Ver. 1.0 E

OLM-4001/4601NGE
User's Guide

CONTENTS

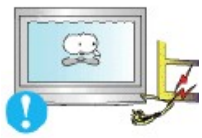
Safety Instructions

- Do not use a damaged or loose plug.
  - This may cause electric shock or fire.

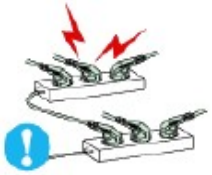
- Do not pull the plug out by the wire nor touch the plug with wet hands.
  - This may cause electric shock or fire.

- Use only a properly grounded plug and receptacle.
  - An improper ground may cause electric shock or equipment damage.

- Insert the power plug firmly so that it does not come loose.
  - A bad connection may cause fire.



- Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.
  - This may cause electric shock or fire.

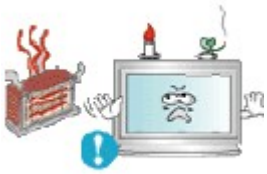


- Do not connect too many extension cords or plugs to one outlet.
  - This may cause fire.

➢ Do not disconnect the power cord while using the LCD Display.
• A surge may be caused by the separation and may damage the LCD Display.

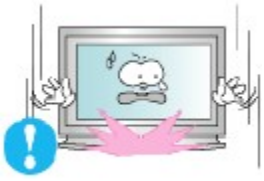
➢ Do not use the power cord when the connector or plug is dusty.
• If the connector or plug of the power cord is dusty, clean it with a dry cloth.
• Using the power cord with a dusty plug or connector may cause electric shock or fire.

➢ Do not drop the LCD Display when moving it.
•This may cause damage to the product or the person carrying it.



➢ Keep any flammable objects such as candles, insecticides or cigarettes away from the product.
• Otherwise, this may cause fire.

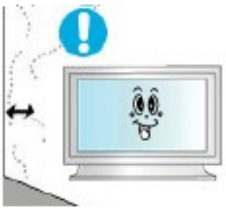
➢ Keep any heating devices away from the power cable.
• A melted coating may cause electric shock or fire.



➢ Put down the LCD Display carefully.
• Failing to do so may damage the LCD Display.

➢ Do not place the LCD Display face down.
• This may damage the TFT-LCD surface.

➢ The installation of the bracket must be done by a qualified professional.
• Installing the bracket by unqualified personnel may result in injury.
• Always use the mounting device specified in the owner's manual.



➢ When installing the product, make sure to keep it away from the wall (more than 10 cm / 4 inches) for ventilation purposes.
• Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.

➢ Do not spray water or detergent directly onto the LCD Display.
•This may cause damage, electric shock or fire.

➢ Keep the product away from places exposed to oil, smoke or moisture; do not install inside a vehicle.
• This may cause a malfunction, electric shock or fire.
• In particular, avoid operating the LCD Display near water or outdoors Where the LCD Display could be exposed to snow or rain.

➢ Disconnect the plug from the outlet during storms or lightning or if it is not used for a long period of time.
• Failure to do so may cause electric shock or fire.

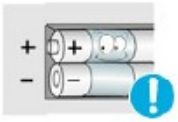
➢ Do not install the product on an unstable, uneven surtace or a location prone to vibrations.

• Dropping the product may cause damage to the product or the person carrying it.

Using the product in a location prone to vibrations mayshorten the lifetime of the product or may cause the product to catch fire.

➢ When removing batteries from the remote control, be careful that they are not swallowed by children. keep the batteries out of children's reach.

• If the batteries are swallowed, see a doctor immediately.



➢ When replacing batteries, place the batteries in the correct +/- polarity position as indicated on the battery holder.

• The incorrect polarity may cause a battery to break or leak and Cause fire, injury, or contamination (damage).

➢ Use only specified standard batteries. Do not use new and used batteries together.

• This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).

➢ The batteries (and rechargeable batteries) is not ordinary refuse and must be returned for recycling purposes.
The customer is responsible for returning the used or rechargeable batteries for recycling purposes as the consumer.

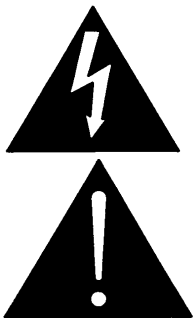
• The customer can return used or rechargeable batteries to a nearby Public recycling center or to a store selling the same type of the battery or rechargeable battery.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
16. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
17. The mains plug of the power supply cord shall remain readily operable.
18. An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing connection.

Note: Prolonged use of headphones at a high volume may cause health damage on your ears.



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

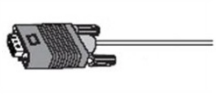
Introduction

LCD Display

Manual

User's Manual

Cable



RS-232C Cable

DVI Cable

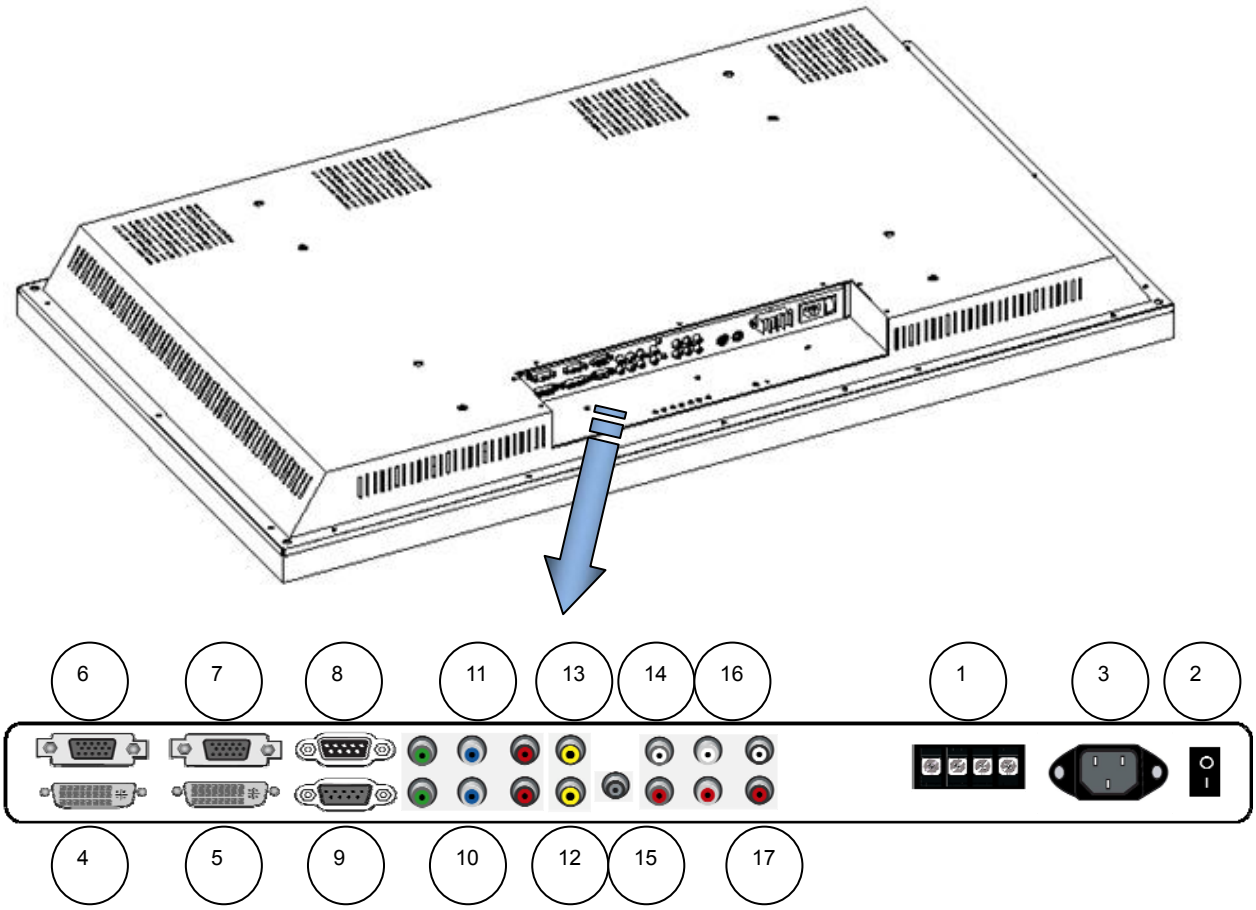
RGB Cable

AC Power Cable

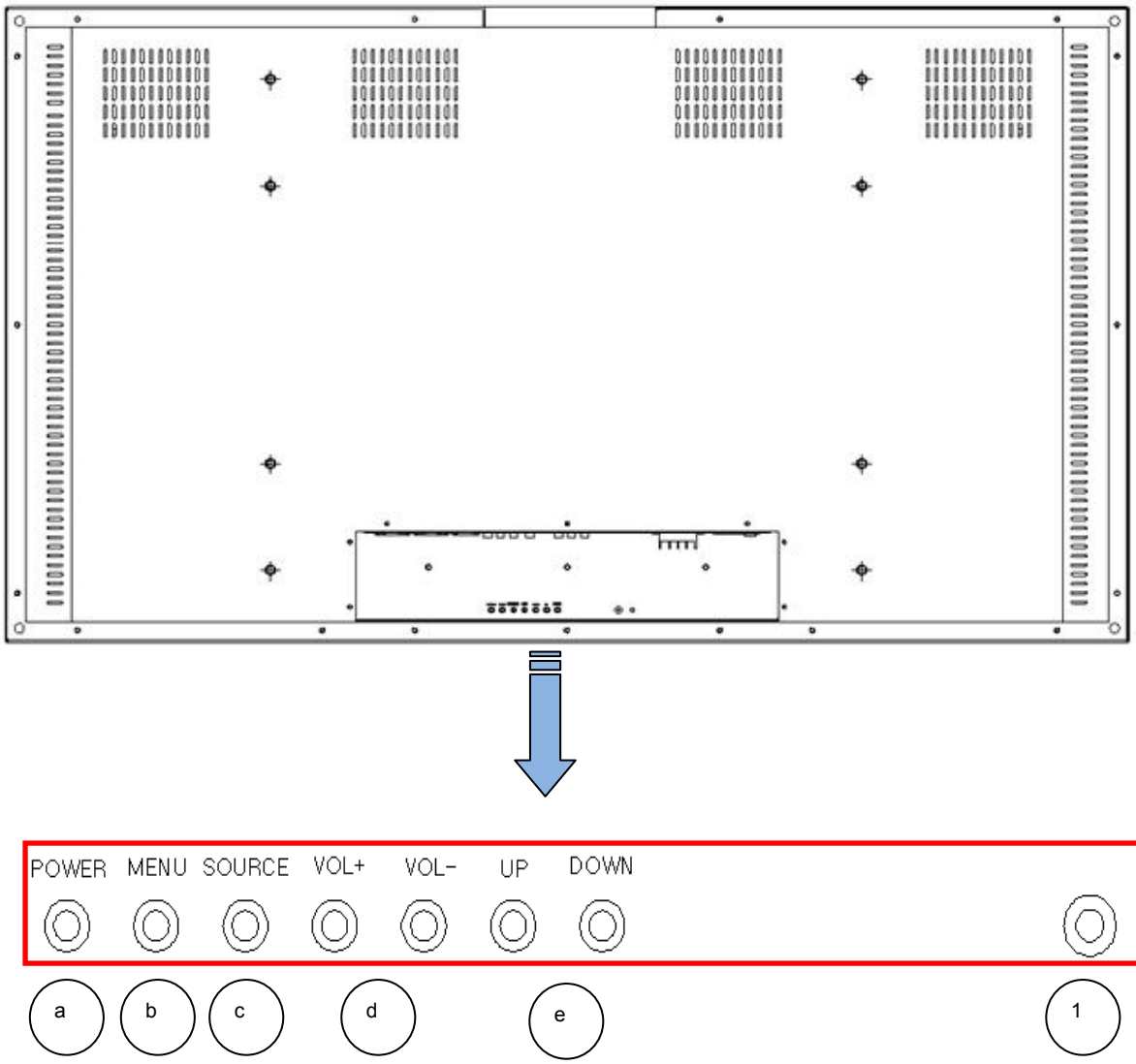
Other

Remote Control

Batteries (AAA X 2)



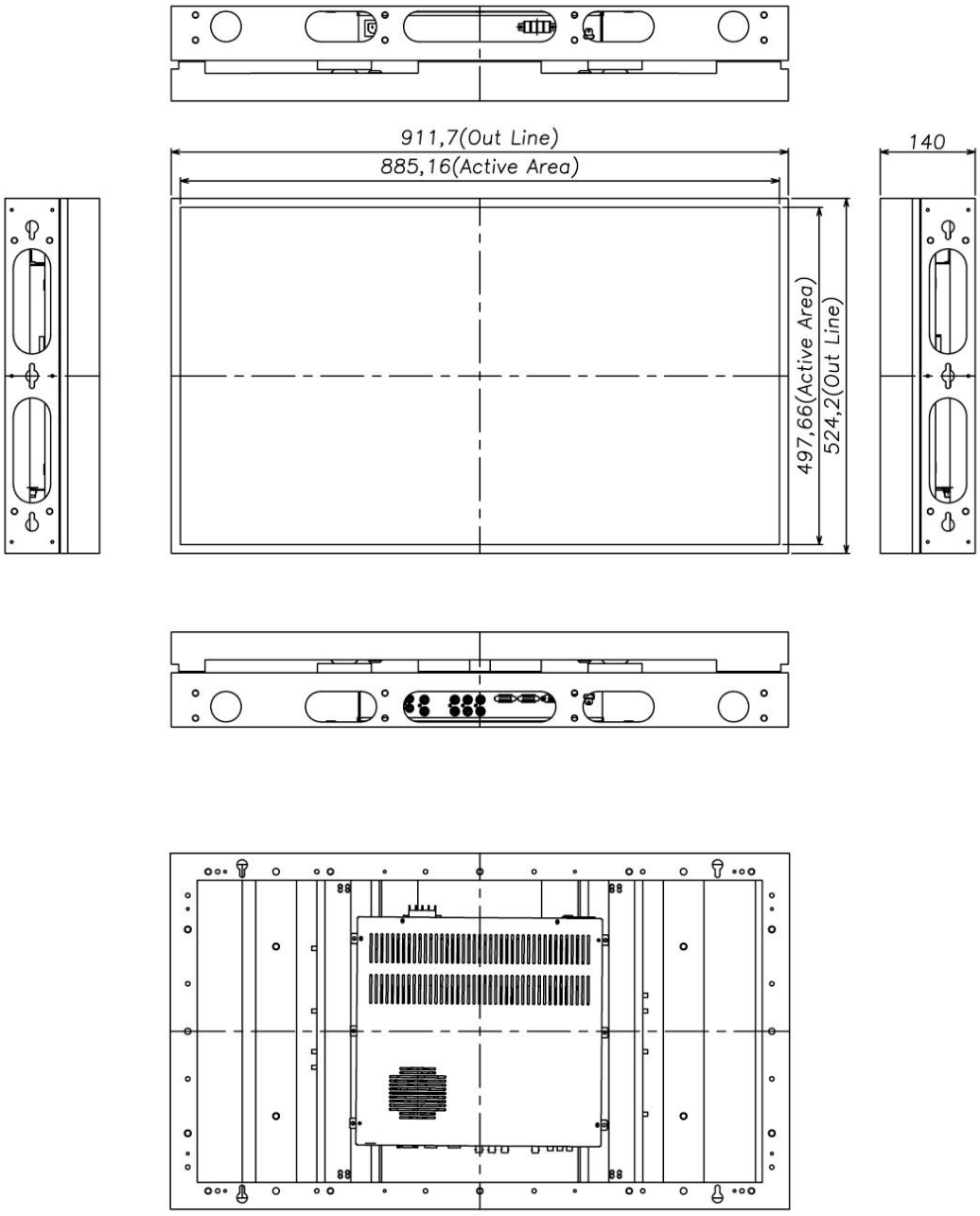
1. Sound Out
2. AC Power S/W On/Off
3. AC Power In (100V ~ 240V)
4. DVI Input
5. DVI Output
6. PC Input
7. PC Output
8. RS-232 Output
9. RS-232 Input
10. Component Input
11. Component Output
12. AV Input
13. AV Output
14. PC Sound Input
15. PC Sound Input (Phone Jack)
16. Component Sound Input
17. AV Sound Input



1. IR
   - Aim the remote control towards this spot on the LCD Display.
2. LED
   - LCD Power Status display(On : BLUE / Off : RED)
3. OSD KEY Input(Power / Menu / Source / Left / Right / Up / Down)
   a) Power : Turns the LCD Display On/ Off.
   b) Menu : Displays the main On-Screen menu.
   c) Source : Select Input Source
      - DVI → PC → COMPONENT → AV
   d) Left/Right : Moves from one menu item to another horizontally or adjusts selected menu values. Adjusts the audio volume.
   e) Up/Down : Moves from one menu item to another vertically or adjusts selected menu values.

Mechanical Layout (Slide Type)

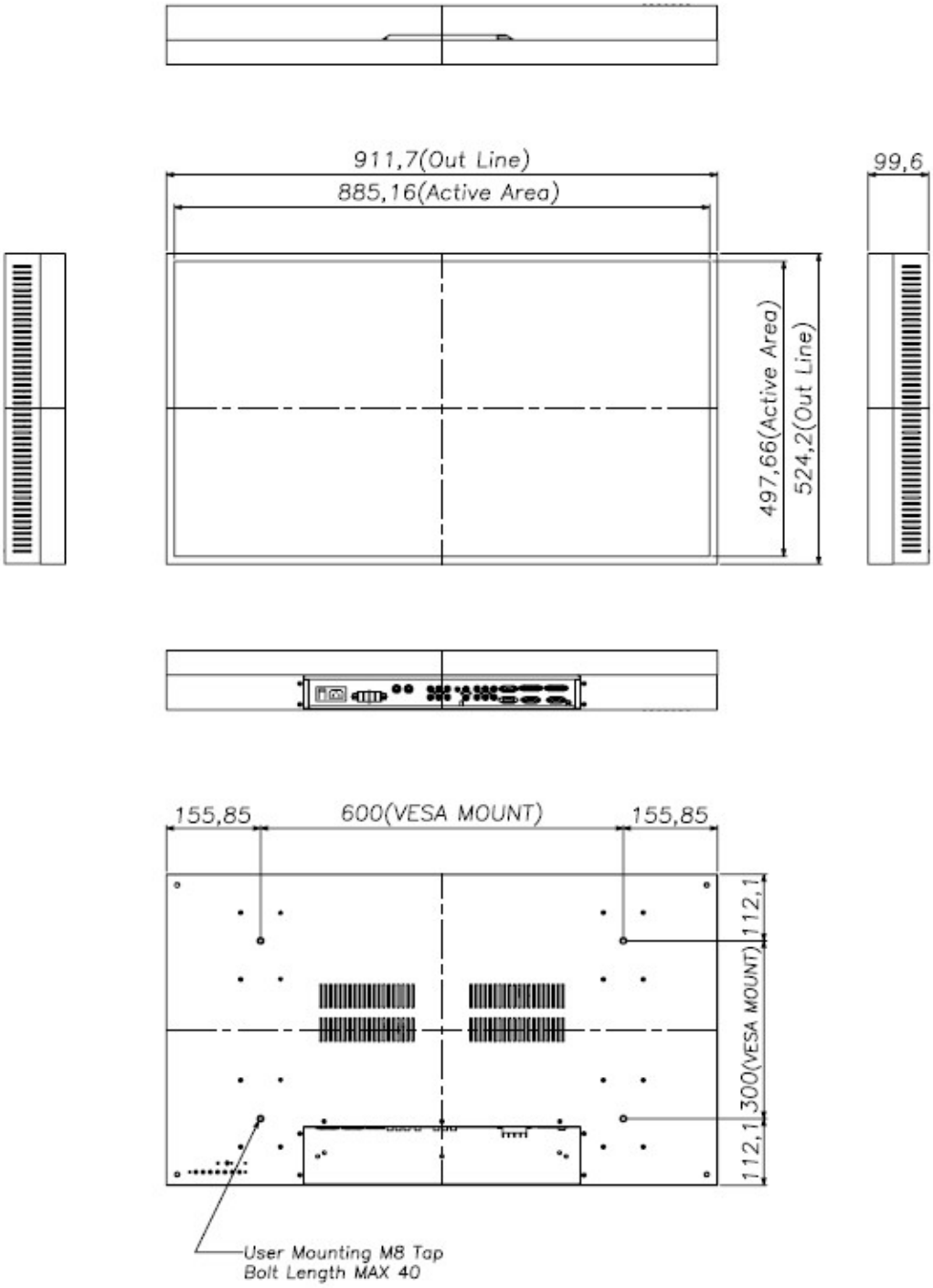
= OLM-4001NGE =



※ Contact your dealer to purchase the "Wall mount bracket" required for wall-mounted installation.

Mechanical Layout (Set Type)

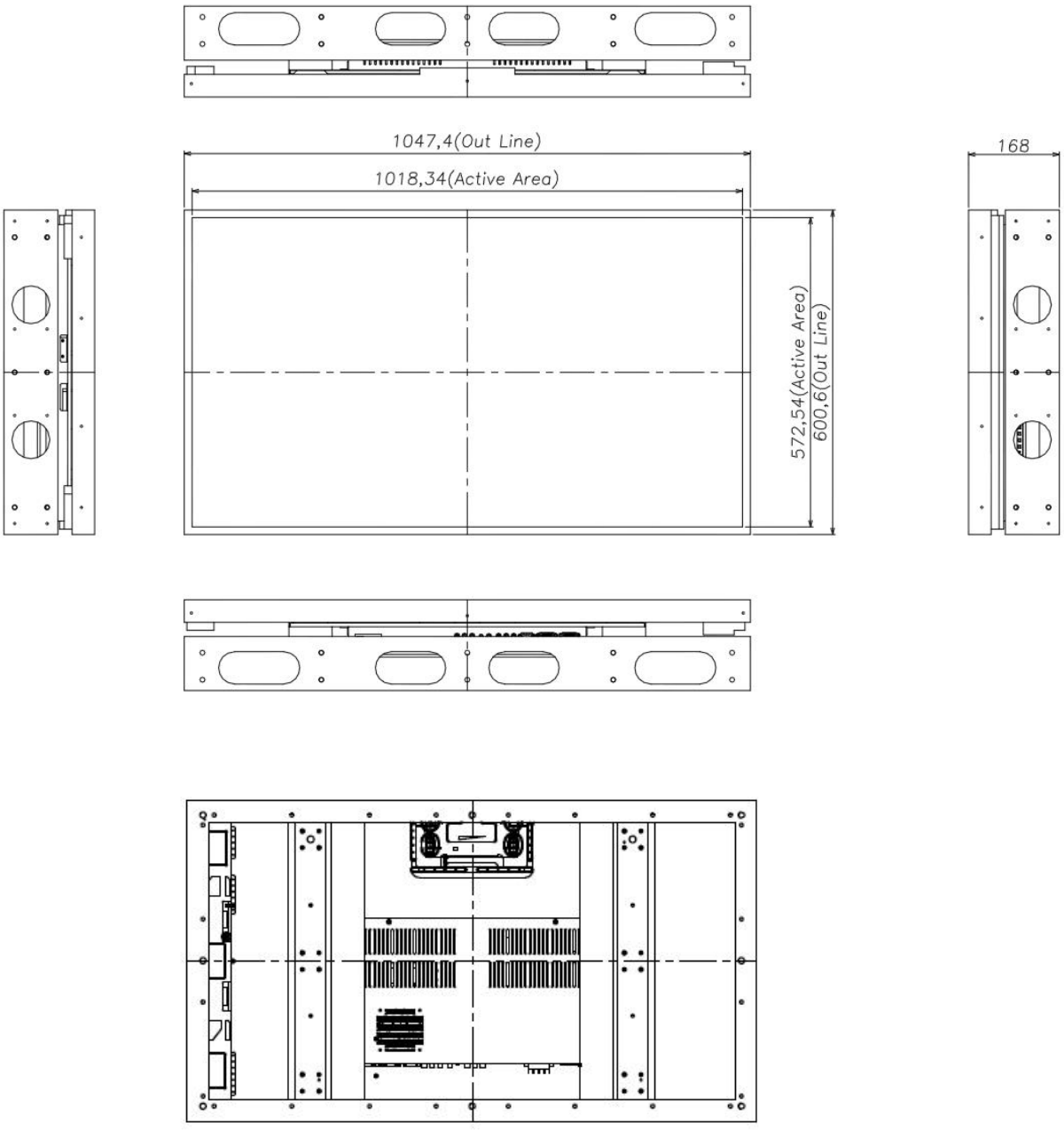
= OLM-4001NGE =



※ Contact your dealer to purchase the "Wall mount bracket" required for wall-mounted installation.

Mechanical Layout (Slide Type)

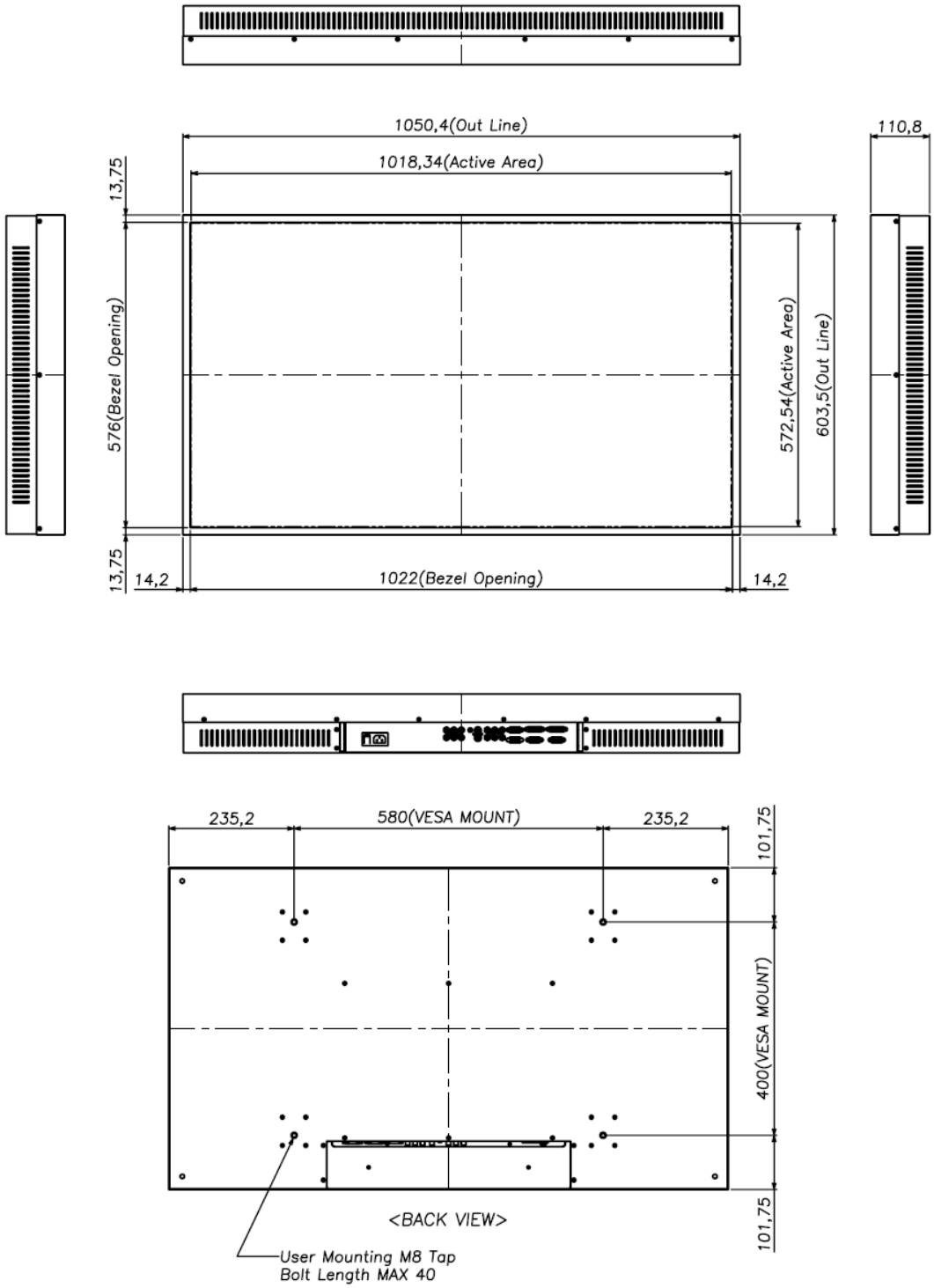
= OLM-4601NGE =



※ Contact your dealer to purchase the "Wall mount bracket" required for wall-mounted installation.

Mechanical Layout (Set Type)

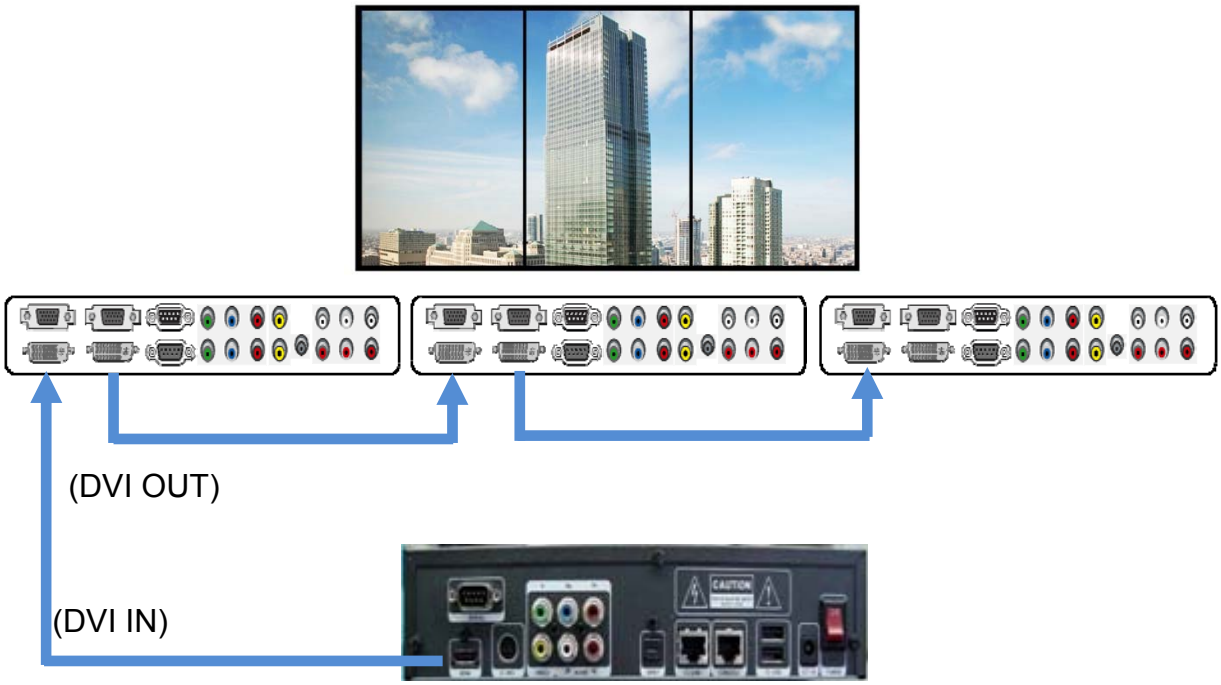
= OLM-4601NGE =



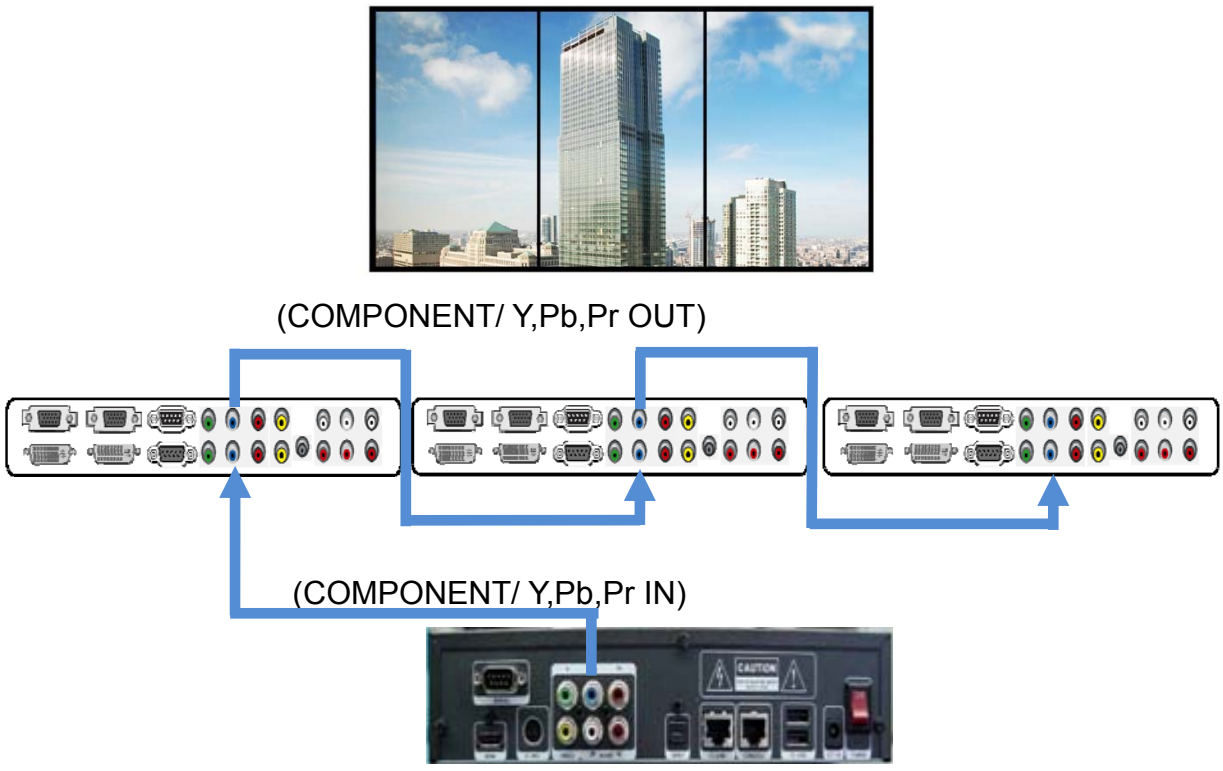
※ Contact your dealer to purchase the "Wall mount bracket" required for wall-mounted installation

Connections

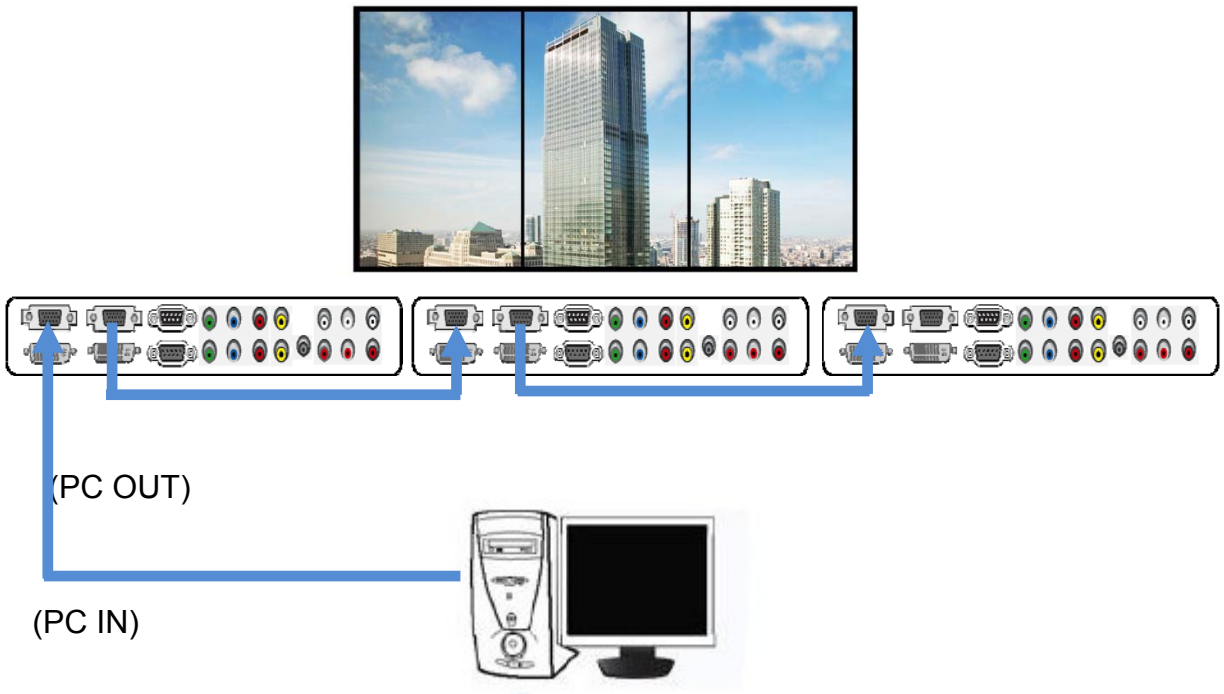
Cable Assemble (DVI).



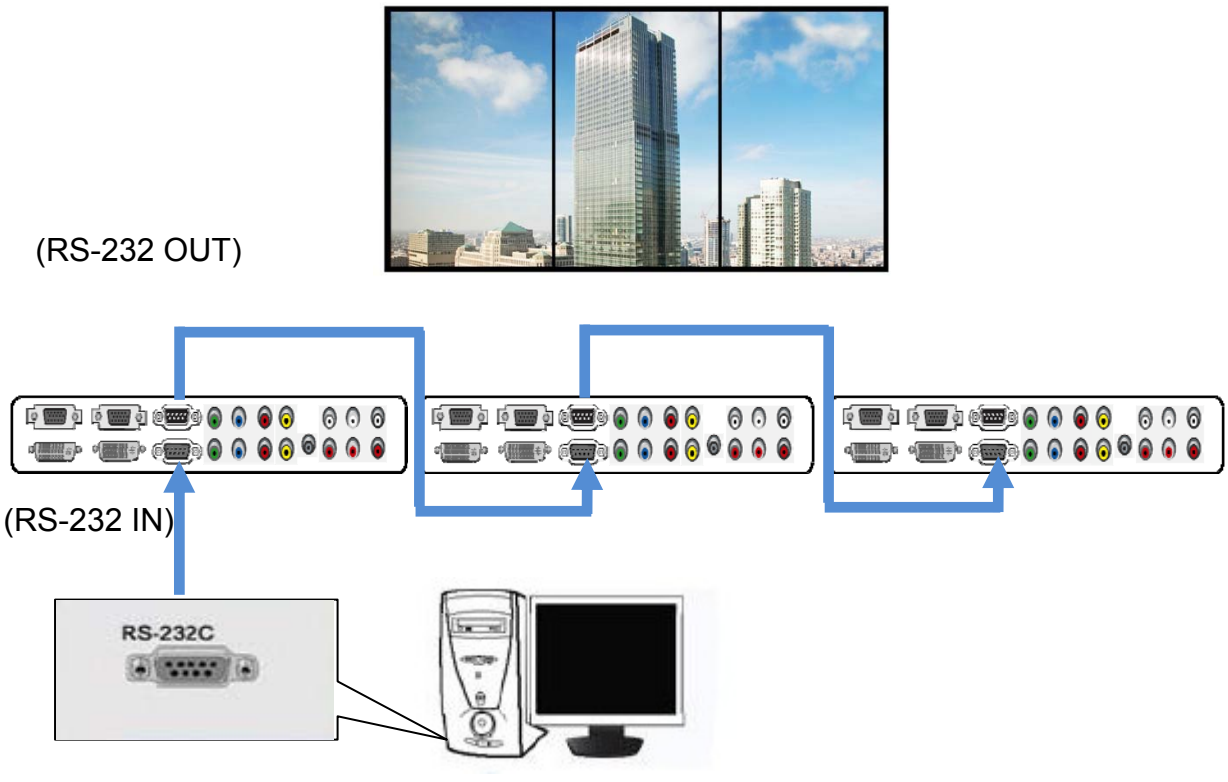
Cable Assemble (COMPONENT/Y,Pb,Pr).



Cable Assemble (PC).



Cable Assemble (RS-232).



SICP (Serial Interface Communication Protocol)

This document defines all the command and messages exchanged between the Master (a PC or the other controller) and the Slave (the displays).
It also describes the ways to send or read the commands or the messages.

1. Protocol definition

SICP stands for “Serial Interface Communication Protocol”.
The protocol is specifically designed to allow data communication in half duplex multi-point environments, but it can also be used for half duplex point-to-point RS-232C communication.

2. Communication characteristics

A half duplex communication is implemented starting from the concept of a master-slave structure, where the display is supposed to be the slave.
The first action is always taken by the master, which can be either a PC or any controlling device (acting as server) interfaced to the monitor. After sending a command or a request in the appropriate format the master receives from the slave an acknowledgement, which tells the transmitter whether the command is not valid (or not executable, anyway) or it is accepted. In case of a request, the requested information is sent back and it becomes the acknowledgement by itself.

3. How to connect a external equipment

Femail Pin number Mail Pin number
2 <----------> 2
3 <----------> 3
5 <----------> 5

4. Hardware Protocol

Baud rate : 9600 bps
Data bits : 8 bit
Parity bits : None
Stop bits : 1 bit
Handshake : None

5. Transmission Formats

This is the format that the computer will send to the display to execute commands .
The format for this command transmission is as follows:
(total 13 byte)
ex) <STX>001PWRWOFF0<ETX> (Set ID : 1 , Power Off Send)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f	0	0	1	P	W	R	W	O	F	F	0	0x0d
Hex	ASCII (capital letter)											Hex

- STX : Start of Text (0x0f)
- ID1 ~ ID3 : Set ID (001~100)
- CM1 ~ CM3 : Command (PWR, MIN, MUT,RML,KPL……)
- R/W : Read/Write
- DA1 ~ DA3 : Data (Values)
- IND : Index
- ETX : End of Text (0x0d)

6. OK Acknowledgement

The acknowledgement will be sent by the display to the computer to verify that the command has been successfully received and executed. This format for this acknowledgement is as follows:

ex) <STX>001PWR#OFF#<ETX> (Set ID : 1 , Power Off Acknowledgement)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f	0	0	1	P	W	R	**#**	O	F	F	**#**	0x0d
Hex	ASCII (capital letter)											Hex

7. Error Acknowledgement

The Error Values will be sent by the display to the computer to verify that the command has been successfully received and executed.
This format for this Error Values is as follows:

ex) <STX>001PWRERROR<ETX> (Set ID : 1 , Power Off Error)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f	0	0	1	P	W	R	**E**	**R**	**R**	**O**	**R**	0x0d
Hex	ASCII (capital letter)											Hex

8. How to choose display ID number

♦ Read Set ID Number

* Attention : Read SetID Function must be only one connect Monitor (1 pc : 1 monitor)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f	F	F	F	**S**	**I**	**D**	R	0	0	0	0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : “FFF” (Set ID)
- DA1 ~ DA3 : “000” (Don’t care)

Ex) <STX>FFFSIDR0000<ETX> (Read Set ID)
Acknowledge => <STX>001SID#001#<ETX> (Set ID : 1)

♦ Write Set ID Number

* Attention : Write SetID Function must be only one connect Monitor (1 pc : 1 monitor)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f	F	F	F	**S**	**I**	**D**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : “FFF” (Set ID)
- DA1 ~ DA3 : “001” (Set ID Number)

Ex) <STX>FFFSIDR0010<ETX> (Write Set ID : 1)
Acknowledge => <STX>001SID#001#<ETX>

9. Command List

♦ Power On/Off (PWR)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**P**	**W**	**R**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “-ON” : Power On
  “OFF” : Power Off

Ex) <STX>001PWRWOFF0<ETX> (Power Off)
Acknowledge => <STX>001PWR#OFF#<ETX>

♦ Remote Control Lock On/Off (RML)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**R**	**M**	**L**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “-ON” : Lock On
  “OFF” : Lock Off

Ex) <STX>001RMLW-ON0<ETX> (Lock On)
Acknowledge => <STX>001RML#-ON#<ETX>

♦ Keypad Control Lock On/Off (KPL)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**K**	**P**	**L**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “-ON” : Lock On
  “OFF” : Lock Off

Ex) <STX>001KPLW-ON0<ETX> (Lock ON)
Acknowledge => <STX>001KPL#-ON#<ETX>

♦ Source Change (MIN)

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**M**	**I**	**N**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “DVI” : DVI
  “COM” : Component
  “-PC” : PC(D-SUB)
  “-AV” : AV(Composite)

Ex) <STX>001MINWDVI0<ETX> (Source DVI)
Acknowledge => <STX>001MIN#DVI#<ETX>

♦ **Virtual Remote Control (RMT)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**R**	**M**	**T**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “MEN” (Menu)
  “SOU” (Source)
  “LEF” (Left & Volume-)
  “RIG” (Right & Volume+)
  “ENT” (Enter)
  “-UP” (Up)
  “DOW” (Down)
  “EXI” (Exit)

Ex) <STX>001RMTWSOU0<ETX> (Remote Source Button)
Acknowledge => <STX>001RMT#SOU#<ETX>

♦ **Horizontal Set Count (HSC)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**H**	**S**	**C**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “001” ~ “010”

Ex) <STX>001HSCW0100<ETX> (H-Set Count 10)
Acknowledge => <STX>001HSC#010#<ETX>

♦ **Vertical Set Count (VSC)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**V**	**S**	**C**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “001” ~ “010”

Ex) <STX>001VSCW0100<ETX> (V-Set Count 10)
Acknowledge => <STX>001VSC#010#<ETX>

♦ **Display Sequence (SDS)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**S**	**D**	**S**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “001” ~ “100”

Ex) <STX>001SDSW0010<ETX> (Display Sequence 1)
Acknowledge => <STX>001SDS#001#<ETX>

♦ **Horizontal Edge Adjust (HEG)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**H**	**E**	**G**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “000” ~ “200”

Ex) <STX>001HEGW0300<ETX> (H-Edge Adjust 30)
Acknowledge => <STX>001HEG#030#<ETX>

♦ **Vertical Edge Adjust (VEG)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**V**	**E**	**G**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “000” ~ “200”

Ex) <STX>001VEGW0400<ETX> (V-Edge Adjust 40)
Acknowledge => <STX>001VEG#040#<ETX>

♦ **Color Adjust DVI (FCD)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**F**	**C**	**D**						0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “000” ~ “255” (Color Value)
- R/W : “W” (Write)
  “R” (Read)
- IND : “0” (Sub-Brightness)
  “1” (R-Offset)
  “2” (G-Offset)
  “3” (B-Offset)
  “4” (Sub-Contrast)
  “5” (R-Gain)
  “6” (G-Gain)
  “7” (B-Gain)

Ex) <STX>001FCDW1004<ETX> (Write : DVI Sub-Contrast 100)
Acknowledge => <STX>001FCD#1004<ETX>
Ex) <STX>001FCDR0002<ETX> (Read : DVI G-Offset)
Acknowledge => <STX>001FCD#1102<ETX> (G-Offset:110)

♦ **Color Adjust PC(D-SUB) (FCP)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**F**	**C**	**P**						0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “000” ~ “255” (Color Value)
- R/W : “W” (Write)
  “R” (Read)
- IND : “0” (Sub-Brightness)
  “1” (R-Offset)
  “2” (G-Offset)
  “3” (B-Offset)
  “4” (Sub-Contrast)
  “5” (R-Gain)
  “6” (G-Gain)
  “7” (B-Gain)

Ex) <STX>001FCPW1100<ETX> (Write : PC Sub-Brightness 110)
Acknowledge => <STX>001FCP#1100<ETX>
Ex) <STX>001FCPR0001<ETX> (Read : PC R-Offset)
Acknowledge => <STX>001FCP#1202<ETX> (G-Offset : 120)

♦ **Color Adjust COMPONENT (FCC)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**F**	**C**	**C**						0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “000” ~ “255” (Color Value)
- R/W : “W” (Write)
  “R” (Read)
- IND : “0” (Sub-Brightness)
  “1” (R-Offset)
  “2” (G-Offset)
  “3” (B-Offset)
  “4” (Sub-Contrast)
  “5” (R-Gain)
  “6” (G-Gain)
  “7” (B-Gain)

Ex) <STX>001FCCW1004<ETX> (Write : Component Sub-Contrast 100)
Acknowledge => <STX>001FCC#1004<ETX>
Ex) <STX>001FCCR0002<ETX> (Read : Component G-Offset)
Acknowledge => <STX>001FCC#1102<ETX> (G-Offset : 110)

♦ **Color Adjust AV (FCA)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**F**	**C**	**A**						0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“001” ~ “100”)

- DA1 ~ DA3 : “000” ~ “255” (Color Value)
- R/W : “W” (Write)
  “R” (Read)
- IND : “0” (Sub-Brightness)
  “1” (R-Offset)
  “2” (G-Offset)
  “3” (B-Offset)
  “4” (Sub-Contrast)
  “5” (R-Gain)
  “6” (G-Gain)
  “7” (B-Gain)

Ex) <STX>001FCAW1004<ETX> (Write : AV Sub-Contrast 100)
Acknowledge => <STX>001FCA#1004<ETX>
Ex) <STX>001FCAR0002<ETX> (Read : AV G-Offset)
Acknowledge => <STX>001FCA#1102<ETX> (G-Offset : 110)

♦ **Zoom IN/OUT(ZOM)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f	0	0	0	**Z**	**O**	**M**	W					0x0d
Hex	ASCII (capital letter)											Hex

- ID1 ~ ID3 : Set ID (“000”)
- DA1 ~ DA2 : “11” ~ “99” (H- Set Count , V-Set Count)
  Ex) 3x3 Multivision => 33
- DA3 : “I” or “O” (Zoom IN, Zoom OUT)
- R/W : “W” (Write)
- IND : “0” (DVI)
  “1” (RGB)
  “2” (COMPONENT)
  “3” (AV)

Ex) <STX>000ZOMW22I0<ETX> (2x2, Zoom IN, DVI)
Ex) <STX>000ZOMW33O1<ETX> (3x3, Zoom OUT, PC)

♦ **PC Auto Adjust (AUT)**

STX	ID1	ID2	ID3	CM1	CM2	CM3	R/W	DA1	DA2	DA3	IND	ETX
0x0f				**A**	**U**	**T**	W				0	0x0d
Hex	ASCII (capital letter)											Hex

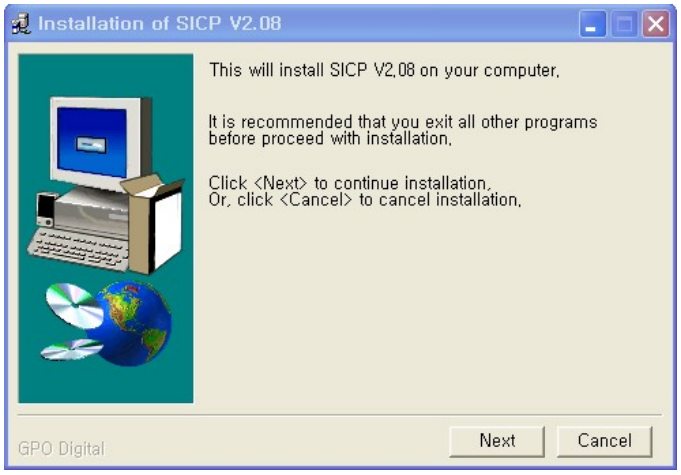
- ID1 ~ ID3 : Set ID (“001” ~ “100”)
- DA1 ~ DA3 : “-PC”
  Ex) <STX>001AUTW-PC0<ETX> (PC Auto)
Acknowledge => <STX>001AUT#-PC#<ETX>

1. Introduction

This manual booklet describes how to manage and utilize the product (Multi vision set) through remote control by RS232 protocol. This will introduce SICP V2.08 (Software that enables you to control the Multivision) and various applications will be possible with this software. As per different way of customizing, the functions and specifications of each product may vary.

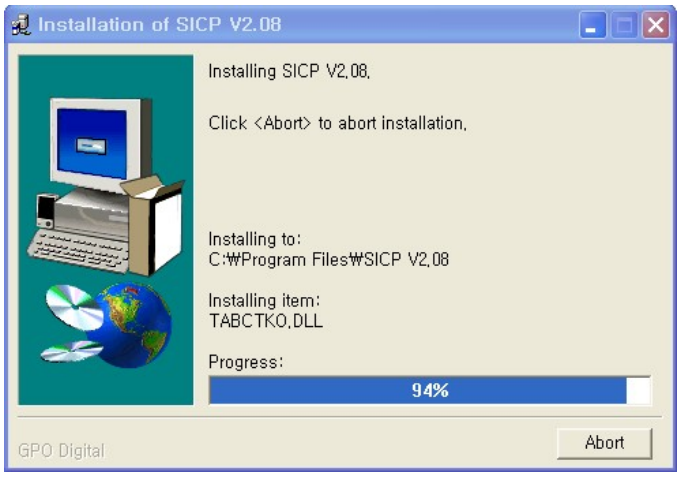
2. Installing SICP V2.08

Run the file named "**SICP208Setup.exe"** and follow the instruction below.
If you have SICP program installed previously, delete the previous one and re-install the new one.

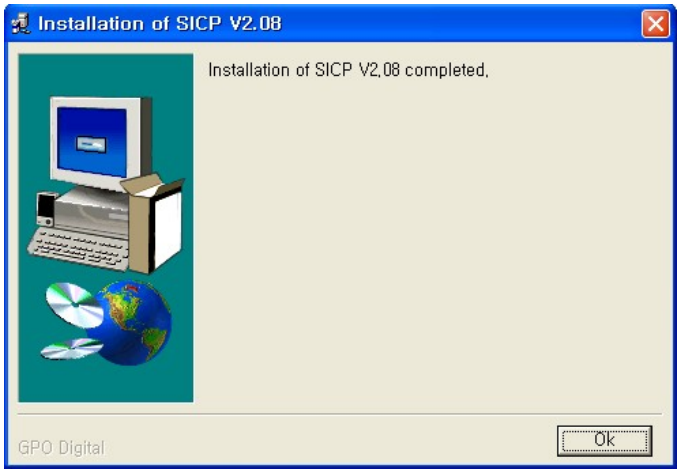


Press "Next"

Select the folder you wish to save the file in. Press "Install" if you are ok with the designated folder.



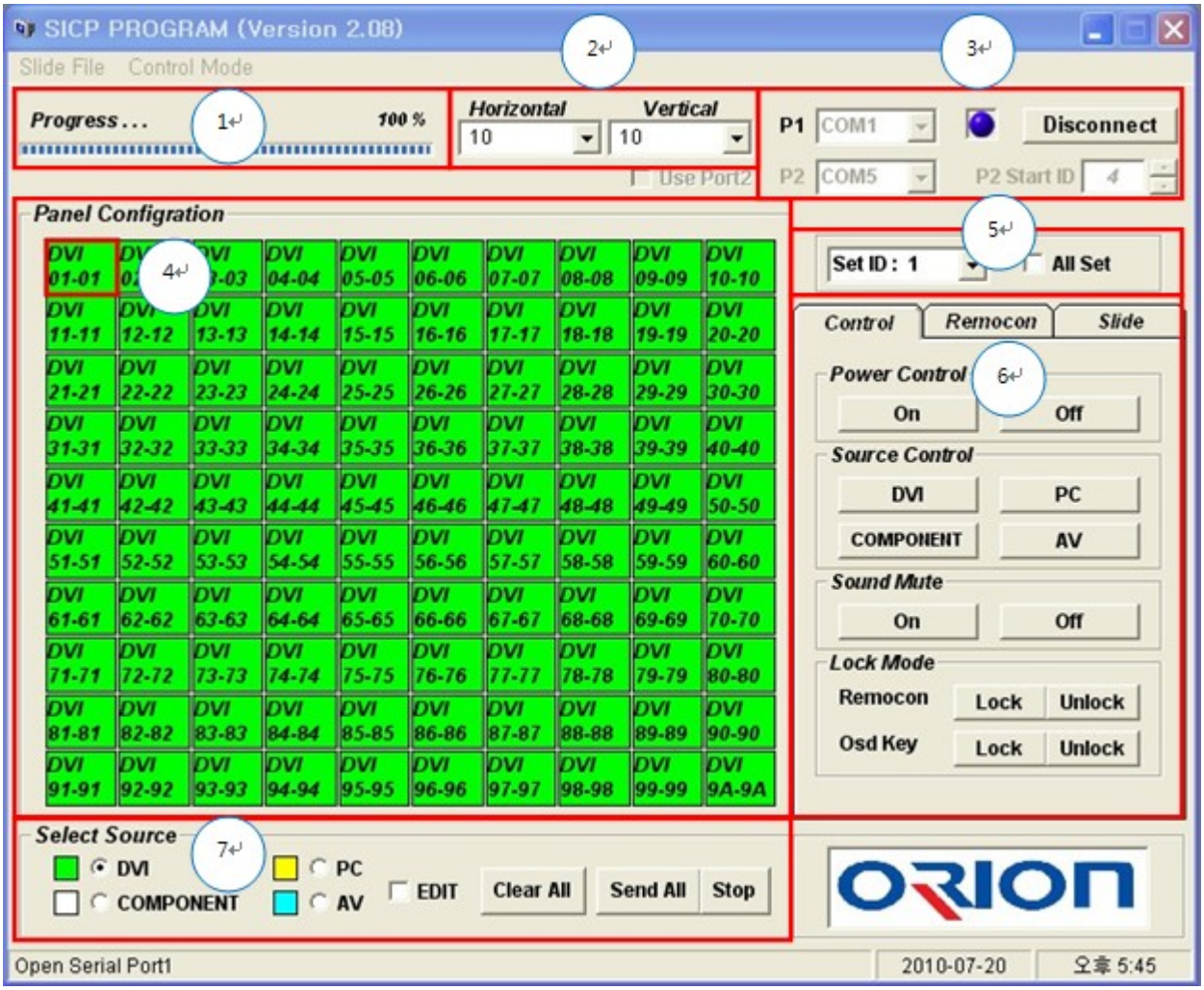
Wait until the installation is complete.



Once installation is complete, Go to “Start”Menu -> Programs -> SICP V2.08 to run the program.

3. Running SICP V2.08 and Structure

Go to “Start”Menu -> Programs -> SICP V2.08 to run the program.



① Progress Bar : Shows the status of RS232 communication
② Horizontal & Vertical : Shows the type of display you can select
③ Communication : Select the Port connected to the PC
④ Panel Configuration : Indicates the information such as display configuration, source, Set ID and sequence number
⑤ Set ID : Shows the Set ID you can control
⑥ Control Button : Set of control buttons
⑦ Edit tools : Set of edit tools

4. Connect & Disconnect

- You can connect RS232 input and control PC using RS232 Cable.
- Select the Port you can connect to your PC (refer to ③ in the image above) and press connect button.
  If connected properly, the lamp will be turned to BLUE (from RED). If not connected properly, the following message will appear.

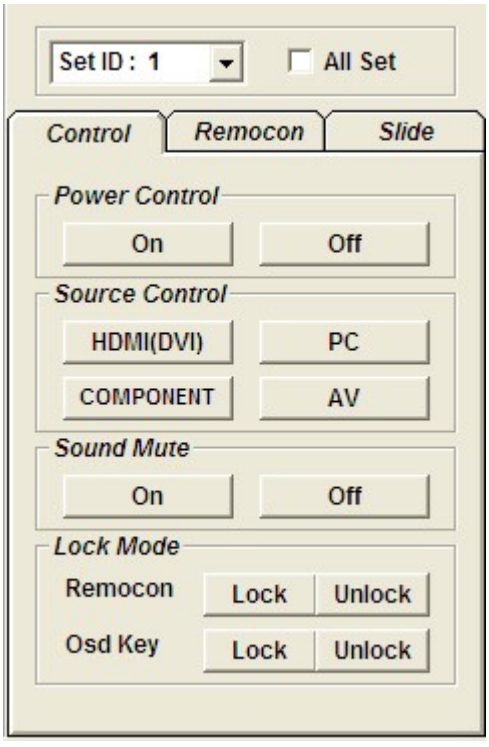
  Unable to open serial port : The port may not be available in your PC or another program may be running under this port.

  Cannot connect with Easy DiD System : RS232 Cable may not be connected properly or Set ID may be incorrect. Re-check on Set ID.

5. Multi-vision Control

You can control each display separately. First, select the display you wish to control by selecting Set ID You may click on it (Refer to ④ in the image above) or selecting the options (Refer to ⑤ in the image above). If the set is selected,
you may practice the following functions.

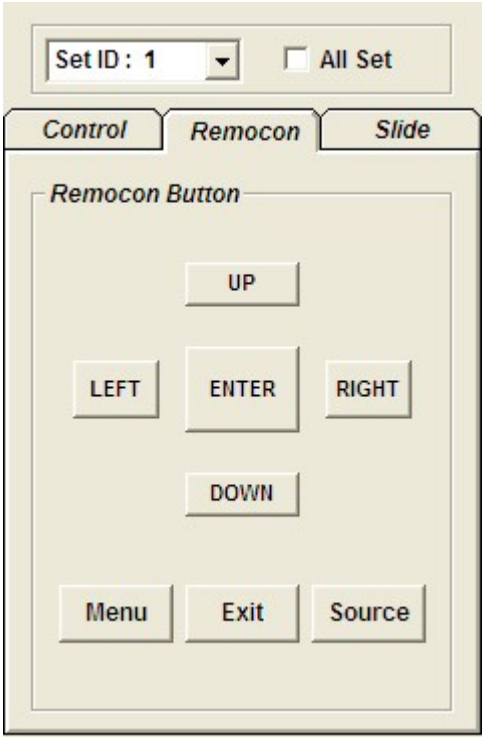
1) Basic Control



- Select Control Tab

Power Control : Turn the Set On/Off
Source Control : Select Source
Sound Mute : Turn the Mute On/Off
Lock Mode : Lock or unlock the IR or control key.

2) Virtual Remocon

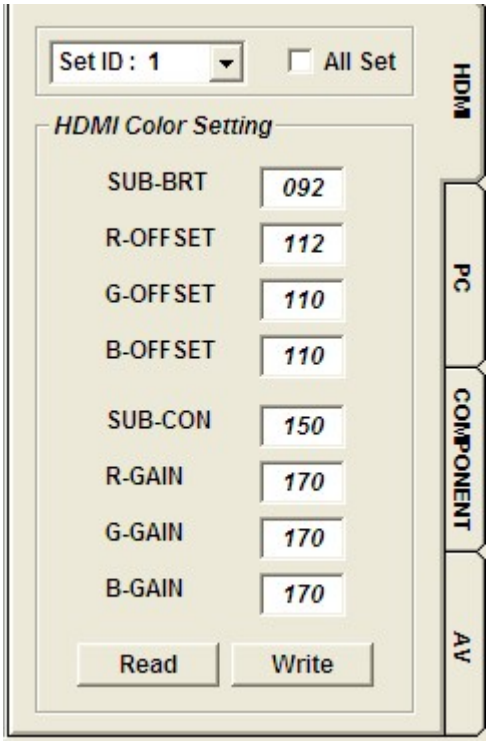


- Select Remocon Tab

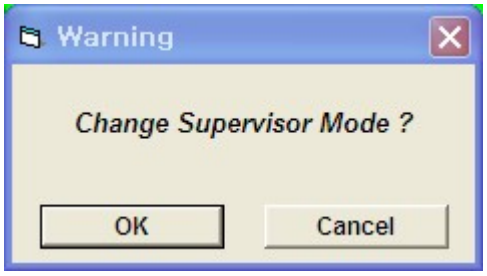
- This virtual remote controller controls the set through RS232.

Note : Functions in Slide Tab will be described in “6. Slide Function”

3) Color Setting

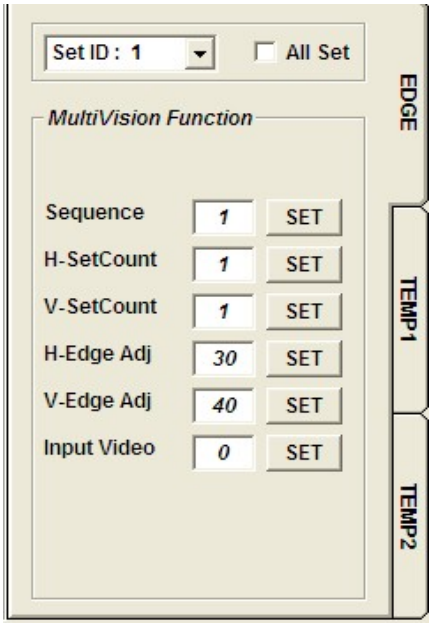


- You can access to Color setting mode only if you enter Supervisor Mode. In order to enter Supervisor mode, go to “Control Mode” in the tool bar (top) and select “Setting Mode”
- Hot key: Ctrl+F2.

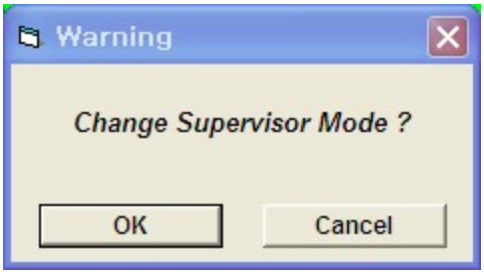


- Press “OK”
- Adjust the color(0~255) The color will be optimized in the testing after manufacturing. It is not recommended to adjust the color unless necessary.

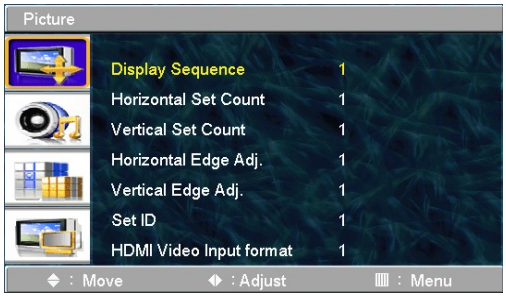
4) Edge Setting



- You can access to Edge Setting only if you enter Supervisor Mode. In order to enter Supervisor mode, go to “Control Mode” in the tool bar (top) and select “Setting Mode”
- Hot key: Ctrl+F3.



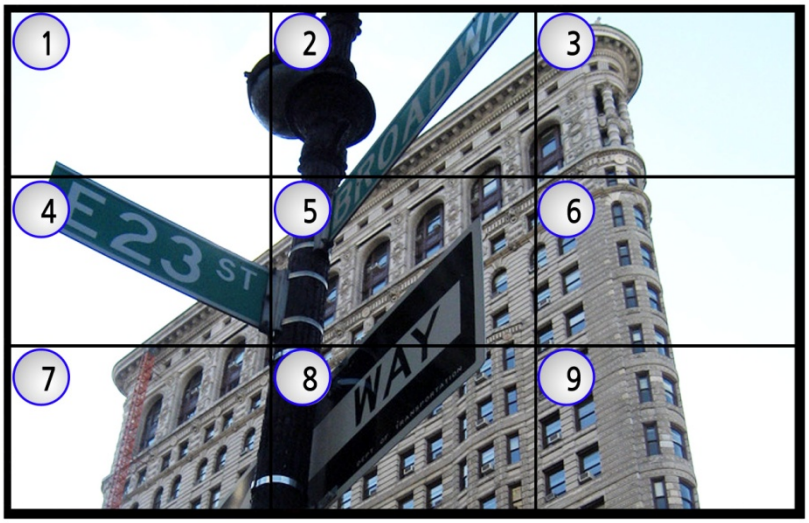
- Press “OK”
- It is not readable and only writable.



<OSD Menu>

< Others >

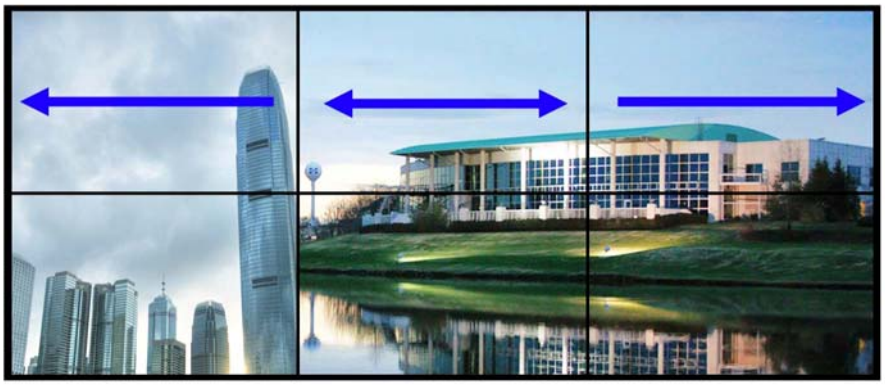
- Display Sequence : Set the panels to display the contents.(1~100)



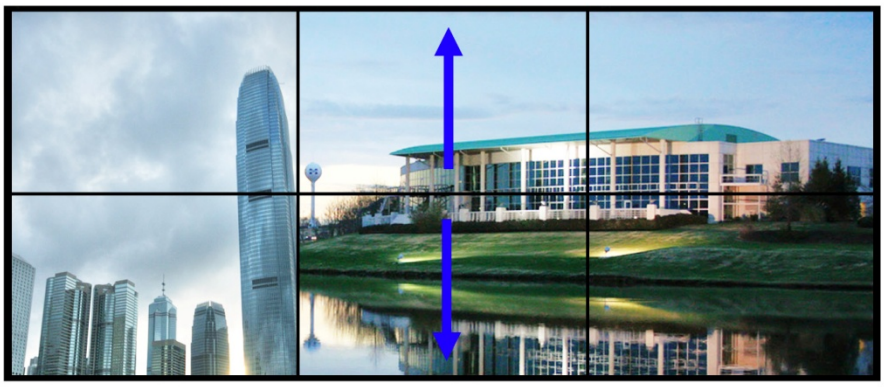
- H-Set Count (Horizontal Set Count) : Set the horizontal size of the Multi Vision (1~10)
  E.g. If set as above, H-Set Count : 3

- V-Set Count (Vertical Set Count) : Set the vertical size of the Multi vision (1~10)
  E.g. If set as above, V-Set Count : 3

- H-Edge Adj (Horizontal Edge Adjust) : Set the horizontal gap of Multi Vision (0~200)



- V-Edge Adj (Vertical Edge Adjust) : Set the vertical gap of Multi Vision (0~200)



- HDMI Video Input format : Select video format of HDMI input data
  0 : RGB444
  1 : YPbPr444
  2.: YPbPr422

6. Slide Function

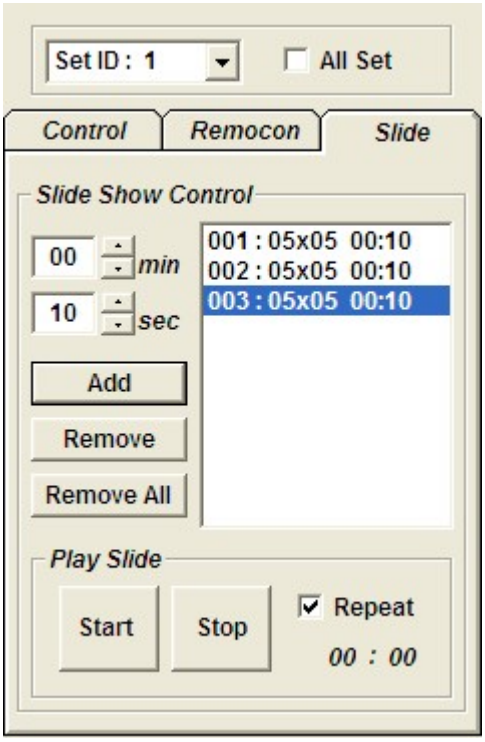
1) Edit

Example> When you wish to display 5X5 from DVI and display 3X3 (in the center) from PC.
- Tick on Edit box as described in ① of the image above.
- Select PC as described in ② of the image above.
- Select the area by clicking and dragging as described in ③ of the image above.
- The complete image will show as the picture on the right.

 # Send : Press“Send All”in order to practice the setting you made.

 # Initialize: Select DVI in Edit tool and press “Clear All” in order to initialize. The setting will be then initialized.

 # Add & Delete in Slide Schedule



Total management is possible by inserting the page you edited. You can set the play time for each page separately.

You cannot change the sequence of play so you have to insert the schedule in order.

- Add : Insert the edits (page) you made.
- Remove : Remove the page
- Remove All : Remove the schedule

2) Play

Press the start icon (refer to the image above) to play and press stop icon if you wish to stop playing.
- Repeat : Repeat to play slide show

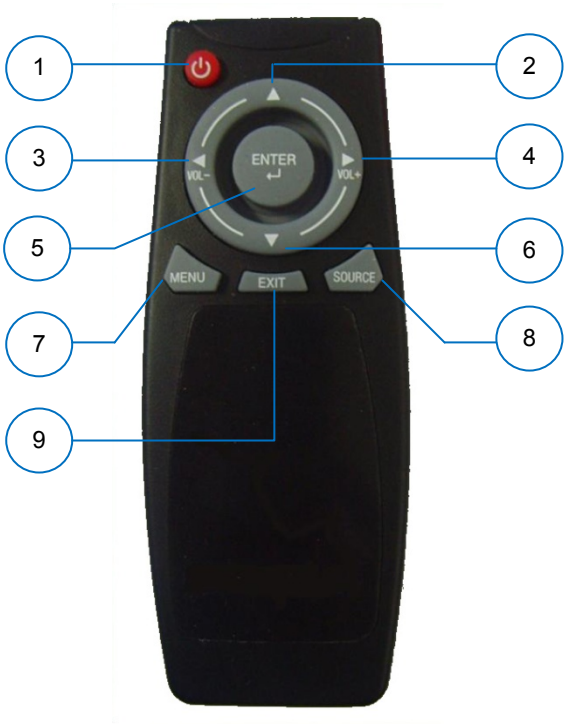
3) File Management

You can save the contents you edited and replay the saved contents. You must save after you complete scheduling.

- Save a file: Go to “Slide File”(top left of SICP program) and press File Save in order to save the file in the folder you wish to select. Basically, the file format is *.sld.

- Open a file: Go to “Slide File” and press “File Open”in order to open the file you wish to play.

Remote control



1. POWER : Turns the LCD Display On and Off

2. UP : Control the UP cursor in the menu

3, LEFT : Control the LEFT cursor in the menu

4, RIGHT : Control the RIGHT cursor in the menu

5, ENTER : Control the ENTER cursor in the menu

6, DOWN : Control the DOWN cursor in the menu

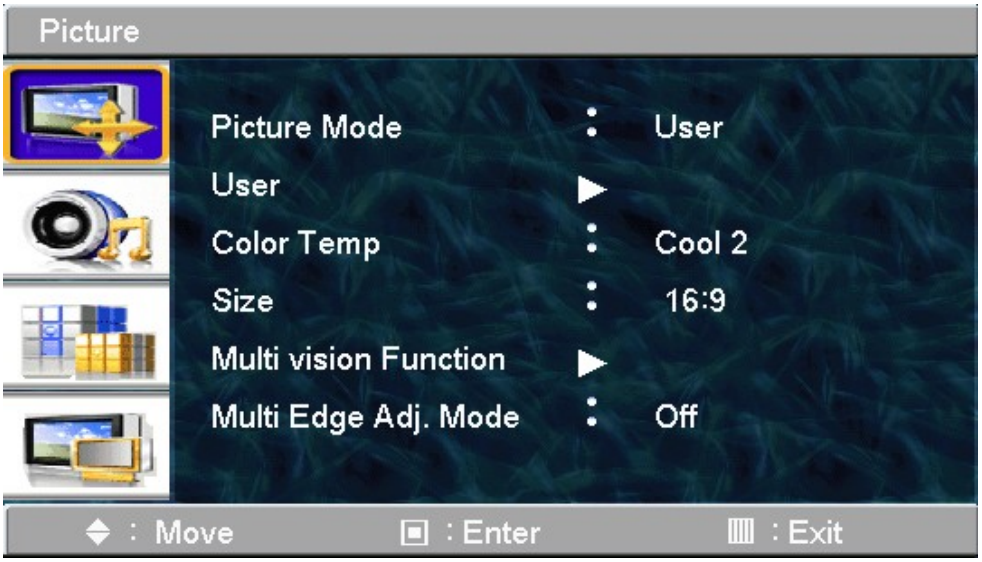
7. MENU : Displays the main On-Screen menu

8. SOURCE : Select Input Source

-DVI → PC → COMPNENT → AV →

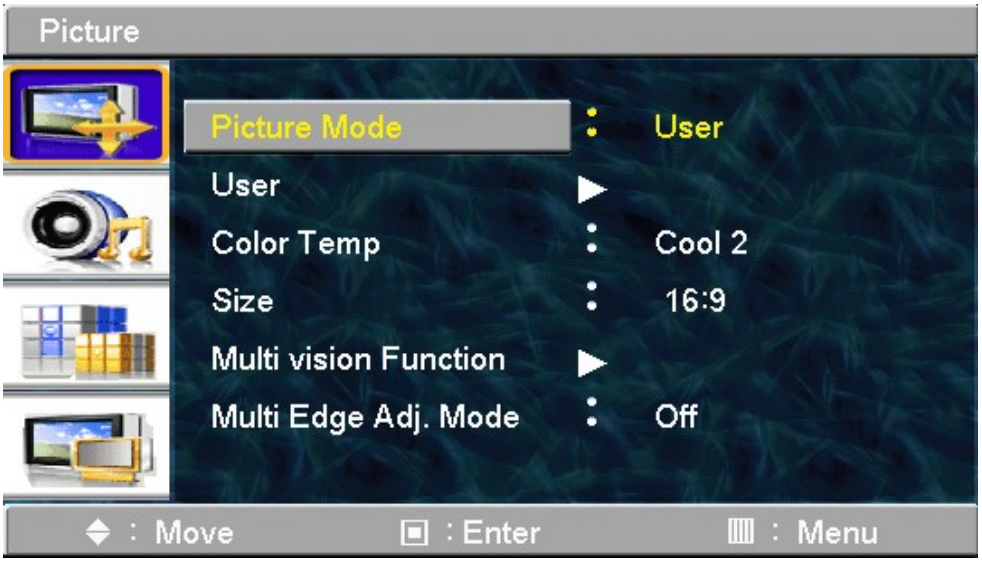
9. EXIT : Exit the On-Screen menu

Viewing the Menus



◆ Press the MENU button.
The main menu is displayed on the screen.
Its left side has five icons: **Picture, Sound, Setup and PIP.**

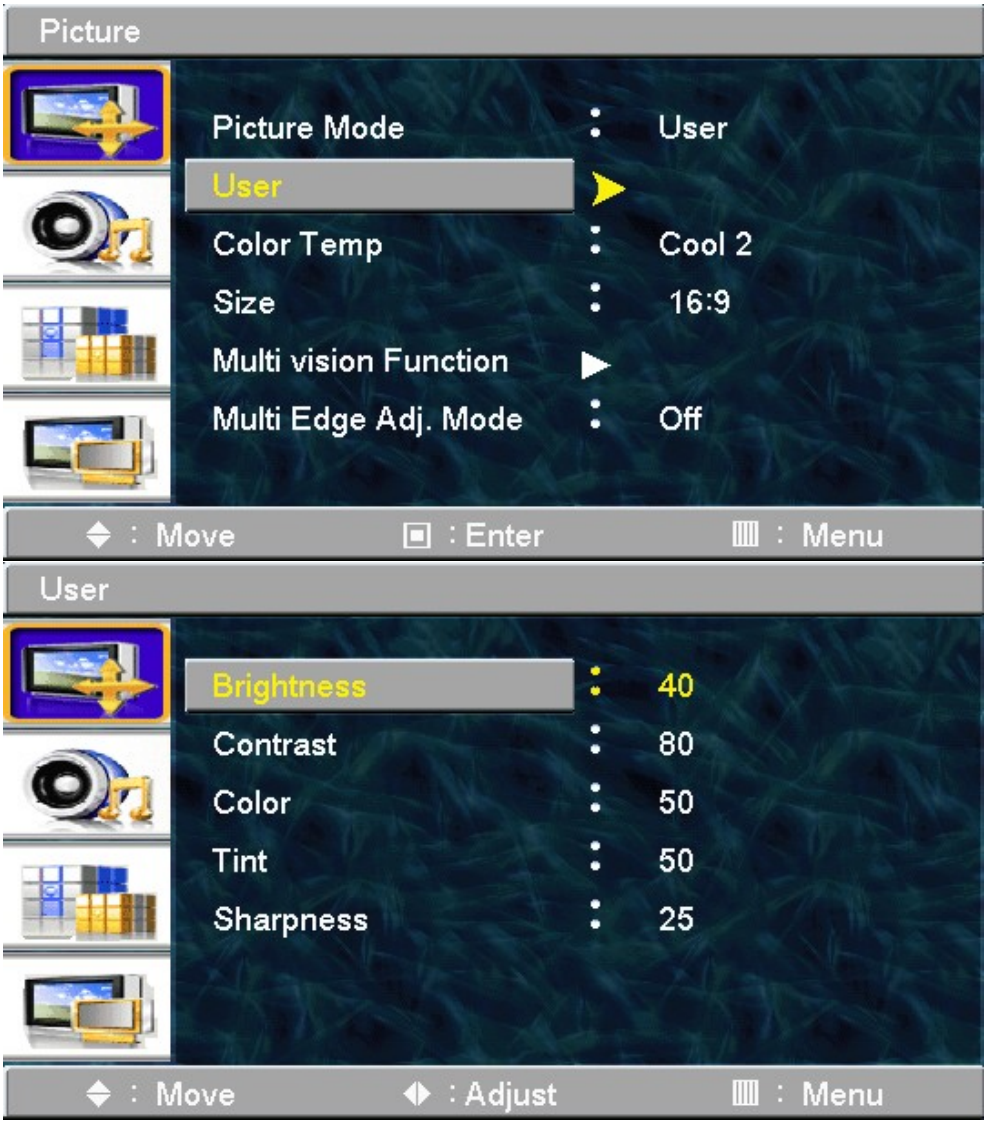
Changing the Picture Standard



1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** button.
3. Press the **ENTER** button twice.
4. Select the required mode by pressing the ▲ or ▼ button, then press the **ENTER** button.
➢ The settings values may vary depending on the input source.
(ex. AV, Component, PC, or DVI)
5. Press the **EXIT** button to exit.

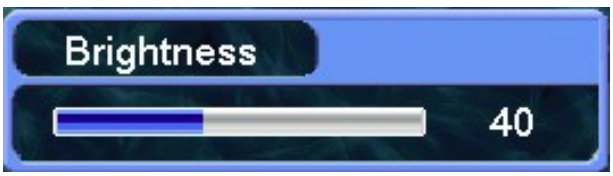
Customizing the Picture Settings

Your MLCD has several setting options that allow you to control the picture quality.

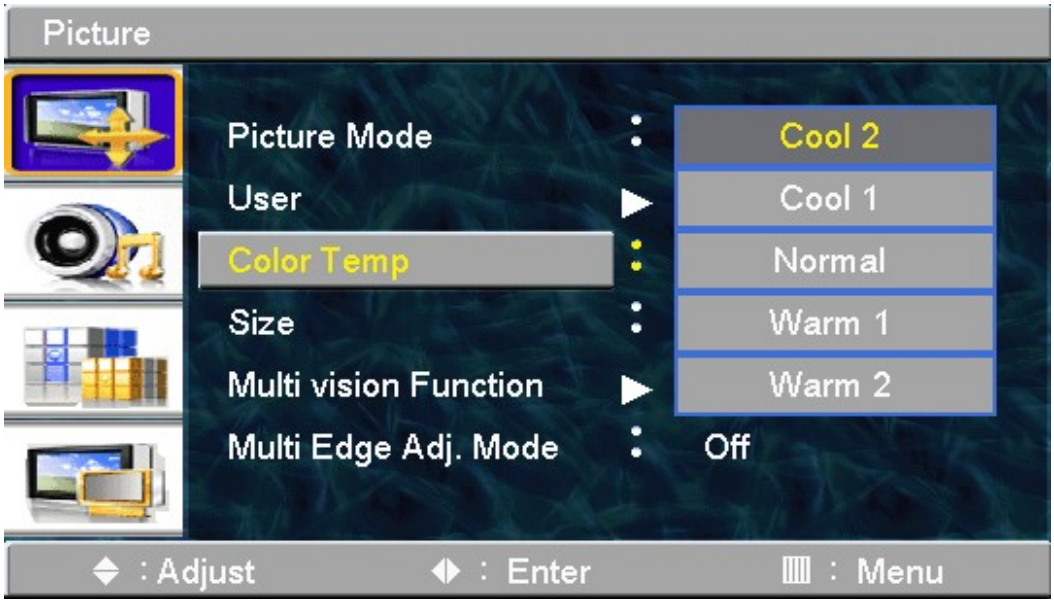


1. Press the **MENU** button to display the menu.
2. Press the **ENTER** button.
3. Press the ▲ or ▼ button to select **Custom**, then press the **ENTER** button.
4. Select the required mode by pressing the ▲ or ▼ button, then press the **ENTER** button.
5. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
6. When you are satisfied with your setting, press the **ENTER** button.
7. Press the **EXIT** button to exit.

◆ **Brightness** – **Contrast**– **Color** – **Tint** –**Sharpness** (**Tint** NTSC only)
Press the ◄ or ► button until you reach the optimal setting.



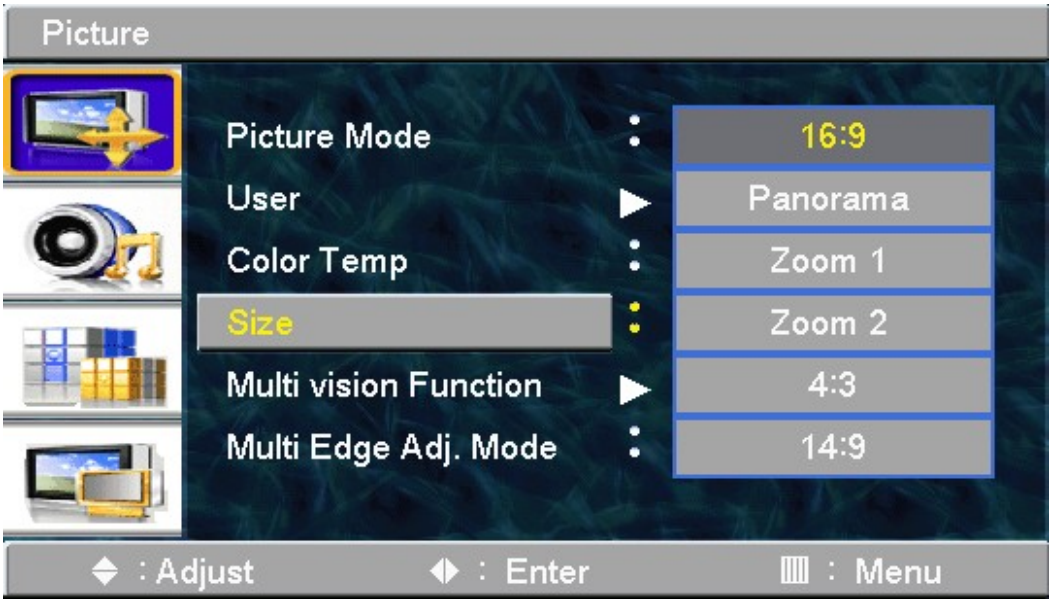
◆Brightness: It adjusts the brightness of the image.
◆Contrast: It adjusts the contrast of image.
◆Color: It adjusts the intensity of the color.
◆Tint: It adjusts the natural tint of the image.
◆Sharpness: It adjusts the clarity of the image.
◆Color Tone: Cool2/Cool1/Normal/Warm1/Warm2



◆Cool 1: This results in a blue tone.
◆Cool 2: This results in a more blue tone.
◆Normal: This is standard color setting.
◆Warm1: This results in a reddish tone.
◆Warm2: This results in a more reddish tone.

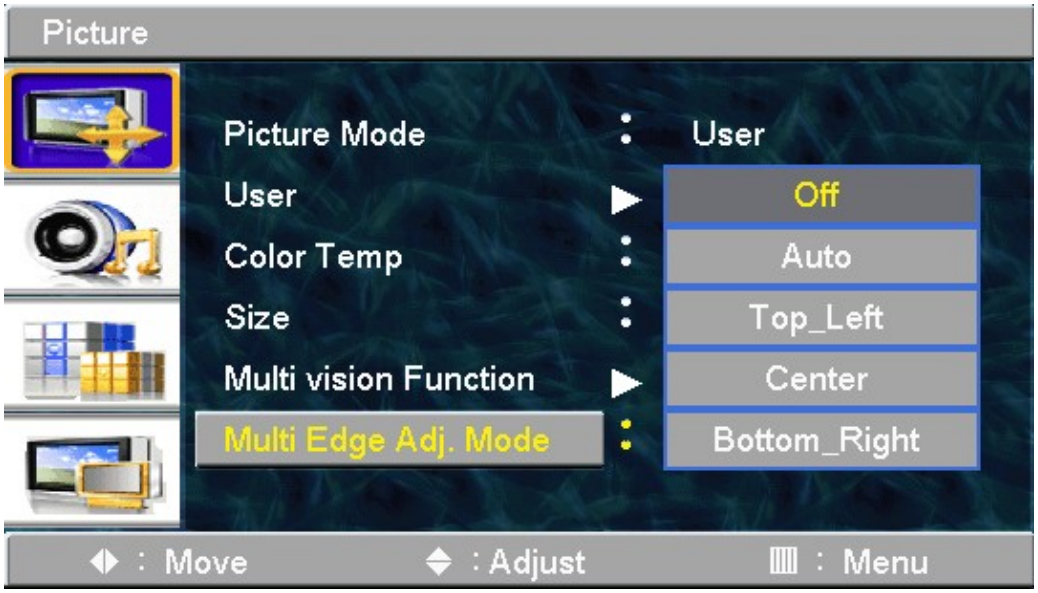
Selecting the Picture Size

You can select the picture size which best corresponds to your viewing requirements.



1. Press the **MENU** button to display the menu.
2. Press the **ENTER** button.
3. Press the ▲ or ▼ button to select **Size**, then press the **ENTER** button.
4. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
5. Press the **EXIT** button to exit.

Selecting the Multi Edge Adj.Mode

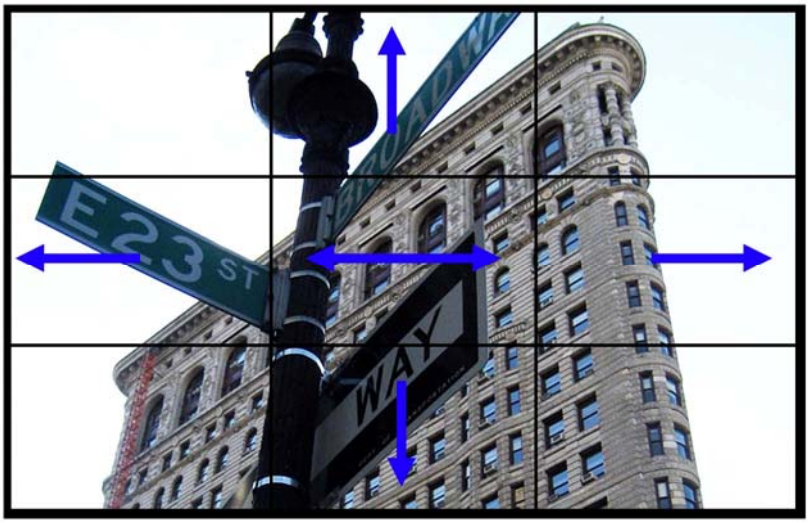


1. Press the **MENU** button to display the menu.
2. Press the **ENTER** button.
3. Press the ▲ or ▼ button to select **Multi Edge Adj.Mode**, then press the **ENTER** button.
4. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
5. Press the **EXIT** button to exit.

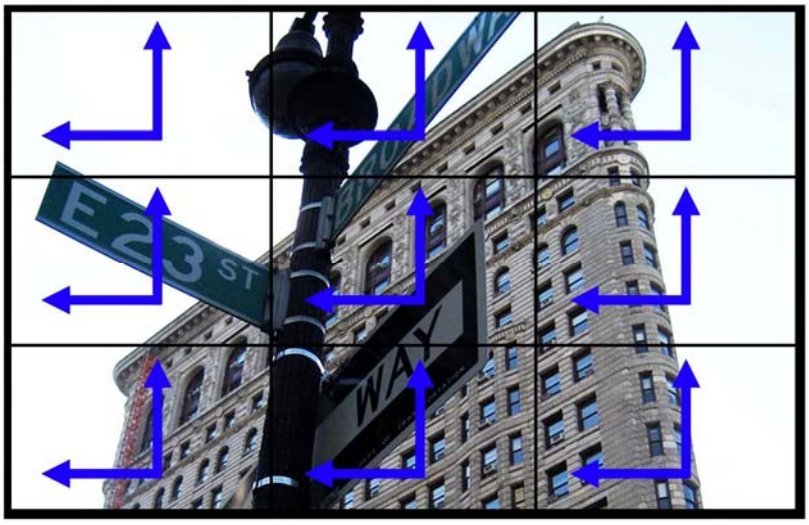
※ Adjust Horizontal/ Vertical Edge Gap

◆Off: This Adjust Horizontal/ Vertical Edge Gap Off

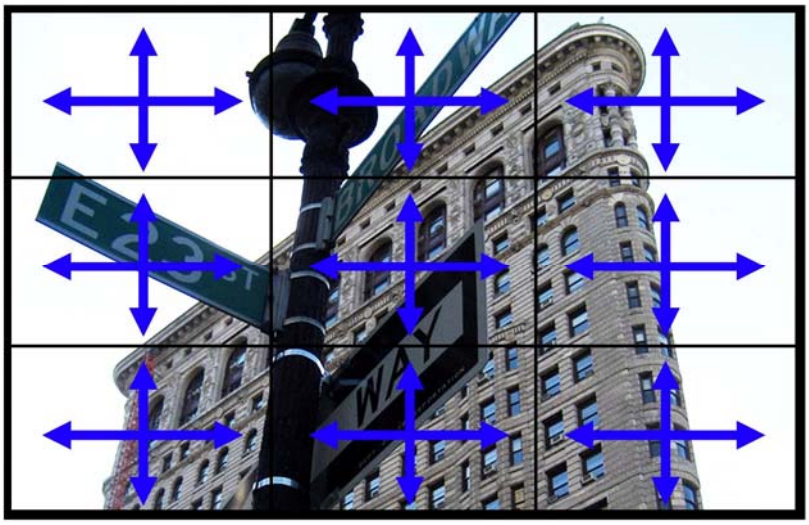
◆Auto: This Adjust Horizontal/ Vertical Edge Gap Normal.



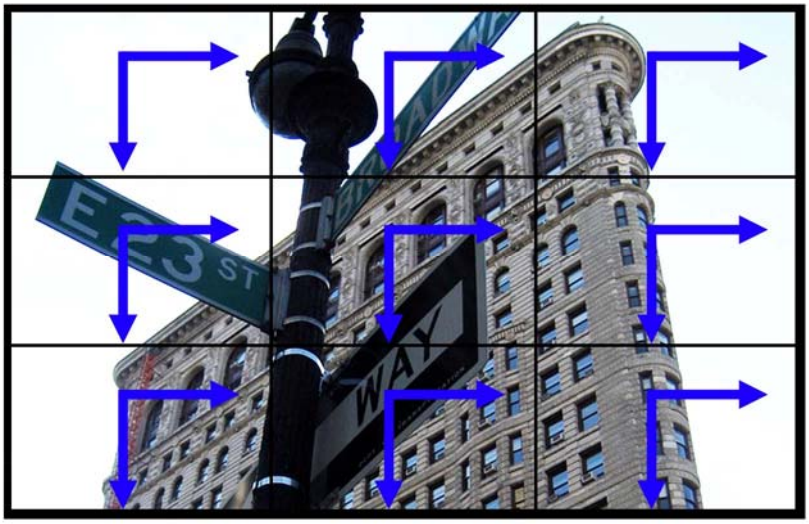
◆Top Left: This Adjust Horizontal(Left) / Vertical(Top) Edge Gap.



◆Center: This Adjust Horizontal(Center) / Vertical(Center) Edge Gap..

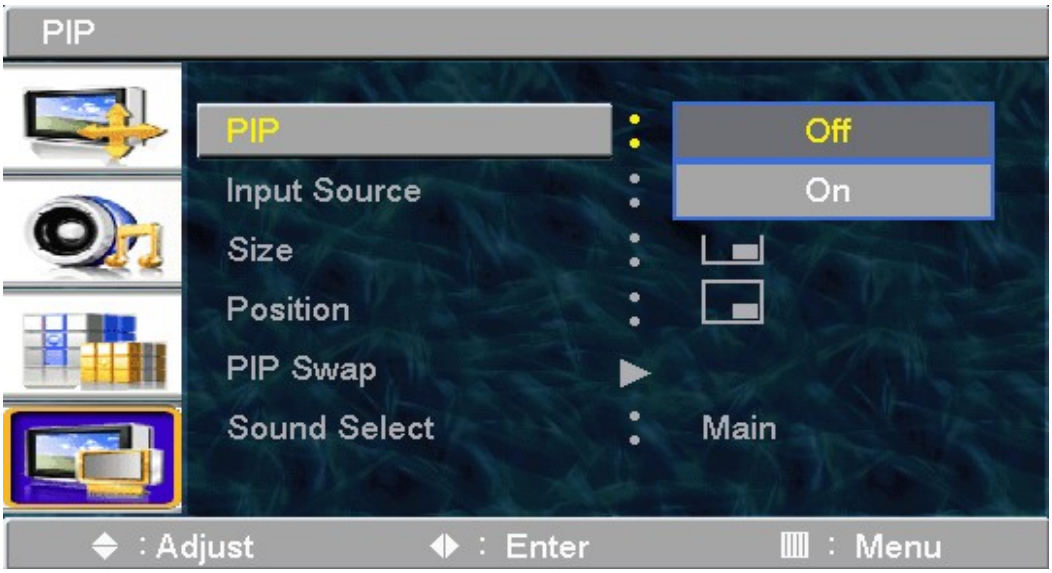


◆Bottom Right: This Adjust Horizontal(Right) / Vertical(Bottom) Edge Gap.

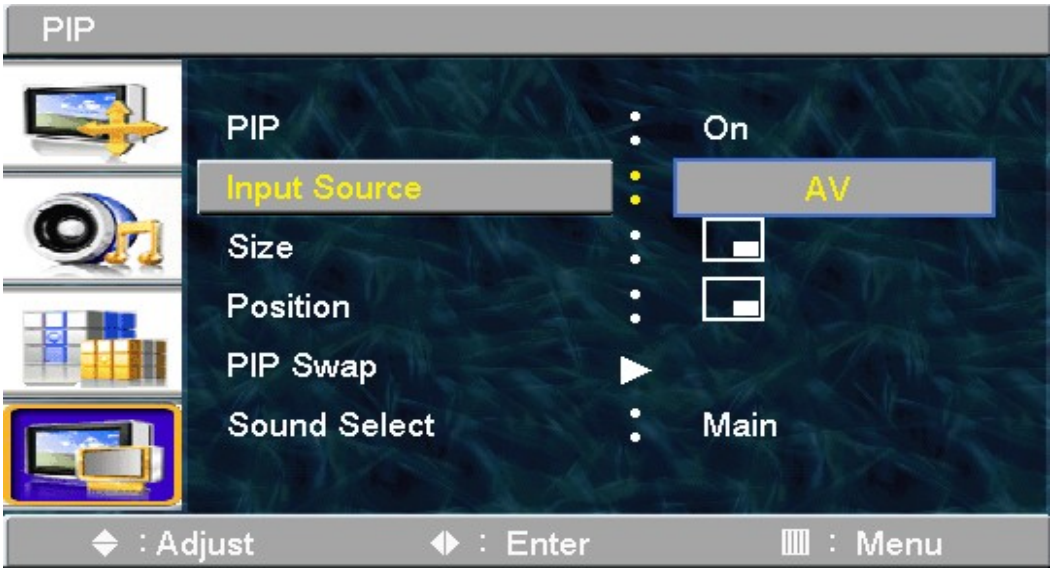


Viewing the Picture in Picture (PIP) (Available in PC mode)

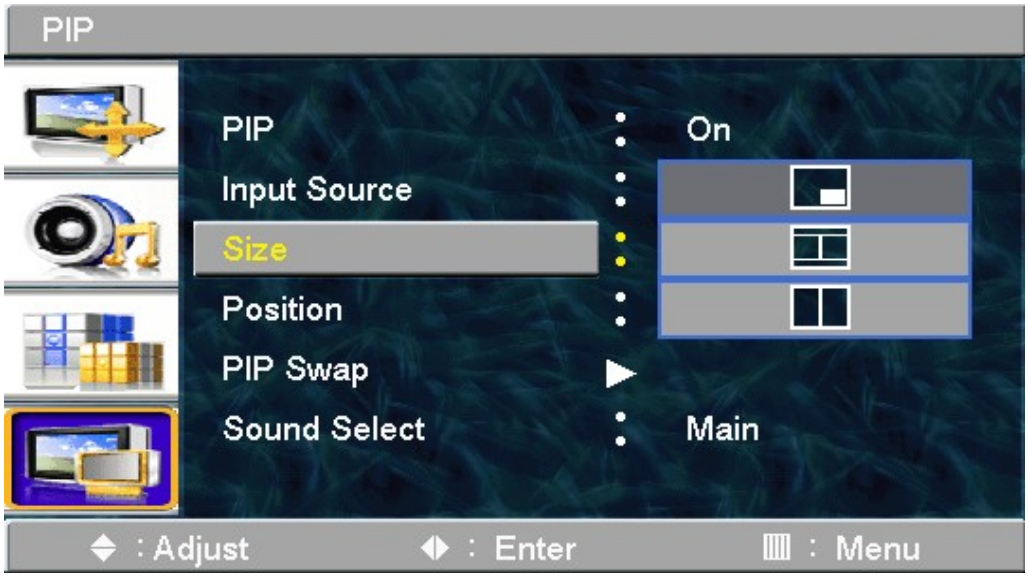
You can display a sub picture within the main picture of PC. In this way you can watch monitor the video input from any connected devices while watching PC.



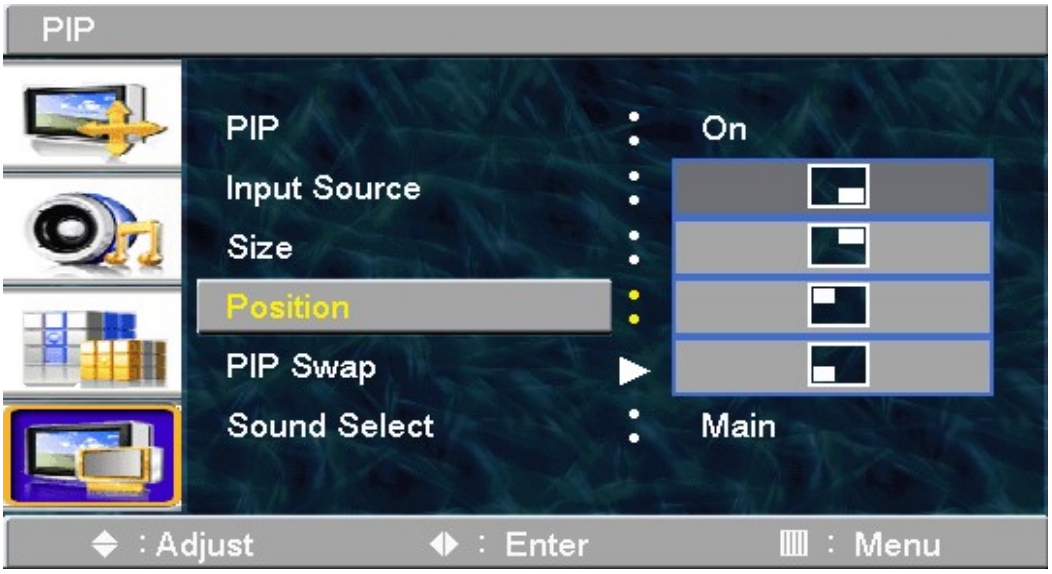
1. Press the MENU button to display the menu.
2. Press the ▲ or ▼ button to select PIP, then press the ENTER button.
3. Press the ▲ or ▼ button to select On, then press the ENTER button.
4. Select the required option by pressing the ▲ or ▼ button, then press the ENTER button.
5. When you are satisfied with your setting, press the ENTER button.
6. Press the EXIT button to exit.



◆ Input Source: DVI / PC / Component / AV
You can select a source of the sub-picture.



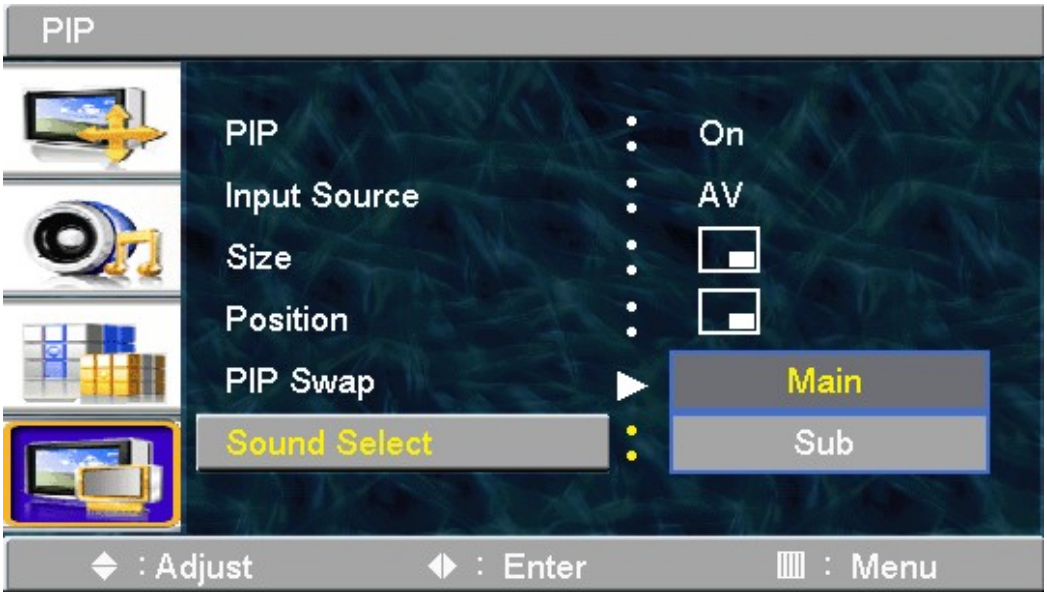
You can select a source size of the sub-picture.



◆ Position:
You can select a source position of the sub-picture.

◆ Swap
You can select the main screen and the sub screen will swap.

◆ Sound Select.
You can select the sound of the sub screen can be selected when PIP is being displayed

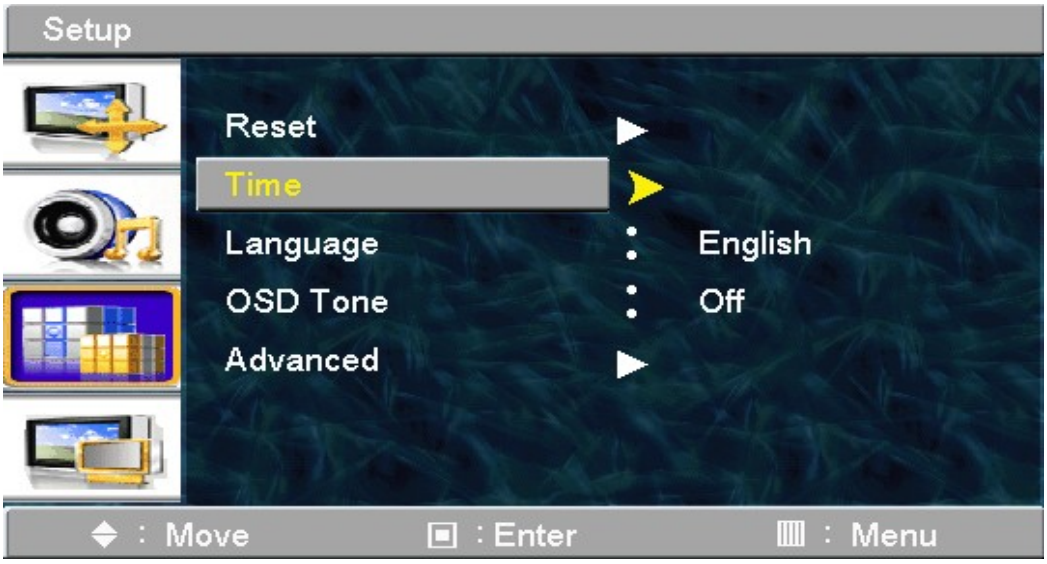


Reset.

1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** button.
3. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
4. When you are satisfied with your setting, press the **ENTER** button.

◆ **Reset**: You can return to the factory defaults settings.

Time Features.

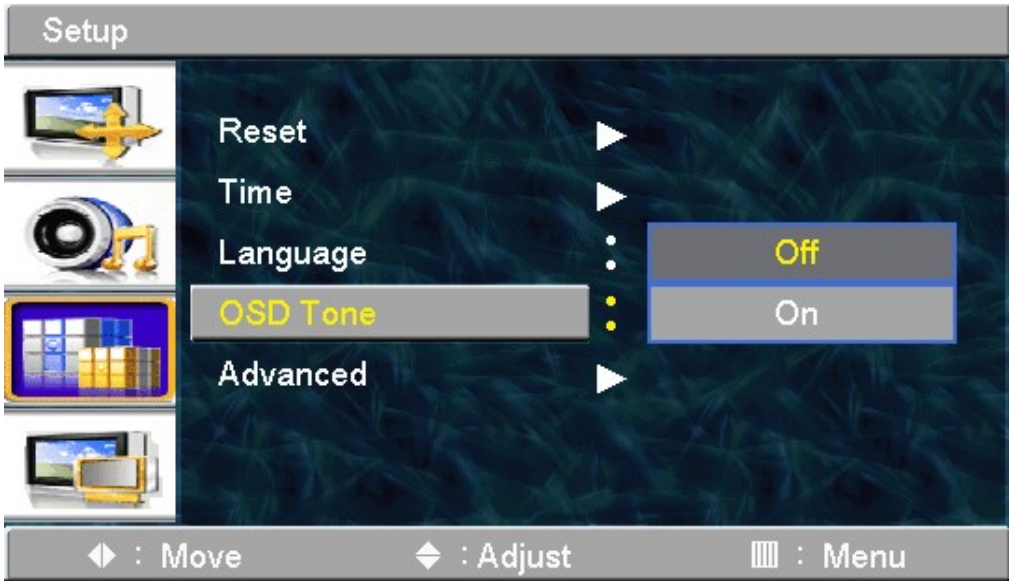


1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** button.
3. Press the ▲ or ▼ button to select **Timer**, then press the **ENTER** button.
4. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
5. When you are satisfied with your setting, press the **ENTER** button.
6. Press the **EXIT** button to exit.
-Attention : If you off the AC Power then Clear time set value

Language.

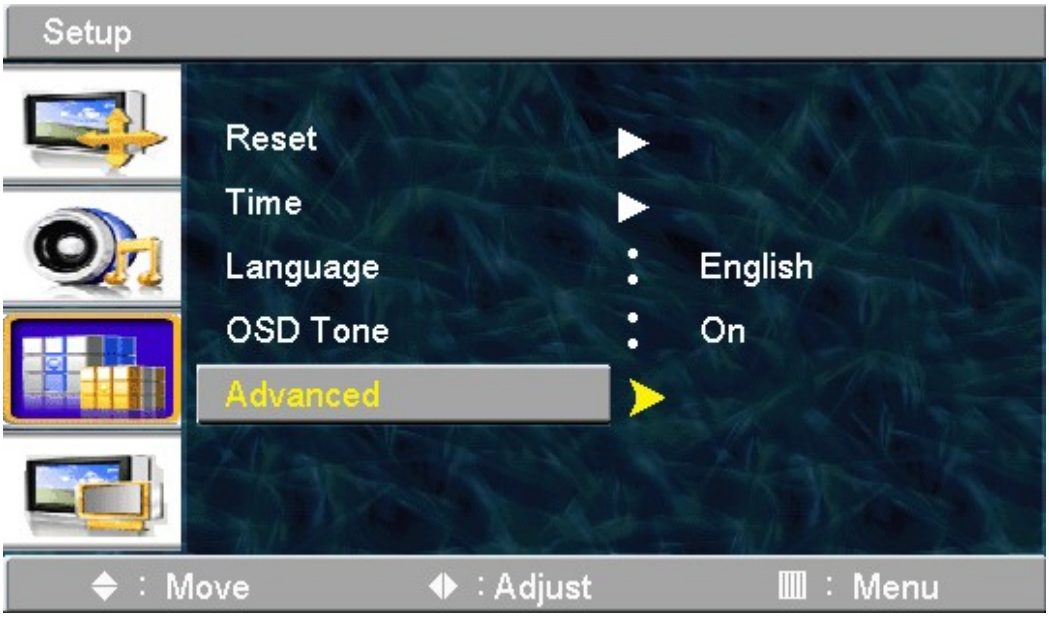
1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** button.
3. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
4. When you are satisfied with your setting, press the **ENTER** button.
5. Press the **EXIT** button to exit.

OSD Tone.



1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** button.
3. Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** button.
4. When you are satisfied with your setting, press the **ENTER** button.
5. Press the **EXIT** button to exit.

Advanced.



Dimming .

1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Setup→Dimming** then press the **ENTER** button.
3. Select the required option by pressing the ▲ or ▼ button
- Auto Dimming : On or Off : If want Auto Control the Dimming by lux value then select On, or not Off
- Dim Level : If auto dimming off, you can adjust manual dimming.
- Max Dim. Ambient : For max Dimming value by this value
- Min Dim. Ambient : For min Dimming value by this value
- Ambient : Current ambient lux

* Lux sensor board should be set out side of front case. (Option)

4. Press the **EXIT** button to exit.

Heat control.

1. Press the **MENU** button to display the menu.
2. Press the ▲ or ▼ button to select **Setup→Heat Control** then press the **ENTER** button.
3. Select the required option by pressing the ▲ or ▼ button
-Fan Control : Off/On/Auto : If you want always fan off then Off or always on then On or Auto control then Auto.
-Fan Active Temperature : Fan turn on point.
-Hysteresis : Fan turn on or off margin value.
-Temperature : Current temperature
4. Press the **EXIT** button to exit.

Specifications

OLM-4001NGE

Items		Specifications
40 inch (RGB Vertical Stripe)	Display Size	40 Inch (16:9) : Narrow Bezel
	Response Time	8 ms(Typ G to G)
	Pixel Size	0.46125(H) x 0.46125(V) mm
	Resolution	1920 x 1080 (WUXGA)
	Colors	8 bit, 16.7M Colors
	Brightness	700cd/㎡ (Typ)
	Contrast Ratio	3000:1
	View Angle	Hor. 178 Degree(Typ), Ver. 178 Degree(Typ)
	Surface Treatment	Hard coating(3H), Haze 44%
	Panel Size	911.7(H Typ) x 524.2(V Typ)
POWER	AC Input	AC 100~240V~, 50/60Hz, 2.5A
	Power Consumption	220W

OLM-4601NGE

Items		Specifications
46inch (RGB Vertical Stripe)	Display Size	46 Inch (16:9) : Narrow Bezel
	Response Time	8 ms(Typ G to G)
	Pixel Size	0.53025(H) x 0.53025(V) mm
	Resolution	1920 x 1080 (WUXGA)
	Colors	8 bit, 16.7M Colors
	Brightness	700cd/㎡ (Typ)
	Contrast Ratio	3000:1
	View Angle	Hor. 178 Degree(Typ), Ver. 178 Degree(Typ)
	Surface Treatment	Hard coating(3H), Haze 44%
	Panel Size	1018.353(H Typ) x 572.67(V Typ)
POWER	AC Input	AC 100~240V~, 50/60Hz, 1.5A
	Power Consumption	280W

Input/Output Port Description

Items		Specifications
Supported Signal Connection	PC (Analog RGB)	H Frequency Range : 20 ~ 80 kHz
		V Frequency Range : 55 ~ 75 Hz
		Maximum resolution :1920x1080 60Hz
		Maximum pixel rate : 162 MHz/110MHz
	DVI (Digital RGB)	H Frequency Range : 20 ~ 80 kHz
		V Frequency Range : 55 ~ 75 Hz
		Maximum resolution : 1920x1080 60Hz
		Maximum pixel rate : 162 MHz/110MHz
		HDCP support
	AV	NTSC / PAL / SECAM
	Component	1080i / 1080p 720P 480i / 576i 480P / 576P
Input Connection	AV	1
	Component	1
	PC Analog	1
	DVI	1
	Comport (RS232C)	1 / 9 Pin FeMail Type
Input Connection (Audio)	PC/DVI Audio	RCA Stereo L/R / Phone Jack Stereo
	AV Audio	RCA Stereo L/R
	Component Audio	RCA Stereo L/R
Output Connection	DVI	1
	PC Analog	1
	AV	1
	Component	1
	Speaker Out	1/ 7W×2 Channel Speaker (8 ohms)
	Com port (RS232C)	1/ 9 Pin Mail Type

Timing Modes

Display Mode	Horizontal Frequency(KHz)	Verticall Frequency(Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 800 x 600	53.674	85.061	56.250	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 960	60.000	60.000	108.000	+/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
1366 x 768	47.712	60.015	85.500	+/+
VESA,1920 x 1080	66.587	59.934	138.500	+/-

- Operating Temperature : 0℃ ~ 32℃.
- Quality assurance : The warranty period is one year.
  ※ This product can be changed to improve performance without notification.
- The up contents not to notify can be changed.

HEAD OFFICE FACTORY : 257-6 GONGDAN-DONG, GUMI, GYEONGBUK, KOREA
TEL 82-54-460-5700 FAX : 82-54-461-3284