

WISeNeT

security-LED MONITOR

User manual

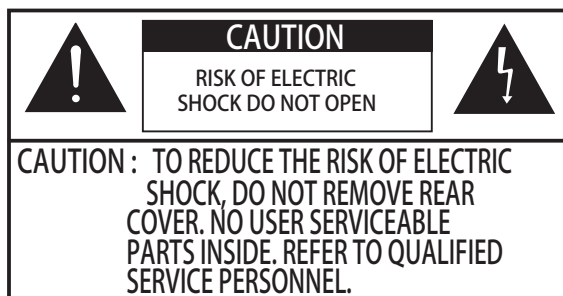
SMT-2233

SMT-1935

SMT-1931

SMT-2731

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 Hanwha Techwin 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 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 Hanwha Techwin, or sold with the monitor. Any mounting of the monitor should follow Hanwha Techwin's instructions and should use a mounting accessory recommended by Hanwha Techwin.
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 Hanwha Techwin'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 Hanwha Techwin 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 of 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 which indicates a need for service.
20. **Replacement Parts:** When replacement parts are required, be sure the service technician has used replacement parts specified by Hanwha Techwin 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 perform 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

WARNING (available for SMT-1931, SMT-2731)

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 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 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.

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."

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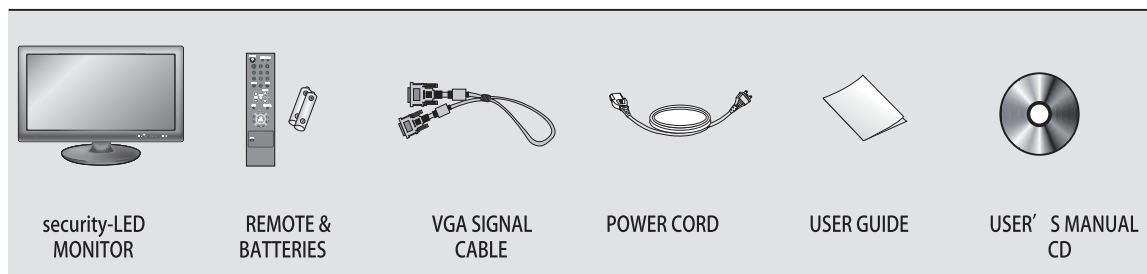
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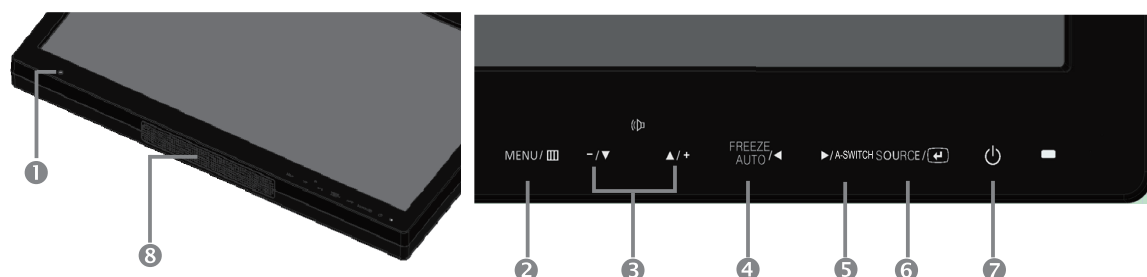
Unpacking

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. The colour and the appearance may differ depending on the product .



Viewing the Control Panels

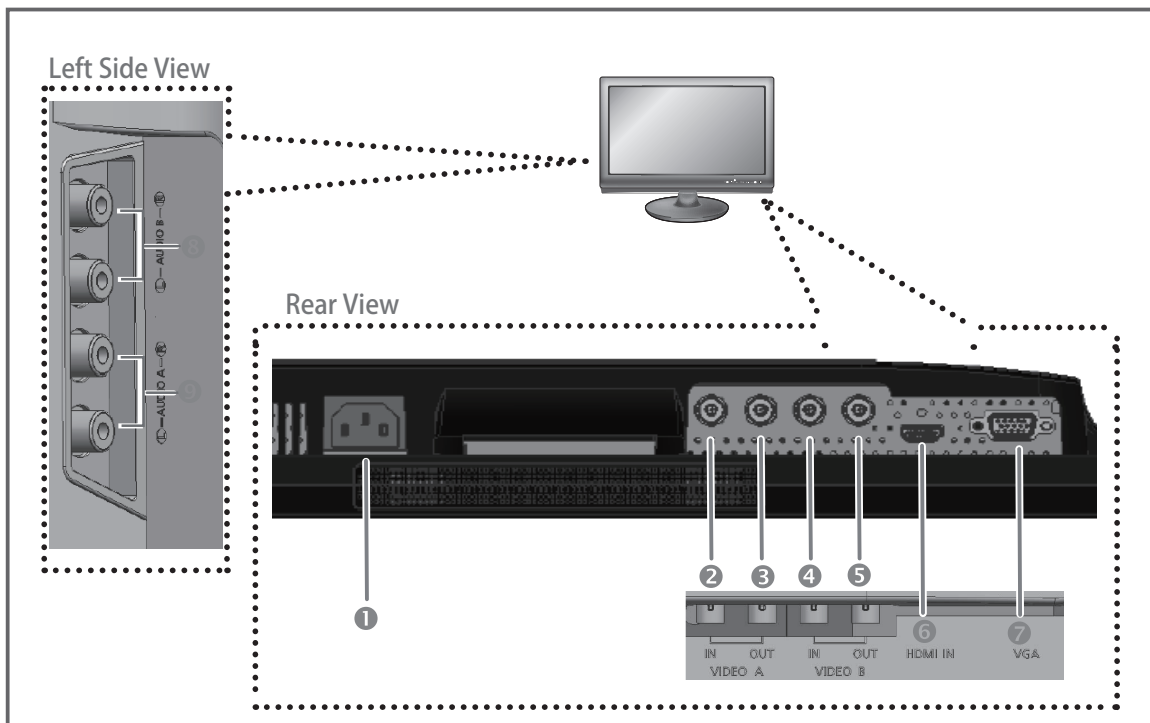
Front View



- ❶ Remote controller sensor.
- ❷ MENU Activates and exits the On Screen Display.
- ❸
 - ▲ : Moves the OSD menu or increases the volume level.
 - ▼ : Moves the OSD menu or decreases the volume level.
- ❹ / 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.
- ❺ / A-SWITCH
Increases the level of active function, and selects OSD menu. According to the interval set in the menu, monitor will automatically switch input signal, Video-A -> Video-B -> VGA -> HDMI. Auto Switch would become inactive if Auto Switch is set as off in the menu.
- ❻ ENTER / SOURCE
Selects input source, activates a highlighted menu item.
- ❼ (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.
- ❽ Speaker

Rear & Left Side View

The colour and the appearance may differ depending on the product .



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

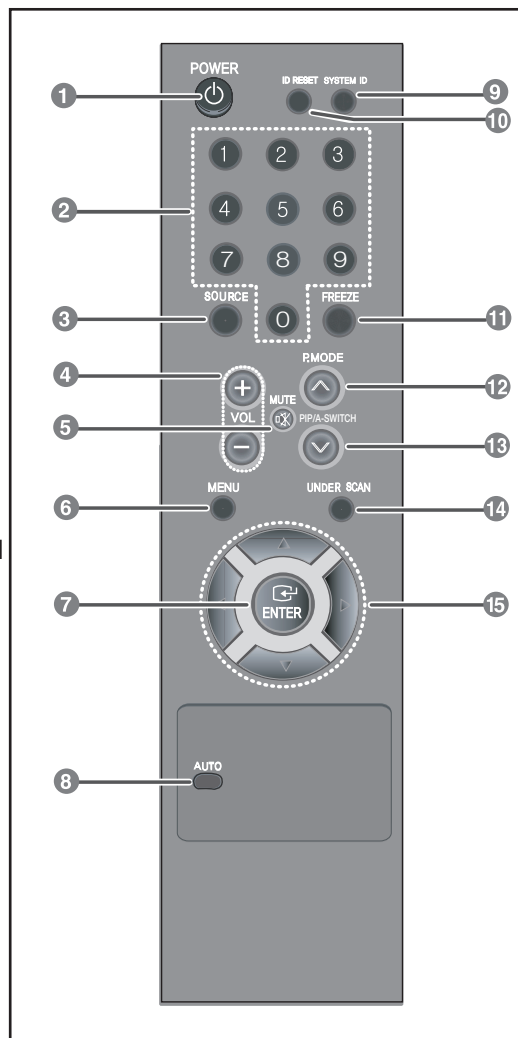
- ❽ AUDIO-B
Audio-B input : Right (RED), Left (White)
- ❾ AUDIO-A
Audio-A input : Right (RED), Left (White)

Note

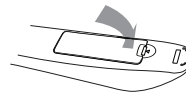
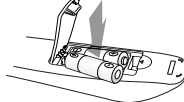
When you don't use video looping output ,please unplug video looping output cable or connect a 75Ω terminal resistance at the video looping output jack .Otherwise,it will cause the signal scope oversized which bring about brightness distortion.

Remote Controller

- ❶ **POWER**
Turns the Power On or Off.
There will be a few seconds delay before display appears.
- ❷ **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
- ❸ **SOURCE**
Press the 'SOURCE' button to change the input signal source.
- ❹ **VOLUME +, -**
Adjusts the audio volume.
- ❺ **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.
- ❻ **MENU**
Open the on-screen menu and exit from the menu screen or close screen adjustment menu.
- ❼ **ENTER**
Activates a highlighted menu item.
- ❽ **AUTO - Available In VGA mode Only**
Adjusts the screen display automatically.
- ❾ **SYSTEM ID**
Setting the SYSTEM ID of remote controller.
Refer to ❷ Number button.
- ❿ **ID RESET**
Resets 1(default value) for the remote control ID.
- ⓫ **FREEZE - Available in Video A/B,HDMI Mode**
Press the button once to freeze the screen. Press it again to unfreeze.
- ⓬ **P.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)
- ⓭ **PIP (Available in VGA/HDMI Mode) /A-SWITCH**
Push the PIP button to turn PIP screen On/Off. (PIP is not available for SMT-1935/SMT-2233/SMT-1931/ SMT-2731) .
After pressing A-Switch button, monitor will automatically switch input signal, Video-A -> Video-B -> VGA -> HDMI according to the interval set in the menu.
- ⓮ **UNDER SCAN - Available in Video A/B,HDMI Mode**
Displays the entire video signal on the screen.
- ⓯ **▼▲/◀▶ buttons**
Moves from one menu item to another horizontally, vertically or adjusts selected menu values.



Installing batteries in the Remote Control



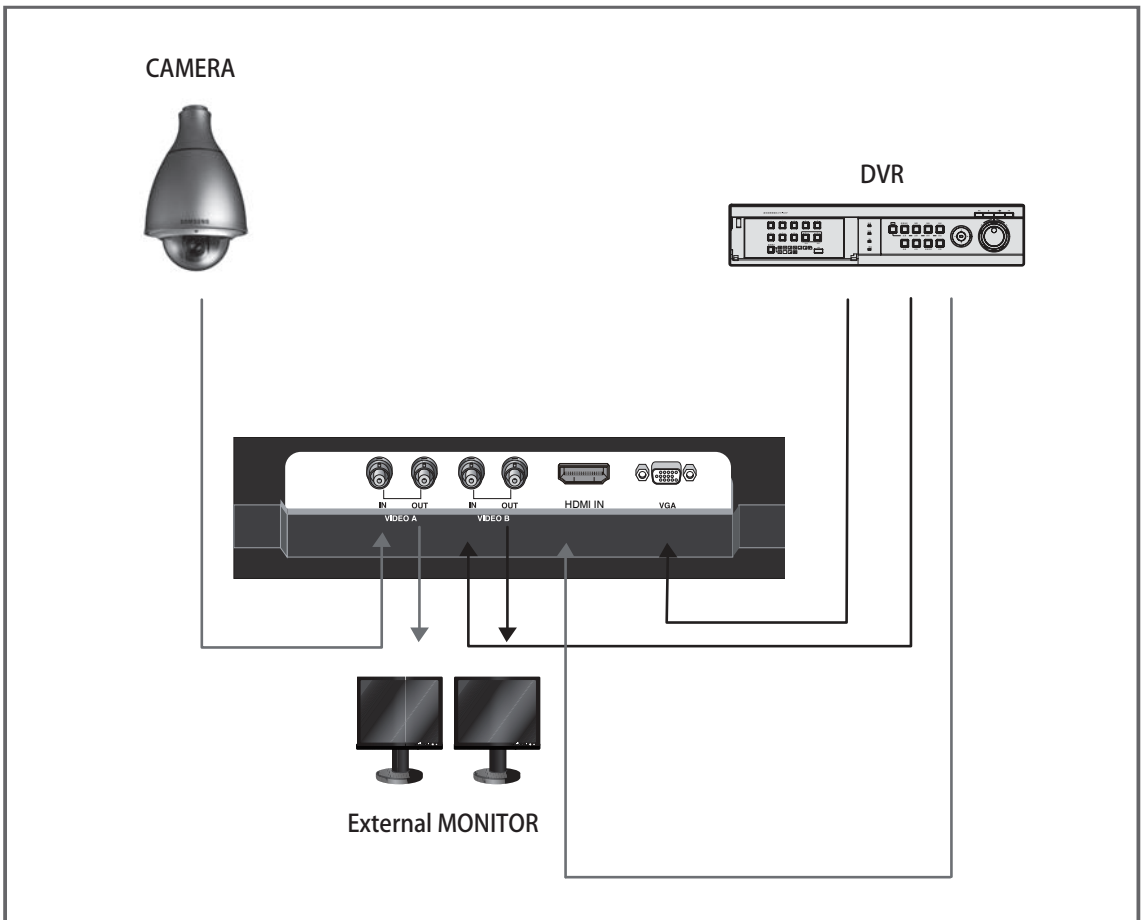
1. Lift the cover at the back of the remote control upward as shown.
2. Install two AAA size batteries. Make sure to match the "+" and "-" ends of the batteries with the diagram inside the compartment.
3. Replace the cover. Assuming typical TV usage, the batteries last for about one year.

NOTE

- Use the remote control within 23 feet from Monitor.
- Bright light may affect the performance of the remote control. Avoid using nearby special fluorescent light or neon signs.

Connecting to External Devices.

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



Securing the Installation Space

Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation.

Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.

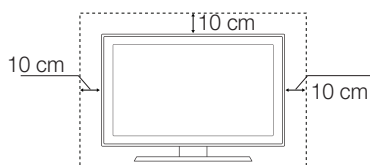
✎ When using a stand or wall-mount, use parts provided by Hanwha Techwin only.

If you use parts provided by another manufacturer, it may result in a problem with the product or an injury due to the product falling.

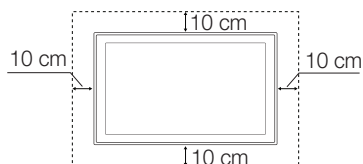
✎ The appearance may differ depending on the product.

✎ Be careful when you contact the monitor because some parts can be somewhat hot.

Installation with a stand.



Installation with a wall-mount.



OSD Menu Configurations

No Signal Display

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

No Signal

<Video mode>

Check signal cable

<VGA.HDMI 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.

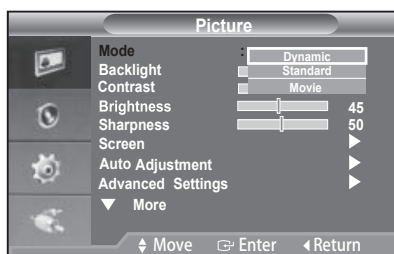
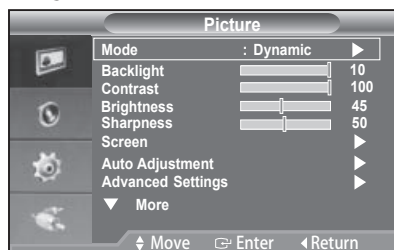
NOTE1: Press the ◀ button to return to the previous screen.
Press the MENU button to exit.

NOTE2: The OSD display will disappear after 1 minutes if there is no button input.

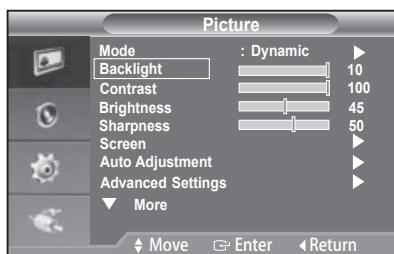
NOTE3: The displayed image may differ depending on the model.

Picture Menu

- **Mode : Dynamic, Standard, Movie**
The displayed image may differ depending on the input signal.



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, Colour, Tint**



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, Colour, Tint)
Press the ENTER button.

- ※ In VGA Mode, "Sharpness" can not be adjusted.
- ※ Only when the input signal is NTSC mode, can Tint function be applicable.

► Screen

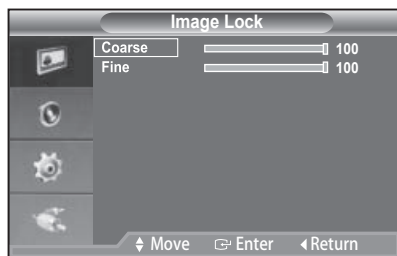
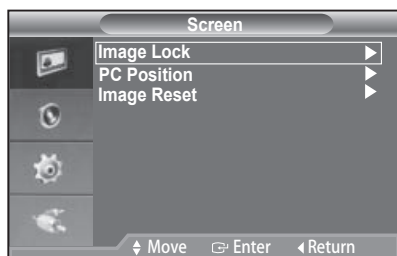
Image Lock , PC Position , Image Reset

● 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.

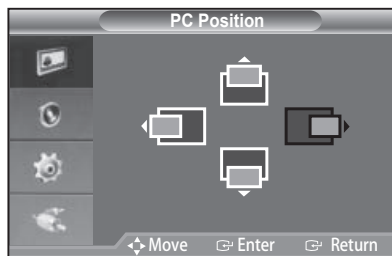
After the noise has been reduced, re-adjust the picture so that it is aligned on the center of screen.



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.

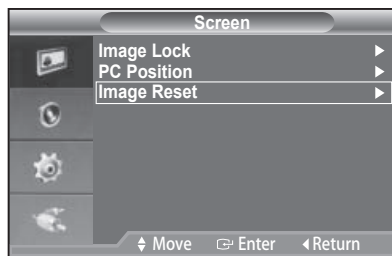
● PC Position

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 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.

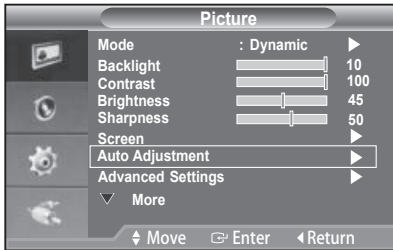


1. Follow the "Image Lock" instructions number 2 to 4.
2. Press the ▼/▲ button to select "Image Reset", then press the ENTER button.
3. Press the MENU button to exit.

- ※ Only in VGA Mode, "Screen" can be adjusted.

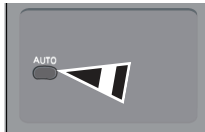
► Auto Adjustment (Adjusting the PC screen automatically)

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.



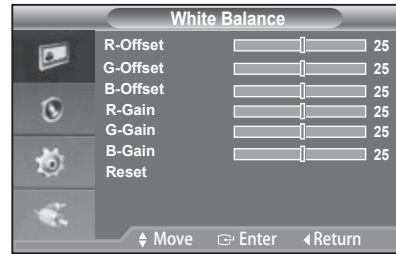
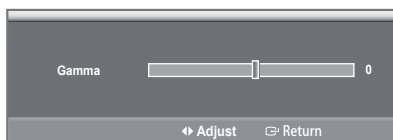
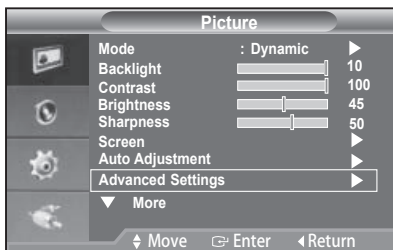
1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Auto Adjustment menu.
4. It will be adjusted automatically
5. Press the MENU button to exit.

PC screen can be adjusted automatically by pressing AUTO button on the remote control.



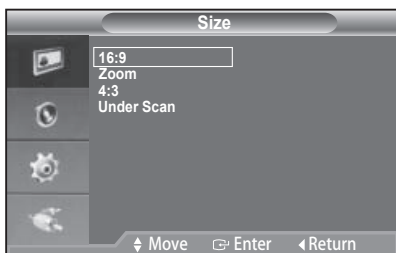
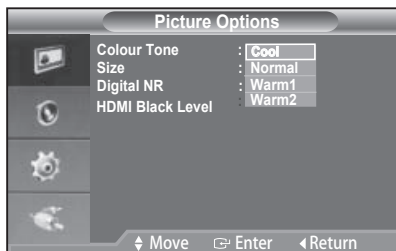
* Only in VGA Mode, "Auto Adjustment" can be available.

► 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 the setting 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 of Colour Tone: 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.
- ※ SMT-1935: Under Scan and 16:9 are not available in VGA mode.
SMT-2233/SMT-1931/SMT-2731: Under Scan is not available in VGA mode. When the input signal is PAL, Under Scan is not available In Video-A & Video-B mode,
7. The Digital NR menu includes : Off, Low, Medium, High, Auto.
Digital NR is not available in VGA mode.
 8. 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.

► Reset

You can return to the factory defaults picture settings.

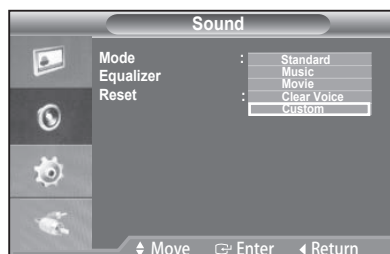
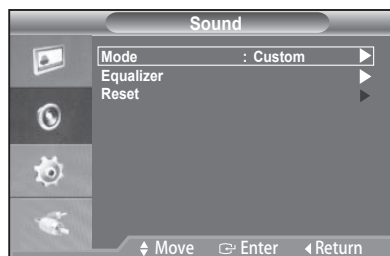


1. Press the MENU button to select the Picture menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ and ENTER button to select the Reset menu.
4. Press the ▲/▼ button to select "OK" or "Cancel". Press the ENTER button.
5. Press the MENU button to exit.

※ In VGA/HDMI mode, the picture menu will display resolution information.

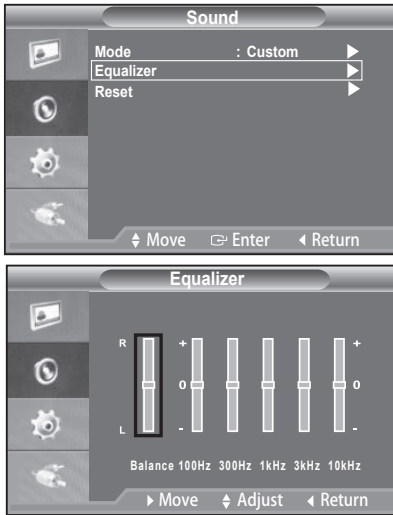
Sound Menu

► 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.

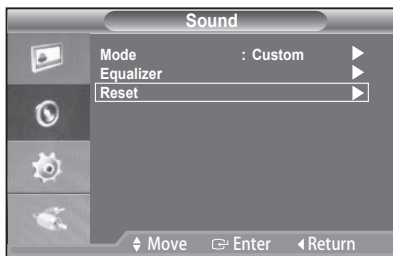
► Equalizer



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".

► Reset

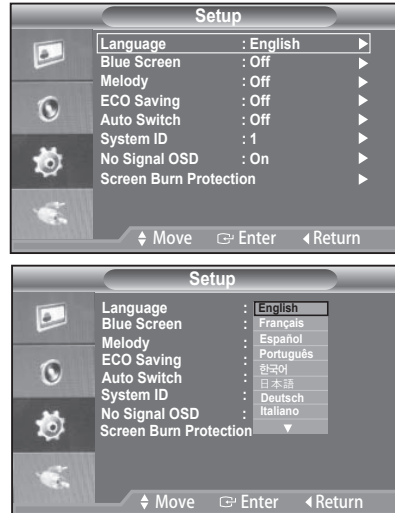
Selecting the Reset function after setting the equalizer resets the equalizer setting to the factory defaults.



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".

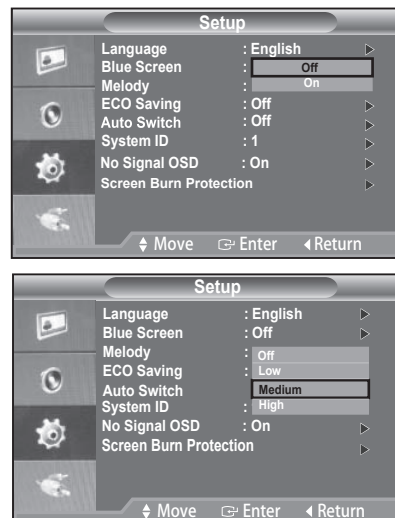
Setup Menu

► 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.

- Press the ▼/▲ and ENTER button to select the Blue Screen or Melody menu.
- 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".

※ In HDMI Mode, "Blue Screen" can not be adjusted.

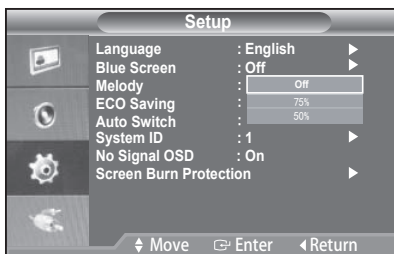
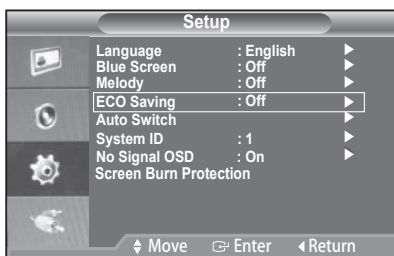
- Melody: Off/Low/Medium/High

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

You can hear the melody when the monitor is turned on even if you turn the volume down to zero.

- Press the MENU button to exit.

► ECO Saving

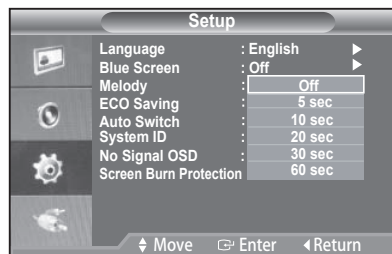
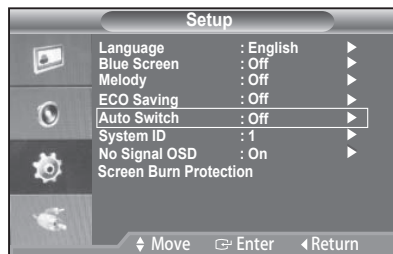


This function adjusts the brightness of the Monitor so as to reduce power consumption. When watching Monitor at night, set the "Energy Saving" mode option to "High" to reduce eye fatigue as well as power consumption.

- 75% : Change the monitor power consumption to 75% of the default level.
- 50% : Change the monitor power consumption to 50% of the default level.
- Off : Deactivate the Eco Saving function.

- Press the MENU and ▼/▲ button to select the Setup menu.
- Press the ENTER or ► button.
- Press the ▼/▲ and ENTER button to select the Energy Saving menu.
- Press the ▼/▲ and ENTER button to select the setting you want.
- Press the MENU button to exit.

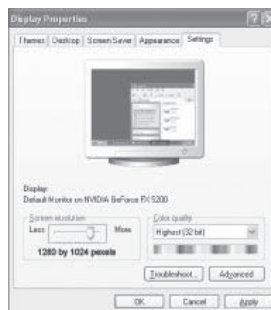
► Auto Switch



When you configure Auto Switch, monitor will automatically switch input signal Video-A -> Video-B -> VGA -> HDMI according to the time interval you set in the menu.

- Press the MENU and ▼/▲ button to select the Setup menu.
- Press the ENTER or ► button.
- Press the ▼/▲ and ENTER button to select Auto Switch menu.
- Press the ▼/▲ and ENTER buttons to set Time Interval.

► 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 Hanwha Techwin 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- SMT-2233/SMT-2731: 1920 x 1080

SMT-1935: 1280 x 1024

SMT-1931: 1366 x 768

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.)

SMT-2233

Display Mode		Refresh Rate (Hz)	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
IBM	640×350	70	31.469	70.086
VESA DMT	640×480	60	31.469	59.94
MAC	640×480	67	35	66.667
VESA DMT	640×480	72	37.861	72.809
		75	37.500	75.000
IBM	720×400	70	31.469	70.087
DTV CEA	720×576	60	35.91	59.95
VESA DMT	800×600	60	37.879	60.317
VESA DMT	800×600	72	48.077	72.188
		75	46.875	75.000
MAC	832×624	75	49.726	74.551
VESA DMT	1024×768	60	48.363	60.004
		70	56.476	70.069
VESA DMT	1024×768	75	60.023	75.029
VESA GTF	1280×720	60	44.772	59.855
		70	52.53	69.853
VESA CVT	1280×720	75	56.456	74.777
VESA	1152×720	75	67.500	75.000
VESA	1280×960	60	60.000	60.000
VESA	1280×1024	60	63.979	60.000
		75	79.972	75.024
		60	75.000	60.000
VESA	1600×1200	65	81.25	65.000
		70	87.500	70.000
		60	67.432	59.94

SMT-1935

Display Mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM	640×350	31.469	70.086	25.175	+/-
	720×400	31.469	70.087	28.322	-/+
	640×480	31.469	59.940	25.175	-/-
VESA	640×480	37.861	72.809	31.500	-/-
	640×480	37.500	75.000	31.500	-/-
	800×600	37.879	60.317	40.000	+/+
	800×600	48.077	72.188	50.000	+/+
	800×600	46.875	75.000	49.500	+/+
	1024×768	48.363	60.004	65.000	-/-
	1024×768	56.476	70.069	75.000	-/-
	1024×768	60.023	75.029	78.750	+ /+
	1152×864	67.500	75.000	108.000	+/+
	1280×960	60.000	60.000	108.000	+/+
MAC	640×480	35.000	66.667	30.240	-/-
	832×624	49.726	74.551	57.284	-/-
	1152×870	68.681	75.062	100.000	+/+

SMT-1931

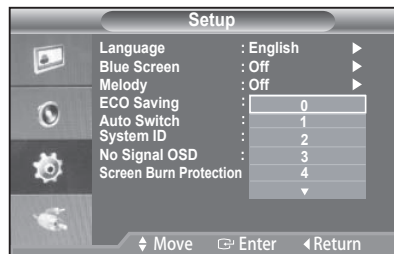
Display Mode		Refresh Rate	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)
IBM	640 x 350	70Hz	31.469	70.086	25.175
IBM	720 x 400	70Hz	31.469	70.087	28.322
VESA DMT	640 x 480	60Hz	31.469	59.940	25.175
MAC	640 x 480	67Hz	35.000	66.667	30.240
VESA DMT	640 x 480	72Hz	37.861	72.809	31.500
VESA DMT	640 x 480	75Hz	37.500	75.000	31.500
VESA CVT	720 x 576	60Hz	35.910	59.950	32.750
VESA DMT	800 x 600	60Hz	37.879	60.317	40.000
VESA DMT	800 x 600	72Hz	48.077	72.188	50.000
VESA DMT	800 x 600	75Hz	46.875	75.000	49.500
MAC	832 x 624	75Hz	49.726	74.551	57.284
VESA DMT	1024 x 768	60Hz	48.363	60.004	65.000
VESA DMT	1024 x 768	70Hz	56.476	70.069	75.000
VESA DMT	1024 x 768	75Hz	60.023	75.029	78.750
VESA DMT	1280 x 720	60Hz	45.000	60.000	74.250
VESA GTF	1280 x 720	70Hz	52.500	70.000	89.040
VESA CVT	1280 x 720	75Hz	56.456	74.777	95.750
VESA DMT	1360 x 768	60Hz	47.712	60.015	85.500
VESA DMT	1366 x 768	60Hz	47.712	59.790	85.500

SMT-2731

Display Mode		Refresh Rate (Hz)	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
IBM	640 x 350	70	31.469	70.086
VESA DMT	640 x 480	60	31.469	59.94
MAC	640 x 480	67	35	66.667
VESA DMT	640 x 480	72	37.861	72.809
		75	37.500	75.000
IBM	720 x 400	70	31.469	70.087
DTV CEA	720 x 400	85	37.927	85.038
VESA DMT	800 x 600	60	37.879	60.317
		72	48.077	72.188
VESA DMT	800 x 600	75	46.875	75.000
		75	49.726	74.551
MAC	832x624	75	49.726	74.551
VESA DMT	1024x768	60	48.363	60.004
		70	56.476	70.069
VESA GTF	1280x720	60	45.00	60.00
		60	44.772	59.855
VESA	1152x864	75	67.5	75.00
VESA	1280x960	60	60.000	60.000
VESA	1280x1024	60	63.979	60.000
		75	79.972	75.024
VESA	1600x1200	60	75.000	60.000
		65	81.25	65.000
		70	87.500	70.000
VESA	1920x1080	60	67.158	59.963
		60	67.500	60.00

- ※ 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.

► System ID



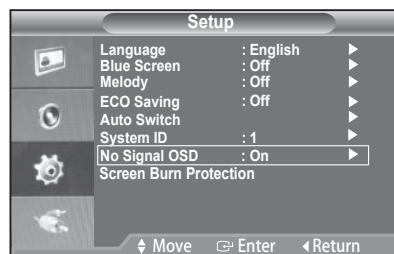
1. Press the MENU and ▼/▲ button to select the Setup menu.
2. Press the ENTER or ► button.
3. Press the ▼/▲ button to select the System ID.
4. Press the ▼/▲ and ENTER button to select the setting you want .(0~9)
5. Press the MENU button to exit.

► 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.



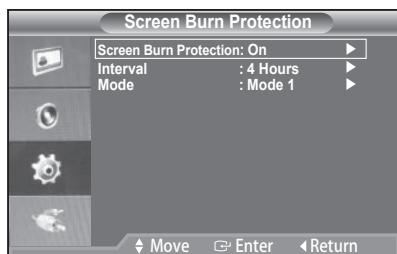
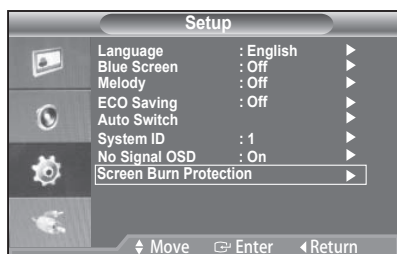
1. Press the MENU and ▼/▲ button to select the Setup menu.
 2. Press the ENTER or ► button.
 3. Press the ▼/▲ button to select the No Signal OSD.
 4. Press the ▼/▲ and ENTER button to select the setting you want .
 5. Press the MENU button to exit.
- ※ This function is not available in VGA and HDMI mode.

► Screen Burn Protection

To reduce the possibility of screen burn, this unit is equipped with Screen Burn Protection screen burn prevention technology.

Screen Burn Protection moves the picture slightly on the screen.

The Screen Burn Protection setting allows you to programme the time between movements of the picture in minutes.



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

Interval: You can set the interval for Screen Burn Protection. The Screen Burn Protection feature stops automatically after a specified period of time.

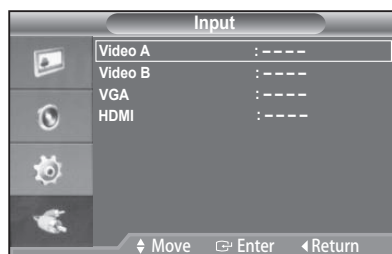
Mode 1: Pixels on the screen moves from Top to the bottom, left to the right.

Mode 2: A vertical bar moves left to right.

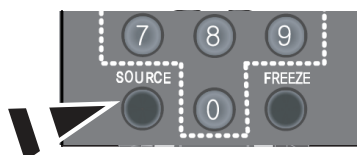
Mode 3: Fading screen. The entire screen becomes brighter, then darker.

Input Menu

► Source List

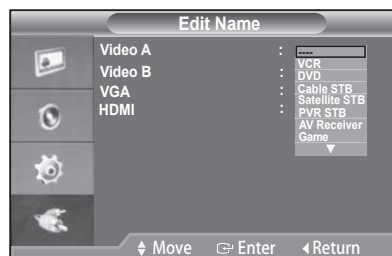


1. Press the MENU and ▼/▲ button to select Input menu.
2. Press the ENTER and ► button.
3. Press the ▼/▲ and ENTER button to select the Source List.
4. Press the ▼/▲ and ENTER button to select desired source.
5. Press the MENU button to exit.



- 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 (SMT-2233/SMT-1935)

Model name		SMT-2233	SMT-1935
Sales Area		Worldwide	
Broadcasting System		NTSC/PAL System	
Panel	Inch	22"	19"
	Display Type	LED PANEL	
	Resolution (HxV)	1920 X 1080	1280 x 1024
	Brightness (cd/m ²)	250	
	Contrast	1000:1	
	Response Time	5msec	
	Viewing Angle Degree	170(Horizontal)/160(Vertical)	
	Pixel Pitch(mm)	0.248(H)x 0.248(V)	0.294(H)x 0.294(V)
Picture	Scan System	Progressive	
	CVBS Resolution	NTSC: 600TVL, PAL: 620TVL	
	Scanning Frequency	Horizontal: 30KHz-81KHz Vertical : 56Hz-75Hz	
	Color System	NTSC 3.58/PAL 4.43	
	Screen Mode	4:3 , 16 : 9	
	3D Comb Filter	Yes	
	Noise Reduction	Yes	
	Auto Switch	Yes	
	Freeze	Yes	
	Under Scan	Yes	
Video	Composite	2CH input , 1.0Vp-p , 75 Ω terminal , Loop Through out , BNC Type	
	HDMI	1CH input	
	VGA	1CH input	
Audio		2 Channel input , 2W Stereo , RCA Type	
OSD	language	16 languages(Eng/Fre/Ger/Spa/Ita/Por/Dut/Swe/Rus/Tha/Ara/Tur/Dan/Kor/Jpn/Chi)	
Simple Stand	Tilt	-2° ~ 22°	
Dimensions (WxDxH)	Net	515mm x 217.4mm x 391.8mm (with stand)	412mm x 217.4mm x 406.5mm (with stand)
		515mm x 59.9mm x 316mm (without stand)	412mm x 59.4mm x 347mm (without stand)
Weight	Net weight	5.18Kg	4.78Kg
Electric Performance	Power Supply	AC 100~240V	
	Power Consumption	24W	22W
Operating condition	Temperature	0°C ~ +40°C°	
	Humidity	20%-90% (non-condensation)	

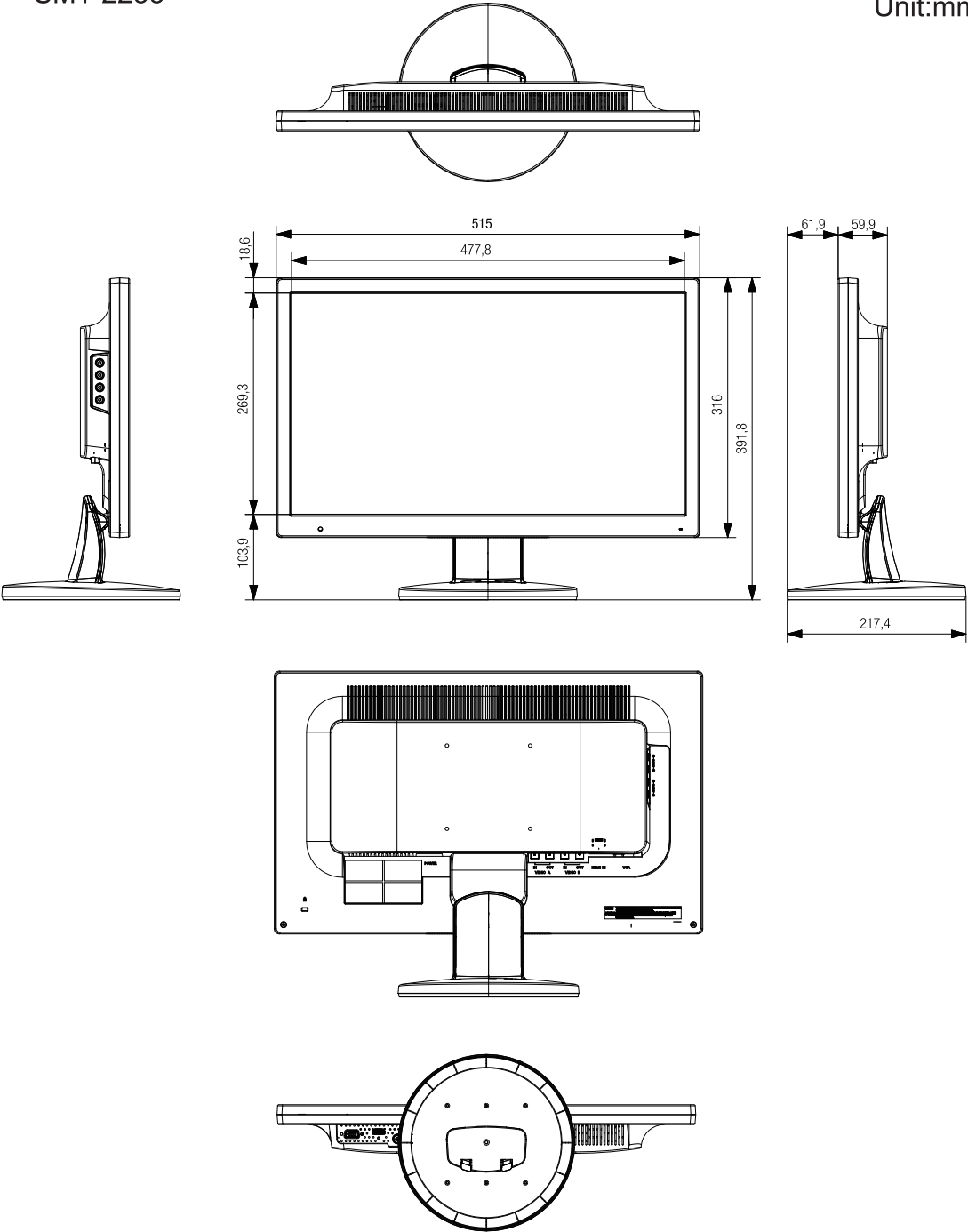
Specifications (SMT-2731/SMT-1931)

Model name		SMT-2731	SMT-1931
Sales Area		Worldwide	
Broadcasting System		NTSC/PAL System	
Panel	Inch	27"	19"
	Display Type	LED PANEL	
	Resolution (HxV)	1920 X 1080	1366 x 768
	Brightness (cd/m ²)	300	250
	Contrast	1000:1	
	Response Time	5msec	
	Viewing Angle Degree	170(Horizontal)/160(Vertical)	
	Pixel Pitch(mm)	0.248(H)x 0.248(V)	0.300(H)x 0.300(V)
Picture	Scan System	Progressive	
	CVBS Resolution	NTSC: 600TVL, PAL: 620TVL	
	Scanning Frequency	Horizontal: 30KHz-81KHz Vertical : 47Hz-75Hz	Horizontal: 30KHz-81KHz Vertical : 56Hz-75Hz
	Color System	NTSC 3.58/PAL 4.43	
	Screen Mode	4:3 , 16 : 9	
	3D Comb Filter	Yes	
	Noise Reduction	Yes	
	Auto Switch	Yes	
	Freeze	Yes	
Video	Under Scan	Yes	
	Composite	2CH input , 1.0Vp-p , 75 Ω terminal , Loop Through out , BNC Type	
	HDMI	1CH input	
	VGA	1CH input	
Audio		2 Channel input , 2W Stereo , RCA Type	
OSD	language	16 languages(Eng/Fre/Ger/Spa/Ita/Por/Dut/Swe/Rus/Tha/Ara/Tur/Dan/Kor/Jpn/Chi)	
Simple Stand	Tilt	-2° ~ 22°	
Dimensions (WxDxH)	Net	648mm x 479.1mm x 212mm (with stand)	446.4mm x 359.6mm x 217.4mm (with stand)
		648mm x 396mm x 61.66mm (without stand)	446.4mm x 59.4mm x 276.9mm (without stand)
Weight	Net weight	7.28Kg	4.23Kg
Electric Performance	Power Supply	AC 100~240V	
	Power Consumption	39.5W	18.5W
Operating condition	Temperature	0°C ~ +40°C°	
	Humidity	20%-90% (non-condensation)	

Dimensions

SMT-2233

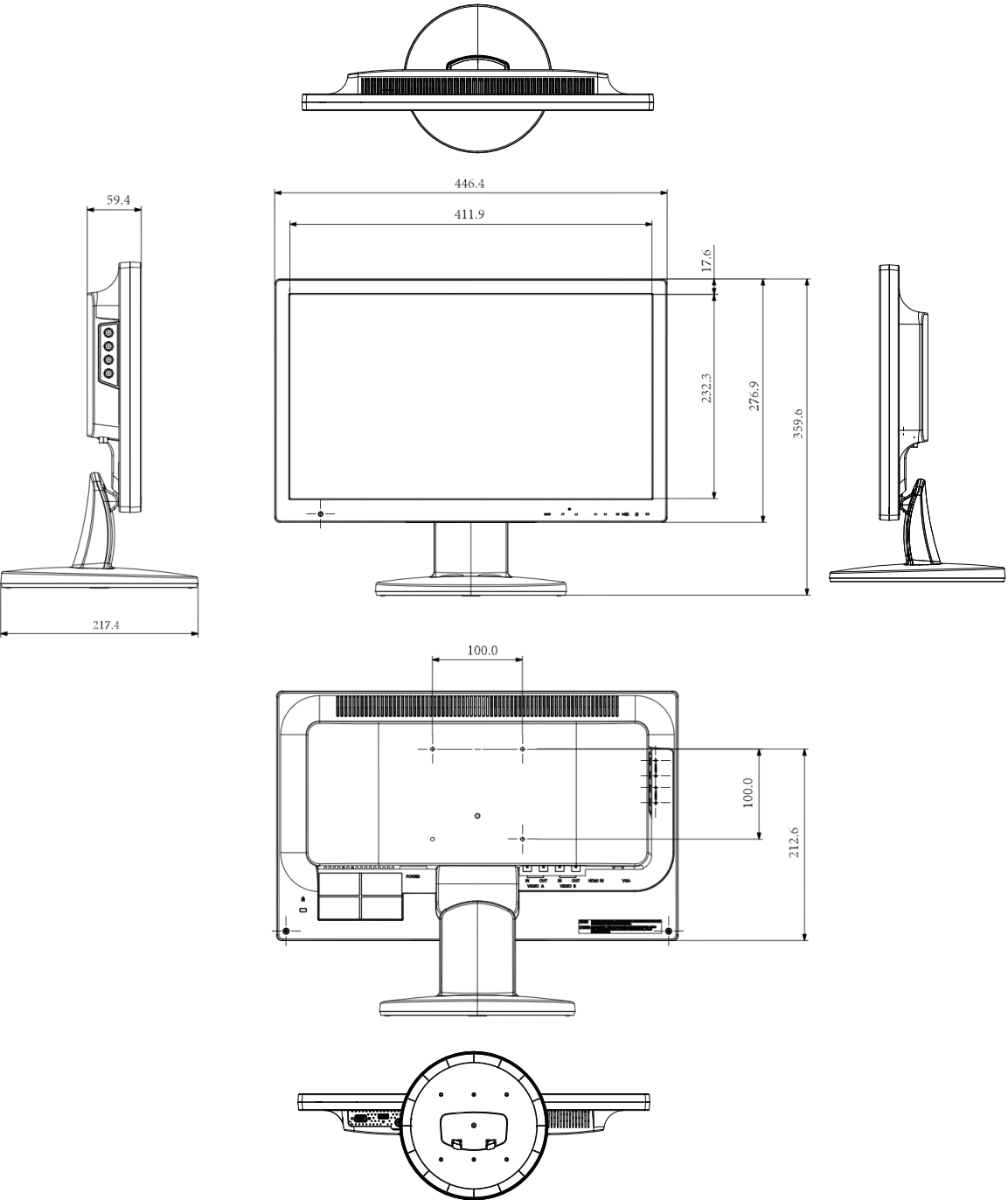
Unit:mm



Dimensions

SMT-1931

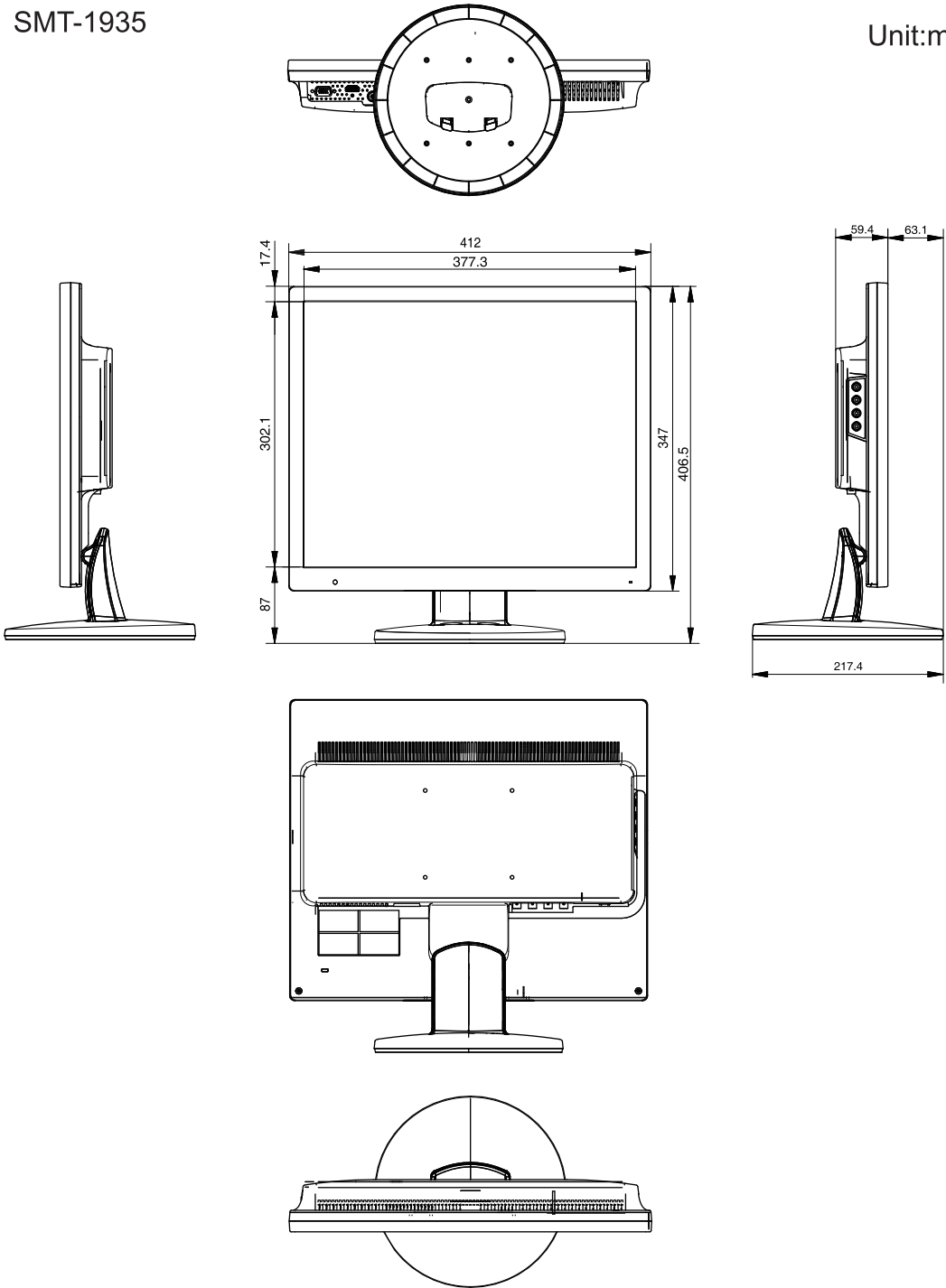
Unit:mm



Dimensions

SMT-1935

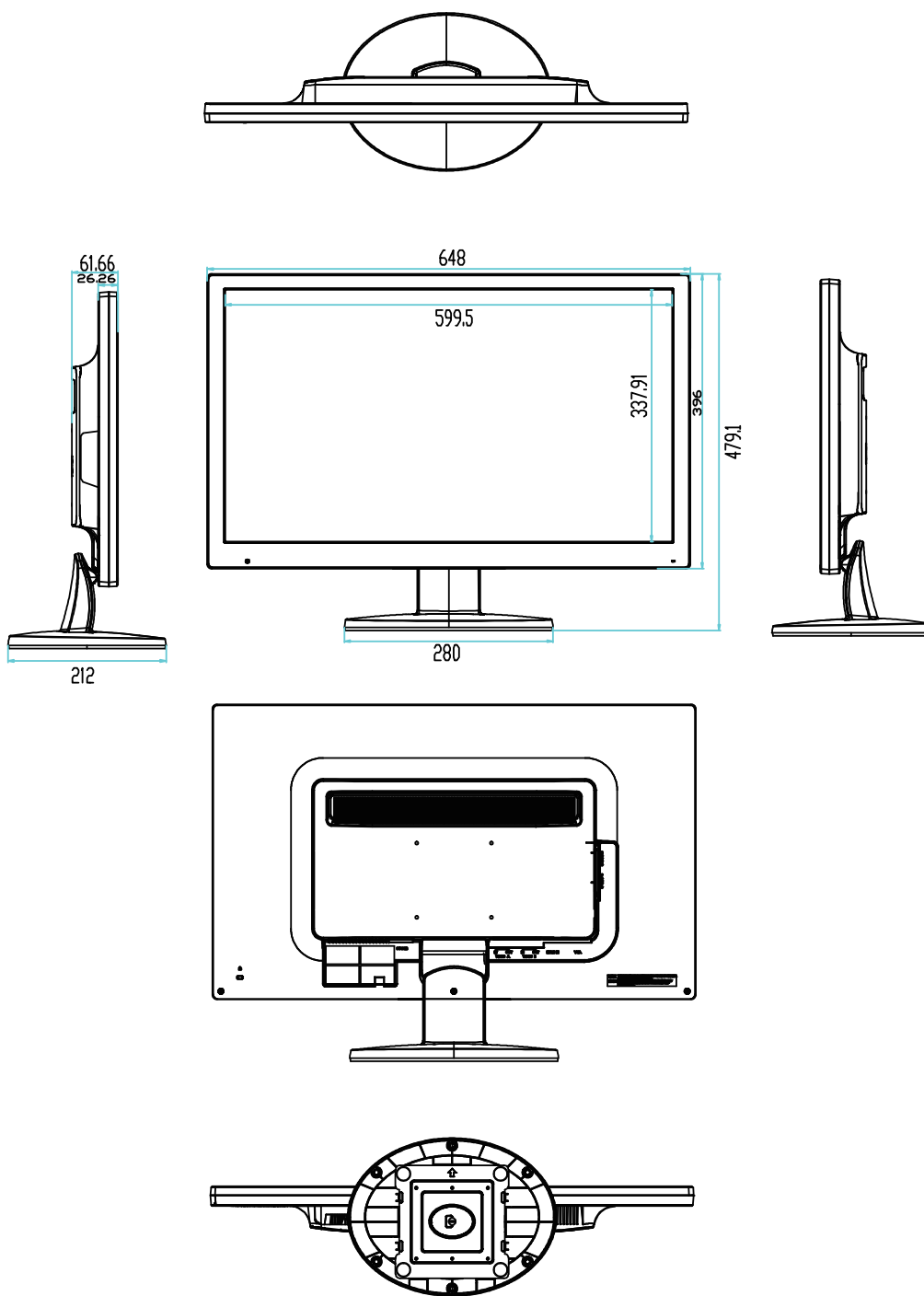
Unit:mm



Dimensions

SMT-2731

Unit:mm



Correct Disposal

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



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

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

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

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

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