

security-LED MONITOR

SMT-2233 SMT-1935 SMT-1931 SMT-2731

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.
- Retain Instructions : The safety and operating instructions should be retained for future reference.
- Heed Warnings: All warnings on the monitor and in the oper ating 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 refer ence to unplugging the monitor in the cleaning description otherwise required in Item 5.
- 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 laun dry tub, in a wet basement or near a swimming pool and the like wet basement or near a swimming pool and the like.
- 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 in structions 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 recep tacles, 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 danger ous voltage or other hazards. Refer all servicing to quailfied 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.

a. When the power-supply cord or plug is damaged. b. If liquid has been spilled or objects have fallen into the

monitor.

- c. If the monitor has been exposed to rain or water.
- d. 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.
- e. If the monitor has been dropped or the cabinet has been damaged.

f. When the monitor exhibits a distinct change in performancethis 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.

NOTIICE

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 (availabel for SMT-1931, SMT-2731)

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 tocomply 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) Llthium coin cells in the product sold or distributed ONLY in California USA.

"Perchlorate Material - special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchiorate."

Contents

| Important Safety Instructions | 2 |
|--------------------------------|----|
| Unpacking | 5 |
| Viewing the Control Panels | 5 |
| Front View | 5 |
| Rear & Left Side View | 6 |
| Remote Controller | 7 |
| Connecting to External Devices | 8 |
| OSD Menu Configurations | |
| No Signal Display | 10 |
| OSD Menu Selection | 10 |
| Picture Menu | |
| Sound Menu | |
| Setup Menu | |
| Input Menu | |
| Specifications | 19 |
| Dimensions | 21 |
| CorrectDisposal | 25 |

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



- Remote controller sensor.
- MENU

Activates and exits the On Screen Display.

- **6** (⟨∁□ +
 - 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.

Image: 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.

- ENTER -/ SOURCE Selects input source, activates a highlighted menu item.
- (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.

Speaker

Rear & Left Side View

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



Rear View

- POWER AC power input.
- VIDEO-A IN Composite signal input for VIDEO A.
- VIDEO-A OUT Video looping output for VIDEO A.
- VIDEO-B IN Composite signal input for VIDEO B.
- VIDEO-B OUT Video looping output for VIDEO B.
- HDMI IN HDMI signal input.
- VGA
 VGA signal input

Left Side View

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



9

10

Ð

Ð

ß

A

ß

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



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.

Nhen using a stand or wall-mount, use parts provided by Samsung 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.
- \circledast 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.



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 disapear 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.
- 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

| _ | | Picture | |
|-----------|-----------------------------------|----------------------|----------------|
| | Mode Backlight Contrast | : Dynar | nic 10 10 100 |
| 0 | Brightness Sharpness Screen | Ĵ | 45 50 |
| ٥ | Auto Adjustme Advanced Sett | | |
| £. | ▼ More | | |
| Cardela . | 🔶 Move | G [,] Enter | |

- 1. Press the MENU button to select the Picture menu.
- 2. Press the ENTER or ▶ button.
- 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.
- Press the ▼/▲ and ENTER button to select the Screen menu.
- 5. Press the V/▲ 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 V/▲ button to select "PC Position", then press ENTER button.
- Press the V/▲ button to adjust the Vertical Position.
 Press the
 ▶ button to adjust the Horizontal Position.
 Press the ENTER button.
 - Press the ENTER Dutton.
- 4. Press the MENU button to exit.
- Image Reset (Initializing the Image Settings) You can replace all image settings with the factory default values.

| | S | creen | | |
|---|---------------------------|---------|----------|---|
| | Image Lock PC Position | | | • |
| ۲ | Image Reset | | | |
| Ŵ | | | | |
| Ŵ | ♦ Move | G Enter | ▲ Return | |

- 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 selfadjust 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 V/▲ 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.
- Press the V/▲ and ENTER button to select the Advanced Settings menu.
- Press the ENTER or ▶ button two times.
 Press the
 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.
- It includes:R-Offset,G-Offset,B-Offset,R-Gain, G-Gain,B-Gain and Reset. Select these menus in turn by pressing ▼/▲ button.
- 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.
- 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,
- 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.
- 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



- Press the MENU and V/▲ button to select the Sound menu.
- 2. Press the ENTER or ► button two times to select the Mode menu.
- 3. Press the V/▲ 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.
- Press the
 ▶ button to select a particular item. Press the ENTER button.
- 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 V/▲ and ENTER button to select the Language menu.
- Press the V/▲ and ENTER button to select the setting you want.
- 5. Press the MENU button to exit.
- Blue Screen/Melody



- Press the MENU and V/▲ 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 V/▲ 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.
- 5. 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.
- 1. Press the MENU and ▼/▲ button to select the Setup menu.
- 2. Press the ENTER or button.
- 3. Press the V/▲ and ENTER button to select the Energy Saving menu.
- 4. Press the V/▲ and ENTER button to select the setting you want.
- 5. 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 V/▲ button to select the Setup menu.
- 2. Press the ENTER or ▶ button.
- Press the ▼/▲ and ENTER button to select Auto Switch menu.
- 4. Press the **▼**/**▲** and ENTER buttons to set Time Interval.
- Setting up Your PC Software (Based on Windows XP)



The Windows Display Properies 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 Properies 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 | VESA GTF 1280×720 | | 44.772 | 59.855 |
| | | 70 | 52.53 | 69.853 |
| VESA CVT | 1280×720 | 75 | 56.456 | 74.777 |
| VESA | 1152x720 | 75 | 67.500 | 75.000 |
| 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 | 67.432 | 59.94 |

SMT-1935

| Displa | y 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 | +/+ |
| | 1280x1024 | 63.981 | 60.020 | 108.000 | +/+ |
| | 1280×1024 | 79.976 | 75.025 | 135.000 | +/+ |
| MAC | 640×480 | 35.000 | 66.667 | 30.240 | -/- |
| | 832x624 | 49.726 | 74.551 | 57.284 | -/- |
| | 1152x870 | 68.681 | 75.062 | 100.000 | +/+ |

SMT-1931

| Displ | ay 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 | <mark>85.500</mark> |
| 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 |
| VESA DIVIT | 040 X 400 | 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 |
| VESA DMT | 800 x 600 | 72 | 48.077 | 72.188 |
| VESA DIVIT | 000 X 000 | 75 | 46.875 | 75.000 |
| MAC | 832×624 | 75 | 49.726 | 74.551 |
| VESA DMT | 1024×768 | 60 | 48.363 | 60.004 |
| VESA DIVIT | | 70 | 56.476 | 70.069 |
| VESA GTF | 1280×720 | 60 | 45.00 | 60.00 |
| VESA GIF | 1280×720 | 60 | 44.772 | 59.855 |
| VESA | 1152×864 | 75 | 67.5 | 75.00 |
| VESA | 1280×960 | 60 | 60.000 | 60.000 |
| VESA | 1280×1024 | 60 | 63.979 | 60.000 |
| VESA | | 75 | 79.972 | 75.024 |
| | | 60 | 75.000 | 60.000 |
| VESA | 1600×1200 | 65 | 81.25 | 65.000 |
| | | 70 | 87.500 | 70.000 |
| VESA | 1920×1080 | 60 | 67.158 | 59.963 |
| VLOA | 1920×1080 | 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



- Press the MENU and V/▲ button to select the Setup menu.
- 2. Press the ENTER or ▶ button.
- 3. Press the $\mathbf{\nabla}/\mathbf{A}$ 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 displays "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.

| Setup | | | | |
|-------|--|-----------------------------|--------|--|
| | Language Blue Screen Melody | : English : Off : Off | * * * | |
| 0 | ECO Saving Auto Switch System ID | : Off : 1 | * * * | |
| ٢ | No Signal OSD Screen Burn Prot | : On tection | | |
| \$ | + Move | 🖙 Enter 🛛 | Return | |

- 1. Press the MENU and ▼/▲ button to select the Setup menu.
- 2. Press the ENTER or ▶ button.
- 3. Press the $\mathbf{\nabla}/\mathbf{A}$ 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 V/▲ button to select Screen Burn Protection.
- 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.





- 1. Press the MENU and ▼/▲ button to select Input menu.
- 2. Press the ENTER and ▶button.
- 3. Press the V/▲ 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 V/▲ 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 ∇/A 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 | | |
| | Inch | 22'' | 19'' | |
| | Display Type | LED F | PANEL | |
| | Resolution (HxV) | 1920 X 1080 | 1280 x 1024 | |
| Devel | Brightness (cd/m ²) | 250 | | |
| Panel | Contrast | 1000:1 | | |
| | Response Time | 5msec | | |
| | Viewing Angle Degree | 170(Horizonta | l)/160(Vertical) | |
| | Pixel Pitch(mm) | 0.248(H)x 0.248(V) | 0.294(H)x 0.294(V) | |
| | Scan System | | essive | |
| | CVBS Resolution | | L, PAL: 620TVL | |
| | Scanning Frequency | | 30KHz-81KHz | |
| | scanning Frequency | | 56Hz-75Hz | |
| | Color System | NTSC 3.5 | 8/PAL 4.43 | |
| Picture | Screen Mode | 4:3 , | 16:9 | |
| | 3D Comb Filter | Yes | | |
| | Noise Reduction | Yes | | |
| | Auto Switch | Yes | | |
| | Freeze | Yes | | |
| | Under Scan | | es | |
| | Composite | 2CH input, 1.0Vp-p, 75Ωterminal, Loop Throug | | |
| Video | | out , BNC Type | | |
| | HDMI | | input | |
| | VGA | | input | |
| | udio | | W Stereo , RCA Type | |
| OSD | language | 16 languages(Eng/Fre/Ge | r/Spa/Ita/Por/Dut/Swe/ | |
| Cincula Chand | T:14 | Rus/Tha/Ara/Tur/Dan/Kor | ~22° | |
| Simple Stand | Tilt | | ~22° 412mm x 217.4mm x 406.5mm | |
| Dimensions | | (with stand) | (with stand) | |
| (WxDxH) | Net | 515mm x 59.9mm x 316mm | 412mm x 59.4mm x 347mm | |
| | | (without stand) | (without stand) | |
| Weight | Net weight | 5.18Kg | 4.78Kg | |
| | Power Supply | |)~240V | |
| Electric Performance | Power Consumption | 24W | 22W | |
| A 1 1 1 | Temperature | | +40°C° | |
| Operating condition | Humidity | 20%-90% (non- | | |
| | | | | |

Specifications (SMT-2731/SMT-1931)

| Model name | | SMT-2731 | SMT-1931 | |
|----------------------------|---------------------------------|---|--|--|
| Sales Area | | Worldwide | | |
| Broadcasting System | | NTSC/PAL System | | |
| | Inch | 27'' | 19'' | |
| | Display Type | | PANEL | |
| | Resolution (HxV) | 1920 X 1080 | 1366 x 768 | |
| Panel | Brightness (cd/m ²) | 300 | 250 | |
| Paner | Contrast | | 00:1 | |
| | Response Time | 5msec | | |
| | Viewing Angle Degree | 170(Horizonta | al)/160(Vertical) | |
| | Pixel Pitch(mm) | 0.248(H)x 0.248(V) | 0.300(H)x 0.300(V) | |
| | Scan System | Prog | ressive | |
| | CVBS Resolution | | L, PAL: 620TVL | |
| | Scanning Frequency | Horizontal: 30KHz-81KHz Vertical : 47Hz-75Hz | Horizontal: 30KHz-81KHz Vertical : 56Hz-75Hz | |
| Picture | Color System | NTSC 3.5 | 8/PAL 4.43 | |
| | Screen Mode | 4:3 , 16 : 9 | | |
| | 3D Comb Filter | Yes | | |
| | Noise Reduction | Y | /es | |
| | Auto Switch | Yes | | |
| | Freeze | Yes | | |
| | Under Scan | Yes | | |
|) (de e | Composite | 2CH input , $1.0Vp$ -p , 75Ω terminal , Loop Throug out , BNC Type | | |
| Video | HDMI | 1CH | input | |
| | VGA | | input | |
| A | udio | 2 Channel input, 2W Stereo, RCA Type | | |
| OSD | language | 16 languages(Eng/Fre/Ger Tha/Ara/Tur/Dan/Kor/Jpn/ | /Spa/Ita/Por/Dut/Swe/Rus/ /Chi) | |
| Simple Stand | Tilt | -2° | ~22° | |
| Dimensions (WxDxH) | Net | 648mm x 479.1mm x 212mm (with stand) 648mm x 396mm x 61.66mm (without stand) | 446.4mm x 359.6mm x 217.4mm (with stand) 446.4mm x 59.4mm x 276.9mm (without stand) | |
| Weight | Net weight | 7.28Kg | 4.23Kg | |
| | Power Supply | | 0~240V | |
| Electric Performance | Power Consumption | 39.5W | 18.5W | |
| Operating condition | Temperature | 0°C ~ | +40°C° | |
| Operating condition | Humidity | 20%-90% (nor | n-condensation) | |





SMT-1935









Unit:mm





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.



SALES NETWORK

HEAD OFFICE

6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, SEOUL 463-400 Rep. of KOREA Tel : +82-70-7147-8753, 8764 Fax : +82-31-8018-3740 www.samsungsecurity.com

SAMSUNG TECHWIN AMERICA Inc.

100 Challenger Rd. Suite 700 Ridgefield Park, NJ 07660 Toll Free : +1-877-213-1222 Direct : +1-201-325-6920 Fax : +1-201-373-0124 www.samsung-security.com SAMSUNG TECHWIN EUROPE LTD.

2nd Floor, No. 5 The Heights, Brooklands, Weybridge, Surrey, KT13 0NY, UK Tel : +44-1932-82-6700 Fax : +44-1932-82-6701 www.samsungsecurity.co.uk

www.samsungsecurity.com www.samsungipolis.com