LCD Display

User Manual

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.

SAMSUNG

Safety Instructions

Notational

📝 Note

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

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

❗ Warning / Caution

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

❗ Notational Conventions

|			
🚫	Prohibited	❗	Important to read and understand at all times
🚫	Do not disassemble	🔌	Disconnect the plug from the outlet
🚫	Do not touch	⏚	Ground to prevent an electric shock

Power

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

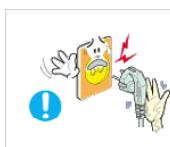If using screen saver, set it to active screen mode.

The images here are for reference only, and are not applicable in all cases (or countries).
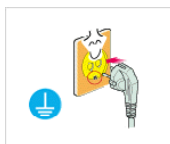
Shortcut to Anti-Afterimage Instructions
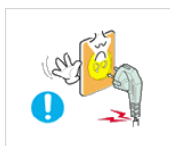
▶ Do not use a damaged power cord or plug or a damaged or loose power outlet.

• Otherwise, this may result in electric shock or fire.
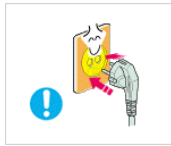
▶ Do not touch the power plug with wet hands when removing or plugging the plug into the outlet.
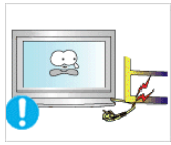
• Otherwise, this may result in electric shock.

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

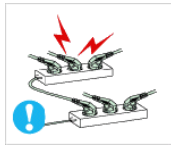• Otherwise, it may result in electric shock or personal injury.

1

Ensure that the power plug is plugged into the power outlet firmly and correctly.
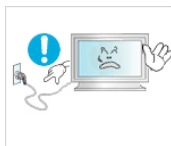
- Otherwise, this may result in fire.

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

- Otherwise, this may result in fire.

Do not connect multiple appliances to the same power outlet.

- Otherwise, this may cause fire due to overheating.

Do not disconnect the power cord while using the product.

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

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

- This may cause electric shock or fire.

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

- Otherwise, this may result in fire or electric shock.
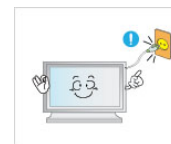
Connect the power plug to a wall outlet that can be easily reached.

- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

Installation

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

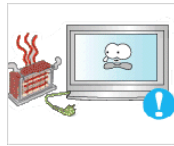Failure to do so may cause serious damage to your monitor.

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

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

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

- Otherwise, this may result in fire.

2

▶ Keep heating appliances as far away from the power cord or the product as possible.

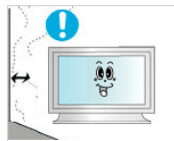- Otherwise, this may result in electric shock or fire.

▶ When putting the product down, make sure to put it down softly.

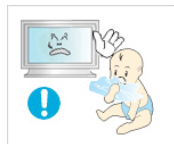- Otherwise, this may result in damage to the screen display.

▶ Do not place the front of the product on the floor.

- Otherwise, this may result in damage to the screen display.

▶ Install your product in a well ventilated location. Ensure that there is a clearance of more than 10 cm from the wall.

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

▶ Ensure that the packaging vinyl is kept away from children.

- Otherwise, it may result in serious harm (suffocation) if children play with it.

Clean

When cleaning the monitor case or the surface of the TFT-LCD screen, wipe with a slightly moistened, soft cloth.
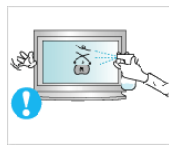
▶ Do not spray cleaner directly onto the surface of the product.

- Otherwise, this may result in the discoloration and distortion of the structure and the screen surface may peel off.
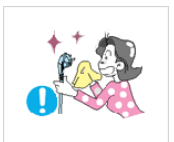
▶ When cleaning the power plug pins or dusting the power outlet, clean it with a dry cloth.

- Otherwise, it may result in fire.

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

- Otherwise, it may result in electric shock or fire.
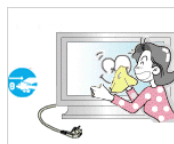
▶ When cleaning the product, disconnect the power cord and clean it with a soft, dry cloth.

- (Do not use chemicals such as wax, benzene, alcohol, thinner, mosquito repellant, lubricant, or cleaner.) These may change the appearance of the product surface and peel off the indication labels on the product.
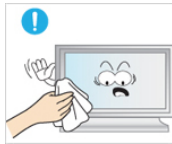
Since the product housing is easily scratched, make sure to use the specified cloth only.

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

- Ensure that water does not enter the product and that it is not wet.

- Otherwise, this may result in electric shock, fire or a malfunction.

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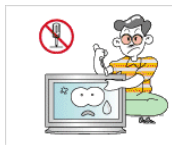
The product is a high voltage product. Ensure that users do not disassemble, repair or modify the product themselves.

- Otherwise, this may result in electric shock or fire. If the product needs to be repaired, contact a Service Center.
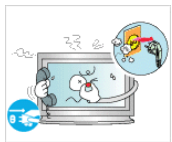
If there is a strange smell or a strange sound or smoke is coming from the product, disconnect the power plug immediately and contact a Service Center.

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

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

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

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

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

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

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

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

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

Make sure that the ventilating opening is not blocked.

- Otherwise, it may result in fire due to an increase in the internal temperature.
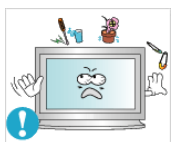
Do not place any containers containing water, vases, flower-pots, medicines as well as any metal on the product.

- If water or a foreign material enters the product, disconnect the power cord and contact a Service Center.

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- This may result in a product malfunction, electric shock, or fire.

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

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

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

- If water or foreign material enters the product, disconnect the power cord and contact a Service Center.

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

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

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

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

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

- Otherwise, it may result in electric shock or fire.
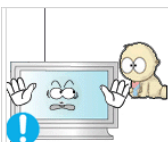
▶ Ensure that children do not hang onto the product or climb up onto the product.

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

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

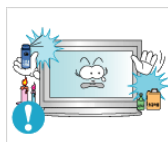- Otherwise, this may result in overheating or fire due to dust, and may result in fire due to electric shock or leakage.
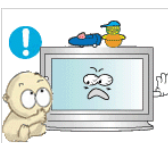
▶ Do not place any heavy items or toys or confectionery, such as cookies etc. that may attract the attentions of children onto the product.

- Your children may hang onto the product causing it to fall and this may result in personal injury or death.
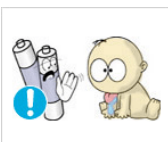
▶ Be careful that children do not place the battery in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

- If children have had the battery in their mouths, consult your doctor immediately.
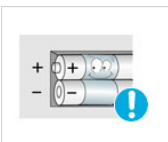
▶ When replacing the battery, insert it with right polarity (+, -).

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

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

- Otherwise, the batteries may be damaged or cause fire, personal injury or damage due to a leakage of the internal liquid.
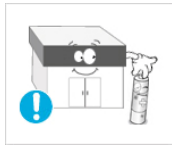
The batteries (and rechargeable batteries) is not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling purposes as the consumer.

- The customer can return used or rechargeable batteries to a nearby public recycling center or to a store selling the same type of the battery or rechargeable battery.
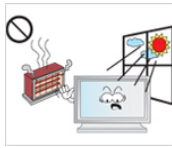
Do not place the product in a location exposed to direct sunlight or near any heat such as a fire or heater.

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

Do not drop any objects onto the product or cause any impact to the product.

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

Do not use a humidifier or kitchen table near the product.

- Otherwise, this may result in electric shock or fire.
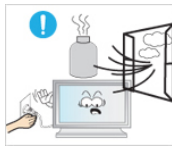
When there is a gas leak, do not touch the product or the power plug but ventilate immediately.

- If a spark occurs, it may cause an explosion or fire.
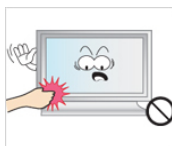
If the product has been turned on for a long time, the display panel becomes hot. Do not touch it.

Keep the small accessories in a location out of the reach of children.

Do not put any heavy objects on the product.

- This may result in personal injury and/or damage to the product.

6

Introduction

Package Contents

Note

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

If any items are missing, contact your dealer.

Contact a local dealer to buy optional items.

Unpacking

LCD Display

Manuals

Quick Setup Guide	Warranty Card	User's Guide
	(Not available in all locations)	

MagicInfo Software CD,
MagicInfo Manual CD

Others

Remote Control	Batteries (AAA X 2)	GND Cable

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Others

(Not available in all loca-
tions)

Your LCD Display

Front
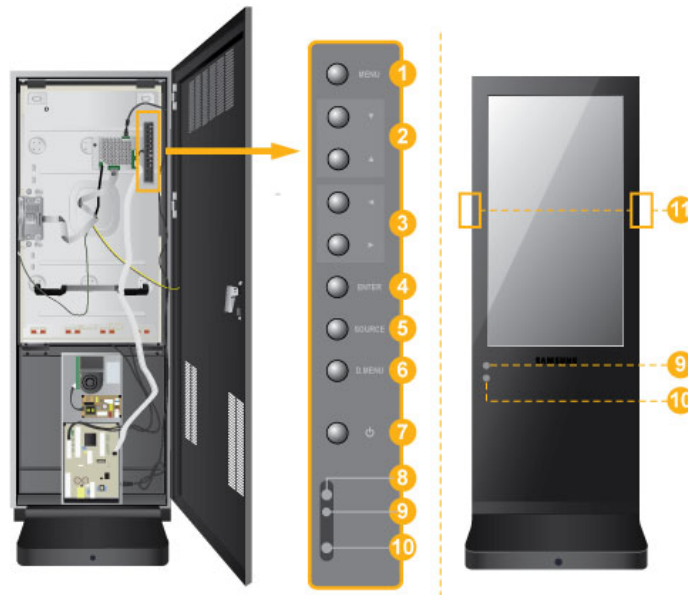
①　*MENU button [MENU]*

Opens the on-screen menu and exits from the menu. Also use to exit the OSD menu or return to the previous menu.

②　*Navigate buttons (Up-Down buttons)*

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

③　*Adjust buttons (Left-Right buttons) / Volume buttons*

Moves from one menu item to another horizontally or adjusts selected menu values. When OSD is not on the screen, push the button to adjust volume.

④　*ENTER button [ENTER]*

Activates a highlighted menu item.

⑤　*SOURCE button [SOURCE]*

Switches from PC mode to Video mode. Changing the source is only allowed for external devices that are connected to the LCD Display at the time.

[HDMI] → **[MagicInfo]**

⑥　*D.MENU*

Opens the on-screen D.MENU.

Note

- This is available when a TV tuner box is installed.

Note

- This function does not work for this LCD Display.

7. *Power button [⏻]*

Use this button for turning the LCD Display on and off.

8. *Brightness Sensor*

The product's Brightness Sensor function automatically detects the surrounding brightness using a brightness sensor and adjusts its brightness accordingly.

9. *Power indicator*

Shows PowerSaver mode by blinking green

Note

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

10. *Remote Control Sensor*

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

11. *Speaker*

Rear

Note

For detailed information concerning cable connections, refer to Connecting Cables under Setup. The LCD Display 's configuration at the back may vary slightly depending on the LCD Display model.
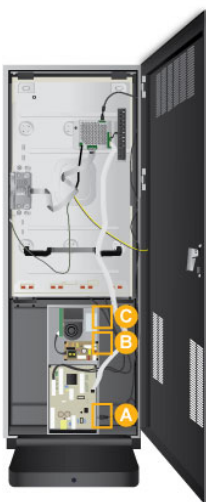
A
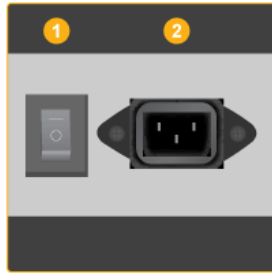
1 *POWER S/W ON [│] / OFF [O]*

Switches the LCD Display On/Off.

2 *POWER IN*

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

B
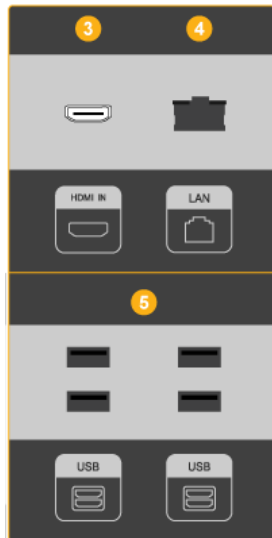
3 *HDMI IN*

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

Up to HDMI cable 1.0 can be supported.

4 *LAN (LAN Connection Terminal)*

5 *USB(USB Connection Terminal)*

Keyboard / Mouse, Mass Storage Device Compatible.

C
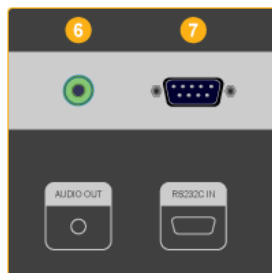
6 *AUDIO OUT*

Headphone/External speaker output terminal.

7 *RS232C IN (RS232C Serial PORT)*

10
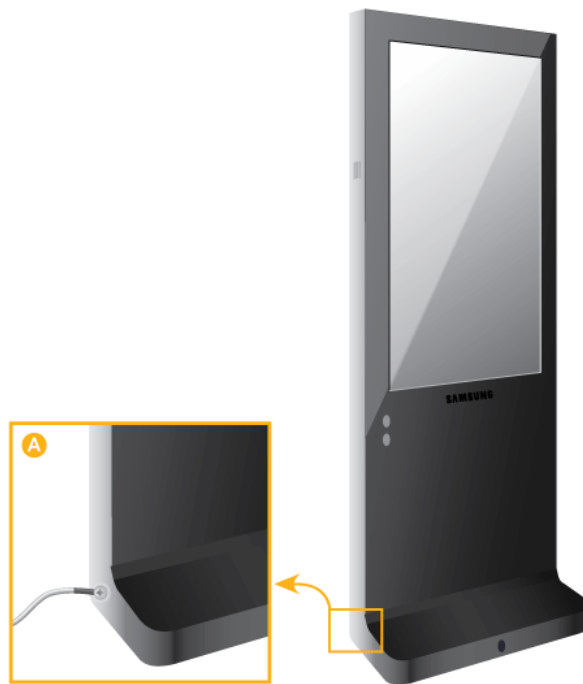
Side

1. Connect the GND wires to the bottom part of both sides of the product and then to the
   back of the product as shown by figure (A).

2. Connect the other side of the GND wires to the ground box when indoors or to the ground
   pole that has been pushed into the ground when outdoors.

 Note

The ground (GND) is used to prevent product noise and to protect people from electric shock
due to electric leakage.

Remote Control
 Note

The performance of the remote control may be affected by a TV or other electronic device
operating near the LCD Display , causing a malfunction due to interference with the frequen-
cy.
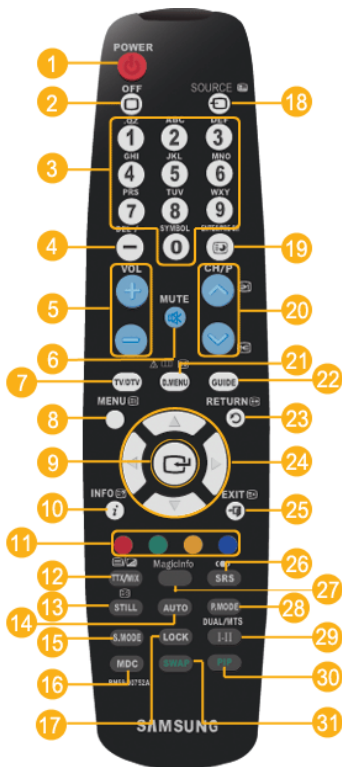
1	⏻ POWER
2	▭ OFF
3	Number Buttons
4	DEL ╼╱╾ button
5	+ VOL -
6	⊄ MUTE
7	TV/DTV
8	MENU
9	⏎
10	*i* INFO
11	COLOR BUTTONS
12	▤╱◣ TTX/MIX
13	STILL
14	AUTO
15	S.MODE
16	MDC
17	LOCK
18	⊡ SOURCE
19	⊟● ENTER/PRE-CH
20	⌄ CH/P ⌃
21	D.MENU
22	GUIDE
23	↺ RETURN
24	Up-Down Left-Right buttons
25	→▮ EXIT
26	(●) SRS
27	MagicInfo
28	P.MODE
29	⊦Ⅱ DUAL/MTS
30	*PIP*
31	*SWAP*

1. ⏻ POWER	Turns the product On.
2. ▭ Off	Turns the product Off.
3. Number Buttons	Press to change the channel.
4. DEL ╼╱╾ button	The "-" button operates only for DTV. It is used to select MMS (multi-channel) for a DTV.

5. + VOL -	Adjusts the audio volume.
6. MUTE	Pauses (mutes) the audio output temporarily. This is displayed on the lower left corner of the screen. The audio resumes if MUTE or - VOL + is pressed in the Mute mode.
7. TV/DTV	Selects the TV and DTV mode directly.
8. MENU	Opens the on-screen menu and exits from the menu or closes the adjustment menu.
9.	Activates a highlighted menu item.
10. *i* INFO	Current picture information is displayed on the upper left corner of the screen.
11. COLOR BUTTONS	Press to add or delete channels and to store channels to the favorite channel list in the "Channel List" menu.
12. TTX/MIX	TV channels provide written information services via teletext.
	- Teletext Buttons
	8 ≡i , 10 ≡? , 13 ≡○ , 18 ≡.. , 19 ≡○ , 20 ≡►/◄ , 21 ≡‼ , 23 ≡‡ , 25 ≡X ,
	For more information > TTX / MIX
13. STILL	Press the button once to freeze the screen. Press it again to unfreeze.
14. AUTO	Adjusts the screen display automatically in **PC** mode. By changing the resolution in the control panel, auto function is performed.
15. S.MODE	When pressing this button, the current mode is displayed at the bottom centre of the screen. The LCD Display has a built-in high fidelity stereo amplifier. Then press the button again to circle through available preconfigured modes. (**Standard → Music → Movie → Speech → Custom**)
16. MDC	MDC Quick Launch Button.
17. LOCK	Activates or deactivates all function keys on both the remote control and the LCD Display except for the Power and LOCK buttons.
18. SOURCE	Press the button to change the input signal SOURCE.
	Changing the SOURCE is only allowed for external devices that are connected to the monitor at the time.
19. ENTER/PRE-CH	This button is used to return to the immediately previous channel.
20. CH/P	In **TV** mode, selects TV channels.
21. D.MENU	DTV menu display
22. GUIDE	Electronic Program Guide (EPG) display.

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23. ↻ RETURN	Returns to the previous menu.
24. Up-Down Left-Right buttons	Moves from one menu item to another horizontally, vertically or adjusts selected menu values.
25. ⃗▉ EXIT	Exits from the menu screen.
26. (●) SRS	Selects SRS TruSurround XT mode.
27. MagicInfo	MagicInfo Quick Launch Button.
28. P.MODE	When you press this button, current picture mode is displayed on the lower center of the screen.

AV / HDMI / TV : P.MODE

The LCD Display has four automatic picture settings that are preset at the factory. Then push button again to circle through available preconfigured modes. (**Dynamic** → **Standard** → **Movie** → **Custom**)

PC / DVI / MagicInfo: M/B (*MagicBright*)

MagicBright is a feature providing the optimum viewing environment depending on the contents of the image you are watching. Then push button again to circle through available preconfigured modes. (**Entertain** → **Internet** → **Text** → **Custom**)

29. ╟╢ DUAL/MTS	*DUAL* -

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

MTS-

You can select MTS (Multichannel Television Stereo) mode.

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

30. *PIP*	Every time you press the button, a PIP screen appears.
	- This fuction does not work for this LCD Display.
31. *SWAP*	Swaps the contents of the PIP and main image. The image in the PIP window will appear on the main screen, and the main screen image will appear in the PIP window.
	- This fuction does not work for this LCD Display.

14

Using the Software

Touch Screen

1. Double-click "Calibrate" on the Desktop.
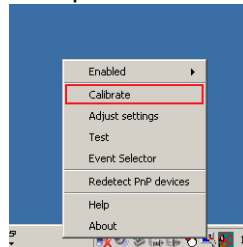
Right-click over the icon in the system tray and select "Calibrate" from the pop-up menu.

When the points are displayed, touch the corresponding points exactly.

Note

Since you may not be able to touch a point located at the edge, connect and use a mouse.

Adjusting the LCD Display

Input

Source List

> MENU → ENTER → [**Input**] → ENTER → [**Source List**]
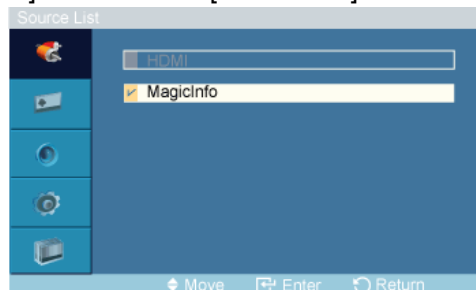
> → ▲ , ▼ → ENTER

> 1. **HDMI**

> 2. **MagicInfo**

Note

- The direct button on the remote control is the 'SOURCE' button.

Edit Name

> MENU → ENTER → [**Input**] → ▼ → ENTER → [**Edit Name**]
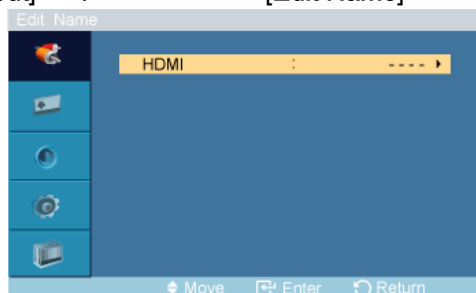
> → ▲ , ▼ → ENTER

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

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

Picture

MagicBright

> MENU → ▼ → ENTER → [**Picture**] → ENTER → [**MagicBright**]
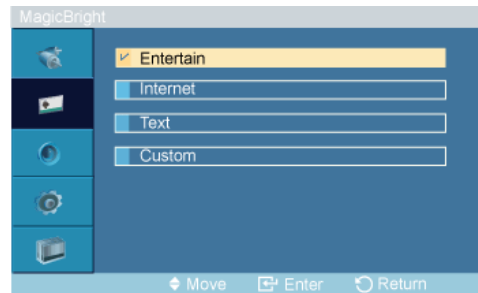
→ ▲ , ▼ → ENTER

MagicBright is a feature providing the optimum viewing environment depending on the con-tents of the image you are watching. Currently four different modes are available: **Entertain**, **Internet**, **Text** and **Custom**. Each mode has its own pre-configured brightness value. You can easily select one of the four settings by simply pressing the **MagicBright** control button.

(Not available in **Dynamic Contrast** mode of **On**.)

1. **Entertain**

   High brightness

   For watching motion pictures such as a DVD or VCR.

2. **Internet**

   Medium brightness

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

3. **Text**

   Normal brightness

   For documents or works involving heavy text.

4. **Custom**

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

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

Custom

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

MENU → ▼ → ENTER → [**Picture**] → ▼ → ENTER → [**Custom**]

(Not available in **Dynamic Contrast** mode of **On**.)

Note

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

Contrast

MENU → ▼ → ENTER → [**Picture**] → ▼ → ENTER → [**Custom**] → ENTER→ [**Contrast**]

→ ◄, ► → ENTER

Adjusts the Contrast.

Brightness

MENU → ▼ → ENTER → [**Picture**] → ▼ → ENTER → [**Custom**] → ▼ → ENTER → [**Brightness**]

Brightness	▭▭▭▭▭▭▭▭ 100
♦ Move	◄► Adjust ↻ Return

→ ◄, ► → ENTER

Adjusts the Brightness.

Sharpness

MENU → ▼ → ENTER → [**Picture**] → ▼ → ENTER → [**Custom**] → ▼ → ▼ → ENTER → [**Sharpness**]

Sharpness	▭▭ 40
♦ Move	◄► Adjust ↻ Return

→ ◄, ► → ENTER

Adjusts the Sharpness.

Color Tone

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →ENTER → [**Color Tone**]

Color Tone	
🖌	✔ Off
▦	Cool
●	Normal
◎	Warm
▣	Custom
	♦ Move ⏎ Enter ↻ Return
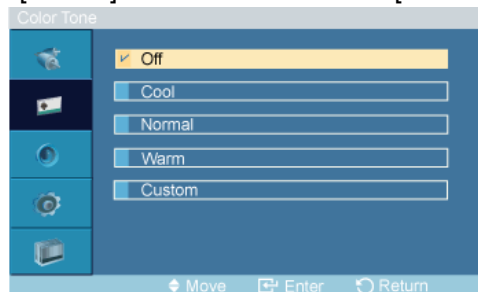
→ ▲ , ▼ → ENTER

The color tones can be changed.

(Not available in **Dynamic Contrast** mode of **On**.)

1. **Off**

2. **Cool**

3. **Normal**

4. **Warm**

5. **Custom**

🖉 **Note**

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

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

Color Control

Note

- This function does not work for this LCD Display.

Adjusts individual Red, Green, Blue color balance.

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

(Not available in **Dynamic Contrast** mode of **On**.)

Note

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

Red

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ → ENTER → [**Color Control**] → ENTER → [**Red**]
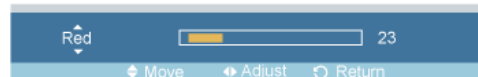
→ ◄, ► → ENTER

Green

MENU → ▼→ ENTER → [**Picture**] → ▼ → ▼ →▼ → ENTER → [**Color Control**] → ▼ → ENTER → [**Green**]
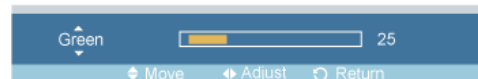
→ ◄, ► → ENTER

Blue

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ → ENTER → [**Color Control**] → ▼ → ▼ → ENTER → [**Blue**]

→ ◄, ► → ENTER

Color Temp

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ → ENTER → [**Color Temp**]

→ ◄, ► → ENTER

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

(Not available in **Dynamic Contrast** mode of **On**.)

Note

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

Image Lock

Note

- This function does not work for this LCD Display.

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

(Available in **PC** mode only)

(Not available in **Dynamic Contrast** mode of **On**.)

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ →▼ → ENTER → [**Image Lock**]

Coarse

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ →▼ → ENTER → [**Image Lock**] → ENTER → [**Coarse**]

Coarse		1792
	◆ Move ◀▶ Adjust ↻ Return	

→ ◀, ▶ → ENTER

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

Fine

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ →▼ → ENTER → [**Image Lock**] → ▼ → ENTER → [**Fine**]

Fine		3
	◆ Move ◀▶ Adjust ↻ Return	

→ ◀, ▶ → ENTER

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

H-Position

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ →▼ → ENTER → [**Image Lock**] → ▼ → ▼ → ENTER → [**H-Position**]

H-Position		51
	◆ Move ◀▶ Adjust ↻ Return	

→ ◀, ▶ → ENTER

Adjusts the screen location horizontally.

V-Position

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ →▼ →▼ → ENTER → [**Image Lock**] → ▼ → ▼ → ▼ → ENTER → [**V-Position**]
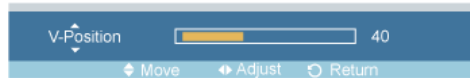
→ ◄, ► → ENTER

Adjusts the screen location vertically.

Auto Adjustment

Note

- This function does not work for this LCD Display.

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼ → ENTER → [**Auto Adjustment**]
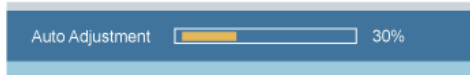
The values of **Fine**, **Coarse**, **Position** are adjusted automatically. By changing the resolution in the control panel, the auto function is performed.

(Available in **PC** mode only)

(Not available in **Dynamic Contrast** mode of **On**.)

Note

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

Signal Balance

Note

- This function does not work for this LCD Display.

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

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼ →▼ → ENTER → [**Signal Balance**]

(Available in **PC** mode only)

(Not available in **Dynamic Contrast** mode of **On**.)

Signal Balance

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼ →▼ → ENTER → [**Signal Balance**] → ENTER → [**Signal Balance**]

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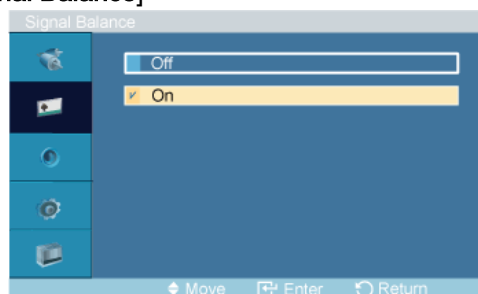
→ ▲ , ▼ → ENTER

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

Signal Control

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

1. **R-Gain**

   MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼→ ▼→ ENTER → [**Signal Balance**] → ENTER → ▼ → [**Signal Control**] → ENTER → [**R-Gain**]

   → ◄, ► → ENTER

2. **G-Gain**

   MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼→ ▼→ ENTER → [**Signal Balance**] → ENTER → ▼→ [**Signal Control**] → ▼ → ENTER→ [**G-Gain**]

   → ◄, ► → ENTER

3. **B-Gain**

   MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼→ ▼→ ENTER → [**Signal Balance**] → ENTER → ▼→ [**Signal Control**] → ▼ → ▼ → ENTER→ [**B-Gain**]

   → ◄, ► → ENTER

4. **R-Offset**

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

   → ◄, ► → ENTER

5. **G-Offset**

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

   → ◄, ► → ENTER

6. **B-Offset**

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MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼→ ▼→ ENTER → [**Signal Balance**] → ENTER → ▼→ [**Signal Control**] → ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**B-Offset**]

→ ◄, ► → ENTER

Size

Note

- This function does not work for this LCD Display.

MENU → ▼→ ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼→ ▼→ ▼→ ENTER → [**Size**]
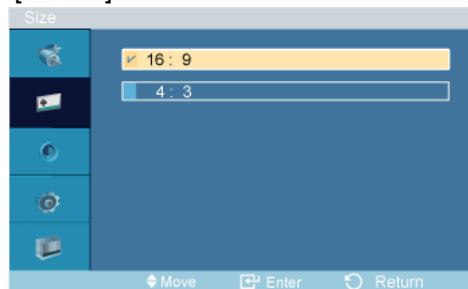
→ ▲ , ▼ → ENTER

The **Size** can be switched.

(Not available in **Dynamic Contrast** mode of **On**.)

1. **16:9**

2. **4:3**

Dynamic Contrast

MENU → ▼→ ENTER → [**Picture**] → ▼ → ▼ → ▼ →▼ →▼→ ▼→ ▼→ ▼→ ENTER → [**Dynamic Contrast**]
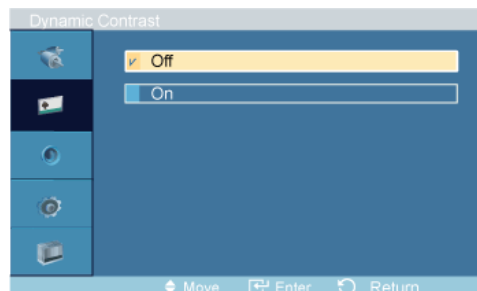
→ ▲ , ▼ → ENTER

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

1. **Off**

2. **On**

Brightness Sensor

MENU → ▼ → ENTER → [**Picture**] → ▼ → ▼ → ▼ → ▼ → ▼ → ▼ → ▼ → ▼ → ▼ → ENTER → [**Brightness Sensor**]
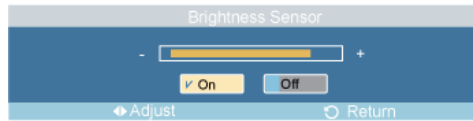
→ ◄, ► →ENTER

Brightness Sensor is to automatically detect distribution of inputted visual signal and adjust to create optimum brightness.

1. **Off**

2. **On**

Sound

Mode

MENU → ▼ →▼ → ENTER → [**Sound**] → ENTER → [**Mode**]
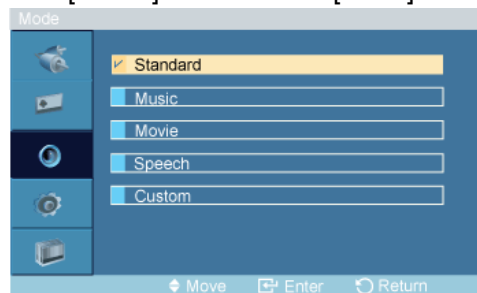
→ ▲ , ▼ → ENTER

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

1. **Standard**

   Selects **Standard** for the standard factory settings.

2. **Music**

   Selects **Music** when watching music videos or concerts.

3. **Movie**

   Selects **Movie** when viewing movies.

4. **Speech**

   Selects **Speech** when watching a show that is mostly dialogue (i.e., news).

5. **Custom**

   Selects **Custom** if you want to adjust the settings according to your personal preferences.

Custom

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

MENU → ▼ →▼ → ENTER → [**Sound**] →▼→ ENTER → [**Custom**]

 Note

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

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

Bass

MENU → ▼ →▼ → ENTER → [**Sound**] →▼→ ENTER → [**Custom**]→ENTER→ [**Bass**]

| Bass | 50 |

→ ◄, ► → ENTER

Emphasizes low frequency audio.

Treble

MENU → ▼ →▼ → ENTER → [**Sound**] →▼→ ENTER → [**Custom**]→▼→ENTER→ [**Treble**]

| Treble | 50 |

→ ◄, ► → ENTER

Emphasizes high frequency audio.

Balance

MENU → ▼ →▼ → ENTER → [**Sound**] →▼→ ENTER → [**Custom**]→▼→▼→ENTER→ [**Balance**]

| Balance | L 50 | R 50 |

→ ◄, ► → ENTER

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

Auto Volume

MENU → ▼ →▼ → ENTER → [**Sound**] →▼→▼→ ENTER → [**Auto Volume**]

Off

On
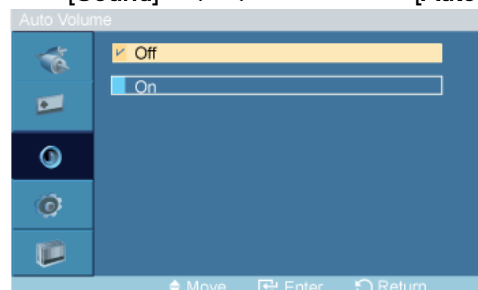
→ ▲ , ▼ → ENTER

Reduces the difference in volume control between broadcasters.

1. **Off**

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2. **On**

SRS TS XT

MENU → ▼ →▼ → ENTER → [**Sound**] →▼→▼→▼→ ENTER → [**SRS TS XT**]
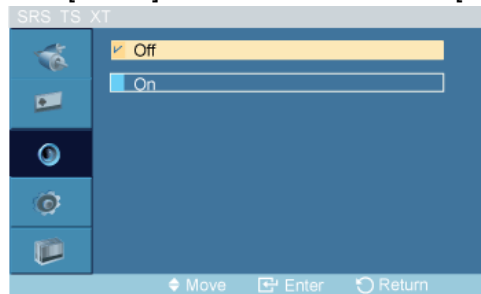
→ ▲ , ▼ → ENTER

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

1. **Off**

2. **On**

 Note

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

Setup

Language

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ENTER → [**Language**]
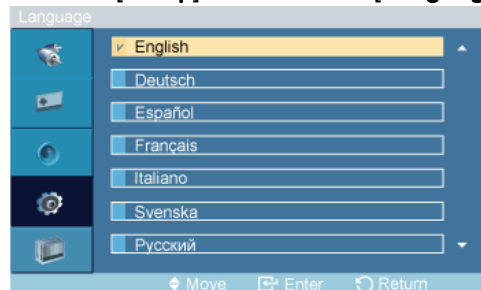
→ ▲ , ▼ → ENTER

You can choose one of 13 languages.

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

 Note

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

Time

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

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼ → ENTER → [**Time**]

Clock Set

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼ → ENTER → [**Time**] → ENTER→ [**Clock Set**]
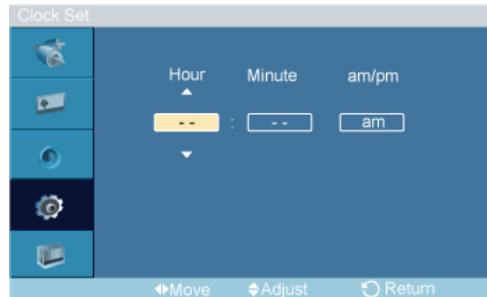
→ ▲ , ▼ / ◄, ► → ENTER

Current Time Setting.

Sleep Timer

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼ → ENTER → [**Time**] → ▼ → ENTER→ [**Sleep Timer**]
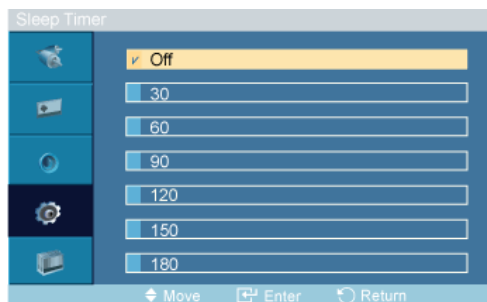
→ ▲ , ▼ → ENTER

Turns the LCD Display off automatically at certain times.

On Timer

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼ → ENTER → [**Time**] → ▼→ ▼ → ENTER→ [**On Timer**]
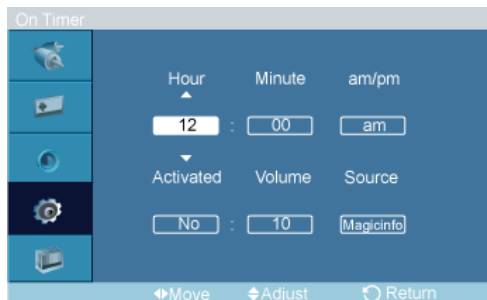
→ ▲ , ▼ / ◄, ► → ENTER

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

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Off Timer

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼ → ENTER → [**Time**] → ▼→ ▼→ ▼ → ENTER
→ [**Off Timer**]
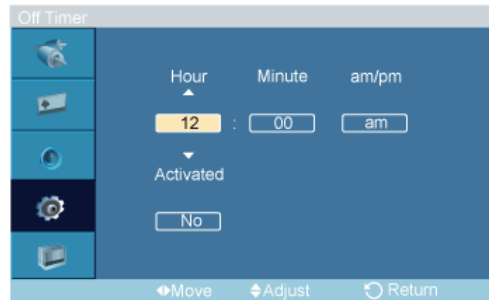
→ ▲ , ▼ / ◄, ► → ENTER

Turns the LCD Display off automatically at a preset time.

Menu Transparency

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼ → ENTER → [**Menu Transparency**]
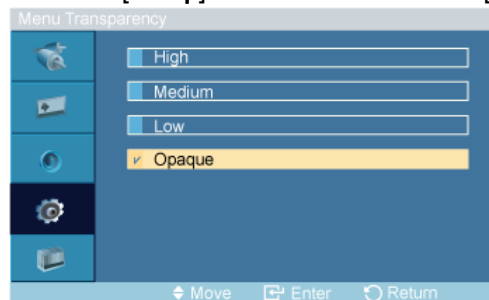
→ ▲ , ▼ → ENTER

Change the transparency of the background of the OSD.

Safety Lock

Change PIN

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼ → ENTER → ▮▮▮▮▮▮▮▮→ ENTER
→ ▮▮▮▮▮▮▮▮
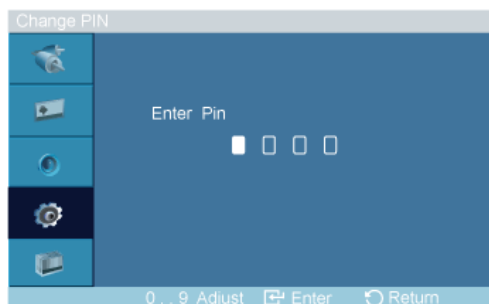
→ [0~9] → [0~9] → [0~9] → [0~9]

The password can be changed.

Note

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

Lock On

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼ → ENTER → ▮▮▮▮▮▮▮▮ → ▼ → ENTER → ▮▮▮▮▮▮

→ [0~9] → [0~9] → [0~9] → [0~9]

This is the function that locks the OSD in order to keep the current settings or to prevent others from adjusting the settings.

Energy Saving

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼→ ▼ → ENTER → [Energy Saving]
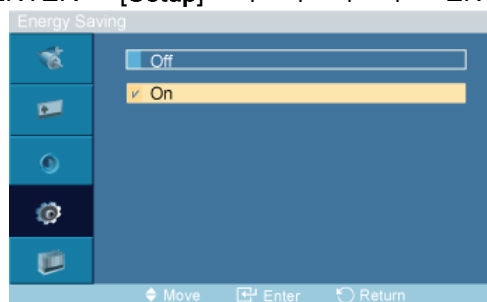
→ ▲ , ▼ → ENTER

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

1. **Off**

2. **On**

 Note

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

HDMI Black Level

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼→ ▼ → ▼ → ENTER → [HDMI Black Level]
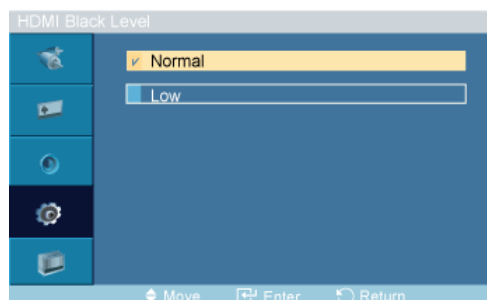
→ ▲ , ▼ → ENTER

When a DVD or set-top box is connected to your TV via HDMI, it may cause a degradation in the screen quality, such as an increase in the black level, a low contrast, or discoloration,

etc., depending on the external device connected. In this case, adjust the screen quality of your TV by configuring the **HDMI black level**.

1. **Normal**

2. **Low**

Video Wall

Note

- This function does not work for this LCD Display.

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

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

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ENTER → [**Video Wall**]

Note

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

Video Wall

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ENTER → [**Video Wall**]→ ENTER → [**Video Wall**]
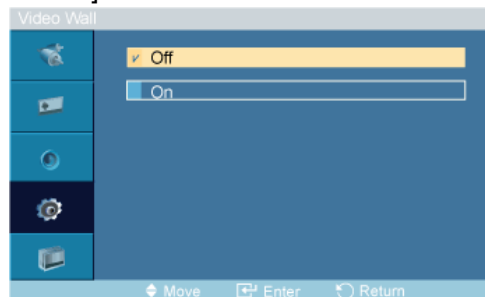
→ ▲ , ▼ → ENTER

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

1. **Off**

2. **On**

Format

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ENTER → [**Video Wall**]→ ▼ → ENTER → [**Format**]

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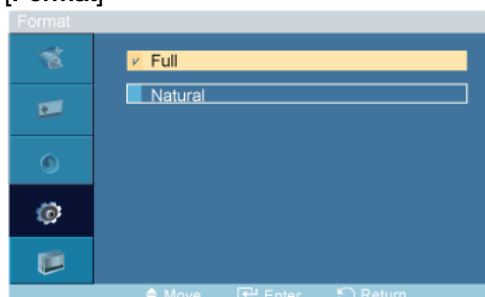
→ ▲ , ▼ → ENTER

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

1. **Full**

   Provides a full screen without any margins.

2. **Natural**

   Displays a natural image with the original aspect ratio intact.

Horizontal

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ENTER → [**Video Wall**]→ ▼ → ▼ → ENTER → [**Horizontal**]
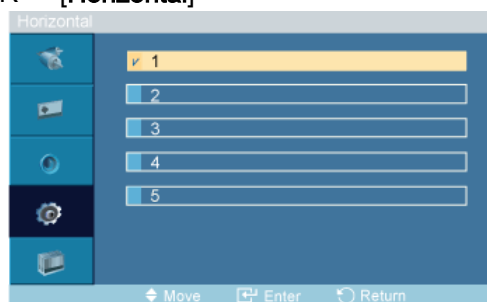
→ ▲ , ▼ → ENTER

Sets how many parts the screen should be divided horizontally.

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

Vertical

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ENTER → [**Video Wall**]→ ▼ → ▼ → ▼ → ENTER → [**Vertical**]
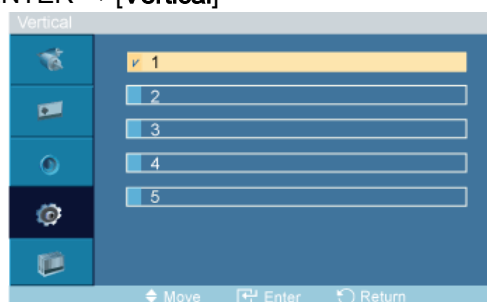
→ ▲ , ▼ → ENTER

Sets how many parts the screen should be divided vertically.

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

Screen Divider

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ENTER → [**Video Wall**]→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Screen Divider**]

The screen can be divided into several images. A number of screens can be selected with a different layout when dividing.

- Select a mode in Screen Divider.

- Select a display in Display Selection.

- The selection will be set up by pressing a number in the selected mode.

Safety Screen

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

- The **Safety Screen** function scrolls the screen for the specified period of time.

- This function is not available when the power is turned off.

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**]

Pixel Shift

Pixel Shift

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ENTER → [**Pixel Shift**] → ENTER → [**Pixel Shift**] → ▲ , ▼ → ENTER
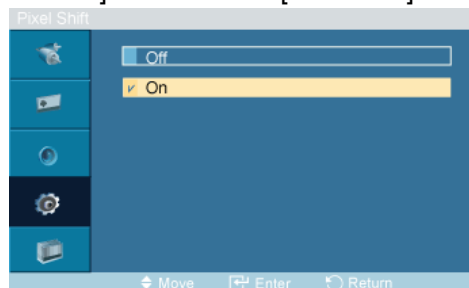
To prevent after-images on the screen you can use this function, so that every minute pixels on the LCD are moved in horizontal or vertical direction.

1. **Off**

2. **On**

 Note

The **Pixel Shift** is not available when **Video Wall** is On.

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Horizontal Dot

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [Safety Screen] → ENTER → [Pixel Shift] → ▼ → ENTER → [Horizontal Dot] → ▲ , ▼ → ENTER
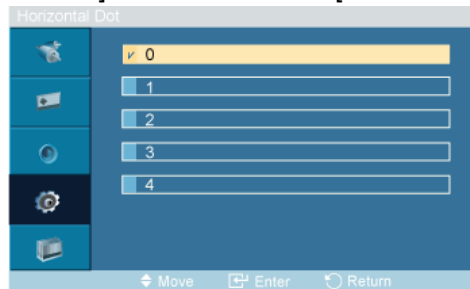
Sets how many pixels the screen moves horizontally.

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

Vertical Line

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [Safety Screen] → ENTER → [Pixel Shift] → ▼ →▼ → ENTER → [Vertical Line] → ▲ , ▼ → ENTER
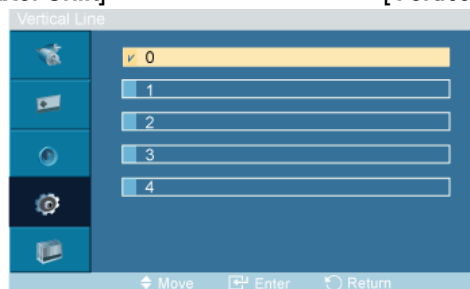
Sets how many pixels the screen moves vertically.

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

Time

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [Safety Screen] → ENTER → [Pixel Shift] → ▼ →▼ →▼ → ENTER → [Time] → ▲ , ▼ → ENTER

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

Can be set between 1 and 10 hours.

Timer

Timer

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ENTER → [**Timer**] → ENTER → [**Timer**] → ▲ , ▼ → ENTER
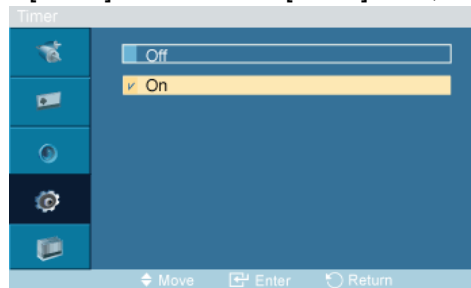
You can set the timer for Screen Burn Protection.

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

1. **Off**

2. **On**

Mode

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ENTER → [**Timer**] → ▼ → ENTER → [**Mode**] → ▲ , ▼ → ENTER
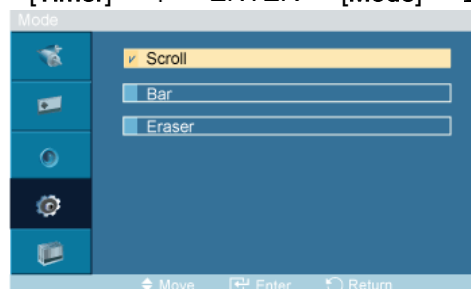
You can change the **Safety Screen** Type.

1. **Scroll**

2. **Bar**

3. **Eraser**

Period

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ENTER → [**Timer**] → ▼ → ▼ → ENTER → [**Period**] → ▲ , ▼ → ENTER

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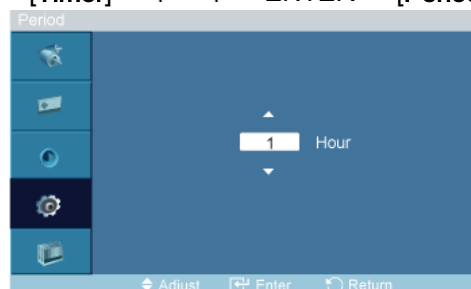
Use this function to set the execution period for each mode set in the timer.

Time

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ENTER → [**Timer**] → ▼ → ▼ → ▼ → ENTER → [**Time**] → ▲ , ▼ → ENTER
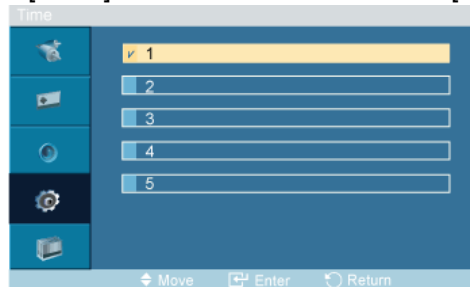
Within the set period of time specify a time for execution.

- **Mode**-**Scroll** : 1~5 **sec**

- **Mode**-**Bar**, **Eraser** : 10~50 **sec**

Scroll

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ▼ → ENTER → [**Scroll**]
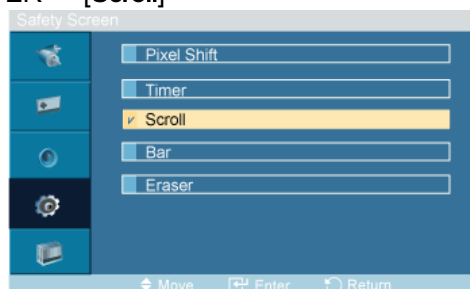
This function prevents after-images on the screen by moving all the pixels on the LCD according to a pattern.

Use this function when there are remaining after-images or symbols on the screen, especially when you displayed a still image on the screen for a long time.

Bar

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ▼ → ▼ →ENTER → [**Bar**]
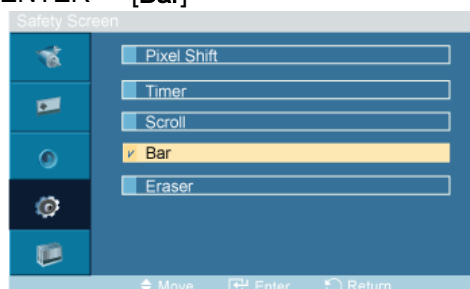
This function prevents after-images on the screen by moving long black and white vertical lines.

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Eraser

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ENTER → [**Safety Screen**] → ▼ → ▼ → ▼ → ▼ →ENTER → [**Eraser**]

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

Resolution Select

Note

• This function does not work for this LCD Display.

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →ENTER → [**Resolution Select**]
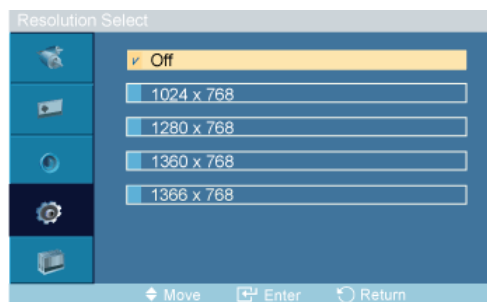
→ ▲ , ▼ → ENTER

When the picture is not displayed properly on the screen when setting the graphics card resolution of the computer to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768@ 60Hz or 1366 x768 @ 60Hz, by using this function(Resolution Select), you can have the picture displayed on the screen in the specified resolution.

Note

Available in **PC** mode only

1. **Off**

2. **1024 X 768**

3. **1280 X 768**

4. **1360 x 768**

5. **1366 X 768**

Note

Selecting the menu is only allowed when the graphics resolution is set to 1024 x 768 @ 60Hz, 1280 x 768 @ 60Hz, 1360 x 768@ 60Hz or 1366 x768 @ 60Hz.

Power On Adjustment

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ENTER → [**Power On Adjustment**]

→ ▲ , ▼ → ENTER

Adjusts the Power On time for the screen.

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

Side Gray

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ▼→ ENTER → [**Side Gray**]
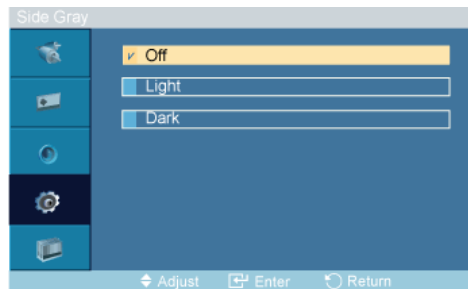
→ ▲ , ▼ → ENTER

Select the brightness of the grey for the screen background.

1. **Off**

2. **Light**

3. **Dark**

Reset

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

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ▼→ ▼ → ENTER → [**Reset**]

Image Reset

Note

- This function does not work for this LCD Display.

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ▼→ ▼
→ ENTER → [**Reset**]→ ENTER → [**Image Reset**]

→ ◄, ►→ ENTER

Note

Available in **PC** mode only

Note

The Reset function is not available when **Video Wall** is **On**.

Color Reset

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ▼→ ▼
→ ENTER → [**Reset**]→ ▼→ ENTER → [**Color Reset**]
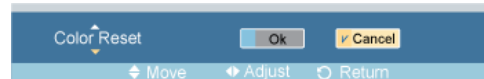
→ ◄, ► → ENTER

OSD Rotation

MENU → ▼ →▼ →▼ → ENTER → [Setup] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ▼→ ▼
→ ▼→ ▼→ ENTER → [OSD Rotation]
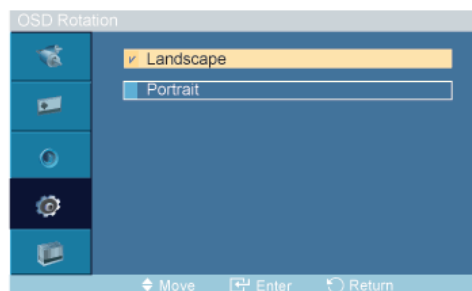
→ ◄, ► → ENTER

OSD Rotate

1. **Landscape**

2. **Portrait**

Lamp Control

MENU → ▼ →▼ →▼ → ENTER → [**Setup**] → ▼→ ▼→ ▼→ ▼ → ▼ → ▼ → ▼ → ▼ →▼→ ▼→ ▼
→ ▼→ ENTER → [**Lamp Control**]

→ ◄, ► → ENTER

Adjusts the inverter lamp in order to reduce energy consumption.

 Note

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

Multi Control

Multi Control

Assigns an individual ID to the SET.

MENU → ▼ →▼ →▼ → ▼ → ENTER → [**Multi Control**] → ENTER
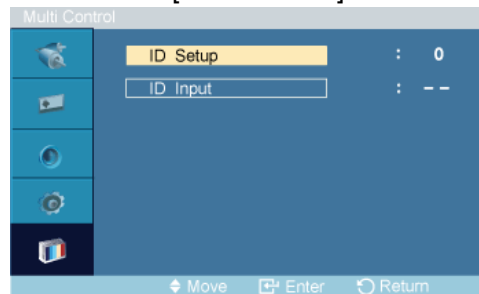
→▲ , ▼→ [0~9]

- **ID Setup**

  Assigns distinctive IDs to the SET.

- **ID Input**

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

MagicInfo

 Note

- For **MagicInfo**, a remote control is available for **MagicInfo**. However, it is recommended using a separate USB keyboard.

- For **MagicInfo** in Device mode, moving external devices while booting may cause errors. Set up external devices only if the LCD Display turns on.

- Do not unplug the LAN cable used for the network (ex: video display). Otherwise, the program (MagicInfo) may stop. If you do unplug the cable, restart the system.

- Do not unplug the LAN cable used by an USB device (ex: video display). Otherwise, the program (MagicInfo) may stop.

- To access other sources, press the SOURCE button in **MagicInfo**.

- The preset password for the LCD Display is "000000".

- The server program's Power-On option works only if the LCD Display's power is completely shut off.

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

- In the OSD image of **MagicInfo**, Network mode is the same as Device.

- When using **MagicInfo** with the MagicInfo Server Program: perform Network mode.

- When using **MagicInfo** with the device directly connected to LCD Display : execute Device mode.

- Press ESC to directly go to the **MagicInfo** Window screen.

- To setup **MagicInfo** on a Windows screen, a keyboard and mouse are required.

- To setup **MagicInfo** on a Windows screen, refer to the MagicInfo Server Help.

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

- For pivoted LCD Displays, ticker transparency is not supported.

- For pivoted LCD Displays, a screen resolution of up to 720*480(SD) is supported for movies.

- For drive D:, **EWF** is not applied.

- When the contents of Setup have been changed when **EWF** is in the **Enable** state, to save the changes in the disk, you must **Commit** them.

- By selecting **Disable**, **Enable** or **Commit**, the system is restarted.

MagicInfo

1. Select Application - step 1
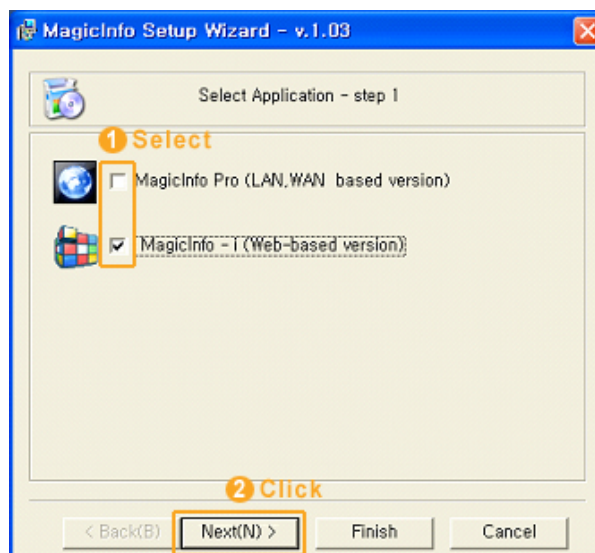
2. Select TCP/IP - step 2
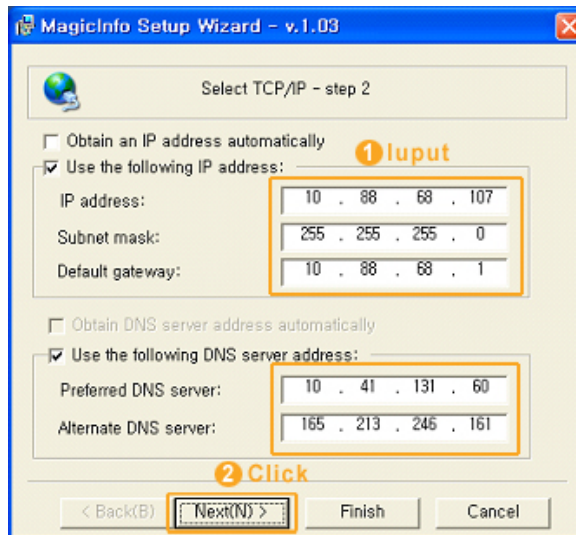
3. Select Language -step 3

4. Select Screen Type - step 4
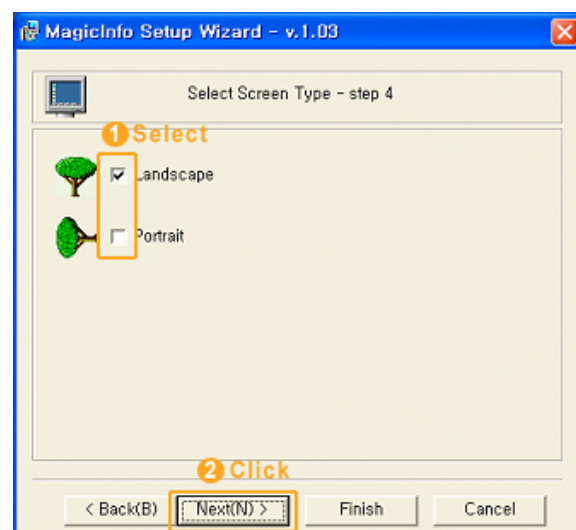
5. Setup Information
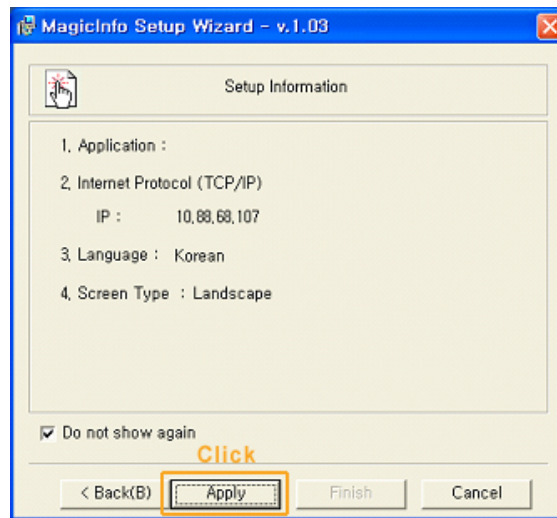
Note

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

Troubleshooting

Self-Test Feature Check

Note

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

Maintenance and Cleaning

1) Maintaining the LCD Display Case.

Clean with a soft cloth after disconnecting the power cord.

- Do not use benzene, thinner or other flammable substances, or a wet cloth.

2) Maintaining the Flat Panel Display Screen.

Clean with a soft cloth (cotton flannel) smoothly.

- Never use acetone, benzene or thinner.

  (They may cause flaws or deformation of the screen surface.)

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

Check List

Note

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

- For more network-related information, refer to the MagicInfo Troubleshooting section.

Problems related to the Screen

Note

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

Q: The screen is blank and the power indicator is off.

A: Ensure that the power cord is firmly connected and the LCD Display is on.

Q: The image is not clear; picture is blurred.

A: Run Frequency **Coarse** and **Fine** tuning.

A: Set the resolution and frequency to the recommended ranges.

Q: The image is too light or too dark.

A: Adjusts the **brightness** and **contrast**.

(Refer to the **Brightness**, **Contrast**)

Q: The screen color is inconsistent.

A: Adjust color using **Custom** under OSD Color Adjustment menu.

Q: The color image is distorted by dark shadows.

A: Adjust color using **Custom** under OSD Color Adjustment menu.

Q: The color white is poor.

A: Adjust color using **Custom** under OSD Color Adjustment menu.

Q: The power Indicator blinks green.

A: The LCD Display is currently saving the changes made to the settings to the OSD memory.

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

A: Press a key on the keyboard.

Q: The screen is blank and it is blinking.

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

Problems related to Audio

 Note

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

Q: No sound.

A: Ensure that the audio cable is firmly connected to both the audio-in port on your LCD Display and the audio-out port on your sound card.

A: Check the volume level.

Q: The sound level is too low.

A: Check the volume level.

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

Q: The sound is too high or too low.

A: Adjusts the **Treble** and **Bass** to the appropriate levels.

Problems related to the Remote Control

 Note

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

Q: The remote control buttons do not respond.

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A: Check the polarities (+/-) of the batteries.

A: Check if the batteries are empty.

A: Check if the power is on.

A: Check if the power cord is securely connected.

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

Q & A

Q: How can I change the frequency?

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

   Note

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

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

A: Disconnect the power cord and then clean the LCD Display with a soft cloth, using either a cleaning solution or plain water.

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

Q: How can I play the video?

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

Note

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

Specifications

General

General

Model Name	SyncMaster 460TMn

LCD Panel

Size	46 inches (116cm)
Display area	1018.08 mm (H) x 572.67 mm (V)
Pixel Pitch	0.53025 mm (H) x 0.53025 mm (V)

Synchronization

Horizontal	30~81kHz
Vertical	56~85Hz

Display Color

16.7 M

Resolution

Optimum resolution	1920x1080@60Hz
Maximum resolution	1920x1080@60Hz

Input Signal, Terminated

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

0.7 Vp-p ± 5%

Separate H/V sync, Composite, SOG

TTL level (V high≥ 2.0 V, V low ≤ 0.8 V)

Maximum Pixel Clock

165MHz (Analog,Digital)

Power Supply

This product supports 100 - 240 V.

Since the standard voltage may differ from country to country, please check the label on the back of the product.

Signal connectors

HDMI, LAN, USB(4port), Stereo Out, Serial Port

Dimensions (W x H x D) / Weight

712.0 x 1947.5 x 862.1 mm / 28.0 x 76.7 x 33.9 inches / 97.7kg / 215.4 lbs

Environmental considerations

Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C) (With Network Model)

Environmental considerations

	Humidity : 10 % ~ 80 %, non-condensing
Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C)
	Humidity : 5 % ~ 95 %, non-condensing

Plug and Play Capability

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

Dot Acceptable

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

For example, the number of TFT-LCD sub pixels contained in this product are 6,220,800.

Note

Design and specifications are subject to change without prior notice.

Class A (Information Communication equipment for industrial use)

Attention dealers and users. This device is registered for EMC requirements for industrial use (Class A) and can be used in areas other than general households.

PowerSaver

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

State	Normal Operation	Power saving mode	Power off (Power-Button)
Power Indicator	On	Blinking	Off
Power Consumption	305watts	less than 5watts	less than 0 watts

Preset Timing Modes

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

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 848 x 480	31.020	60.000	33.750	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 768	47.776	59.870	79.500	-/+
VESA, 1280 x 960	60.000	60.000	108.000	+/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1366 x 768	47.712	59.790	85.500	+/+
VESA,1600 x 1200	75.000	60.000	162.000	+/+
VESA,1920 x 1080	67.500	60.000	148.000	+/+

Horizontal Frequency

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

Vertical Frequency

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

Information

For Better Display

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

- Resolution: 1920 x 1080

- Vertical frequency (refresh rate): 60 Hz

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

- For example, the number of TFT-LCD sub pixels contained in this product are 6,220,800.

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

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

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

PRODUCT INFORMATION (Image Retention Free)

What is Image Retention ?

Image retention may not occur when a LCD panel is operated under normal conditions.

Normal conditions are defined as continuously changing video patterns. When the LCD panel is operated for a long time with a fixed pattern (over 12 hours), there may be slight difference in voltage between electrodes that work the liquid crystal (LC) in a pixel. The voltage difference between electrodes increases with time, forcing the liquid crystal to lean. When this occurs, the previous image may be seen when the pattern is changed. To prevent this, the accumulated voltage difference must be decreased.
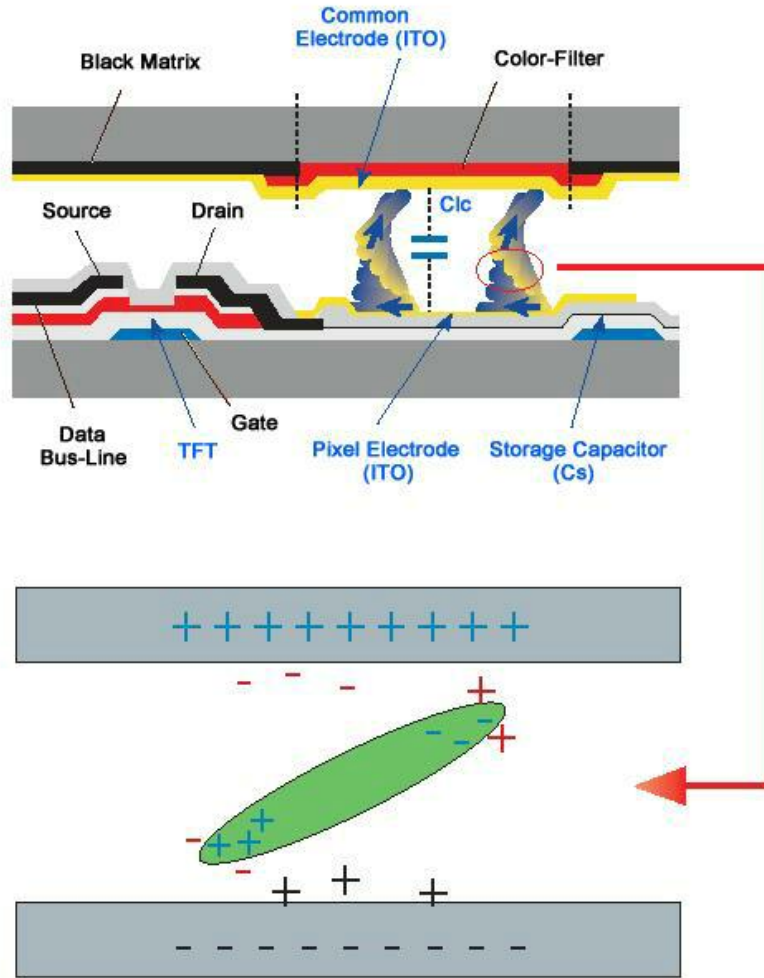
⏩ *Power Off, Screen Saver, or Power Save Mode*

- Turn the power off for 4 hours after 20 hours in use

- Turn the power off for 2 hours after 12 hours in use

- Set the Monitor to power off with the PC Display Properties Power Scheme.

- Use a Screen saver if possible - Screen saver in one color or a moving image is recommended.

⏩ *Change the Color Information periodically*
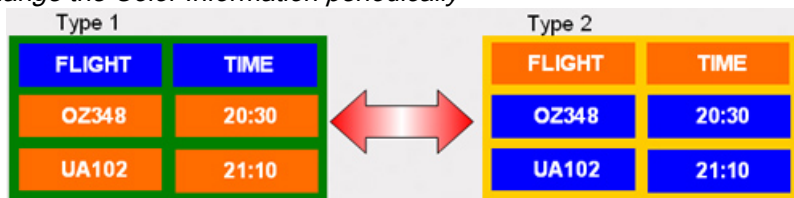
📝 **Note**

Use Two different colors

Rotate the Color Information with 2 different colors every 30 minutes.

- Avoid using a combination of characters and background color with large difference in luminance.

  Avoid using Grey colors, which can cause Image retention easily.

  Avoid: Colors with big difference in luminance (Black & White, Grey)

🔵 *Change the characters color periodically*

- Use Bright colors with little difference in luminance.

  - Cycle : Change the characters color and background color every 30 minutes

- Every 30 minutes, change the characters with movement.

- All area display Moving image together with Logo periodically.

  - Cycle: Display moving image together with Logo for 60 seconds after 4 hours in use.

- The best way to protect your monitor from Image retention is to turn Power off, or set your PC, or System to operate a Screen Saver program when you are not using it. Also Warranty service will be limited based on instruction guide.

🔵 *Apply the Screen Scroll function on Product*

- Apply the Screen Scroll function

  - Symptom: Horizontal Bar with Black Color move up and down.

🖉 **Note**

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

🔵 *Apply the Screen Pixel function on Product*

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- Apply the Screen Pixel function

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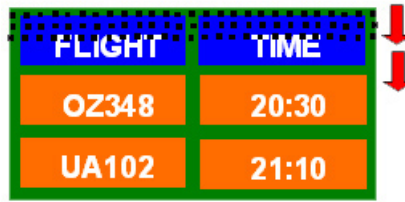
- Apply the Screen Bar function

  - Symptom: Horizontal / Vertical Bar with Black Color move up and down.

Note

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

Apply the Screen Erasing function on Product

- Apply the Screen Erasing function

  - Symptom: 2 Vertical blocks move with erasing the display
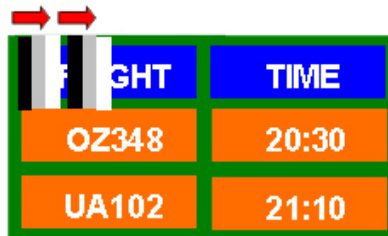
Note

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

Appendix

Contact SAMSUNG WORLDWIDE

⬚ Note

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

North America

U.S.A	1-800-SAMSUNG(726-7864)	http://www.samsung.com
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TRINIDAD & TO-BAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com
VENEZUELA	0-800-100-5303	http://www.samsung.com

Europe

AUSTRIA	0810 - SAMSUNG (7267864, € 0.07/min)	http://www.samsung.com
BELGIUM	02-201-24-18	http://www.samsung.com/be (Dutch) http://www.samsung.com/be_fr (French)
CZECH	800 - SAMSUNG (800-726786)	http://www.samsung.com

Distributor pro Českou republiku:
Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8

DENMARK	70 70 19 70	http://www.samsung.com

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JORDAN	800-22273	
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TURKEY	444 77 11	http://www.samsung.com
U.A.E	800-SAMSUNG(726-7864)	http://www.samsung.com

Terms

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

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Vertical Frequency	The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called the Vertical Frequency or Refresh Rate. Unit: Hz Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz.
Horizontal Frequency	The time to scan one line connecting the right edge to the left edge of the screen horizontally is called the Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz
Interlace and Non-Interlace Methods	Showing the horizontal lines of the screen from the top to the bottom sequentially is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.
Plug & Play	This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.
Resolution	The number of horizontal and vertical dots used to compose the screen image is called the 'resolution'. This number shows the accuracy of the display. A high resolution is good for performing multiple tasks as more image information can be shown on the screen. Example: If the resolution is 1920 x 1080, this means the screen is composed of 1920 horizontal dots (horizontal resolution) and 1080 vertical lines (vertical resolution).

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