SyncMaster 400FP-2,460FP-2,400FPn-2, 460FPn-2

# **LCD Monitor**

## **User Manual**

## **Safety Instructions**

#### Notational

🖉 Note

These safety instructions must be followed to ensure your safety and prevent property damage.

Make sure to read the instructions carefully and use the product in the correct manner. UWarning / Caution



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

#### Notational Conventions



#### Power

When not used for extended period of time, set your computer to DPM.

If using screen saver, set it to active screen mode.

The images here are for reference only, and are not applicable in all cases (or countries).

Shortcut to Anti-Afterimage Instructions



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Do not use a damaged power cord or plug or a damaged or loose power outlet.

Otherwise, this may result in electric shock or fire.

Otherwise, this may result in electric shock.



Do not touch the power plug with wet hands when removing or plugging the plug into the outlet.



Make sure to connect the power cord to a grounded power outlet.



Otherwise, it may result in electric shock or personal injury.



Ensure that the power plug is plugged into the power outlet firmly and correctly.

• Otherwise, this may result in fire.

Do not forcefully bend or pull the power plug and do not place any heavy material on it.

• Otherwise, this may result in fire.

Otherwise, this may result in me.

Do not connect multiple appliances to the same power outlet.

• Otherwise, this may cause fire due to overheating.



Do not disconnect the power cord while using the product.

• Otherwise, this may result in damage to the product due to electric shock.



■ To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.

This may cause electric shock or fire.



Use only the power cord provided by our company. Do not use the provided power cord of another product.

• Otherwise, this may result in fire or electric shock.

#### Installation



Be sure to contact an authorized 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.



Ensure that at least two persons lift and move the product.

• Otherwise, it may be dropped and cause personal injury, and/ or damage the product.



When installing the product in a cabinet or rack, make sure that the front end of the bottom of the product does not project out.

- Otherwise, it may fall or cause personal injury.
- Use a cabinet or rack of a size appropriate to the product.



DO NOT PLACE CANDLES, MOSQUITO REPELLANT, CIGARETTES AND ANY HEATING APPLIANCES NEAR THE PRODUCT.

Otherwise, this may result in fire.





- Ensure that the packaging vinyl is kept away from children.
- Otherwise, it may result in serious harm (suffocation) if children play with it.



- If the height of your LCD Display is adjustable, do not place any object or part of your body on the stand when lowering it.
- This may cause damage to the product or the person carrying 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 cleaner directly onto the surface of the product.

• Otherwise, this may result in the discoloration and distortion of the structure and the screen surface may peel off.



Clean the product using a soft cloth with a LCD Display cleaner only. If you must use a cleaner other than the LCD Display cleaner, dilute it with water at a ratio of 1:10.



When cleaning the power plug pins or dusting the power outlet, clean it with a dry cloth.

• Otherwise, it may result in fire.

When cleaning the product, make sure to disconnect the power cord.

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Otherwise, it may result in electric shock or fire.

When cleaning the product, disconnect the power cord and clean it softly with a dry cloth.

 (Do not use chemicals such as wax, benzene, alcohol, thinner, mosquito repellant, lubricant, or cleaner.) These may change the appearance of the product surface and peel off the indication labels on the product.

Since the product housing is easily scratched, make sure to use the specified cloth only.

 Use the specified cloth adding only a little water. As the product may be scratched if there is any foreign material on the cloth, make sure to shake it thoroughly before using it.



When cleaning the product, do not spray water directly onto the main body of the product.

- Ensure that water does not enter the product and that it is not wet.
- Otherwise, this may result in electric shock, fire or a malfunction.

#### Others



The product is a high voltage product. Ensure that users do not disassemble, repair or modify the product themselves.

• Otherwise, this may result in electric shock or fire. If the product needs to be repaired, contact a Service Center.



If there is a strange smell or a strange sound or smoke is coming from the product, disconnect the power plug immediately and contact a Service Center.



• Otherwise, this may result in electric shock or fire.

Do not place this product in a location exposed to moisture, dust, smoke, water, or in a car.

• Otherwise, this may result in electric shock or fire.



When you drop the product or the case is broken, turn the power off and disconnect the power cord. Contact a Service Center.

Otherwise, this may result in electric shock or fire.



If thunder or lightening is occurring, do not touch the power cord or antenna cable.

Otherwise, this may result in electric shock or fire.



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

Otherwise, it may fall and result in electric shock, damage to the product or fire due to damage to the cable.



Do not lift or move the product back and forwards or right and left while only holding the power cord or signal cables.

Otherwise, it may fall and result in electric shock, damage to the product or fire due to damage to the cable.



Make sure that the ventilating opening is not blocked by a table or curtain.

Otherwise, it may result in fire due to an increase in the internal temperature.



Do not place any containers containing water, vases, flowerpots, medicines as well as any metal on the product.

- If water or a foreign material enters the product, disconnect the power cord and contact a Service Center.
- This may result in a product malfunction, electric shock, or fire.



Do not use or keep combustible spray or flammable material near the product.

• Otherwise, this may result in an explosion or fire.



Do not insert any metal, such as chopsticks, coins, pins and steel, or flammable objects, such as matches or paper, inside the product (through the ventilating openings, input and output terminals, etc).

- If water or foreign material enters the product, disconnect the power cord and contact a Service Center.
- Otherwise, this may result in electric shock or fire.

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When using a fixed screen for a long time, an afterimage or stain may occur.

If you are not using your product for a long period of time, put it into sleep mode or use a moving screen saver.

Set a resolution and frequency appropriate to the product.



Otherwise, your eyesight may be damaged.



When using headphones or earphones, do not turn the volume too high.

Having the sound too loud may damage your hearing.



If you continually move closer to the product screen, your eyesight may be failing.



Take a rest for at least five (5) minutes after using the LCD Display for one (1) hour.

This reduces the weariness of your eyes.



Do not install it in an unstable location such as an unstable rack or uneven surface or a location exposed to vibrations.

- Otherwise, it may fall and cause personal injury and/or damage the product.
- If you use the product in a location exposed to vibrations, it may damage the product and result in fire.



When moving the product, turn the power off and disconnect the power plug, antenna cable, and all the cables connected to the product.

• Otherwise, it may result in electric shock or fire.



Ensure that children do not hang onto the product or climb up onto the product.

• The product may fall and cause personal injury or death.



▶ If you do not use the product for a long period of time, disconnect the power cord from the power outlet.

• Otherwise, this may result in overheating or fire due to dust, and may result in fire due to electric shock or leakage.



Do not place any heavy items or toys or confectionery, such as cookies etc. that may attract the attention of children and to the product.

• Your children may hang onto the product causing it to fall and this may result in personal injury or death.



Be careful that children do not place the battery in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

• If children have had the battery in their mouths, consult your doctor immediately.

When replacing the battery, insert it with right polarity (+, -).



 Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.



Use only the specified standardized batteries, and do not use a new battery and a used battery at the same time.

• Otherwise, the batteries may be damaged or cause fire, personal injury or damage due to a leakage of the internal liquid.



■ The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

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.



Do not place the product in a location exposed to direct sunlight or near any heat such as a fire or heater.

This may reduce the lifetime of the product, and may result in fire.



- Do not drop any objects onto the product or cause any impact to the product.
- Otherwise, this may result in electric shock or fire.



- Do not use a humidifier or kitchen table near the product.
- Otherwise, this may result in electric shock or fire.



When there is a gas leak, do not touch the product or the power plug but ventilate immediately.

If a spark occurs, it may cause an explosion or fire.



If the product has been turned on for a long time, the display panel becomes hot. Do not touch it.

- Keep the small accessories in a location out of the reach of children.
  - Be careful when adjusting the angle of the product or the height of the stand.
    - This may result in personal injury as your hand or fingers may become caught.
  - Also, if you tilt the product too far, it may fall and cause personal injury.



Do not install the product in a location low enough for children to reach.

- Otherwise, it may fall and result in personal injury.
- Since the front part of the product is heavy, install the product on a level and stable surface.



- Do not put any heavy objects on the product.
- This may result in personal injury and/or damage to the product.

## Introduction

#### **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.

#### Checking the Contents of the Package



Remove the lock from the package box, as shown in the figure above.







Lift up the package box by Check the contents of the holding the grooves on package. And vinyl cover. both sides of the package box.



- After unpacking the package, make sure to check the contents of the package.
- Make sure to keep the package box for transporting the product in the future.
- After unpacking, you may use the lower part of the package box as a temporary stand for product test or operation check.





- You can purchase and connect a separate network box or TV tuner box. For information on how to use these, refer to their respective user manuals.
- You can only connect one external box.

#### Ferrite Core



- The ferrite cores are used to shield the cables from interference.
- When connecting a cable, open the ferrite core and clip it around the cable near the plug.

#### Your LCD Display

#### Front



MENU button [MENU]

Opens the on-screen menu and exits from the menu. Also use to exit the OSD menu or return to the previous 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. When OSD is not on the screen, push the button to adjust volume.

4 ENTER button [ENTER]

Activates a highlighted menu item.

5000 SOURCE button [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] [DVI] [AV] [HDMI] [MagicInfo] [TV] [BNC] [Component]

🖉 Note

- The **TV** menu is available when a TV tuner box is installed.
- The MagicInfo menu is available when a network box is installed in the FPn-2 or FP-2 model.

6 D.MENU

Opens the on-screen D.MENU.



#### Rear



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.









Switches the LCD Display On/Off.



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



<sup>3</sup> RS232C OUT/IN (RS232C Serial PORT)

MDC(Multiple Display Control) Program Port

UVI / PC / HDMI IN [DVI/PC/HDMI AU-DIO IN] (PC/DVI/HDMI Audio Connection Terminal (Input))



Connect the HDMI terminal at the back of your LCD Display to the HDMI terminal of your digital output device using a HDMI cable.

<sup>6</sup> DVI / PC / HDMI IN [RGB](PC Video Connection Terminal)

Using a D-Sub Cable (15 pin D-Sub) - PC mode (Analog PC)

UNI / PC / HDMI IN [DVI] (PC Video Connection Terminal)

Using a DVI Cable (DVI-D to DVI-D) - DVI mode (Digital PC)

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Make sure to use connecting DC-OUT terminal to the authorized TV-Tuner Box[SBB-DT\*].

Otherwise, this may result in damage to the product.

9 AV IN [VIDEO] (VIDEO Connection Terminal)

Connect the [VIDEO] terminal of your monitor to the video output terminal of the external device using a VIDEO cable.

U AV AUDIO IN [L-AUDIO-R](LCD Display Audio Connection Terminal (Input)) U AV AUDIO OUT [L-AUDIO-R] (LCD Display Audio Connection Terminal (Output))

12 BNC/COMPONENT OUT[R/PR, G/Y, B/ PB, 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.

BNC/COMPONENT IN[R/PR, G/Y, B/ PB, H, V]

(BNC/Component Connection Terminal (Input))



#### </u> RGB OUT

(Applicable to the FPn-2 model only)

15 LAN (LAN Connection Terminal)

(Applicable to the FPn-2 model only)

USB(USB Connection Terminal)

Keyboard / Mouse, Mass Storage Device Compatible.

(Applicable to the FPn-2 model only)







#### Kensington Lock

The Kensington Lock is a device used to physically fix the system when using it in a public place. The locking device has to be purchased separately. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for proper use. The locking device has to be purchased separately.

## 🖉 Note

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

## Using the Anti-Theft Kensington Lock

- Insert the locking device into the Kensington slot on the Monitor <sup>B</sup>and turn it in the locking direction A.
- 2. Connect the Kensington Lock cable.
- 3. Fix the Kensington Lock to a desk or a heavy stationary object.



See Connecting Cables 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.



4. DEL -/ button	The "-" button operates only for DTV. It is used to select MMS (multi-channel) for a DTV.		
5. + VOL -	Adjusts the audio volume.		
6. <sup>⊄</sup> MUTE	Pauses (mutes) the audio output temporarily. This is dis- played on the lower left corner of the screen. The audio resumes if MUTE or - VOL + is pressed in the Mute mode.		
7. TV/DTV	Selects the TV and DTV mode directly.		
8.77 MENU	Opens the on-screen menu and exits from the menu or closes the adjustment menu.		
9.	Activates a highlighted menu item.		
10. <i>i</i> INFO	Current picture information is displayed on the upper left corner of the screen.		
11.COLOR BUTTONS	Press to add or delete channels and to store channels to the favorite channel list in the "Channel List" menu.		
12.	TV channels provide written information services via tele- text.		
8	- Teletext Buttons El , 10 E? , 18 E) , 18 E, 19 E) , 29 E)/13 E) , 28 E, 28 EX,		
	For more information > TTX / MIX		
13.STILL	Press the button once to freeze the screen. Press it again to unfreeze.		
14.AUTO	Adjusts the screen display automatically in <b>PC</b> mode. By changing the resolution in the control panel, auto function is performed.		
15. 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. ( <b>Standard Music Movie Speech Custom</b> )		
16.MDC	MDC Quick Launch Button.		
17.LOCK	Activates or deactivates all function keys on both the remote control and the LCD Display except for the Power and LOCK buttons.		
	buttons.		
18. <sup>-D</sup> SOURCE	Press the button to change the input signal SOURCE.		
18. I SOURCE			
18.	Press the button to change the input signal SOURCE. Changing the SOURCE is only allowed for external devices		
_	Press the button to change the input signal SOURCE. Changing the SOURCE is only allowed for external devices that are connected to the monitor at the time. This button is used to return to the immediately previous		

Returns to the Moves from or or adjusts sele Exits from the Selects SRS	ected menu vali menu screen.	ı. another horizontall	y, vertically	
Moves from or or adjusts sele Exits from the Selects SRS	ne menu item to ected menu valu menu screen.	another horizontall	y, vertically	
or adjusts sele Exits from the Selects SRS	ected menu vali menu screen.		y, vertically	
Selects SRS <sup>-</sup>				
MagicInfo Qui	Selects SRS TruSurround XT mode.			
MagicInfo Quick Launch Button.				
When you press this button, current picture mode is di played on the lower center of the screen.			ode is dis-	
AV/HDMI/1	<b>V</b> : P.MODE			
preset at the through avail	factory. Then able preconfig	push button agai ured modes. ( <b>D</b> y	n to circle	
PC / DVI / Ma	gicInfo: M/B (N	lagicBright)		
vironment dep watching. The	pending on the on push button a	contents of the ima gain to circle throug	ge you are	
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 selec	t MTS (Multicha	nnel Television Ste	reo) mode.	
	Audio Type	MTS/S_Mode	Default	
FM Stereo	Mono	Mono	Manual	
	Stereo	Mono ↔ Stereo	Change Mono	
Even time ve				
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.				
- This fuction does not work for this LCD Display.				
	When you proplayed on the played on the played on the AV / HDMI / T The LCD Disp preset at the through avail Standard I PC / DVI / Ma MagicBright i vironment dep watching. The preconfigured Custom ) DUAL- STEREO/MOI MONO/NICAN broadcasting is control while v MTS- You can select FM Stereo Every time you - This fuction of Swaps the control wing in the PIP win main screen in	When you press this button, played on the lower center of AV / HDMI / TV : P.MODE The LCD Display has four auto preset at the factory. Then through available preconfig Standard Movie Custo PC / DVI / MagicInfo: M/B (M) MagicBright is a feature provisionment depending on the over watching. Then push button a preconfigured modes. (Enter Custom) DUAL- STEREO/MONO, DUAL 1 / MONO/NICAM STEREO can broadcasting type by using the control while watching TV. MTS- You can select MTS (Multichan Audio Type FM Stereo Mono Stereo SAP Every time you press the button - This fuction does not work for Swaps the contents of the PII in the PIP window will appear main screen image will appear	When you press this button, current picture main played on the lower center of the screen.   AV / HDMI / TV : P.MODE   The LCD Display has four automatic picture settin preset at the factory. Then push button again through available preconfigured modes. ( Dy Standard Movie Custom )   PC / DVI / MagicInfo: M/B (MagicBright)   MagicBright is a feature providing the optimum of the pending on the contents of the imal watching. Then push button again to circle througe preconfigured modes. (Entertain Internet Custom )   DUAL-   STEREO/MONO, DUAL 1 / DUAL II and MON MONO/NICAM STEREO can be operated depending the DUAL button on control while watching TV.   MTS-   You can select MTS (Multichannel Television Stereo SAP   Mono Mono   Stereo Mono ↔ Stereo SAP   Every time you press the button, a PIP screen at - This fuction does not work for this LCD Display   Swaps the contents of the PIP and main image. in the PIP window will appear on the main scree main screen image will appear in the PIP window	

## Mechanical Layout(400FP-2.400FPn-2)

## **Mechanical Layout**



#### **LCD Display Head**

#### NETWORK MODEL SIZE



#### **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 Display.
- SAMSUNG is not responsible for any product damage or any injury caused by installation at customer's discretion.

#### Dimensions



## 

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

#### 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

Only use the components and accessories shipped with the product.



#### Wall Bracket Assembly

🖉 Note

There are two hinges(left and right). Use the correct one.

1. Insert and tighten the Captive Screw in the direction of the arrow.

When done, mount the wall bracket on the wall.

There are two hinges(left and right). Use the correct one.

- A Captive Screw
- B Wall Bracket
- C Hinge (Left)
- D Hinge (Right)
- 2. Before drilling into the wall, check if the length between the two locking holes at the back of the product is correct.

If the length is too short or long, loosen all or some of the 4screws on the wall bracket to adjust the length.



Α-

Length between the two locking holes

3. Check the installation diagram and mark the drill points on the wall. Use the 5.0 mm bit to drill holes deeper than 35 mm. Fix each anchor in the corresponding hole. Match each of the brackets and hinge holes to the corresponding anchor holes and insert and tighten the 11 screws A.



#### To mount the product on the wall bracket

The shape of the product may vary depending on the model. (The assemblies of the plastic hanger and the screw are the same)

1. Remove the 4 screws on the back of the product.



2. Insert the screw B into the plastic hanger.



#### 

- Mount the product on the wall bracket and make sure it is properly fixed to the left and right plastic hangers.
- Be careful when installing the product on the bracket as fingers can be caught in the holes.
- Make sure the wall bracket is securely fixed to the wall, or the product may not stay in place after installation.
- 3. Tighten the 4 screws in step 2 (plastic hanger + screw B)to the rear holes of the product.



4. Remove safety pin (3) and insert the 4 product holders into the corresponding bracket holes (1). Then place the product(2) so that it is firmly fixed to the bracket. Make sure to re-insert and tighten the safety pin (3) to securely hold the product to the bracket.



- A LCD Display
- B Wall Bracket
- C Wall

#### Wall Bracket Angle Adjustment

Adjust the bracket angle to -2° before installing it on the wall.



- 1. Fix the product to the wall bracket.
- 2. Hold the product at the top in the center and pull it forward (direction of the arrow) to adjust the angle.

## 🖉 Note

You can adjust the bracket angle between -2° and 15°.



Make sure to use the top center, and not the leftor the right side of the product to adjust the angle.

## Mechanical Layout(460FP-2, 460FPn-2)

#### **Mechanical Layout**



#### LCD Display Head

#### **NETWORK MODEL SIZE**



#### 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 Display.
- SAMSUNG is not responsible for any product damage or any injury caused by installation at customer's discretion.

#### Dimensions



## 

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

#### 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

Only use the components and accessories shipped with the product.



#### Wall Bracket Assembly



There are two hinges(left and right). Use the correct one.

1. Insert and tighten the Captive Screw in the direction of the arrow.

When done, mount the wall bracket on the wall.



There are two hinges(left and right). Use the correct one.

- B Wall Bracket
- C Hinge (Left)
- D Hinge (Right)
- 2. Before drilling into the wall, check if the length between the two locking holes at the back of the product is correct.

If the length is too short or long, loosen all or some of the 4screws on the wall bracket to adjust the length.



Α-

Length between the two locking holes

3. Check the installation diagram and mark the drill points on the wall. Use the 5.0 mm bit to drill holes deeper than 35 mm. Fix each anchor in the corresponding hole. Match each of the brackets and hinge holes to the corresponding anchor holes and insert and tighten the 11 screws A.



#### To mount the product on the wall bracket

The shape of the product may vary depending on the model. (The assemblies of the plastic hanger and the screw are the same)

1. Remove the 4 screws on the back of the product.



2. Insert the screw B into the plastic hanger.



#### Notice

- Mount the product on the wall bracket and make sure it is properly fixed to the left and right plastic hangers.
- Be careful when installing the product on the bracket as fingers can be caught in the holes.
- Make sure the wall bracket is securely fixed to the wall, or the product may not stay in place after installation.

3. Tighten the 4 screws in step 2 (plastic hanger + screw B)to the rear holes of the product.



4. Remove safety pin (3) and insert the 4 product holders into the corresponding bracket holes (1). Then place the product(2) so that it is firmly fixed to the bracket. Make sure to re-insert and tighten the safety pin (3) to securely hold the product to the bracket.



- A LCD Display
- B Wall Bracket
- C Wall

#### Wall Bracket Angle Adjustment

Adjust the bracket angle to -2° before installing it on the wall.



- 1. Fix the product to the wall bracket.
- 2. Hold the product at the top in the center and pull it forward (direction of the arrow) to adjust the angle.



You can adjust the bracket angle between -2° and 15°.



Make sure to use the top center, and not the leftor the right side of the product to adjust the angle.

## Connections

#### **Connecting a Computer**



#### 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.

## Ø Note

AV input devices such as DVD players, VCRs 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 contents under Adjusting Your LCD Display.



- 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 2 ways to connect the D-sub to your LCD Display. Choose one of the following:

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.



2-29 Using the DVI (Digital) connector on the video card.

• Connect the DVI Cable to the DVI port on the back of your LCD Display and the DVI port on the computer.

•
DVI

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.

0	0	0	0	0

Onnect 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.
- Contact a local SAMSUNG Electronics Service Center to buy optional items.

#### **Connecting to Other devices**



#### 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, VCRs 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 contents under Adjusting Your LCD Display.

#### **Connecting AV Devices**



- 1. Connect the port of the DVD, VCR (DVD / DTV Set-Top Box) to the [R-AUDIO-L] port of the LCD Display.
- 2. Then, start the DVD, VCR or Camcorders with a DVD disc or tape inserted.

3. Select AV using the SOURCE .

## 🖉 Note

The LCD Display has AV connection terminals to connect AV input devices like DVDs, VCRs or Camcorders. You may enjoy AV signals as long as the LCD Display is turned on.

#### **Connecting to a Camcorder**



- 1. Locate the AV 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 .
- 3. Select **AV** for the Camcorder connection using the Source button on the front of the LCD Display or on the remote control.
- 4. 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 a DVD Player**



- 1. Connect a set of audio cables between the AV 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 P<sub>R</sub>, Y, P<sub>B</sub> port on the LCD Display and the P<sub>R</sub>, Y, P<sub>B</sub> jacks on the DVD player.



- 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 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 P<sub>R</sub>, Y, P<sub>B</sub> port on the LCD Display and the P<sub>R</sub>, Y, P<sub>B</sub> jacks on the Set Top Box.
- 2. Connect a set of audio cables between the AV AUDIO IN [L-AUDIO-R] on the LCD Display and the AUDIO OUT jacks on the Set Top Box.



 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 Using a HDMI Cable**



# 🖉 Note

- Input devices such as digital DVD are connected to the HDMI terminal of the LCD Display using the HDMI cable.
- You cannot connect a PC to the HDMI terminal.

# **Connecting Using a DVI to HDMI Cable**



# 🖉 Note

- Connect the DVI output terminal of a digital output device to the HDMI terminal of the LCD Display using a DVI to HDMI cable.
- Connect the red and white jacks of an RCA to stereo (for PC) cable to the same colored audio output terminals of the digital output device, and connect the opposite jack to the DVI / PC / HDMI AUDIO IN terminal of the LCD Display.

# Connecting to an Audio System





# 🖉 Note

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

# **Connecting a LAN Cable**



# 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, VCRs 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 contents under Adjusting Your LCD Display.





Connect the LAN cable.

(Applicable to the FPn-2 model only)

# Connecting a USB device



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.



AV input devices such as DVD players, VCRs 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 contents under Adjusting Your LCD Display.





You can connect USB devices such as a mouse or keyboard.

(Applicable to the FPn-2 model only)

# Using the Software

# **Monitor Driver**



# Installing the Monitor Driver (Automatic)

- 1. Insert CD into the CD-ROM drive.
- 2. Click "Windows".
- 3. Choose your monitor model in the model list, then click the "OK" button.

SAMSUNG monitor installer	×		
Select the display adapter on which you want to intall the monitor			
1. RADEON 9550 : Plug and Play Monitor			
Select the monitor which you want to install			
Samsung ****			
( )			
OK CANCEL			

4. If you can see following message window, then click the "Continue Anyway" button. Then click "OK" button (Microsoft<sup>®</sup> Windows<sup>®</sup> XP/2000 Operating System).

Hardwa	re Installation
1	The software you are installing for this hardware: Samsung **** has not passed Windows Logo testing to verify its compatibility with Windows XP. ( <u>Tell me why this testing is important</u> .) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommeds that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway

# 🖉 Note

This monitor driver is under certifying MS logo, and this installation doesn't damage your system.

The certified driver will be posted on Samsung Monitor homepage.

http://www.samsung.com/

## Installing the Monitor Driver (Manual)

Microsoft<sup>®</sup> Windows Vista<sup>™</sup>, Operating System

- 1. Insert your Manual CD into your CD-ROM drive.
- Click (Start) and "Control Panel". Then, double-click on "Appearance and Personalization".



3. Click "Personalization" and then "Display Settings".



4. Click "Advanced Settings...".

Display Settings		
fonitor		
Drag the icons to match your monitors.	-	Jdentify Monitor
1		
1. (Multiple Menitori) on NVIDIA Geforer	- 6600 LE (N	Icrosoft Corporation
1. (Multiple Monitors) on NVIDIA GeForce	- 6600 LE (N	Icrosoft Corporation -
	- 6600 LE (N	icrosoft Corporation
[7] [his is my main monitor	6600 LE (M	Scrosoft Corporation -
Ibis is my main monitor     Defined the dedetop ands this monitor     Besolution     Low	6600 LE (M	
It is a my main monitor     It is a my main monitor     Exclusion     Low	High	<u>Colore</u>
This is my main monitor     To be a set of the solution set of the monitor     Besolution     Low	6600 LE (M	<u>Colore</u>

5. Click "Properties" in the "Monitor" tab. If the "Properties" button is deactivated, it means the configuration for your monitor is completed. The monitor can be used as is.

If the message "Windows needs..." is displayed, as shown in the figure below, click "Continue".

Monitor Troubleshoot. Color Management	Windows needs your permission to contionue
Generic Pr.P. Monitor	If you started this action, continue.
Monitor Settings Soleen refresh rate:	Device Properties
60 Hertz •	
I gde modes that this monitor cannot display	Details Continue Cancel
Clearing this check box allows you to select display modes that this monitor cannot display correctly. This may lead to an unusable display and/or damaged hardware.	Currende Carle
aspay ano,or canageo haroware.	User Account Control helps stop unauthorized changes to your comput
OK Cancel Apply	

# 🖉 Note

This monitor driver is under certifying MS logo, and this installation doesn't damage your system.

The certified driver will be posted on Samsung Monitor homepage.

6. Click "Update Driver..." in the "Driver" tab.

Seneral Driver. Details	General Driver Details
Genetic Ph/P Montor	Generic PriP Monitor
Device type: Monitors Manufacturer: (Standard monitor types) Location: on INVDVA GeForce 6500 LE (Microsoft Coppo	Driver Provider: Microsoft Driver Date: 6/21/2006 Driver Venico: 6.0.6000 15366
Device status	Digital Signer: microsoft windows
This device is working property.	Driver Details To view details about the driver files.
	Update Driver
	Boll Back Driver E the device fails after updating the driver, roll back to the previously initialed driver
	Deable Deables the selected device.
	Uninitial To uninitial the driver (Advanced).

7. Check the "Browse my computer for driver software" checkbox and click "Let me pick from a list of device drivers on my computer".

low do you want to search for driver software?	Browse for driver software on your computer
<ul> <li>Search automatically for updated driver software Windows will search your computer and the between for the latest driver software for your device.</li> </ul>	Search for driver software in this location:
<ul> <li>Egonese may computer for driver software Locate and initial three software manufly.</li> </ul>	Let me pick from a list of device drivers on my computer The far will show insafeld driver whears compatible with the doics, and all driver software is the same category as the doics.

8. Click "Have Disk..." and select the folder (for example, D:\Drive) where the driver setup file is located, and click "OK".

Select the device driver you want to install for this hardware.	heet the manufacture's installation dak, and then make sure that the correct drive is selected below. Cancel
IV/Rex garpatile hardwari Mode 12 Genera Hef Hanter	Copy manufacturer's files from:
Net Generals That Header	Browse.
The down a detaily signed     Teleme Data     Teleme Data     Teleme Data	

9. Select the model that matches your monitor from the list of monitor models on the screen, and click "Next".



10. Click "Close" "Close" "OK" "OK" on the following screens displayed in sequence.



Microsoft<sup>®</sup> Windows<sup>®</sup> XP Operating System

- 1. Insert CD into the CD-ROM drive.
- 2. Click "Start" "Control Panel" then click the "Appearance and Themes" icon.

	🕼 fiel 🔕 - 🤧 🔎 Sauch 🐑 Robers 💷 -	
My Documents My Recent Documents My Pictures My Pictures My Pictures My Computer Cover Pane Printers and Faves Printers and Faves Printers Saarch Run Plan Plan.	e status tude e trapad	A set where the set of

3. Click "Display" icon and choose the "Settings" tab then click "Advanced...".

P Appearance and Theses	Display Properties	
ge £# par Apress par ge @ Eek = ② - ♪ Don't ≧n Ndes □1 +	Themes Desktop Screen Saver Appearance Settings	
Approved App		_

4. Click the "Properties" button on the "Monitor" tab and select "Driver" tab.

Plug and Play Monitor and 3D Prophet III Properties 👘 😰 🔯	Plug and Play Monitor Properties	2 🔀
GeForce3 Device Selection Color Correction General Adapter Monitor Troubleshoot Color Management Monitor type Plug and Play Monitor Properties	General Driver Phug and Play Monitor Device type: Monitors	
Monitor settings Screen refresh rate:	Manufacturer: (Standard monitor types) Location: on 3D Prophet III	
Hetz     Hide modes that this monitor cannot display     Clearing this check, box allows you to select display modes that this     monitor this check, box allows you to select display modes that this     monitor damaged hardware.	Cerico status This device is working property. If you are having problems with this device, click. Troubleshoot to start the troubleshooter. Iroubleshooter. Iroubleshooter.	3
OK Cancel @pp//	Device usage: Use this device (enable)	Cancel

5. Click "Update Driver..." and select "Install from a list or..." then click "Next" button.



6. Select "Don't search, I will..." then click "Next" and then click "Have disk".

Hardware Update Wizard	Hardware Update Wizard
Please choose your search and installation options.	Select the device driver you want to install for this hardware.
Qsearch for the best driver in these locations. Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.	Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Search removable media (floppy, CD-ROM)	Show compatible hardware
Include this location in the search:	Model
A/\ Planke	Plug and Play Monitor
On't search. I will choose the driver to install.	
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.	
ure tarres you choose will be ure best march na your nationale.	This driver is digitally signed. Have Disk Infline why driver searches is important
< <u>Back</u> Mest> Cancel	<back newt=""> Cancel</back>

7. Click the "Browse" button then choose A:(D:\Driver) and choose your monitor model in the model list and click the "Next" button.

Install F	rom Disk	X	Hardware Update Wizard
-	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel	Select the device driver you want to install for this hardware.
	Copy manufacturer's files from:	Browse	This driver in not digitally signed     Id mustic driver involves in monotal     (gack Newt > Carcel

8. If you can see following message window, then click the "Continue Anyway" button. Then click "OK" button.

Hardwa	re Installation
⚠	The software you are installing for this hardware: Samsung **** has not passed Windows Logo testing to verify its compatibility with Windows P.P. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

# Ø Note

This monitor driver is under certifying MS logo, and this installation doesn't damage your system.

The certified driver will be posted on Samsung Monitor homepage.

http://www.samsung.com/

9. Click the "Close" button then click "OK" button continually.

General Driver
Samsung **** Driver Provider: Samsung Driver Date: 9/11/2001 Driver Version: 1.0.0 Digital Signer: Not digitally signed Driver Details To view details about the driver files. Ugdate Driver To update the driver for this device. Bott Back.Driver If the device fails after updating the driver, roll
Los asso. Unrep         back to the previously initiated driver.           Uninitiat         To uninitiat the driver (Advanced).

10. Monitor driver installation is completed.

Microsoft® Windows® 2000 Operating System

When you can see "Digital Signature Not Found" on your monitor, follow these steps.

- 1. Choose "OK" button on the "Insert disk" window.
- 2. Click the "Browse" button on the "File Needed" window.
- 3. Choose A:(D:\Driver) then click the "Open" button and then click "OK" button.

#### How to install

- 1. Click "Start", "Setting", "Control Panel".
- 2. Double click the "Display" icon.
- 3. Select the "Settings" tab and click "Advanced Properties" button.
- 4. Choose "Monitor".

Case1 : If the "Properties" button is inactive, it means your monitor is properly configured. Please stop installation

Case2 : If the "Properties" button is active, click the "Properties" button then follow next steps continually.

- 5. Click "Driver" and then click on "Update Driver..." then click on the "Next" button.
- 6. Choose "Display a list of the known drivers for this device so that I can choose a specific driver" then click "Next" and then click "Have disk".
- 7. Click the "Browse" button then choose A:(D:\Driver).
- 8. Click the "Open" button, then click "OK" button.
- 9. Choose your monitor model and click the "Next" button then click "Next" button.
- 10. Click the "Finish" button then the "Close" button.

If you can see the "Digital Signature Not Found" window then click the "Yes" button. And click the "Finish" button then the "Close" button.

Microsoft<sup>®</sup> Windows<sup>®</sup> Millennium Operating System

- 1. Click "Start", "Setting", "Control Panel".
- 2. Double click the "Display" icon.
- 3. Select the "Settings" tab and click "Advanced Properties" button.
- 4. Select the "Monitor" tab.
- 5. Click the "Change" button in the "Monitor Type" area.
- 6. Choose "Specify the location of the driver".
- 7. Choose "Display a list of all the driver in a specific location..." then click "Next" button.
- 8. Click the "Have Disk" button.
- 9. Specify A:\(D:\driver) then click "OK" button.
- 10. Select "Show all devices" and choose the monitor that corresponds to the one you connected to your computer and click "OK".
- 11. Continue choosing "Close" button and "OK" button until you close the Display Properties dialogue box.

Microsoft<sup>®</sup> Windows<sup>®</sup> NT Operating System

- 1. Click "Start", "Settings", "Control Panel", and then double-click "Display" icon.
- 2. In Display Registration Information window, click Settings Tab and then click "All Display Modes".
- 3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click "OK".
- 4. Click "Apply" button if you see the screen working normally after clicking "Test". If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).

# 🖉 Note

If there is no Mode at All Display Modes, select the level of resolution and vertical frequency by referring to the Preset Timing Modes in the user guide.

Linux Operating System

To execute X-Window, you need to make the X86Config file, which is a type of system setting file.

- 1. Press "Enter" at the first and the second screen after executing the X86Config file.
- 2. The third screen is for setting your mouse.
- 3. Set a mouse for your computer.
- 4. The next screen is for selecting a keyboard.

- 5. Set a Keyboard for your computer.
- 6. The next screen is for setting your monitor.
- 7. First of all, set a horizontal frequency for your monitor. (You can enter the frequency directly.)
- 8. Set a vertical frequency for your monitor. (You can enter the frequency directly.)
- 9. Enter the model name of your monitor. This information will not affect the actual execution of X-Window.
- 10. You have finished setting up your monitor. Execute X-Window after setting other requested hardware.

#### MDC



#### Installation

- 1. Insert the installation CD into the CD-ROM drive.
- Click the MDC installation file.
   Note

If the popup window to install the software for the main screen is not displayed, proceed with the installation using the MDC executable file on the CD.

- 3. When the Installation Shield Wizard window appears, click "Next".
- 4. Select "I agree to the terms of the license agreement" to accept the terms of use.
- 5. Click "Install".
- 6. The "Installation Status" window appears.
- 7. Click "Finish".
- 8. When the installation is complete, the MDC executable icon appears on your desktop. Double-click the icon to start the program.

MDC execution icon may not appear depending on specification of computer system or monitor. If that happens, press F5 Key.

#### **Installation Problems**

The installation of MDC can be affected by such factors as the video card, motherboard and the network environment.

# Uninstall

The MDC program can be removed only by using the "Add or Remove Programs" option of the Windows $^{\ensuremath{\mathbb{R}}}$  Control Panel.

Perform the following steps remove MDC.

Select "Setting/Control Panel" on the "Start" menu and then double-click "Add/Delete a program".

Select MDC from the list and then click the "Add/Delete" button.

Using MDC

# Adjusting the LCD Display

# Input

# **Available Modes**

- 📔 PC / BNC / DVI
- 🔼 AV
- 🖸 номі
- MagicInfo
- 🚺 тv
- Component



- The **TV** menu is available when a TV tuner box is installed.
- The MagicInfo menu is available when a network box is installed.

# Source List PAHMTC

MENU	ENTER	[Input]	ENTER	[Source Li	ist]
		Source	List		
		3	PC		•
		-			
		۲			
		ø	MagicInfo		
			BNC		<b></b>
			🗢 Mov	ve 💽 Enter	🕤 Return
		Source	List		
		\$	Compone	nt	•
					•
		۲			
		ø			
			Mov	ve 🕑 Enter	neturn

#### ▲, ▼ ENTER

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

- 1. **PC**
- 2. **DVI**
- 3. **AV**

#### 4. HDMI

This is deactivated when a TV tuner box is installed.

#### 5. MagicInfo

This is activated when a network box is installed in the HN or H model.

#### 6. **TV**

This is activated when a TV tuner box is installed.

7. BNC

**BNC** mode is not supported if the component cable is connected. To use **BNC** mode, remove the component cable and connect the BNC cable.

#### 8. Component

**Component** mode is not supported if the BNC cable is connected. To use **Component** mode, remove the BNC cable and connect the Component cable.

# 🖉 Note

- The direct button on the remote control is the 'SOURCE' button.
- For PC and DVI, this is deactivated if the cable is disconnected.

## Edit Name

MENU	ENTER	[Input]	ENTER	[Edit	Name]
		Edit Nam	e		
		3	PC	:	••••• •
					•••••
		0	AV	:	>
				:	)
		Ø	BNC		,
			Component		>
			Move	🗗 Enter	🕤 Return
		PC			
		*	v		•
			DVD		
		۲	Cable STB		
		100	HD STB		
		Ø	Satellite STB		
			AV Receiver		
			🗢 Move	🗗 Enter	🕤 Return

#### ▲, ▼ ENTER

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

VCR / DVD / Cable STB / HD STB / Satellite STB / AV Receiver / DVD Receiver / Game / Camcorder / DVD Combo / DHR / PC

# Picture [PC / BNC / DVI / MagicInfo Mode]

# **Available Modes**

- PC / BNC / DVI
- 🔼 AV
- 🖸 HDMI
- MagicInfo
- 🚺 тv
- Component

Note

- The **TV** menu is available when a TV tuner box is installed.
- The MagicInfo menu is available when a network box is installed.

# MagicBright PM

MENU	Ŧ	ENTER	[Pictu	re]	ENTEF	۲ [Ma	gicBright]
			MagicBrig	ht			
			1	📕 Ent	ertain		
					rnet		
			۲	Tex	tom		
			Ø				
					Move	🛃 Enter	🐑 Return

#### ▲, **▼** ENTER

**MagicBright** is a 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 documents or works involving heavy text.

2. Internet

Medium brightness

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

3. Text

Normal brightness

For documents or works involving heavy text.

#### 4. Custom

Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste.

If this is the case, adjust the brightness and contrast by using the OSD menu.

## Custom PM

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

MENU ▼ ENTER [Picture] ▼ ENTER [Custom]

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

#### Contrast



Adjusts the Contrast.

#### **Brightness**

MENU T ENTER [Picture] T ENTER [Custom] T ENTER [Brightness] Brightness 100 T Move T Adjust O Return

◄, ► ENTER

Adjusts the Brightness.

## Sharpness



Color Tone	e
1	V Off
	Cool
۲	Warm
ø	Custom
	🗢 Move 🖙 Enter 🏷 Return

The color tones can be changed.

1. **Off** 

- 2. Cool
- 3. Normal
- 4. Warm
- 5. Custom

# 🖉 Note

If you set the **Color Tone** to **Cool**, **Normal**, **Warm**, or **Custom**, the **Color Temp** function is disabled.

If you set the Color Tone to Off, the Color Control function is disabled

# Color Control PM

Adjusts individual Red, Green, Blue color balance.

MENU ▼ ENTER [Picture] ▼ ▼ ▼ ENTER [Color Control]

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

#### Red



## Blue

Color

MENU ENTER	▼ [B	ENTER llue]	[Picture]	۲	۲	¥	ENTER	[C)	olor Control]	¥	¥
			Blue	Move	◆A	diust	43				
	EN	TER		MOVE		ajaat	Orteam				
-, -											
r Temp 🖻	N										
MENU	Ŧ	ENTER	[Picture]	¥	¥	¥	ENTER	[C	olor Temp.]		
			Color Temp				5000	<			
			•	Adjust			<ol> <li>Return</li> </ol>				

◄, ► ENTER

**Color Temp** is a measure of the 'warmth' of the image colors.

This function is only enabled if the Color Tone is set to Off.

# Image Lock 📔

**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 mode only)



◄, ► 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.

#### Fine



**⊲**, ► ENTER

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

## **H-Position**

MENU ▼ ENTER ENTER [ <b>H-Position</b>		¥	¥	¥	Ŧ	ENTER	[Image Lock]	¥	Ŧ
	H-Position					51			
<b>∢,</b> ► ENTER	÷	Move	● Ad	JUST	O Retu	m			

Adjusts the screen location horizontally.

# **V-Position**

MENU ▼ ENTER ▼ ENTER [ <b>V-Po</b> s		Ŧ	٠	۲	٠	ENTER	[Image Lock]	¥	Ŧ
	V-Position	Move	Adj	ust	to Retu	40 m			
<b>⊲,</b> ► ENTER									

Adjusts the screen location vertically.

# Auto Adjustment P

MENU 🛛 🔻 [Auto Adjusti	ENTER ment]	R [Pictu	re]	• •	¥	¥	¥	ENTER
		Auto Adjustment			30%			

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 mode only) 🖉 Note

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.

[Picture] MENU Ŧ ENTER ENTER [Signal Balance]

(Available in PC mode only)

#### Signal Balance



Selects either **On** or **Off** with the signal control.

#### **Signal Control**

MENU ▼ ENTER [Picture] ▼ ▼ ▼ ▼ ▼ ▼ ▼ ENTER [Signal Balance] ENTER ▼ [Signal Control]

1. R-Gain

l'Signal Ba	alarice	J Er	NIER	•	laidu	а со	ntroij	E	NIER	[K-Gairi]	ENTER
				•							



- ◄, ► ENTER
- 2. G-Gain

MENU ▼ ENTER [Picture] ▼ ▼ ▼ ▼ ▼ ▼ ▼ ENTER [Signal Balance] ENTER ▼ [Signal Control] ▼ ENTER [G-Gain] EN-TER

G-Ĝain			50
	Move		

◄, ► ENTER

3. B-Gain

MENU	Ŧ	ENTE	R	[Pictu	ıre]	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	ENTER
[Signal Ba ENTER	lance	] EN	NTER	۲	[Sign	al Con	ntrol]	¥	¥	ENT	ER	[B-Gain]

B-Ĝain		_		
	🕈 Move	<ul> <li>Adjust</li> </ul>	O Return	

- ◄, ► ENTER
- 4. R-Offset

MENU ▼ ENTER [Picture] ▼ ▼ ▼ ▼ ▼ ▼ ▼ ENTER [Signal Balance] ENTER ▼ [Signal Control] ▼ ▼ ▼ ENTER [R-Offset] ENTER

R-Offset		5	
Move	Adjust	🖸 Return	

- ◄, ► ENTER
- 5. G-Offset

MENU ▼ ENTER [Picture] ▼ ▼ ▼ ▼ ▼ ▼ ▼ ENTER [Signal Balance] ENTER ▼ [Signal Control] ▼ ▼ ▼ ▼ ENTER [G-Offset] ENTER





The **Size** can be switched.

- 1. **16:9**
- 2. **4:3**

# Dynamic Contrast PM

MENU ▼ ENTER [Dynamic Contrast]	[Pictu	ure]	۲	•	¥	Ŧ	•	Ŧ	٠	•	ENTER
	Dynamic	Contras	t								
	1	v (	Off								
			On								
	۲										
	ø										
			🔶 Move	E E	nter ,	🔿 Reti	um				

#### ▲, ▼ ENTER

**Dynamic Contrast** automatically detects the distribution of the visual signal and adjusts to create an optimum contrast.

- 1. **Off**
- 2. **On**

# Picture [ AV / HDMI / TV / Component Mode]

# **Available Modes**

- PC / BNC / DVI
- 🔼 AV
- 🖸 HDMI
- MagicInfo
- 🚺 т и
- Component

# 🖉 Note

- The **TV** menu is available when a TV tuner box is installed.
- The MagicInfo menu is available when a network box is installed.

## Mode All TC

MENU	Ŧ	ENTER	[Picture]	ENTE	r [M	lode]
			Mode			
			1	Dynamic		
			<b>1</b>	Standard		
				Movie		
			•	Custom		
			ø			
				🗢 Move	🛃 Enter	🖸 Return

#### ▲, ▼ 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

🖉 Note

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

# Custom

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

	MENU	Ŧ	ENTER	[Picture]	Ŧ	ENTER	[Custom]		
Contras	st								
	MENU	Ŧ	ENTER	[Picture]	Ŧ	ENTER	[Custom]	ENTER	[Contrast]
				Contrast			100		
				¢	Move	🚸 Adjust 🕤 🕤	) Return		
	◄, ►	ENT	ER						
	Adjusts t	the Co	ontrast.						
Brightn	ess								
	MENU [ <b>Bright</b> n	₹ ess]	ENTER	[Pictur	e]	▼ EN <sup>-</sup>	FER [Cust	tom] 🔻	ENTER
				Brightness	Move	▲ Adiust	100 Return		
		ENT			Move	i Alajaat C	, recurri		
	◄, ►								
	-	the Br	ightness.						
Sharpn	ess								
	MENU [Sharpn	▼ ess]	ENTER	[Picture]	•	ENTER	R [Custom	] 🔻 🕇	ENTER
		-		Sharpness	Move	Adjust C	40		
	◄, ►	ENT	ER						
	Adjusts 1	the pi	cture Sharp	oness.					
Color									
•••••	MENU [C <b>olor</b> ]	¥	ENTER	[Picture]	¥	ENTER	[Custom]	• • ·	ENTER
				CoĴor	Move	Adjust €	50 ) Return		
	◄, ►	ENT	ER						
	Adjusts t	the pi	cture Color						
Tint									
	MENU [Tint]	•	ENTER	[Picture]	Ŧ	ENTER	[Custom]	• • •	▼ ENTER
				Tint			100		
		<b></b> .		\$	Move	🐠 Adjust 🕤	) Return		
	◄, ►	ENT							
	Adds a r	natura	I tone to th	e display.					

# 🖉 Note

Tint function can be available just in NTSC system.

# Color Tone

MENU	Ŧ	ENTER	[Picture	e] 🔻	Ŧ	ENT	ER	[Color	Tone]
			Color Tone						
			1	Off					
			1	Cool2					
				Cool1					
			۲	🖌 Norma	I				
			ø	Warm1					
			<u> </u>	Warm2	2				
				🔶 Mo	ove [	🕑 Enter	🖸 Re	turn	

#### ▲, ▼ ENTER

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

- 1. Off
- 2. Cool2
- 3. Cool1
- 4. Normal
- 5. Warm1
- 6. Warm2

# Note 🖉

If you set the **Color Tone** to **Cool2**, **Cool1**, **Normal**, **Warm1**, or **Warm2**, the **Color Temp** function is disabled.

# Color Temp.



Size	
1ª	🞽 16 : 9
-	Zoom1
	Zoom2
۲	4:3
õ	Just Scan
~	
	🗢 Move 🕞 Enter 🏷 Return

The Size can be switched.

- 1. **16:9** Sets the picture to 16:9 wide mode.
- 2. **Zoom 1** Magnifies the size of the picture on the screen.
- 3. Zoom 2 Magnifies the size of the picture more than "Zoom 1".
- 4. **4:3** Sets the picture to 4:3 normal mode.
- 5. **Just Scan** Displays the input scenes as they are without any cutoff when HDMI 720p, 1080i, 1080p signals are input.

# 🖉 Note

Certain external devices may feed the display an out of spec signal that may cause cutoff even when using the **Just Scan** feature.

ZOOM1, ZOOM2 will be unavailabel in HDMI mode.

# Digital NR (Digital Noise Reduction)



▲, ▼ 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**
- 🖉 Note

Digital NR function is not available for all resolutions.



# Film Mode

#### ▲, **▼** ENTER

Turns Film Mode Off/On.

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

(In **HDMI** mode, this function can be available when the input signal is interlaced scan; it cannot be available with progressive scan signal.)

- 1. **Off**
- 2. **On**

# Dynamic Contrast

Dynamic Contrast	MENU 🔻 [Dynamic Conti	[Pict	ture]	۲	¥	•	۲	•	¥	۲	ENTER
On         Image: Constraint of the second		 Dynamic	Contrast								
		1	v Off								
		•	On								
		۲									
		ø									
🔶 Move 🕞 Enter 🕤 Return		ø									
			¢.	Move	🚭 Enter	ÐF	Return				

#### ▲, ▼ ENTER

**Dynamic Contrast** automatically detects the distribution of the visual signal and adjusts to create an optimum contrast.

- 1. **Off**
- 2. **On**

# Sound

# **Available Modes**

- PC / BNC / DVI
- 🔼 AV
- 🖸 HDMI

- MagicInfo
- 🚺 тv
- Component

Note

- The **TV** menu is available when a TV tuner box is installed.
- The MagicInfo menu is available when a network box is installed.

#### Mode PAHMTC [Sound] [Mode] MENU ENTER ENTER Ŧ Té Standard Music • Movie ۲ Speech Ó

#### ▲, **▼** 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 adjust the settings according to your personal preferences.

# Custom PAHMTC

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

MENU ▼ ▼ ENTER [Sound] ▼ ENTER [Custom]

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

• If you adjust sound using **Custom** function, **Mode** will turn to **Custom** mode.

#### Bass

MENU	• •	ENTER	[Sound]	▼ E	NTER	[Custom]	ENTER	[Bass]
			Bâss Move		ljust 🖸 Re	50		
-4, ►	ENTER		▼ MOVE			2011		

Emphasizes low frequency audio.

#### Treble

MENU [ <b>Treble</b> ]	۲	Ŧ	ENTER	[9	Gound]	•	ENTER	[Cu:	stom]	٠	ENTER
				Trêble	Move	▲ Adjust	• Return	50			

**⊲**, ► ENTER

Emphasizes high frequency audio.

# Balance

MENU ▼ [Balance]	¥	ENTER	[Sou	nd]	▼ E	NTER	[Custom	l] <b>▼</b>	¥	ENTER
			Bajance	L 50		_	] R 50			
				Move	🔹 🚸 Adjus	t 🕤 Retur	n			

#### **⊲**, ► ENTER

Allows you to Adjusts the sound balance between the left and right speakers.

# Auto Volume

MENU	Ŧ	Ŧ	ENTER	२ [S	ound]	Ŧ	Ŧ	ENTER	[Auto Volume]
				Auto Volur	ne				
				1	Off				
					On				
				0					
				-					
				Ø					
					¢	Move	🖃 Ent	er 🛛 🕤 Return	

## ▲, ▼ ENTER

Reduces the difference in volume control between broadcasters.

- 1. **Off**
- 2. **On**

#### SRS TS XT PAHMTC

MENU V V ENTER [Sound] V V ENTER [SRS TS XT]

SRS TS	XT
1	Off
	On
٩	
ø	
	🗢 Move 🖙 Enter 🏷 Return

**SRS TS XT** 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.

Off
 On

Ø Note

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

# Setup

# **Available Modes**

- PC / BNC / DVI
- 🔼 AV
- 🖸 HDMI
- MagicInfo
- 🚺 тv
- Component

Ø Note

- The **TV** menu is available when a TV tuner box is installed.
- The MagicInfo menu is available when a network box is installed.

## Language PAHMTC

MENU	Ŧ	Ŧ	Ŧ	ENTER	[Setup]	ENTER	२ [Lan	igua	ge]
				Language					
				1	English			•	
					Deutsch			]	
				•	Español			ן נ	
				۲	Français			ן נ	
					Italiano			] [	
				۲	Svenska			]	
					Русский			] - [	
					Move	🗗 Enter	🕤 Return		

#### ▲, <del>▼</del> ENTER

You can choose one of 13 languages.

English,Deutsch,Español,Français,Italiano,Svenska,Русский Português,Türkçe,简体中文,繁體中文,日本語, 한국어

🖉 Note

The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.

## Time **PAHMTC**

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

MENU **v v** ENTER [Setup] **v** ENTER [Time]

## **Clock Set**



🛦, 🔻 🤜 🕨 ENTER

Current Time Setting.

# **Sleep Timer**

MENU 🔻 [Sleep Timer]	•	Ŧ	ENTER	[Setup]	٠	ENTER	[Time]	•	ENTER
			Sleep Timer						
			1	V Off					
			-	30			]		
				60			]		
			۲	90			]		
			ø	120			]		
			~~	150			]		
				180			]		
				🔷 Move 🛛 🔂	Enter	🏷 Return			

#### ▲, ▼ ENTER

Turns the LCD Display off automatically at certain times.

- 1. Off
- 2. **30**
- 3. **60**

- 4. **90**
- 5. **120**
- 6. **150**
- 7. 180

## **On Timer**



#### ▲, ▼/ ◀, ► 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.

# **Off Timer**



#### ▲, ▼/ ◄, ► ENTER

Turns the LCD Display off automatically at a preset time.

# Menu Transparency



Change the transparency of the background of the OSD.

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

# Safety Lock PIN PAHMTC

MENU	Ŧ	Ŧ	Ŧ	ENTER	[Setup]	•	Ŧ	Ŧ	ENTER	[Safety Lock PIN]
				Safety Lock	Pin					
				TA .						
					Enter Pin					
				۲						
				ø						
					09 Adjust	- 🕑 E	nter	🖰 Ret	um	

 $\begin{bmatrix} 0 & 9, 0 & 9, 0 & 9, 0 & 9 \end{bmatrix} \quad \begin{bmatrix} 0 & 9, 0 & 9, 0 & 9, 0 & 9 \end{bmatrix} \quad \begin{bmatrix} 0 & 9, 0 & 9, 0 & 9, 0 & 9 \end{bmatrix}$ 

The password can be changed.

# Energy Saving PAHMTC

MENU ▼ ▼ [Energy Saving]	Ŧ	ENTER	[Setup]	•	Ŧ	•	Ŧ	ENTER
	Ene	rgy Saving						
	1	💰 🚺 Off						
	3	Z On						
		9						
	4	Ø						
	ų							
		🗢 Move	🗄 🖽 Enter	🏷 Return				

▲, ▼ ENTER

This feature adjusts the power consumption of the unit in order to save energy.

- 1. Off
- 2. **On**



If you want to reduce the standby power consumption, set **Energy Saving** to **On**. However, when **Energy Saving** is **On**, you cannot use the remote Power On function of the MDC and the WOL (Wake On LAN) function of MagicInfo.

# HDMI Black Level 🗓



#### ▲, ▼ ENTER

When a DVD or set-top box is connected to your TV via HDMI, it may cause a degradation in the screen quality, such as an increase in the black level, a low contrast, or discoloration, etc., depending on the external device connected. In this case, adjust the screen quality of your TV by configuring the **HDMI black level**.

- 1. Normal
- 2. Low

## Video Wall

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.

MENU ▼ [Video Wall]	۲	۲	ENTER	[Setup]	۲	۲	۲	۲	۲	۲	ENTER
🖉 Note											

When Video Wall is running, the Auto Adjustment, Image Lock, and Size functions are not available. Video Wall does not operate in MagicInfo mode.

# Video Wall



🛦 , 🔻 🛛 ENTER

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

- 1. **Off**
- 2. **On**

# Format

MENU 🔻 [Video Wall]			er [ <b>Forn</b>	[Setu nat]	ip]	Ŧ	Ŧ	¥	¥	۲	¥	ENTER
		Format										
		1	V	Full								
		•		Natural					]			
		0										
		ø										
				Move	🛃 Ente	r t	🔵 Returr	١				

#### ▲, <del>▼</del> ENTER

The **Format** can be selected to see a divided screen.

## 1. Full

Provides a full screen without any margins.

#### 2. Natural

Displays a natural image with the original aspect ratio intact.

## Horizontal

Horizontal  V 1  2  3  4  5  V 1  C  C  C  C  C  C  C  C  C  C  C  C  C	MENU 🔻 [Video Wall]	Ť	ENTER ENTER	[Set) [Horiz]	up] ontal]	•	· ·	Ŧ	۲	۲	ENTER
2 3 4 5 5			Horizontal								
			1	<u>v</u> 1							
3 4 5 5			-	2							
6           5				3							
			۲	4							
			ø	5							
🗢 Move 🕑 Enter 🏷 Return											
				🗢 Move	🛨 Enter	۳) R	eturn				

#### ▲, ▼ ENTER

Sets how many parts the screen should be divided horizontally.

Five adjustment levels: 1, 2, 3, 4, and 5.

# Vertical

MENU **v v v** ENTER [Setup] **v v v v v** ENTER [Video Wall] **v v v** ENTER [Vertical]

Vertical				
1	<mark>۲</mark> 1			
•	2			
۲	4			
ø	5			
	🗢 Move	🕑 Enter	🐑 Return	

Sets how many parts the screen should be divided vertically.

Five adjustment levels: 1, 2, 3, 4, and 5.

#### **Screen Divider**



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.

## Safety Screen PASCHMC

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

MENU	Ŧ	Ŧ	Ŧ	ENTER	[Setup]	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	ENTER
[Safety :	Scree	en]											

#### **Pixel Shift**

#### **Pixel Shift**

MENU	Ŧ	Ŧ	Ŧ	ENT	ER	[Setup]	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	ENTER
[Safety S	Scree	en]	EN	TER	[Pix	el Shift]	ENT	ΈR	[Pi	xel S	hift]		,▼	ENTER
Pixel Shift														
-------------	------	--	--											
10	Off													
•	v On													
۲														
ø														

To prevent after-images on the screen you can use this function, so that every minute pixels on the LCD are moved in horizontal or vertical direction.

- 1. **Off**
- 2. **On**

## **Horizontal Dot**



Sets how many pixels the screen moves horizontally.

Five adjustment levels: 0, 1, 2, 3, and 4.

# **Vertical Line**

	ixel Shift]			▼ ▼ ▼ ENTER [Vertical Line] ▲, ▼
Vertical Li	ne			
1	<mark>۷</mark> 0			
	1			
	2			
۲	3			
ø	4			
<b></b>				
	🗢 Move 🖸	🗗 Enter 🛛 🏷	Return	

Sets how many pixels the screen moves vertically.

Five adjustment levels: 0, 1, 2, 3, and 4.

### Time



Set the time interval for performing the horizontal or vertical movement, respectively.

### Timer

Timer



You can set the timer for Screen Burn Protection.

If you start the operation to erase any residual image, the operation will be performed for the set period of time and then automatically finish.

- 1. Off
- 2. **On**

### Mode



You can change the Safety Screen Type.

- 1. Scroll
- 2. Bar
- 3. Eraser

## Period



Use this function to set the execution period for each mode set in the timer.

### Time



Within the set period of time specify a time for execution.

- Mode-Scroll : 1~5 sec
- Mode-Bar, Eraser : 10~50 sec

# Scroll



This function prevents after-images on the screen by moving all the pixels on the LCD according to a pattern. Use this function when there are remaining after-images or symbols on the screen, especially when you displayed a still image on the screen for a long time.

Bar



This function prevents after-images on the screen by moving long black and white vertical lines.

### Eraser



This function prevents after-images on the screen by moving a rectangular pattern.

# Resolution Select

MENU 🔻 🔻 🔻 [Resolution Select]	ENTER	[Setup]	Ŧ	¥	¥	¥	Ŧ	۲	Ŧ	Ŧ	ENTER
	Resolution Se	elect									
	1	V Off									
	•	1024 x 768					]				
							1				
	۲	1360 x 768					1				
	ø	1366 x 768					]				
		🗢 Move 🖸	E Enter	- D	Return						

### ▲,▼ ENTER

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



Available in **PC** 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 x768 @ 60Hz.

# Power On Adjustment



### ▲, ▼ ENTER

Adjusts the Power On time for the screen.



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

# Side Gray PAHMTC



▲, ▼ ENTER

Select the brightness of the grey for the screen background.

- 1. **Off**
- 2. Light
- 3. Dark

# Reset

Reverts the product settings to factory defaults. The Reset function is only available when PC / DVI is being used.

ME	NU	Ŧ	Ŧ	Ŧ	ENTER	[Setup]	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ	Ŧ
Ŧ	EN	TER	[F	Reset	t]											

# Image Reset 📔

MENU ▼ ▼ ▼ E ▼ ENTER [Reset]		p] <b>▼ ▼ ▼</b> nage Reset]	• •	Ŧ	Ŧ	¥	Ŧ	Ŧ
	Image Reset	Ok V Cancel						
, ► ENTER Ø Note								
Available in <b>PC</b> mode onl	у							
The Reset function is not	available when	Video Wall is On						

# Color Reset

MENU ▼ ENT	▼ ▼ ▼ E ER [Reset]			¥ ▼ set]	• •	•	Ŧ	•	Ŧ
		Color Reset		V Cancel Return					
∢,►	ENTER								
OSD Rotation	РАНМТ								
MENU ▼ ▼	▼ ▼ ▼ E ▼ ENTER	ENTER [Setu [OSD Rotation OSD Rotation Port	lscape	Return	•	•	•	•	•
◄, ►	ENTER								
OSD Rot	tate								

- 1. Landscape
- 2. Portrait

# Lamp Control

▼ ▼ ENTER			D] <b>▼</b>	¥	۲	۲	¥	Ŧ	¥	¥	٠	۲
	Lamp Cor					100						
	•	Adjust		ÐF	Return							

**⊲**, ► ENTER

Adjusts the inverter lamp in order to reduce energy consumption.

🖉 Note

This function does not operate when **Dynamic Contrast** is set to **On** in **PC**, **DVI**, **AV**, **HDMI**, **TV** modes.

# **Multi Control**

## **Available Modes**

- 📴 PC / BNC / DVI
- 🔼 AV
- 🖸 номі
- MagicInfo
- 🚺 т
- Component

# Multi Control

Assigns an individual ID to the SET.



- ▲,▼ [0~9]
- ID Setup

Assigns distinctive IDs to the SET.

• ID Input

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

### MagicInfo

## **Available Modes**

- 📔 PC / DVI
- 🔼 AV
- 🖸 HDMI
- MagicInfo
- 🚺 т

🖉 Note

- The **TV** menu is available when a TV tuner box is installed.
- FP-2 model can use MagicInfo menu when mounted Network box.

# 🖉 Note

- For **MagicInfo**, a remote control is available for **MagicInfo**. However, it is recommended using a separate USB keyboard.
- For **MagicInfo** in Device mode, moving external devices while booting may cause errors. Set up external devices only if the LCD Display turns on.
- Do not unplug the LAN cable used for the network (ex: video display). Otherwise, the program (MagicInfo) may stop. If you do unplug the cable, restart the system.
- Do not unplug the LAN cable used by an USB device (ex: video display). Otherwise, the program (MagicInfo) may stop.
- To access other sources, press the SOURCE button in MagicInfo.
- The preset password for the LCD Display is "000000".
- The server program's Power-On option works only if the LCD Display's power is completely shut off.

Please make sure not to use the Power-On option when the LCD Display is in the process of shutting down since this may cause system errors on the LCD Display.

- In the OSD image of MagicInfo, Network mode is the same as Device.
- When using MagicInfo with the MagicInfo Server Program: perform Network mode.
- When using **MagicInfo** with the device directly connected to LCD Display : execute Device mode.
- Press ALT + F12 to directly go to the MagicInfo Window screen.
- To setup MagicInfo on a Windows screen, a keyboard and mouse are required.
- To setup MagicInfo on a Windows screen, refer to the MagicInfo Server Help.

It is highly recommended not to turn off the AC power during an operation.

- For pivoted LCD Displays, ticker transparency is not supported.
- For pivoted LCD Displays, a screen resolution of up to 720\*480(SD) is supported for movies.
- For drive D:, EWF is not applied.
- When the contents of Setup have been changed when **EWF** is in the **Enable** state, to save the changes in the disk, you must **Commit** them.
- By selecting Disable, Enable or Commit, the system is restarted.

# MagicInfo

🕙 MUISetup	×
Instal languages TCP/IP	
Select the language you want to install on the system dialogs. Current Language : English	for menus and
English     Chinese (Traditional)	
German	
Italian Japanese Korean	
Swedish Chinese (Simplified)	
Spanish Spanish	
	Instal
Do not show again	Cancel

1. Select MagicInfo in the Source List menu.

2. The MUISetup screen appears. Select the language you want to use.

3. Press the Install button.

If you select Do not show again and click the Install button, the Scheduler screen is displayed after rebooting.

4. Connect your keyboard and mouse and press the "ALT + F12" keys on your keyboard.

5. The Windows Desktop is displayed and the MagicInfo icon (the image will be inserted) appears. Move the cursor over the icon.



If the **MagicInfo** icon is not displayed on the notification area, double click the **MagicInfo** icon on the window desktop. The icon will appear.

# 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**

- 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.

### Warning Messages

You can even view the screen at a resolution of 1360(1920) x 768(1080). 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.

Not Optimum Mode
Recommended Mode **** X *** 60Hz



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. surface.)

(They may cause flaws or deformation of the screen

The user will be required to pay costs and related expenses for repairing damages caused.

### Symptoms and Recommended Actions

P 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.

- Check if the power cord and the video cables are properly connected to the computer. 1.
- 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.
- For more network-related information, refer to the MagicInfo Troubleshooting section.

# Problems related to the Installation (PC Mode)

# 🖉 Note

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

The LCD Display screen flickers. Q:

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

(Refer to Connecting a Computer)

### Problems related to the Screen

# 🖉 Note

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

- Q: The screen is blank and the power indicator is off.
- A: Ensure that the power cord is firmly connected and the LCD Display is on.

(Refer to the Connecting a Computer)

- Q: "Check Signal Cable" message.
- A: Ensure that the signal cable is firmly connected to the PC or video sources.

(Refer to the Connecting a Computer)

- A: Ensure that the PC or video sources are turned on.
- Q: "Not Optimum Mode" message.
- A: Check the maximum resolution and the frequency of the video Adaptor.
- A: Compare these values with the data in the Preset Timing Modes Chart.
- Q: The picture rolls vertically.
- A: Check if the signal cable is securely connected. Re-connect it, if necessary.

(Refer to Connecting a Computer)

- Q: The image is not clear; picture is blurred.
- A: Run Frequency **Coarse** and **Fine** tuning.
- A: Turn on again after removing all accessories (video extension cable, etc.)
- A: Set the resolution and frequency to the recommended ranges.
- Q: The picture image is unstable and shakes.
- A: 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.
- Q: Ghost images are shown in the picture.
- A: Check if the resolution and frequency set for the computer video card falls in the range supported by the LCD Display. If not, reset them referring to the current Information under the LCD Display menu and Preset Timing Modes.
- Q: The image is too light or too dark.
- A: Adjusts the **brightness** and **contrast**.

(Refer to the Brightness, Contrast)

- Q: The screen color is inconsistent.
- A: Adjust color using **Custom** under OSD Color Adjustment menu.
- Q: The color image is distorted by dark shadows.
- A: Adjust color using **Custom** under OSD Color Adjustment menu.
- Q: The color white is poor.
- A: Adjust color using **Custom** under OSD Color Adjustment menu.
- Q: The Power Indicator blinks.
- A: The LCD Display is currently saving the changes made in the settings to the OSD memory.
- Q: The screen is blank and the power indicator light blinks every 0.5 or 1 seconds.
- A: The LCD Display is using its power management system.
- A: Press any key on the keyboard.
- Q: The screen is blank and it is blinking.
- A: 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.

- Q: No sound.
- A: 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 a Computer)

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

Q: The remote control buttons do not respond.

- A: Check the polarities (+/-) of the batteries.
- A: Check if the batteries are empty.
- A: Check if the power is on.
- A: Check if the power cord is securely connected.
- A: Check if a special fluorescent or neon lamp is on in the vicinity.

### **Problems related to MagicInfo**

# 🖉 Note

Making a Bootable USB Flash Disk.

- Q: Making a Bootable USB Flash Disk
- A: 1) You can turn a common 512-MB or bigger USB storage media into a bootable disk using a USB bootable disk creation tool. (For example, the HP USB Disk Storage Format Tool)
- A: 2) Copies the OS ghost image and executables to your USB disk.
- A: 3) Enter the BIOS menu of your set by pressing the F2 key in the BIOS logo screen. Then, enable the USB Boot First option by selecting that option and pressing the Enter key in the Boot menu.
- A: 4) Switch your set on while your USB disk is connected and boot up in DOS mode.
- A: 5) Run C:\ghost.exe and choose Local Partition From Image from the menu. Choose the ghost image to update your USB disk with and choose the target disk.
- A: 6) When the ghost image update finishes, the set will be rebooted automatically.

### Q & A

- Q: How can I change the frequency?
- A: The frequency can be changed by reconfiguring the video card.

# Note 🖉

That video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)

- Q: How can I Adjusts the resolution?
- A: Windows XP:

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

A: Windows ME/2000:

Set the resolution in the Control Panel Display Settings.

\* Contact the video card manufacturer for details.

- Q: How can I set the Power Saving function?
- A: Windows XP:

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

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

A: Windows ME/2000:

Set the resolution at the Control Panel Display Screen Saver.

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

- Q: How can I clean the outer case/LCD Panel?
- A: Disconnect the power cord and then clean the LCD Display with a soft cloth, using either a cleaning solution or plain water.

Do not leave any detergent or scratches on the case. Do not let any water enter the LCD Display.

- Q: How can I play the video?
- A: The video supports the MPEG1 and WMV codecs only. Install the corresponding codec to play the video. Note that some of the codecs can be incompatible.

# 🖉 Note

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

# **Specifications**

# General

Model Name	SyncMas	ter 400FP-2, 400FPn-2
	SyncMas	ter 460FP-2, 460FPn-2
LCD Panel		
Size	SyncMaster 400FP-2, 400FPn-2	40 " Diagonal (101 cm)
	SyncMaster 460FP-2, 460FPn-2	46 " Diagonal (116 cm)
Display area	SyncMaster 400FP-2, 400FPn-2	885.6 mm (H) X 498.2 mm (V)
	SyncMaster 460FP-2, 460FPn-2	1018.08 mm (H) X 572.67 mm (V)
Pixel Pitch	SyncMaster 400FP-2, 400FPn-2	0.46125 mm (H) X 0.46125mm (V)
	SyncMaster 460FP-2, 460FPn-2	0.53025 mm (H) x 0.53025 mm (V)
Synchronization	460FP-2, 460FPn-2	0.53025 mm (H) x 0.53025 mm (V)
-	460FP-2, 460FPn-2	
Horizontal	460FP-2, 460FPn-2	Hz
Horizontal Vertical	460FP-2, 460FPn-2 30 ~ 81 k	Hz
Horizontal Vertical <b>Display Color</b>	460FP-2, 460FPn-2 30 ~ 81 k	Hz
Synchronization Horizontal Vertical Display Color 16.7 M Resolution	460FP-2, 460FPn-2 30 ~ 81 k	Hz
Horizontal Vertical <b>Display Color</b> 16.7 M <b>Resolution</b> Optimum resolu-	460FP-2, 460FPn-2 30 ~ 81 k 56 ~ 85 H	Hz
Horizontal Vertical <b>Display Color</b> 16.7 M	460FP-2, 460FPn-2 30 ~ 81 k 56 ~ 85 H SyncMaster 400FP-2,	Hz
Horizontal Vertical <b>Display Color</b> 16.7 M <b>Resolution</b> Optimum resolu-	460FP-2, 460FPn-2 30 ~ 81 k 56 ~ 85 H 56 ~ 85 H 56 ~ 00FP-2, 400FP-2, 400FPn-2 SyncMaster 460FP-2, 460FPn-2	Hz Iz 1920 x 1080 @ 60 Hz (RB)

### Input Signal, Terminated

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

0.7 Vp-p ±5 %

Separate H/V sync, Composite, SOG

TTL level (V high  $\ge 2.0$  V, V low  $\le 0.8$  V)

### **Maximum Pixel Clock**

165MHz (Analog, Digital)

### **Power Supply**

AC 100 - 240 V~ (+/- 10 %), 50/60 Hz ± 3 Hz

### **Signal Cable**

15pin-to-15pin D-sub cable, Detachable

DVI-D to DVI-D connector, Detachable

### Dimensions (W x H x D) / Weight

SyncMaster 400FP-2, 400FPn-2	971.0 x 582.0 x 119.0 mm / 38.2 x 22.9 x 4.7 inch (Without Stand)
	971.0 x 643 x 311.0 mm / 38.2 x 25.3 x 12.2 inch (With Stand) / 19.0 kg / 41.9 lbs
	(With protection glass-option) 22.5 kg / 49.6 lbs
SyncMaster 460FP-2, 460FPn-2	1102.0 x 658.0 x 125.5 mm / 43.4 x 25.9 x 4.9 inch (Without Stand)
	1102.0 x 719.0 x 311.0 mm / 43.4 x 28.3 x 12.2 inch (With Stand) / 27.0 kg / 59.5 lbs
	(With protection glass-option) 32.0 kg / 70.5 lbs

### **VESA Mounting Interface**

600 x 400 mm

### **Environmental considerations**

-		
400FPn-2	Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C)
460FPn-2		Humidity : 10 % ~ 80 %, non-condensing
	Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C)
		Humidity : 5 % ~ 95 %, non-condensing
400FP-2, 460FP-2	Operating	Temperature : 32°F ~ 104°F (0°C ~ 40°C)
40011-2		Humidity: 10.9/ 90.9/ non-condensing
		Humidity : 10 % ~ 80 %, non-condensing
	Storage	Temperature : $-4^{\circ}F \sim 113^{\circ}F$ (-20°C ~ 45°C)

### **Plug and Play Capability**

This LCD Display can be installed on any Plug & Play compatible system. The interaction of the LCD Display and the computer systems will provide the best operating conditions and LCD Display settings. In most cases, the LCD Display 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 6,220,800.



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

### PowerSaver (When used as a Network monitor)

Sta	ate	Normal Operation	Power saving mode	Power off (Power-switch)
Power Indicator		On	On Blinking	Off
Power Consump-	400FPn- · 2	228 W	Less than 5 W	0 W
tion	460FPn- 2	310 W	Less than5 W	0 W

### PowerSaver (When used as a normal monitor)

Sta	ate	Normal Operation	Power saving mode	Power off (Power-switch)
Power I	ndicator	On	Blinking	Off
Power	400FP-2	180 W	Less than 2 W	0 W
Consump- tion	460FP-2	240 W	Less than2 W	0 W

## **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)		Pixel Clock (MHz)	Sync Polarity (H/V)
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	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
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, 848 x 480	31.020	60.000	33.750	+/+
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, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 768	47.776	59.870	79.500	-/+
VESA, 1280 X 960	60.000	60.000	108.000	+/+
VESA, 1280 X 1024	63.981	60.020	108.000	+/+
VESA, 1280 X 1024	79.976	75.025	135.000	+/+
VESA, 1360 x 768	47.712	60.015	85.500	+/+
VESA, 1600 x 1200	75.000	60.000	162.000	+/+
VESA, 1920 x 1080	66.587	59.934	138.500	+/-
VESA, 1920 x 1080	67.500	60.000	148.5	+/+

### 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

# Information

# For Better Display

Adjust the computer resolution and screen injection 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(1920) x 768(1080)
- 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(6,220,800).

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 monitor 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



• 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.

Horizontal Bar with Black color		
FLIGHT		
OZ348	20:30	•
UA102	21:10	

### 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.

	TIME	
OZ348	20:30	-
UA102	21:10	

### - 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.

FLIGHT	TIME	
Horizontal Bar		┛
OZ348	20:30	Ĭ
		+
UA102	21:10	

## - 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

$\rightarrow$		_
н	GHT	TIME
0	Z348	20:30
U	A102	21:10

## - 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 )

# 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(726-7864)	http://www.samsung.com/us
CANADA	1-800-SAMSUNG(726-7864)	http://www.samsung.com/ca
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com/mx
	Latin America	
ARGENTINE	0800-333-3733	http://www.samsung.com/ar
BRAZIL	0800-124-421	http://www.samsung.com/br
	4004-0000	
CHILE	800-SAMSUNG(726-7864)	http://www.samsung.com/cl
COLOMBIA	01-8000112112	http://www.samsung.com/co
COSTA RICA	0-800-507-7267	http://www.samsung.com/lat- in
ECUADOR	1-800-10-7267	http://www.samsung.com/lat- in
EL SALVADOR	800-6225	http://www.samsung.com/lat- in
GUATEMALA	1-800-299-0013	http://www.samsung.com/lat- in
HONDURAS	800-7919267	http://www.samsung.com/lat- in
JAMAICA	1-800-234-7267	http://www.samsung.com/lat- in
NICARAGUA	00-1800-5077267	http://www.samsung.com/lat- in
PANAMA	800-7267	http://www.samsung.com/lat- in
PUERTO RICO	1-800-682-3180	http://www.samsung.com/lat- in
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/lat- in
TRINIDAD & TO- BAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com/lat- in
VENEZUELA	0-800-100-5303	http://www.samsung.com/lat- in

### Europe

AUSTRIA

IA 0810 - SAMSUNG(7267864, http://www.samsung.com/at € 0.07/min)

Europe			
BELGIUM	02 201 2418	http://www.samsung.com/be (Dutch)	
		http://www.samsung.com/ be_fr (French)	
CZECH REPUBLIC	800 - SAMSUNG (800-726786)	http://www.samsung.com/cz	
	Distributor pro Českou republiku: Samsung Zrt., česká organizační složka, Oas	is Florenc, Sokolovská394/17, 180 00, Praha 8	
DENMARK	8 - SAMSUNG (7267864)	http://www.samsung.com/dk	
EIRE	0818 717 100	http://www.samsung.com/ie	
FINLAND	30 - 6227 515	http://www.samsung.com/fi	
FRANCE	01 4863 0000	http://www.samsung.com/fr	
GERMANY	01805 - SAMSUNG (7267864, € 0.14/Min)	http://www.samsung.de	
HUNGARY	06-80-SAMSUNG(726-7864)	http://www.samsung.com/hu	
ITALIA	800-SAMSUNG(726-7864)	http://www.samsung.com/it	
LUXEMBURG	02 261 03 710	http://www.samsung.com/lu	
NETHERLANDS	0900 - SAMSUNG (0900-7267864) (€ 0.10/Min)	http://www.samsung.com/nl	
NORWAY	3 - SAMSUNG (7267864)	http://www.samsung.com/no	
POLAND	0 801 1SAMSUNG (172678)	http://www.samsung.com/pl	
	022 - 607 - 93 - 33		
PORTUGAL	808 20 - SAMSUNG (7267864)	http://www.samsung.com/pt	
SLOVAKIA	0800-SAMSUNG(726-7864)	http://www.samsung.com/sk	
SPAIN	902 - 1 - SAMSUNG (902 172 678)	http://www.samsung.com/es	
SWEDEN	075 - SAMSUNG (726 78 64)	http://www.samsung.com/se	
SWITZERLAND	0848-SAMSUNG(7267864, CHF 0.08/min)	http://www.samsung.com/ch	
U.K	0845 SAMSUNG (7267864)	http://www.samsung.com/uk	
	CIS		
ESTONIA	800-7267	http://www.samsung.com/ee	
LATVIA	8000-7267	http://www.samsung.com/lv	
LITHUANIA	8-800-77777	http://www.samsung.com/lt	
KAZAKHSTAN	8-10-800-500-55-500	http://www.samsung.com/ kz_ru	
KYRGYZSTAN	00-800-500-55-500		
RUSSIA	8-800-555-55-55	http://www.samsung.ru	
TADJIKISTAN	8-10-800-500-55-500		
UKRAINE	8-800-502-0000	http://www.samsung.ua	

8-10-800-500-55-500

UZBEKISTAN

http://www.samsung.com/ kz\_ru

	Asia Pacific			
AUSTRALIA	1300 362 603	http://www.samsung.com/au		
CHINA	800-810-5858	http://www.samsung.com/cn		
	400-810-5858			
	010-6475 1880			
	HONG KONG:3698 - 4698	http://www.samsung.com/hk		
INDIA	3030 8282	http://www.samsung.com/in		
	1800 110011			
	1-800-3000-8282			
INDONESIA	0800-112-8888	http://www.samsung.com/id		
JAPAN	0120-327-527	http://www.samsung.com/jp		
MALAYSIA	1800-88-9999	http://www.samsung.com/my		
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	http://www.samsung.com/nz		
PHILIPPINES	1-800-10-SAMSUNG (726-7864)	http://www.samsung.com/ph		
	1-800-3-SAMSUNG (726-7864)			
	02-5805777			
SINGAPORE	1800-SAMSUNG(726-7864)	http://www.samsung.com/sg		
THAILAND	1800-29-3232	http://www.samsung.com/th		
	02-689-3232			
TAIWAN	0800-329-999	http://www.samsung.com/tw		
VIETNAM	1 800 588 889	http://www.samsung.com/vn		
Middle East & Africa				

# ddle East & Africa

SOUTH AFRICA	0860-SAMSUNG(726-7864)	http://www.samsung.com/za
TURKEY	444 77 11	http://www.samsung.com/tr
U.A.E	800-SAMSUNG(726-7864)	http://www.samsung.com/ae
	8000-4726	

# Terms

Dot Pitch	The image on a monitor 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 fre- quency 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 sec- ond, this is regarded as 60 Hz.

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 monitors to ensure a clear image. The Inter- lace 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 monitor to ex- change information automatically. This monitor follows the international standard VESA DDC for the Plug & Play func- tion.
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 1920 x 1080, this means the screen is composed of 1920 horizontal dots (horizontal resolution) and 1080 vertical lines (vertical resolution).
SRS TS XT	This feature outputs sonorous and vivid 3D sound as for 5.1 channel speaker sound but through a 2-channel speaker. It has a good effect when stereo signals are input.

### **Correct Disposal**

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)



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

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

should not be mixed with other commercial wastes for disposal.

### Correct disposal of batteries in this product - Europe only



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This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.



The rechargeable battery incorporated in this product is not user replaceable. For information on its replacement, please contact your service provider.

### Authority

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