



# Contents

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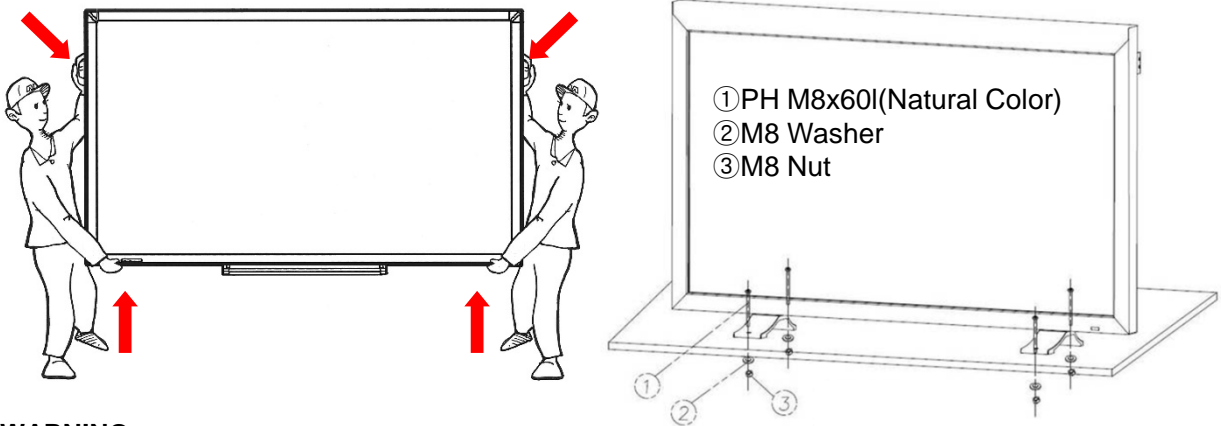
# 1. Important Safety Instructions

ICON	NAME	MEANING
	Warning	Failing to follow the precautions marked with this sign may result in a serious injury or even a fatality.
	Caution	Failing to follow the precautions marked with this sign may result in a personal injury or property damage.

***Before operating the set, please read this manual carefully.***

After products wrapping paper out , Grasp the upper handle as shown in the image, Go to the bottom bezel.

- The Product must be taken to erect and maintain a horizontal product is stable.
- When put up product the bottom, edge of the portion of product do not.



## **WARNING :**

To reduce the risk of electric shock do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel. To prevent fire or shock hazard, do not expose the rear of the set to rain or moisture. Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mark, or damage the Active Matrix LCD permanently.

## **CAUTION:**

Unauthorized tampering with the inside of the monitor invalidates the warranty. The manufacturer shall not warrant for any damage caused by improper maintenance and/or repair work by third parties.

## **Important safeguards for you and your new product:**

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into your new product, please read and observe the following safety points when installing and using your new product and save them for future reference.

### **1) Read Instructions**

### **2) Follow Instructions**

All operating and use instructions should be followed.

### **3) Retain Instructions**

The safety and operating instructions should be retained for future reference.

### **4) Heed Warnings**

All warnings on the product and in the operating instructions should be adhered to.

### **5) Cleaning**

Disconnect the unit from the electricity supply before cleaning. Do not use abrasive cleaners. Use a damp cloth for cleaning.

### **6) Water and Moisture**

Do not use this apparatus near water.

### **7) Transporting Product**

A product and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the product and cart combination to overturn.

### **8) Ventilation**

Do not block any of the ventilation openings.  
Install in accordance with the manufacturer's instructions.

### **9) Power Sources**

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your supplying dealer.

### **10) Power Lead Polarization**

This product is equipped with a three-wire grounding-type cord. This is a safety feature. Do not defeat the safety purpose of the grounding-type cord.

### **11) Power Cord Protection**

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the product.

### **12) Outdoor Antenna Grounding**

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. A "face plate" also needs to be installed with an isolating capacitor to prevent any damage from static.

### **13) Lightning**

For added protection for this product 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 antenna or cable system. This will prevent possible damage to the product due to lightning and power-line surges.

### **14) Power Lines**

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to avoid contact with such power lines or circuits, as contact with them might be fatal.

### **15) Earthing the product**

This product must be earthed properly to comply with the safety regulations in the country of use. If you are unsure of these regulations, please consult a qualified electrician.

### **16) Servicing**

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel. If the Set does not operate properly, switch it off and call your dealer.

### **17) Damage Requiring Service**

Isolate this product from the mains supply and refer servicing to qualified service personnel under the following conditions:

1. If the power-supply cord or plug is damaged.
2. If the glass front has been damaged.
3. If there is ingress of water between the glass and the LCD screen.
4. If the product 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 will often require extensive work by a qualified technician to restore the product to its normal operation.
5. If the product has been dropped or the cabinet has been damaged.
6. If the product exhibits a distinct change in performance.

### **18) Safety Check**

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition and the front seal is intact.

### **19) Mounting**

The product should be mounted on a wall only as recommended in the instructions.

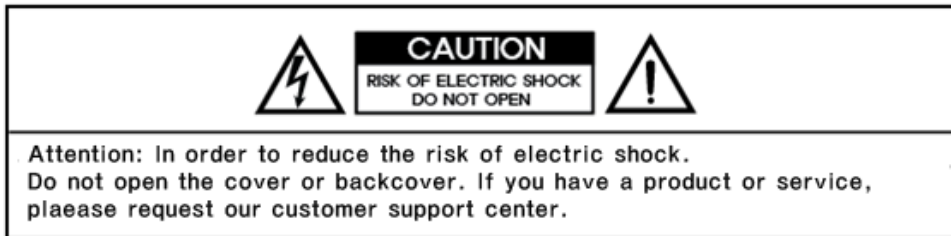
### **20) Power**

This set operates on an AC supply; the voltage is as indicated on the label on the Manual. This appliance must be earthed at all times through the chassis as well as through the power lead.

### **21) Location**

Do not install on an unstable location with support area smaller than the DID SET.  
Please secure enough space for safety use.

- Products at the same time holding the products when building or product, do not hold the back of the handle. under the product makes. the handle is a secondary role.
- Table stand and put them on the table by using the installation gets the nose does not necessarily prevent a fall on the floor using the screws fixed.



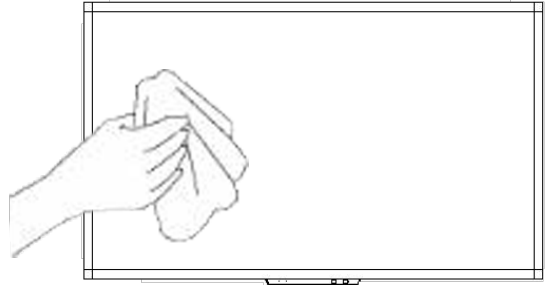
## 1-2. Care and Maintenance

### External Surface and Screen Maintenance

Clean the product with a soft dry cloth.

- Avoid cleaning the product with an inflammable substance such as benzene or thinner or with a wet cloth. This may result in a problem with the product.
- Avoid scratching the screen with your fingernails or a sharp object.
- Avoid cleaning the product by spraying water onto it. If water enters the product, it may result in fire, electric shock or a problem with the product.

A white stain may be generated on the surface of the model if a supersonic humidifier is used near it.



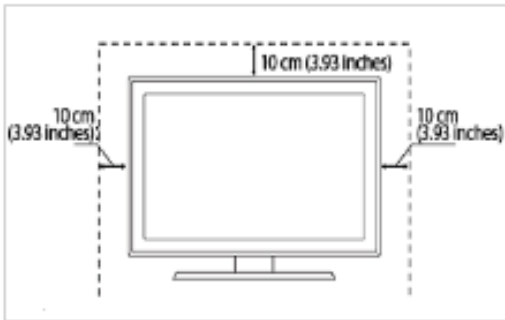
▷ The appearance and the color may differ depending on models.

### Securing the Installation Space

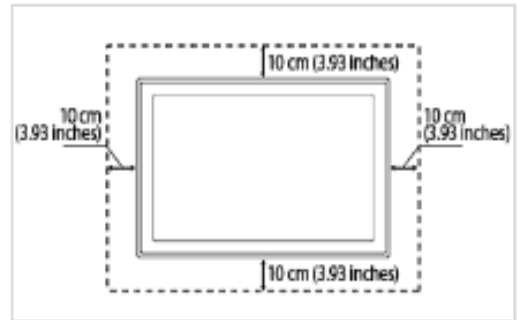
- Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation. Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature. Install the product so the required distances shown in the figure are kept.

▷ The appearance may differ depending on the product.

When installing the product with a stand



When installing the product with a wall-mount



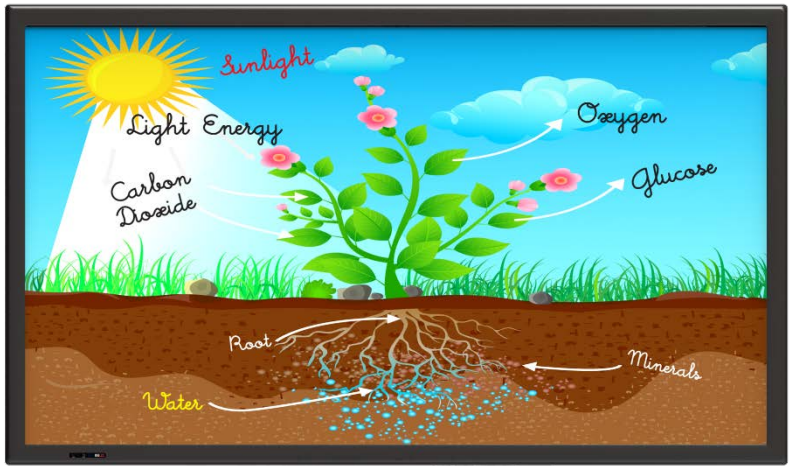
### About persistent images

- Displaying a still image for a long time may create a persistent image or stain on the screen. If you do not use the product for a long time, set the power-saving mode or screen saver.
- Due to technological constraints of the Panel manufacturer, the images generated by this product may appear either brighter or darker than normal by appr. 1ppm (parts per million) pixel. The number of sub-pixels of an panel by size:  
The number of Sub-Pixels = Max. Horizontal Resolution x Max. Vertical Resolution x 3  
Example) If the maximum resolution is 1920 x 1080, the number of sub-pixels is 1920 x 1080 x 3 = 6,220,800.


2. Introduction

2-1. Package Contents

- Unpack the product and check if all of the following contents have been included.
- Store the packaging box in case you need to move the product later.
- If any items are missing, contact your dealer.
- Contact a local dealer to purchase optional items.



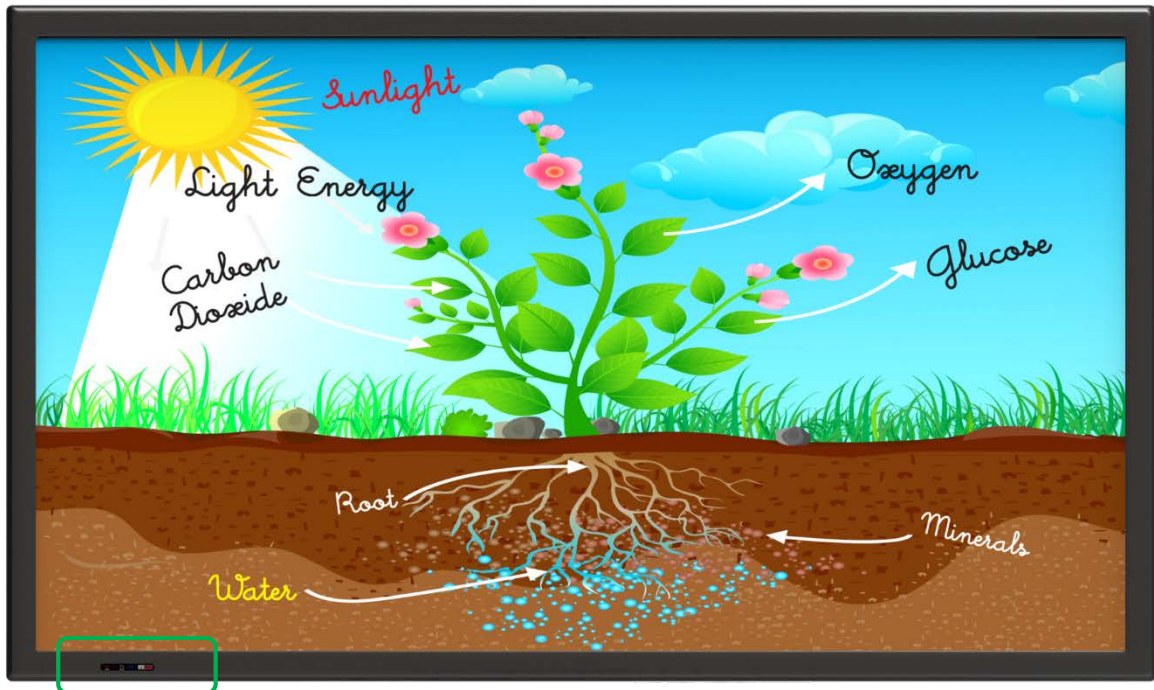
LED Display

Contents	<div></div> <div>User Manual</div>		
Cable	<div></div> <div>HDMI Cable</div>	<div></div> <div>USB Cable(for Touch)</div>	<div></div> <div>Power Cable</div>
Accessory	<div></div> <div>Remote Control</div>	<div></div> <div>Batteries(CR-2025 x 1)</div>	<div></div> <div>PEN x 2</div>




### 3. Each description

#### 3.1 Front View



⑤

1. POWER(  ) : Turns the LED Display On/Off.

2. LED Indicator

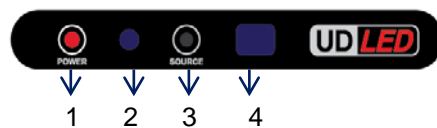
Shows Power ON mode -- BLUE

Power Saver mode by blinking RED.

Shows Power OFF mode -- RED. .

3. SOURCE(  ) : Selection Input Signal button

4. IR Receive Remote Control: Aim the remote control towards this spot on the LED Display.

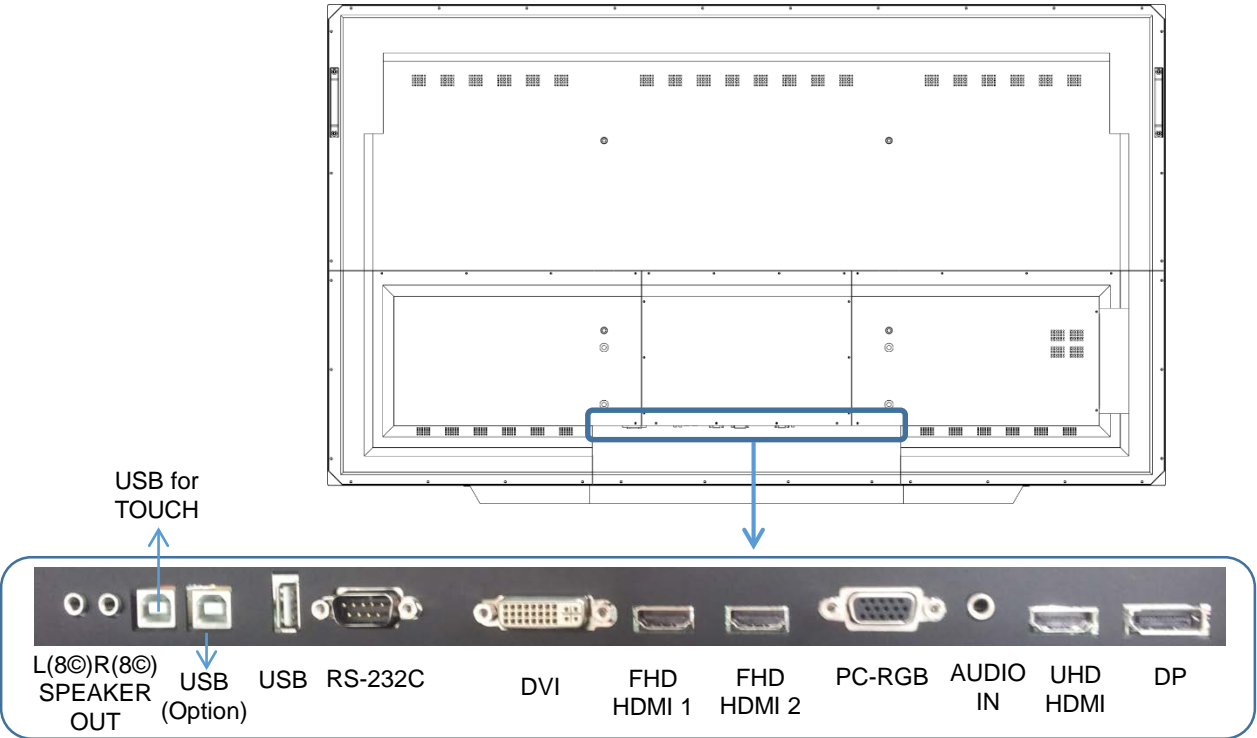


## Notes

※ When you want to use outer hard drive, if they are ones for using standard cables or adaptor, please use adaptors.

※ It can be occurred to be readable or not depended on USB cable length.

3.2 Rear View



Interface Description

Interface	Description
DP	DISPLAY PORT Input- up to UHD Input
UHD HDMI	High Definition Multimedia Input- up to UHD input
AUDIO IN	Audio IN for DVI and PC source
PC(RGB)	PC Screen Input
FHD HDMI2	High Definition Multimedia Input- up to FHD input, Support MHL
FHD HDMI1	High Definition Multimedia Input- up to FHD input
DVI	High Definition Multimedia Input
RS-232	Facility to control the screen via RS232 protocol
USB	Download-software update, Play contents
USB(Optional)	When connecting the USB for touch dual touch
USB for TOUCH	External PC using USB touch sensor connection

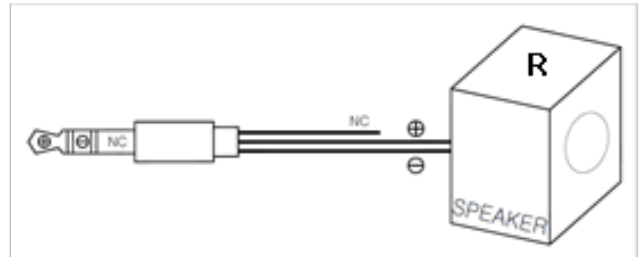
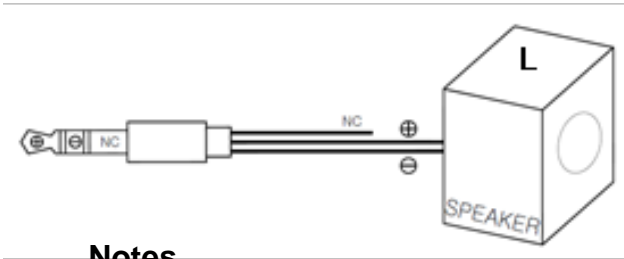
Notes

Service port: For factory uses only.

※ For products built in OPS, if connecting USB cables, it can be connected TOUCH Sensor automatically, but display should be converted by manually.

## 4. PC Connection

1. Connect RGB cable to RGB, Voice connection will be connected to PC AUDIO IN with stereo cable.
  2. HDMI cable will be connected to (display and voice are available at the same time)
  3. External speaker will be connected to R , L input with using Ø3.5 stereo cable and then connect same as below drawing. L, R connection is same. Internal speaker will not output.
- Note) Don't connect NC

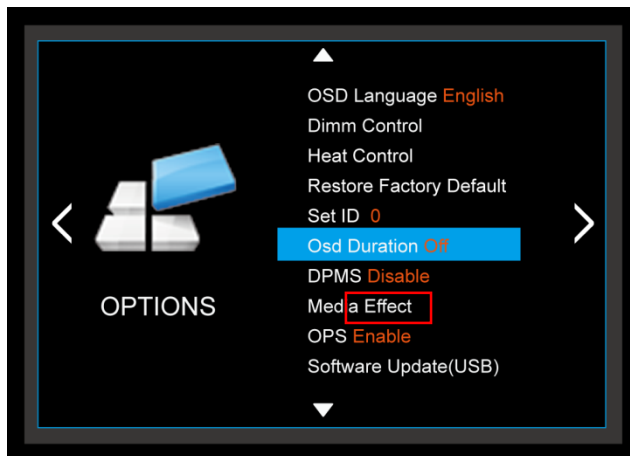


### Notes

- : Please turn off the power when connecting external speakers.
- : If there are no any sound when connecting to speaker with power-on, please restart it once again

## 5. When using OPS PC CAUTION

1. Do not connect to touch sensor USB cable.  
(Touch sensor cable is already connected by internal OPS docking board)
2. After connecting adapter, turn on the OPS PC.
3. Refer to bottom when remove the OPS PC OR use external PC.
4. OPTIONS-→ OPS-→ After the change in use Enable to Disable.

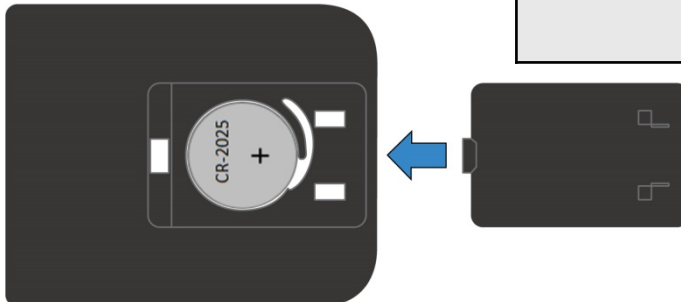


## 6. Remote Controller



### 6.1 How to insert battery.

Insert the battery into proper polarities  
Battery model:(CR-2025 3V)



Key Name	Description
POWER	Power ON/OFF.
SOURCE	Activates OSD menu of input source selecting. Navigates input source.
PC	PC.
AV	AV.
HDMI	HDMI 1, HDMI 2, HDMI 3.
PSM	Picture mode: Standard, Dynamic, Soft, User.
SSM	Sound mode: Standard, Flat, Music, Movie.
MENU	Activates main OSD menu.
EXIT	Escapes main OSD menu.
FREEZE	Videos are saved with pictures.
MUTE	Toggles sound status of speaker.
ECO	Screen Bright.
SLEEP	Set the sleep timer.
INFO	Displays input source information.
ZOOM	Activates OSD of aspect ratio control.
◀◀	Fast Backward function (contents play).
▶▶	Same as "PLAY" on keypad.
▶▶	Fast Forward function (contents play).
◀	Move before contents play mode (contents play).
■	Stop function (contents play).
▶	Move next contents play mode (contents play).
^	Navigates upper menu in main OSD menu. Navigates input source.
v	Navigates down menu in main OSD menu. Navigates input source
>	Increases sound volume of speaker. Same as "+ Key" on keypad. Navigates next menu in main OSD menu.
<	Decreases sound volume of speaker. Same as "-Key" on keypad. Navigates before menu in main OSD menu.

## 7. OSD MENU DESCRIPTION

### 7.1. MENU OVERVIEW

In this menu system, there are several ways to customize the menu settings provided.

Most menus consist of three levels to set up the options, but some require greater depth for the variety of settings. If you press the **MENU** button, only the first and second level of the menu system will appear on the monitor screen. The third level can be displayed by pressing **SELECT**. If a menu has more than three levels, the pop-up dialogue box will be displayed as the fourth or fifth level.

#### 1) To show and remove the Menu:

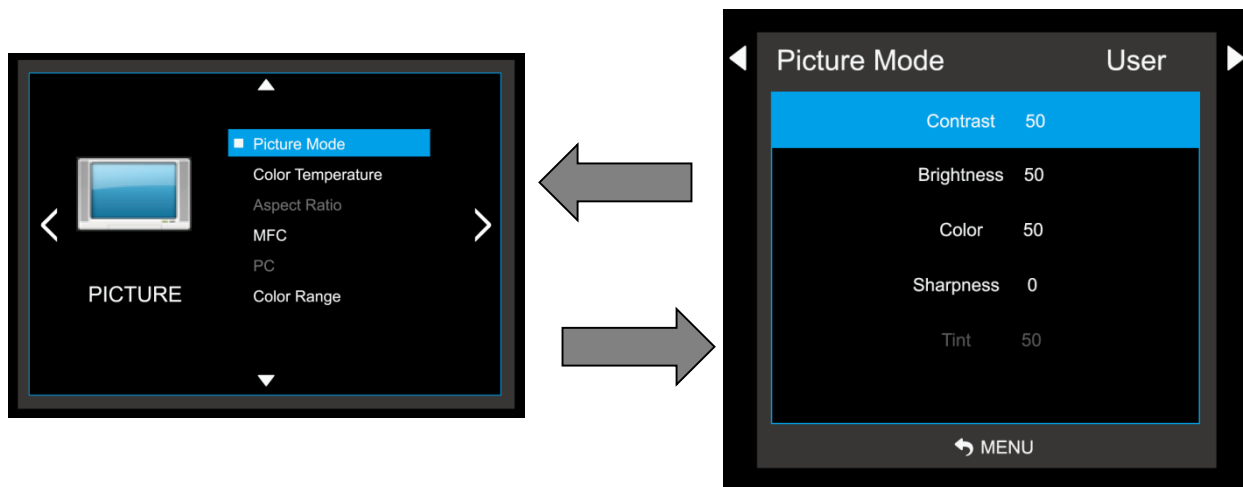
Press the **MENU** button on the Remote Control to display the menu. A second press of the **MENU** button or a press of the **MENU** button will take you back to monitor viewing.

#### 2) To go to the next level:

Press **OK** on the Remote Control.

#### 3) To go back to the previous level:

Press **MENU** on the Remote Control.



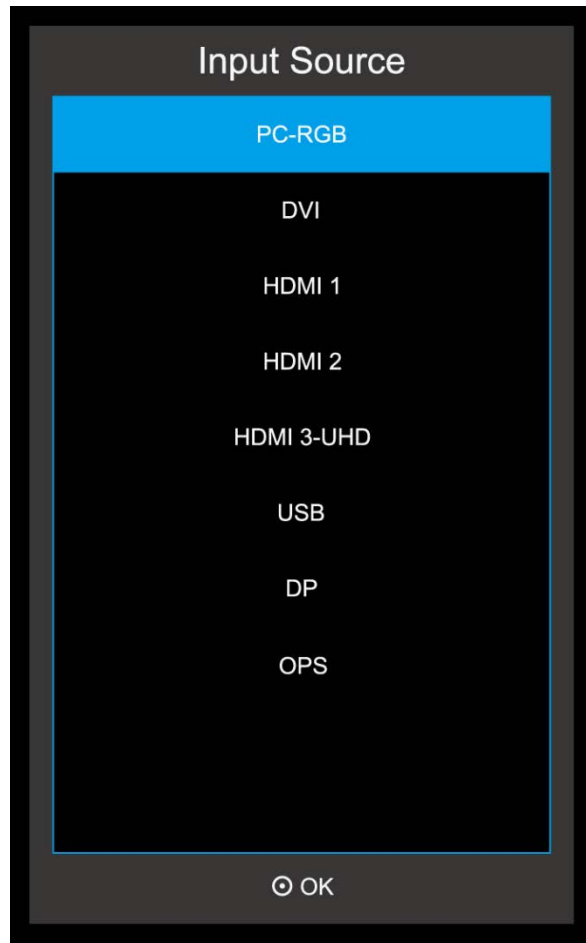
#### 4) Typical Menu Operation

1. Press **MENU** button: The main menu will appear.
2. Use **▲/▼** to select the desired menu option (icon).
3. While the desired menu option is selected, press **OK** to move to the second level.
4. Press **OK** to move to the third level: Some menu options require additional steps.
5. Press **MENU** to return to the previous menu.

## 7.2. Video Input Selection

### 1) How to select a video source from the OSD

1. Select a ◀/▶ button you can click the **SOURCE** button to select each video source.
2. To go to the desired video source, press the **OK** button.



## 7.3 BASIC OPERATION

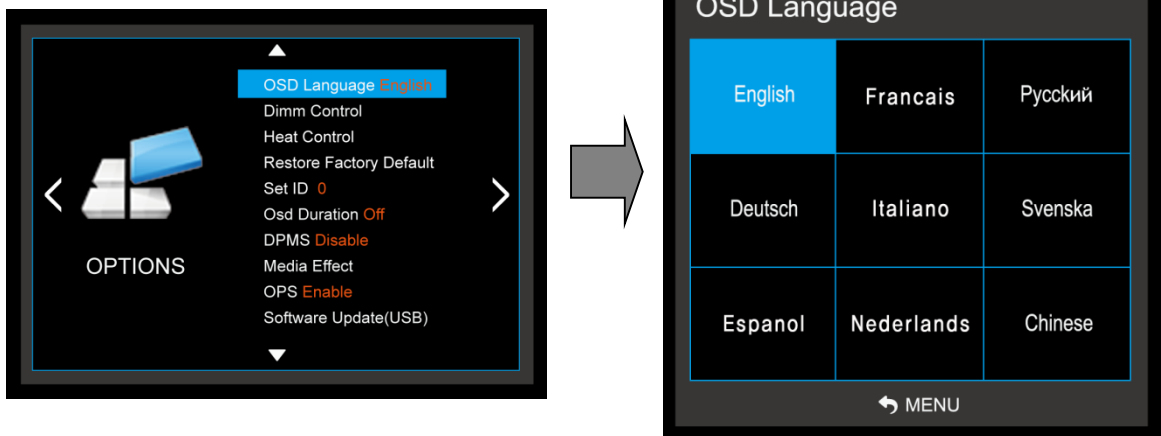
### 1) Turning On the Monitor

1. First, connect power cord correctly. At this moment, the monitor switches to standby or power on mode. In standby mode, in order to turn monitor on, press the **POWER** button on the remote control.
2. Select the viewing source by using **SOURCE** button on the remote control.

### 2) Volume Adjustment (A/V extension option)

1. Press the VOL+/- ◀ / ▶ button to adjust the volume.
2. If you want to switch the sound off, press the **MUTE** button on the remote control.
3. You can cancel this function by pressing the **MUTE** or VOL+/- ◀ / ▶ button.

### 3) On Screen Menus Language Selection



- The menus can be shown on the screen in the selected language. First select your language.
- 1. Press the **MENU** button and then use ▲ / ▼ button to select the **OPTION** icon.
- 2. Press the ▲ / ▼ button to select **Menu Language** menu.
- 3. Press the **OK** button and then use ▲ / ▼ / ◀ / ▶ button to select your desired language:  
From this point on, the on-screen menus will be shown in the selected language.
- 4. Press **MENU** to return to the previous menu.

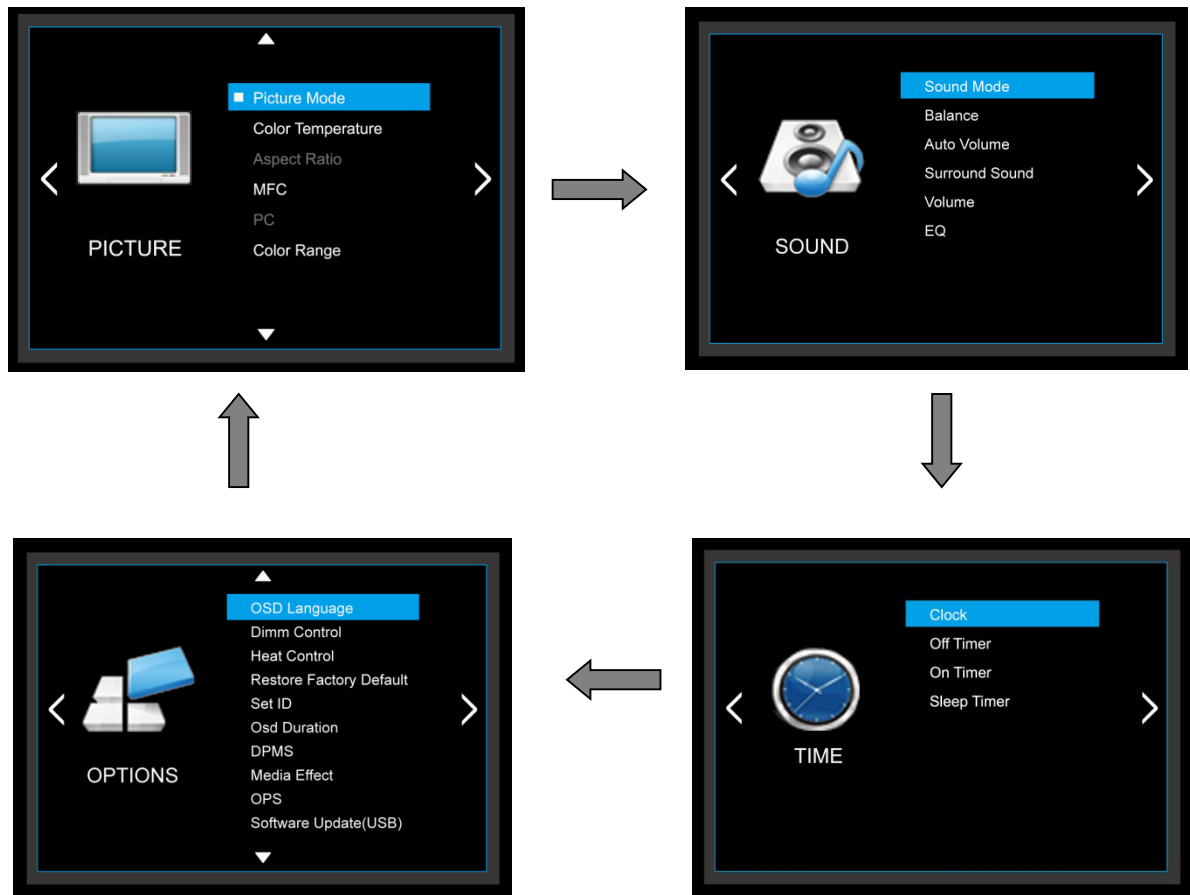
#### Supported Languages

English, Francais, Italiano, Nederlands, Espanol, Chinese, etc.

## 7.4 On Screen Menus Selection and Adjustment

### 1) How to adjust the OSD screen

1. Press the **MENU** button and then ◀/▶ button to select each menu.
2. Press the **OK** button and then use ▲/▼ button to display the available menus.

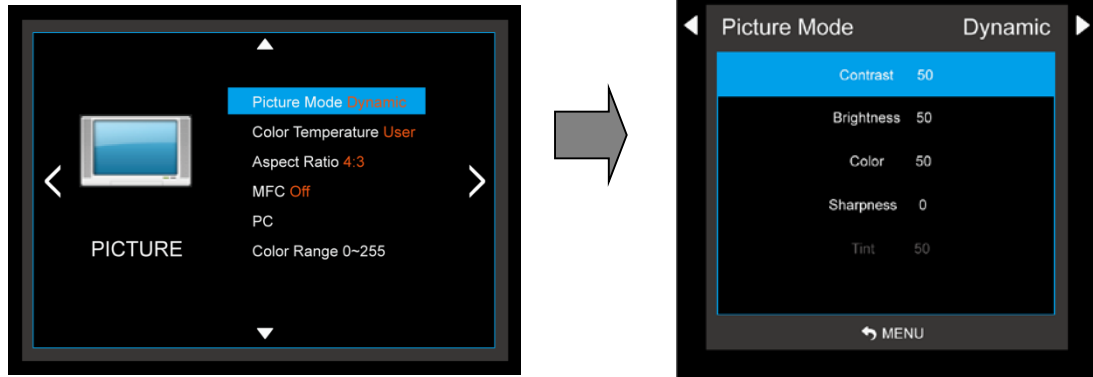


- Your monitor's OSD (On Screen Display) may differ slightly from what is shown in this manual.



## 7.5 PICTURE MENU OPTIONS

### 1) Picture Mode

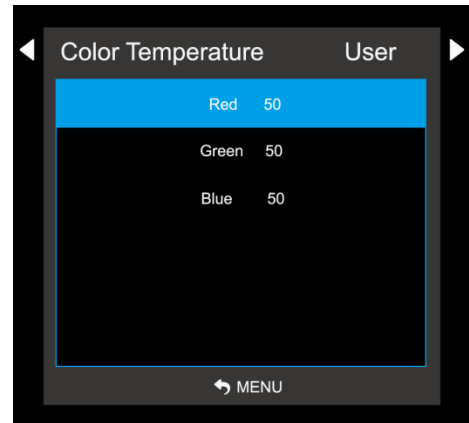
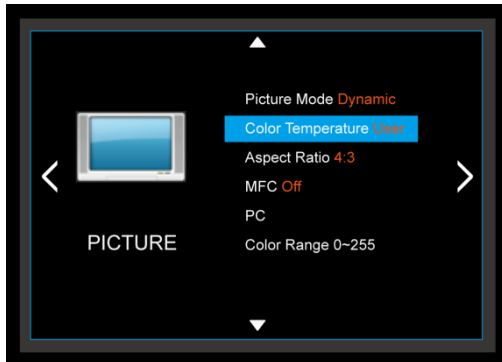


- Adjust the picture appearance to suit your preference and viewing situations.

1. Press the **MENU** button and then ◀/▶ button to select the **PICTURE** mode.
2. Press the ◀/▶ button and then use **OK** button to select **Picture Mode** menu.  
**Standard, Dynamic, Mild, User**
3. Press the ▲/▼ button to select **Picture Mode - User** menu  
**Contrast, Brightness, Color, Sharpness, Tint.**
4. Press **OK** button and then use ◀/▶ button to make appropriate adjustments.
5. Press **MENU** to return to the previous menu.

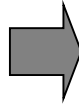
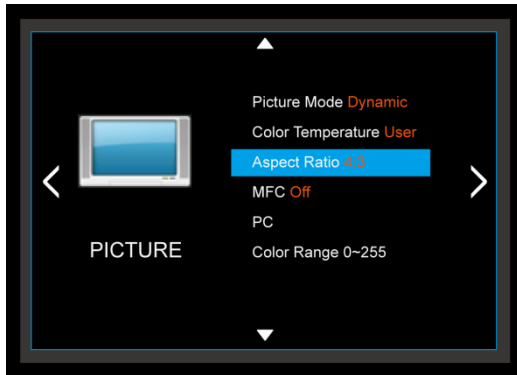
- Contrast : Control the difference between the bright and dark regions of the screen picture. **(Only user-mode Support)**
- Brightness: Adjust brightness of the picture. **(Only user-mode Support)**
- Color: Adjust color of the picture. **(Only user-mode Support)**
- Sharpness: Set the amount of fine detail in the picture. **(Only user-mode Support)**
- Tint: Control the fresh tones to make them appear natural. **(Does not work in any mode)**

## 2) Color Temperature Control



- Choose one of five automatic color adjustments. Set to warm to enhance hotter colors such as red, or set to cool to see less intense colors with more blue.
1. Press the **MENU** button and then use ◀/▶ button to select the **PICTURE** icon.
  2. Press the ▲/▼ button and then use **ENTER** button to select **Color Temperature** menu.
  3. Press the **OK** button and then use ◀/▶ button to select desired option:  
**User, Cool, Medium, Warm.**
  4. Press the ▲/▼ button to select **Picture Mode - User** menu.  
**Red, Green, Blue**
  5. Press **MENU** to return to the previous menu.
- Color Temperature : select between Normal, Cool and Warm. **(Only user-mode Support)**

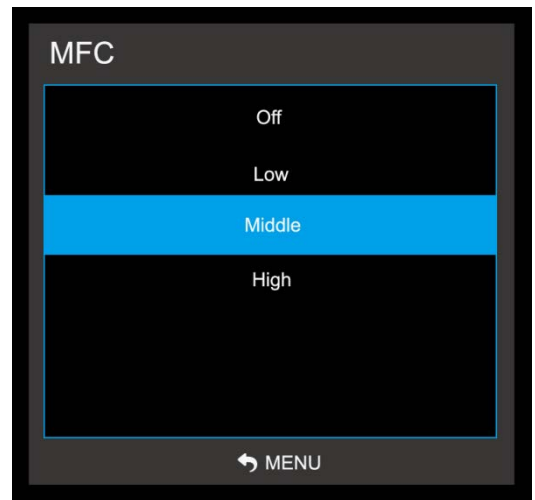
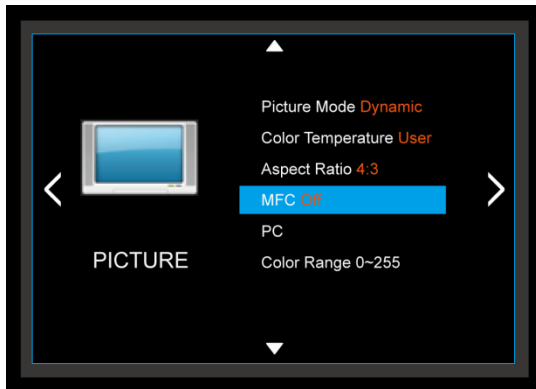
### 3) Aspect Ratio



- Selects the screen format.

1. Press the **MENU** button and then use ◀/▶ button to select the **PICTURE** icon.
2. Press the ▲/▼ button and then use **OK** button to select **Aspect Ratio** menu.
3. Press the **OK** button and then use ▲/▼ button to select desired option:  
**Auto, 4:3, 16:9, Zoom1, Zoom2.**  
→ When the HDMI signal through DVI JACK behaves for all the support.  
→ When the DVI input signal 4:3, 16:9 support.
4. Press **MENU** to return to the previous menu.

### 4) MFC



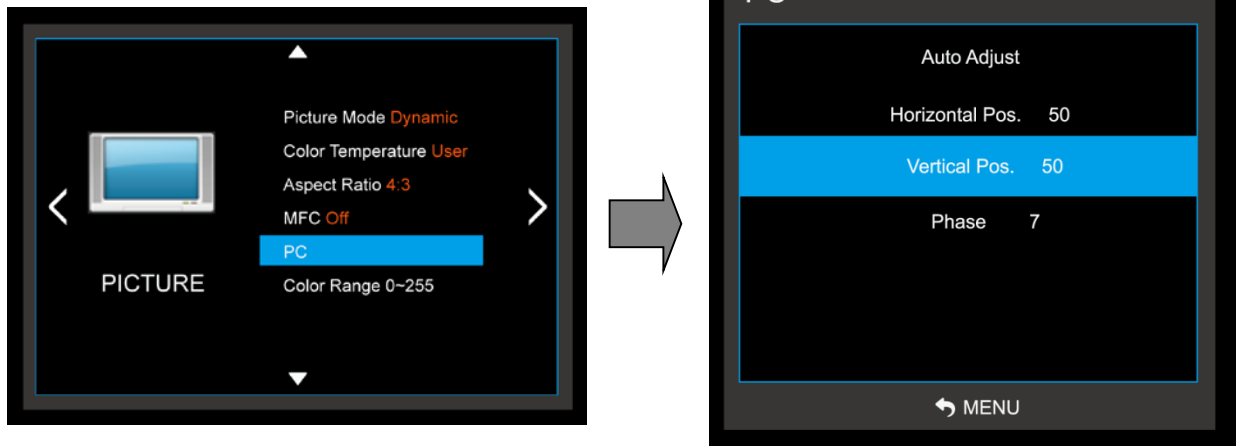
- Select the picture appearance to suit your preference and viewing situations.

1. Press the **MENU** button and then ◀/▶ button to select the **PICTURE** icon.
2. Press the ▲/▼ button and then use **OK** button to select **MFC** menu
3. Press the **OK** button and then use button to select the desired picture option;  
**Off, Low, Middle, High, Default.**
4. Press **MENU** to return to the previous menu.

**MFC** - When the video screen is set to HIGH if the phenomenon will be broken

- Touch Speed is Degraded
- Motion compensated Frame Rate Conversion
- JUDDER phenomenon occurs in the video, it is possible to change the setting to HIGH.

## 5) PC Menu



1. Press the **MENU** button and then use ◀/▶ button to select the **PICTURE** icon.
2. Press the ▲/▼ button and then use **OK** button to select **PC Menu**.
3. Press ▲/▼ button and then use ◀/▶ button to make appropriate adjustments.  
→ **Only PC mode Support.**
4. Press **MENU** to return to the previous menu.

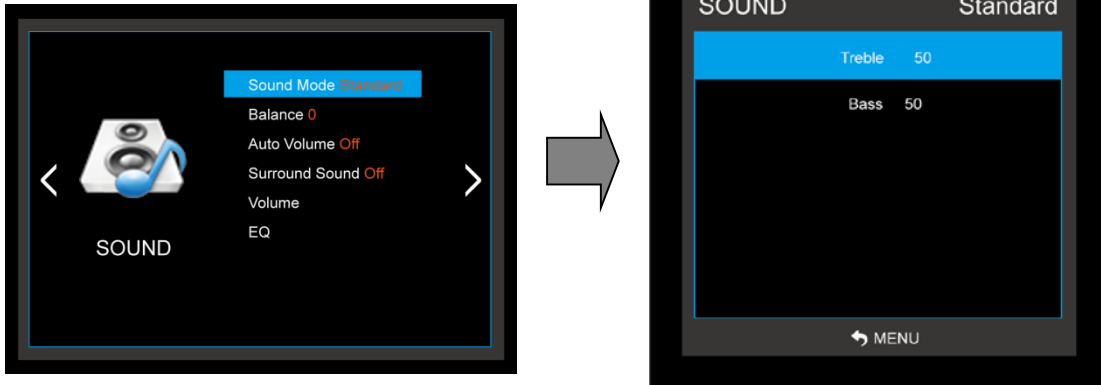
## 6) Color Range

1. Press the **OK** button. [Range scaling changes from 16-234 to 0-255]

→ **Not Support in PC mode, Usb mode .**

## 7.6 SOUND MENU OPTIONS

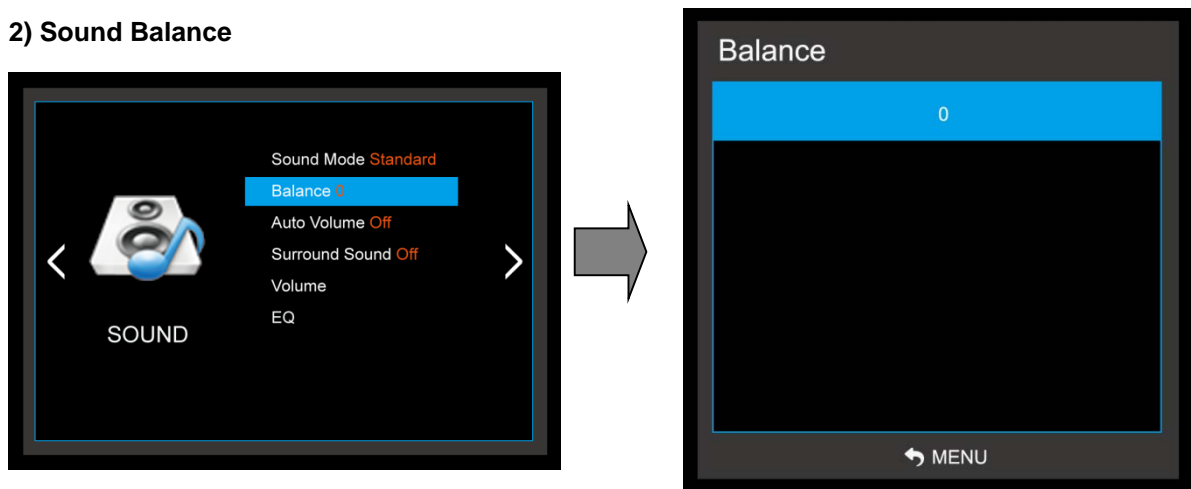
### 1) Sound Standard Mode



- Adjust the sound to suit your taste and room situations.

1. Press the **MENU** button and then use ◀/▶ button to select the **SOUND** icon.
  2. Press the ▲/▼ button and then use **OK** button to select **Sound Mode** menu : **Standard, Music, Movie, Sports, User**.
  3. Press the ◀/▶ button and then use ▲/▼ button to select - **User** menu : **Treble, Bass**.
  4. Press **MENU** to return to the previous menu.
- Treble: Controls the relative intensity of higher pitched sounds. (Only user-mode Support)
- Bass: Controls the relative intensity of lower pitched sounds. (Only user-mode Support)

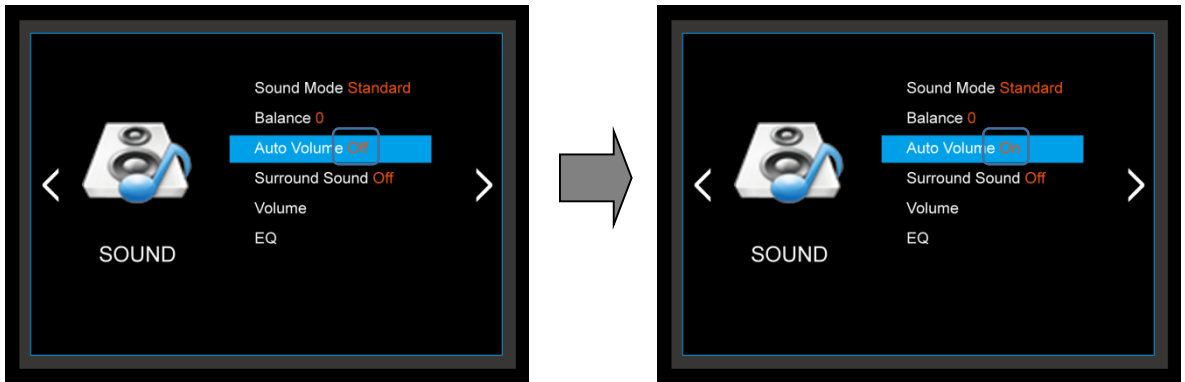
### 2) Sound Balance



- Adjust the sound to suit your taste and room situations.

1. Press the **MENU** button and then use ◀/▶ button to select the **SOUND** icon.
2. Press the ▲/▼ button and then use **OK** button to select the **Balance** menu.
3. Press ◀/▶ button to make appropriate adjustments. **[L50 ~ 0 ~ R50]**
4. Press **MENU** to return to the previous menu.

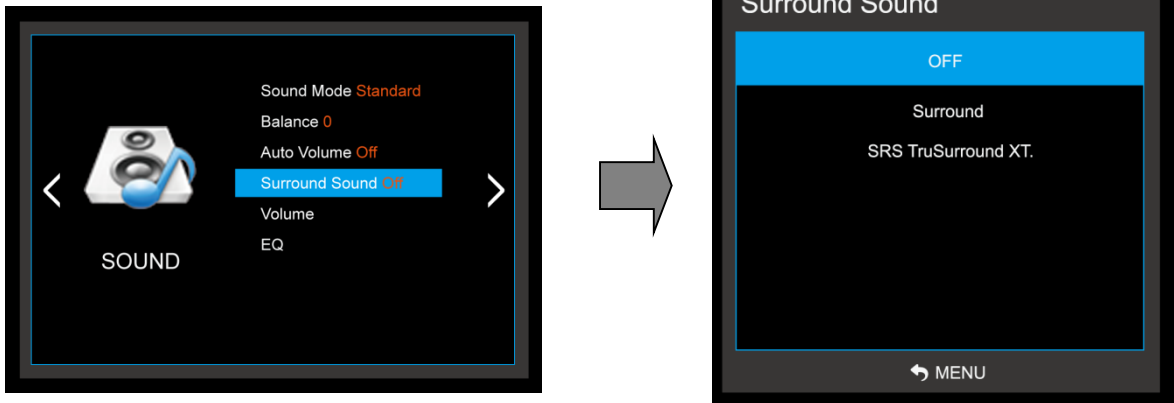
### 3) Auto Volume – Automatic Volume Limit System: For protecting the hearing



- Adjust the sound to suit your taste and room situations.

1. Press the **MENU** button and then use ◀/▶ button to select the **SOUND** icon.
2. Press the ▲/▼ button and then use **OK** button to select the **Auto Volume** menu.
3. Press **OK** button to make appropriate adjustments : **On, Off**
4. Press **MENU** to return to the previous menu.

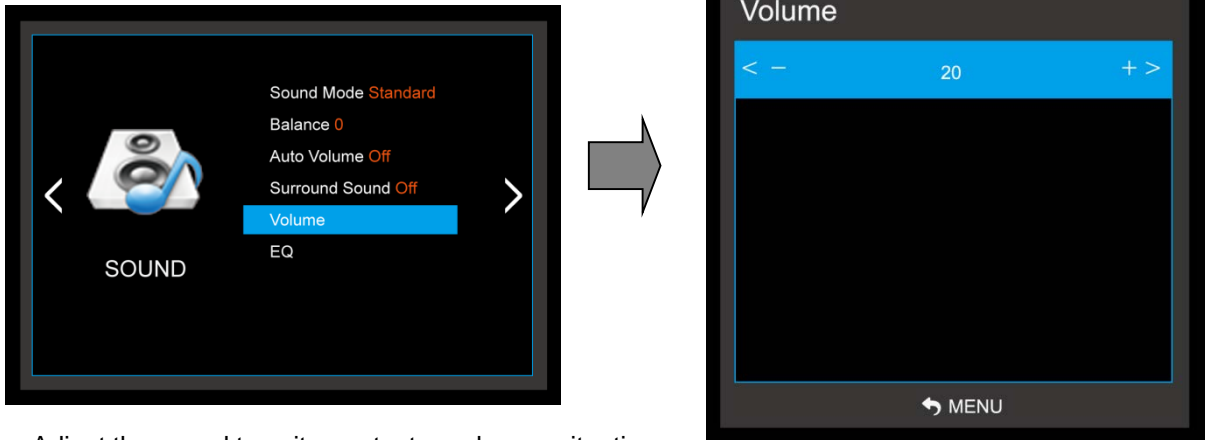
### 4) Surround Sound



- Adjust the sound to suit your taste and room situations.

1. Press the **MENU** button and then use ◀/▶ button to select the **SOUND** icon.
2. Press the ▲/▼ button and then use **OK** button to select the **Surround Sound** menu.
3. Press the ▲/▼ button **OK** button to make appropriate adjustments :
4. Press **MENU** to return to the previous menu.

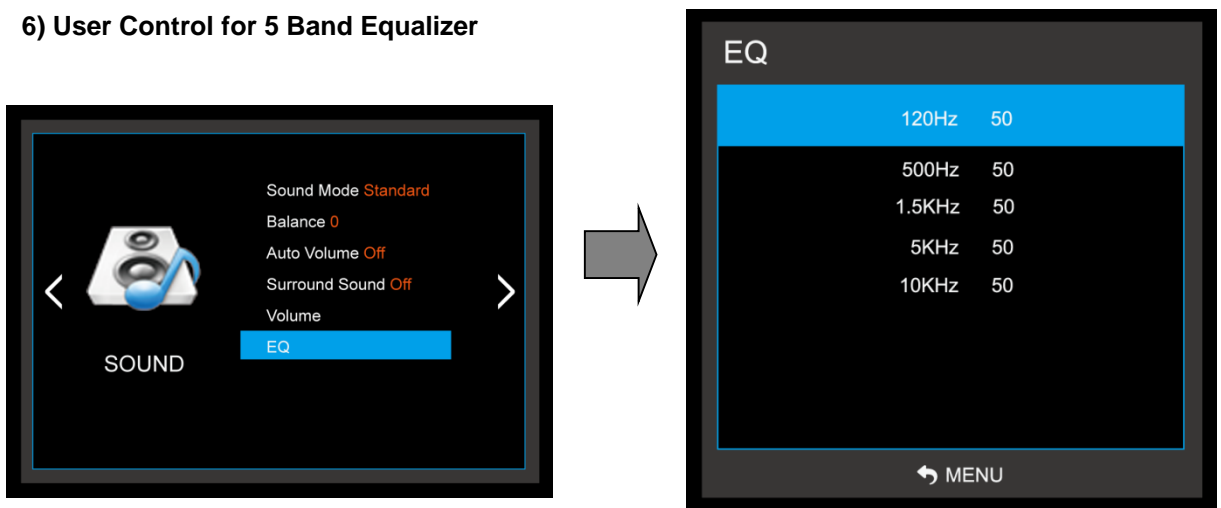
## 5) Volume



- Adjust the sound to suit your taste and room situations.

1. Press the **MENU** button and then use ◀/▶ button to select the **SOUND** icon.
2. Press the ▲/▼ button to select the **Volume** menu.
3. Press **OK** button and then use ◀/▶ button to make appropriate adjustments. [0 ~ 100]
4. Press **MENU** to return to the previous menu.

## 6) User Control for 5 Band Equalizer



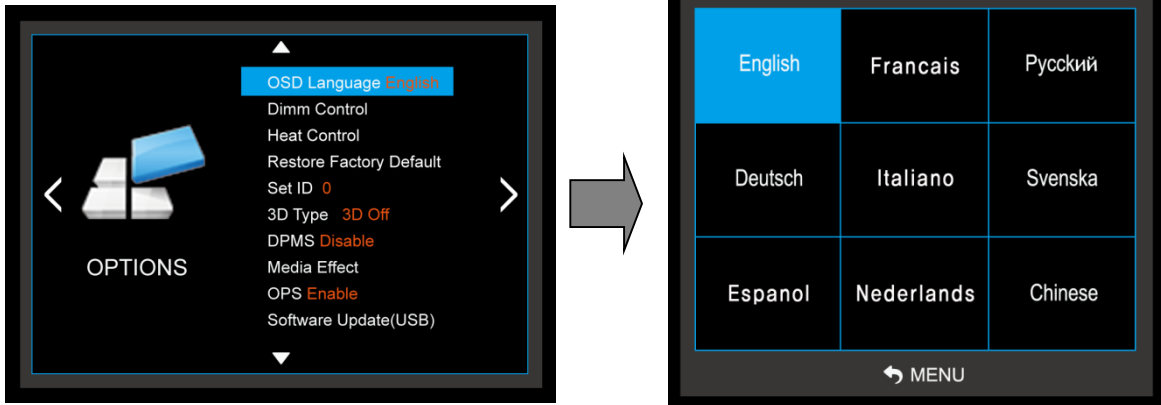
- If the Equalizer settings are changed, sound mode setting goes to **User** automatically.

1. Press the **MENU** button and then use ◀/▶ button to select the **SOUND** icon.
2. Press the ▲/▼ button to select the **EQ(Equalizer)** menu.
3. Press the **OK** button and then use ◀/▶ button to make appropriate adjustments;  
**120Hz, 500Hz, 1.5KHz, 5KHz, 10KHz.**
4. Press **MENU** to return to the previous menu.

## 7.7 SETUP MENU OPTIONS

### 1) Language

- Select a language for the menus to appear in.

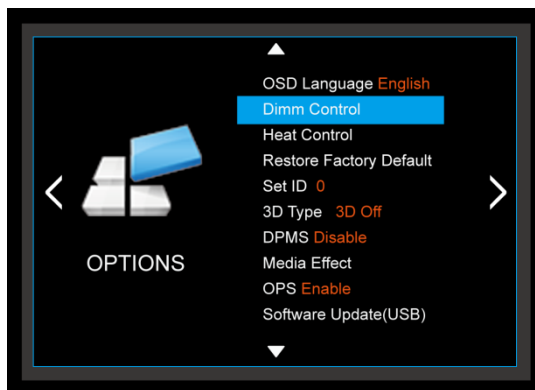


1. Press the **MENU** button and then use **◀/▶** button to select the **OPTION** icon.
2. Press the **▲/▼** button to select the **OSD Language** menu.
3. Press the **OK** button and then use **▲/▼/◀/▶** button to select the desired option:  
**Supports Language**  
**English, Franais, Espanol, Deutsch, Italiano, Nederlands, Chinese, etc.**
4. Press **MENU** to return to the previous menu.

### 2) Dimm Control

#### 2-1) Dimming

- Automatic dimming controls by Adjusting the brightness of the set in Dimming menu.

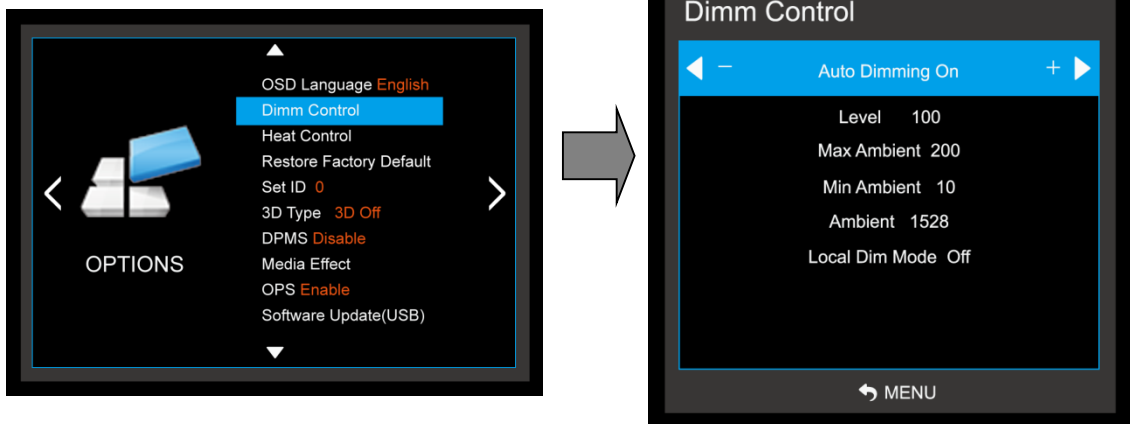


1. Press the **MENU** button and then use **◀/▶** button to select the **OPTION** icon.
2. Press the **▲/▼** button to select the **Dimm Control** Menu.
3. Press the **OK** button and then use **▲/▼** button to select the **Dimming** Menu.
4. Press the **▲/▼/◀/▶** button to set Dimming options.
5. Press **MENU** to return to the previous menu.



### 2-1-1) Dimming Menu – Auto Dimming (Light Ambient Sensor Option only)

- Enable/disable auto dimming control by light ambient sensor



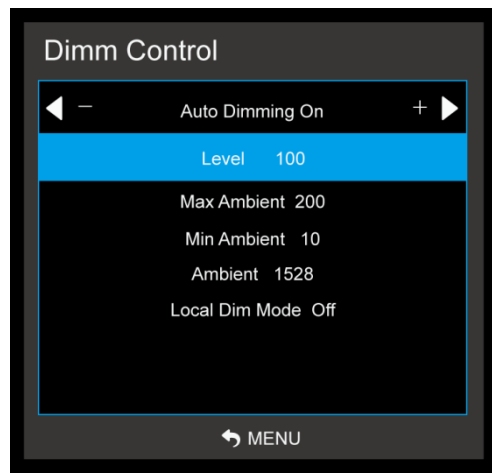
1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Dimm Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **Dimming** Menu.
4. Press the ▲/▼ button to select the **Auto Dimming** functions.
5. Press the ◀/▶ button to set Auto Dimming options.
6. Press **MENU** to return to the previous menu.

**ON** : Dim level is adjusted by light sensor (automatic control system)

**OFF** : Dim level is adjusted by manual control (manual control system)

### 2-1-2) Dim Level : Auto Dimming - off

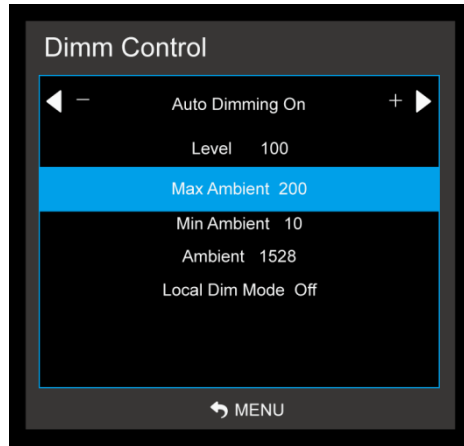
- Controls Inverter dimming level – Inverter brightness control.



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Dimm Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **Dimming** Menu.
4. Press the ▲/▼ button to select the **Level** functions.
5. Press the ◀/▶ button to set **Level** functions.
6. Press **MENU** to return to the previous menu.

### 2-1-3) Dimming Menu – MAX Ambient (Light Ambient Sensor Option only)

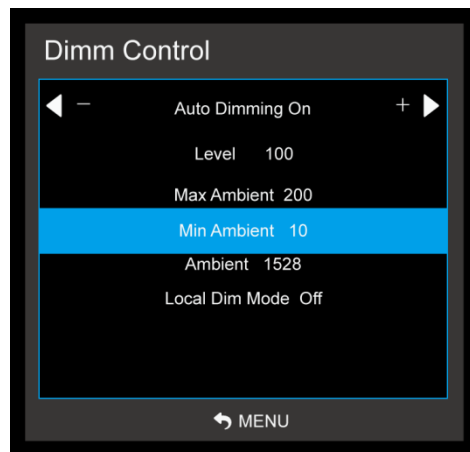
- Adjusts detected light ambient to set the maximum dimming



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Dimm Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **Dimming** Menu.
4. Press the ▲/▼ button to select the **Max Ambient** functions.
5. Use ◀/▶ button to set detected light ambient value by LUX unit.
6. Press **MENU** to return to the previous menu.

### 2-1-4) Dimming Menu – MIN Ambient (Light Ambient Sensor Option only)

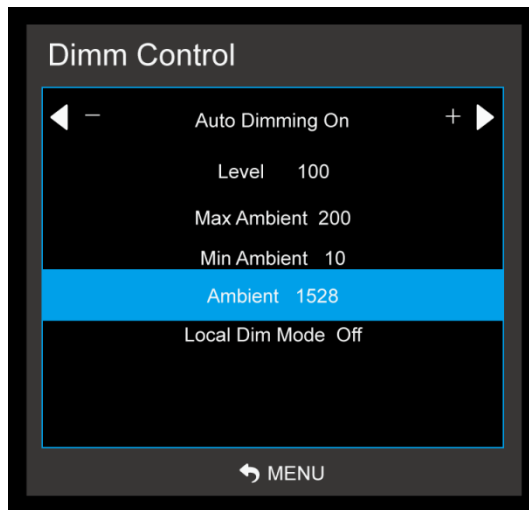
- Adjusts detected light ambient to set the minimum dimming



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Dimm Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **Dimming** Menu.
4. Press the ▲/▼ button to select the **Min Ambient** functions.
5. Use ◀/▶ button to set detected light ambient value by LUX unit.
6. Press **MENU** to return to the previous menu.

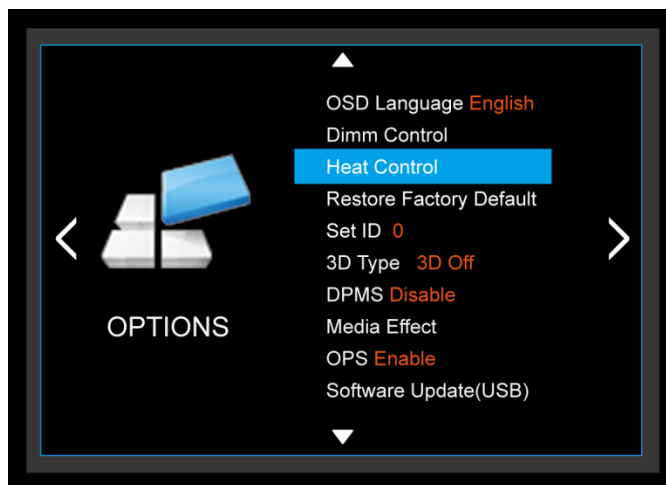
### 2-1-5) Dimming Menu – Ambient (Light Ambient Sensor Option only)

- Displays current detected light ambient level by LUX unit. Read Only.



### 3) Heat Control

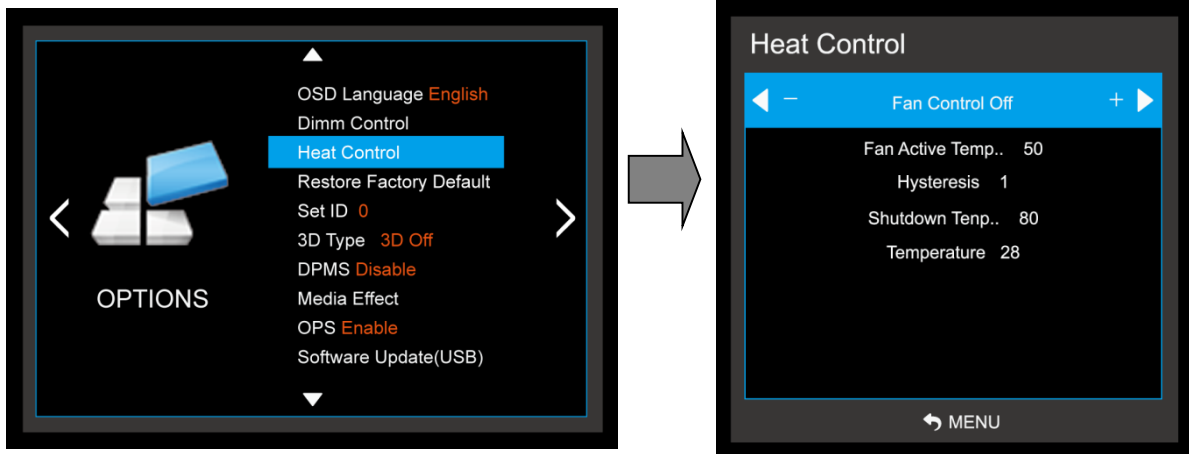
- Automatic Fan controls by internal/external temperature sensor



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Heat Control** Menu.
3. Press the **OK** button and then use ▲/▼/◀/▶ button to set Heat Control options.
4. Press **MENU** to return to the previous menu.

### 3-1) Heat Control Menu – Fan Control

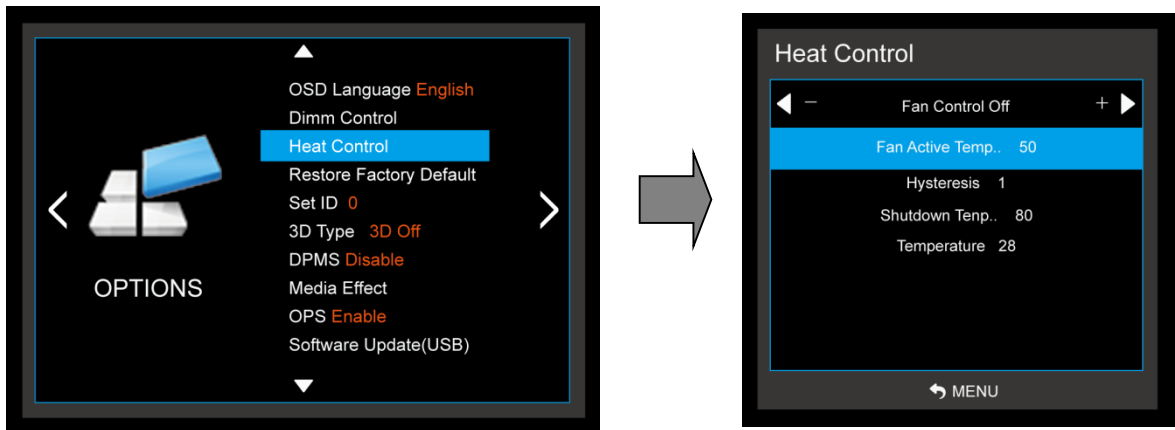
- Controls fan driving option by temperature sensor / force on / force off



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Heat Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **Fan Control** functions.
4. Press the ◀/▶ button to set **Off, On, Auto** options.
5. Press **MENU** to return to the previous menu.

### 3-2) Heat Control Menu – Fan Active Temperature

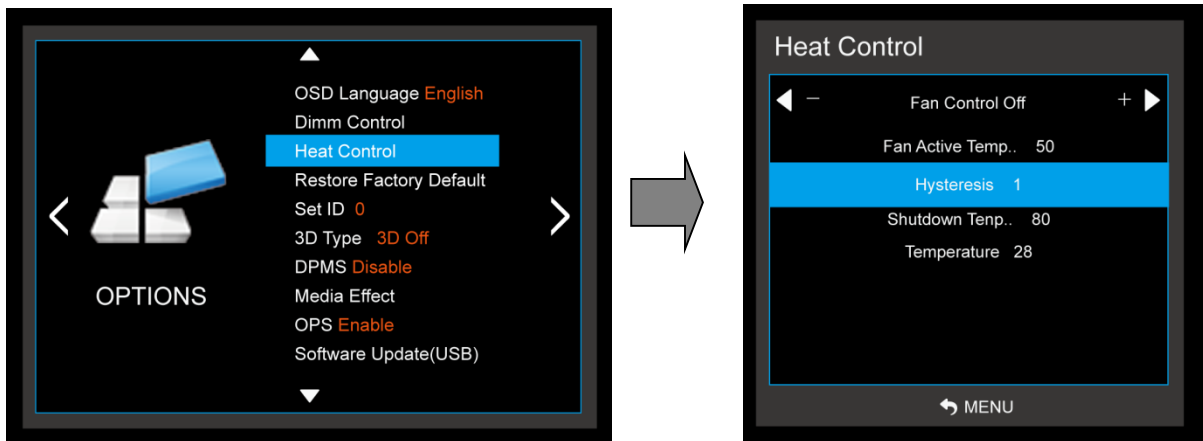
- Adjusts fan driving temperature by Celsius degree. It works only when the **Fan Control** setting is **Auto**.



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Heat Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **Fan Active Temperature** Menu.
4. Use ◀/▶ button to set fan driving temperature by Celsius degree unit.
5. Press **MENU** to return to the previous menu.

### 3-3) Heat Control Menu – Hysteresis

- Adjusts fan driving hysteresis temperature by Celsius degree.

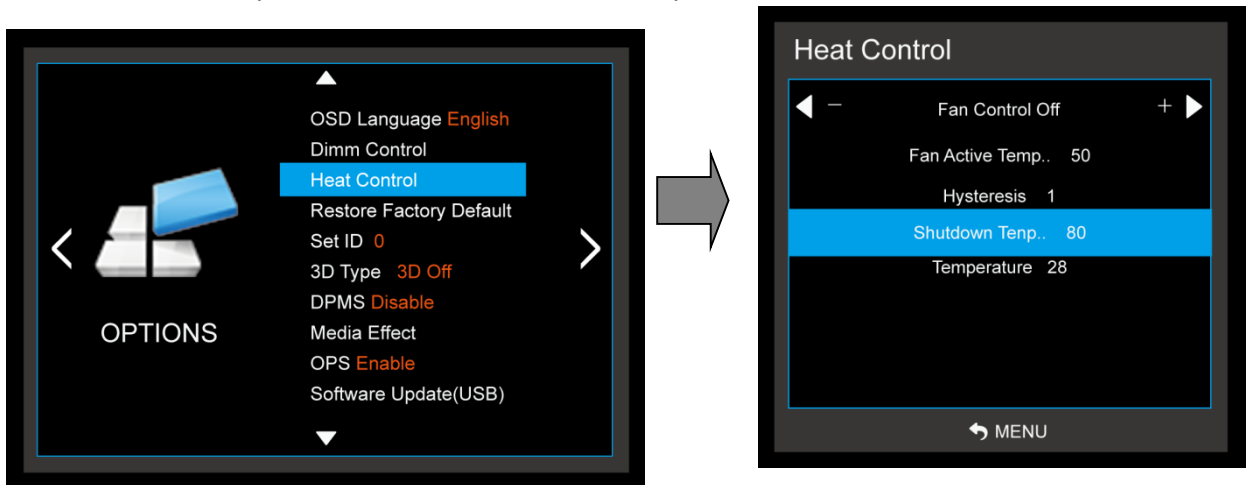


1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Heat Control** Menu..
3. Press the **OK** button and then use ▲/▼ button to select the **Hysteresis** Menu.
4. Use ◀/▶ button to set fan driving hysteresis temperature by Celsius degree unit.
5. Press **MENU** to return to the previous menu.

### 3-4) Heat Control – Shutdown

- Adjusts shutdown mode temperature by Celsius degree.

When current temperature reaches the shutdown temp, the monitor enters shutdown mode.



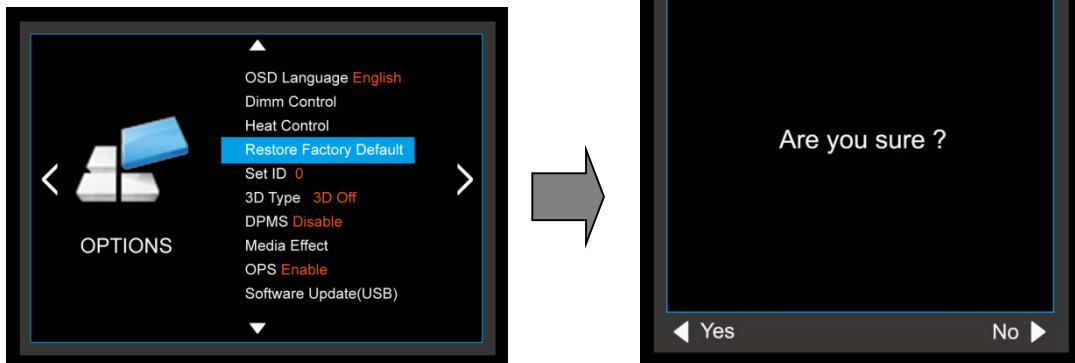
1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select the **Heat Control** Menu.
3. Press the **OK** button and then use ▲/▼ button to select the **shutdown** Menu.
4. Use ◀/▶ button to set fan driving hysteresis temperature by Celsius degree unit.
5. Press **MENU** to return to the previous menu.

### 3-5) Heat Control – Current temperature

- Displays current detected main sensor's temperature and auxiliary sensor's (option) temperature  
Read Only.

### 4) Reset

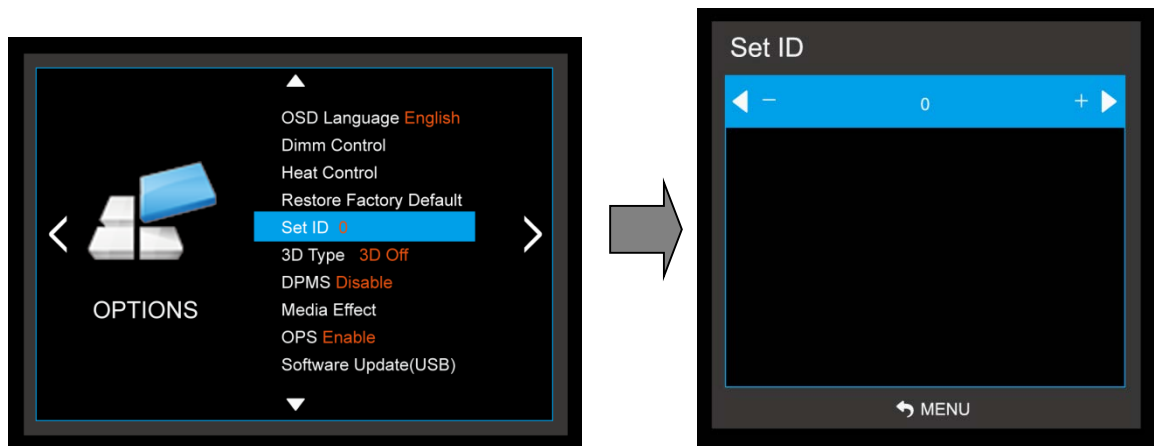
Resets user setting values as default



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select **Restore Factory Default** menu
3. Press the **OK** button and then use ▲/▼ button to select the **Are you sure?** menu.
4. Press **MENU** to return to the previous menu.

### 5) Set ID

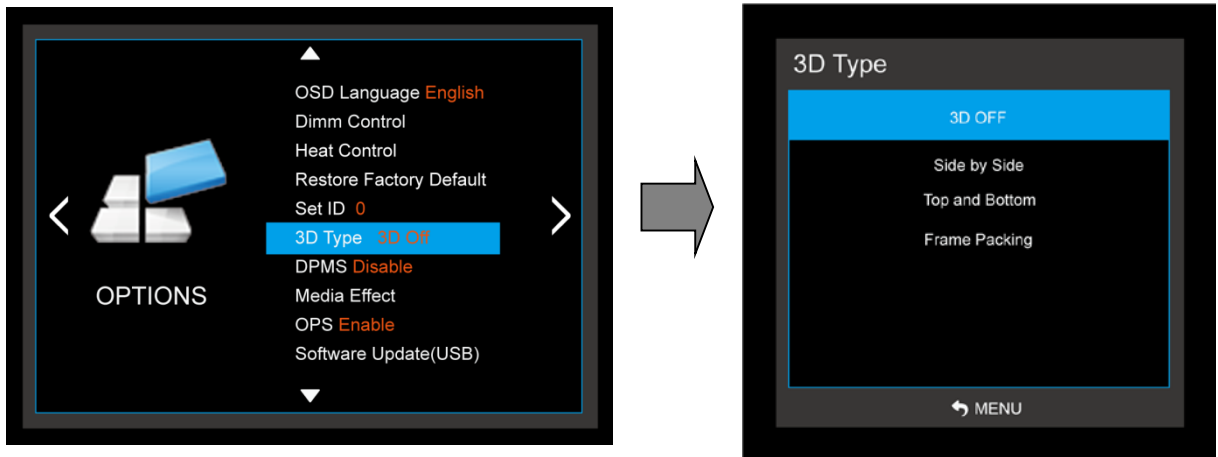
Number assigned to the SET in RS-232C communication.



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select **Set ID** menu
3. Press ◀/▶ button to make appropriate adjustments. [ 0 ~ +99]
4. Press **MENU** to return to the previous menu.

## 6) 3D Type

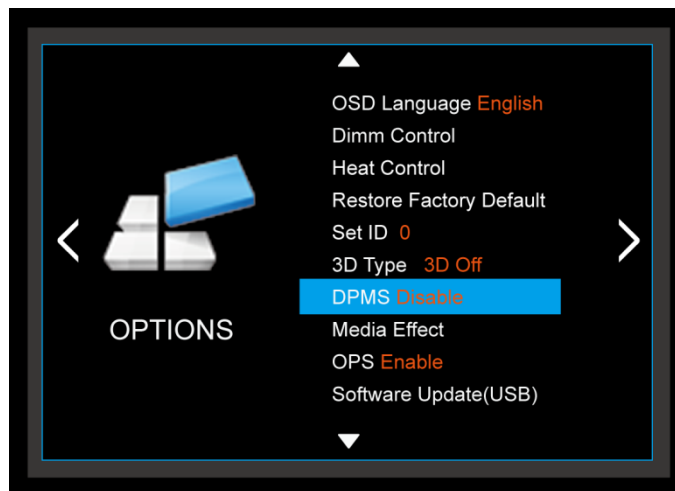
3D used and whether adjustments.



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select **3D Type** menu
3. Press the **OK** button to select the Details Menu : **3D OFF, Side by Side, Top and Bottom, Frame Packing.**
4. Press **MENU** to return to the previous menu.

## 7) DPMS

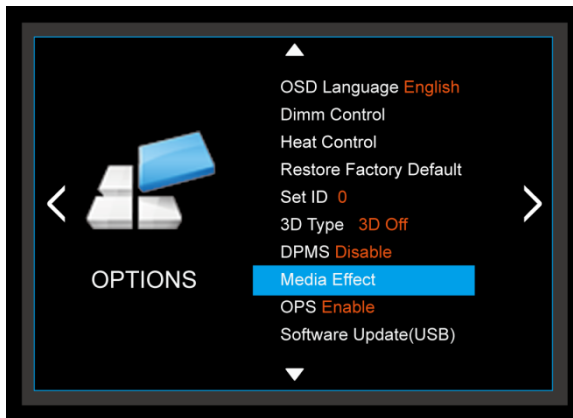
Shut off the panel power after the input source has been unused for some time (idle), to save power.



1. Press the **MENU** button and then use ◀/▶ button to select the **OPTION** icon.
2. Press the ▲/▼ button to select **DPMS** menu
3. Press the **OK** button to select the Details Menu : **ON, OFF**
4. Press **MENU** to return to the previous menu.




## 8) Media Effect

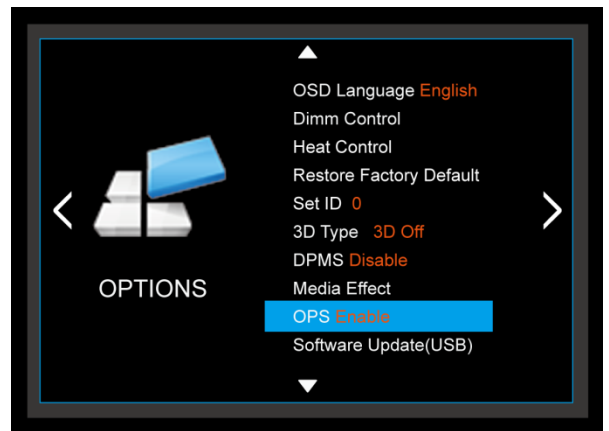
- Adjusting the slideshow effect in picture playback of USB mode.  
→ Photo playback applies only



## 9) OPS

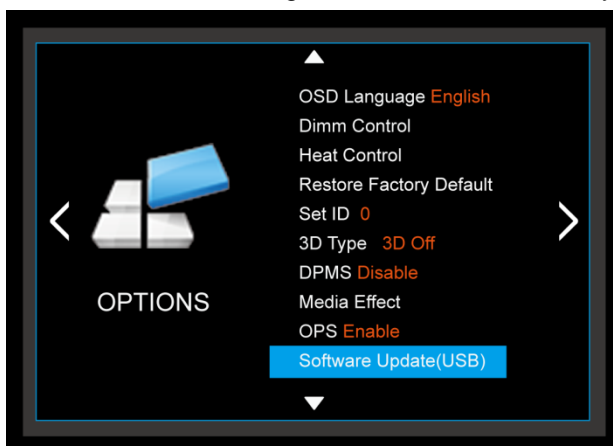
Whether to use OPS PC adjustment

1. Press the **MENU** button and then use  button to select the **OPTION** icon.
2. Press the  button to select **OPS** menu
3. Press the  button to select the Details Menu : **Disable, Enable**
4. Press **MENU** to return to the previous menu.



## 10) Software Update (USB)

When downloading software via USB memory.



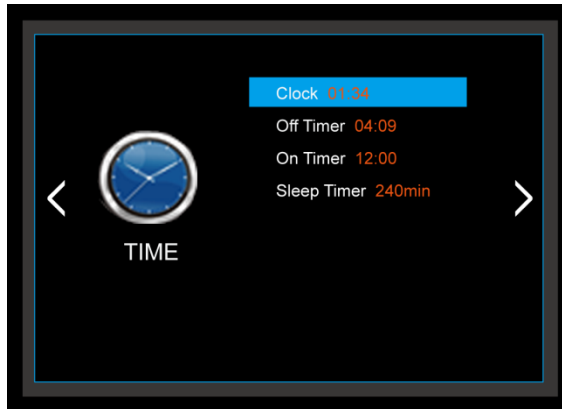
- Must be new version software (merge. bin) in USB memory



## 7.8 CLOCK MENU

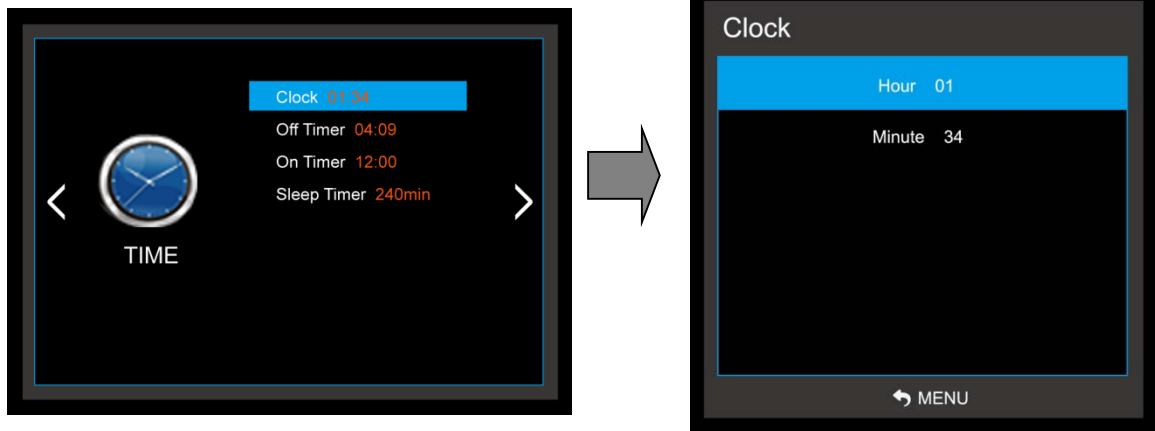
### 1) Time Settings

Enable the user to set up the clock information.



#### 1-1) Clock

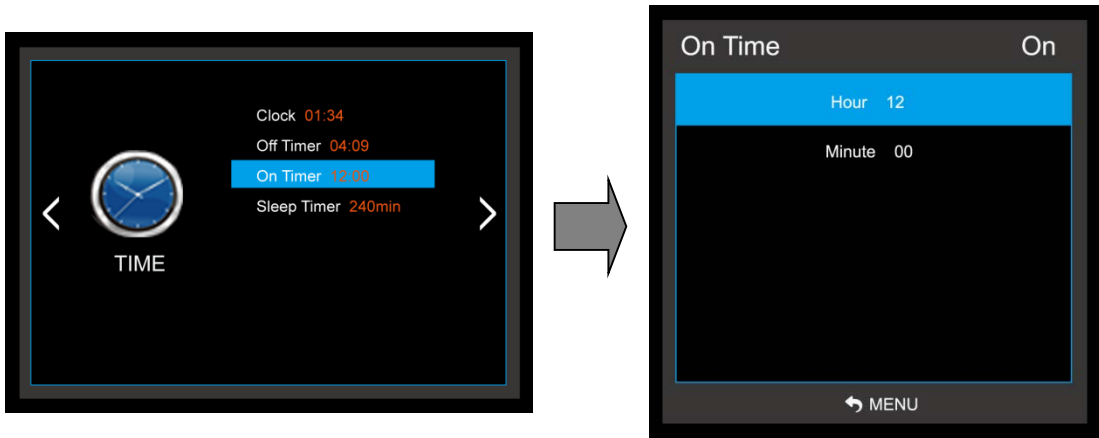
If current time setting is wrong, reset the clock manually.



1. Press the **MENU** button and then use ◀/▶ button to select the **TIME** icon.
2. Press the **OK** button and then use ▲/▼ button to select **Clock**.
3. Press the ▲/▼ button to select the **Hour**, **Minute**.
4. Use ◀/▶ button to adjust clock.
5. Press **MENU** to return to the previous menu.

## 2) On Timer

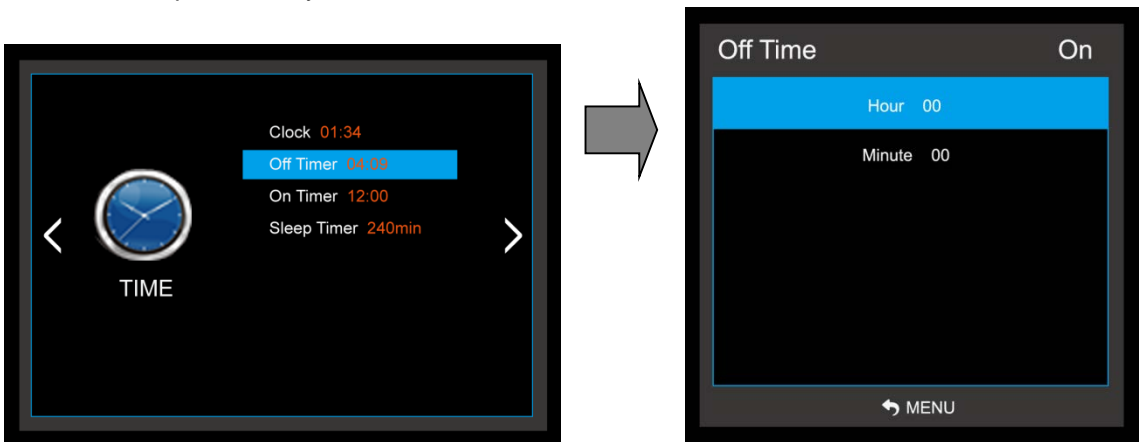
Timer function operates only if current time has been set.



1. Press the **MENU** button and then use ◀/▶ button to select the **TIME** icon.
2. Press the ▲/▼ button to select **On Timer**.
3. Press the **OK** button and then use ◀/▶ button to select the **On, Off**.
4. Use ▲/▼ button, ◀/▶ button to adjust on time schedule and activation.
5. Press **MENU** to return to the previous menu.

## 3) Off Timer

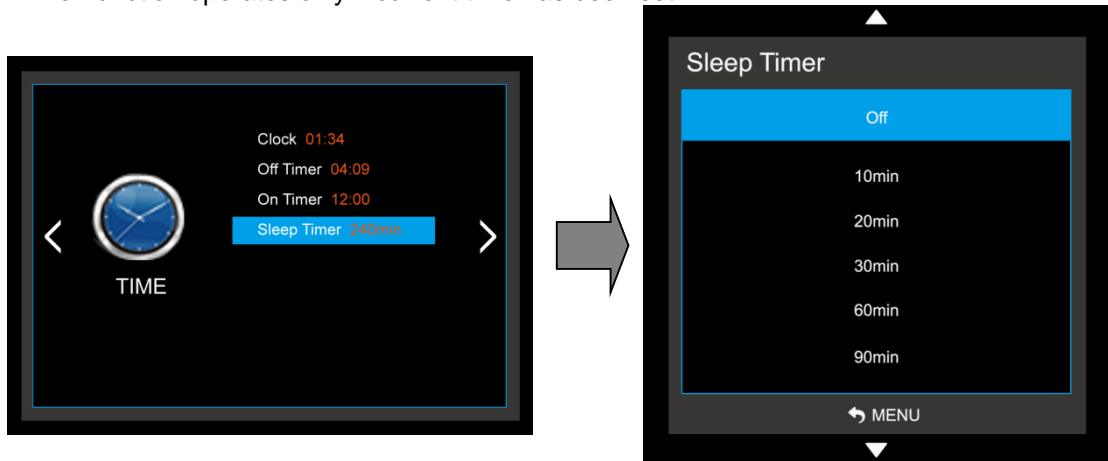
Timer function operates only if current time has been set.



1. Press the **MENU** button and then use ◀/▶ button to select the **TIME** icon.
2. Press the **OK** button and then use ▲/▼ button to select **Off Timer**.
3. Press the ▶ button and then use ◀/▶ button to select the **On, OFF**.
4. Use ▲/▼ button, ◀/▶ button to adjust off time schedule and activation.
5. Press **MENU** to return to the previous menu.

#### 4) Sleep Timer

Timer function operates only if current time has been set.



1. Press the **MENU** button and then use ◀/▶ button to select the **TIME** icon.
2. Press the ▲/▼ button to select **Sleep Timer**.
3. Press the **OK** button and then use ◀/▶ button to select the desired time.
4. Press **MENU** to return to the previous menu.

## 8.Product Specification

### 8-1. LED Specification

#### System Specifications

Items	Specification
Touch detection method	IR BAR blocking sensor system
Touch tool / Reaction	Hand or Others solid object, 15ms (Typ.)
Effective screen size(mm)	1652.4(W) x 932.2(H)mm
Resolution (Pixel)	3840 x 2160
Front Glass	Tempered Glass 4.0t (Nonglare Type)
Overall dimensions(WxHxD)	1765 x 1014 x 99 mm
VESA Mount	600(H) x 400(V) mm, M8 SCREW
Weight	Approx. 84Kg(TBD)

#### LED Panel Specifications

Items	Specification
Active screen size (Diagonal)	75 inches (190.5cm)
Response Time	6.0ms(Typ G to G)
Display Frame Rate	120 Hz
Pixel Format	QWUXGA (3,840 x 2,160)
Display Colors	16.7M Colors
Brightness	450cd/m <sup>2</sup>
Contrast Ratio	4000 : 1(Typ.)
View Angle(Typ)	Hor. 178, Ver. 178 (CRe10)

#### Ratings of Environment

Items	Specification
Storage Temperature	-20°C ~ +60°C
Operating Temperature/Humidity	0°C ~ +35°C / 20~80%RH (no condensation)
Power Supply Voltage	AC100 - 240V, 50/60Hz
Power Consumption	MAX 400W

## Input / Output Description

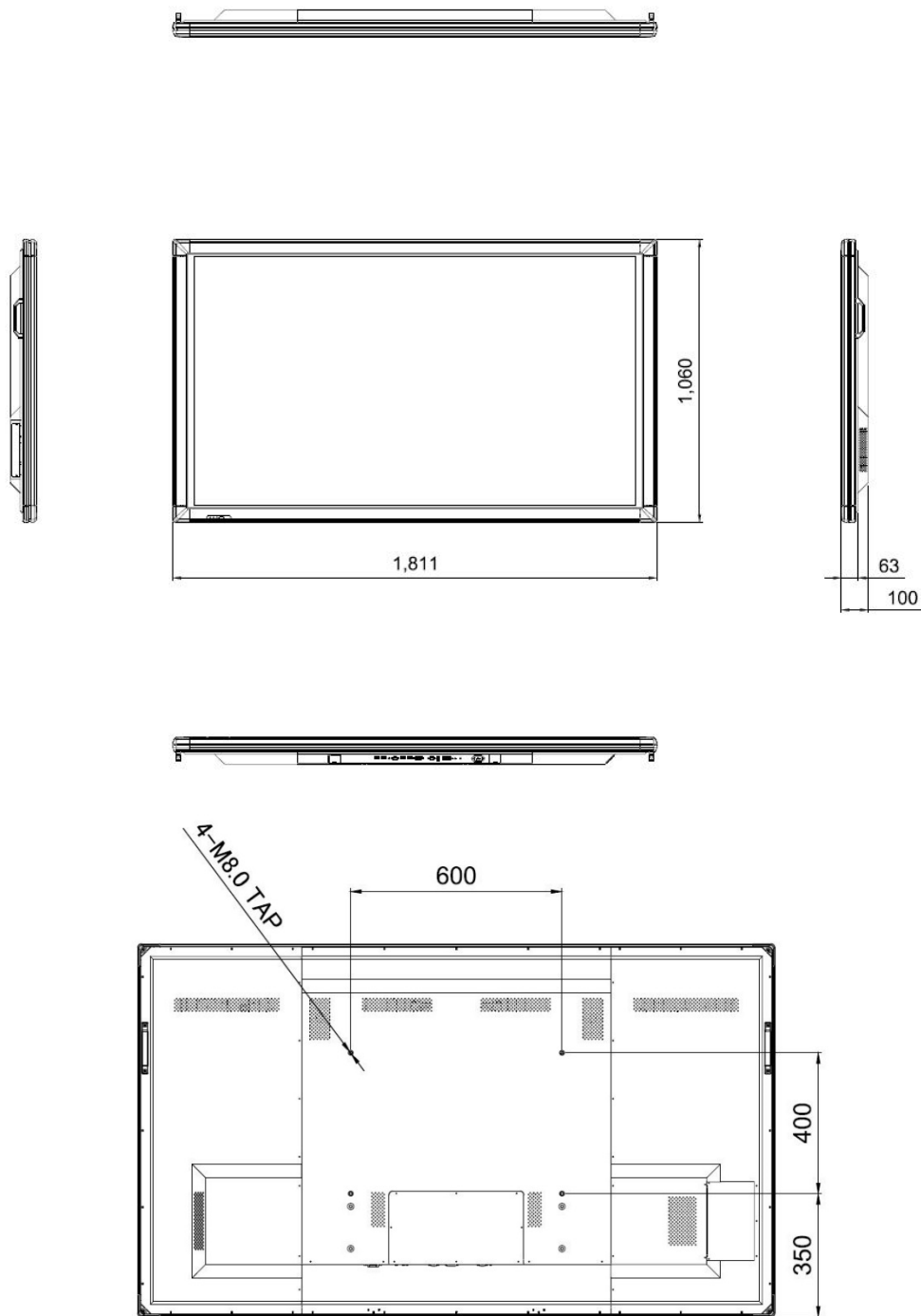
Items		Specifications
Video	Display Format(Not support at UHD mode.)	5 Modes(Auto,4:3, 16:9, Zoom1, Zoom2)
	Picture Status Memory	4 Modes(Contrast, Brightness, Color, Sharpness)
	Color Temperature Status Memory	4 Modes(User, Cool, Medium, Warm)
Sound	Output(RMS)	EQ Max. 10W X 2 Channels
	Sound System	Stereo
	Equalizer	5 Bands (120Hz, 500Hz, 1.5KHz, 5KHz, 10KHz)
	Sound Status Memory	5 Modes (Standard, Music, Movie, Sports, User)
	Balance	Yes
	Surround	Yes
Terminals	PC-RGB	1 ( D-SUB 15P)
	PC/DVI-Audio	1 ( Ø3.5 JACK )
	UHD HDMI	1
	FHD HDMI	2 (1ea-MHL Supported)
	UHD DP	1
	DVI-D	1
	EXT, Speaker Output	1 ( Ø3.5 JACK L/R )
	RS232C	1 ( D-SUB 9P )
	USB(Touch Sensor—Optional)	2 (For Touch Sensor Control, Etc)
	Component (Optional)	1 ( Y-Pb-Pr, RCA JACK )
	Media Play USB / Software Update	1 / Yes(Through USB)
Others	DPMS Mode	All
	OPS	Yes ( Internal )
	Sleep Timer	Yes(Max 240Min.)
	Time Zone	Yes
	Dimm Control( TV Only work.)	6 Modes(Auto Dimming, Local Dimming, Manual Dimming mode)
	Freeze Function	Yes
Resolution	Auto Bright	Yes
	Component (Optional)	480i/480P/576i/576P/720P/1080i/1080P
	DVI	DTV TIMING : 1080P(50/60Hz), 1080i, 720P(50Hz/60Hz), 576P(50Hz), 480P(60Hz) VESA TIMING : up to 1920x1080@60Hz
	UHD DP/UHD HDMI	4Kx2K@30Hz,1080P(50/60Hz), 1080i, 720P(50Hz/60Hz), 576P(50Hz), 480P(60Hz) VESA TIMING : up to 1920x1080@60Hz
	HDMI	DTV TIMING : 1080P(50/60Hz), 1080i, 720P(50Hz/60Hz), 576P(50Hz), 480P(60Hz) VESA TIMING : up to 1920x1080@60Hz
	PC - RGB	DOS 720*400(70Hz)
		VGA 640*480(60Hz/72Hz/75Hz)
		SVGA 800*600(56Hz/60Hz/72Hz/75Hz)
		XGA 1024*768(60Hz/70Hz/75Hz)
		SXGA 1280*1024(60Hz)
		WXGA 1280*768(60Hz/75Hz),1360*768(60Hz/75Hz)
		WSXGA 1600*1200(60Hz), 1920*1080(60Hz)
		WUXGA 1920*1080(60Hz)

## Signal specification

Parameter			Specification		
PC	Sync		Sync H: 30-75KHz V: 56-75Hz		
	Video Level		Video Level 0.7Vp-p@75ohm		
	MODE		Max 1920X1080@60Hz		
AV	Color system		PAL/NTSC/SECAM		
	Video Level		1Vp-p@75ohm		
	Audio Level		500mV rms		
YPbPr (Optional)	Video Level		Y:1Vp-p@75ohm,PbPr:0.7Vp-p@75ohm		
	Audio Level		500mV rms		
	Format		480i, 480p, 576i, 576p, 720p, 1080i, 1080p		
HDMI	Video Level		Standard TMDS		
	Format		480i, 480p, 576i, 576p, 720p, 1080i, 1080p,4k2k		
Media Play	Video	MPEG1	MPEG1		Up to 1920 x 1080, 30fps, Bitrate: 20Mbps
		MPEG2	MPEG2		
		MPEG4	AVC, MPEG-4 Visual, DivX5, DivX4, DivX3, XviD, MS-MPEG4 V3, MWV3		
		MJPEG	M-JPEG		
	Photo	JPEG	The maximum display resolution is 15360*8640, the Minimum is 100*100		
		BMP			
		PNG			
	Audio		AC-3, AAC, MP3, PCM		
	File	Video	.avi, .mpg, .vob, .mp4, .mkv, .flv, .mov		
		Photo	.jpg, .bmp, .png		

9. Product Dimensions

9-1. LED Dimensions



## 10. Troubleshooting

### 10-1. Product Self-Diagnosis

- You can check if the product is working properly using the Self-Diagnosis function.
- If a blank screen is displayed and the Power LED blinks even if the product and the PC are properly connected, perform the self-diagnosis function according to the procedures below.

Turn the product and the PC off.

Remove the D-Sub cable from the product.

Turn the product on.

If the product is working properly, the<Check Signal Cable>message appears.

In this case, if a blank screen is displayed again, make sure that there is no problem with the PC and the connection.

### 10-2 Before Requesting Service

- Please check the following before requesting After-Sales service.
- If the problem continues, please contact your nearest Service Center.

#### 1) PROBLEMS RELATED TO SCREEN.

##### 1. Screen is blank and power indicator is off.

- » Ensure that the power cord is firmly connected and the monitor is on.

##### 2 . <Mode Not Supported> Message.

- » Check the maximum resolution and the frequency of the video adapter.
- » Compare these values with the data in the Standard Signal Mode Table.

##### 3. Picture rolls vertically.

- » Check if the signal cable is securely connected. Connect it again securely.

##### 4. Image is not clear. Picture is blurred.

- » Run frequency<Coarse> and <Fine> tuning.
- » Turn on again after removing all accessories(video extension cable, etc.) Set resolution and frequency to the recommended ranges.

##### 5. The image is too light or too dark.

- » Adjust the <Brightness>and<Contrast>.

##### 6. Screen is blank and the power indicator light blinks every 0.5 or 1 seconds.

- » The monitor is using its power management system. Press a key on the keyboard.

#### 2 )PROBLEMS RELATED TO AUDIO.

##### 1. No sound

- » Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card.

##### 2. The sound level is too low.

- » Check the volume level. If the volume is still too low after turning the control to its maximum, check the volume control on the computer sound card or software program.

#### 3. PROBLEMS RELATED TO REMOTE CONTROL.

##### 4. The remote control buttons do not respond.

- » Check the battery polarities(+/-).
- » Check if the batteries have been exhausted.
- » Check if the power is on.
- » Check if the power cord is securely connected.
- » Check if a special fluorescent or neon lamp is on in the vicinity.



## **11. Customer support and AS guide.**

### **11-1. Before request AS**

1) When the product does not operate normally, product manuals can be found on the troubleshooting please refer to the page.

### **11-2. AS Cost**

- 1) Our warranty period is 1 years.
- 2) A/S is the cost incurred to our bylaws, item rated A/S price is determined according to the criteria, accurate repair cost, please contacts a customer support counseling over the phone.
- 3) Even within the warranty period if you use a shipping and negligence A/S will be charged.