**Operating Instruction Manual**

# LED MONITOR

*DSMH21.5LED-WGF*
*DSMH23.6LED-WGF*
*DSMH27LED-WGF*
*DSMH32LED-WGF*
*DSMH42LED-WGF*
*DSMH46LED*
*DSMH54.6LED*

## Table of contents

## Important Safety Information

Read and understand all safety information before using this product. Follow all instructions marked on the product and described in this document.  Pay close attention to the following installation warnings and safety precautions.

**Intended Use**

This monitor was designed for AV or BNC input and tested to replace an existing monitor. These monitors are intended for indoor use only and are not designed for use in hazardous locations.

**Explanation of Signal Word Consequences**

**DANGER: To avoid the risk of fire and/or explosion which may result in serious injury or death: Do not install or use this product in a hazardous location.**

**WARNING**: **To avoid the risk of fire which could result in serious injury or death:** Do not remove the cover or back of the monitor.

**CAUTION: To avoid the risk of electric shock which could result in serious injury or death.**

  •This device must only be operated with the original power supply,

  •Do not use a damaged power supply.

  •Do not use a power cord that is frayed or otherwise damaged.

    •

**CAUTION: To avoid the risk of electric shock which may result in minor or moderate injury:**

The socket-outlet should be installed near the equipment and should be easily accessible.

•Use a power cable that is properly grounded. Always use the appropriate AC cord certified for the individual country. Some examples are listed below:

•Do not service the monitor Do not remove the cover or back of the monitor. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. The backlight inverter output is at high voltage.

•Do not use non-conforming replacement parts.

•Do not expose the monitor to rain or other sources of water, steam, or moisture.

•Do not place foreign objects on the monitor or its cables.

**CAUTION: To avoid the risk of minor or moderate personal injury or damage to the monitor:**

• Never wall-mount the monitor without the locking mechanism in place.

• Use an anchoring system appropriate for the weight of the product.

• Consult a construction professional before attempting to hang the unit on the wall.

**To avoid the risk of glass breakage which may result in minor or moderate injury:**

• Handle the monitor with care to avoid breaking the display screen. The display contains glass parts. Dropping the display may cause the glass parts to break.

• Do not place foreign objects on the monitor.

**Important Notes:**

•Plug power cord into appropriate power source & a grounded receptacle.

•When unplugging power supply cord, pull on plug not cord.

•Do not connect or disconnect this product during an electrical storm.

•Install the display in a well-ventilated area. Always maintain adequate ventilation to protect the display from overheating and to ensure reliable and continued operation.

•Do not expose this display to heat. Passive heat may cause damage to the case and other parts.

•Do not install this display in areas where extreme vibrations may be generated. For example, nearby manufacturing equipment as this may produce strong vibrations. The vibrations may cause picture discoloration or poor video quality.

• Product weight varies from 10 to 24 pounds depending on the packaging, use caution when lifting.

• Ensure that metal does not contact the touch screen.

**To avoid ergonomic concerns:**

Do not install the monitor in a manner or location with awkward accessibility. Extended use may result in muscle, tendon, or fixed posture strains. It is recommended you take periodic breaks from continuous use.

**CAUTION：To avoid the risk of electric shock which may result in minor or moderate injury:**

Seek  qualified advice if liquid is spilled into the product or the product is exposed to rain or water.

If the product does not operate properly when operating instructions are followed.

If the product has been dropped or the case has been damaged.

If the product shows a distinct change in performance indicating a need for service.

## Accessories

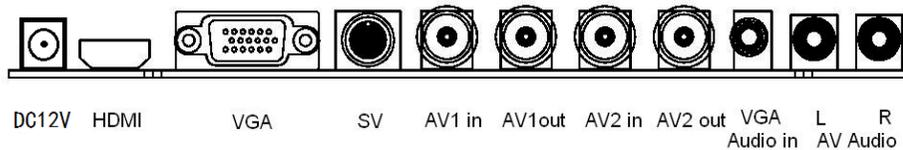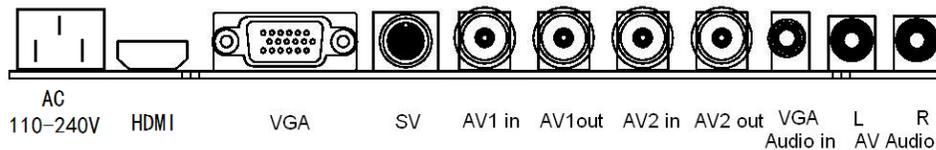Please check the following listed accessories before installation:

| | |
|---|---|
| AC wire | one pc |
| Power supply | one pc (DC12V available ) |
| Remote Control | one pc |
| VGA  cable | one pc |
| AUDIO  cable | one pc |
| User manual | one pc |

# Installation
## Rear Interface
### (a) External power supply



DC12V  HDMI    VGA    SV    AV1 in  AV1out  AV2 in  AV2 out  VGA  L      R
                                                            Audio in  AV Audio

### (b) Built-in power supply



AC
110-240V  HDMI    VGA    SV    AV1 in  AV1out  AV2 in  AV2 out  VGA  L      R
                                                               Audio in  AV Audio

## Explanation of  connectors
 This section describes the jacks on the back panel of your MONITOR.

**DC12V:** power supply  DC12V

**AC:** power supply  AC100-240V

**HDMI**  Lets you connect a device, such as a digital cable box, with an HDMI or a DVI output. HDMI (High-Definition Multimedia Interface)  Provides an uncompressed digital connection that carries both video and audio data by way of an integrated mini-plug cable. Since HDMI technology is based on Digital Visual Interface (DVI), the jack on the back of your MONITOR is also compatible with DVI devices. HDMI Input  lets you connect a device, such as a digital cable box, with an HDMI output.

**VGA**  Connect your computer, or other device with a VGA output, to this jack using a 15 pin D-sub cable.

**S-VIDEO**  Connect a DVD player, or other device with a s-video output, to this jack using a 4 pin s-video cable.

**VIDEO INPUT 1 (BNC1/BNC2 IN)**  Lets you connect a device that has composite video jacks, such as a VCR or DVD player.

**VIDEO OUTPUT (BNC1/BNC2 OUT)**  Connect a VCR or DVD-recorder to record digital and analog programs from the ANTENNA CABLE INPUT (excluding copy-protected programs  and component video formats) while the MONITOR is turned on. You must leave the MONITOR on the same channel you are recording.

 **AUDIO IN** (Stereo mini jack) Use to obtain sound when a device is connected to the VGA jack. Use a 3.5 mm stereo mini pin cable (sometimes referred to as 1/8" stereo mini pin) to connect a device to your MONITOR.

**AUDIO L and R:**Receives audio from another device such as a camcorder, video game console, VCR, or DVD player. Use when connecting to the VIDEO or S-V Input.  The left audio connector is usually white. The right audio connector is usually red.

## 2. Connection under various signal input modes
### （Ⅰ） Connecting with VGA

This connection allows you to connect to a suitable device. Connect one end of a 15-pin monitor cable to the VGA VIDEO jack on the monitor and the other end to the device's video output jack. Note, if your device's video output isn't 15-pin, you'll need an adapter that can connect to a 15-pin monitor cable.

**Connect your audio cable.**

Connect a 3.5 mm stereo mini pin cable (sometimes referred to as 1/8" stereo mini pin) to the PC AUDIO jack on the back of the monitor and the other end to the Audio Output jack on the device.

**Viewing the PC**

1. Plug in the MONITOR and the device.
2. Turn on the MONITOR and the PC.

3. Press the SOURCE button  on the remote control until you see *VGA* displayed at the top of the monitor's screen. To go back to viewing AV video, press the SOURCE  buttons to enter the AV

（Ⅱ）**Connecting the Device with AV Video (Basic)**

This connection allows you to connect a device that has a Video Out jack, for example, a  camera or DVD player.

**Note:** If the device you're connecting also has Component Video jacks and you  have component video cables, we recommend you use the Component Video   (Advanced) Connection instead.

**Connect your yellow video cable( video in).**

Connect a video cable to the BNC1 or BNC2  INPUT jack on the back of the monitor and to the Video Output jack on the DVD player or a camera.

**Connect your red and white audio cables.**

Connect the audio (red and white) cables to the AUDIO INPUT R and L jacks on the back of the monitor and to the Audio Output jacks on the DVD player.

**Viewing the Picture from the Connected Device**

1.Plug in the monitor and the device.

2.Turn on the MONITOR and the device you want to view, for example a DVD player.

3. Press the SOURCE button on the remote control until you see *AV1* (if connected to the VIDEO INPUT 1 jack) or *AV2*(if connected to the AV2 jacks) displayed at the top  of the monitor's screen.

**Note:** If the picture from the DVD player appears blue and your device is connected to the VIDEO Input, you might be tuned to the wrong input. Make sure you press SOURCE until you see AV1/AV2 displayed at the TOP of the monitor's screen.

（Ⅲ）**HDMI connection**

High-Definition Multimedia Interface (HDMI) technology is an uncompressed digital connection that carries both video and audio data by way of an integrated mini-plug cable.

**Using the example of a set-top box or a DVD player:**

•**If your set-top box has an HDMI jack, connect an HDMI cable.**

Connect an HDMI cable to the HDMI Input jack (or the HDMI 2 jack if it is more convenient) on the back of the monitor and to the HDMI Out jack on the back of the  device.

**If your DVD player has a HDMI jack, connect an HDMI cable and an HDMI adapter.**

**A.** Connect an HDMI cable to the HDMI Input jack on the back of the monitor.

**B.** Attach an HDMII adapter to the end of the HDMI cable, then connect the adapter to the HDMI Out jack on the DVD player

**C.** Since you're using an HDMI adapter, you need to connect Audio left and right cables to the DVD AUDIO R and L jacks on the back of the monitor and to the R and L jacks on the back of the device.

**Viewing the Picture from the Connected Device**

The device in this connection is connected to the HDMI jack. To view this device:

1. Turn on the  monitor and the device you want to view, for example a set-top box.

2. Press the source button on the remote control until you see *HDMI* displayed at the top of the monitor's screen.

**3. Connecting the Monitor Cables to your Computer**

You should be sure all cable connections are secure. Shaking and vibration may dislodge cables that are improperly connected. Route all wiring and cabling away from heat sources and sharp metal edges to avoid damage. Also, keep the touch screen cable away from sources of electromagnetic and radio frequency interference.

**4.Testing the Monitor**

After connection, turn on the power switch located on the rear(or side) bezel. Before you test your monitor, make sure all cables are connected properly and routed through the cable management system.  Be sure to tighten all cable screws. To test that the monitor is working properly:

1. Turn on your device.

2. Make sure the video image is displayed. If it is not, restart your monitor. Ensure the LED is blue – red indicates power but no signal.

3. Make sure the video image is centered within the screen area. Use the monitor controls to adjust the image if necessary. Perform an Auto Config function first, then if you wish you can adjust the horizontal and vertical
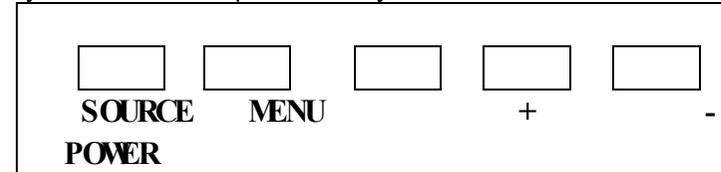
position, contrast, and brightness to better suit your video card and your personal preference. Refer to Basic OSD setup for more information on using the on-screen menu to adjust the video display.

| Power | Turn On & off the monitor |
|---|---|
| Power-s | Back light : high,  mid , low |
| ▯▯ | Scale : normal, center, full, 16:9 |
| Sensor | Available  only built-in camera |
| Freeze | Still : on & off |
| Mute | Switches the sound on or off |
| Lock | Menu lock: lock, unlock |
| 、 | Move  Up / down highlight icon, |
| Menu | Display the main on-screen menu |
| < 、 > | Press them to turn up  or turn dowm the volume |
| Auto | Auto adjust (available only VGA mode) |
| INFO | Press it to display information on the monitor screen |
| VGA | VGA signal |
| HDMI | HDMI signal |
| AV | AV input signal |
| PIP | picture in picture |
| Source | Press it  to display and select the available video signal |
| POP | Picture on  picture |
| 0~9 | available  only  password entered |
| SWAP | POP & PIP function |
| EXIT | Press this button to exit the menu |

## Controls & Functions

Ⅰ、**Buttons on the lower-right part of the panel**

If you cannot locate your remote, you can use the side panel buttons  of your monitor to operate many of the monitor's features.

```
SOURCE     MENU              +          -
POWER
```

**1.POWER**  Turn on / off the monitor

**2.SOURCE**: Accesses the  available  video  input  signals (VGA、HDMI AV1、AV2 、S-VIDEO)

**3.MENU**：  Brings  up  the  MONITOR  Main  menu.  When  in  the  OSD system, press MENU button to return to the previous menu  or exit

**4.＋:** turn on  the  volume.  In the MONITOR menu system, acts like the right arrow button on the remote control and adjusts menu controls.

**5.－** :turn down the volume. In the MONITOR menu system, acts   like the left arrow button on the  remote control and adjusts menu controls.

**6.** ⬤ Remote control signal receiver window

**7.** ⬤Remote indicator: In red when standby mode, in blue when  in display.

**HOW to use  buttons**

Use the buttons on the right side control panel to adjust the OSD

（1）Power on the LCD monitor.

(2) press source button  to accesses the available video input signals，press ＋ or － button to enter the video mode

(3) press MENU button then press ＋ / － button move highlight icon left / right

(4) Press SOURCE  button to enter the submenu，then press ＋ / － button    corresponding to edit,

(5)  When you are satisfied with the setting ,press MENU button to return to the previous menu or exit

**Remote control**

* Ensure the remote control is pointed toward the remote control window on the display. No obstacles should be placed between the remote control and the remote control window. The effective receiving range for the signal is 3 meters to the front of the remote control window,

1. To ensure a normal operation, the remote control should not be dropped or damaged in any way .It should also be kept dry and away from all heat sources.

2. Battery replacement is necessary when the remote controller acts inconsistently or stops operating the LCD display.
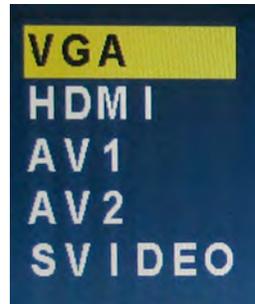
**Choose the input source**

To enjoy display from the external input source, before you select the source, you need to connect the devices, otherwise, when you select the source no signal will appear on the screen. Press source button on the monitor or remote control, the menu appears on the screen, then press source to select the monitor item, and press "+/- (>)" to confirm it

**VGA:** the input source from VGA terminal output
**HDMI:** the input source from HDMI in terminal output
**AV1/2:** the input source from AV or video camera terminal output
**SVIDEO:** the input source from S-Video terminal output
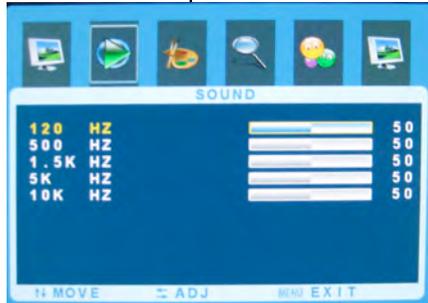
# OSD setup

1. OSD setup under VGA input mode

| Picture | Remark |
|---|---|
| | **Brightness**: Adjusts the brightness of the picture.<br>**Contrast**  Adjusts the difference between the light and dark areas of the picture.<br>**Color temp: press** " > " button Change the color intensity of the temperature selected (Normal/warm/cool/s-RGB/user)<br>**Scale:** normal/center<br>**Auto:** (auto-adjust) **press**"> "button Performs automatic configuration of the phase, clock, vertical and horizontal position.<br>**Picture mode:** press    or    button to select picture mode, then press the < or > buttons to select the correct color system, in general ,you can see it as " USER". Press < or > button to select.<br>" standard/dynamic/soft /user" . |

SOUND



equalizer



**Equalizer** The five band graphic equalizer lets you adjust the audio frequency settings. You can select one of the five band equalizer presets or create your own personal preset (see picture equalizer).

**Balance** Adjusts how much audio is sent to the left and right(-50 to +50)

The intermediate value is 0,when indication value of balance increases toward +50,sound of the right speaker becomes stronger. When indication value of balance decrease toward -50 sound of the left speaker becomes stronger.

**Sound Mode** Provides special processing through your speakers (depending on the setting you chose as your Sound Type). The available audio modes are: standard/user/movie/music.

**AVC:**ON OFF

**SURROND**: the surround sound feature expands the audio listening field wider and deeper to create exceptional sound quality from the monitor's speakers

**Language** Lets you select your preferred language for the menus: (English/ Chinese/German/ French. Spanish/Portuguese/Russian/Italian are supported)

**OSD H-POSITION:** H-position moves the OSD position left (0-50) or pressing the "> " button. H-position moves the OSD position right (51-100)

**OSD V-POSITION:** Adjust the OSD image vertically by pressing the "< or > " button. V-position moves the OSD position up or down. 0-100

**OSD DURATION**:5-60

**OSD HALFTONE**:0-50

**Sleep-timer:** Lets you set the monitor to turn off after a given amount of time

(OFF .15min.30min.45min.60min)

**Back light:** HIGH, MID. LOW

**Auto power: (ON.OFF) Only working with Body sensor**

**MEM-RECALL**: press > key will reset the unit to factory defaults





unavailable on VGA mode

| | |
|---|---|
|  | **H-POSITION** ： Moves image horizontally on screen either left (<) or right (>). <br> **V-POSITION** ： Moves images vertically on screen either up (<) or down (>). <br> **CLOCK**： If the clock setting of your image is not fine-tuned, you may observe periodic vertical bars of video noise on your image. These bars of noise are usually adjusted out when an Auto Configuration is performed. If the bars of noise are still present, this setting can be adjusted manually. <br> **PHASE**： If the phase of your monitor is not fine-tuned, you may observe unstable horizontal lines |
|  | **MULITI WINDOW:** <br> OFF.PIP. POP <br> **The default value is off,** Lets you select your window for the picture: PIP . POP |

**2. OSD setup under AV1/AV2/S-VIDEO /HDMI input mode**

| PICTURE | Remark |
|---|---|
|  | **Brightness**: Adjusts the brightness of the picture. <br> **Contrast**  Adjusts the difference between the light and dark areas of the picture. <br> **HUE:**-50 to +50 <br> **Saturation**:0~100 <br> **Sharpness**:0~100 <br> **Color temp: press** " > " button Change the color intensity of the temperature Selected (Normal/warm/cool/s-RGB/user) <br> **Scale:** normal/center <br> **Picture mode:** <br> standard .dynamic/soft/user <br> **3D NR:** Reduces picture "static" or any type of interference. This feature is especially useful for providing a clearer picture in weak analog signal conditions. Press the right arrow to choose between: *Off* for no noise reduction; *Low* for a softer, smoother picture that retains picture sharpness and detail; *Medium* for a slightly softer picture than the *Low* setting; *High* for an even softer, smoother picture than the other settings (the picture detail is somewhat decreased). <br> **MPEG NR**: Mpeg noise reduce ( OFF/ low / high) |

| | |
|---|---|
| SOUND<br><br><br><br> | **Equalizer** The five-band graphic equalizer lets you adjust the audio frequency settings. You can select one of the five-band Equalizer Presets or create your own personal preset.<br>**Balance** to balance right and left sound of the monitor,<br>The intermediate value is 0,when indication value of balance increases toward +50,sound of the right speaker becomes stronger.<br>When indication value of balance decrease toward -50 sound of the left speaker becomes stronger<br>**Sound Mode** Provides special processing through your speakers (depending on the setting you chose as your Sound Type). The available audio modes are:<br>**Standard. User/movie/music.**<br>**Standard:** Does not give any special processing, simply provides the mono or stereo sound provided by the signal you're watching.<br>**AVC:**ON  OFF<br>**SURROUND**: the surround sound feature expands the audio listening field wider and deeper to create exceptional sound quality from the monitor's speakers |

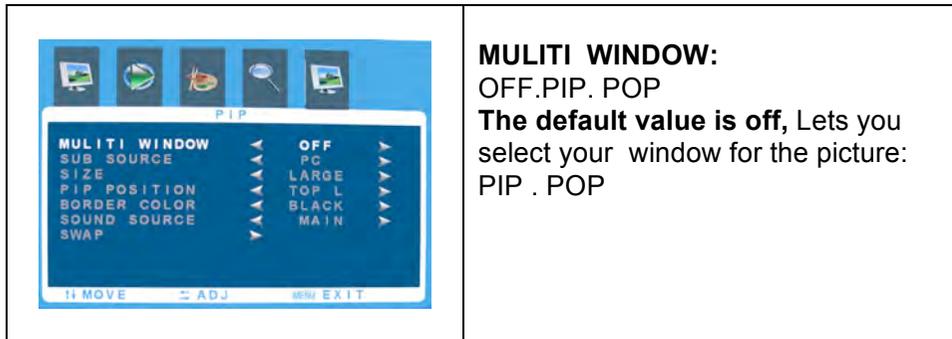| | |
|---|---|
|  | **Language** Lets you select your preferred  language for the menus: English. Chinese. German. French. Spanish. Portuguese. Russian. Italian<br>**OSD H-POSITION:** H-position moves the OSD position left (0-50)  or press the "> " button.  H-position  moves the OSD position right (51-100)<br>**OSD V-POSITION:**Adjust the OSD image vertically by pressing the "< or > " button.V-position moves the OSD position up or down. 0-100<br>OSD DURATION:0-50<br>OSD HALFTONE:0-100<br>**Sleep-timer:** Lets you set the monitor to turn off after a given amount of time (off .15min.30min.45min.60min)<br>**Back light:** HIGH, MID. LOW<br>**Auto power: (ON.OFF) Only working with Body sensor**<br>**MEM-RECALL**: press ► key will restore the factory defaults |
| ADVANCE<br><br> | Press< or > for desired adjust parameter option until satisfactory value is achieved ,when VGA signals are received ,the automatic modes is used for parameter adjustment.<br>**H size:** horizontal size of picture can be adjusted in this item<br>**HSTART**: horizontal position of picture can be adjusted in this item<br>**V size**: vertical size of picture can be adjusted in this item<br>**VSTART**: vertical  position of picture can be adjusted in this item |

**MULITI  WINDOW:**
OFF.PIP. POP
**The default value is off,** Lets you select your  window for the picture: PIP . POP

## Care and Cleaning

**CAUTION:** Turn off your MONITOR before cleaning.
You can clean the MONITOR as required, using a soft lint-free cloth. Be sure to occasionally dust the ventilation slots in the cabinet to help assure adequate ventilation.
The MONITOR's screen should be cleaned with a soft, lint-free cloth.  Take care not to scratch or mark the screen. If necessary, you may use a cloth damped with warm water. While cleaning do not spray liquid directly on the screen, or allow liquid to run down the screen and inside the Monitor. Also, never place drinks or vases with water on top of the monitor. This could increase the risk of  fire, shock hazard or other damage to the monitor.

**Mounting Your MONITOR to the Wall**
Caution: The wall mount must bear a minimum of five times the monitor's net weight without causing damage. To mount your MONITOR to the wall you need to purchase a VESA wall mount. For models 15inch. 17inch . 19inch.20inch, purchase a VESA 100 x 100, KM4x 8mm (100 x 100, for example, means the mounting measurements are 100mm horizontally and 100mm vertically; M4 x 8 mm is the type screw that needs to be used).
1.You need first to remove the base  before attaching the wall mount.
A. Place the MONITOR, face down, on a surface that is soft, yet  strong
   enough to hold the MONITOR.
B. Use a screwdriver to remove the screws from the four holes on
   each side of the bottom of the MONITOR's base (only use with base)
2.Make sure all cables are already connected to the MONITOR.
3.Follow the directions included with the wall mount to mount the monitor to the wall.