. The Interlace method is the same as that used in TVs.

Plug & Play

This is a function that provides the best quality screen for the user by allowing the computer and the LCD Display to exchange information automatically. This LCD Display follows the international standard VESA DDC for the Plug & Play function.

Resolution

The number of horizontal and vertical dots used to compose the screen image is called the 'resolution'. This number shows the accuracy of the display. A high resolution is good for performing multiple tasks as more image information can be shown on the screen.

Example:	If the resolution is 1360 x 768, this means the screen is composed of 1360 horizontal dots (horizontal resolution) and 768 vertical lines (vertical resolution).
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Multiple Display Control (MDC)

A Multiple Display Control (MDC) is an application allowing various displays to be easily and simultaneously operated on a PC. RS-232C, a standard of serial communication, is used for communicating between a PC and a display.

Correct Disposal

➔ **Correct Disposal of This Product (Waste Electrical & Electronic Equipment) - Europe only**



(Applicable in the European Union and other European countries with separate collection systems)

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MÉXICO

IMPORTADO POR: SAMSUNG ELECTRONICS MÉXICO. S.A. de C.V.
Vía Lopez Portillo No. 6, Col. San Fco. Chilpan
Tultitlán, Estado de México, C.P. 54940
Tel: 01-55-5747-5100 / 01-800-726-7864

EXPORTADO POR: Samsung Electronics CO.,LTD.
416, Mae tan-3dong, Yeongtong - gu,
Suwon City, Gyeonggi-do Korea

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