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# User Manual 31.5" FHD 1920 x 1080 LED-backlit LCD















#### **Legal Information**

First English printing, January 2024

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

#### Safety Instructions

# Please read all of these instructions carefully before you use the device. Save this manual for future reference.

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labeled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

#### What the warranty does not cover

□ Normal wear and tear.

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:

| Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or |
|---|
| failure to follow instructions supplied with the product.   |
| Repair or attempted repair by anyone not authorized by us.  |
| Any damage of the product due to shipment.  |
| Removal or installation of the product.   |
| Causes external to the product, such as electric power fluctuation or failure.                                    |
| Use of supplies or parts not meeting our specifications.  |

- ☐ Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

#### **Regulatory Notices Federal Communications Commission (FCC)**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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#### **Before Installation**

- It is very important to mount the equipment in a suitable cabinet or on a stable surface.
- Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

### Unpacking

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

### **How To Clean Your LCD Monitor**



### Caution :

- To avoid the risk of electric shock, make sure your hands are dry before unplugging your monitor from or plugging your monitor into an electrical outlet.
- When you clean your monitor, do not press down on the LCD screen. Pressing down on the screen can scratch or damage your display. Pressure damage is not covered under warranty.
- Use only cleansers made specifically for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the finish.
- Do not spray any kind of liquid directly onto the screen or case of your monitor. Spraying liquids directly onto the screen or case can cause damage which is not covered under warranty.
- Do not use paper towels or abrasive pads to clean your monitor. Using an abrasive pad or any wood based paper product such as paper towels can scratch your LCD screen.

# **Cleaning Your Monitor**

To clean your LCD safely, please follow these steps:

- ① Disconnect the power cord.
- ② Gently wipe the surface using a clean, dry microfiber cloth. Use as little pressure as possible.

# Cleaning Tough Marks and Smudges

To remove tough marks and smudges, please follow these steps:

- ① Disconnect the power cord.
- Spray a small amount of non-abrasive cleanser on a microfiber cloth.
- Caution: Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.
- Gently wipe the surface. Use as little pressure as possible.
- Wait until your monitor is completely dry before plugging it in and powering it up.

# < 1.1 > Package Content

# ID-E32Aw / ID-E32AwN ID-HE32Aw / ID-HE32AwN



31.5" FHD LCD display X 1
6ft VGA cable X 1
Power cord X 1
Remote controller X 1

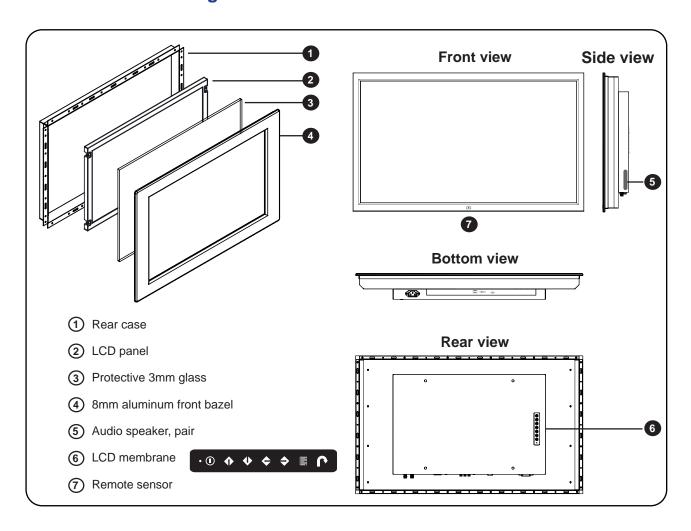
#### Basic I/O



#### Upgrade I/O with advanced features



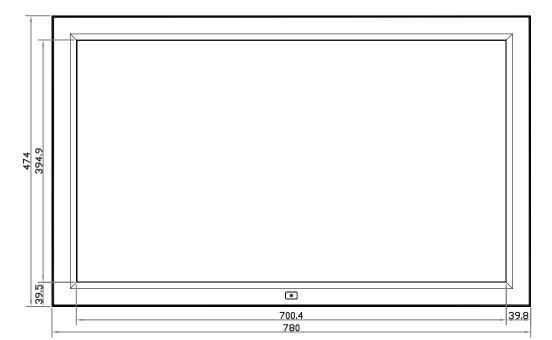
# < 1.2 > Structure Diagram



| Model                   | Product Dimension<br>(W x D x H)              | Net Weight         |
|-------------------------|---|--------------------|
| ID-E32Aw<br>ID-E32AwN   | 780 x 88.2 x 474 mm<br>30.7 x 3.5 x 18.7 inch | 20.9 kg<br>46 lb   |
| ID-HE32Aw<br>ID-HE32AwN |   | 23.9 kg<br>52.6 lb |

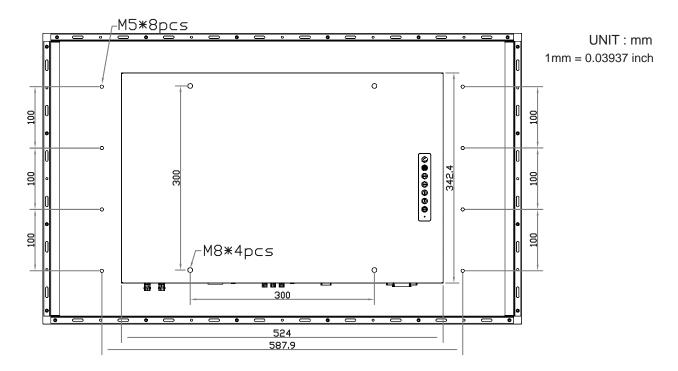
**Side View** 

### **Front View**

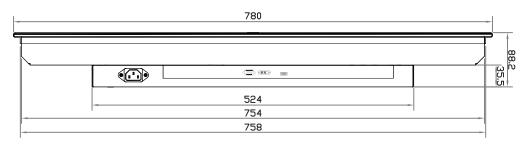


35.5 88.2

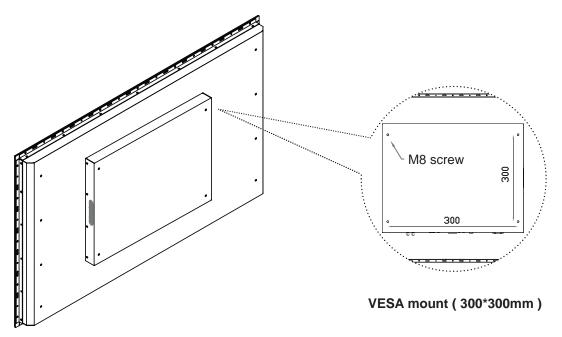
### **Rear View**



### **Bottom View**



# < 1.3 > VESA Installation



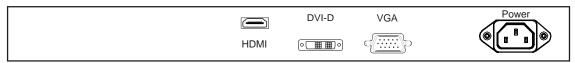
■ Hardware and M8\*4 pcs for VESA mount are not provided

# ID-E32Dw / ID-HE32Dw



31.5" FHD LCD display X 1
6ft VGA cable X 1
Power cord X 1
Remote controller X 1

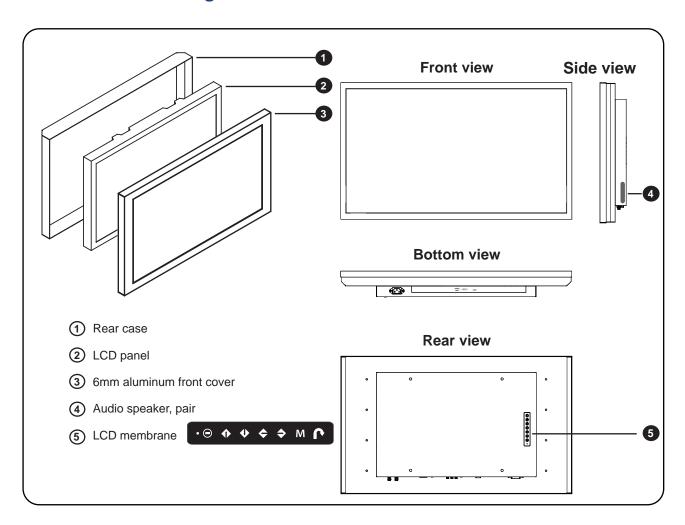
#### Basic I/O



#### Upgrade I/O with advanced features

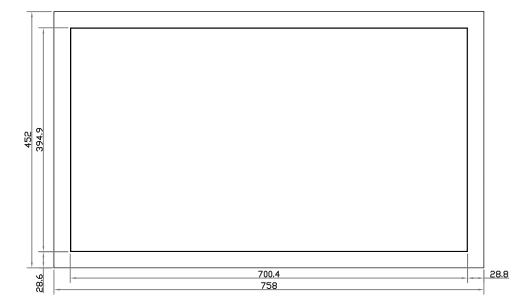


# < 2.2 > Structure Diagram

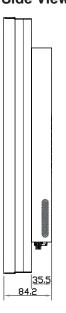


| Model     | Product Dimension<br>(W x D x H) | Net Weight |
|-----------|----------------------------------|------------|
| ID-E32Dw  | 758 x 84.2 x 452 mm              | 18.7 kg    |
| ID-HE32Dw | 29.8 x 3.3 x 17.8 inch           | 41.1 lb    |

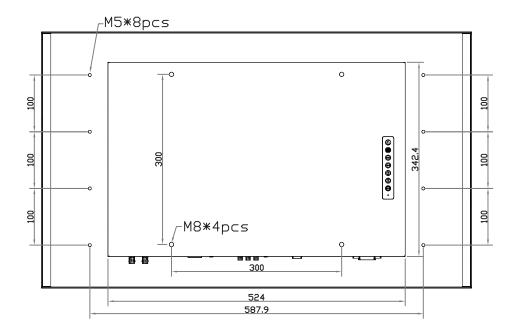
### **Front View**



### **Side View**

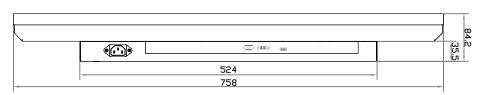


### **Rear View**

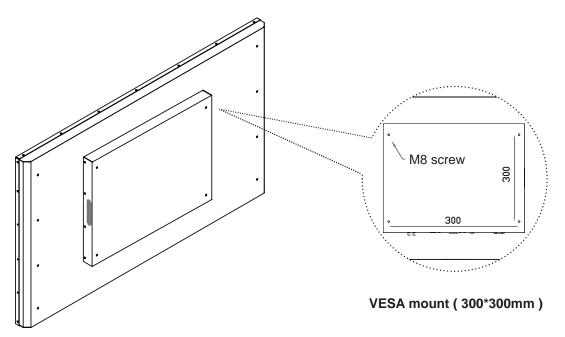


UNIT : mm 1mm = 0.03937 inch

### **Bottom View**



# < 2.3 > VESA Installation



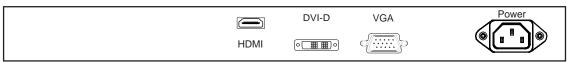
■ Hardware and M8\*4 pcs for VESA mount are not provided

# ID-E32Pw / ID-HE32Pw



31.5" FHD LCD display X 1
6ft VGA cable X 1
Power cord X 1
Remote controller X 1

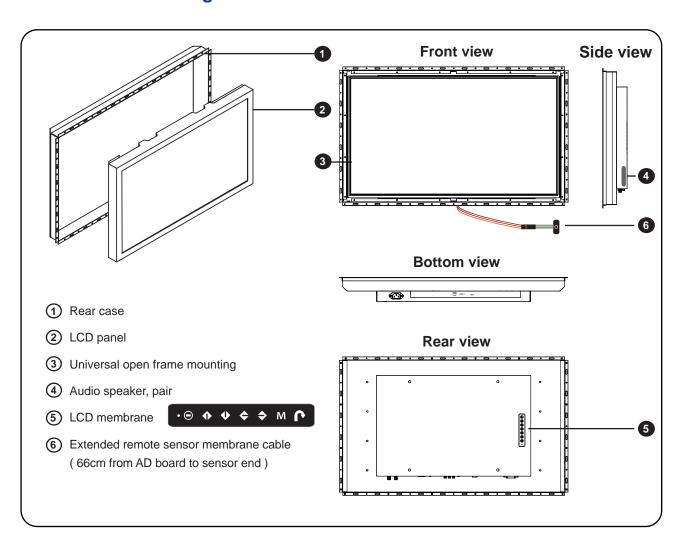
#### Basic I/O



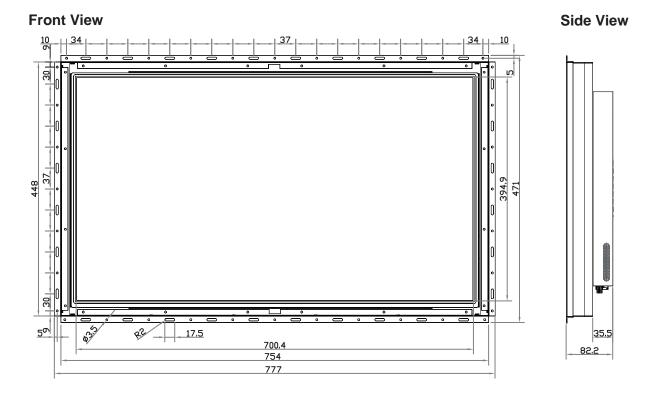
#### Upgrade I/O with advanced features



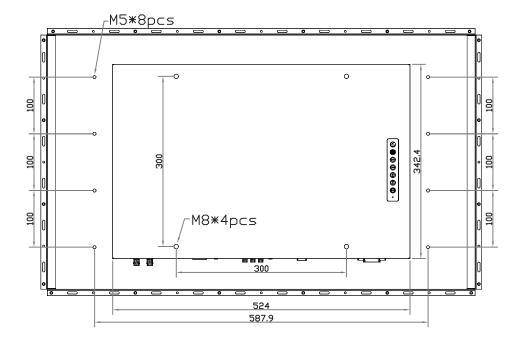
# < 3.2 > Structure Diagram



| Model     | Product Dimension<br>(W x D x H) | Net Weight |
|-----------|----------------------------------|------------|
| ID-E32Pw  | 777 x 82.2 x 471 mm              | 16.4 kg    |
| ID-HE32Pw | 30.6 x 3.2 x 18.5 inch           | 36.1 lb    |

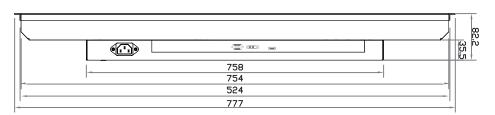


### **Rear View**



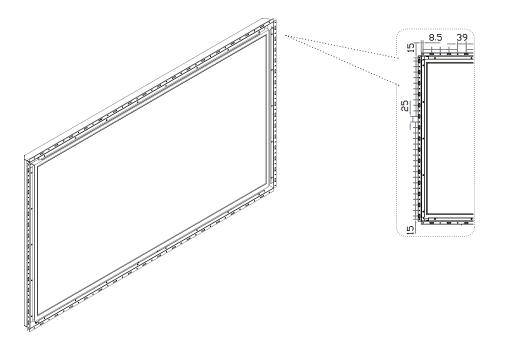
UNIT: mm 1mm = 0.03937 inch

### **Bottom View**

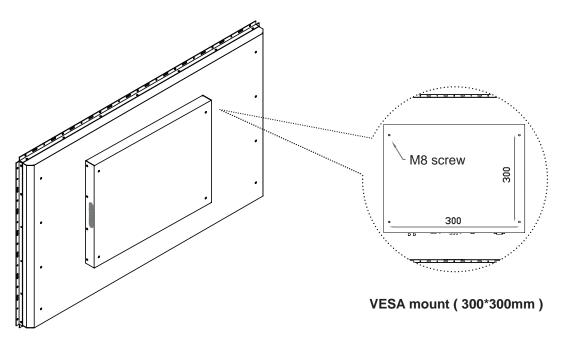


# < 3.3 > Installation

# (I) Universal mount



# (II) VESA mount (300\*300mm)



■ Hardware and M8\*4 pcs for VESA mount are not provided

# < Part 4 >

# < 4.1 > Product Specifications

| Mechanical Design          | ID-E32Aw /<br>ID-HE32Aw | ID-E32AwN /<br>ID-HE32AwN | ID-E32Dw /<br>ID-HE32Dw | ID-E32Pw /<br>ID-HE32Pw |
|----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|
| Protection                 | 8mm front bezel         | NEMA 4 / IP65             | front cover             | open frame              |
| Front Panel                | Black, RAL 9005         |                           | -                       |                         |
| Rear Casing                | Black, RAL 9005         |                           |                         |                         |
| VESA mount                 | 300 x 300 mm            |                           |                         |                         |
| Universal mount            |                         |                           | ready                   |                         |
| Overhead tilted wall-mount | option                  |                           | option                  | -                       |
| Desktop stnad              | option                  |                           | option                  | -                       |

| LED-backlit LCD Panel            | Standard              | Sunlight Readable |  |
|----------------------------------|-----------------------|-------------------|--|
| Brightness ( cd/m <sup>2</sup> ) | 350 1500              |                   |  |
| Contrast Ratio ( typ. )          | 1200 : 1              | 3000 : 1          |  |
| MTBF ( hrs )                     | 30,000                | 50,000            |  |
| Panel Size ( diagonal )          | 31.5-inch Widescre    | een TFT color LCD |  |
| Native resolution                | 1920 >                | x 1080            |  |
| Colors                           | 16.7M, 8-bit          |                   |  |
| Viewing Angle ( L/R/U/D )        | 89/89,                | 89/89/89          |  |
| Response Time ( ms )             | 8 20                  |                   |  |
| Dot pitch ( mm )                 | 0.363                 |                   |  |
| Display Area ( mm )              | 698.4H x 392.85V      |                   |  |
| Surface treatment                | Anti-glare Anti-glare |                   |  |
| Surface hardness                 | 3H                    |                   |  |
| Backlight Type                   | LED                   |                   |  |

| Video               |                     |
|---------------------|---------------------|
| VGA                 | Analog 0.7Vp-p      |
| DVI                 | DVI-D single link   |
| HDMI                | HDMI 1.4 / HDCP 1.4 |
| Option Display port | DP 1.0 / HDCP 1.3   |
| Composite ( BNC )   | NTSC & PAL          |

| Audio Option             |                                   |
|--------------------------|-----------------------------------|
| Input                    |                                   |
| Connector                | 3.5mm stereo jack<br>30kΩ / 750mV |
| Impedance / Power level  | 30kΩ / 750mV                      |
| Output                   |                                   |
| Connector                | 3.5mm stereo jack<br>30kΩ / 2.8V  |
| Resistance / Power level | 30kΩ / 2.8V                       |
| Speaker:                 |                                   |
| Dual Stereo              | 10W x 2                           |
|                          | •                                 |

<sup>\*</sup>When the audio output is connected, speaker output is OFF

| Power             | Standard                              | Sunlight Readable |  |
|-------------------|---------------------------------------|-------------------|--|
| Input             | Auto-sensing 100 to 240VAC, 50 / 60Hz |                   |  |
| Consumption:      |                                       |                   |  |
| Screen ON         | Max. 56W                              | Max. 160W         |  |
| Power saving mode | Max. 9W                               | Max. 9W           |  |
| Power button OFF  | Max. 2W                               | Max. 2W           |  |

| Compliance  |                      |  |
|-------------|----------------------|--|
| EMC         | FCC & CE             |  |
| Safety      | CE / LVD & UKCA      |  |
| Environment | RoHS3 & REACH / WEEE |  |

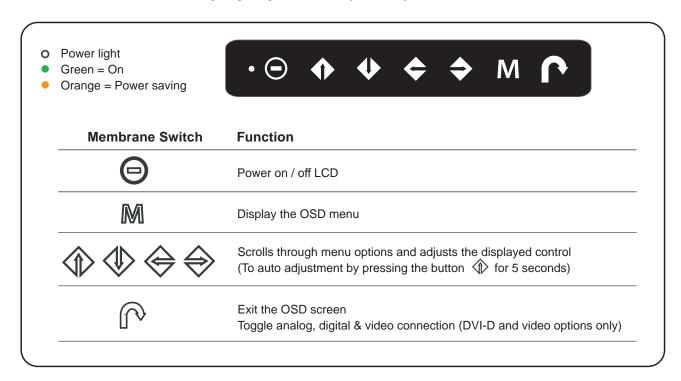
| Environmental Conditions |             |                                    |  |
|--------------------------|-------------|------------------------------------|--|
| Operating                | Temperature | 0 to 55°C degree                   |  |
|                          | Humidity    | 10~90%, non-condensing             |  |
|                          | Altitude    | 16,000 ft                          |  |
| Storage /                | Temperature | -20 to 60°C degree                 |  |
| Non-operating            | Humidity    | 5~90%, non-condensing              |  |
|                          | Altitude    | 40,000 ft                          |  |
|                          | Shock       | 10G acceleration (11ms duration)   |  |
|                          | Vibration   | 10~300Hz 0.5G RMS random vibration |  |

| Physical Specibcation | ID-E32Aw /<br>ID-HE32Aw           | ID-E32AwN /<br>ID-HE32AwN | ID-E32Dw /<br>ID-HE32Dw | ID-E32Pw /<br>ID-HE32Pw |
|-----------------------|-----------------------------------|---------------------------|-------------------------|-------------------------|
| Product (WxDxH)       |                                   |                           |                         |                         |
| mm                    | 780 x 88.2 x 474                  |                           | 758 x 84.2 x 452        | 777 x 82.2 x 471        |
| inch                  | 30.7 x 3.5 x 18.7                 |                           | 29.8 x 3.3 x 17.8       | 30.6 x 3.2 x 18.5       |
| Net Weight            | 20.9 kg / 46 lb 23.9 kg / 52.6 lb |                           | 18.7 kg / 41.4 lb       | 16.4 k g / 36.1 lb      |
| Chassis color         | Dark                              |                           |                         |                         |
| Chassis materials     | Aluminum                          |                           |                         |                         |

<sup>\*</sup> All dimensions stated are subject to change if options are selected / integrated to base model part codes

| Applicable Format  |              |                                       |
|--------------------|--------------|---------------------------------------|
| DVI-D / VGA Input  | PC Signal    | :1920 x 1080 x 60Hz                   |
|                    |              | 1360 x 768 x 60Hz                     |
|                    |              | 1280 x 1024 x 60 / 75Hz               |
|                    |              | 1280 x 960 x 60Hz                     |
|                    |              | :1280 x 768 x 60 / 75Hz               |
|                    |              | 1152 x 864 x 75Hz                     |
|                    |              | :1024 x 768 x 60 / 70 / 75Hz          |
|                    |              | :848 x 480 x 60Hz                     |
|                    |              | :800 x 600 x 60 / 72 / 75Hz           |
|                    |              | 720 x 400 x 70Hz                      |
|                    |              | :640 x 480 x 60 / 72 / 75Hz           |
|                    |              | 640 x 400 x 70Hz                      |
|                    |              | 640 x 350 x 70Hz                      |
|                    | Audio Signal | 2ch Linear PCM                        |
| HDMI Input         | PC Signal    | Same as VGA                           |
|                    | HDMI 1.4     | 1920 x 1080 x 50 / 60Hz ( 1080p )     |
|                    |              | 1920 x 1080 x 25 / 30Hz ( 1080i )     |
|                    |              | 1280 x 720 x 50 / 60Hz ( 720p )       |
|                    |              | 720 x 480 x 50 / 60Hz ( 576p / 480p ) |
|                    | Audio Signal | 2ch Linear PCM                        |
| Display port Input | PC Signal    | 1920 x 1080 x 60Hz                    |
|                    |              | 1600 x 1200 x 60Hz                    |
|                    |              | 1360 x 768 x 60Hz                     |
|                    |              | 1280 x 768 x 60 / 75Hz                |
|                    |              | 1280 x 768 x 60Hz                     |
|                    |              | 1024 x 768 x 60 / 70 / 75Hz           |
|                    |              | 800 x 600 x 60 / 72 / 75Hz            |
|                    |              | 720 x 400 x 70Hz                      |
|                    |              | :640 x 480 x 60 / 72 / 75Hz           |
|                    | Audio Signal | 2ch Linear PCM                        |

# < 4.2 > On-screen Display Operation (OSD)



### 1 Picture

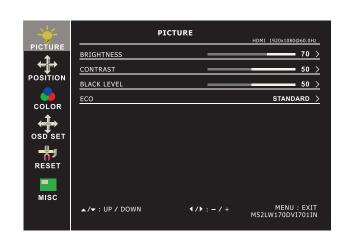
Brightness: Adjust the screen brightness

Contrast : Adjust the difference between the image background

( black level ) and the foreground ( white level )

Black level: Adjust background black level of the screen

Eco : Screen in power saving mode

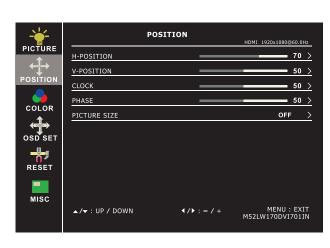


### 2 Position

H-Position : To adjust the horizontal position of the videoV-Position : To adjust the vertical position of the videoClock : To auto adjust H. Size of the screen

Phase : To fine tune the screen.

Picture size : FULL SCREEEN / 4:3 / 5:4 / 16:10



# < 4.2 > On-screen Display Operation (OSD)

### 31.5" FHD Display

### (3) Color

Color temperature: User / Warm / Cool / 5400k mode and

Red / Green / Blue color balance

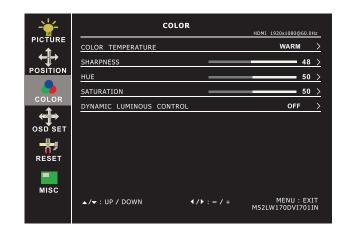
Sharpness : Adjust the image from weak to sharp

Hue : Adjust the screen hue value

Saturation : Adjust the saturation of the image color

Dynamic

luminous control : Control the dynamic brightness



### (4) OSD Set

Language : Select the language in which the OSD menu is

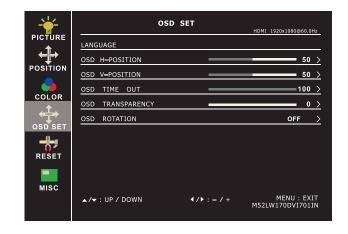
displayed - English

OSD H-Position : Align the screen image left or right
OSD V-Position : Align the screen image up or down

OSD time out : Adjust the screen timeout

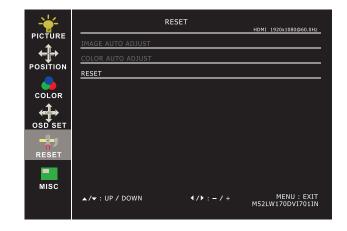
OSD transparency: Adjust the screen transparency

OSD rotation : Rotate the screen - 90° / 180° / 270°



### 5 Reset

Reset : Return the adjustment back to factory setting



# 6 MISC

Signal source: Select the signal source - DP / HDMI1 / HDMI2

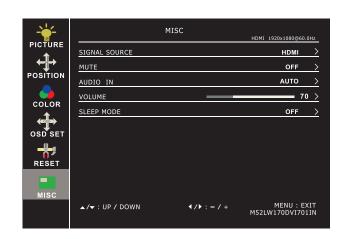
Mute : Turn off the surrounding sound

Audio in : Auto / Line in / DP

Volume : Adjust the volume of sound

Sleep mode : Set the off time - 10 min / 20 min / 30 min /

50 min / 60 min / 120 min / 240 min



# < 4.3 > How to Use Picture In Picture ( PIP ) / Picture By Picture ( PBP )

# < 4.3.1 > Picture in Picture ( PIP )

#### Mode

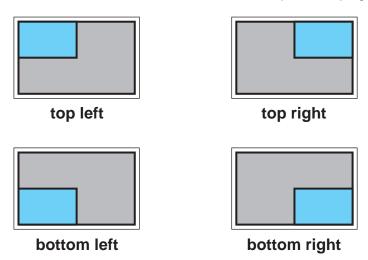
Display the Sub screen in the Main screen. OSD Menu  $\to$  MISC  $\to$  PIP Mode  $\to$  Large / Small / OFF



#### **Position**

Adjust the position of the Sub screen (top left, bottom left, top right, bottom right)

OSD Menu  $\rightarrow$  MISC  $\rightarrow$  PIP Position  $\rightarrow$  top left / top right / bottom left / bottom right



#### **Size**

Adjust the size of the Sub screen ( Large / Small ) OSD Menu  $\to$  MISC  $\to$  PIP Mode  $\to$  Large / Small

### Size of Sub screen

| <b>LCD Monitor</b> | Large Sub screen | Small Sub screen |
|--------------------|------------------|------------------|
| 1920 x 1200        | 552 x 414        | 480 x 360        |
| 1920 x 1080        | 552 x 414        | 480 x 360        |
| 1440 x 900         | 414 x 310        | 360 x 270        |
| 1366 x 768         | 392 x 294        | 340 x 254        |
| 1280 x 1024        | 368 x 276        | 320 x 240        |

# < 4.3.2 > Picture By Picture ( PBP )

#### Mode

Display the Sub screen next to the Main screen. OSD Menu  $\rightarrow$  MISC  $\rightarrow$  PIP Mode  $\rightarrow$  PBP



#### Size

| LCD Monitor | Main / Sub screen |
|-------------|-------------------|
| 1920 x 1200 | 955 x 716         |
| 1920 x 1080 | 955 x 716         |
| 1440 x 900  | 715 x 536         |
| 1366 x 768  | 678 x 508         |
| 1280 x 1024 | 635 x 476         |

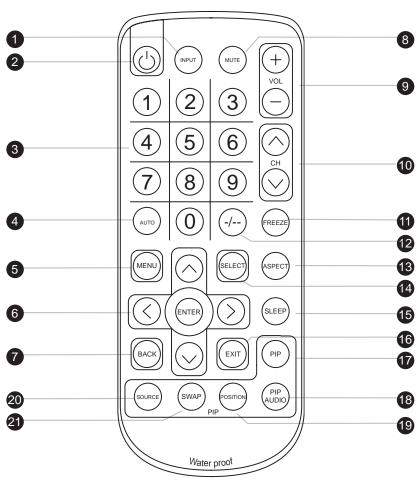
### < 4.3.3 > PIP / PBP Source

To select an input signal for PIP / PBP Sub screen. OSD Menu  $\rightarrow$  MISC  $\rightarrow$  PIP Source  $\rightarrow$  HDMI / SDI

The PIP / PBP is operable in the following table :

| Sub<br>Main | HDMI | SDI |
|-------------|------|-----|
| HDMI        | Х    | 0   |
| SDI         | 0    | Х   |

# < 4.4 > Remote Controller



| ① INPUT   | Select the source  |  |  |
|---|--|--|--|
| <u></u> ②   | Switches on or off the TV  |  |  |
| Only use in TV mode. Select channels. For channel num and above, enter the second digit within two seconds. |  |  |  |
| ④ AUTO  | Auto adjust  |  |  |
| ⑤ MENU  | Display the menu on the screen or go to the previous menu  |  |  |
| ⑥ <b>▲</b> / <b>▼</b> / <b>◆</b> / <b>►</b> / <b>ENTER</b>  | Go to the upper menu or select the previous value / Go to the next menu or select the next value / Decrease the setting value / Increase the setting value or enter to the select item setting Enter to the select item settings or excude the setting |  |  |
| 7 BACK  | Back to previous value   |  |  |
| ® MUTE  | Turn on or off the speaker   |  |  |
| 9 Vol + / -   | Increase or decrease the speaker volume  |  |  |
| ① CH+/-   | For TV model only, increase or decrease the channel number   |  |  |
| ① FREEZE  | Reserve for OEM model  |  |  |
| <pre>① -/</pre>   | For setting input single or double digits  |  |  |
| 3 ASPECT  | Adjust the screen size   |  |  |
| (4) SELECT  | To select the existing item  |  |  |
| (5) SLEEP   | Select the sleeping time   |  |  |
| ® EXIT  | Exit the menu or cancel  |  |  |

### **PIP functions**

| ① PIP       | Picture in picture                     |  |
|-------------|--|--|
| ® PIP AUDIO | To set the audio of in PIP mode        |  |
| 19 POSITION | To set the screen position in PIP mode |  |
|             | PIP Source                             |  |
| ② SWAP      | Swap screen in PIP mode                |  |

# < Part 5 > Options

# < 5.1 > Option Table

# 31.5" FHD Display

| Options                       | Aw /<br>AwN | HAw /<br>HAwN | Dw       | HDw      | Pw       | HPw      |
|-------------------------------|-------------|---------------|----------|----------|----------|----------|
| SDI                           | <b>✓</b>    | <b>✓</b>      | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> |
| MC multi-screen control       | <b>√</b>    | <b>✓</b>      | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>/</b> |
| Touchscreen                   | <b>✓</b>    | /             | /        | <b>✓</b> | <b>✓</b> | /        |
| DC Power                      | <b>✓</b>    | /             | <b>✓</b> | <b>✓</b> | <b>✓</b> | /        |
| MIL-type / lockable connector | <b>√</b>    | <b>✓</b>      | <b>✓</b> | <b>✓</b> | <b>✓</b> | /        |
| Quad display                  | <b>√</b>    | <b>✓</b>      | <b>✓</b> | <b>✓</b> | <b>✓</b> | /        |
| Auto / switch dimming         |             | /             |          | <b>/</b> |          | /        |

# < 5.2 > Options : 3G / HD / SD-SDI input

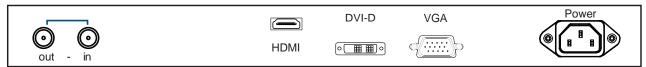


Our SDI input is an ideal solution for the broadcast-grade video and high resolution CCTV market.

Designed for use with NOVA series displays, a SDI input module can support up to 1080p @60Hz resolution without using additional space or power and it comes standard with a 1-year warranty.

\* SDI option comes with speakers & remote controller.

# SDI



| INPUT | 3G-SDI IN  | BNC x 1 / 0.8Vp-p ( 75 ohm )                   |
|-------|------------|--|
|       | 3G-SDI OUT | BNC x 1 / Active through, equalized & relocked |

| Standard Compliance | Video | SMPTE 425M / 274M / 296M / 125M |
|---------------------|-------|---------------------------------|
|                     |       | ITU-R BT.656                    |
|                     | Audio | SMPTE 299M / 272M-C             |
|                     |       |                                 |

| Compatible Video Format | 3G-SDI       | 1080p | @60 / 50Hz, 4:2:2      |
|-------------------------|--------------|-------|------------------------|
| <b>-</b>                |              | 1080p | @30 / 25 / 24Hz, 4:4:4 |
|                         |              | 1080i | @60 / 50Hz, 4:4:4      |
|                         |              | 720p  | @60 / 50Hz, 4:4:4      |
|                         | HD-SDI       | 1080p | @30 / 25 / 24Hz, 4:2:2 |
|                         |              | 1080i | @60 / 50Hz, 4:2:2      |
|                         |              | 720p  | @60 / 50Hz, 4:2:2      |
|                         | SD-SDI       | 480i  | @60Hz, 4:2:2           |
|                         | ITU-R BT.656 | 576i  | @50Hz, 4:2:2           |

| Compatible Audio Format | 3G-SDI | 48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized Video   |
|-------------------------|--------|---|
|                         | HD-SDI | 48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized Video   |
|                         | SD-SDI | 48kHz, 16 / 20 / 24 bit, 2 CH, Synchronized / Asyn- |
|                         |        | chronized Video                                     |

| Max. Transmission Distance | 3G-SDI | 150m at 2.97Gb/s  |
|----------------------------|--------|-------------------|
| 75 ohm coaxial cable       | HD-SDI | 250m at 1.485Gb/s |
|                            | SD-SDI | 480m at 270Mb/s   |

# < 5.3 > Options : MC

#### 31.5" FHD Display

### MC

# (Multi-display Control)

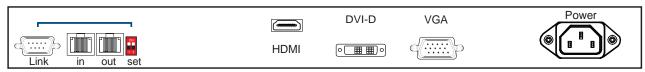


More control is always good. Especially when it is necessary and easy. Synergy Global Technology provides MC solution to control the OSD of various Industrial LCD displays up to 64 units.

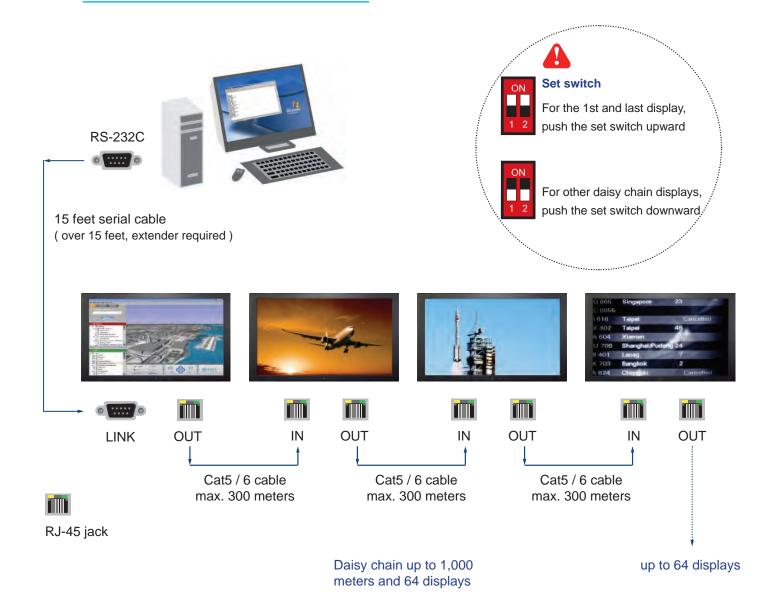
The RS-232C is used for the communication between the PC and the Prst display via a 15 feet serial cable while the CAN bus is used for the various LCD displays cascade together via CAT 5/6 cable, and daisy chain up to 1,000 meters.

Designed for use with our Industrial LCD displays, we provide a MC input module without using additional space or power.

### MC



\*\*\* Please download the protocol of MC control at : https://www.rackmountmart.com/downloads.html



# < 5.4 > Upgrade Options :

Display Port
 Audio
 ( DP 1.0, HCDP 1.3 )
 ( Built-in Dual Stereo Speakers, 2W x 2 )
 ( 3.5mm audio jacks for audio in & out )



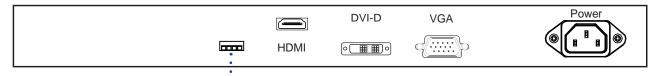
# < 5.5 > Options : Touchscreen & driver



### 31.5" USB Touchscreen Specification

| Model                | TPC Multi-touch                 | IR10 Multi-touch                              |
|----------------------|---------------------------------|---|
| Technology           | Projected Capacitive            | Infrared                                      |
| Touch Point          | 10                              | 10  |
| Input Type           | Finger or Capacitive Stylus     | Pen, Finger, Finger of gloved hand activation |
| Resolution           | 4096 x 4096                     | -   |
| Touch Point Accuracy | ± 2 mm                          | ± 2 mm  |
| Response Speed       | < 5 ms                          | ≤ 15 ms                                       |
| Activation Force     | < 5 g                           | No minimum touch activation force             |
| Surface Hardness     | 6H                              | -   |
| Light Transmission   | > 85%                           | -   |
| Haze                 | 3% ↓                            | -   |
| Durability           | 50 million touches              | Unlimited                                     |
| Top Layer            | 1.1 mm Glass                    | 3 mm  |
| Bottom Layer         | 0.7 mm Sensor Glass             | -   |
| Thickness            | 2 mm                            | -   |
| Connector            | USB                             | A-type USB                                    |
| Compatibility        | Linux / Android / Windows / Mac | Windows 7 / Windows 10                        |

- Dimension will be changed if touchscreen required
- USB touchscreen package includes 1 x 6ft USB cable, quick reference guideline and CD disc
- For detailed information, please refer to the attached CD disc
- As the touchscreen unit is not made of toughened glass, please handle it carefully



**USB Touchscreen** 

### **IR10** Driver



Connect the USB cable from the USB port on the LCD to a computer. The touch screen supports easy Plug-and-Play operations. There is no need to install additional drivers on the computer.

# < 5.6 > Options : DC Power



| Model           | 24V      | 48V      | 125V      |
|-----------------|----------|----------|-----------|
| Input rating    |          |          |           |
| Input voltage:  | 24-Volt  | 48-Volt  | 110-Volt  |
| Input range:    | 18 ~ 36V | 36 ~ 75V | 43 ~ 160V |
| Input current   |          |          |           |
| - No load       | 100 mA   | 50 mA    | 10 mA     |
| - Full load     | 7386 mA  | 3611 mA  | 1540 mA   |
| Output rating   |          |          |           |
| Output voltage: | 24-Volt  | 24-Volt  | 24-Volt   |
| Output current: | 6.25A    | 6.25A    | 6.25A     |
| Efficiency      | 88%      | 90%      | 89%       |

# \*\*\* For DC power option :

(1) If the unit with LCD, earthing may be required



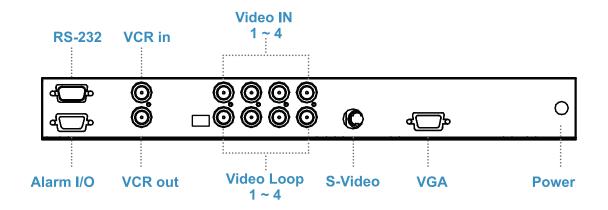
|                         | Input                    | Part no.      | MIL Standard      |
|-------------------------|--------------------------|---------------|-------------------|
| MIL - type<br>Connector | DC Power ***<br>( Male ) | MS3470W8-33P  | MIL - DTL - 26482 |
|                         | VGA ***<br>( Male )      | MS3470W14-15P | MIL - DTL - 26482 |

<sup>\*\*\*</sup> There are several additional MIL DC and VGA connector types with varying design characteristics to meet cost considerations and to provide users with the most design ßexibility possible. For more information, please contact us.

|                       | Input                | Part no.         | Standard   |
|-----------------------|----------------------|------------------|------------|
| Lockable<br>Connector | DC Power<br>( Male ) | YM-Ext-461CP001  | D-type 3W3 |
|                       | USB                  | LUSB - A111 - 00 | -          |

<sup>\*\*\*</sup> MIL - type or Lockable connectors above can be integrated with our LCD displays. Sale service just for connectors not provided.

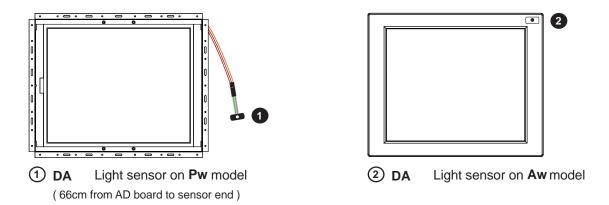
# < 5.8 > Options : Quad Display



# **QD** Specification

| Item                         |                  | Description                        |   |  |
|------------------------------|------------------|------------------------------------|---|--|
| Model Number                 |                  | QD (NTSC)                          | QD (PAL)  |  |
| Number of Cold               | or               | 16.7 M                             | 16.7 M  |  |
| Imaging Systen               | n                | NTSC                               | PAL   |  |
| Resolution                   |                  | 1024 x 525                         | 1024 x 625  |  |
| Refresh Rate                 |                  | 60                                 | 50  |  |
| Video Input                  | Camera Input     | 1.0 Vpp,                           | 75 Ohm x 4  |  |
|                              | VCR Input        | 1.0 Vpp, 7                         | 75 Ohm x 1  |  |
|                              | Live Monitor     | 1.0 Vpp, 7                         | 75 Ohm x 1  |  |
| Video Output                 | Loop Through Out | 1.0 Vpp, 7                         | 60 50  1.0 Vpp, 75 Ohm x 4  1.0 Vpp, 75 Ohm x 1  1.0 Vpp, 75 Ohm x 1  1.0 Vpp, 75 Ohm x 4  1.0 Vpp, 75 Ohm x 1  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye |  |
| Video Output  Auto Gain Cont | VCR Output       | 1.0 Vpp, 7                         | 75 Ohm x 1  |  |
| Auto Gain Cont               |                  | Υ                                  | res .   |  |
| Time / Date                  |                  | Υ                                  | /es   |  |
| On Screen Disp               | olay             |                                    |   |  |
| Camera Title                 |                  | 8 Chara                            | acter Title   |  |
| 2 x Zoom On Playback         |                  |                                    |   |  |
| Display Format               | QUAD             | Υ                                  | 'es   |  |
| Diopidy i office             | FULL             | Υ                                  | /es   |  |
|                              | SEQUENCY         | Υ                                  | ′es   |  |
| Dwell Time                   |                  | 0 to 99 Se                         | c Adjustable  |  |
| Alarm Inputs                 |                  | Selectable NO/NC Contacts x 4      |   |  |
| Relay Outputs                |                  | NO/NC contacts x 1: 1A @DC24V Max. |   |  |
| Alarm Hold Tim               | ne               | 1 Sec to Non-stop                  |   |  |
| Built-in Buzzer              |                  | Yes                                |   |  |
| Key Lock                     |                  | Yes                                |   |  |

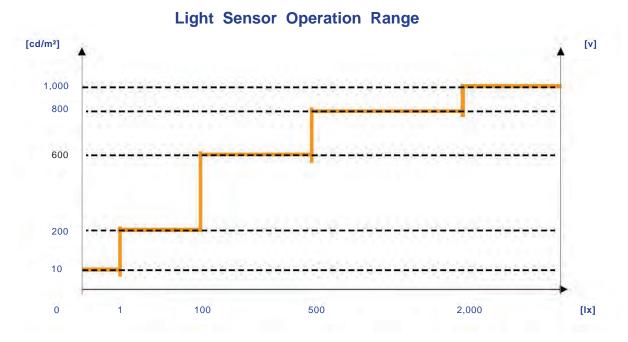
### < 5.9 > Options for Sunlight Readable : Auto Dimming 31.5" FHD Display



**DA** light sensor installed on the display front panel. Users can set auto dimming ON or OFF from OSD menu. Then display brightness changes according to its ambient brightness. Each change causes 10% increase or decrease on display brightness.

Once the auto dimming is ON, users cannot adjust brightness from OSD menu.

Steps: OSD Menu > Picture > Auto Dimming > ON



# **Options: Switch Dimming**

**DS** is a IP54 dimming knob installed on the bottom right side of the front panel. The display can support hyper dimming function to adjust brightness from nearly 0% to 100% via the easy-to-use knob. One click on dimming knob causes 2% increase or decrease on display brightness.



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