

**SAMSUNG**

# **TFT-LCD MONITOR**

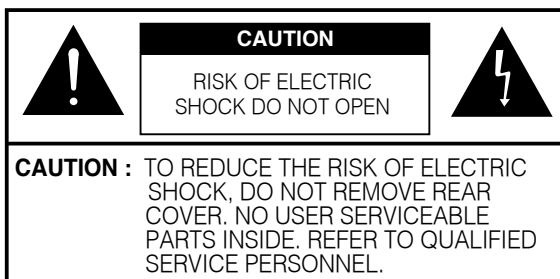
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**SMT-2231**

User Guide



# IMPORTANT SAFETY INSTRUCTIONS



### Graphic Symbol Explanation

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



### Warning - To Prevent Fire or Shock Hazard, Do Not Expose This Monitor To Rain or Moisture.

- 1. Read Instructions :** All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions :** The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings :** All warnings on the monitor and in the operating instructions should be adhered to.
- 4. Follow Instructions :** All operating and user instructions should be followed.
- 5. Cleaning :** Unplug this monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. Exception. A monitor that is meant for uninterrupted service and that for some specific reason, such as the possibility of the loss of an authorization code for a CATV converter, is not intended to be unplugged by the user for cleaning or any other purpose may exclude the reference to unplugging the monitor in the cleaning description otherwise required in Item 5.
- 6. Attachments :** Do not use attachments not recommended by Samsung as they may cause hazards.
- 7. Water and Moisture :** Do not use this monitor near water for example, near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool and the like.
- 8. Accessories :** Do not place this monitor on an unstable cart, stand, tripod, bracket or table. The monitor may fall, causing serious injury to a child or adult and serious damage to the appliance. Use only with a cart, stand, tripod, bracket or table

recommended by Samsung, or sold with the monitor. Any mounting of the monitor should follow Samsung's instructions and should use a mounting accessory recommended by Samsung.

- 9. Ventilation :** Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the monitor and to protect it from overheating and these openings should never be blocked by placing the monitor on a bed, sofa, rug or other similar surface. This monitor should never be placed near or over a radiator or heat register. This monitor should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or Samsung's instructions have been adhered to.
- 10. Installation :** Do not install near any heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 11. Power Sources :** This monitor should be operated only from the type of power source indicated on the making label. If you are not sure of the type of power supply to your installation site, consult your Samsung dealer or local power company.
- 12. Grounding or Polarization :** For monitors equipped with a 3-wire grounding-type plug having a third (grounding) pin. This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
- 13. Power :** Cord Protection-Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the monitor.
- 14. Lightning :** For added protection for this monitor during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the monitor due to lightning and power-line surges.
- 15. Overloading :** Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
- 16. Object and liquid Entry :** Never push objects of any kind into this monitor through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the monitor.
- 17. Servicing :** Do not attempt to service this monitor yourself as opening or removing cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 18. Handling:** Do not put vessels such as vases filled with liquids on this monitor.

- 19. Damage Requiring Service :** Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions.
- When the power-supply cord or plug is damaged.
  - If liquid has been spilled or objects have fallen into the monitor.
  - If the monitor has been exposed to rain or water.
  - If the monitor does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and require extensive work by a qualified technician to restore the monitor to its normal operation.
  - If the monitor has been dropped or the cabinet has been damaged.
  - When the monitor exhibits a distinct change in performance- this indicates a need for service.

**20. Replacement Parts :** When replacement parts are required, be sure the service technician has used replacement parts specified by Samsung or have the same characteristics as the original parts.  
Unauthorized substitutions may result in fire, electric shock or other hazards.

**21. Safety Check :** Upon completion of any service or repairs to this monitor, ask the service technician to preform safety checks to determine that the monitor is in proper operating condition.

#### NOTICE

**(Hg) (Within a circle) LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS**  
For details see [lamprecycle.org](http://lamprecycle.org), [eire.org](http://eire.org), or call 1-800-Samsung

#### Warning

This equipment has been tested and found to comply the limits for a class A digital device, pursuant to part 15 of the FCC Rules and ICES-003 of Industry Canada.  
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.  
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### User-Installer Caution

Your authority to operate this FCC verified equipment could be voided if you make changes or modifications not expressly approved by the party responsible for compliance to part 15 of the FCC Rules.

#### Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions : (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions.

You may find the booklet called how to Identify and Resolve Radio/TV Interference Problems helpful.

This booklet was prepared by the Federal Communications Commission.

It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4.

#### IC Compliance Notice

This Class (A) digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

This Class A digital apparatus complies with Canadian ICES-003.

#### Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

#### CALIFORNIA USA ONLY

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

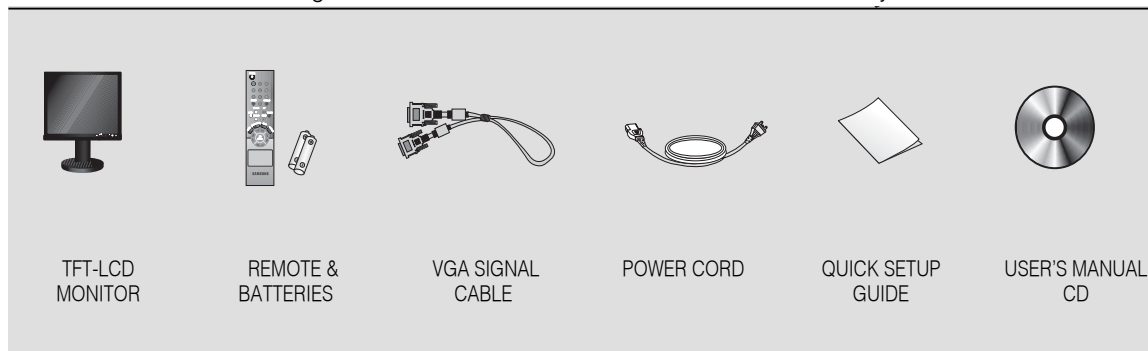
"Perchlorate Material - special handling may apply, See [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)."

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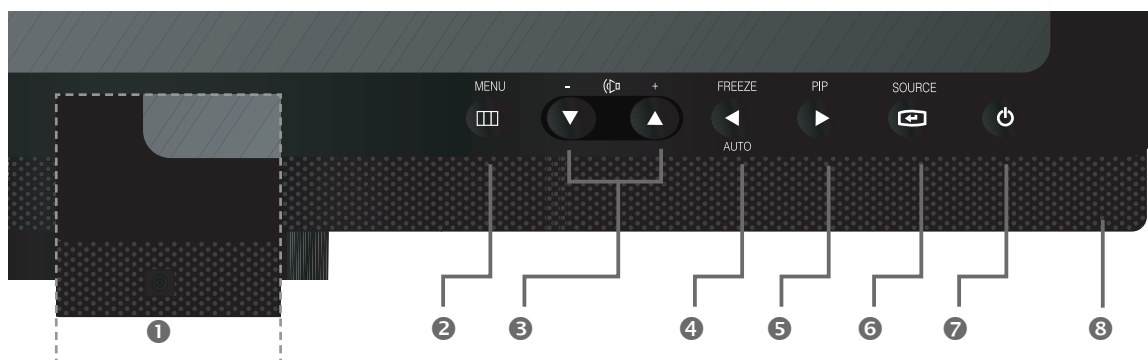
## Unpacking

Remove the package cover and place the product on a flat and secure surface or in the installation location. Check whether all the following devices and accessories are included with the main system.



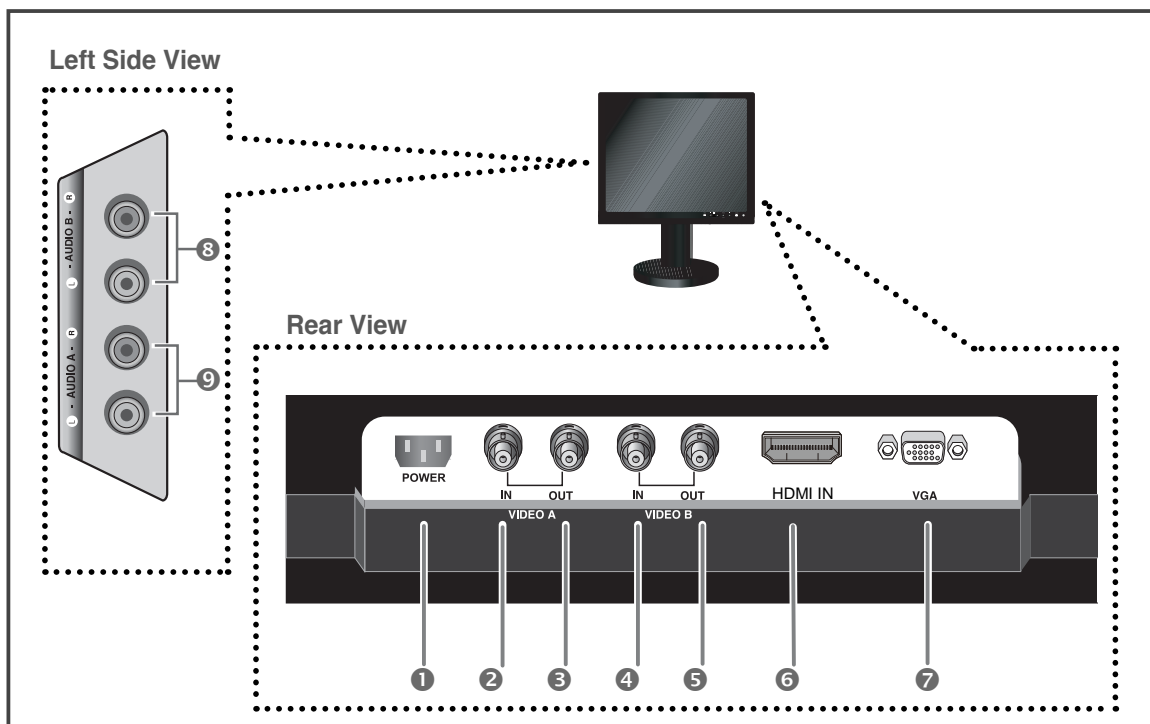
## Viewing the Control Panels

### Front View



- 1 IR Sensor**  
Remote controller sensor.
- 2 MENU**  
Activates and exits the On Screen Display.
- 3 - (VOLUME) +/-**  
▲ : Moves the OSD menu or increases the volume level.  
▼ : Moves the OSD menu or decreases the volume level.
- 4 ◀ / FREEZE/AUTO**  
Decrease the level of active function and move to the previous menu.  
Still picture function in Video mode when there is no OSD menu on the screen.  
Also, activates Auto adjustment function in the **VGA** mode when you press the **Auto** button with the OSD Menu off.
- 5 ▶ / PIP**  
Increases the level of active function, and selects OSD menu. Also, Activates PIP function in the **VGA** Mode.
- 6 ENTER (ENTER) / SOURCE**  
Selects input source, activates a highlighted menu item.
- 7 (POWER) ON/OFF**  
Turns the power on or off.  
There will be a few seconds delay before the display appears.  
The power LED lights with blue when the power is turned on. The power is turned off by pressing the power switch again and the power LED goes off.
- 8 Speaker**

## Rear & Left Side View



### Rear View

- ❶ **POWER**  
AC power input.
- ❷ **VIDEO-A IN**  
Composite signal input for VIDEO A.
- ❸ **VIDEO-A OUT**  
Video looping output for VIDEO A.
- ❹ **VIDEO-B IN**  
Composite signal input for VIDEO B.
- ❺ **VIDEO-B OUT**  
Video looping output for VIDEO B.
- ❻ **HDMI IN**  
HDMI signal input.
- ❼ **VGA**  
VGA signal input

### Left Side View

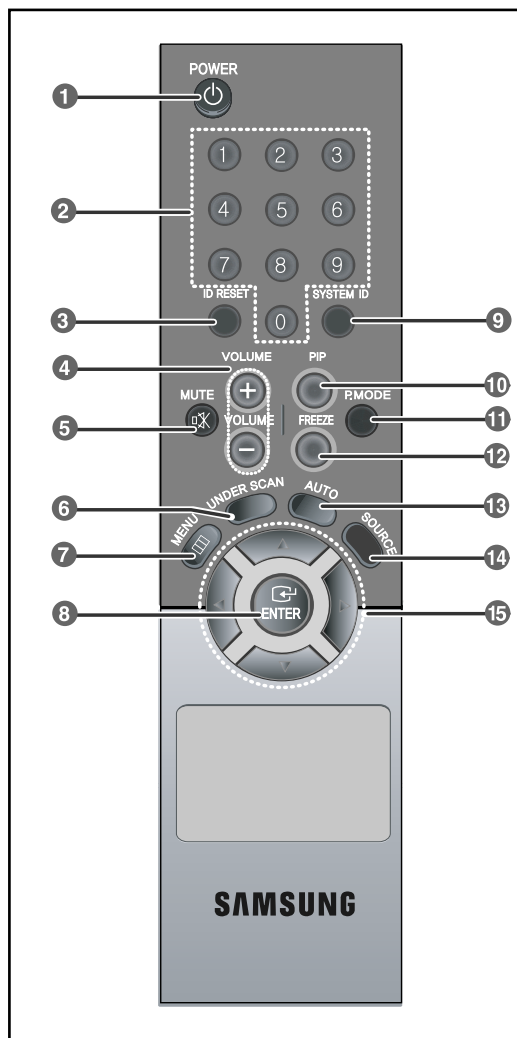
- ❽ **AUDIO-B**  
Audio-B input : Right (RED), Left (White)
- ❾ **AUDIO-A**  
Audio-A input : Right (RED), Left (White)

### Note

When you don't use video looping output ,please unplug video looping output cable or connect a 75Ω terminal resistance at the video looping output jack .Otherwise,it will cause the signal scope oversized which bring about brightness distortion.

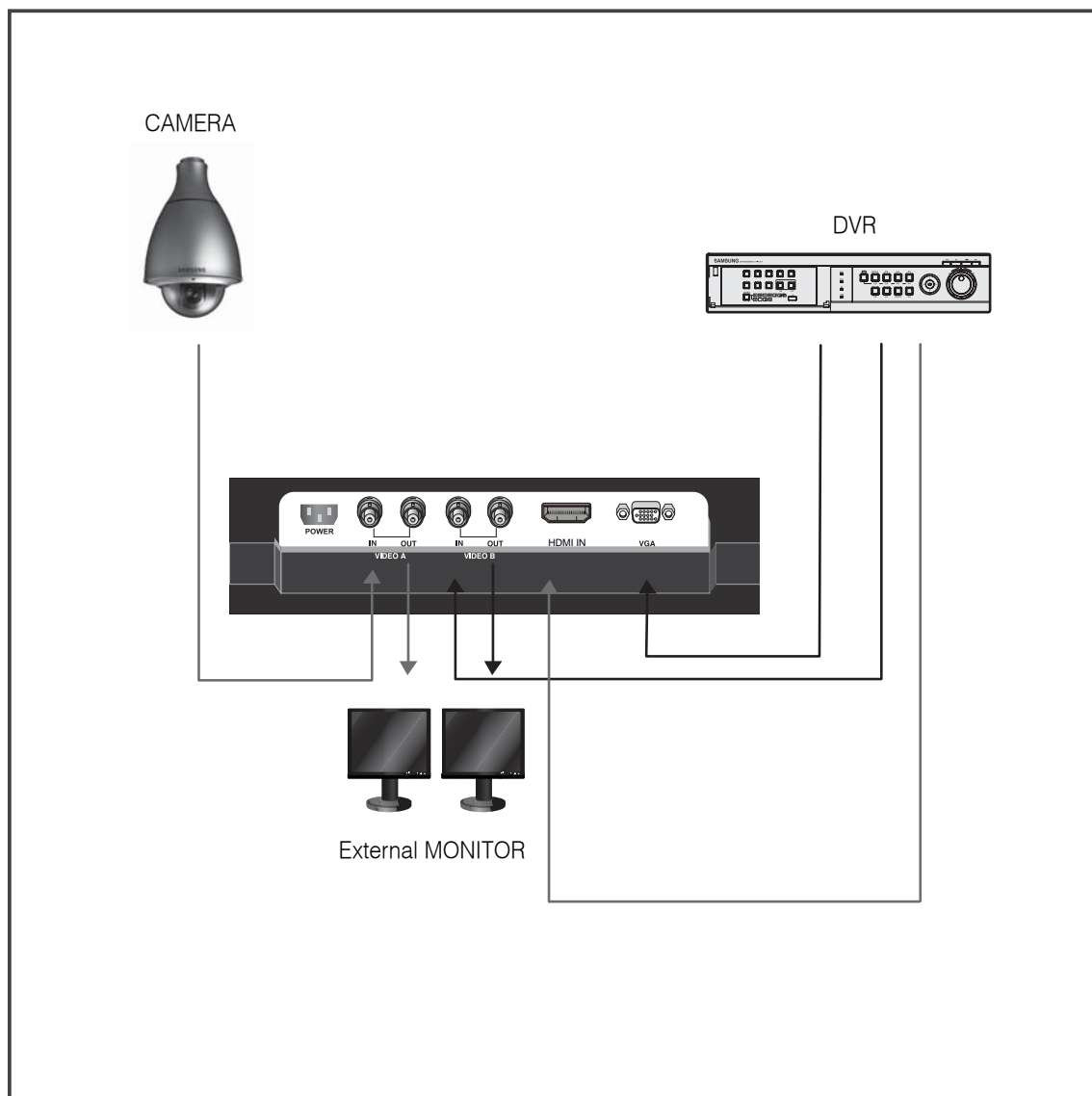
## Remote Controller

- 1 POWER**  
Turns the Power On or Off.  
There will be a few seconds delay before display appears.
- 2 Number button**  
Changes the SYSTEM ID for remote controller.  
With the SYSTEM ID button pressed, entered the desired NUMBER by pressing the corresponding button(0~9) to set up the Remote Controller ID
- 3 ID RESET**  
Resets 01(default value) for the remote control ID.
- 4 VOLUME +, -**  
Adjusts the audio volume.
- 5 MUTE**  
Press to mute the sound temporarily.  
Displayed on the bottom left of the screen.  
Press the MUTE button again to cancel the Mute function. Alternatively press the - or + button to cancel the Mute function.
- 6 UNDER SCAN**  
Displays the entire video signal on the screen.
- 7 MENU**  
Open the on-screen menu and exit from the menu screen or close screen adjustment menu.
- 8 ENTER**  
Activates a highlighted menu item.
- 9 SYSTEM ID**  
Setting the SYSTEM ID of remote controller.  
Refer to 2 Number button.
- 10 PIP - Available in VGA Mode**  
Push the PIP button to turn PIP screen On/Off.
- 11 P.MODE - Available in Video A/B, S-Video Mode**  
Press to select a pre-defined Picture Mode of the monitor or to change the picture atmosphere as required. When you press this button, current mode is displayed on the lower center of the screen.  
The monitor has three auto matic picture settings that are preset at the factory. Then push button again to circle through available reconfigured modes.  
( Dynamic, Standard, Movie)
- 12 FREEZE - Available in Video A/B, S-Video Mode**  
Press the button once to freeze the screen. Press it again to unfreeze.
- 13 AUTO - Available In VGA mode Only**  
Adjusts the screen display automatically.
- 14 SOURCE**  
Press the 'SOURCE' button to change the input signal source.  
Changing the source is allowed only in external devices that are connected to the monitor at the time.
- 15 ▼▲/◀▶ buttons**  
Moves from one menu item to another horizontally, vertically or adjusts selected menu values.



## Connecting to External Devices.

The product can be connected to an external device such as Camera, DVR, External Monitor, etc.

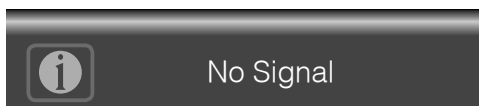




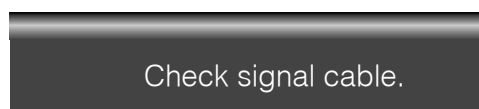
## OSD Menu Configurations

### No Signal Display

When there is no connection at the VGA and Video input, the On Screen Display will show this message.



<Video mode>



<VGA mode>

### OSD Menu Selection

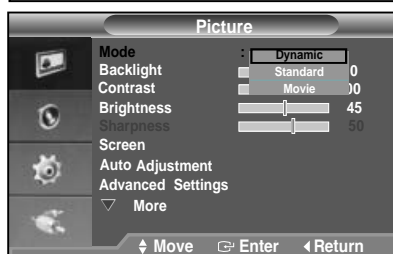
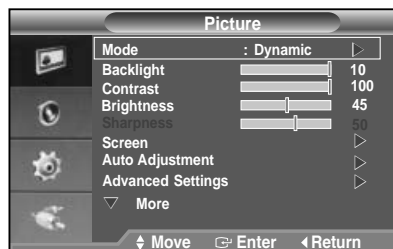
1. Press the MENU button to see the main menu.
2. Press ▼/▲ and ENTER button to select the main menu.
3. Press ▼/▲ and ENTER (or ►) button to select the sub menu.
4. Press ▼/▲ and ENTER (or ►) button to select setting. (Or press ◀/▶ button to select setting)
5. Press the MENU button to exit.

**NOTE1:** Press the ◀ button to return to the previous screen.  
Press the MENU button to exit .

**NOTE2:** The OSD display will be disappear after 2 minutes if there is no button input.

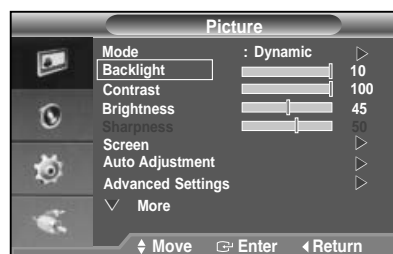
### Picture Menu

#### ► Mode : Dynamic, Standard, Movie



1. Press the MENU button to select the Picture menu.
  2. Press the ENTER or ► button to select the Mode menu.
  3. Press the ENTER or ► button.
  4. Press the ▼/▲ and ENTER button to select the mode you want. (Dynamic, Standard, Movie )
  5. Press the MENU button to exit.
- ※ You can return to the factory defaults picture settings by selecting the "Reset".

#### ► Custom : Backlight, Contrast, Brightness, Sharpness

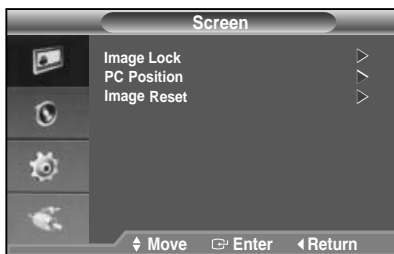


1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ button to select the setting you want. (Backlight, Contrast, Brightness, Sharpness)  
Press the ENTER button.

4. Press the ◀/▶ and the ENTER button to adjust the setting value and save.
5. Press the MENU button to exit.
- ※ In VGA Mode, "Sharpness" can not be adjusted.

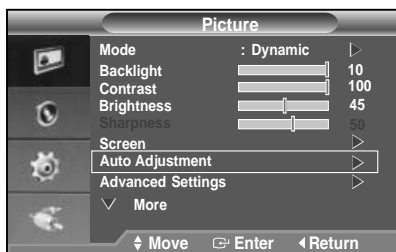
## ► Screen

### Image Lock , PC Position , Image Reset



1. Press the MENU button to select the Picture menu.
  2. Press the ENTER or ► button.
  3. Press the ▼/▲ and ENTER button to select the Screen menu .
  4. There are 3 sub menu:Image Lock,PC Position, Image Reset.
  5. Press the ENTER or ►button.Then select "Coarse" or "Fine" menu.Press the ◀/▶ and the ENTER button to adjust thesetting value and save.
  6. Press the MENU button to exit.
- Only in VGA Mode, "Screen" can be adjusted.

## ► Auto Adjustment



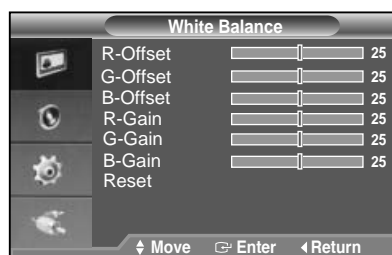
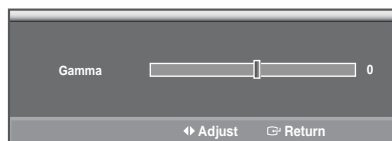
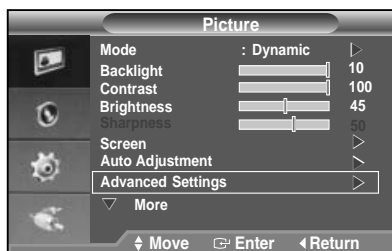
1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Auto Adjustment menu.
4. It will be adjusted automatically
5. Press the MENU button to exit.

### ※ Auto Adjustment (Adjusting the PC Screen Automatically)

**Auto adjustment allows the PC screen of set to self-adjust to the incoming PC video signal. The values of fine, coarse and position are adjusted automatically.**

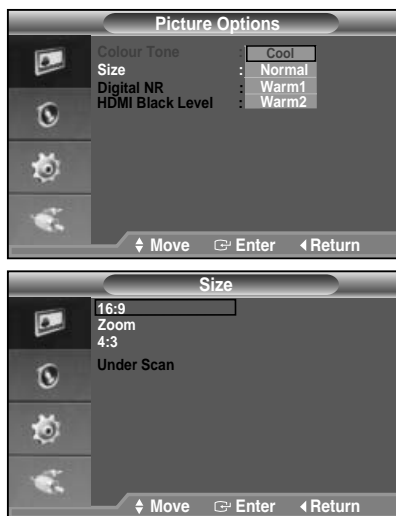
## ► Advanced Settings

### Gamma, White Balance



1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Advanced Settings menu .
4. Press the ENTER or ► button two times. Press the ◀/▶ and the ENTER button to adjust thesetting value and save of the Gamma menu.
5. Select the White Balance menu and then press the ENTER or ► button.
6. It includes:R-Offset,G-Offset,B-Offset,R-Gain, G-Gain,B-Gain and Reset. Select these menus in turn by pressing▼/▲ button.
7. Press the ENTER or ► button when selecting the menu:R-Offset,G-Offset,B-Offset,R-Gain, G-Gain,B-Gain.
8. Press the ◀/▶ and the ENTER button to adjust the setting value and save.
9. Press Reset menu, the menu R-Offset,G-Offset, B-offset,R-Gain,G-Gain,B-Gain will return back to the default value 25.
10. Press the MENU button to exit.

## ► Picture Options: Colour Tone/Size/ Digital NR/HDMI Black Level



1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Picture Options menu.
4. There are 4 sub menu: Colour Tone, Size, Digital NR, HDMI Black Level.
5. Press the ENTER or ► button. Select the mode: Cool, Normal, Warm1, Warm2 by pressing ▼/▲ button and ENTER button.
6. Select the Size menu, you can adjust picture in turn by 16:9, Zoom, 4:3, Under Scan.
7. Only in the Video mode, the menu Size can be adjusted.
8. The Digital NR menu includes : Off, Low, Medium, High, Auto. Only in the Video mode, the menu Digital NR can be adjusted. Its default value is Medium.
9. The HDMI Black Level menu includes : Normal, Low. Only in the HDMI mode, the menu HDMI Black Level can be adjusted. Its default value is Normal.

## ► Freezing the Current Picture

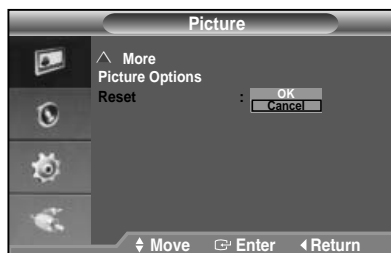


Press the FREEZE button to freeze a moving picture into a still one. Press again to cancel.

- ✧ This function is not available in VGA mode.

## ► Reset

You can return to the factory defaults picture settings.

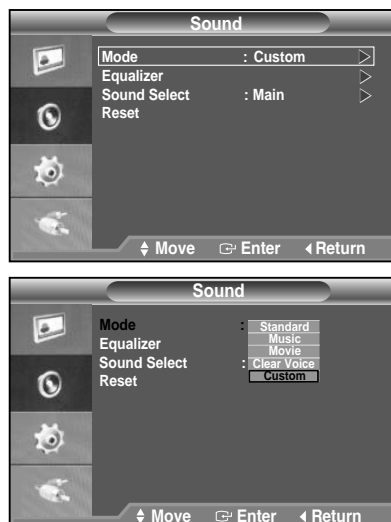


1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Reset menu.
4. Press the ▲/▼ button to select "OK" or "Cancel". Press the ENTER button.
5. Press the MENU button to exit.

- ✧ In VGA mode, the picture menu will display resolution information.

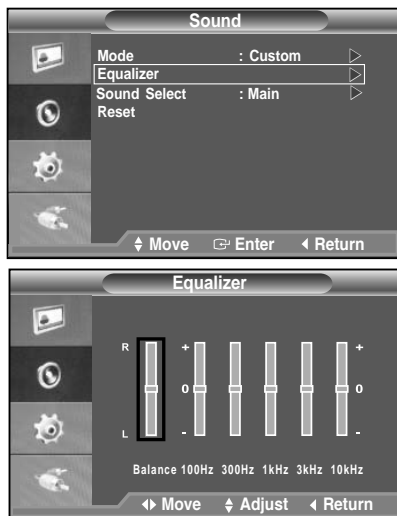
## Sound Menu

### ► Mode: Standard, Music, Movie, Clear Voice, Custom



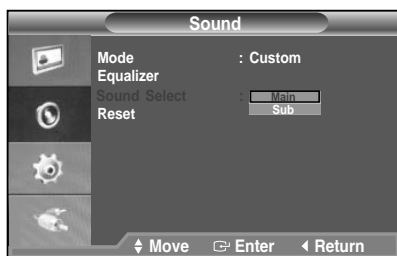
1. Press the MENU and ▼/▲ button to select the Sound menu.
2. Press the ENTER or ► button two times to select the Mode menu.
3. Press the ▼/▲ and ENTER button to select the setting you want.
4. Press the MENU button to exit.

## ► Equalizer



1. Press the MENU and ▼/▲ button to select the Sound menu.
  2. Press the ENTER or ► button.
  3. Press the ▼/▲ and ENTER button to select the Equalizer menu.
  4. Press the ◀/▶ button to select a particular item. Press the ENTER button.
  5. Press the ▼/▲ and ENTER button to adjust the setting value and save.
  6. Press the MENU button to exit.
- ※ If you make any changes to these settings, the Sound Mode is automatically switched to "Custom".

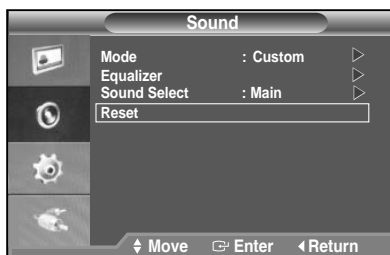
## ► Sound Select



1. Press the MENU and ▼/▲ button to select the Sound menu.
  2. Press the ENTER or ► button.
  3. Press the ▼/▲ and ENTER button to select the Sound Select menu.
  4. Press the ▼/▲ and ENTER button to adjust the setting value and save.
  5. Press the MENU button to exit.
- ※ Only in the VGA mode/HDMI mode, and PIP is on status, the Sound Select can be adjusted.

## ► Reset

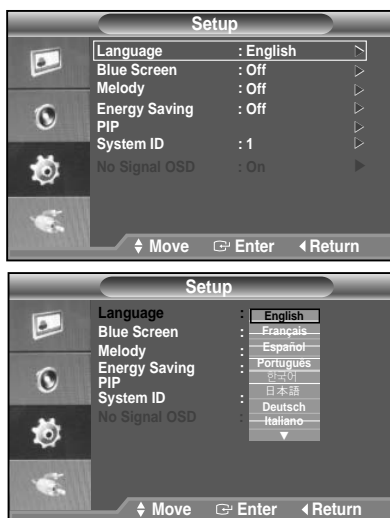
Selecting the Reset function after setting the equalizer resets the equalizer setting to the factory defaults.



1. Press the MENU and ▼/▲ button to select the Sound menu.
  2. Press the ENTER or ► button.
  3. Press the ▼/▲ and ENTER button to select the Reset.
  4. Press the MENU button to exit.
- ※ You can select the "Reset" function only when the sound "Mode" is set to "Custom".

## Setup Menu

### ► Language



1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Language menu.
4. Press the ▼/▲ and ENTER button to select the setting you want.
5. Press the MENU button to exit.

► Blue Screen/Melody



1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Blue Screen or Melody menu.
4. Press the ▼/▲ and ENTER button to select the setting you want.

• Blue Screen: Off/On

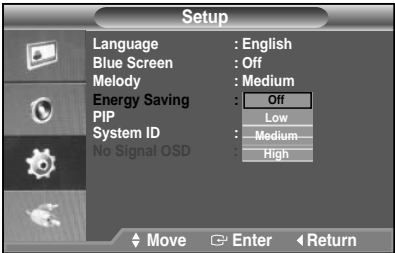
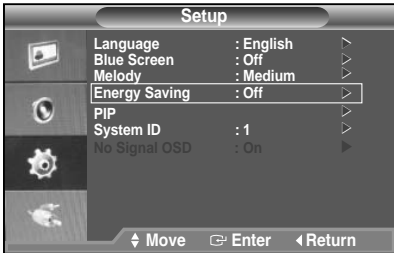
If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".

• Melody:Off/Low/Medium/High

You can hear melody sound when the monitor is powered on or off.

5. Press the MENU button to exit.

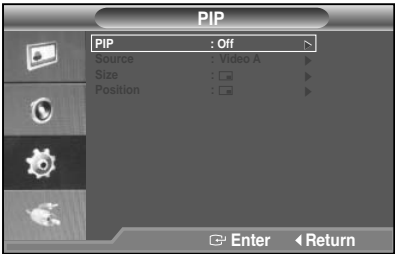
► Energy Saving



This function adjusts the brightness of the Monitor so as to reduce power consumption. When watching Monitor at night, set the "Energy Saving" mode option to "High" to reduce eye fatigue as well as power consumption.



1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Energy Saving menu.
4. Press the ▼/▲ and ENTER button to select the setting you want.
5. Press the MENU button to exit.

► PIP



1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the PIP menu.
4. Press the ENTER button again. Press the ▼/▲ button to select "On", then press ENTER button.

Main picture	Sub picture
PC	Video A, Video B

4. Press the PIP button on the remote control repeatedly to activate or deactivate the "PIP".
5. Press the ▼/▲ button to select "Source", then press ENTER button. Select a source of the sub picture by pressing the ▼/▲ button and press the ENTER button.
6. Press the ▼/▲ button to select Size menu, then press the ENTER button .
7. Press the ▼/▲ and ENTER button to select the size you want (  ).
8. Press the ▼/▲ button to select "Position", then press the ENTER button. Select the position of the sub picture by pressing the ▼/▲ button and then press the ENTER button(  ).
9. Press the MENU button to exit.



**Note:**

 is the PBP function.

► **Setting up Your PC Software  
(Based on Windows XP)**



**The Windows Display Properties for a typical computer are shown above. The actual screens on your PC may be different depending upon your particular version of Windows and your particular video card. Even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)**

1. First, click on "Control Panel" on the Windows start menu.
2. When the control panel window appears, click on "Display" and a Display Properties window will appear.
3. Click on "Setting" .

4. Navigate to the "Screen resolution" tab on the Setting window.

The correct size setting (resolution):

Optimum- 1280 x 1024

If a vertical-frequency option exists on your Settings window, the correct value is "60Hz" or "75 Hz".

Otherwise, just click "OK" and exit the window.

► **Display Modes**

**Both screen position and size will vary depending on the type of monitor and its resolution.**

**The resolutions in the table are recommended. (All resolutions between the supported limits are supported.)**

No	Display Mode			Horizontal Frequency (kHz)	Vertical Frequenc (Hz)
	Originator	Resolution			
1	IBM	640 x 350	70Hz	31.469	70.086
2	VESA DMT	640 x 480	60Hz	31.469	59.940
3	MAC	640 x 480	67Hz	35.000	66.667
4	VESA DMT	640 x 480	72Hz	37.861	72.809
5			75Hz	37.500	75.000
6	IBM	720 x 400	70Hz	31.469	70.087
7	DTV CEA	720 x 576	60Hz	35.910	59.950
8	VESA DMT	800 x 600	60Hz	37.879	60.317
9	VESA DMT	800 x 600	72Hz	48.077	72.188
10			75Hz	46.875	75.000
11	MAC	832 x 624	75Hz	49.726	74.551
12	VESA DMT	1024 x 768	60Hz	48.363	60.004
13			70Hz	56.476	70.069
14	VESA DMT	1024 x 768	75Hz	60.023	75.029
15	VESA GTF	1280 x 720	60Hz	44.772	59.855
16			70Hz	52.530	69.853
17	VESA CVT	1280 x 720	75Hz	56.456	74.777
18	VESA	1152 x 720	75Hz	67.5	75.000
19	VESA	1280x 960	60Hz	60.000	60.000
20	VESA	1280 x 1024	60Hz	63.979	60.000
21			75Hz	79.972	75.024
22	VESA	1600 x1200	60Hz	75.000	60.000
23			65Hz	81.25	65.000
24			70Hz	87.5	70.000
25	VESA	1920 x 1080	50Hz	28.125	50.000
23			60Hz	67.432	59.940

- ✗ The interlace mode is not supported.
- ✗ The set might operate abnormally if a non-standard video format is selected.
- ✗ Separate and Composite modes are supported. SOG is not supported.

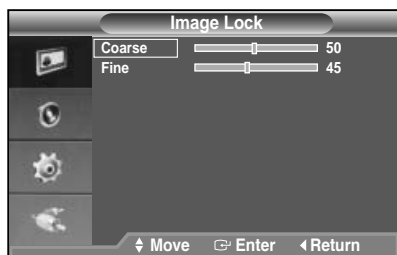
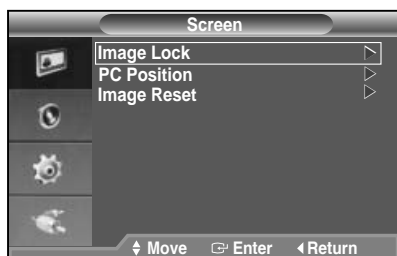
## ► Screen

### • Image Lock(Coarse and Fine Tuning of the Image)

The purpose of picture quality adjustment is to remove or reduce picture noise.

If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (coarse) and Fine-tune again.

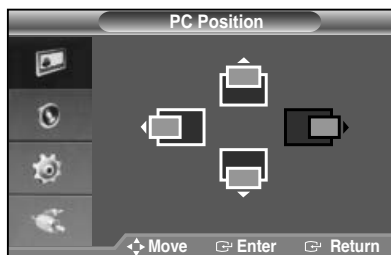
After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.



1. Preset: Press the SOURCE button to select VGA mode.
2. Press the MENU button to select the Picture menu.
3. Press the ENTER or ► button.
4. Press the ▼/▲ and ENTER button to select the Screen menu.
5. Press the ▼/▲ to select "Image Lock", then press the ENTER button.
6. Press the ▼/▲ button to select "Coarse" or "Fine", then press the ENTER button.
7. Press the ◀/▶ button to adjust the screen quality. Press the ENTER button.
8. Press the MENU button to exit.

### • PC Position

Adjust the PC's screen positioning if it does not fit the Monitor screen.



1. Follow the "Image Lock" instructions number 2 to 4.
2. Press the ▼/▲ button to select "PC Position", then press the ENTER button.
3. Press the ▼/▲ button to adjust the Vertical-Position. Press the ◀/▶ button to adjust the Horizontal-Position. Press the ENTER button.
4. Press the MENU button to exit.

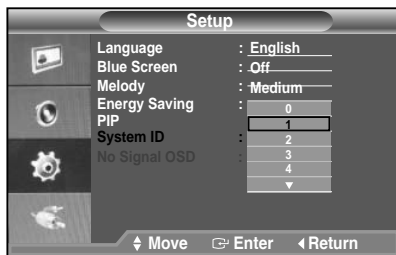
### • Image Reset(Initializing the Image Settings)

You can replace all image settings with the factory default values.



1. Follow the "Image Lock" instructions number 2 to 4.
2. Press the ▼/▲ button to select "Image Reset", then press the ENTER button.
3. Press the MENU button to exit.

## ► System ID



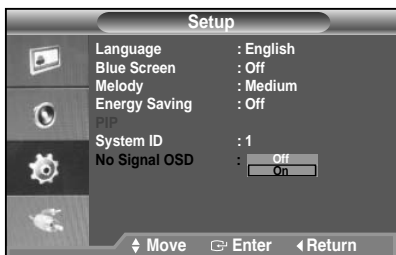
1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ button to select the System ID.
4. Press the ▼/▲ and ENTER button to select the setting you want (0~9)
5. Press the MENU button to exit.

## ► No Signal OSD

**No Signal OSD determines whether “No Signal” displays on the screen or not.**

**If you set the No Signal OSD to On, the screen will display “No Signal” when there is no video signal input.**

**If you set the No Signal OSD to Off, the screen will not display “No Signal” when there is no video signal input.**



1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ button to select the No Signal OSD.
4. Press the ▼/▲ and ENTER button to select the setting you want.
5. Press the MENU button to exit.

※ This function is not available in VGA mode.

## Input Menu

### ► Source List



1. Press the MENU and ▼/▲ button to select Input menu.
2. Press the ENTER and ► button.
3. Press the ▼/▲ and ENTER button to select the Source List.
4. Press the ▼/▲ and ENTER button to select desired source.
5. Press the MENU button to exit.



1. Press the SOURCE button on the remote control to toggle between all the available source.

### ► Edit Name



1. Press the MENU and ▼/▲ button to select Input menu.
2. Press the ENTER and ► button.
3. Press the ▼/▲ and ENTER button to select the Edit Name.
4. Press the ▼/▲ and ENTER button to select the input.
5. Press the ▼/▲ button to select the name you want. Press the ENTER button.
6. Press the MENU button to exit.



## Specifications

Model Name		SMT-2231
Sales Area		World Wide
Broadcasting System		NTSC/PAL System
Panel	Inch	22"
	Display Type	21.5"W TFT LCD
	Resolution (HxV)	1920 X 1080
	Brightness(cd/m2)	300
	Contrast	1000:1
	Response Time	5msec
	Viewing Angle Degree	170(Horizontal)/160(Vertical)
Picture	Pixel Pitch(mm)	0.248mm(H) x 0.248mm(V)
	Scan System	Progressive
	CVBS Resolution	NTSC:600TVL PAL:620TVL
	A/D bits	10 bits
	Scanning frequency	Horizontal: 31.5 kHz – 80 kHz, Vertical: 56 Hz – 75 Hz
	Color System	NTSC 3.58/PAL4.43
	Screen Mode	4:3,16:9
	3D Comb Filter	Yes
	Noise Reduction	Yes
	PIP/PBP	Yes/Yes
	Freeze	Yes
Video	Under Scan	Yes
	Composite	2CH input, 1.0Vp-p, 75Ω terminated, Loop Through out, BNC Type
	HDMI	1CH input
	VGA	1CH input
Audio		2Channel input, 2W Stereo, RCA Type
OSD	Language	16 Language (Eng/Chn/Fre/Ger/Spa/Ita/Por/Dut/Swe/Rus/Kor/Jpn/Tur/Dan/Tha/Ara)
Simple Stand	Tilt	-2° ~ 22°
	Swivel	0° ~ +350°
Dimensions(WxDxH)	Net	515.0mm x 217.4mm x 402.0mm (with stand) 515.0mm x 69.0mm x 330.5mm (without stand)
Weight	Net Weight	6.1Kg
	Package Weight	6.88Kg
Electric Performance	Power Supply	100 ~ 240V
	Power Consumption	60W
Operating condition	Temperature	0°C – +40°C
	Humidity	20% – 90% (non-condensation)

