



User Manual

400BX

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

Before Using the Product

Copyright

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TruSurround XT, SRS and the  symbol are trademarks of SRS Labs, Inc.

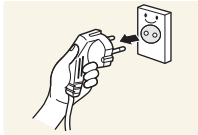
TruSurround XT technology is incorporated under license from SRS Labs, Inc.

Before Using the Product

Cleaning

Exercise care when cleaning as the panel and exterior of advanced LCDs are easily scratched.

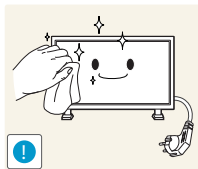
Take the following steps when cleaning.



1. Power off the monitor and computer.
2. Disconnect the power cord from the monitor.



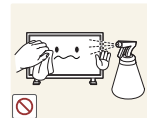
Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.



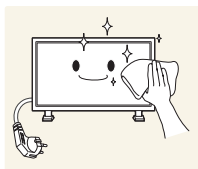
3. Wipe the monitor with a clean, soft and dry cloth.



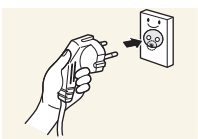
- Do not use detergents that contain alcohol, solvent or surface-active agents.



- Do not spray water or detergent directly on the product.



4. Wet a soft and dry cloth in water and wring thoroughly to clean the exterior of the monitor.



5. Connect the power cord to the monitor when cleaning is finished.
6. Power on the monitor and computer.

Storage

High-glossy models can develop white stains on the surface if an ultrasonic wave humidifier is used nearby.





Contact Customer Service Center if the inside of the monitor needs cleaning (service fee will be charged).





Before Using the Product

Safety Precautions

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

	This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.
	This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Symbols

 Warning	A serious or fatal injury may result if instructions are not followed.
 Caution	Personal injury or damage to properties may result if instructions are not followed.
	Activities marked by this symbol are prohibited.
	Instructions marked by this symbol must be followed.

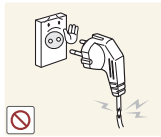
Before Using the Product

Electricity and Safety



The following images are for reference only. Real-life situations may differ from what is shown in the images.

Warning



Do not use a damaged power cord or plug, or a loose power socket.

- An electric shock or fire may result.

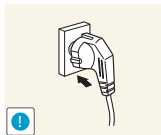


Do not use multiple products with a single power socket.

- Overheated power sockets may cause a fire.

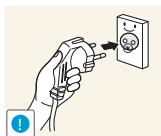


Do not touch the power plug with wet hands. Otherwise, an electric shock may result.



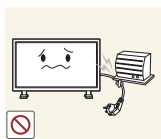
Insert the power plug all the way in so it is not loose.

- An unsecure connection may cause a fire.



Connect the power plug to a grounded power socket (type 1 insulated devices only).

- An electric shock or injury may result.



Do not bend or pull the power cord with force. Be careful not to leave the power cord under a heavy object.

- Damage to the cord may result in a fire or electric shock.



Do not place the power cord or product near heat sources.

- A fire or electric shock may result.



Clean any dust around the pins of the power plug or the power socket with a dry cloth.

- A fire may result.

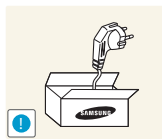
Before Using the Product

Caution



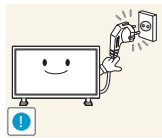
Do not disconnect the power cord while the product is being used.

- The product may become damaged by an electric shock.



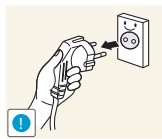
Only use the power cord provided with your product by Samsung. Do not use the power cord with other products.

- A fire or electric shock may result.



Keep the power socket where the power cord is connected unobstructed.

- The power cord must be disconnected to cut off power to the product when an issue occurs.
- Note that the product is not completely powered down by using only the power button on the remote.



Hold the plug when disconnecting the power cord from the power socket.

- An electric shock or fire may result.

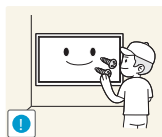
Installation

Warning



Do not place candles, insect repellants or cigarettes on top of the product. Do not install the product near heat sources.

- A fire may result.



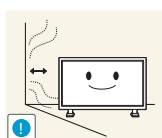
Have a technician install the wall-mount hanger.

- Installation by an unqualified person can result in an injury.
- Only use approved cabinets.



Do not install the product in poorly ventilated spaces such as a bookcase or closet.

- An increased internal temperature may cause a fire.



Install the product at least 10cm away from the wall to allow ventilation.

- An increased internal temperature may cause a fire.

Before Using the Product



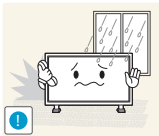
Keep the plastic packaging out of the reach of children.

- Children may suffocate.



Do not install the product on an unstable or vibrating surface (insecure shelf, sloped surface, etc.)

- The product may fall and become damaged and/or cause an injury.
- Using the product in an area with excess vibration may damage the product or cause a fire.



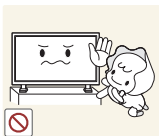
Do not install the product in a vehicle or a place exposed to dust, moisture (water drips, etc.), oil, or smoke.

- A fire or electric shock may result.



Do not expose the product to direct sunlight, heat, or a hot object such as a stove.

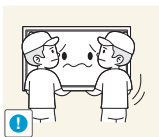
- The product lifespan may be reduced or a fire may result.



Do not install the product within the reach of young children.

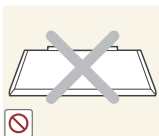
- The product may fall and injure children.
- As the front is heavy, install the product on a flat and stable surface.

Caution



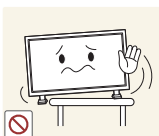
Do not drop the product while moving.

- Product failure or personal injury may result.



Do not set down the product on its front.

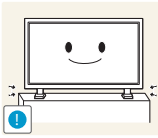
- The screen may become damaged.



When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

- The product may fall and become damaged and/or cause an injury.
- Install the product only on cabinets or shelves of the right size.

Before Using the Product



Set down the product gently

- Product failure or personal injury may result.



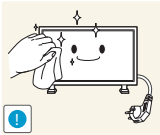
Installing the product in an unusual place (a place exposed to a lot of fine particles, chemical substances or extreme temperatures, or an airport or train station where the product should operate continuously for an extended period of time) may seriously affect its performance.

- Be sure to consult Samsung Customer Service Center if you want to install the product at such a place.

Before Using the Product

Cleaning

Warning



Disconnect the power cord before cleaning.

- An electric shock or fire may result.



Do not spray water directly on the product when cleaning.

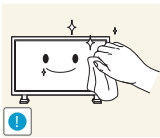
- Do not expose the product to water or get the product wet.
- A fire, electric shock, or product defect may result.

Caution



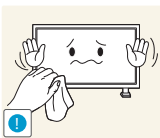
Do not spray detergent directly on the product.

- Otherwise, the exterior or display is highly likely to discolor, crack, or peel off.



Disconnect the power cord and wipe the product with a dry soft cloth.

- Do not use chemicals such as wax, benzene, alcohol, thinner, insecticide, air freshener, lubricant or cleaner on the product. The exterior may become damaged or the labels may peel off.

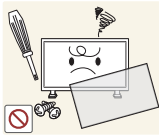


As the product exterior is easily scratched, always use the cloth provided with the product when cleaning. Slightly wet the cloth with water before use. Make sure there are no foreign substances on the cloth before use to prevent scratches.

Before Using the Product

Operation

Warning



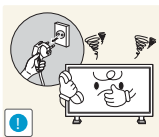
There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.

- A fire or electric shock may result.
- Contact Samsung Customer Service Center for repairs.



Before moving the product, turn off the power switch and disconnect the power cord, antenna cable and all other connected cables.

- Damage to the cord may result in a fire or electric shock.



If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Center.

- An electric shock or fire may result.



Do not let children hang from the product or climb on top of it.

- Children may become injured or seriously harmed.



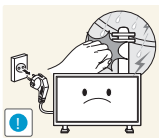
If the product is dropped or the outer case is damaged, turn off the power switch and disconnect the power cord. Then contact Samsung Customer Service Center.

- Continued use can result in a fire or electric shock.



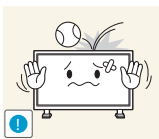
Do not leave heavy objects or items that children like (toys, sweets, etc.) on top of the product.

- The product or heavy objects may fall as children try to reach for the toys or sweets resulting in a serious injury.



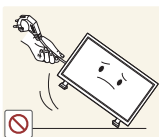
During a lightning or thunderstorm, remove the power cord and do not touch the antenna cable.

- A fire or electric shock may result.



Do not drop objects on the product or apply impact.

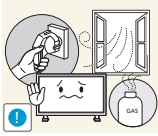
- A fire or electric shock may result.



Do not move the product by pulling the power cord or any cable.

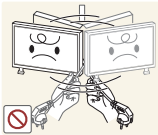
- Product failure, an electric shock or fire may result from a damaged cable.

Before Using the Product



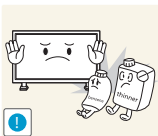
If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.

- Sparks can cause an explosion or fire.
- Never touch the power cord or antenna cable when thunder or lightning is present.



Do not lift or move the product by pulling the power cord or any cable.

- Product failure, an electric shock or fire may result from a damaged cable.



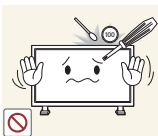
Do not use or keep combustible spray or an inflammable substance near the product.

- An explosion or fire may result.



Ensure the vents are not blocked by tablecloths or curtains.

- An increased internal temperature may cause a fire.



Do not insert metallic objects (chopsticks, coins, hairpins, etc) or objects that burn easily (paper, matches, etc) into the product (via the vent or input/output ports, etc).

- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- Product failure, an electric shock or fire may result.

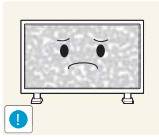


Do not place objects containing liquid (vases, pots, bottles, etc) or metallic objects on top of the product.

- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- Product failure, an electric shock or fire may result.

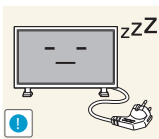
Before Using the Product

Caution



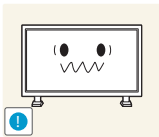
Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.

- Activate power-saving mode or a moving-picture screen saver if you will not be using the monitor for an extended period of time.



Disconnect the power cord from the power socket if you do not plan on using the product for an extended period of time (vacation, etc).

- Dust accumulation combined with heat can cause a fire, electric shock or electric leakage.



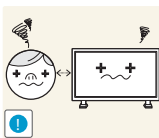
Use the product at the recommended resolution and frequency.

- Your eyesight may deteriorate.



Do not hold the monitor upside-down or move it by holding the stand.

- The product may fall and become damaged or cause an injury.

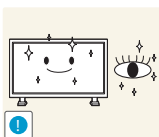


Looking at the screen too close for an extended period of time can deteriorate your eyesight.



Do not use humidifiers or stoves around the product.

- A fire or electric shock may result.

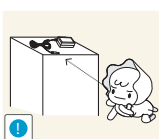


Rest your eyes for more than 5 minutes for every 1 hour of product use.

- Eye fatigue will be relieved.

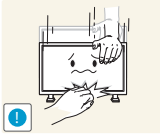


Do not touch the screen when the product has been turned on for an extended period of time as it will become hot.



Store small accessories out of the reach of children.

Before Using the Product



Exercise caution when adjusting the product angle or stand height.

- Your hand or finger may get stuck and injured.
- Tilting the product at an excessive angle may cause the product to fall and an injury may result.



Do not place heavy objects on the product.

- Product failure or personal injury may result.

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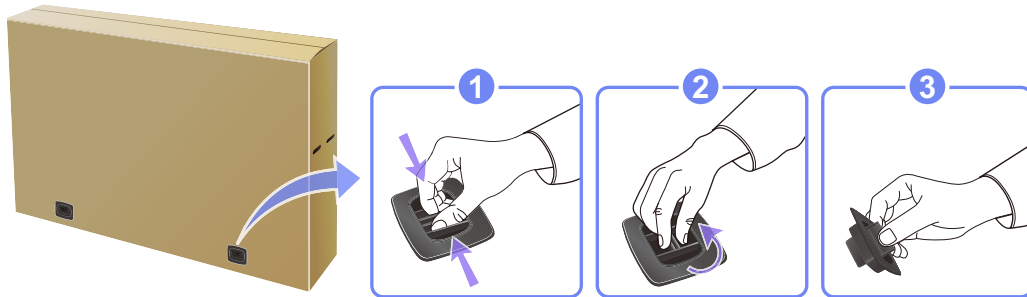
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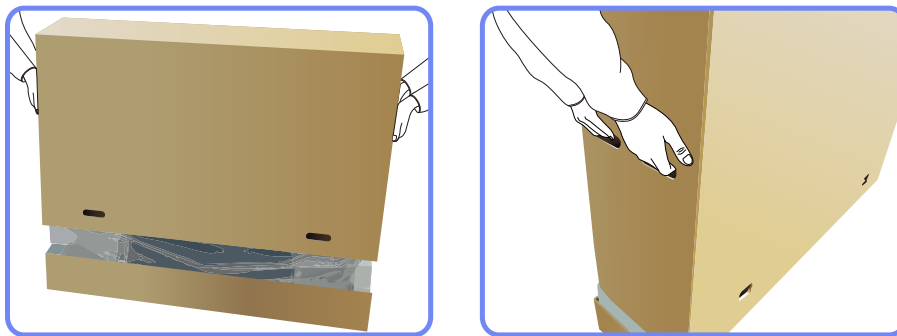
1.1 Checking the Contents

1.1.1 Removing the Packaging

- 1 Remove the black locking device at the bottom of the box.



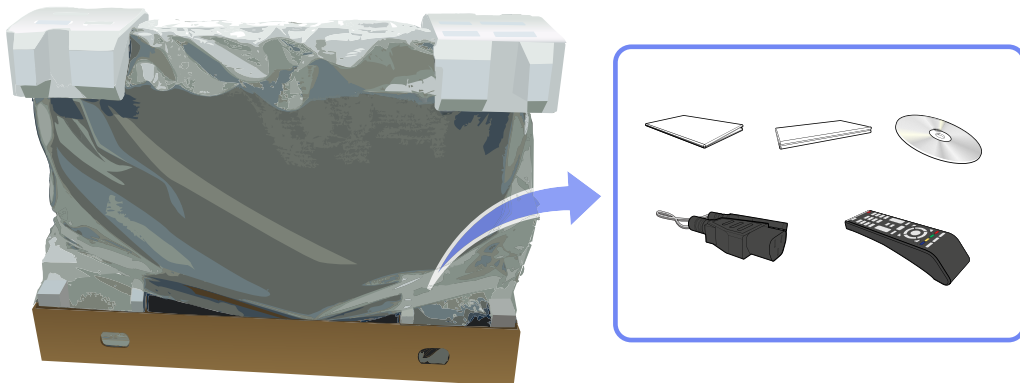
- 2 Using the grooves in the box, lift and remove the top of the box.



- 3 Check the components and remove the Styrofoam and plastic bag.



The appearance of actual components may differ from the image shown.



This image is for reference only.

- 4 Store the box in a dry area so that it can be used when moving the product in the future.

1.1.2 Checking the Components

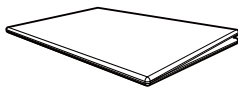


- Contact the vendor where you purchased the product if any components are missing.
- The appearance of the components and items sold separately may differ from the image shown.

Components



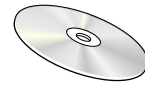
Components may differ in different locations.



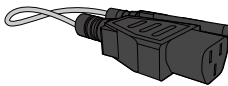
Quick setup guide



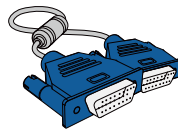
Warranty card
(Not available in all locations)



User manual



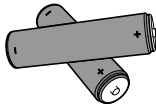
Power cord



D-SUB cable



Remote Control

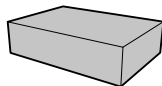


Batteries
(Not available in all locations)

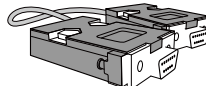
Items sold separately



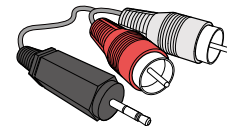
The following items can be purchased at your nearest retailer.



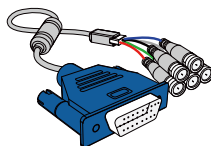
Wall-mount KIT



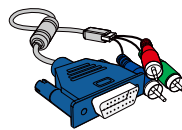
RS232C cable



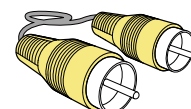
RCA stereo cable



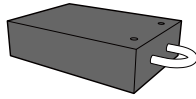
RGB-BNC cable



RGB-component cable



AV cable



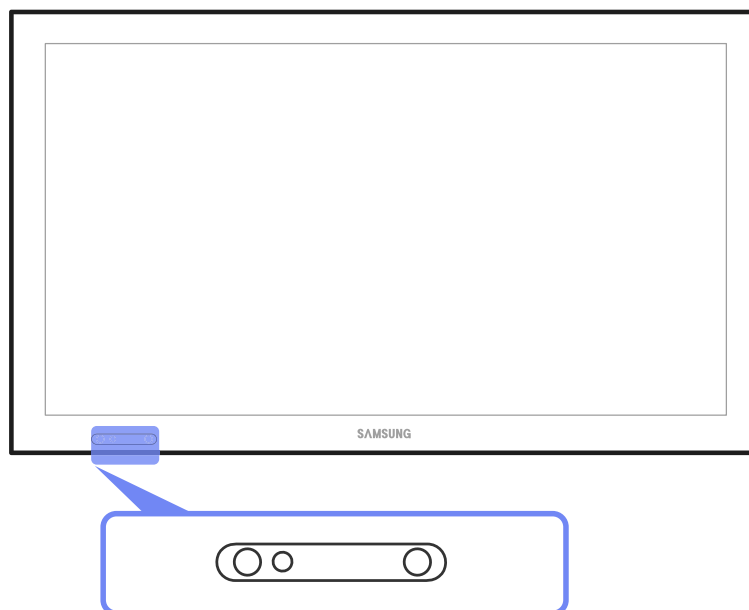
TV tuner box

1.2 Parts

1.2.1 Frontal Sensor



- The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.
- This product can only be controlled by using the remote control.

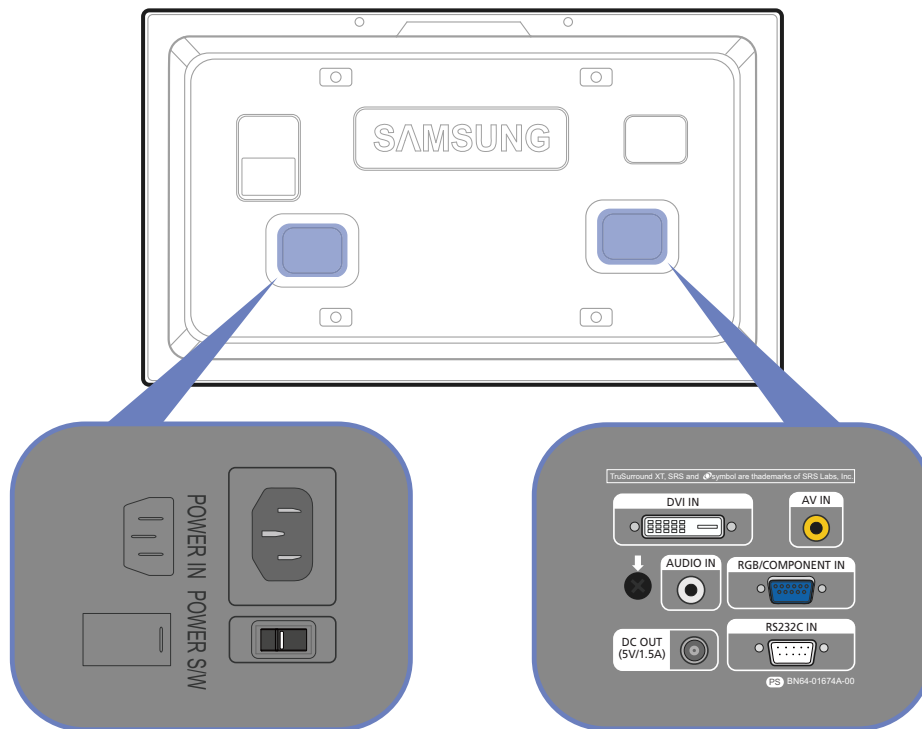


Sensor	Description
Power lamp 	Normal: On / Energy saving: Blinks Refer to "8.2PowerSaver" for details on Energy Saving mode.
Remote sensor 	Receives signals from the remote Keep the area between the remote sensor and remote control obstacle-free.

1.2.2 Reverse Side



The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



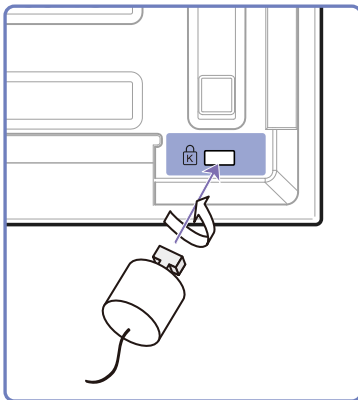
Port	Description
[POWER S/W] ON [I] / OFF	Power switch
[POWER IN]	Connects to the power cord
[DVI IN]	Connects to a source device using a DVI cable or HDMI-DVI cable
[AV IN]	Connects to a source device using the AV cable
[AUDIO IN]	Connects to the audio of a source device
[RGB/COMPONENT IN]	Connects to a source device using the D-SUB or RGB-component cable
[DC OUT (5V/1.5A)]	Be sure to connect the [DC OUT] port to a TV tuner box specified by Samsung. Otherwise, the product performance may be affected.
[RS232C IN]	Connects to an MDC using the RS232C cable

1.2.3 Anti-theft Lock



- An anti-theft lock allows you to use the product securely even in public places.
- The locking device shape and locking method depend on the manufacturer. Refer to the user guide provided with your anti-theft locking device for details.

To lock an anti-theft locking device:

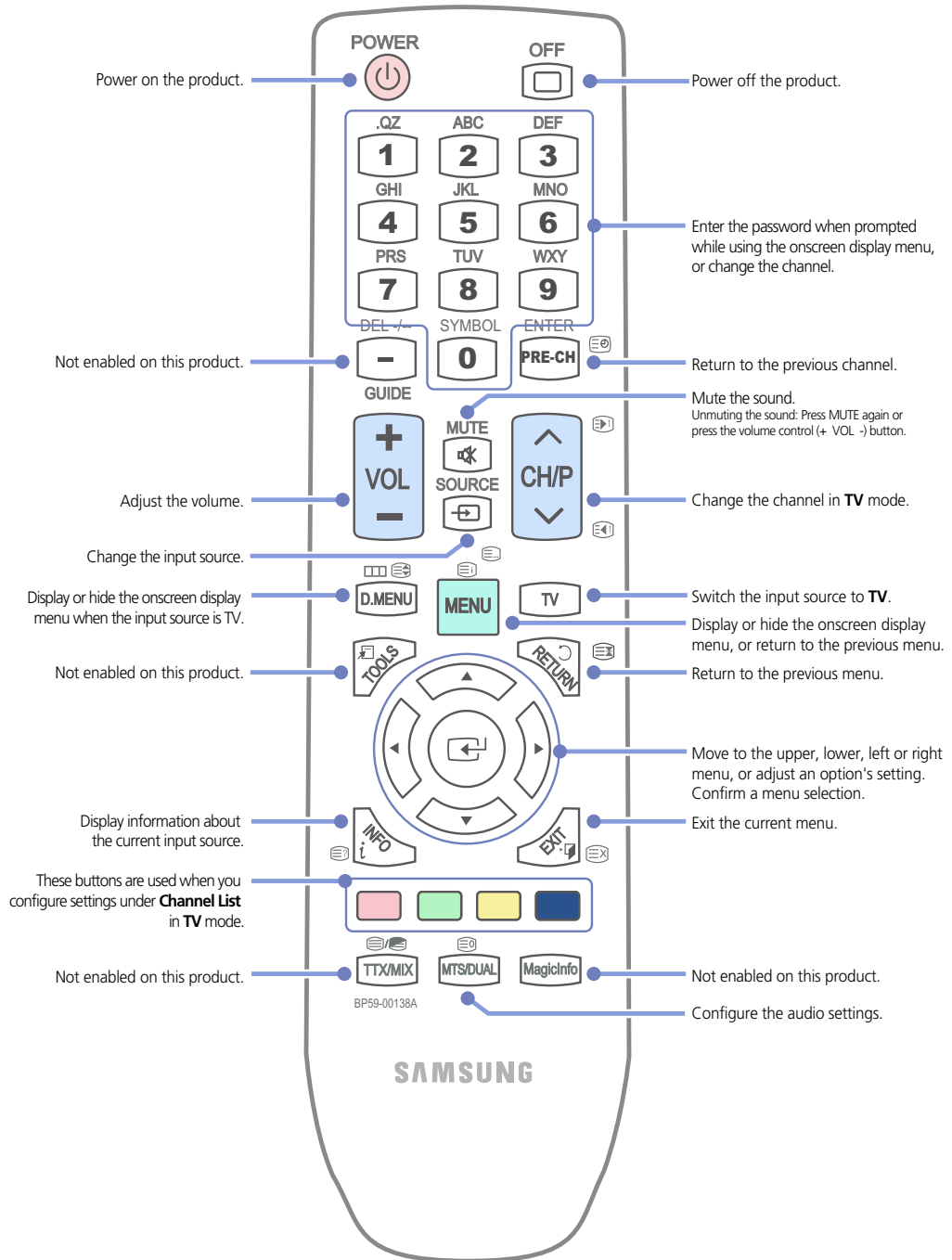


- 1 Fix the cable of your anti-theft locking device to a heavy object such as a desk.
- 2 Put one end of the cable through the loop on the other end.
- 3 Insert the locking device into the anti-theft lock slot at the back of the product.
- 4 Lock the locking device.
 - An anti-theft locking device can be purchased separately.
 - Refer to the user guide provided with your anti-theft locking device for details.
 - Anti-theft locking devices can be purchased at electronics retailers or online.


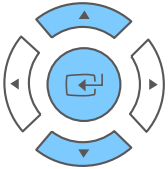
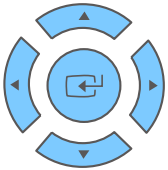


1.2.4 Remote Control



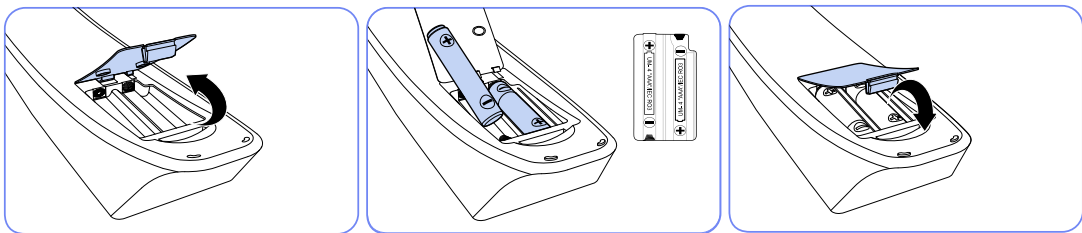
- Using other display devices in the same space as the remote control of this product can cause the other display devices to be inadvertently controlled.
- Remote control button functions may differ for different products.



Adjusting the OSD with the Remote Control

	1. Open the OSD menu.
	2. Select from Input , Picture , Sound , Setup or Multi Control in the displayed OSD menu screen.
	3. Change settings as desired.
	4. Finish setting.
	5. Close the onscreen display (OSD) menu.

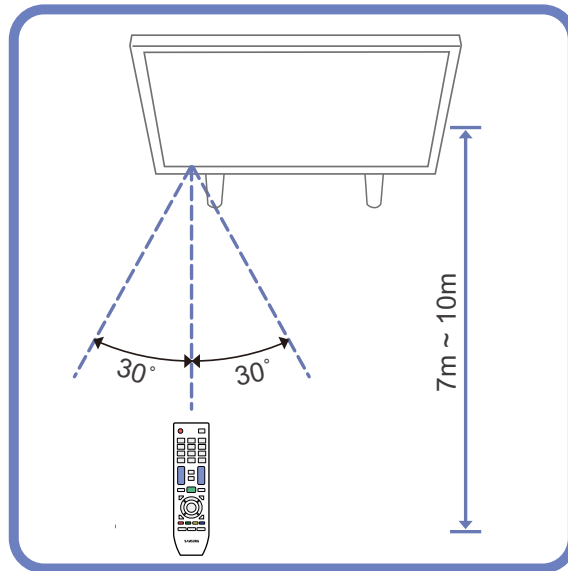
To place batteries in the remote control:



- 1 Open the back lid of the remote control.
- 2 Place two AAA batteries (1.5V) in the right direction.
- 3 Close the lid.

 Batteries are sold separately.

Remote Control Reception Range



Use the remote control within 7m to 10m from the sensor on the product at an angle of 30° from the left and right.



- Store used batteries out of reach of children and recycle.
- Do not use a new and used battery together. Replace both batteries at the same time.
- Remove batteries when the remote control is not to be used for an extended period of time.

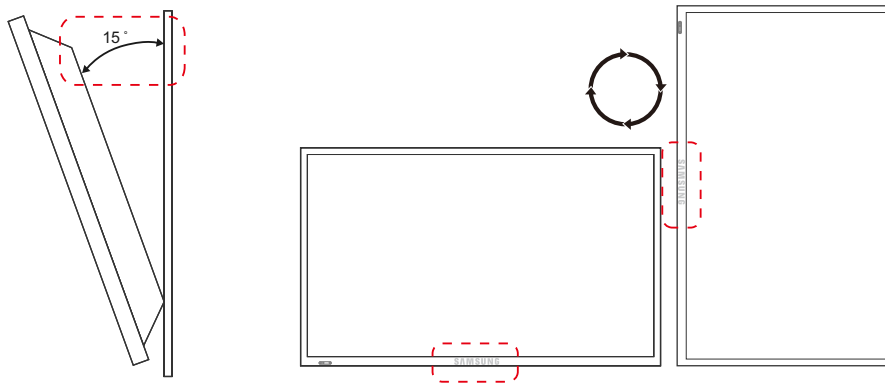
1.3 Before Installing the Product (Installation Guide)

! To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

- Ensure that an authorized installation company installs the wall mount.
- Otherwise, it may fall and cause personal injury.
- Make sure to install the specified wall mount.

1.3.1 Tilting Angle and Rotation

 Contact Samsung Customer Service Center for further details.



- A The product can be tilted at a maximum angle of 15° from a perpendicular wall surface.
- B To use the product vertically (portrait), turn it clockwise so that the LED is pointing down.

1.3.2 Ventilation

1. Installation on a Perpendicular Wall

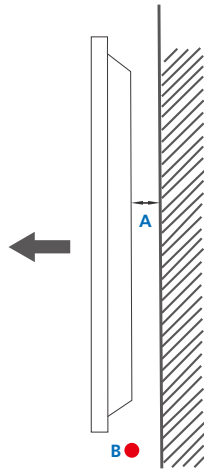


Figure 1.1 Side view

A Minimum 40 mm

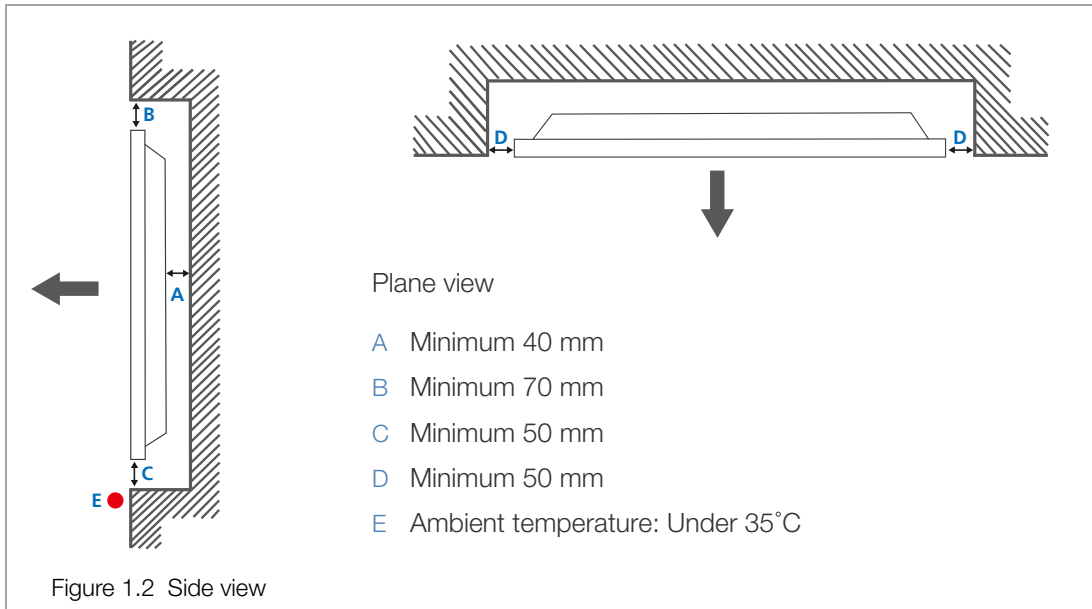
B Ambient temperature: Under 35°C

- When installing the product on a perpendicular wall, allow at least 40 mm of space between the product and wall surface for ventilation and ensure that the ambient temperature is kept below 35°C.

2. Installation on an Indented Wall



Contact Samsung Customer Service Center for further details.

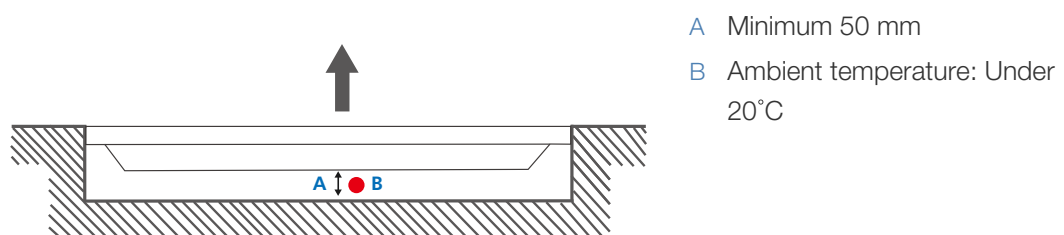


When installing the product on an indented wall, allow at least the space specified above between the product and wall for ventilation and ensure that the ambient temperature is kept below 35°C.

3. Installation in an Indented Floor

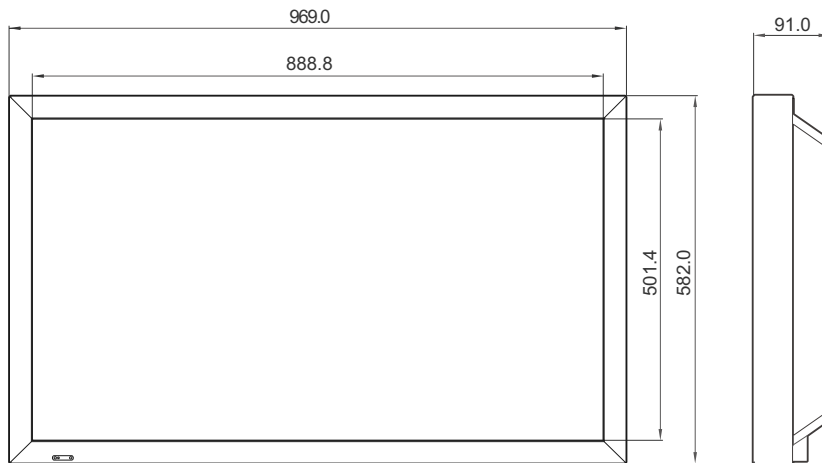


Contact Samsung Customer Service Center for further details.



When installing the product in an indented floor, allow at least 50 mm of space between the product and floor surface for ventilation and ensure that the ambient temperature is kept below 20°C.

1.3.3 Product Blueprint



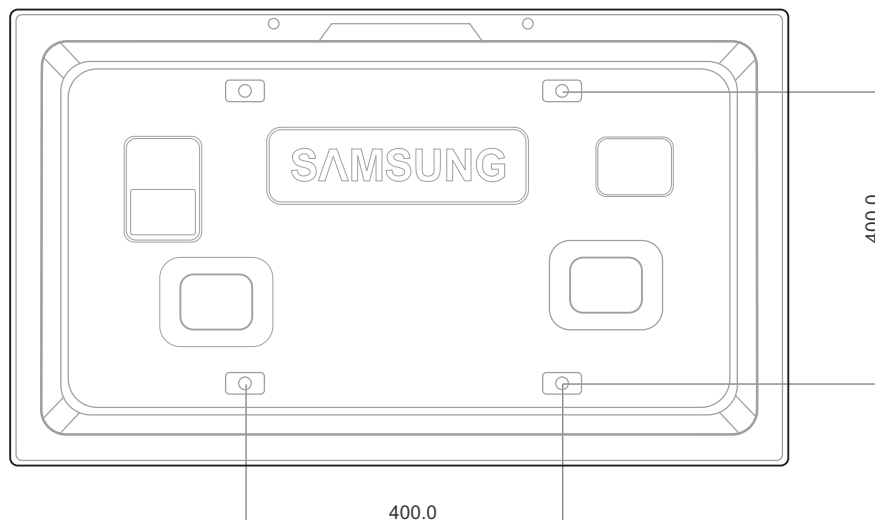
1.4 VESA Bracket (hanger) Installation

1.4.1 VESA Bracket (hanger) Installation



- The VESA bracket must be installed in accordance with the VESA standards.
- Purchasing and installing a VESA bracket: Contact your nearest Samsung dealer to order a VESA bracket. After an order has been placed, a technician will visit you to install your VESA bracket.
- Samsung is not held responsible for any damage to the product or injuries sustained as a result of the product being installed by an unqualified individual.

Installation Measurements



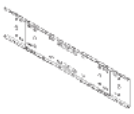





- Be sure to use machine screws with a diameter of 6 mm and a length of 8 mm to 12 mm to install the bracket on a wall.

Installing a Bracket

- The bracket must be installed by a qualified technician.
- Samsung is not held responsible for any damage to the product or injuries sustained as a result of the product being installed by an unqualified individual.
- The bracket must be installed in a cement wall. Installation in a plaster or wooden wall is unstable and the product may fall off.

Components

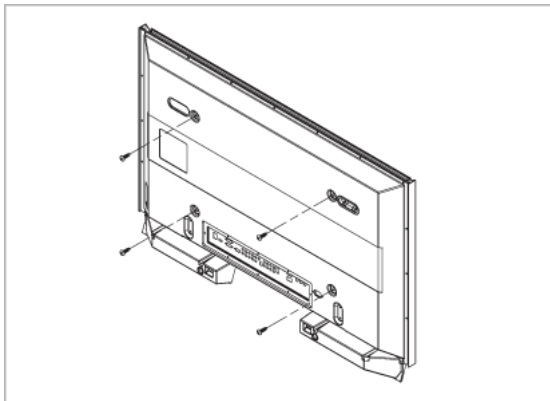
Be sure to use only the components and parts provided with your bracket for installation.

					
Bracket x 1	Hinge x 2 (left and right)	Plastic piece x 4	Screw A x 11	Screw B x 4	Anchor x 11

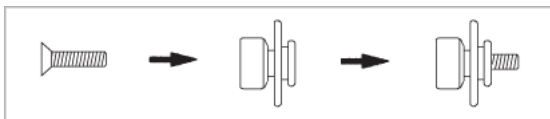
Fixing the main unit to the bracket:


The appearance of the main unit may differ from the image shown (The assembly and installation of the plastic pieces and screws are the same as the images shown).

- 1 Remove the 4 screws from the back of the main unit.

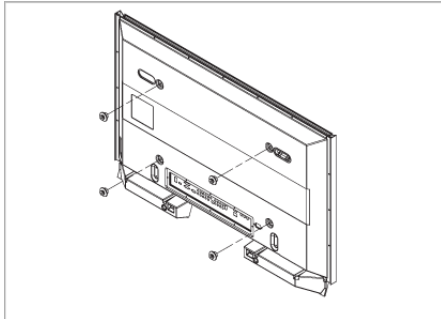


- 2 Combine the plastic pieces with the screws (B).

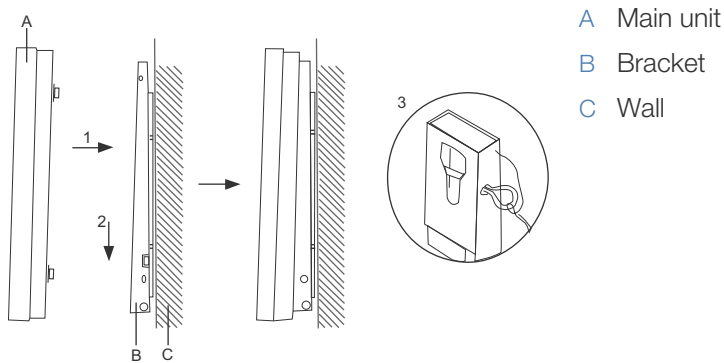


- 
 • After hanging the main unit on the bracket, check from the left and right sides that all the plastic pieces are firmly in place.
- Exercise caution when installing or adjusting the angle of the main unit to prevent the fingers from being caught.
- Ensure that the bracket is firmly fixed to the wall to prevent the main unit from falling off and causing injuries.

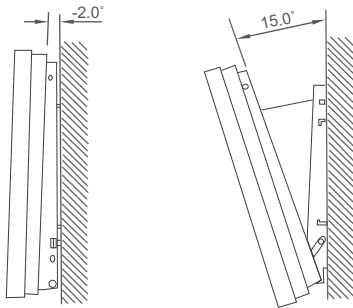
- 3 Firmly fasten the 4 screws (B) combined with the plastic pieces at step 2 to the back of the main unit.



- 4 Remove the safety pin (3). Fit the 4 holders on the main unit in the grooves in the bracket, and lower (1) and securely hang the main unit on the bracket (2). Fasten the safety pin (3) to prevent the main unit from being detached from the bracket.



Adjusting the Wall-mounted Product Angle



- 1 Fix the main unit to the bracket.

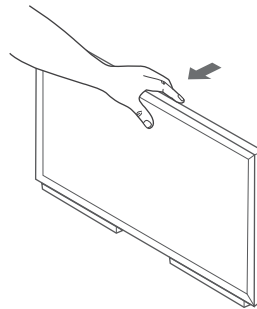


Adjust the bracket angle to -2° before you fix the bracket on the wall.

- 2 Hold and pull the top and center of the main unit fixed on the bracket towards you as shown below to adjust the angle.

- 3 Angle adjustment can be made between -2° and 15° .

Be sure to pull the center (not the sides) of the main unit when adjusting the angle.

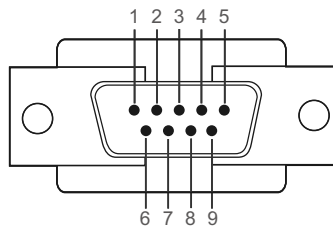


1.5 Remote Control

1.5.1 Cable Connection

Interface	RS232C (9 pins)
Pin	TxD (No. 2), RxD (No. 3), GND (No. 5)
Bit rate	9600 bps
Data bits	8 bit
Parity	None
Stop bit	1 bit
Flow control	None
Maximum length	15m (only shielded type)

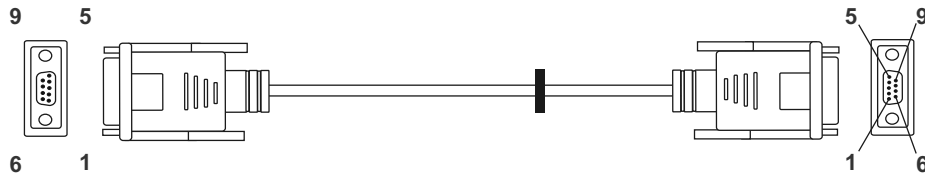
- Pin assignment



Pin	Signal
1	Detect data carrier
2	Received data
3	Transmitted data
4	Prepare data terminal
5	Signal ground
6	Prepare data set
7	Send request
8	Clear to send
9	Ring indicator

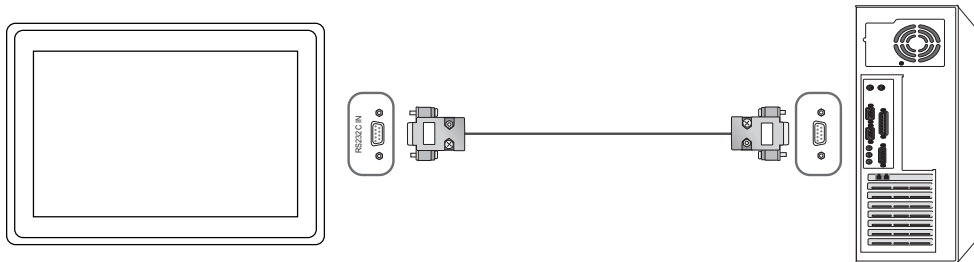
Preparations

- RS232C cable
 Connector: 9-pin D-Sub
 Cable: Cross (reversed) cable



-P1-		-P1-		-P2-		-P2-
Female	Rx	2	----->	3	Rx	Female
	Tx	3	<-----	2	Tx	
	Gnd	5	-----	5	Gnd	

- Connection



1.5.2 Control Codes

Viewing control state (Get control command)

Header	Command	ID	Data length	Checksum
0xAA	Command type		0	

Controlling (Set control command)

Header	Command	ID	Data length	Data	Checksum
0xAA	Command type		1	Value	

Command

No.	Command type	Command	Value range
1	Power control	0x11	0~1
2	Volume control	0x12	0~100
3	Input source control	0x14	-
4	Screen mode control	0x18	-
5	Screen size control	0x19	0~255
6	PIP on/off control	0x3C	0~1
7	Auto adjustment control	0x3D	0
8	Video wall mode control	0x5C	0~1
9	Safety Lock	0x5D	0~1

- Issued IDs can be displayed in hexadecimals. However, ID 0 must be displayed as 0xFF.
- All communications take place in hexadecimals. The checksum is calculated by adding up all values except the header. If a checksum adds up to be more than 2 digits as shown below ($11+FF+01+01=112$), the first digit is removed.

E.g. Power On & ID=0

Header	Command	ID	Data length	Data 1	Checksum
0xAA	0x11		1	"Power"	

Header	Command	ID	Data length	Data 1	12
0xAA	0x11		1	1	

- To control all devices connected by a serial cable simultaneously irrespective of IDs, set the ID as "0xFE" and transmit commands. Commands will be executed by each device but ACK will not respond.

Power control

- Function
A TV/monitor can be powered on and off using a PC.
- Viewing power state (Get Power ON / OFF Status)

Header	Command	ID	Data length	Checksum
0xAA	0x11		0	

- Setting power ON/Off (Set Power ON / OFF)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x11		1	"Power"	

"Power": Power code to be set on a TV/monitor

1 : Power ON

0 : Power OFF

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x11	"Power"	

"Power": Power code to be set on a TV/monitor

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x11	"ERR"	

"ERR" : A code showing what error has occurred

Volume control

- Function
The volume of a TV/monitor can be adjusted using a PC.
- Viewing volume state (Get Volume Status)

Header	Command	ID	Data length	Checksum
0xAA	0x12		0	

- Setting the volume (Set Volume)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x12		1	"Volume"	

"Volume": Volume value code to be set on a TV/monitor (0-100)

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x12	"Volume"	

"Volume": Volume value code to be set on a TV/monitor (0-100)

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x12	"ERR"	

"ERR" : A code showing what error has occurred

Input source control

- Function
The input source of a TV/monitor can be changed using a PC.
- Viewing input source state (Get Input Source Status)

Header	Command	ID	Data length	Checksum
0xAA	0x14		0	

- Setting the input source (Set Input Source)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x14		1	"Input Source"	

"Input Source": An input source code to be set on a TV/monitor

0x14	PC
0x1E	BNC
0x18	DVI
0x0C	Input source
0x04	S-video
0x08	Component
0x20	MagicInfo
0x1F	DVI_video
0x30	RF (TV)
0x40	DTV
0x21	HDMI1
0x22	HDMI1_PC
0x23	HDMI2
0x24	HDMI2_PC
0x25	Display Port

- ! □ DVI_video, HDMI1_PC and HDMI2_PC cannot be used with the Set command. They only respond to "Get" commands.
- This model does not support BNC, S-Video, HDMI1, HDMI1_PC, HDMI2, HDMI2_PC, and Display ports.
- **MagicInfo** is only available with models that contain the **MagicInfo** function.
- RF (TV) and DTV are only available with models that include a TV.

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x14	"Input Source"	

"Input Source": An input source code to be set on a TV/monitor

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x14	"ERR"	

"ERR" : A code showing what error has occurred

Screen

- Function

The screen mode of a TV/monitor can be changed using a PC.

Screen mode cannot be controlled when the **Video Wall** function is enabled.



This control can only be used on models that include a TV.

- Viewing screen status (Get Screen Mode Status)

Header	Command	ID	Data length	Checksum
0xAA	0x18		0	

- Setting the picture size (Set Picture Size)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x18		1	"Screen Mode"	

"Screen Mode": A code that sets the TV/monitor status

0x01	16 : 9
0x04	Zoom
0x31	Wide Zoom
0x0B	4 : 3

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x18	"Screen Mode"	

"Screen Mode": A code that sets the TV/monitor status

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x18	"ERR"	

"ERR" : A code showing what error has occurred

Screen size control

- Function
The screen size of a TV/monitor can be changed using a PC.
- Viewing the screen size (Get Screen Size Status)

Header	Command	ID	Data length	Checksum
0xAA	0x19		0	

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x19	"Screen Size"	

"Screen Size": TV/monitor screen size (range: 0 – 255, unit: inch)

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x19	"ERR"	

"ERR" : A code showing what error has occurred

PIP On/Off control

- Function

The PIP mode of a TV/monitor can be turned on or off using a PC.



- Only available on models that have the PIP function.
- The mode cannot be controlled if **Video Wall** is set to **On**.
- This function is not available in MagicInfo.

- Viewing PIP on/off state (Get the PIP ON / OFF Status)

Header	Command	ID	Data length	Checksum
0xAA	0x3C		0	

- Setting PIP on/off (Set the PIP ON / OFF)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x3C		1	"PIP"	

"PIP": A code used to turn the PIP mode of a TV/monitor on or off

1 : PIP ON

0 : PIP OFF

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x3C	"PIP"	

"PIP": A code used to turn the PIP mode of a TV/monitor on or off

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x3C	"ERR"	

"ERR" : A code showing what error has occurred

Auto adjustment control (PC and BNC only)

- Function
Automatically adjust the PC system screen using a PC.
- Viewing auto adjustment state (Get Auto Adjustment Status)
- Setting auto adjustment (Set Auto Adjustment)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x3D		1	"Auto Adjustment"	

"Auto Adjustment" : 0x00 (at all times)

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x3D	"Auto Adjustment"	

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x3D	"ERR"	

"ERR" : A code showing what error has occurred

Video Wall Mode Control

- Function

Video Wall Mode can be activated on a TV/monitor using a PC.

This control is only available on a TV/monitor whose **Video Wall** is enabled.

This function is not available in MagicInfo.

- Viewing video wall mode (Get Video Wall Mode)

Header	Command	ID	Data length	Checksum
0xAA	0x5C		0	

- Setting the video wall (Set Video Wall Mode)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x5C		1	"Video Wall Mode"	

"Video Wall Mode": A code used to activate Video Wall mode on a TV/monitor

1 : **Full**

0 : **Natural**

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x5C	"Video Wall Mode"	

"Video Wall Mode": A code used to activate Video Wall mode on a TV/monitor

- Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x5C	"ERR"	

"ERR" : A code showing what error has occurred

Safety Lock

- Function
PC can be used to turn the Safety Lock function on or off on a TV/monitor.
This control is available regardless of whether or not the power is turned on.
- Viewing the safety lock state (Get Safety Lock Status)

Header	Command	ID	Data length	Checksum
0xAA	0x5D		0	

- Enabling or disabling safety lock (Set Safety Lock Enable / Disable)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x5D		1	"Safety Lock"	

"Safety Lock": Safety lock code to be set on a TV/monitor

1 : ON

0 : OFF

- Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x5D	"Safety Lock"	

"Safety Lock": Safety lock code to be set on a TV/monitor

- Nak

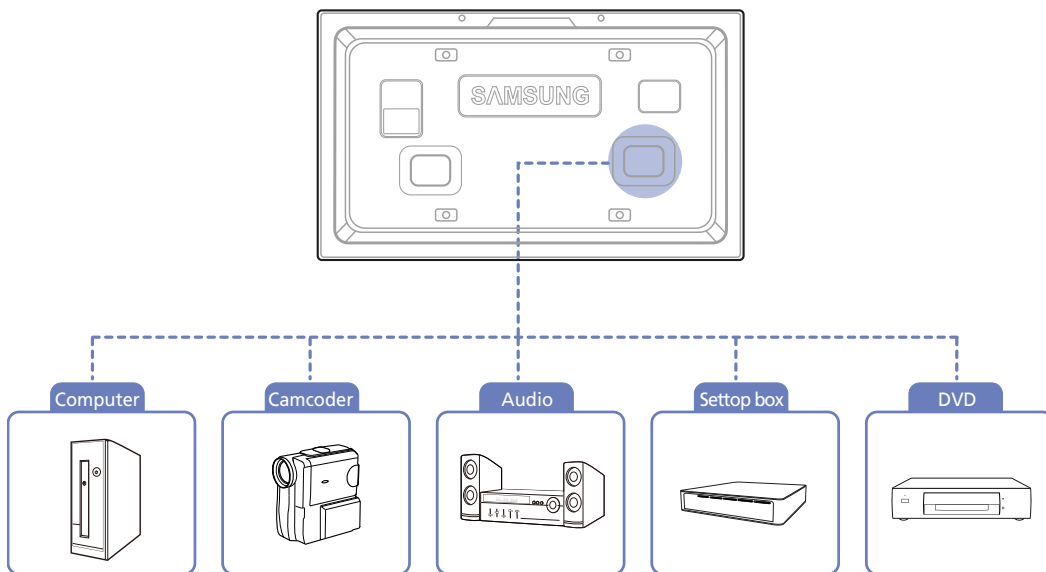
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'N'	0x5D	"ERR"	

"ERR" : A code showing what error has occurred

2.1 Before Connecting

Check the following before you connect this product with other devices.

Devices that can be connected to this product include PCs, camcorders, speakers, set top boxes and DVD/Blu-ray Disc players.



2.1.1 Pre-connection Checkpoints

- Before connecting a source device, read the user manual provided with it. The number and locations of ports on source devices may differ from device to device.
- Do not connect the power cable until all connections are completed. Connecting the power cable during connection may damage the product.
- Connect the sound ports correctly: left = white and right = red.
Audio input received via an audio-in port will be outputted via the PC, DVI, Source, or Component port.
- Check the types of ports at the back of the product you want to connect.

2.2 Connecting and Using a PC

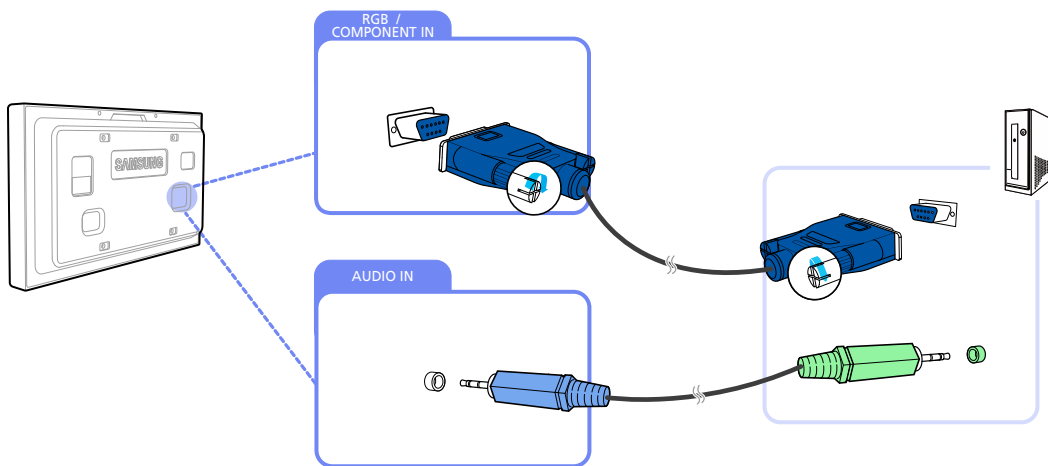
2.2.1 Connecting to a PC

- A PC can be connected to the product in a variety of ways. Select a connection method suitable for your PC.



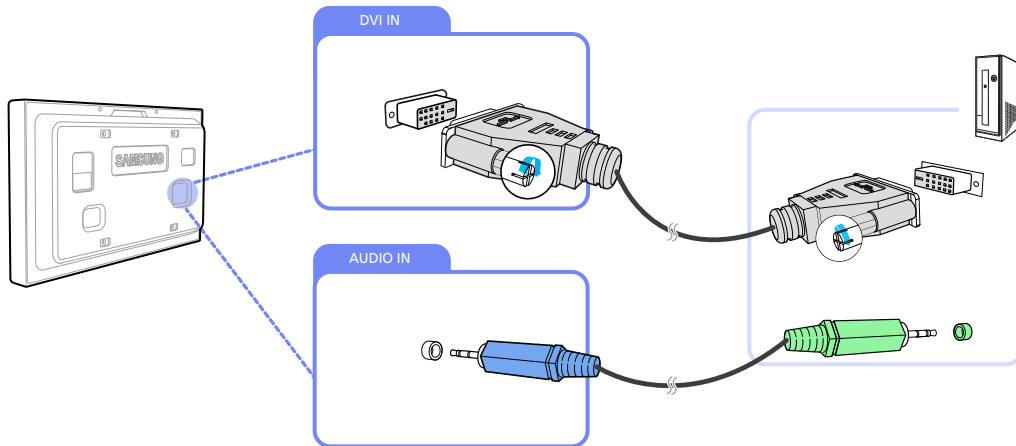
Connecting parts may differ in different products.

Connection using the D-SUB cable (analogue type)



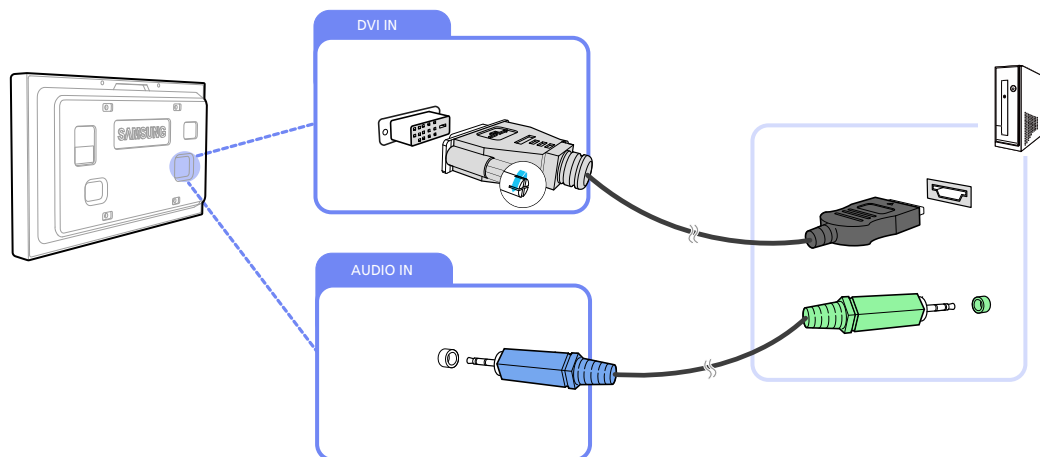
- 1 Connect the D-SUB cable to the [RGB/COMPONENT IN] port on the product and the D-SUB port on the PC.
- 2 Connect a sound output cable to the [AUDIO IN] port on the product and the sound output port on the PC.
- 3 Connect the power cord to the product and power socket, and power on the PC.

Connection using a DVI cable (digital type)



- 1 Connect a DVI cable to the [DVI IN] port on the monitor and the DVI port on the PC.
- 2 Connect a sound output cable to the [AUDIO IN] port on the product and the sound output port on the PC.
- 3 Connect the power cord to the product and power socket, and power on the PC.

Connection Using an HDMI-DVI Cable



- 1 Connect an HDMI-DVI cable to the [DVI IN] port on the monitor and the HDMI port on the PC.
- 2 Connect a sound output cable to the [AUDIO IN] port on the product and the sound output port on the PC.
- 3 Connect the power cord to the product and power socket, and power on the PC.



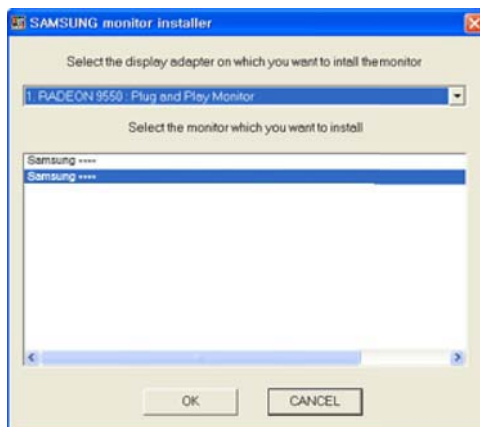
When you connect a PC to the product using an HDMI-DVI cable, set **Edit Name** to **DVI PC** to access video and audio content stored on the PC.

2.2.2 Driver Installation



- You can set the optimum resolution and frequency for this product by installing the corresponding drivers for this product.
- An installation driver is contained on the CD supplied with the product.
If the provided files are faulty, go to the Samsung homepage (<http://www.samsung.com/sec>) and download the files.

- 1 Insert the user manual CD provided with the product into the CD-ROM drive.
- 2 Click "Windows Driver."
- 3 Follow the instructions given on the screen to proceed with installation.
- 4 Select your product model from the list of models.



- 5 Go to Display Properties and check that the resolution and refresh rate are appropriate. Refer to your Windows OS manual for further details.

2.2.3 Changing the Resolution

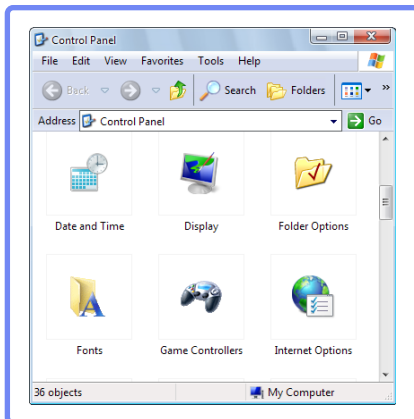
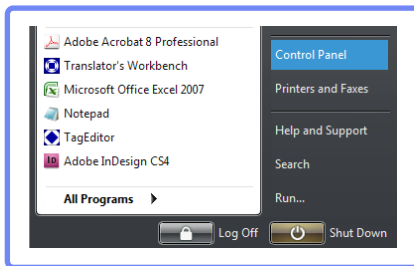


Adjust the resolution and refresh rate in Control Panel on your PC to obtain optimum picture quality.

The picture quality of TFT-LCDs may degrade if the optimum resolution is not selected.

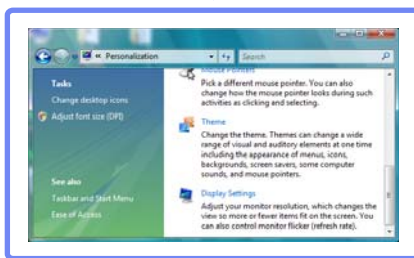
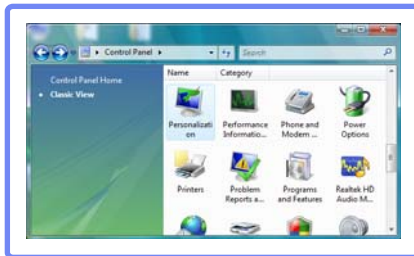
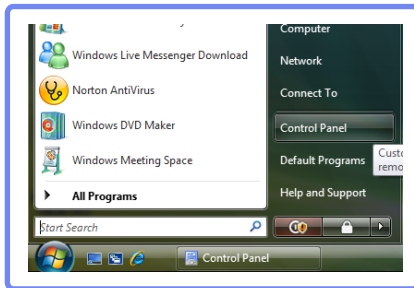
Changing the Resolution on Windows XP

Go to Control Panel → Display → Settings, and change the resolution.



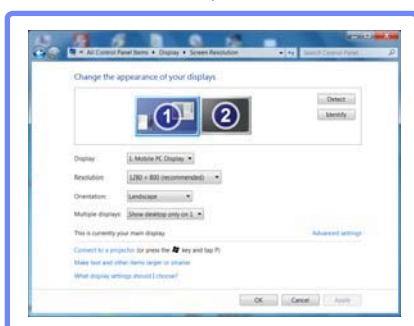
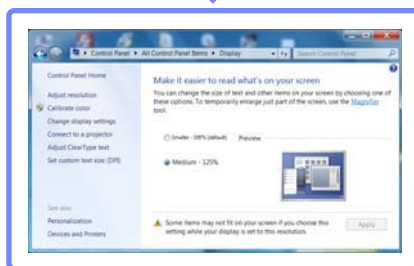
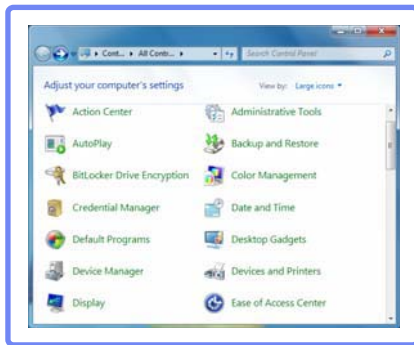
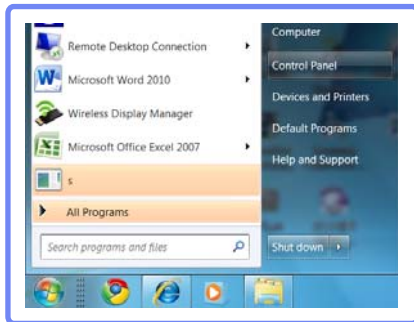
Changing the Resolution on Windows Vista

Go to Control Panel → Personal Settings → Display Settings, and change the resolution.



Changing the Resolution on Windows 7

Go to Control Panel → Display → Screen Resolution, and change the resolution.



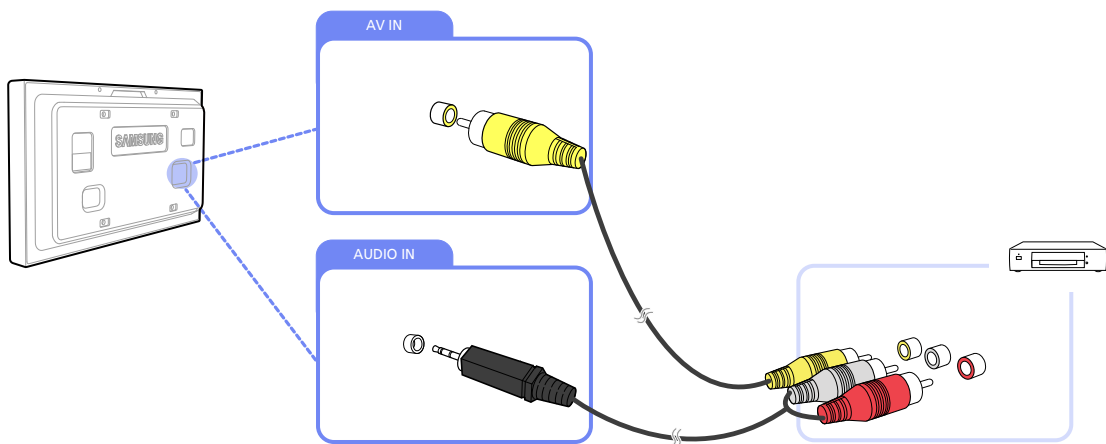
2.3 Connecting to a Video Device

- You can connect a video device to the product using a cable.



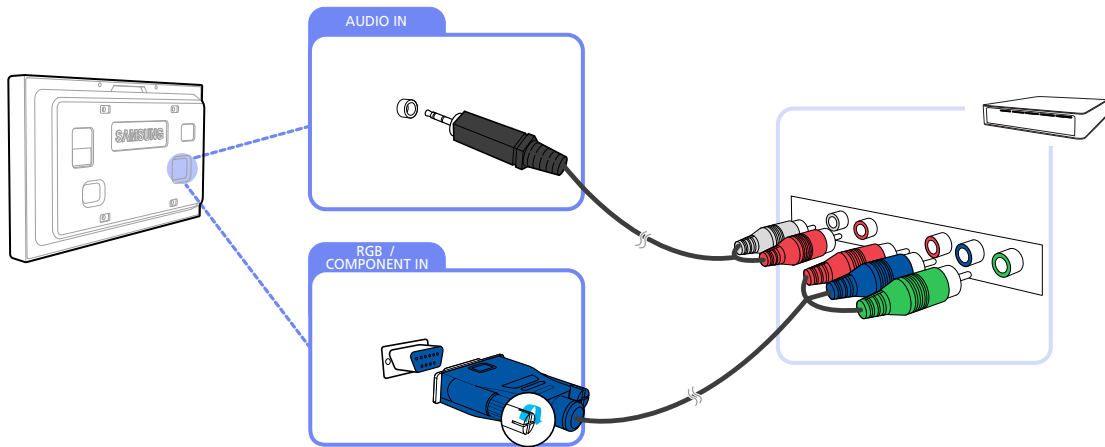
Connecting parts may differ in different products.

2.3.1 Connection Using the AV Cable



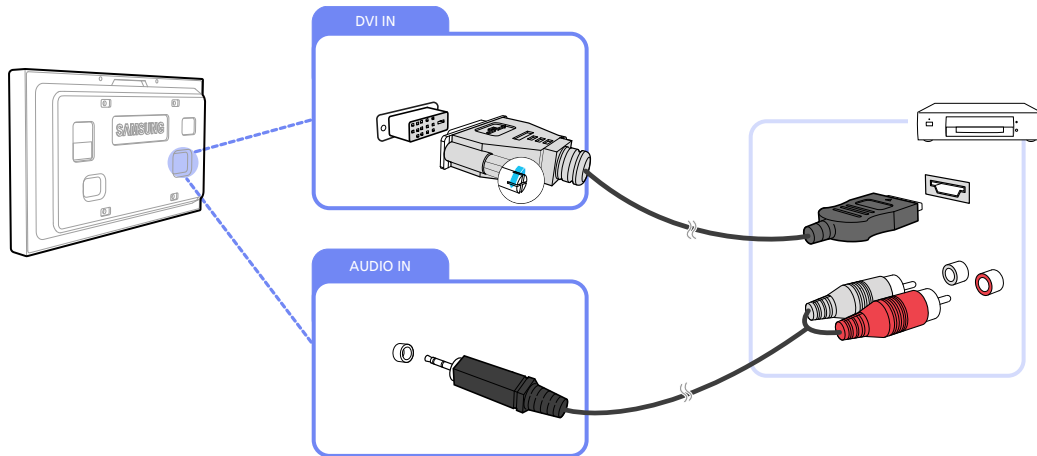
- 1 Connect the AV cable to the [AV IN] port on the product and the video port on the video device.
- 2 Connect the RCA stereo cable to the [AUDIO IN] port on the product and the matching-colored AUDIO OUT ports on the video device.
- 3 Press the **SOURCE** button on the remote control to change the source to **AV**.

2.3.2 Connection Using the RGB-component Cable




- 1 Connect the RGB-component cable to the [RGB/COMPONENT IN] port on the product and the matching-colored component ports on the video device.
- 2 Connect the RCA stereo cable to the [AUDIO IN] port on the product and the matching-colored AUDIO OUT ports on the video device.
- 3 Press the **SOURCE** button on the remote control to change the source to **Component**.

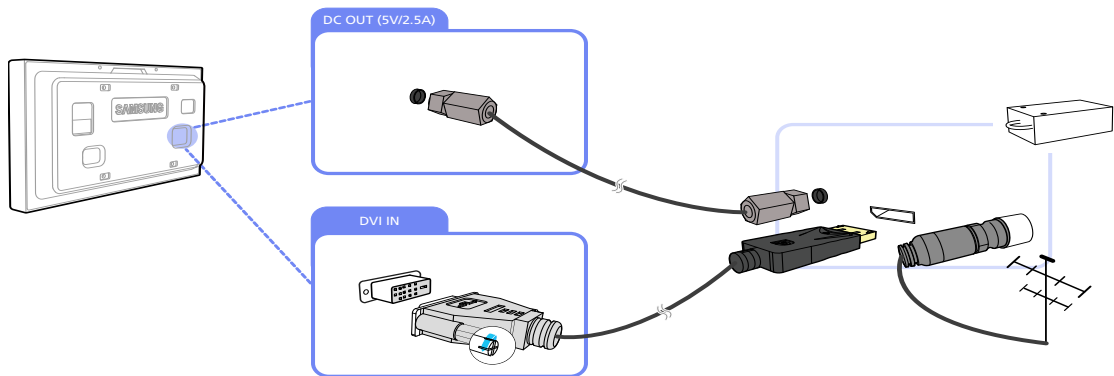
2.3.3 Connection Using an HDMI-DVI Cable



- 1 Connect an HDMI-DVI cable to the [DVI IN] port on the product and the HDMI port on the video device.
 - 2 Connect the RCA stereo cable to the [AUDIO IN] port on the product and the matching-colored AUDIO OUT ports on the video device.
 - 3 Press the **SOURCE** button on the remote control to change the source to **DVI**.
- ✎
 - Audio will not be enabled if the product is connected to a video device using an HDMI-DVI cable. To resolve this, additionally connect an audio cable to the audio ports on the product and video device. When you connect a video device to the product using an HDMI-DVI cable, set **Edit Name** to **DVI Device** to access video and audio content stored on the video device.
 - Supported resolutions include 1080p (50/60Hz), 720p (50/60Hz), 480p, and 576p.

2.4 Connecting to a TV Tuner Box (US Only)

 TV tuner boxes are sold separately. Contact Samsung Customer Service Center for enquiries on the purchase and installation of a TV tuner box.



- 1 Refer to the quick installation guide provided with your TV tuner box when you connect the tuner box to the product.
- 2 Connect a DP-DVI cable (which is TV-dedicated) to [DVI IN] on the product and TV OUT on the TV tuner box.
- 3 Connect the power cord of the TV tuner box to the [DC OUT (5V/2.5A)] port on the product and the power port on the TV tuner box.
- 4 Connect the antenna to the antenna port on the TV tuner box.
- 5 Connect the power cord to the product and a power socket.
- 6 Turn on the power button.
- 7 Press the **SOURCE** button on the remote control to change the source to **TV**.

2.5 Connecting and Using a Source Device

2.5.1 Source List/Edit Name

Source List allows you to select a variety of sources and change source device names.

Source List

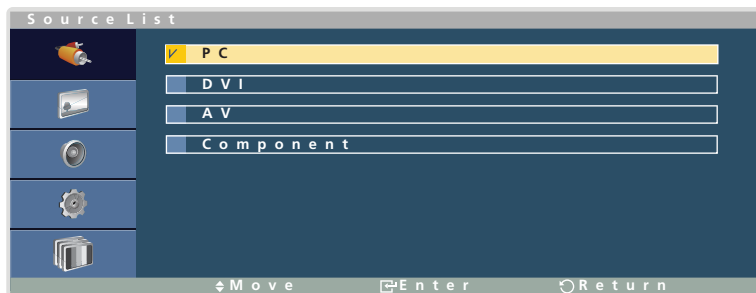
You can display the screen of a source device connected to the product. Select a source from Source List to display the screen of the selected source.

To change the setting in Source List:



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Input** and press [**↵**].
- 3 Press **▲/▼** to move to **Source List** and press [**↵**]. The following screen will appear.



- 4 Press **▲/▼** to move to the source you want and press [**↵**]. The screen of the selected source will be displayed.



To use TV, connect a TV tuner box to the product. **DVI** will be disabled under Source List if a TV tuner box is connected. Refer to page 59 for details about connecting to a TV.



The screen may not display correctly if an incorrect source is selected for the source device you want to convert to.

Edit Name

- You can rename a connected source device.



Sometimes the screen will not display properly unless the name of a source device is specified in **Edit Name**. In addition, it is best to rename the source device in **Edit Name** to obtain optimal picture quality.

To rename a source device in Edit Name:

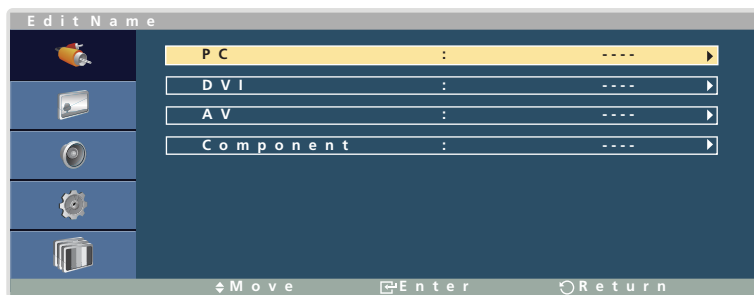


This product can only be controlled by using the remote control.

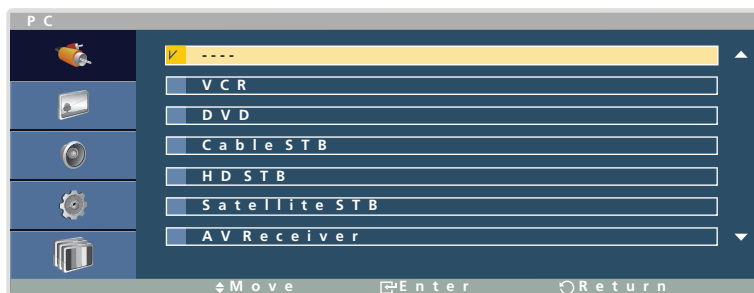
- Press **MENU** on the remote control.
- Press **▲/▼** to move to **Input** and press [**↵**].
- Press **▲/▼** to move to **Edit Name** and press [**↵**]. A list of sources (PC, DVI, etc.) will appear.



DVI will be displayed as **TV** if a TV tuner box is connected.



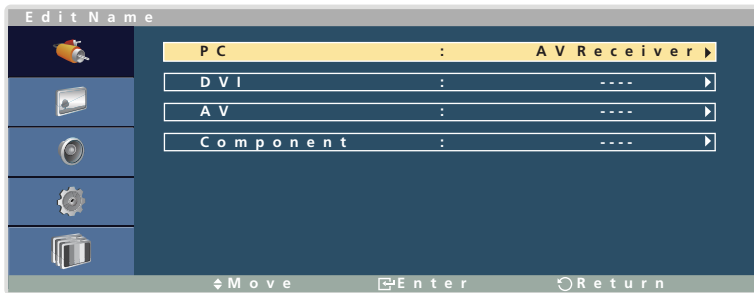
- Press **▲/▼** to move to the source you want and press [**↵**]. A list of source devices will appear as shown below.




The list can include the following source devices. Source devices on the list differ depending on the selected source.

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

- 5 Press ▲/▼ to move to the source device you want and press [↵]. The name of the selected source device will be displayed as shown below.



-  Available settings in the **Picture** menu depend on the current source and settings made in **Edit Name**. (Refer to page 94 for details about the **Picture** menu.)

Source AutoSwitch Settings

- Turning on the display with **Source AutoSwitch On**, and the previous video source selection is not active, the display will automatically search the different video input sources for active video.



If the display TV source is active (TV tuner connected to the display) the **Source AutoSwitch** search function becomes inactive. The display will remain in the TV source.

Configuring Source AutoSwitch Settings



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Input** and press [**↩**].
- 3 Press **▲/▼** to move to **Source AutoSwitch Settings** and press [**↩**].
- 4 Press **▲/▼** to move to **Source AutoSwitch** and press [**↩**].

- **Source AutoSwitch**

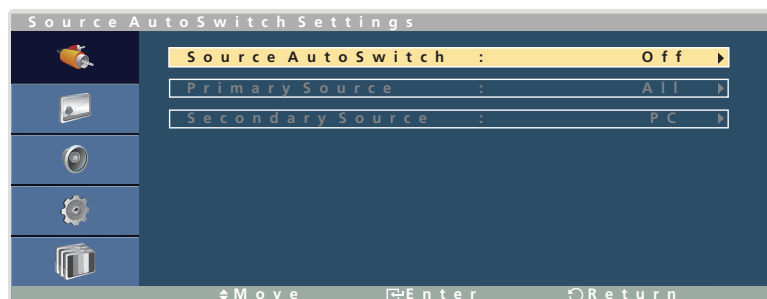
When the **Source AutoSwitch** is **On**, the display video source will automatically be searched for active video.

The **Primary Source** selection will be activated, if the current video source is not recognized.

Secondary source selection will become active, if no primary video source is available.

If both the primary and secondary input sources are not recognized, the display will perform two searches for an active source, each search checking the primary and then secondary source. If both searches fail, the display will return to the first video source and display a message indicating that there is no signal.

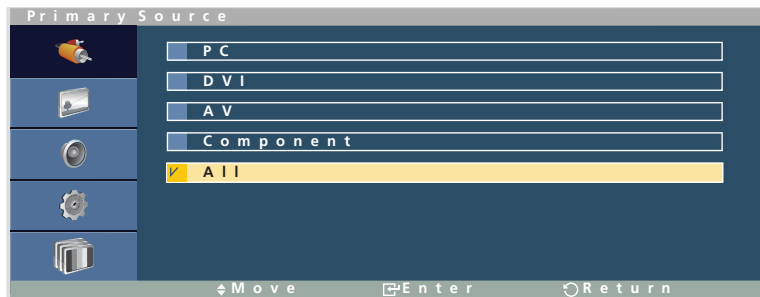
When the **Primary Source** selection is set to **All**, the display will search all the video source inputs twice in sequence looking for an active video source, returning back to the first video source in the sequence if no video is found.



Press **▲/▼** to select the option you want and press [**↩**].

- **Primary Source**

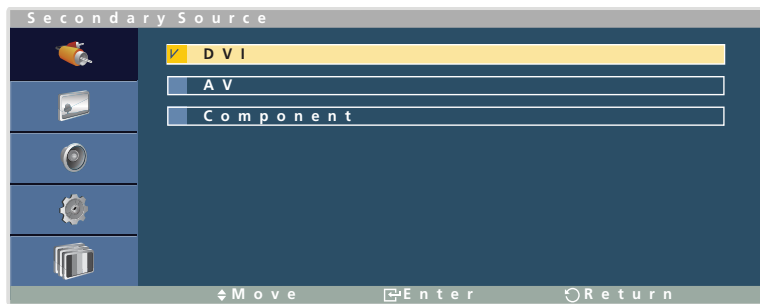
Specify **Primary Source** for the automatic input source.



Press ▲/▼ to select the option you want and press [Enter].

- **Secondary Source**

Specify **Secondary Source** for the automatic input source.



Press ▲/▼ to select the option you want and press [Enter].

Using MDC

MDC (Multiple Display Control) is an application that allows you to easily control multiple display devices simultaneously using a PC.

3.1 Configuring Settings for Multi Control

Assign an individual ID to your product.

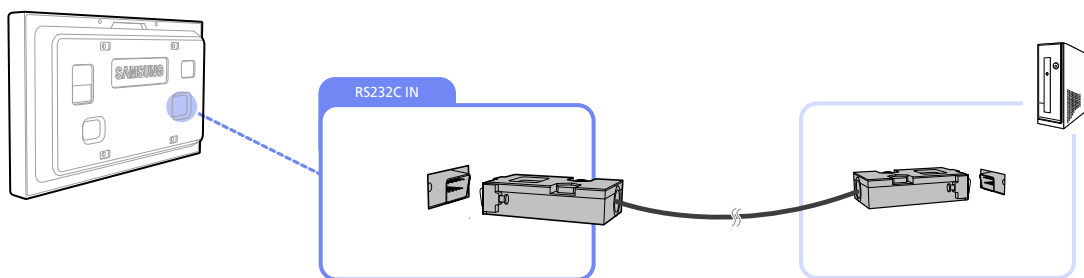
3.1.1 Configuring settings for Multi Control



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Multi Control** and press [**↔**].
 - **ID Setup**
Assign an ID to a set. (Range: 00~99)
Press **▲** or **▼** to select a number, and press [**↔**].
 - **ID Input**
Enter the ID number of the product connected to the input cable for input signal reception.
Enter the number you want using the number buttons on the remote control.




3.2 Connection Using the RS232C Cable




- 1 Connect the RS232C cable to [RS232C IN] on the product and RS232C OUT on the PC.

3.3 MDC Program Installation/Uninstallation

3.3.1 Installation

- 1 Insert the installation CD into the CD-ROM drive.
- 2 Click the MDC System installation program.
 -  If a software installation window is not displayed on the main screen, install with the MDC System execution file under the MDC folder in the CD.
- 3 Click "Next" in the displayed Installation Wizard screen.
- 4 Click "Yes" in the displayed "License Agreement" window.
- 5 In the displayed "Customer Information" window, fill out all the information fields and click "Next".
- 6 In the displayed "Choose Destination Location" window, select the directory path you want to install the program in and click "Next".
 -  If the directory path is not specified, the program will be installed in the default directory path.
- 7 In the displayed ""Start Copying Files"" window, check the directory path to install the program in and click "Next".
- 8 Installation progress will be displayed.
- 9 Click "Finish" in the displayed "InstallShield Wizard Complete" window.
 -  Select "Launch MDC System" and click "Finish" to run the MDC program immediately.



- 10 The MDC System shortcut icon will be created on the desktop after installation.
 - 
 - The MDC execution icon may not be displayed depending on the PC system or product specifications.
 - Press F5 if the execution icon is not displayed.
 - This product does not support Ethernet MDC.

3.3.2 Uninstallation

- 1 Select Settings > Control Panel on the Start menu and double-click Add/Delete Program.
- 2 Select MDC System from the list and click Change/Remove.



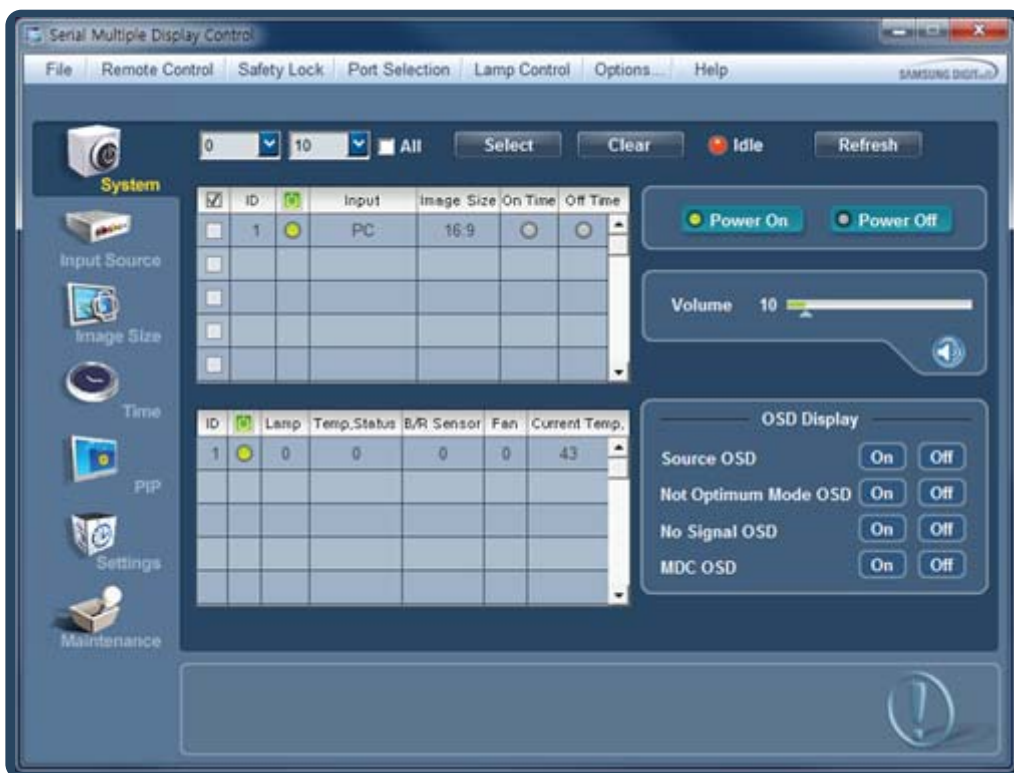
MDC installation can be affected by the graphics card, mother board and network conditions.

3.4 Using the MDC Program (Serial MDC)

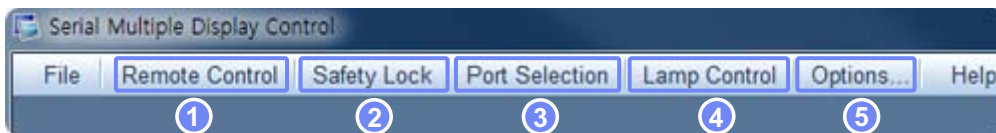
Serial data transmission standard RS-232C is used for communication between a PC and display device. Connect an RS-232C serial cable to the serial ports on the PC and display.

3.4.1 Starting MDC

To start the MDC program, click Start>Programs>Samsung>MDC System>MDC System.



Menu Bar



- 1 Remote Control
 - Enable the remote control signal reception function.
 - Enable-Disable
- 2 Safety Lock
 - Lock the on-screen menus.
 - Off-On



To unlock, set Safety Lock to Off.

3 Port Selection

- Change the port.
- COM1 - COM2 - COM3 - COM4



The default port is COM1.

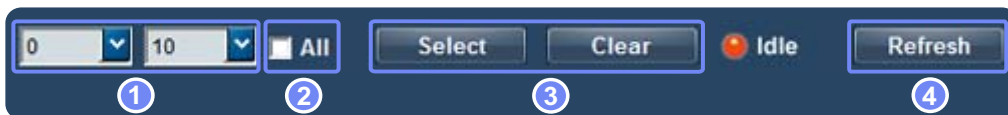
4 Lamp Control

- Change the lamp control mode.
- User Control Mode - Ambient Brightness Mode

5 Options...

- Change the number of IDs and the refresh frequency for connected displays.
- Command

Selecting a Connected Display



- 1 Select Box: Select numbers to set a range.
- 2 All : Select or deselect all connected displays.
- 3 Select, Clear : Select or deselect displays searched by using the select box in step 1.
- 4 Refresh : Search using the number of connected display IDs.



- All of the above functions are applied when all main functions are set.
- Become familiar with the above instructions for efficient use.

3.4.2 Configuring Settings for Main Functions

System

Click "System" to configure preferences.

- The System screen is the same as the main screen.

Displaying the information about connected displays

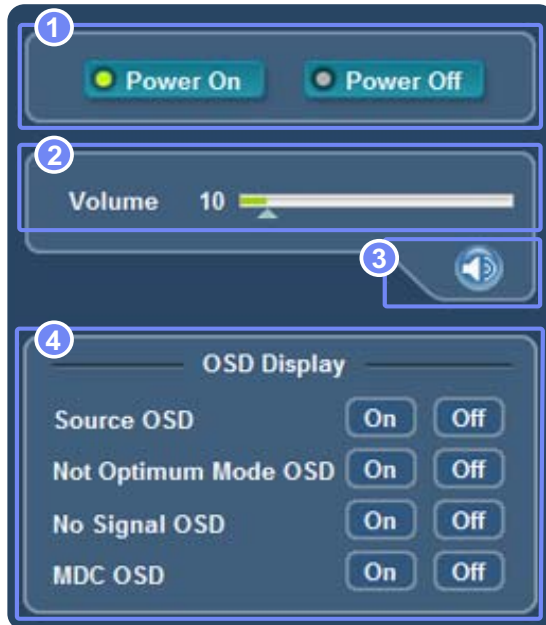
The screenshot shows two tables. The top table lists connected displays with columns for selection, ID, power status, input source, image size, on time, and off time. The bottom table shows detailed information for a selected display, including ID, power status, lamp status, temperature, B/R sensor, fan, and current temperature.


1	2	3	4	5	6	7
<input checked="" type="checkbox"/>	ID		Input	Image Size	On Time	Off Time
<input type="checkbox"/>	1		PC	16:9	<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						

8	ID		Lamp	Temp. Status	B/R Sensor	Fan	Current Temp.
	1		0	0	0	0	43

- 1 : Check a checkbox to select a display.
- 2 ID : View the ID assigned to a connected display.
- 3 : View the power (ON ()/OFF ()) status of a connected display.
- 4 Input : View the input source of a connected display.
- 5 Image Size : View the image size set for a display.
- 6 On Time : View whether On Time is enabled for a display.
- 7 Off Time : View whether Off Time is disabled for a display.
- 8 Display details : View detailed information about the display selected in step 1.

Configuring preferences for a connected display device



- 1 Power On, Power Off : Power on or off a display.
- 2 Volume : Control the volume using the volume bar.
- 3  : Mute or unmute the sound.
- 4 OSD Display
 - Source OSD : Select whether to display an indicator window when the input source changes.
 - Not Optimum Mode OSD : Select whether to display an indicator window for an unsupported mode.
 - No Signal OSD : Select whether to display an indicator window when no signal is received.
 - MDC OSD : Select whether to display an indicator window when settings are changed through MDC.

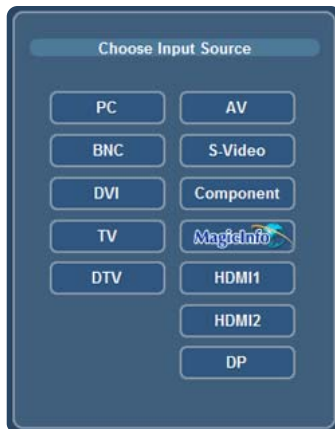
Input Source

Click "Input Source" to configure preferences.

Configuring the input source for a connected display

Displayed options differ from PC mode to TV mode.

PC mode



TV mode



Select the input source you want for the selected display.

	PC mode	TV mode
PC	O	O
BNC	O	O
DVI	O	O
TV	O	O
DTV	O	O
AV	O	O
S-Video	O	O
Component	O	O
MagicInfo	@	@
HDMI1/HDMI2	O	O
DP	O	O
Channel	X	O@

O: Convertible

X: Not convertible

@ : Available input sources vary depending on the connected device model. Check that your displays support the input sources.

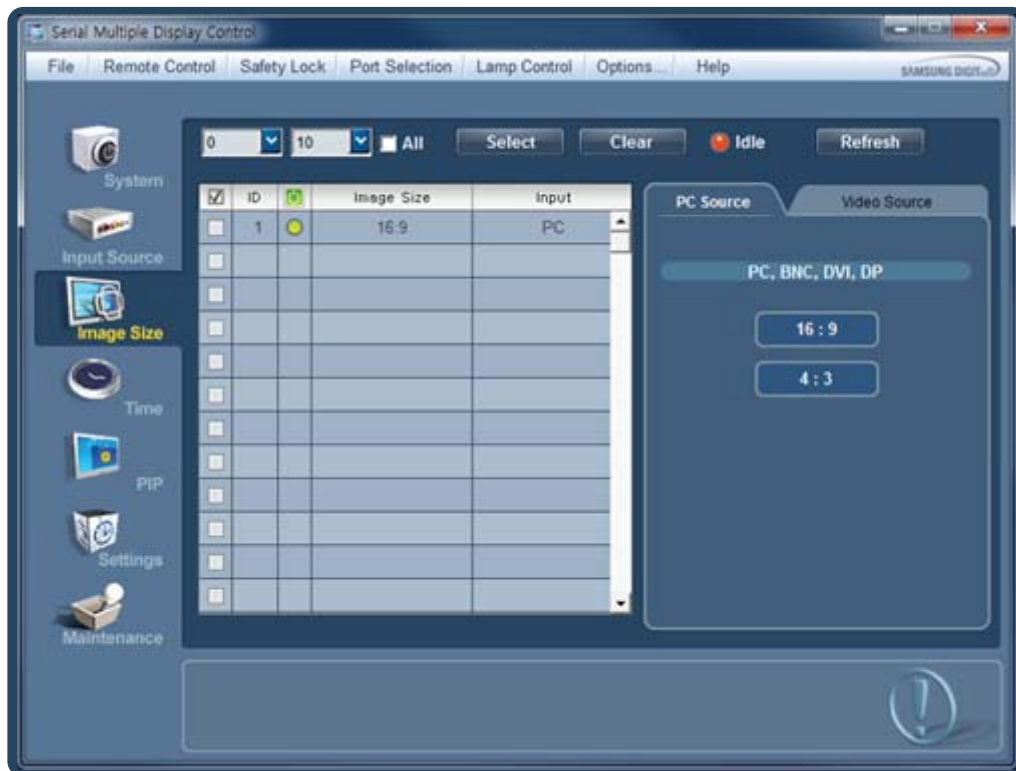
- Changes will only be applied to displays that are powered on.
- HDMI1, HDMI2, DP, BNC, or S-Video mode may not be available depending on the product.
- Magicinfo only functions on products that have the MagicInfo function.
- TV is only enabled on products that have the TV function.
Channel adjustment is only available in TV mode.

Image Size

Click "Image Size" to configure preferences.

When connected in PC, DVI mode:

Click PC Source and change the aspect ratio.

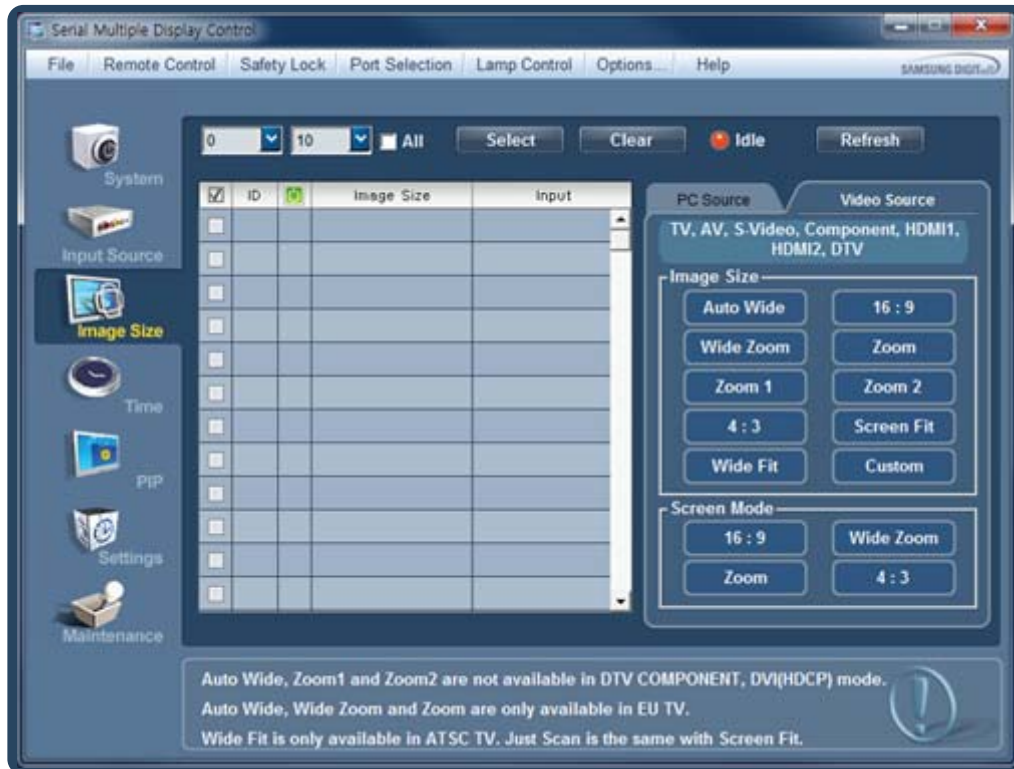


The image size can be changed to 16 : 9 or 4 : 3.

- Changes will only be applied to displays that are powered on.
- Select the displays you want to apply the changes to using the select window above.
- Only displays connected in PC, DVI mode will be displayed on the left.
- Some products may not support DP mode.
- Magicinfo only functions on products that have the MagicInfo function.
- TV is only enabled on products that have the TV function.

When connected in TV, AV, Component, DVI(HDCP) or DTV mode:

Click Video Source and change the aspect ratio.



You can specify Image Size and Screen Mode.

Image Size

- Auto Wide - 16 : 9 - Wide Zoom - Zoom - Zoom 1 - Zoom 2 - 4 : 3 - Screen Fit - Wide Fit - Custom

Screen Mode

- 16 : 9 - Wide Zoom - Zoom - 4 : 3

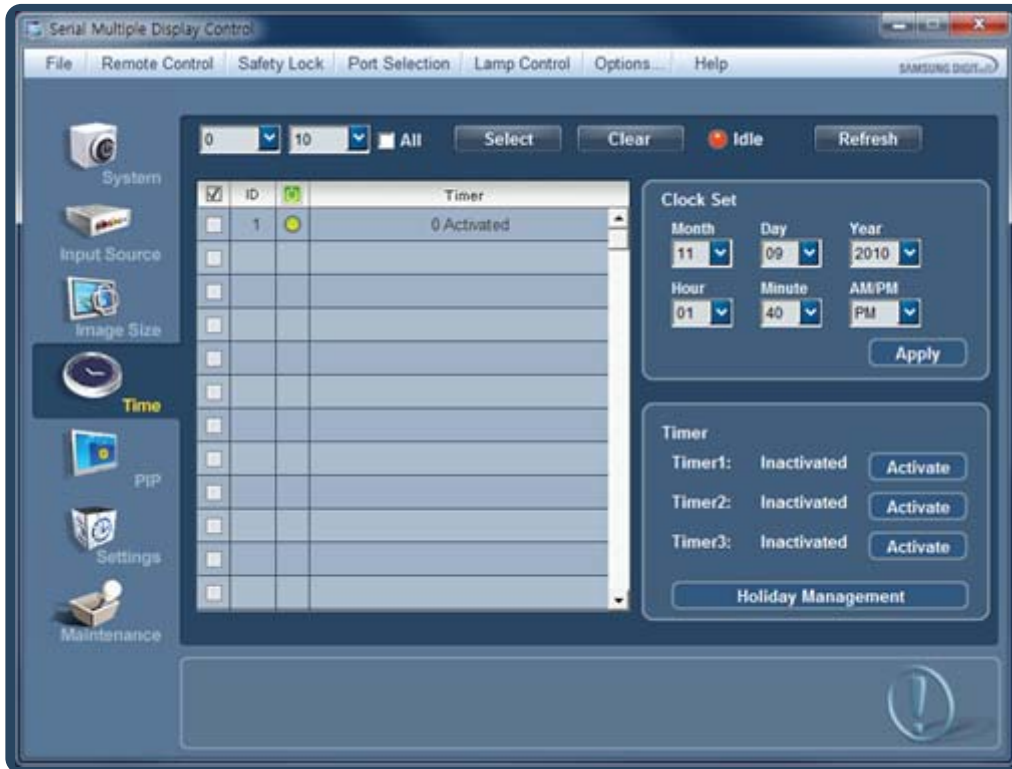
Screen Mode can only be adjusted when Image Size is set to Auto Wide in TV mode.



- Changes will only be applied to displays that are powered on.
- Select the displays you want to apply the changes to using the select window above.
- Only displays connected in TV, AV, Component, DVI(HDCP) or DTV mode will be displayed on the left.
- Auto Wide, Zoom1 and Zoom2 are not enabled when 720p or 1080i signals are received in Component mode.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Time

Click "Time" to configure preferences.



Clock Set

- Select a display and change the time.
- Time is automatically set to the time set on the PC by default.
- To change the time on displays, change the time set on the PC first.

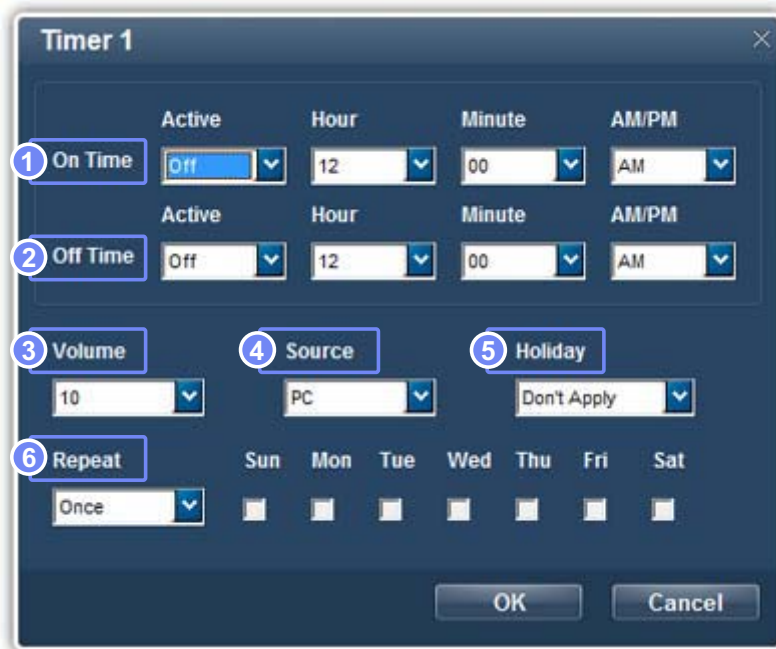
Timer

Set Timer1, Timer2, Timer3, and Holiday Management.



- Changes will only be applied to displays that are powered on.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

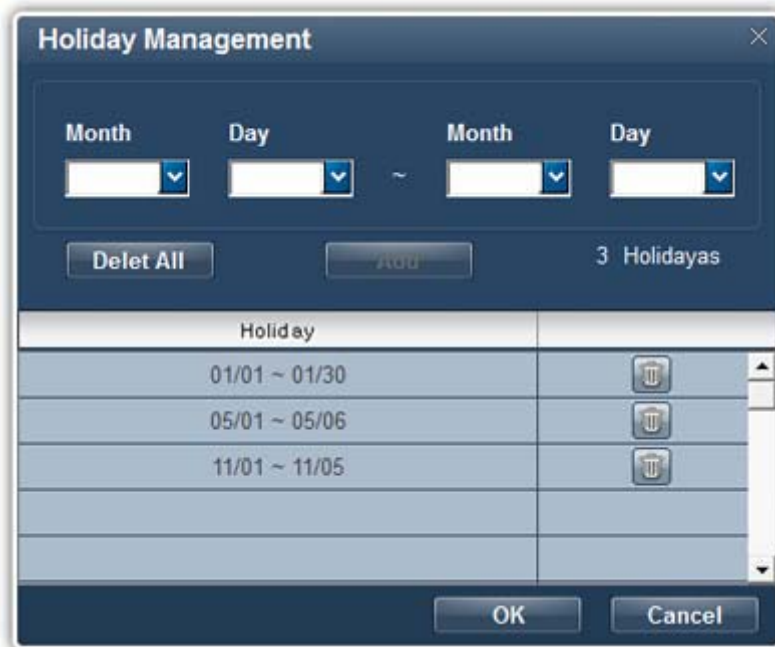
- Setting Timer1, Timer2 and Timer3




- 1 On Time
Automatically turn on the selected display at a specified time.
- 2 Off Time
Automatically turn off the selected display at a specified time.
- 3 Volume
Specify the volume for the display that will turn on by On Time.
- 4 Source
Specify the input source for the display that will turn on by On Time.
- 5 Holiday
Select whether to apply Holiday Management settings to the Timer.
- 6 Repeat
Specify the interval to activate the Timer.
 - Once : Activate the timer only one time.
 - EveryDay : Activate the timer every day.
 - Mon~Fri : Activate the timer from Monday through Friday.
 - Mon~Sat : Activate the timer from Monday through Saturday.
 - Sat~Sun : Activate the timer on Saturdays and Sundays.
 - Manual : Customize days of the week.

- Configuring Preferences for Holiday Management

Holiday Management can be used to set the display not to turn on by the Timer on specified dates.



- 1 Specify the dates.
- 2 Delete All
Delete all the holiday schedules.
- 3 Add
Add a holiday schedule (dates).
- 4 
Delete a holiday schedule.



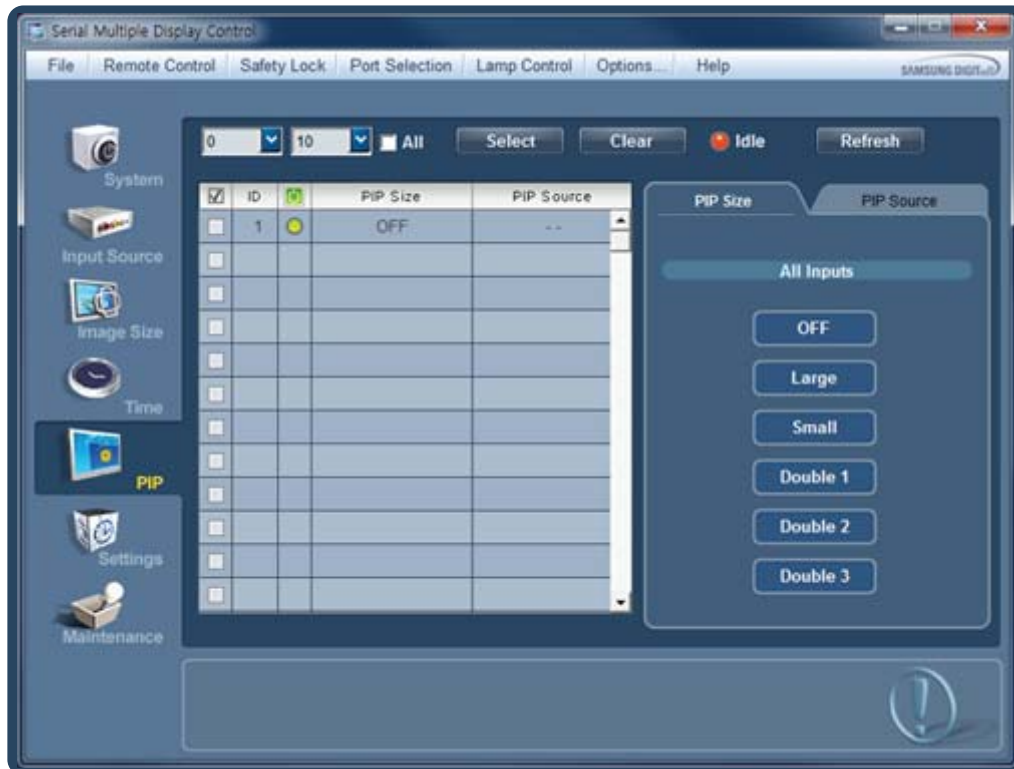
- Changes will only be applied to displays that are powered on.
- Holiday Management can be enabled or disabled in the Timer settings.
- If Source is set to TV in On Time settings, only the displays that have the TV function will power on.
- If Source is set to MagicInfo in On Time settings, only the displays that have the MagicInfo function will power on.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

PIP

Click "PIP" to configure preferences.



Not available on this product.

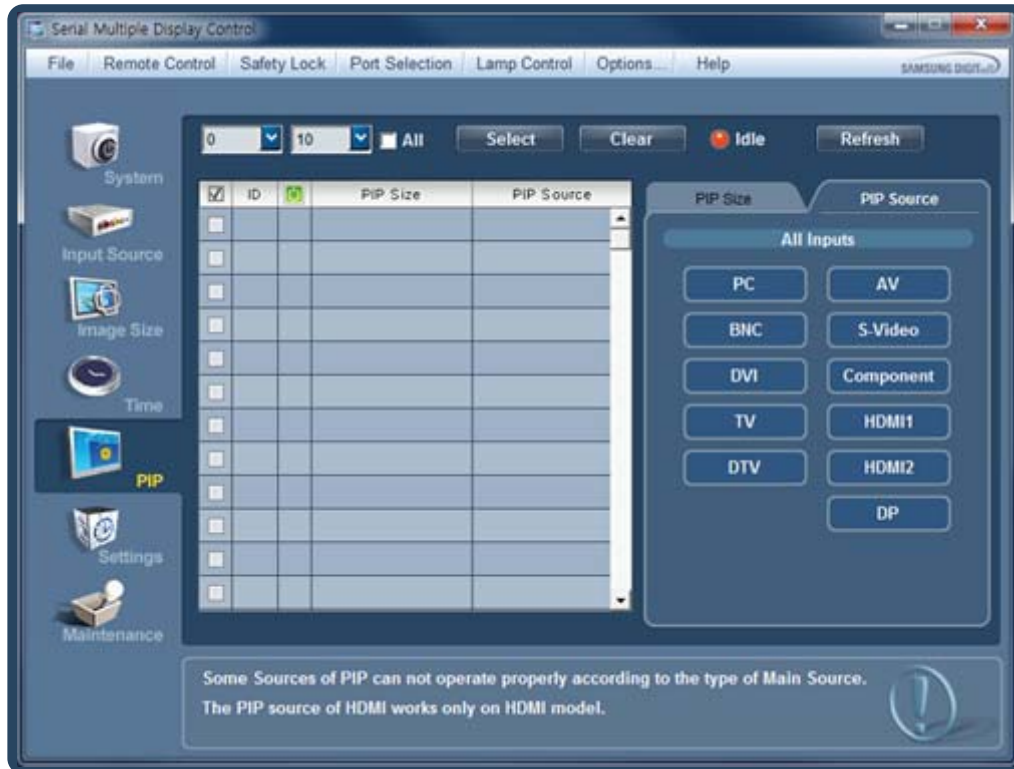
PIP Size

OFF - Large - Small - Double 1 - Double 2 - Double 3



- Changes to PIP Size will only be applied to the displays that are powered on.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

PIP Source



PC - BNC - DVI - TV - DTV - AV - S-Video - Component - HDMI1 - HDMI2 - DP

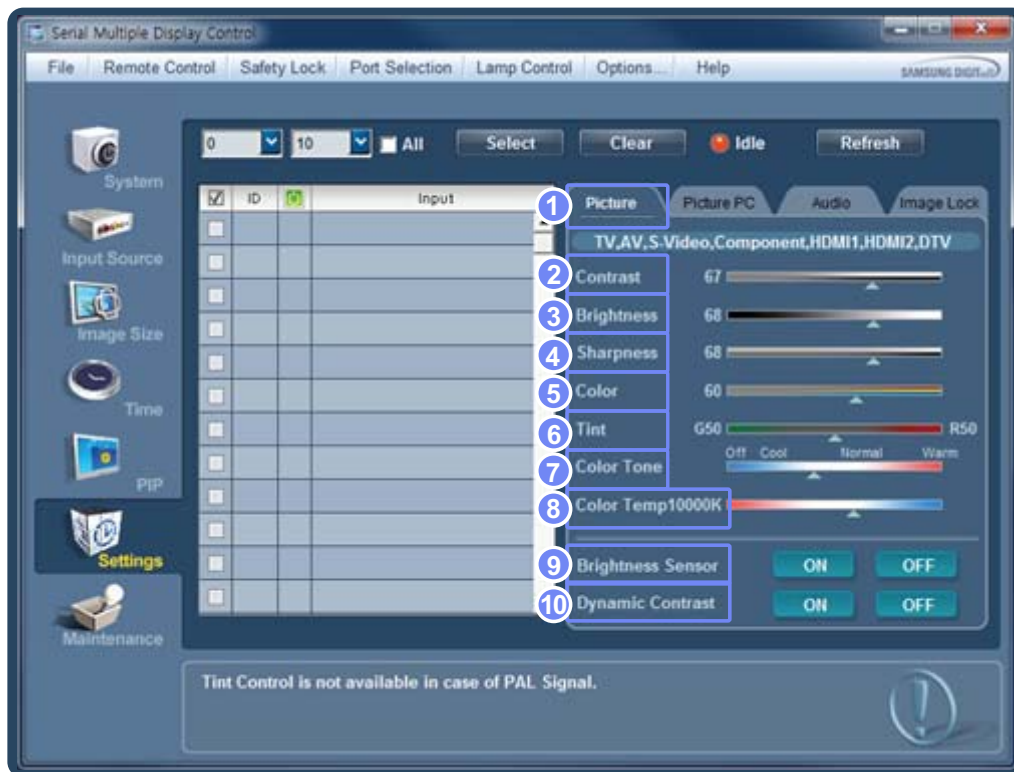


- Changes will only be applied to the displays that are turned on and have PIP mode enabled.
- Some products may not support HDMI2 mode.
- Some products may not support DP mode.
- Available PIP Source options vary depending on the type of Input Source.
- MagicInfo only functions on products that have the MagicInfo function.

Settings

Click "Settings" to configure preferences.

Picture



To view the settings for each connected display, select a display one at a time. Selecting all displays by clicking All+Select will display the default values.

Changing any setting in this menu will automatically switch the mode to **Custom**.

- 1 **Picture**
Change settings for TV, AV, Component and DTV input sources only.
- 2 **Contrast**
Change the contrast for the selected display.
- 3 **Brightness**
Change the brightness for the selected display.
- 4 **Sharpness**
Change the sharpness for the selected display.
- 5 **Color**
Change the color for the selected display.
- 6 **Tint**
Change the tint for the selected display.

7 Color Tone

Change the color tone for the selected display.

8 Color Temp

Change the color temperature for the selected display.

9 Brightness Sensor



Not available on this product.

Enable or disable Brightness Sensor for the selected display.

Brightness Sensor detects ambient light intensity and automatically adjusts the screen brightness.

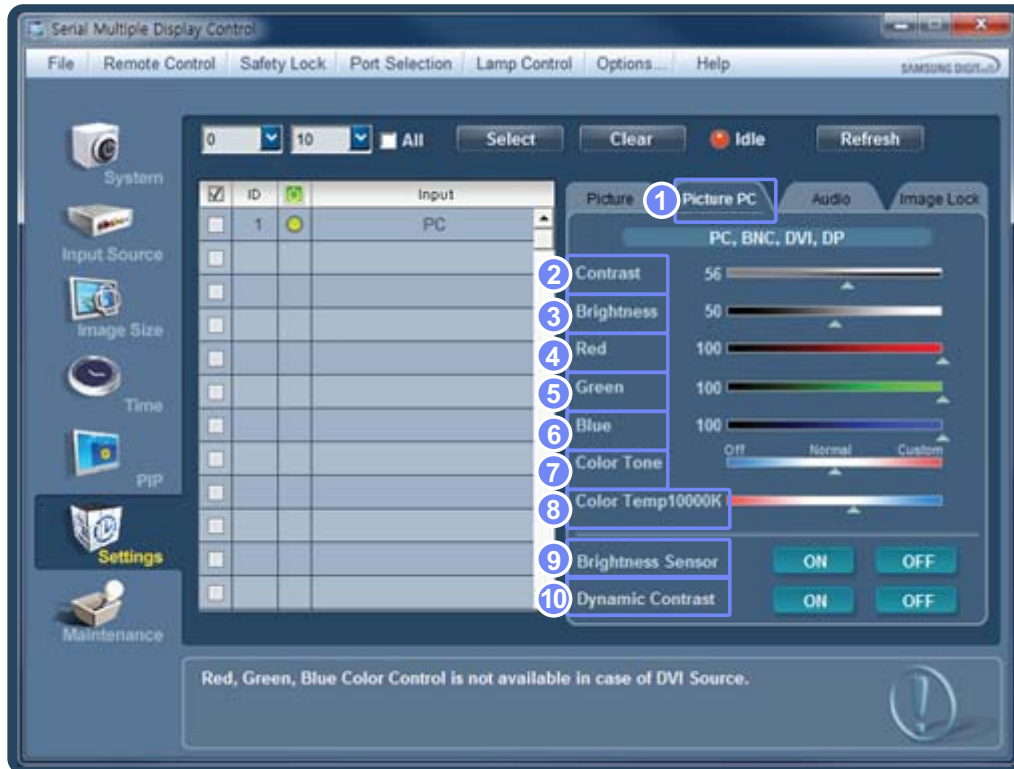
10 Dynamic Contrast

Change the Dynamic Contrast for the selected display.



- Changes will only be applied to the displays that are powered on. If no display is selected, the factory default values will be displayed.
- Some products may not support HDMI2 mode.
- Some products may not support Brightness Sensor mode.
- Color Temp is enabled when Color Tone is set to Off.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Picture PC



To view the settings for each connected display, select a display one at a time. Selecting all displays by clicking All+Select will display the default values.

Changing any setting in this menu will automatically switch the mode to **Custom**.

- 1 Picture PC
Only enabled for the PC, DVI input sources.
- 2 Contrast
Change the contrast for the selected display.
- 3 Brightness
Change the brightness for the selected display.
- 4 Red
Customize the red color for the selected display.
- 5 Green
Customize the green color for the selected display.
- 6 Blue
Customize the blue color for the selected display.
- 7 Color Tone
Change the color tone for the selected display.

8 Color Temp

Change the color temperature for the selected display.

9 Brightness Sensor



Not available on this product.

Enable or disable Brightness Sensor for the selected display.

Brightness Sensor detects ambient light intensity and automatically adjusts the screen brightness.

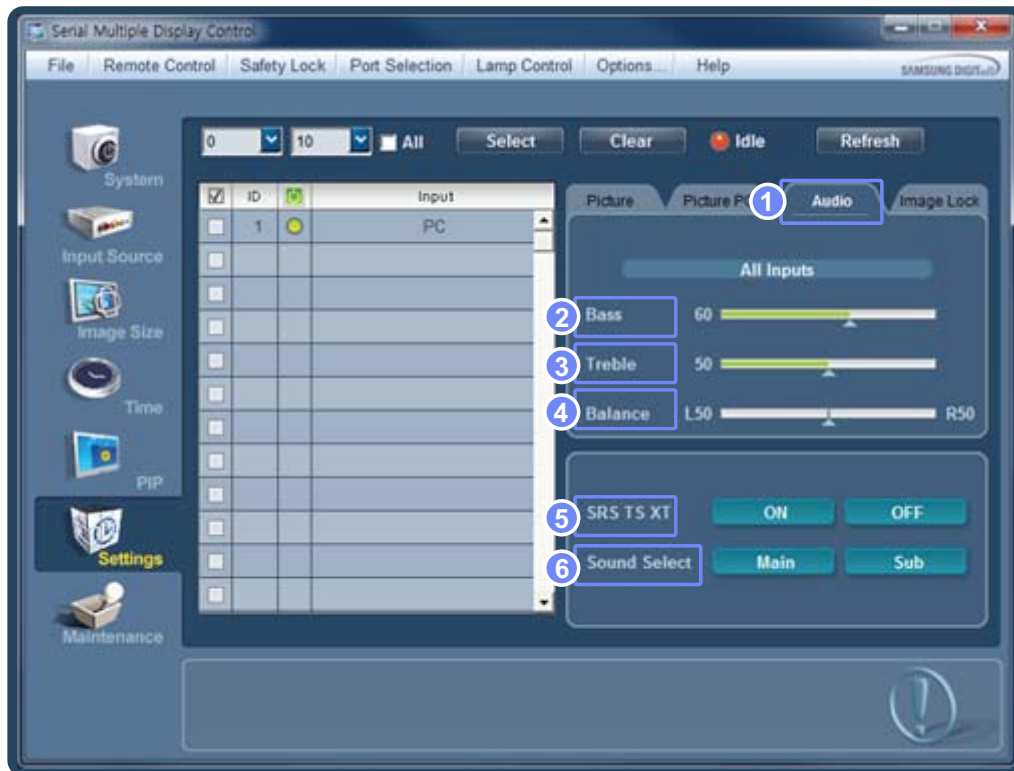
10 Dynamic Contrast

Change the Dynamic Contrast for the selected display.



- Changes will only be applied to the displays that are powered on. If no display is selected, the factory default values will be displayed.
- Some products may not support DP mode.
- Some products may not support Brightness Sensor mode.
- Color Temp is enabled when Color Tone is set to Off.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Audio



To view the settings for each connected display, select a display one at a time. Selecting all displays by clicking All+Select will display the default values.

Changing any setting in this menu will automatically switch the mode to **Custom**.

1 Audio

Change the audio preferences.

2 Bass

Adjust the bass for the selected display.

3 Treble

Adjust the treble for the selected display.

4 Balance

Adjust the volume of the left and right speakers for the selected display.

5 SRS TS XT

Enable or disable the SRS TS XT function for the selected display.

SRS TS XT allows you to enjoy the grand and vivid sound quality of 5.1-channel speakers using two speakers.

6 Sound Select

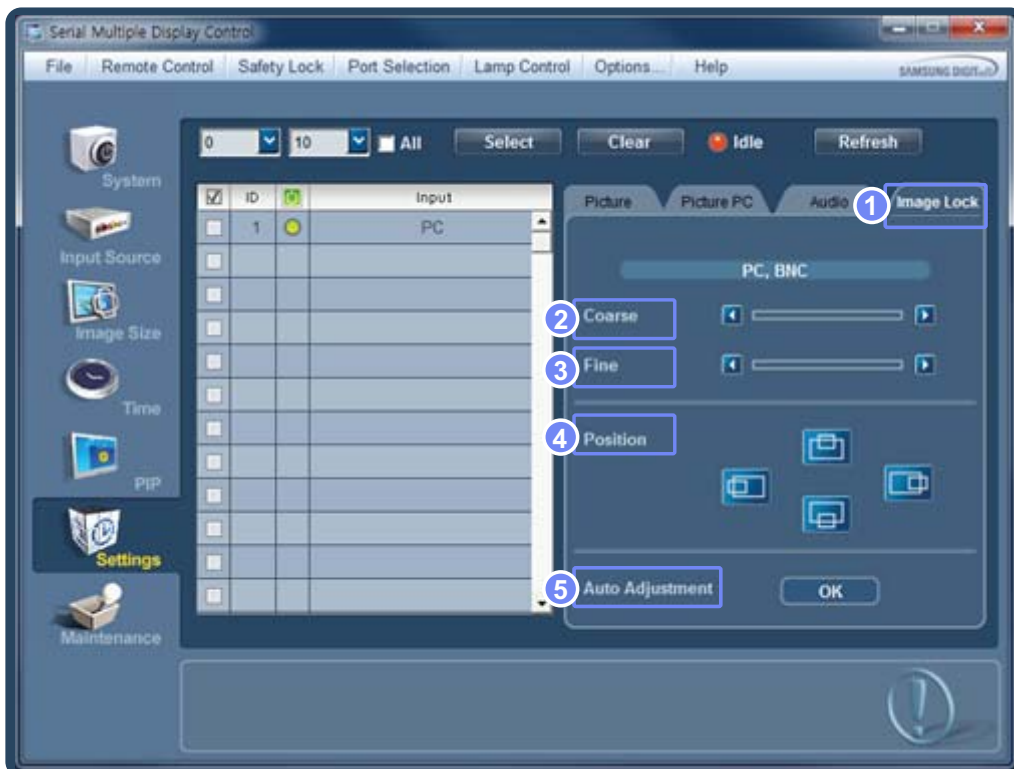


Not available on this product.

Select the sound for the main screen or sub-screen in PIP mode.

- Changes will only be applied to the displays that are powered on. If no display is selected, the factory default values will be displayed.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Image Lock



- 1 Image Lock
Only enabled for the PC input sources.
- 2 Coarse
Vertical noise (stripes) on the screen will be removed.
 - The screen may be moved after changing the frequency (Coarse). If this is the case, move the screen to the center using the horizontal position adjustment menu.
- 3 Fine
Horizontal noise (stripes) on the screen will be removed.
 - If the noise is not completely removed after adjusting the Fine value, adjust Coarse and try Fine adjustment again.
- 4 Position
Move the screen for the selected display horizontally or vertically.
- 5 Auto Adjustment
Automatically configure the Coarse, Fine, and Position settings for the product.

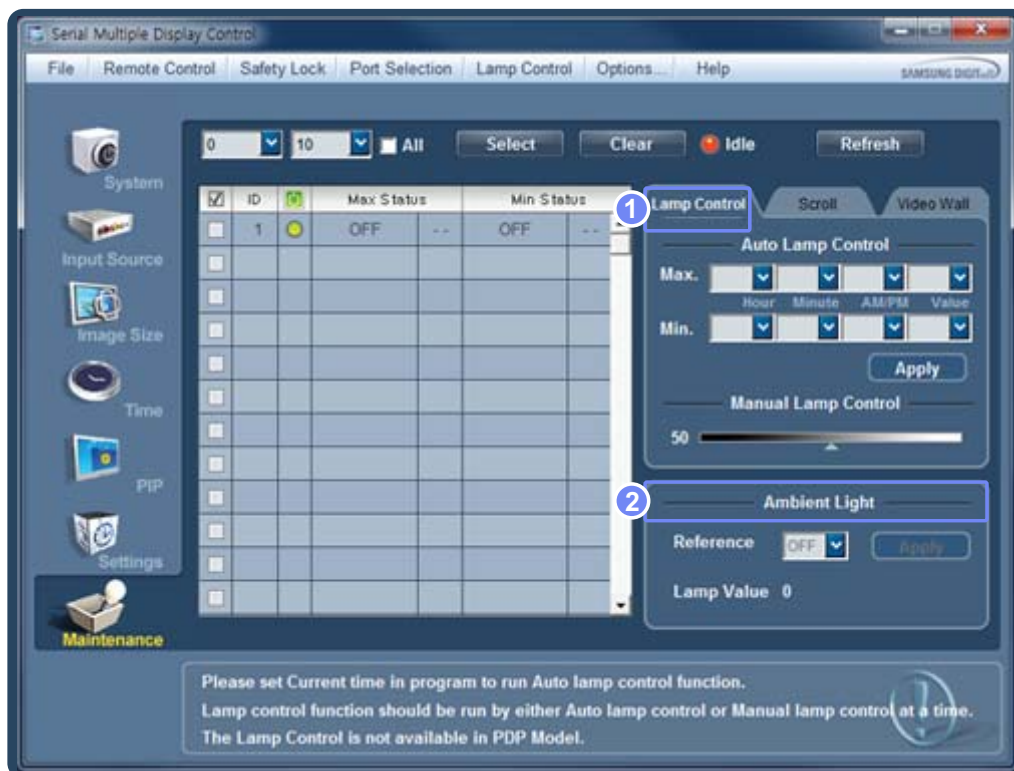
- Changes will only be applied to the displays that are turned on.
- Auto Adjustment will automatically run if the resolution is changed.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Maintenance

Click "Maintenance" to configure preferences.

Maintenance settings can be configured for all the connected input sources.

Lamp Control



1 Lamp Control

Lamp Control is used to adjust the backlight to reduce power consumption.

- Auto Lamp Control
Adjust the backlight for the selected display at a specified time.
Configuring the settings for Auto Lamp Control will automatically disable Manual Lamp Control.
- Manual Lamp Control
Manually adjust the backlight for the selected display.
Configuring the settings for Manual Lamp Control will automatically disable Auto Lamp Control.

- Auto Lamp Control and Manual Lamp Control will only be enabled when User Control Mode is selected in the Lamp Control menu.

2 Ambient Light



Not available on this product.

Ambient Light detects ambient light intensity and automatically adjusts the screen brightness.

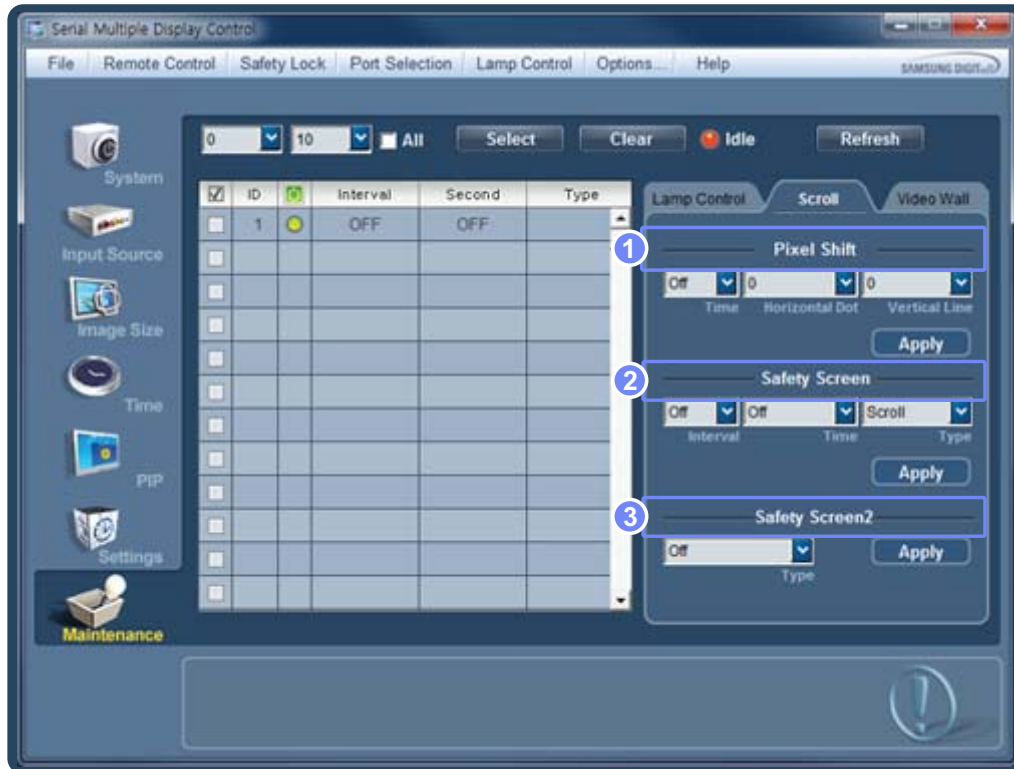
Ambient Brightness Mode should be selected in the Lamp Control menu to use Ambient Light.

Enable or disable Ambient Light for the selected display.



- Changes will only be applied to the displays that are turned on.
- Ambient Light is only compatible with models that are equipped with an automatic brightness sensor.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Scroll



1 Pixel Shift

Setting Time, Horizontal Dot and Vertical Line will prevent afterimage burn-in by moving the screen slightly at specified intervals.

2 Safety Screen

Safety Screen prevents afterimage burn-in when the screen displays a stationary image for an extended period of time.

a. Interval : Specify the interval to activate Safety Screen.

b. Setting Time by Type

- Bar : 10, 20, 30, 40, 50
- Eraser : 10, 20, 30, 40, 50

3 Safety Screen2

Select the type of safety screen you want for the selected display from Type. The selected type of safety screen will automatically display regardless of the preset intervals or time of activation.

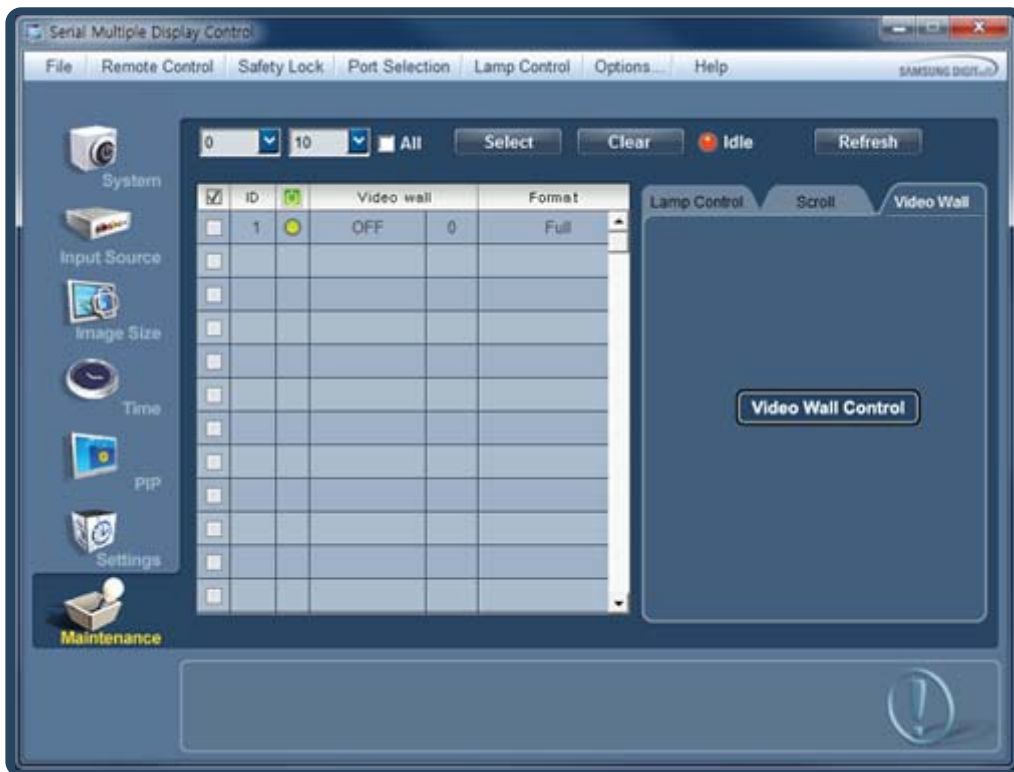
Signal Pattern, All White, Scroll, Bar, Eraser, Pixel



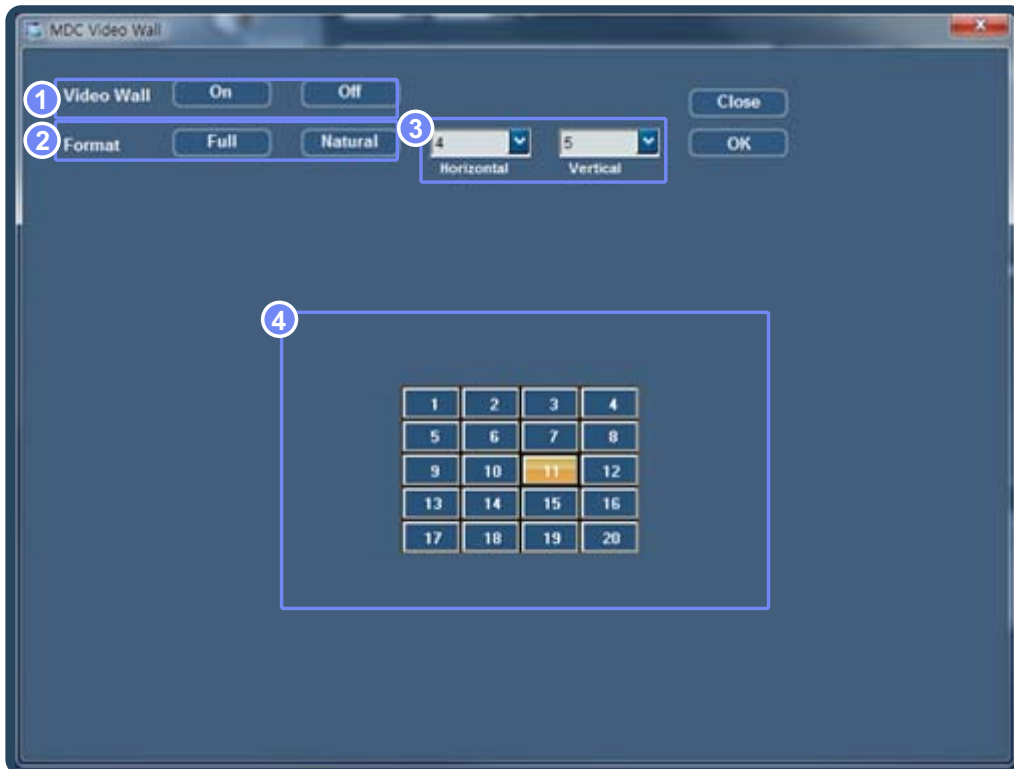
- Changes will only be applied to the displays that are turned on.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

Video Wall

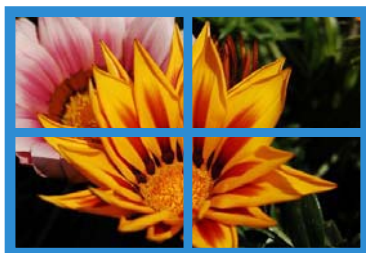
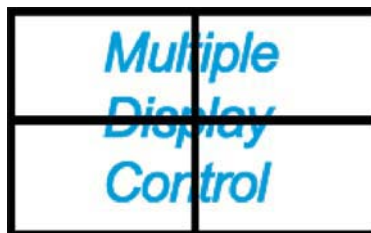
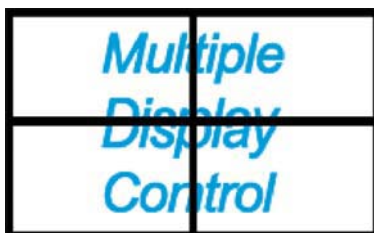
- The Video Wall function can be used to display part of a whole picture or repeat the same picture on each of connected multiple displays.
- To start Video Wall, click "Video Wall Control".



MDC Video Wall



- 1 On / Off
Enable or disable Video Wall.
- 2 Format
Select the format to display the split screen.



Full



Natural

- 3 Screen Divider
 - The screen can be divided into a maximum of 100 (Horizontal and Vertical screens multiplied).

- A maximum of 15 displays can be arranged in a row.
- If the Vertical arrangement is set to 15, a maximum of 6 displays can be assigned to the Horizontal arrangement.
- If the Horizontal arrangement is set to 15, a maximum of 6 displays can be assigned to the Vertical arrangement.



4 Viewing the Arrangement of Displays

View the layout of displays (configured by the screen divider) or change the layout as required.



- Changes will only be applied to the displays that are turned on.
- The range of screen divider settings may differ depending on the model.
- Magicinfo only functions on products that have the MagicInfo function.
- TV mode is only available on products that have the TV function.

3.4.3 Troubleshooting Guide

Issue	Solution
<p>The display you want to control does not appear on the system information chart.</p>	<ol style="list-style-type: none"> 1. Check the connection of the RS232C cable (check that the cable is properly connected to port Com1). 2. Check that another display with a duplicate ID is not connected. Connecting displays with a duplicate ID can cause the displays not to be shown due to data collision. 3. Check that the display ID is within the range of 0 and 99. (Change the ID using the Display menu.) <p> For a display that supports the ID in a range of 0 to 99, the ID should be set between 0 and 99.</p>
<p>The display you want to control does not appear on the other Control Info Grids.</p>	<p>Check that the display is powered on. (See the power status in the system information chart.)</p> <p>Ensure you select the input source the display is connected to.</p>
<p>The following message appears repeatedly.</p> 	<p>Check that the display you want to control is selected.</p>
<p>Displays power on or off at different time from one another even though On Time or Off Time is set.</p>	<p>Adjust the time on the PC to synchronize the time between the connected displays.</p>
<p>The remote control does not work.</p>	<p>The remote control may not work if the RS-232C cable is removed or the program is closed abnormally while the Remote Control function is Disable. To resolve this, run the program again and set Remote Control to Enable.</p>



This program may malfunction sometimes due to a communication problem between the PC and display or electromagnetic waves emitted from nearby electronic devices.

3.4.4 How display properties are shown when multiple displays are used

- 1 When no display is selected: The default value is displayed.
- 2 When one display is selected: Settings for the selected display are displayed.
- 3 When two displays are selected (e.g. in sequence of ID 1 and 3): The settings for ID 1 are displayed before the settings for ID 3.
- 4 When the All+Select checkbox is checked and all displays are selected: The default settings are displayed.

4

Screen Adjustment

Configure the **Picture** settings (**Brightness**, **Color Tone**, etc.).

- The layout of the **Picture** menu options may vary depending on the product.
- The available options in the **Picture** menu depend on the selected input source and the settings in **Edit Name**. (Refer to page 61 for details about **Edit Name**.)
- To use TV, connect a TV tuner box to the product.
Refer to page 59 for details about connecting to a TV.

4.1 Mode

Select a picture mode (**Mode**) suitable for the environment where the product will be used.

- This option is available when **Dynamic Contrast** is set to **Off**.
(Refer to page 112 for details about **Dynamic Contrast**)

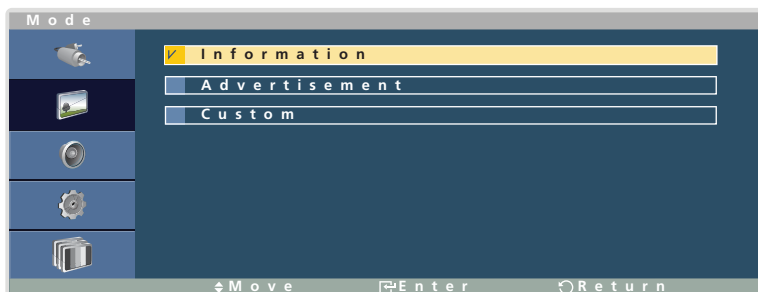
4.1.1 Changing the Picture Mode

- This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↔**].
- 3 Press **▲/▼** to move to **Mode** and press [**↔**].

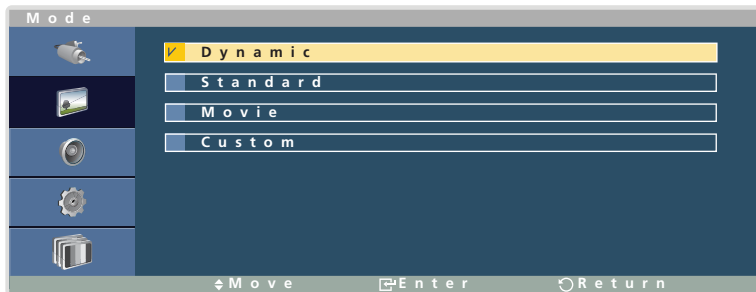
Different **Mode** options are displayed depending on the current input source:

If the input source is PC or DVI:



- **Information**: This mode reduces eye fatigue and is suitable for displaying information to the public.
 - **Advertisement**: This mode is suitable for displaying video content and indoor/outdoor advertisements.
 - **Custom**: Customize **Contrast** and **Brightness** as required.
- 1 Press **▲/▼** to move to the option you want and press [**↔**].
The selected option will be applied.

If the input source is AV, Component or TV:



- **Dynamic**: This mode is suitable when the ambient light is bright.
 - **Standard**: This mode is generally suitable for any environment.
 - **Movie**: This mode reduces eye fatigue.
 - **Custom**: Customize **Contrast** and **Brightness** as required.
- 1 Press ▲/▼ to move to the option you want and press [↵].
The selected option will be applied.

4.2 Custom

Customize **Tint** under **Picture**.



- Changing any setting under **Custom** will change the **Mode** setting to **Custom**.
- This function is available when **Dynamic Contrast** is set to **Off** as long as **Mode** is not set to **Advertisement**.

(Refer to page 112 and page 94 for details about **Dynamic Contrast** and **Mode**)

4.2.1 Configuring the Custom Settings

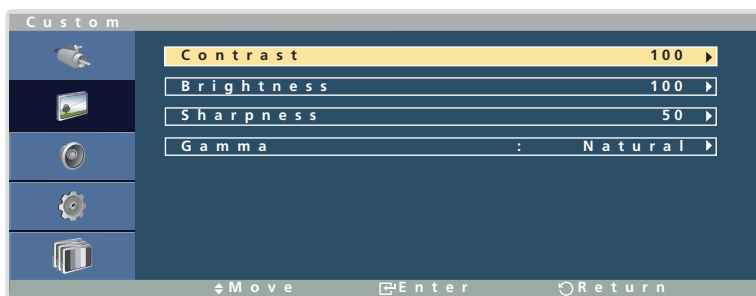


This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**Enter**].
- 3 Press **▲/▼** to move to **Custom** and press [**Enter**].

Different **Custom** options are displayed depending on the current input source:

If the input source is PC or DVI:



- **Contrast**
Adjust the contrast between the objects and background. (Range: 0~100)
A higher value will increase the contrast to make the object appear clearer.
- **Brightness**
Adjust the general brightness of the picture. (Range: 0~100)
A higher value will make the picture appear brighter.
- **Sharpness**
Make the outline of objects more clear or blurry. (Range: 0~100)
A higher value will make the outline of objects clearer.

4

Screen Adjustment

- Gamma(Natural/Mode1/Mode2/Mode3)

Adjust the mid-range brightness (Gamma) of the picture.

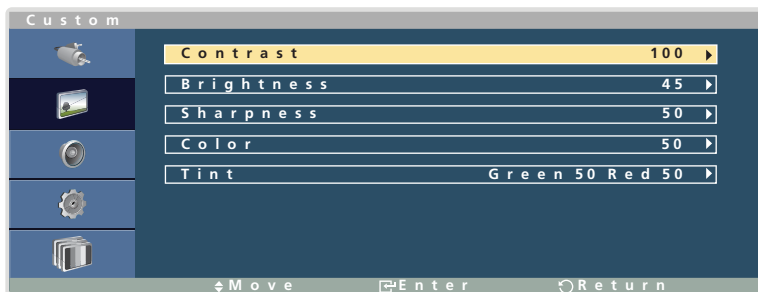
Natural displays the original picture. **Mode1** displays the picture brighter than **Natural** mode. **Mode2** displays the screen darker than **Mode1**. **Mode3** displays dark parts darker and bright parts brighter.

- 1 Press ▲/▼ to move to the option you want and press [↔]. A window will appear where you can adjust the value for the selected option.



- 2 Press ◀/▶ to adjust the value and press [↔]. The change will be applied.

If the input source is AV, Component or TV:



- **Contrast**
Adjust the contrast between the objects and background. (Range: 0~100)
A higher value will increase the contrast to make the object appear clearer.
 - **Brightness**
Adjust the general brightness of the picture. (Range: 0~100)
A higher value will make the picture appear brighter.
 - **Sharpness**
Make the outline of objects more clear or blurry. (Range: 0~100)
A higher value will make the outline of objects clearer.
 - **Color**
Increase or decrease the color intensity. (Range: 0~100)
A higher value will increase the color intensity.
 - **Tint**
Adjust the intensity of the red and green colors. (Range: 0~100)
Increasing the red level will make the red color more prominent in the picture. Increasing the green level will make the green color more prominent in the picture.
- 1 Press ▲/▼ to move to the option you want and press [Enter]. A window will appear where you can adjust the value for the selected option.



- 2 Press ◀/▶ to adjust the value and press [Enter]. The change will be applied.

4.3 Color Tone

Adjust the general color tone of the picture.



- This function is available when **Dynamic Contrast** is set to **Off** as long as **Mode** is not set to **Advertisement**.
(Refer to page 112 and page 94 for details about **Dynamic Contrast** and **Mode**)
- Changing any setting under **Color Tone** will change the **Mode** setting to **Custom**.

4.3.1 Configuring the Color Tone Settings

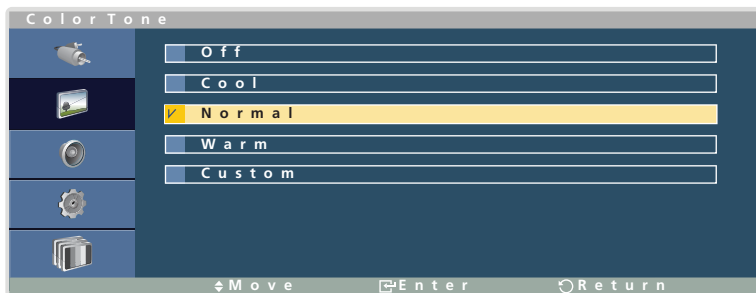


This product can only be controlled by using the remote control.

- Press **MENU** on the remote control.
- Press **▲/▼** to move to **Picture** and press [**↵**].
- Press **▲/▼** to move to **Color Tone** and press [**↵**].

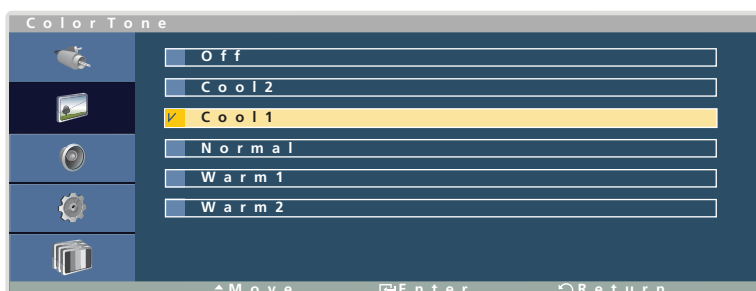
Different **Color Tone** options are displayed depending on the current input source:

If the input source is PC or DVI:



- Press **▲/▼** to move to the option you want and press [**↵**].
The selected option will be applied.

If the input source is AV, Component or TV:



4

Screen Adjustment

- 1 Press ▲/▼ to move to the option you want and press [↵].
The selected option will be applied.

4.4 Color Control

Change the color settings for the picture by adjusting the **Red**, **Green** and **Blue** values. (Range: 0~100)

A higher value will increase the intensity of the selected color.



- This option is available when the input source is **PC** or **DVI**.
- This function is not available when **Color Tone** is set to **Off**. To enable the function, **Dynamic Contrast** must be set to **Off** and **Mode** must not be set to **Advertisement**.
(Refer to page 94, page 99 and page 112 for details about **Mode**, **Color Tone** and **Dynamic Contrast**.)

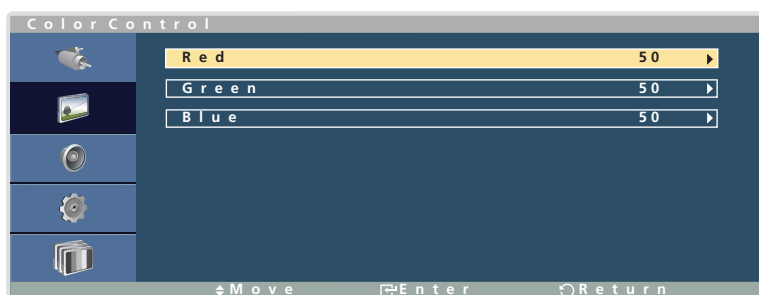
4.4.1 Configuring the Color Control Settings



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Color Control** and press [**↵**].

The following screen will appear.



- 4 Press **▲/▼** to move to the option you want and press [**↵**].

A window will appear where you can adjust the value for the selected option.



- 5 Press **◀/▶** to adjust the value and press [**↵**].

The change will be applied.

4.5 Color Temp.

Adjust the color temperature (Red/Green/Blue). (Range: 5000K–15000K)



This function is available when **Dynamic Contrast** and **Color Tone** are set to **Off** as long as **Mode** is not set to **Advertisement**.

(Refer to page 94, page 99 and page 112 for details about **Mode**, **Color Tone** and **Dynamic Contrast**.)

4.5.1 Configuring the Color Temp. Settings




This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Color Temp.** and press [**↵**].
The following screen will appear.
- 4 Press **◀/▶** to adjust the value and press [**↵**]. The change will be applied.





4.6 Image Lock

Enhance the picture quality by removing noise (static) such as flickering and shaking.

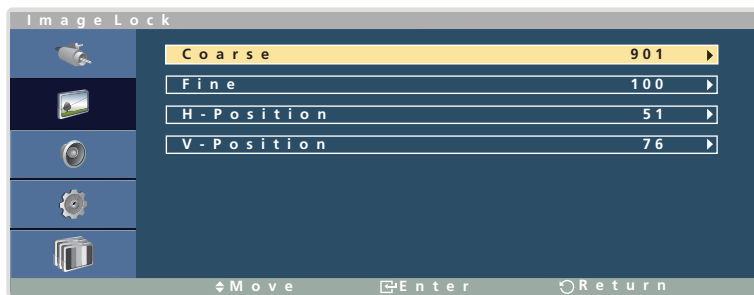
 This option is available when the input source is **PC**.



4.6.1 Configuring the Image Lock Settings

 This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [].
- 3 Press **▲/▼** to move to **Image Lock** and press [].

The following screen will appear.



- **Coarse**
Remove vertical noise (stripes) on the screen.
If the screen is in a different position after the frequency is adjusted using Coarse, move the screen to the center by using the **H-Position/V-Position** menu.
 - **Fine**
Remove horizontal noise (stripes) on the screen.
If noise is not completely removed after **Fine** adjustment, adjust the frequency using Coarse until noise is minimized and then adjust using **Fine** again.
 - **H-Position**
Adjust the screen position. The screen can be moved left or right.
 - **V-Position**
Adjust the screen position. The screen can be moved up or down.
- 4 Press **▲/▼** to move to the option you want and press [].
 - 5 Press **◀/▶** to adjust the value and press []. The change will be applied.

4.7 Auto Adjustment

Automatically adjust the **Coarse**, **Fine**, **H-Position** and **V-Position** settings.

This function can be used to automatically detect and remove noise on the screen and correct the screen position.

This function will automatically run if the screen resolution is changed.



This option is available when the input source is **PC**.

4.7.1 Configuring the Auto Adjustment Settings




This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↔**].
- 3 Press **▲/▼** to move to **Auto Adjustment** and press [**↔**].
- 4 The screen settings will automatically be adjusted.

4.8 Signal Balance

This function is used to supplement a weak RGB signal being transmitted through a long cable.

 This function is available when the input source is **PC** and **Dynamic Contrast** is set to **Off** as long as **Mode** is not set to **Advertisement**

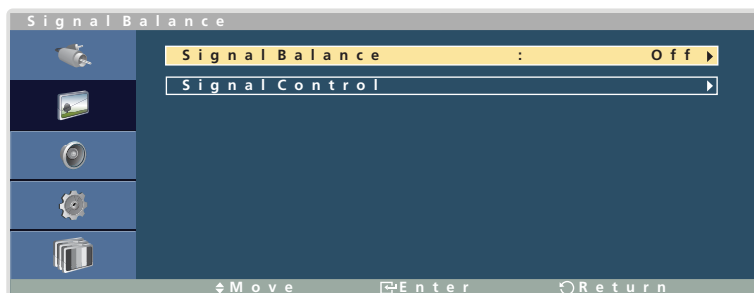
(Refer to page 112 and page 94 for details about **Dynamic Contrast** and **Mode**)

4.8.1 Configuring the Signal Balance Settings

 This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Signal Balance** and press [**↵**].

The following screen will appear.

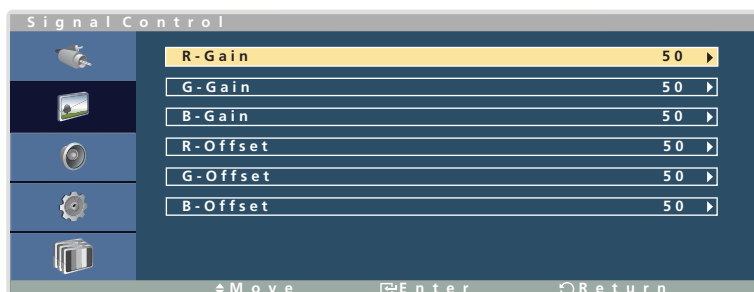


- 4 Press **▲/▼** to move to the option you want and press [**↵**].

The selected option will be applied.

- 5 Press **▲/▼** to move to **Signal Control** and press [**↵**].

The following screen will appear.



 **Signal Control** is enabled when **Signal Balance** is set to **On**.

- 6 Press ▲/▼ to move to the option you want and press [↔].

The following screen will appear.



Specify the RGB (Red/Green/Blue) Gain and Offset values. **R-Gain**, **G-Gain** and **B-Gain** adjust the level of red, green and blue colors in the brighter parts of the screen (range: 0–100). **R-Offset**, **G-Offset** and **B-Offset** adjust the level of red, green and blue colors in the darker parts of the screen (range: 0–100). A higher value will increase the level of the selected color.

- 7 Press ◀/▶ to adjust the value and press [↔]. The change will be applied.

4.9 Size

Change the picture size.

4.9.1 Changing the Picture Size

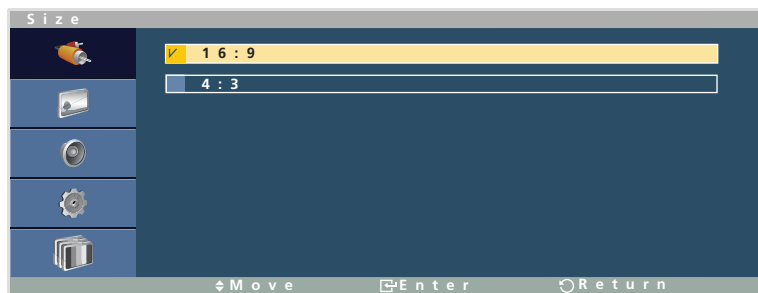


This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Size** and press [**↵**].

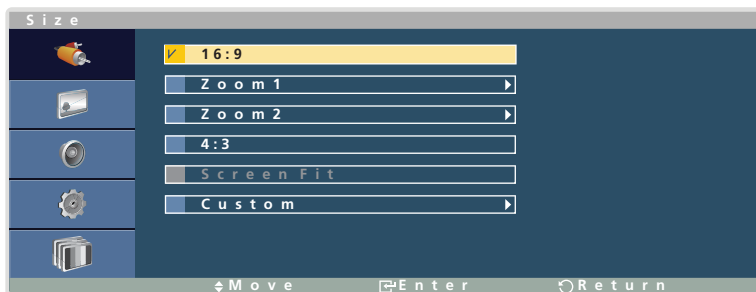
Different **Size** options are displayed depending on the current input source:

If the input source is PC or DVI:



- **16:9**: Display images with an aspect ratio of **16:9**. Suitable for viewing DVD content or widescreen broadcasts.
 - **4:3**: Display images with an aspect ratio of **4:3**. Suitable for viewing video content or standard broadcasts.
- 1 Press **▲/▼** to move to the option you want and press [**↵**].
The selected option will be applied.

If the input source is AV or Component:



- **16:9**: Display images with an aspect ratio of **16:9**. Suitable for viewing DVD content or widescreen broadcasts.
- **Zoom1** : Enlarge the **16:9** aspect ratio vertically.
- **Zoom2** : Enlarge the **Zoom 1** screen vertically.
- **4:3**: Display images with an aspect ratio of **4:3**. Suitable for viewing video content or standard broadcasts.
- **Screen Fit**
Display images in the original aspect ratio. This option is enabled when the input source is **Component** and the video signal is 1080i/p.
- **Custom**: Customize the picture size.

1 Press ▲/▼ to move to the option you want and press [↵].

The selected option will be applied.



- If **Screen Fit** is selected, the picture may be cut off or a corrupted screen may be displayed depending on the current input source.
- **Zoom1** and **Zoom2** are not enabled with HD signals (1080i/p, 720p, 768p).
- If **Zoom1** or **Zoom2** is selected, the **H-Position/V-Position** settings for the enlarged screen can be initialized. (The original size would be restored.)

4.10 Digital NR

Improve the picture quality by minimizing noise (static) on the screen.



- This option is available when the input source is **AV**, **Component** or **TV**.
- Some resolutions do not support **Digital NR**.

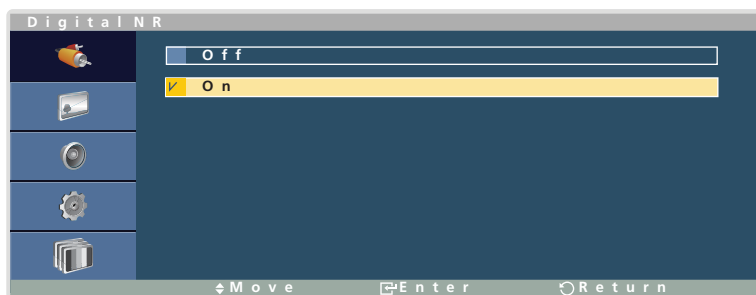
4.10.1 Enabling Digital NR



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**Enter**].
- 3 Press **▲/▼** to move to **Digital NR**, and press [**Enter**].

The following screen will appear.



- 4 Press **▲/▼** to move to the option you want and press [**Enter**].
The selected option will be applied.

4.11 HDMI Black Level

If you use the product by connecting to a DVD player or set-top box with a DVI cable, the contrast and color may degrade and the picture may be darker. If this is the case, correct the degraded picture quality using **HDMI Black Level**. (Normal/Low)



This option is available when a source device that has an HDMI port is connected and the input source is set to **DVI**.

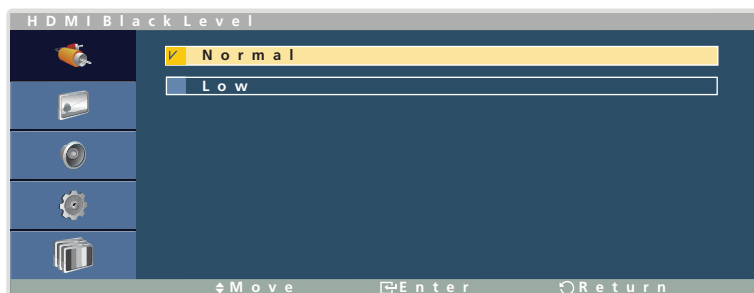
4.11.1 Configuring the HDMI Black Level Settings



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **HDMI Black Level** and press [**↵**].

The following screen will appear.



- **Normal**: Set the brightness (darkness) of the darkest parts of the screen to Normal.
 - **Low**: Set the brightness (darkness) of the darkest parts of the screen to be brighter than Normal.
- 4 Press **▲/▼** to move to the option you want and press [**↵**].

The selected option will be applied.

4.12 Film Mode

Improve the picture quality to enhance the viewing experience when watching a movie.



- This option is available when the input source is **AV**, **Component** or **TV**.
- This option is only available when Interlace mode is selected as scanning mode under HDMI mode. It is not available in progressive scanning mode.
- Subtitles may appear distorted when this function is active.

4.12.1 Enabling Film Mode



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↔**].
- 3 Press **▲/▼** to move to **Film Mode** and press [**↔**].

The following screen will appear.



- 4 Press **▲/▼** to move to the option you want and press [**↔**].

The selected option will be applied.

4.13 Dynamic Contrast

Maintain optimum contrast by automatically adjusting the contrast between objects and the background.

You can enable or disable **Dynamic Contrast**. (Off/On)

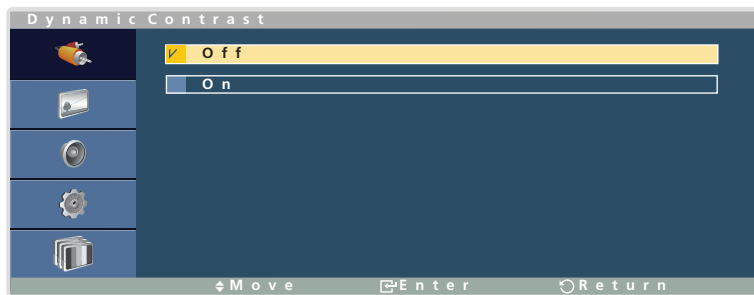
4.13.1 Changing the Dynamic Contrast Setting



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Dynamic Contrast** and press [**↵**].

The following screen will appear.



- 4 Press **▲/▼** to move to the option you want and press [**↵**].
The selected option will be applied.

4.14 Lamp Control

This function is used to adjust the brightness of the backlight to reduce power consumption. (Range: 0~100)



This option is available when **Dynamic Contrast** is set to **Off**.

(Refer to page 112 for details about **Dynamic Contrast**)

4.14.1 Changing the Lamp Control Setting



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Lamp Control** and press [**↵**].

The following screen will appear.



- 4 Press **◀/▶** to adjust the value and press [**↵**]. The change will be applied.

4.15 Picture Reset

Restore the default picture settings.

4.15.1 Activating Picture Reset



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Picture** and press [**↵**].
- 3 Press **▲/▼** to move to **Picture Reset** and press [**↵**].

The following screen will appear.



- 4 Press **◀/▶** to select Yes or No and press [**↵**].

The selected option will be applied.

Sound Adjustment

Configure the sound (**Sound**) settings for the product.

5.1 Mode

Select a sound mode (**Mode**) suitable for the environment where the product will be used.

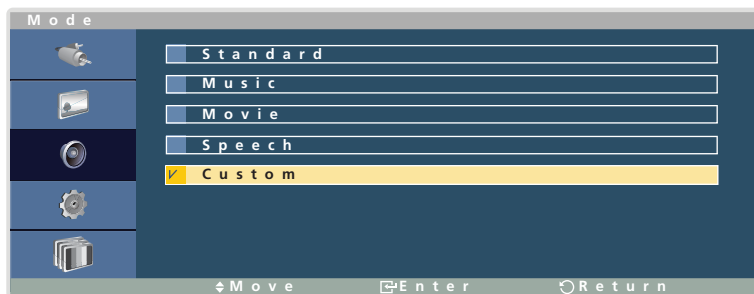
5.1.1 Changing the Mode Setting



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Sound** and press [**↔**].
- 3 Press **▲/▼** to move to **Mode** and press [**↔**].

The following screen will appear.



- **Standard**: Provides sound suitable for any type of content.
 - **Music**: Provides sound close to the original experience.
 - **Movie**: Provides a grand sound experience.
 - **Speech**: Hear voices clearly.
 - **Custom**: Customize the sound as required.
- 4 Press **▲/▼** to move to the option you want and press [**↔**].
The selected option will be applied.

5.2 Custom

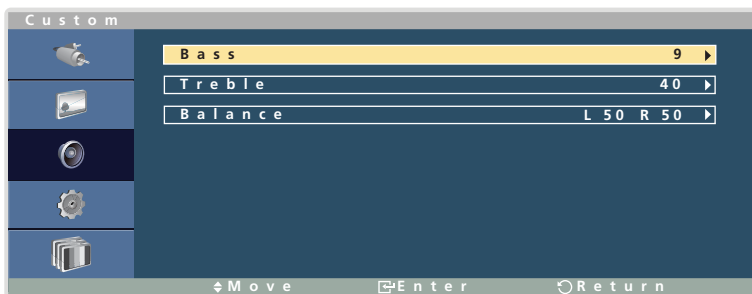
You can customize the sound settings.

5.2.1 Configuring the Custom Settings

 This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Sound** and press [**↵**].
- 3 Press **▲/▼** to move to **Custom** and press [**↵**].

The following screen will appear.




- **Bass**: Adjust the bass level. (Range: 0~100)
 - **Treble**: Adjust the treble level. (Range: 0~100)
 - **Balance** : Balance the sound by adjusting the volume between the left and right speakers.
- 4 Press **▲/▼** to move to the option you want and press [**↵**].

A window will appear where you can adjust the value for the selected option.



- 5 Press **◀/▶** to adjust the value and press [**↵**]. The change will be applied.

- 
 - With some products, sound may be heard even when the volume is set to 0.
 - Changing any setting under **Custom** will change the **Mode** settings to **Custom**.

5.3 Auto Volume

This function can be used to adjust the volume to an appropriate level if the volume is particularly higher or lower than usual.

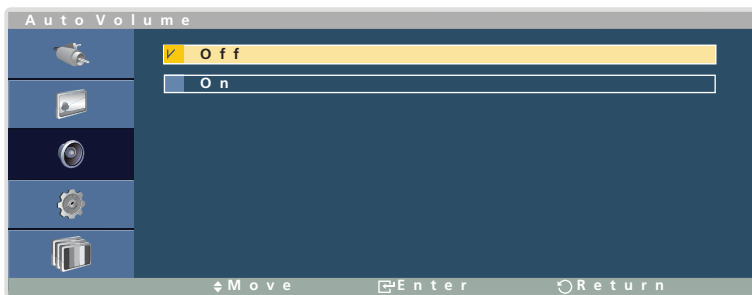
5.3.1 Changing the Auto Volume Setting



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Sound** and press [**↵**].
- 3 Press **▲/▼** to move to **Auto Volume** and press [**↵**].

The following screen will appear.



- 4 Press **▲/▼** to move to the option you want and press [**↵**].

The selected option will be applied.

5.4 SRS TS XT

You can enjoy the grand and vivid sound quality of 5.1-channel speakers using two speakers. TruSurround (TS) XT provides realistic surround sound through any type of 2-channel speaker system such as internal speakers. It is also fully compatible with all multi-channel formats.

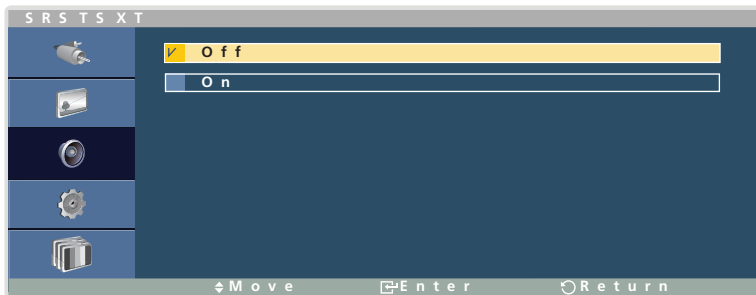
5.4.1 Setting SRS TS XT



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Sound** and press [**↵**].
- 3 Press **▲/▼** to move to **SRS TS XT** and press [**↵**].

The following screen will appear.



- 4 Press **▲/▼** to move to the option you want and press [**↵**].

The selected option will be applied.

5.5 Sound Reset

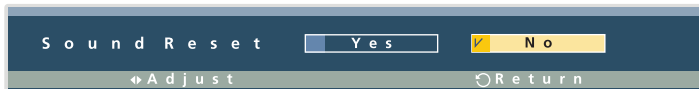
Return the sound settings to the default factory settings.

5.5.1 Resetting Sound Settings (Sound Reset)



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Sound** and press [**↵**].
- 3 Press **▲/▼** to move to **Sound Reset** and press [**↵**]. The following screen will appear.



- 4 Press **◀/▶** to move to the option you want and press [**↵**].
The selected option will be applied.

You can configure additional settings as required.

6.1 Language

Set the menu language.

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



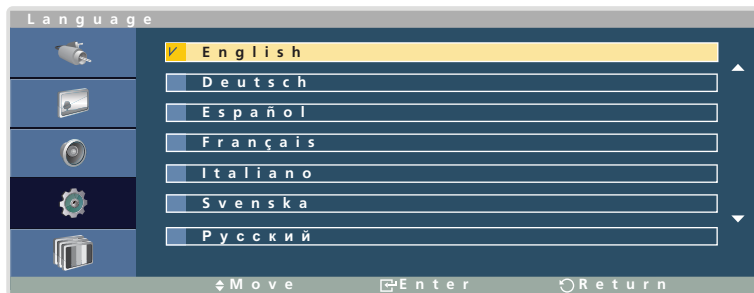
A change to the language setting will only be applied to the onscreen menu display. It will not be applied to other functions on your PC.

6.1.1 Changing the Language



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Language** and press [**↵**].
- 4 Press **▲/▼** to move to the language you want and press [**↵**].



- 5 Menus will be displayed in the new language that was changed.

6.2 Time

You can configure **Clock Set** or **Sleep Timer**. You can also set the product to automatically turn on or off at a specified time using the **Timer** function.

6.2.1 Clock Set

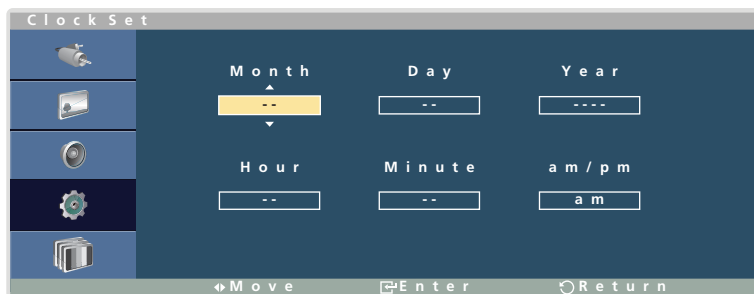
Set the current time.

Changing the Setting for Clock Set



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Time** and press [**↵**].
- 4 Press **▲/▼** to move to **Clock Set** and press [**↵**].
- 5 In the displayed **Clock Set** window, set the current time using the direction keys.



- 6 Press [**↵**] or [**↻**] when all settings are complete. The settings will be applied.

6.2.2 Sleep Timer

Set the product to automatically power on or off after a specified period of time.

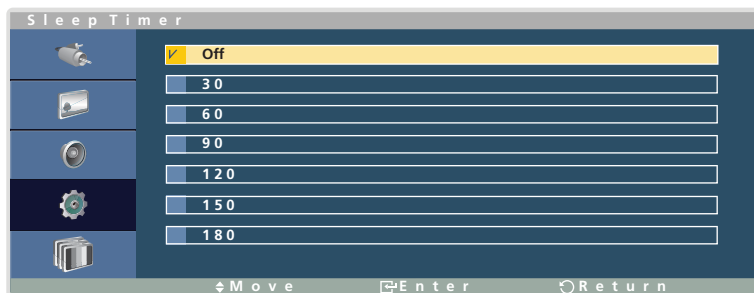
You can select the time to turn off the product from 30, 60, 90, 120, 150 or 180 minutes from the current time.

Setting Sleep Timer



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press **[↵]**.
- 3 Press **▲/▼** to move to **Time** and press **[↵]**.
- 4 Press **▲/▼** to move to **Sleep Timer**, and press **[↵]**.
- 5 Press **▲/▼** to move to the time you want and press **[↵]**.



- 6 Sleep Timer will activate after the selected time.

6.2.3 Timer1 / Timer2 / Timer3

Set the product to automatically power on or off at a specified time.

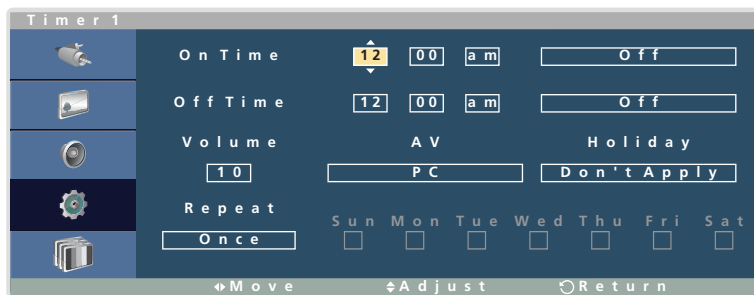
The product will power on, preserving the same volume and input source settings as when it powered off.

Setting Timer



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press **[↵]**.
- 3 Press **▲/▼** to move to **Time** and press **[↵]**.
- 4 Press **▲/▼** to move to **Timer1**, **Timer2** or **Timer3** and press **[↵]**.
- 5 In the displayed **Timer** window, set the timer using the direction keys.



- 6 Press **[↵]** or **[↶]** when all settings are complete. The settings will be applied.



- Timer will only activate when the current time is set (**Clock Set**).
- **Holiday(Apply/Don't Apply)** : When Repeat is applied to the timer, the Holiday option can be used to set the timer not to activate on specified days of the week.
- The day selector boxes at the bottom will be disabled if **Holiday** is set to **Don't Apply**.

6.2.4 Holiday Management

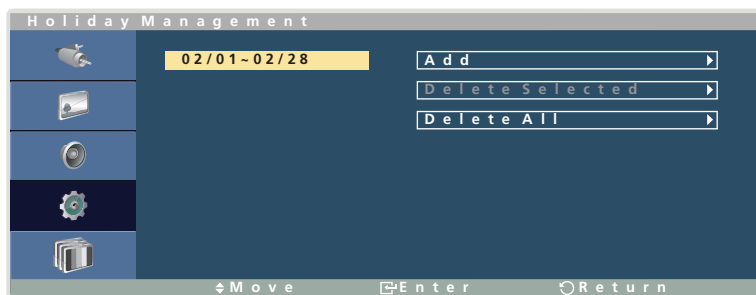
Timer will be disabled during a period specified as a holiday.

Setting Holiday Management



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Time** and press [**↵**].
- 4 Press **▲/▼** to move to **Holiday Management** and press [**↵**].



- **Add:** Specify the period you want to add as a holiday.
 - Go to the **Add** menu, and press [**↵**].
 - Press **▲/▼** to specify the period and press [**↵**] or [**↻**].
 - The period will be added to the list of holidays.
- **Delete Selected:** Delete an item from the list of holidays.
 - Select an item from the list of holidays and press [**↵**].
 - The **Delete Selected** option will be activated.
 - Move to **Delete Selected** and press [**↵**]. The message "Delete the selected holidays?" will appear.
 - Select **Yes**. The selected holiday will be deleted.
- **Delete All:** Delete all items from the list of holidays.
 - Select **Delete All**. The message "Delete all holidays?" will appear.
 - Select **Yes**. All holidays will be deleted.

6.3 Menu Transparency

Set the transparency for the menu windows:

High, Medium, Low, Opaque

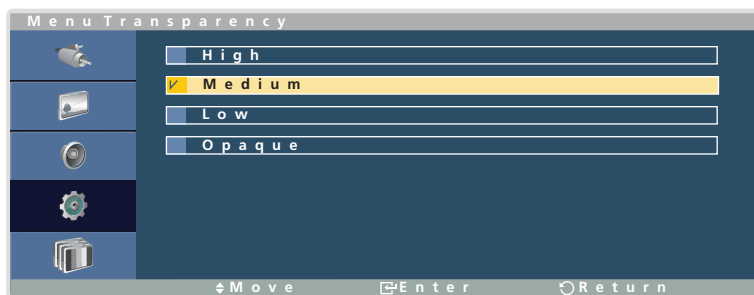
- Select **Menu Transparency** and move to the option you want. The menu window will be displayed as a preview for the selected transparency.
- Move to the option you want, and press [↵] or [↩]. The selected option will be applied.

6.3.1 Changing Menu Transparency

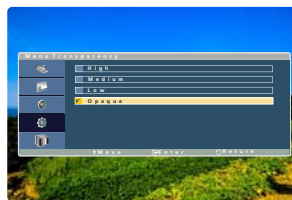
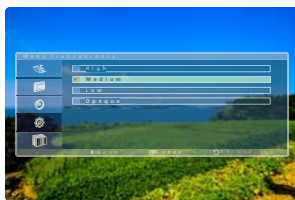
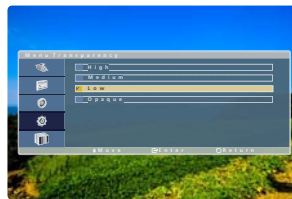
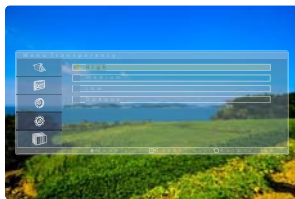


This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press ▲/▼ to move to **Setup** and press [↵].
- 3 Press ▲/▼ to move to **Menu Transparency** and press [↵].
- 4 Press ▲/▼ to select the option you want and press [↵].



- 5 The selected option will be applied.



6.4 Safety Lock

Lock the product in order to prevent the product from malfunction or unintended changes to the settings, or change the PIN used for locking the product.

6.4.1 Change PIN

Change the PIN required to lock the product.

The default PIN is "0000."

Select **Change PIN** to open a PIN input field.

Changing the PIN (Change PIN)

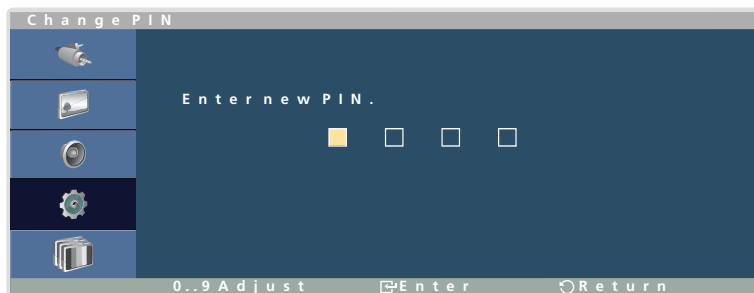


This product can only be controlled by using the remote control.

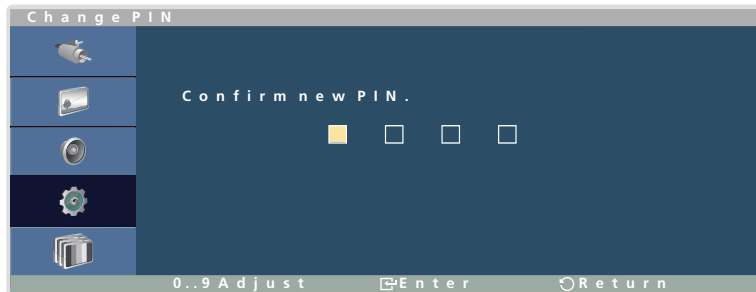
- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↔**].
- 3 Press **▲/▼** to move to **Safety Lock** and press [**↔**].
- 4 Press **▲/▼** to move to **Change PIN** and press [**↔**].
- 5 Enter the current PIN in the displayed PIN input field.



- 6 Enter a new PIN.



- 7 Re-enter the new PIN.



- 8 The PIN has been changed.

Entering the current PIN will display a new PIN input window.

Enter a new PIN and enter it again to confirm. The message "PIN is changed successfully." will appear to indicate that the PIN has successfully been changed.

-  If you forgot the PIN, press **INFO** -> **EXIT** -> **MUTE** on the remote control to restore the default PIN (0000).

6.4.2 Lock

Prevent the product from malfunction or unintended changes to the settings with the Lock feature.

Select **Lock** and enter the PIN to activate lock mode.

To deactivate **Lock** mode, press any key and enter the PIN.

Setting Lock

-  This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Safety Lock** and press [**↵**].
- 4 Press **▲/▼** to move to **Lock** and press [**↵**].
- 5 Enter your PIN in the displayed **Lock On** window.



- 6 Lock mode will activate.

-  Under Lock mode, all controls on the product are disabled until you unlock by entering the PIN.

6.5 Energy Saving

Save power with the **Energy Saving** feature.

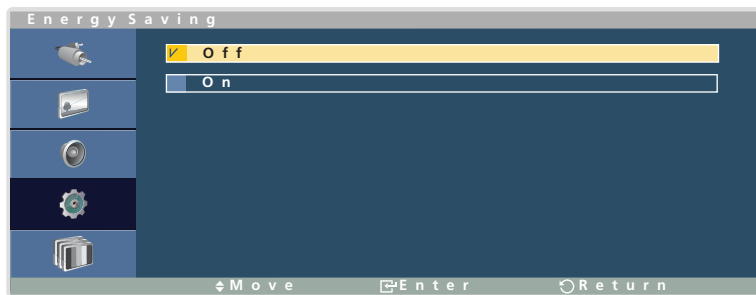
While Energy Saving mode is active, the product power consumption will be controlled to save power.

6.5.1 Setting Energy Saving



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Energy Saving** and press [**↵**].
- 4 Press **▲/▼** to select the option you want and press [**↵**].



- 5 The selected option will be applied.

6.6 Video Wall

Customize the layout of multiple displays that are connected to form a video wall.

In addition, display part of a whole picture or repeat the same picture on each of the connected multiple displays.

To display multiple images, refer to MDC Help or the MagicInfo user guide.

Some models may not support the MagicInfo function.



If more than four displays are connected horizontally and vertically, it is recommended that you use an input resolution of XGA (1024 x 768) level or higher to prevent a dark picture due to degradation in the contrast or color intensity.

6.6.1 Video Wall

You can activate or deactivate **Video Wall**.

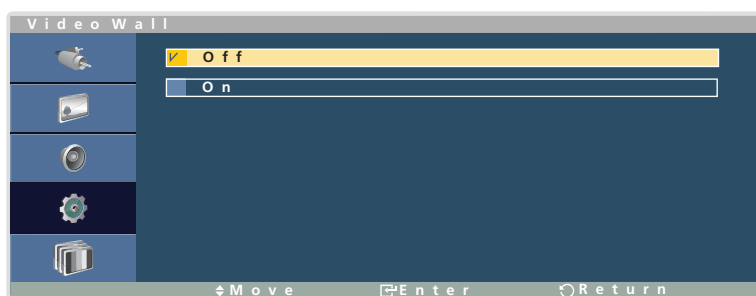
To organize a video wall, select **On**.

Enabling Video Wall



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Video Wall** and press [**↵**].
- 4 Press **▲/▼** to select the option you want and press [**↵**].



- 5 The selected option will be applied.

6.6.2 Format

Select a format to display images on multiple displays.

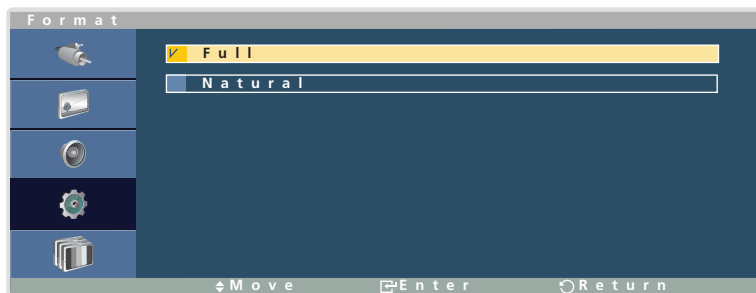
- **Full** : Display images in full screen.
- **Natural** : Display images at the original resolution without enlarging or reducing.

Changing Format



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **On** under **Video Wall** and press [**↵**].
- 4 Press **▲/▼** to move to **Format** and press [**↵**].
- 5 Press **▲/▼** to select the option you want and press [**↵**].



- 6 The selected option will be applied.



The Screen Position option is only enabled when **Video Wall** is set to **On**.

6.6.3 Horizontal

This function automatically divides the screen according to the specified number of horizontal displays.

Enter the number of horizontally arranged displays.

The horizontal screen will automatically be divided according to the number entered.

A maximum of 15 displays can be assigned to the vertical arrangement.

Setting Horizontal



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **On** under **Video Wall** and press [**↵**].
- 4 Press **▲/▼** to move to **Horizontal** and press [**↵**].
- 5 Press **▲/▼** to select a number, and press [**↵**].



- 6 The screen will be divided according to the selected number.



- The screen can be divided into a maximum of 100 screens (horizontal and vertical screens multiplied). For example, if the horizontal arrangement is set to 15, a maximum of 6 displays can be assigned to the vertical arrangement. Conversely, if the vertical arrangement is set to 15, a maximum of 6 displays can be assigned to the horizontal arrangement.
- The Screen Position option is only enabled when **Video Wall** is set to **On**.

6.6.4 Vertical

This function automatically divides the screen according to the specified number of vertical displays.

Enter the number of vertically arranged displays.

The vertical screen will automatically be divided according to the number entered.

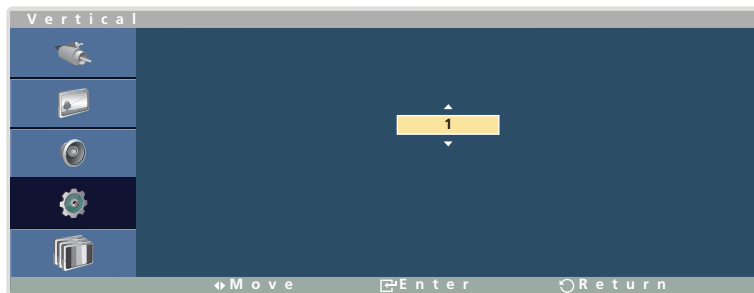
A maximum of 15 displays can be assigned to the vertical arrangement.

Setting Vertical



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **On** under **Video Wall** and press [**↵**].
- 4 Press **▲/▼** to move to **Vertical** and press [**↵**].
- 5 Press **▲/▼** to select a number, and press [**↵**].



- 6 The screen will be divided according to the selected number.



- The screen can be divided into a maximum of 100 screens (horizontal and vertical screens multiplied). For example, if the horizontal arrangement is set to 15, a maximum of 6 displays can be assigned to the vertical arrangement. Conversely, if the vertical arrangement is set to 15, a maximum of 6 displays can be assigned to the horizontal arrangement.
- The Screen Position option is only enabled when **Video Wall** is set to **On**.

6.6.5 Screen Position

You can customize the arrangement of split screens by moving displays identified with a number using the **Screen Position** function.

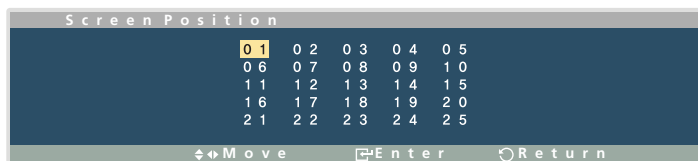
Select Screen Position to display the arrangement of displays (identified with a number) specified according to the Horizontal or Vertical settings. To customize the arrangement, move a number (display) using the direction buttons on the remote control and press [↵].

Changing Screen Position



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press ▲/▼ to move to **Setup** and press [↵].
- 3 Press ▲/▼ to move to **On** under **Video Wall** and press [↵].
- 4 Press ▲/▼ to move to **Screen Position** and press [↵].
- 5 Press ▲/▼ to move a number (display) as required and press [↵].



- 6 The new arrangement after the change will be displayed.



- A maximum of 100 displays can be arranged in **Screen Position**.
- The Screen Position option is only enabled when **Video Wall** is set to **On**.
- The Screen Position window is only displayed when **Horizontal** and **Vertical** are configured.

6.7 Safety Screen

This product uses a **Safety Screen** function to prevent afterimage burn-in on the screen when a stationary image is displayed for an extended period of time. The **Safety Screen** function allows you to configure various settings to protect the screen.

6.7.1 Pixel Shift

Prevent afterimage burn-in by moving pixels slightly at specified intervals.

Setting Pixel Shift

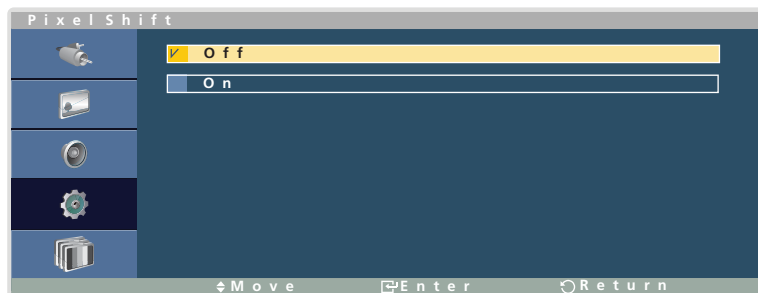


This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press **[Enter]**.
- 3 Press **▲/▼** to move to **Safety Screen** and press **[Enter]**.
- 4 Press **▲/▼** to move to **Pixel Shift** and press **[Enter]**.

- **Pixel Shift**

Activate or deactivate Pixel Shift.



Press **▲/▼** to select the option you want and press **[Enter]**.

- **Horizontal**

Specify how many pixels you want to move horizontally. (Range: 0~4)



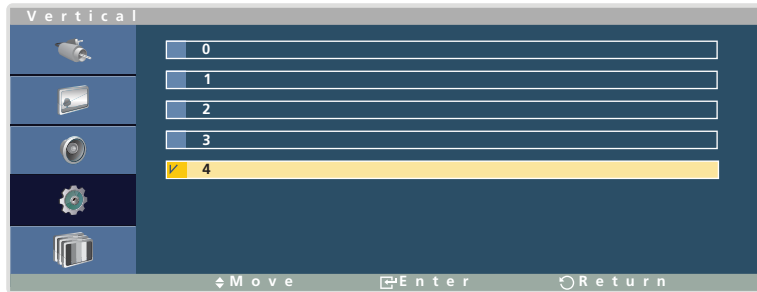
Press **▲/▼** to select a number, and press **[Enter]**.



A higher value will minimize the chance of afterimage burn-in but slight flickering may occur.

- Vertical

Specify how many pixels you want to move vertically. (Range: 0~4)



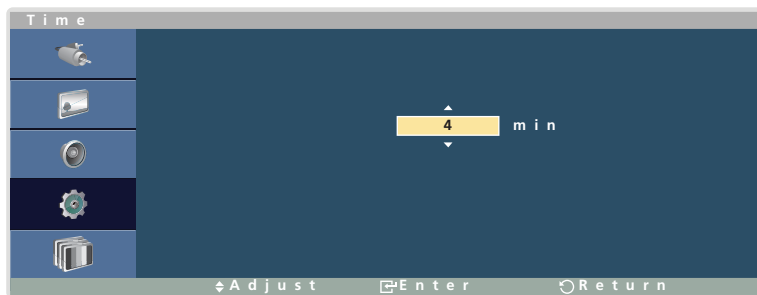
Press ▲/▼ to select a number, and press [↵].



A higher value will minimize the chance of afterimage burn-in but slight flickering may occur.

- Time

Set the time interval to move the specified number of pixels horizontally and vertically.



Press ▲/▼ to select a number, and press [↵].

6.7.2 Timer

Easily protect the screen by setting the timer to activate the afterimage burn-in prevention mode.

([Bar](#) and [Eraser](#))

Setting Timer

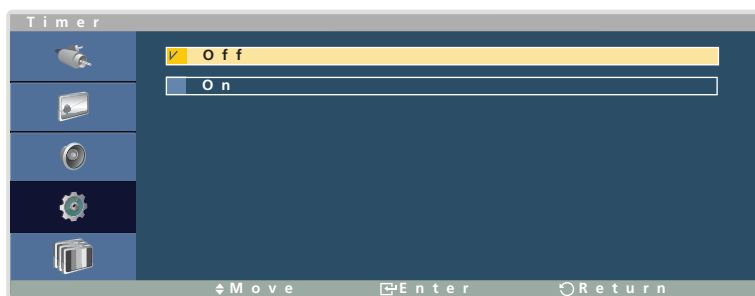


This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Safety Screen** and press [**↵**].
- 4 Press **▲/▼** to move to **Timer** and press [**↵**].

- **Timer**

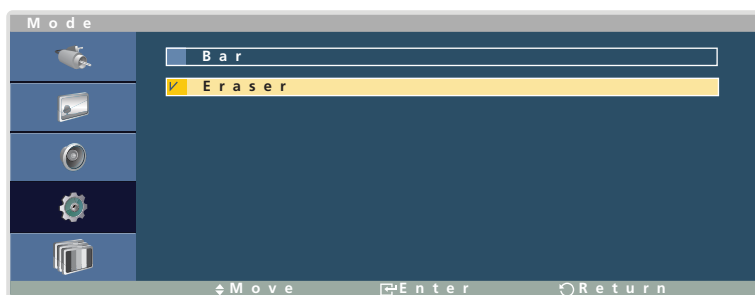
You can enable or disable the timer.



Press **▲/▼** to select the option you want and press [**↵**].

- **Mode**

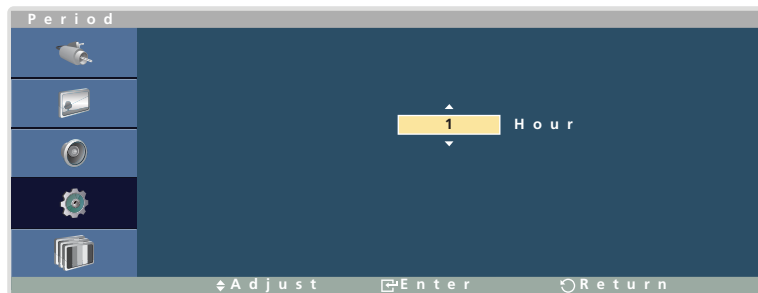
You can select mode from [Bar](#) or [Eraser](#).



Press **▲/▼** to select the option you want and press [**↵**].

- **Period**

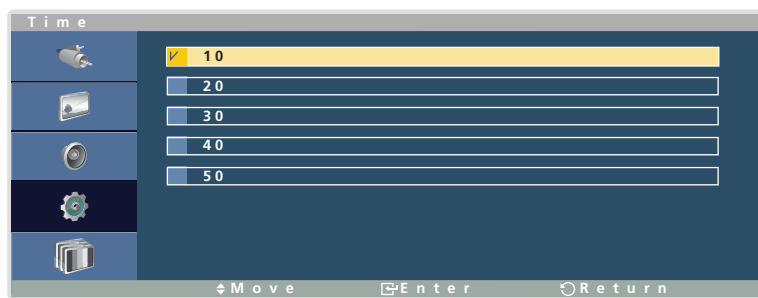
You can set the time interval to activate the timer. (Range: 1 to 10 hours)



Press ▲/▼ to select a number, and press [↵].

- **Time**

You can set the time length you want to activate the timer at a specified interval. (10, 20, 30, 40 or 50 seconds)



Press ▲/▼ to select a number, and press [↵].

6.7.3 Bar / Eraser

You can manually run the selected screen protection mode.

Setting Bar / Eraser



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press ▲/▼ to move to **Setup** and press [↵].
- 3 Press ▲/▼ to move to **Safety Screen** and press [↵].
- 4 Press ▲/▼ to move to **Bar** or **Eraser** and press [↵]. The afterimage burn-in prevention mode will immediately activate.
- 5 To deactivate the process and return to the menu screen, press [↶].

6.7.4 Side Gray

Select the brightness of the grey color for blank parts on the screen. (Off / Light / Dark)

Setting Side Grey



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↔**].
- 3 Press **▲/▼** to move to **Side Gray** and press [**↔**].
- 4 Press **▲/▼** to move to the option you want and press [**↔**].
- 5 The selected option will be applied.

6.8 Resolution Select

If the picture is not normal even when the resolution of the graphics card is one of the following, you can optimize the picture quality by selecting the same resolution for the product as the PC using this menu.

Available resolutions: Off / 1024 x 768 / 1280 x 768 / 1360 x 768 / 1366 x 768

6.8.1 Changing the Resolution (Resolution Select)



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↔**].
- 3 Press **▲/▼** to move to **Resolution Select** and press [**↔**].
- 4 Press **▲/▼** to move to the option you want and press [**↔**].
- 5 The selected option will be applied.



The **Resolution Select** option is only enabled when the input source is **PC**.

6.9 Power On Adjustment

You can set the warm-up time for the screen to turn on after the power button is pressed. (Range: 0 – 50 seconds)

6.9.1 Setting Power On Adjustment



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Power On Adjustment** and press [**↵**].
- 4 Press [**↵**], and select a warm-up time using the **▲/▼** button in the **Power On Adjustment** window.



- 5 The configured **Power On Adjustment** time will be applied.



A warm-up time that is too short may damage the product due to overvoltage.

6.10 OSD Rotation

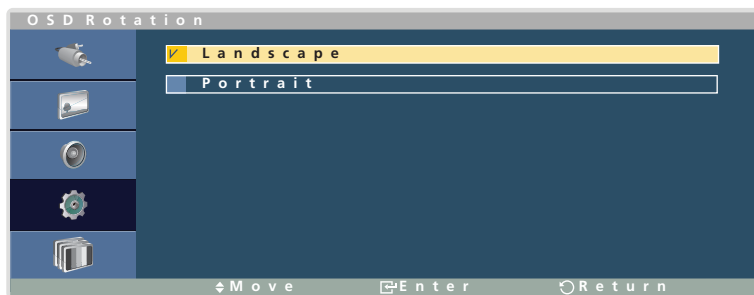
You can rotate and display the menu window in portrait mode when the product is in portrait orientation.

6.10.1 Changing the Menu Orientation (OSD Rotation)



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↔**].
- 3 Press **▲/▼** to move to the option you want and press [**↔**].



- 4 The selected option will be applied.

6.11 Advanced Settings

You can configure advanced settings for your display.

6.11.1 Temperature

Safeguard the product by using a protection feature that detects the internal temperature.

Configuring Temperature Control



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press **[↵]**.
- 3 Press **▲/▼** to move to **Advanced Settings** and press **[↵]**.
- 4 Press **▲/▼** to move to **Temperature** and press **[↵]**.

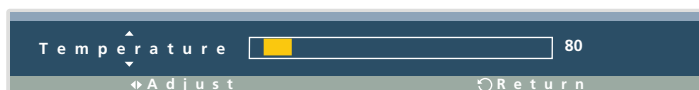
- **Temperature Control**

This function detects the internal temperature of the product. You can specify the temperature range that is acceptable.

The default temperature is set to 77°C.

The recommended operating temperature for this product is 75 to 80°C (based on an ambient temperature of 40°C).

Refer to "page 153" for details about operating environment requirements.



Press **▲/▼** to select a number, and press **[↵]**.



The screen will become darker if the current temperature exceeds the specified temperature limit. If the temperature continues to rise, the product will power off to prevent overheating.

- **Current Temperature**

View the current internal temperature.

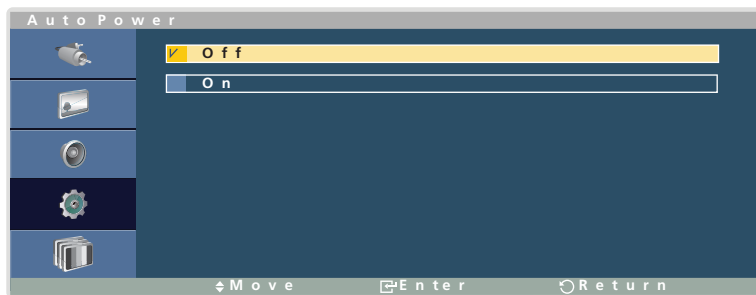
6.11.2 Auto Power

Enabling this option will automatically power on the product if the power cable is connected.

Changing the Auto Power Setting

 This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Advanced Settings** and press [**↵**].
- 4 Press **▲/▼** to move to **Auto Power** and press [**↵**].
- 5 Press **▲/▼** to move to the option you want and press [**↵**].



- 6 The selected option will be applied.

6.11.3 User Auto Color

Setting User Auto Color

 This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Advanced Settings** and press [**↵**].
- 4 Press **▲/▼** to move to **User Auto Color** and press [**↵**].
- 5 Press **▲/▼** to move to the option you want and press [**↵**].
- 6 The selected option will be applied.

- **Auto Color**
This menu automatically adjusts the picture color to obtain optimum picture quality.
- **Reset**
Restore the default color settings.

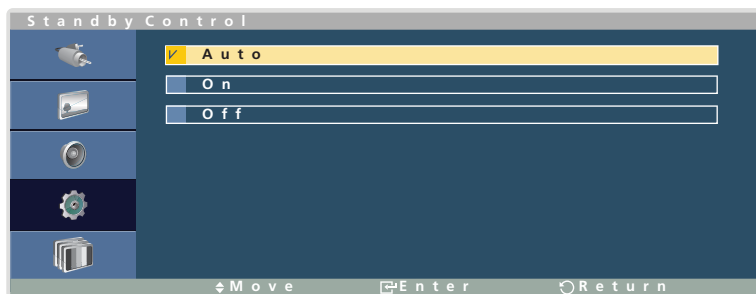
 The **User Auto Color** option is only enabled when the input source is **PC**.

6.11.4 Standby Control

You can set the screen standby mode to be applied when an input signal is received.

Setting Standby Control

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press **[Enter]**.
- 3 Press **▲/▼** to move to **Advanced Settings** and press **[Enter]**.
- 4 Press **▲/▼** to move to **Standby Control** and press **[Enter]**.
- 5 Press **▲/▼** to move to the option you want and press **[Enter]**.



- **Auto**
Power-saving mode will activate if no input signals are detected even though a source device is connected to the display.
The message "No Signal" will appear if no source device is connected.
 - **On**
Power-saving mode will activate if no input signals are detected.
 - **Off**
The message "No Signal" will appear if no input signals are detected.
- 6 The selected option will be applied.
- The Standby Control option is only enabled when **Source** is set to **PC** or **DVI**.
 - If "No Signal" is displayed although a source device is connected, check the cable connection. Refer to page 60 for details about connecting source devices.

6.11.5 Lamp Schedule

Setting Lamp Schedule



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Advanced Settings** and press [**↵**].
- 4 Press **▲/▼** to move to **Lamp Schedule** and press [**↵**].
- 5 Press [**↵**], and move to **On** using the **▲/▼** button and press [**↵**].
- 6 Configure the schedule settings enabled at the bottom using the direction keys.
- 7 Press [**↵**] when all settings are complete.
- 8 The selected option will be applied.

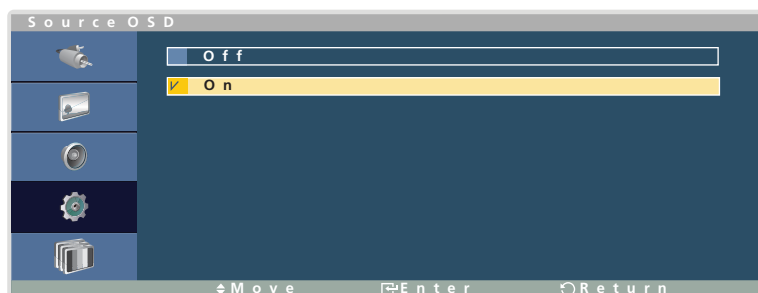
6.11.6 OSD Display

Changing the OSD Display Settings



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↵**].
- 3 Press **▲/▼** to move to **Advanced Settings** and press [**↵**].
- 4 Press **▲/▼** to move to **OSD Display** and press [**↵**].
 - **Source OSD**



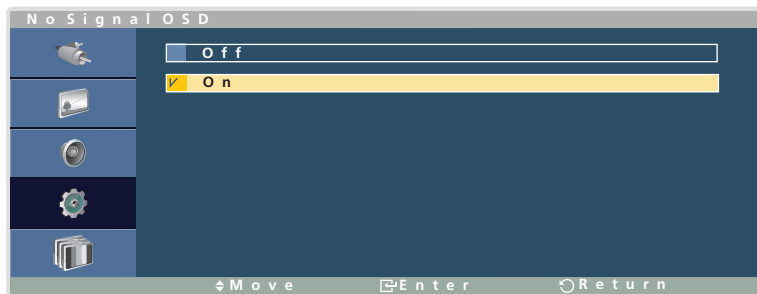
Press **▲/▼** to select the option you want and press [**↵**].

- Not Optimum Mode OSD



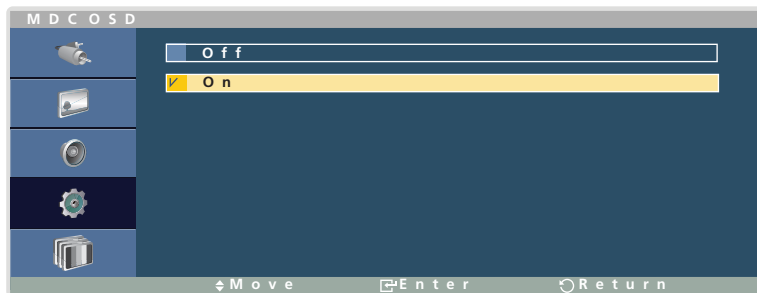
Press ▲/▼ to select the option you want and press [↵].

- No Signal OSD



Press ▲/▼ to select the option you want and press [↵].

- MDC OSD



Press ▲/▼ to select the option you want and press [↵].

6.12 Setup Reset

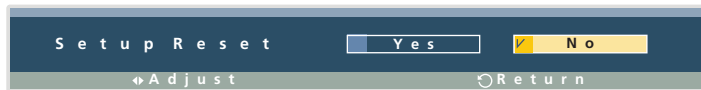
This option returns the current settings under Setup to the default factory settings.

6.12.1 Resetting Setup (Setup Reset)



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↔**].
- 3 Press **▲/▼** to move to **Setup Reset** and press [**↔**].
- 4 Press **▲/▼** to move to the option you want and press [**↔**].



- 5 The selected option will be applied.

6.13 Reset All

This option returns all the current settings for a display to the default factory settings.

6.13.1 Resetting All Settings (Reset All)



This product can only be controlled by using the remote control.

- 1 Press **MENU** on the remote control.
- 2 Press **▲/▼** to move to **Setup** and press [**↔**].
- 3 Press **▲/▼** to move to **Advanced Settings** and press [**↔**].
- 4 Press **▲/▼** to move to **Reset All** and press [**↔**].
- 5 Press **▲/▼** to move to the option you want and press [**↔**].



- 6 The selected option will be applied.

7.1 Requirements Before Contacting Samsung Customer Service Center

7.1.1 Testing the Product



Before calling Samsung Customer Service Center, test your product as follows. If the problem persists, contact Samsung Customer Service Center.

Check if your product is operating normally by using the product test function.

If the screen remains blank while the power LED blinks even when the product is correctly connected to a PC, perform product testing.

- 1 Power off both the PC and product.
- 2 Disconnect all the cables from the product.
- 3 Power on the product.
- 4 If "No Signal" is displayed, the product is operating normally.



If the screen remains blank, check the PC system, video controller and cable.

7.1.2 Checking the Resolution and Frequency

"Not Optimum Mode" will briefly be displayed if a mode that exceeds a supported resolution is selected (refer to Supported Resolutions).

7.1.3 Check the followings.

Installation issue (PC mode)	
The screen keeps switching on and off.	Check the cable connection between the product and PC, and ensure the connection is secure. ("2.2Connecting and Using a PC")
Blank spaces are found at the top and bottom of the screen when an HDMI or HDMI-DVI cable is connected to the monitor and PC.	Blank spaces on the screen are not caused by the monitor. The cause of the problem is the PC or graphics card, and can be fixed by adjusting the screen size in the HDMI or DVI option of the graphics card settings menu. If the graphics card settings menu has no option to adjust the screen size, update the graphics card driver to the latest version. (Please contact the graphics card or computer manufacturer for details on how to adjust the screen settings.)
Screen issue	
The power LED is off. The screen will not switch on.	Make sure that the power cord is connected. ("2.2Connecting and Using a PC")
"No Signal" is displayed on the screen (refer to "Connecting to a PC").	Check that the product is connected correctly with a cable ("2.2Connecting and Using a PC")
	Check that the device connected to the product is powered on.
"Not Optimum Mode" is displayed.	This message is displayed when a signal from the graphics card exceeds the product's maximum resolution and frequency.
	Refer to the Standard Signal Mode Table and set the maximum resolution and frequency according to the product specifications.
The images on the screen look distorted.	Check the cable connection to the product ("2.2Connecting and Using a PC")

Screen issue	
The screen is not clear. The screen is blurry.	Adjust Coarse and Fine .
	Remove any accessories (video extension cable, etc) and try again.
	Set the resolution and frequency to the recommended level.
The screen appears unstable and shaky.	Check that the resolution and frequency of the PC and graphics card are set within a range compatible with the product. Then, change the screen settings if required by referring to the Additional Information on the product menu and the Standard Signal Mode Table.
There are shadows or ghost images left on the screen.	
The screen is too bright. The screen is too dark.	Adjust Brightness and Contrast .
Screen color is inconsistent.	Go to Picture and adjust the Color Control settings.
The colors on the screen have a shadow and are distorted.	Go to Picture and adjust the Color Control settings.
White does not really look white.	Go to Picture and adjust the Color Control settings.
There is no image on the screen and the power LED blinks every 0.5 to 1 second.	The product is in power-saving mode.
	Press any key on the keyboard or move the mouse to return to the previous screen.
Sound issue	
There is no sound.	Check the connection of the audio cable or adjust the volume ("2.2Connecting and Using a PC")
	Check the volume.
The volume is too low.	Adjust the volume.
	If the volume is still low after turning it up to the maximum level, adjust the volume on your PC sound card or software program.
The sound is really flat.	Adjust Treble and Bass .

Remote control issue	
The remote control does not work.	Make sure that the batteries are correctly in place (+/-).
	Check if the batteries are flat.
	Check for power failure.
	Make sure that the power cord is connected.
	Check for any special lighting or neon signs switched on in the vicinity.

Source device issue	
A beeping sound is heard when my PC is booting.	If a beeping sound is heard when your PC is booting, have your PC serviced.

7.2 Q & A

Question	Answer
How can I change the frequency?	<p>Set the frequency on your graphics card.</p> <ul style="list-style-type: none">• "Windows XP": Go to Control Panel → Appearance and Themes → Display → Settings → Advanced → Monitor and adjust the frequency in Monitor Settings.• "Windows ME/2000": Go to Control Panel → Display → Settings → Advanced → Monitor and adjust the frequency in Monitor Settings.• "Windows Vista": Go to Control Panel → Appearance and Personalization → Personalize → Display Settings → Advanced Settings → Monitor and adjust the frequency in Monitor Settings.• "Windows 7": Go to Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced Settings → Monitor and adjust the frequency in Monitor Settings.

Question	Answer
<p>How can I change the resolution?</p>	<ul style="list-style-type: none"> • "Windows XP": Go to Control Panel → Appearance and Themes → Display → Settings and adjust the resolution. • "Windows ME/2000": Go to Control Panel → Display → Settings and adjust the resolution. • "Windows Vista": Go to Control Panel → Appearance and Personalization → Personalize → Display Settings and adjust the resolution. • "Windows 7": Go to Control Panel → Appearance and Personalization → Display → Adjust Resolution and adjust the resolution.
<p>How do I set power-saving mode?</p>	<ul style="list-style-type: none"> • Windows XP: Set power-saving mode in Control Panel → Appearance and Themes → Display → Screen Saver Settings or BIOS SETUP on the PC. • Windows ME/2000: Set power-saving mode in Control Panel → Display → Screen Saver Settings or BIOS SETUP on the PC. • Windows Vista: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC. • Windows 7: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.



Refer to the user manual for your PC or graphics card for further instructions on adjustment.

8.1 General

Model Name		400BX
LCD Panel	Size	40 inch (101 cm)
	Display area	885.6mm (H) x 498.15 mm (V)
Synchronization	Horizontal	30~81 kHz
	Vertical	56~85 Hz
Display Color		16.7 M
Resolution	Optimum resolution	1920 x 1080 @ 60 Hz
	Maximum resolution	1920 x 1080 @ 60 Hz
Maximum Pixel Clock		148.5 MHz (Analog,Digital)
Power Supply		This product uses 100 to 240V. Refer to the label at the back of the product as the standard voltage can vary in different countries.
Signal connectors		Analog D-Sub(RGB/Component In), DVI-D In, CVBS(AV) In, RS232C In, Stereo Audio In, DC Out
Dimensions (W x H x D)		969 x 582 x 91 mm / 38.1 x 22.9 x 3.6 inch
Weight		13.8 kg / 30.4lbs
VESA Mounting Interface		400 mm x 400 mm
Environmental considerations	Operating	Operating Temperature : 32°F ~ 104°F (0°C ~ 40°C) Humidity : 10 % ~ 80 %, non-condensing
	Storage	Storage Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %, non-condensing
Plug-and-Play		This monitor can be installed and used with any Plug-and-Play compatible systems. Two-way data exchange between the monitor and PC system optimizes the monitor settings. Monitor installation takes place automatically. However, you can customize the installation settings if desired.
Panel Dots (Pixels)		Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may be brighter or darker on the LCD panel. This does not affect product performance. The number of sub-pixels by LCD panel type: 40 type (101 cm screen): there are 6,220,800 sub-pixels.



The above specifications are subject to change without notice to improve quality.



Class A (business communications device)

This product is an EMC-registered Class A Device. This classification must be noted by vendors and users. This product is intended for use in non-home environments.

8.2 PowerSaver

The power-saving function of this product reduces power consumption by switching off the screen and changing the color of the power LED if the product is not used for a specified period of time. The power is not turned off in power-saving mode. To switch the screen back on, press any key on the keyboard or move the mouse. Power-saving mode only functions when the product is connected to a PC with a power-saving function.

State	Normal Operation	Power saving mode	Power off	Power off (Power Switch)
Power Indicator	On	Blinking	Amber	off
Power Consumption (Typical)	180 W (613.8 BTU/h)	1 W (3.41 BTU/h)	1 W (3.41 BTU/h)	0 W (0 BTU/h)



- The displayed power consumption level can vary in different operating conditions or when settings are changed.
- To reduce the power consumption to 0, turn off the switch at the back or disconnect the power cord. Disconnect the power cable if you will not be using the product for an extended period of time (during vacation, etc.).

8.3 Preset Timing Modes



- This product can be set to only one resolution for each screen size to obtain the optimum picture quality due to the nature of the panel. Using a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for your monitor.
- Check the frequency when you exchange a CDT monitor (connected to a PC) for an LCD monitor. If the LCD monitor does not support 85Hz, change the vertical frequency to 60Hz using the CDT monitor before you exchange it with the LCD monitor.

The screen will automatically be adjusted if a signal that belongs to the following standard signal modes is transmitted from your PC. If the signal transmitted from the PC does not belong to the standard signal modes, the screen may be blank with the power LED on. In such a case, change the settings according to the following table by referring to the graphics card user manual.

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	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	+/+

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
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, 1366 x 768	47.712	59.790	85.500	+/+
VESA, 1920 x 1080	66.587	59.934	138.500	+/-
VESA, 1920 x 1080	67.500	60.000	148.500	+/+



Horizontal Frequency

The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal frequency is measured in kHz.

Vertical Frequency

The monitor displays a single image multiple times per second (like a fluorescent light) to display what the viewer sees. The rate of a single image being displayed repeatedly per second is called vertical frequency or refresh rate. Vertical frequency is measured in Hz.

Contact SAMSUNG WORLDWIDE



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

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Optimum Picture Quality and Afterimage Burn-in Prevention

Optimum Picture Quality

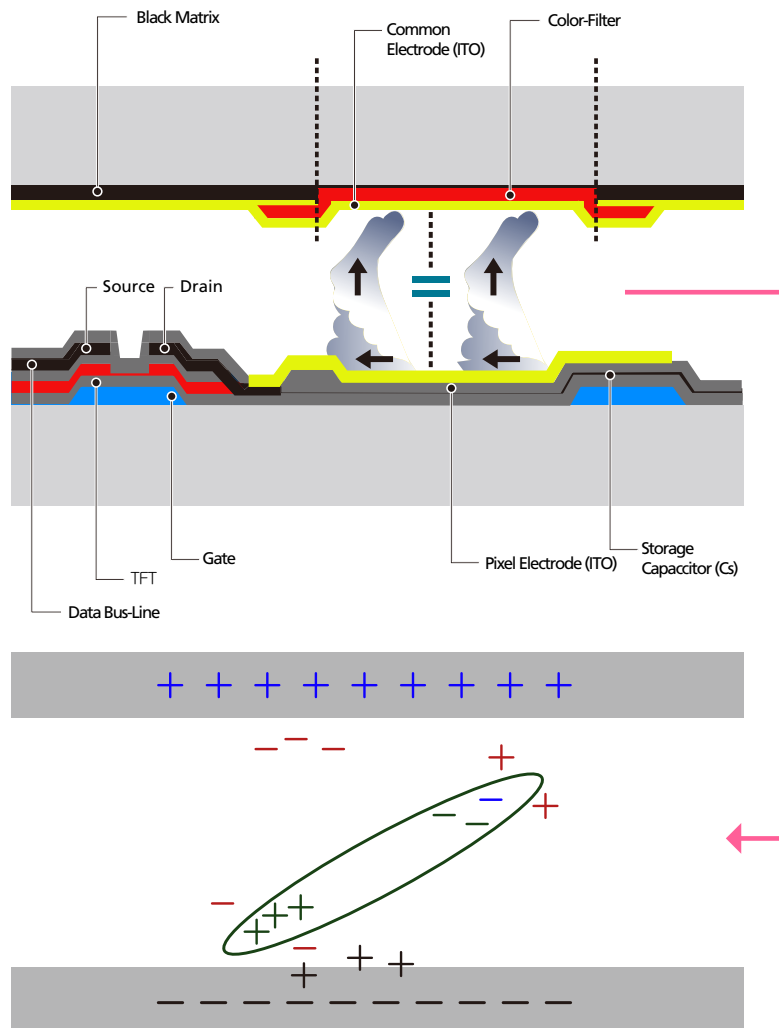
- To enjoy the optimum picture quality, go to Control Panel on your PC and adjust the resolution and refresh rate as follows. The picture quality of TFT-LCDs may degrade if the optimum resolution is not selected.
 - Resolution: 1920 X 1080
 - Vertical frequency (refresh rate): 60Hz
- Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may be brighter or darker on the LCD panel. This does not affect product performance.
 - The number of sub-pixels by LCD panel type: 40 : 6,220,800
- Run "Auto Adjustment" to improve the picture quality. If noise is still found even after auto adjustment, adjust Coarse or Fine.
- Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.
 - Activate power-saving mode or a dynamic screen saver if you will not be using the monitor for an extended period of time.
- Unlike CDT monitors, TFT-LCD monitors (due to the nature of the panel) can be set to only one resolution to obtain the optimum picture quality. Therefore, setting a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for your monitor.

Prevention of Afterimage Burn-in

What is afterimage burn-in?

Afterimage burn-in should not occur when the LCD panel is operating normally. Normal operation refers to a continuously changing video pattern. If the LCD panel displays a fixed pattern for an extended period of time (more than 12 hours), a slight voltage difference may occur between the electrodes in pixels that control the liquid crystals.

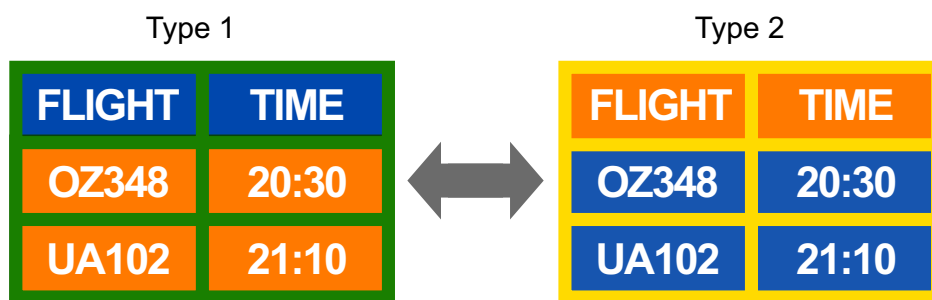
Such a voltage difference between electrodes increases with time and makes the liquid crystals thinner. When this occurs, a previous image can remain on the screen when the pattern changes. To prevent this, the accumulated voltage difference should be reduced.



Appendix

- Powering Off, Screen Saver and Power Saving Mode
 - Power off the product for 4 hours after using it for 20 hours.
 - Power off the product for 2 hours after using it for 12 hours.
 - Go to Display Properties > Power Supply on your PC and set the monitor to power off as required.
 - Using a screen saver is recommended.
It is best to use a single-color or moving-image screen saver.

- Regular Color Change



Use 2 colors

Switch between 2 colors every 30 minutes as shown above.

- Avoid combinations of a text color and background color of contrasting brightness.
Avoid using grey as it may contribute to afterimage burn-in.
Avoid using colors of contrasting brightness (black and white; grey).



- Regular Text Color Change

- Use bright colors of similar brightness.
Interval: Change text color and background color every 30 minutes



- Move and change text every 30 minutes as shown below.

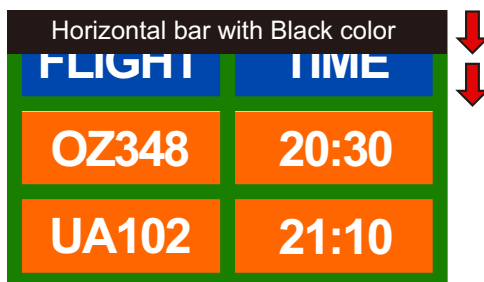


- Regularly display a moving image along with a logo.

Interval: Display a moving image along with a logo for 60 seconds after using for 4 hours.

Appendix

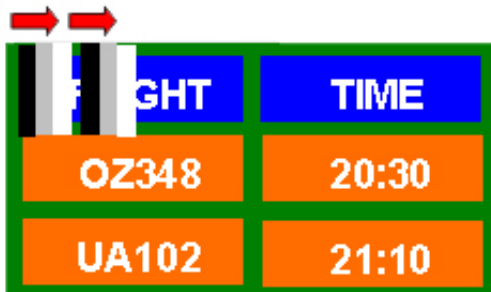
- The best way to protect the monitor from afterimage burn-in is switching the power off or setting the PC or system to run a screen saver when not in use. Also, Warranty service may be limited depending on instruction guide.
- Screen Scroll Function
 - Screen Scroll
Effect: A black bar moves horizontally.



- Screen Bar
Effect: Two black bars move vertically and horizontally.



- Screen Delete Function
 - Screen Scroll
Effect: A black bar moves horizontally.



Terminology

Dot Pitch

The monitor and screen consist of red, green and blue dots. A shorter distance between the dots produces a higher resolution. Dot pitch refers to the distance between the shortest distance between dots of the same color. Dot pitch is measured in millimeters.

Vertical Frequency

The monitor displays a single image many times per second (like a fluorescent light that flickers) to display an image for a viewer to see. The rate of a single image being displayed repeatedly per second is called vertical frequency or refresh rate. Vertical frequency is measured in Hz.

E.g. 60Hz refers to a single image being displayed 60 times in one second.

Horizontal Frequency

The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal frequency is measured in kHz.

Non-interlace Mode and Interlace Mode

Non-interlace mode (progressive scan) displays a horizontal line from the top to the bottom of a screen progressively. Interlace mode displays the odd number lines first and the even number lines next. Non-interlace mode is mainly used in monitors as it produces screen clarity and interlace mode is mainly used in TVs.

Plug & Play

Plug & Play is a function that allows the automatic exchange of information between a monitor and PC to produce an optimum display environment. The monitor uses VESA DDC (international standard) to execute Plug & Play.

Resolution

Resolution is the number of horizontal dots (pixels) and vertical dots (pixels) that form a screen. It represents the level of display detail. A higher resolution enables more data to be displayed on the screen and is useful to perform multiple tasks simultaneously.

E.g. A resolution of 1920 X 1080 consists of 1,920 horizontal pixels (horizontal resolution) and 1,080 vertical pixels (vertical resolution).

Multiple Display Control (MDC)

MDC (Multiple Display Control) is an application that allows multiple display devices to be controlled simultaneously using a PC. Communication between a PC and monitor takes place using RS232C (serial data transmission) and RJ45 (LAN) cables.

DVD(Digital Versatile Disc)

DVD refers to a CD-sized mass storage disk where you can save multimedia (audio, video or game) applications using MPEG-2 video compression technology.

HDMI(High Definition Multimedia Interface)

It is an interface that can be connected to a digital audio source as well as a high-definition video source by using a single cable without compression.

Component ports (green, blue and red)

The component ports, which identify, transmit and receive contrast signals, provide superior picture quality to any other video connection methods.

Stereo

Stereo refers to a technology that outputs audio signals via two channels. It delivers 3D sound experience through separate left and right audio channels over two speakers.

Source

Input source refers to a video source device connected to the product such as a camcorder or video or DVD player.

480i / 480p / 720p / 1080i / 1080p

Each of the scanning rates above refers to the number of effective scanning lines that decides the screen resolution. The scanning rate may be indicated in i (interlaced) or p (progressive), depending on the scanning method.

- Scanning

Scanning refers to a process of sending pixels that form an image progressively. A larger number of pixels will deliver a clearer and more vivid picture.

- Progressive

In progressive scan mode, all lines of pixels are scanned one by one (progressively) on the screen.

- Interlaced

In interlaced scan mode, every other line of pixels is scanned from top to bottom first and then the remaining lines of pixels (that were not scanned) are scanned.

Correct Disposal - Europe only

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



(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 should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product - Europe only



(Applicable in the European Union and other European countries with separate battery return systems.)

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.

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