55" UNB(Ultra Narrow Bezel) Multi LED

CL-55NMF10/20

User's Manual

The information given in this document is carefully checked and believed to be reliable. However, CIMA DIGITEC takes no response for any failure or product damage caused by the application of this information.

All manual are subject to change without notification.

WARNING

Before operating the set, please read this manual carefully.

WARNING :

The unit is operated at dangerous voltages. The unit may only be opened by an authorized specialist.
All maintenance and servicing work must be carried out by an authorized company. Repairs that are carried out incorrectly could result in fatal injuries to the user.

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

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

WARNING :
To reduce the risk of electric shock does 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 TV 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. Attachments
Do not use attachments not recommended by CIMA DIGITEC.,Inc. as they may cause hazards.

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

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. Damage Requiring Service
Isolate this product from the mains supply and refer servicing to qualified service personnel under the following conditions:
a. If the power-supply cord or plug is damaged.
b. If the glass front has been damaged.
c. If there is ingress of water between the glass and the LCD screen.

d. 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.
e. If the product has been dropped or the cabinet has been damaged.
f. If the product exhibits a distinct change in performance.

19. 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.

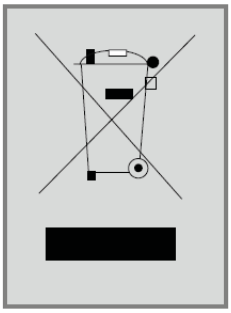
20. Mounting
The product should be mounted on a wall only as recommended in the instructions.

21. 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.

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

WARNING (cont)

Note



This product is designed and manufactured with high quality materials and components which can be recycled and reused.
This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.
Please, dispose of this equipment at your local community waste collection/recycling centre.
In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

Contents

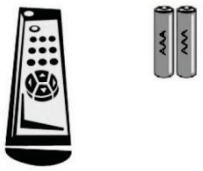
• SUPPLIED ACCESSORIES 7
• REMOTE CONTROL KEY ARRANGEMENTS 8
  • FRONT PANEL LED OPERATIONS 9
  • FRONT PANEL KEY DESCRIPTIONS 9
  • IR-REMOTE CONTROLLER DESCRIPTIONS 10
• CONNECTION DETAILS 11
• INTERFACE DESCRIPTION 11
1. MENU OVERVIEW 12
  1) TO SHOW AND REMOVE THE MENU: 12
  2) TO GO TO THE NEXT LEVEL: 12
  3) TO GO BACK TO THE PREVIOUS LEVEL: 12
  4) TYPICAL MENU OPERATION 12
2. BASIC OPERATION 13
  1) TURNING ON THE MONITOR 13
  2) VOLUME ADJUSTMENT (A/V EXTENSION OPTIO 13
  4) ON SCREEN MENUS LANGUAGE SELECTION 13
3. ON SCREEN MENUS SELECTION AND ADJUSTMENT 14
  1) HOW TO ADJUST THE OSD SCREEN 14
4. SELECT VIDEO INPUT 15
  1) HOW TO SELECT VIDEO SOURCE BY OSD (AV EXTENSION OPTION) 15
  2) HOW TO SELECT VIDEO SOURCE DIRECTLY (IN CASE OF JUNO MAIN ONLY) 15
5. PICTURE MENU OPTIONS 16
  1) PICTURE MODE 16
  2) USER CONTROL 16
  3) COLOR TEMPERATURE CONTROL 17
  4) ASPECT RATIO 17
  5) VIDEO WALL 18
  - VideoWall program 20
  6) PC MENU 25
6. SOUND MENU OPTIONS (AV EXTENSION ONLY) 26
  1) SOUND STANDARD MODE 26
  2) VOLUME 26
  3) SOUND BALANCE 27
  4) USER CONTROL FOR 5 BAND EQUALIZER 27
  5) AVC (AUTOMATIC VOLUME LEVEL CONTROL) 28
  6) MTS (MULTI CHANNEL SOUND CONTROL) 28
7. SETUP MENU OPTIONS 29

1) RESET 29
2) TIME SETTINGS 29
3) LANGUAGE 31
4) OSD TONE CONTROL 32
5) SCREEN SAVER 32
6) ADVANCED MENU 33
6-1) DIMMING 33
6-1-1) DIMMING MENU . AUTO DIMMING (LIGHT AMBIENT SENSOR OPTION ONLY) 33
6-1-2) DIM LEVEL....34
6-1-3) DIMMING MENU . MAX DIM AMBIENT (LIGHT AMBIENT SENSOR OPTION ONLY) 34
6-1-4) DIMMING MENU . MIN DIM AMBIENT (LIGHT AMBIENT SENSOR OPTION ONLY) 35
6-1-5) DIMMING MENU . AMBIENT (LIGHT AMBIENT SENSOR OPTION ONLY) 35
6-2) ADVANCED MENU . HEAT CONTROL....36
6-2-1) HEAT CONTROL MENU . FAN CONTROL 36
6-2-2) HEAT CONTROL MENU . FAN ACTIVE TEMPERATURE 37
6-2-3) HEAT CONTROL MENU . HYSTERESIS 37
6-2-4) HEAT CONTROL . SHUTDOWN 38
6-2-5) HEAT CONTROL . CURRENT TEMPERATURE 38
6-3) ADVANCED MENU . X768 MODE 38
6-4) ADVANCED MENU . MESSAGE OSD 39
6-5) ADVANCED MENU . PIVOT OSD 39
6-6) ADVANCED MENU . AUTO SOURCE CHANGE 40
6-7) ADVANCED MENU . INFORMATION 40
7) SETID 41
7-1) SETID & ACTIVE SET ID 41
8. PIP (PICTURE IN PICTURE)..... 42
1) PIP ON/OFF 42
2) INPUT SOURCE....42
3) SIZE 43
4) POSION 43
5) PIP SWAP....44
6) SOUND SELECT....44
9. 55″ MLED Specification 45

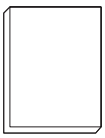
Supplied Accessories

Supplied Accessories

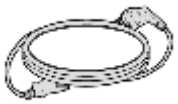
Make sure the following accessories are provided with your product. These should all be included in the box with the main LCD screen



▸ Remote controller, Battery



▸ User's manual



▸ Power cord

▸ Serial Cable

▸ VGA Cable

▸ DVI Cable

Remote Controller

- Remove the rear cover of the remote controller by pressing the arrow Symbol downwards and then pulling firmly to remove it.
- Insert two supplied batteries (1.5V of AAA type).
- Ensure that the polarities (+ and -) of the batteries are aligned correctly. Close the cover.

REMOTE CONTROL KEY ARRANGEMENTS

Front panel LED Operations

Status	Color	Operation
Power Off	Red	On
Normal	Green	On
Not Connected (No signal)	Green	Blinking
DPMS	Red	Blinking

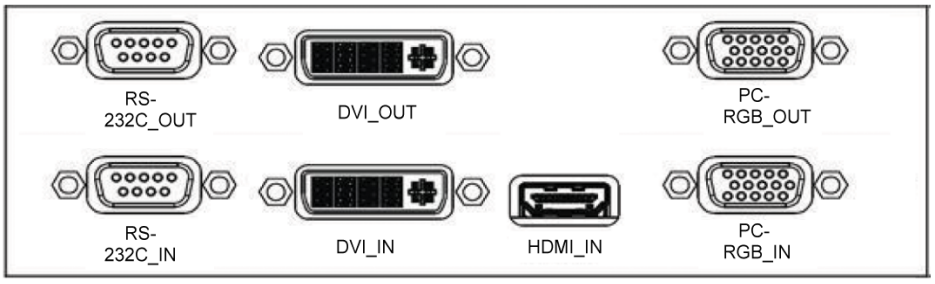
Front Panel Key Descriptions

Key Name	Operation
Power Key	► Power On/Off.
Menu Key	► Activates main OSD menu. ► Navigates higher menu in main OSD menu. ► Stops auto frequency searching. ► Exits OSD menu.
Select Key	► Activates OSD menu of input source selecting. ► Changes input source by selecting. ► Executes functions (by OSD help commands) in main OSD menu. ► Activates Child menu.
Up Key	► Navigates input source. ► Executes function (by OSD help commands) in main OSD menu. ► Navigates previous menu in main OSD menu.
Down Key	► Navigates input source. ► Executes function (by OSD help commands) in main OSD menu. ► Navigates next menu in main OSD menu.
Left Key	► Decreases sound volume of speaker/headphone. ► Executes function (by OSD help commands) in main OSD menu. ► Decreases values of user menu in main OSD menu.
Right Key	► Increases sound volume of speaker/headphone. ► Executes function by OSD help commands in main OSD menu. ► Increases values of user menu in main OSD menu.

IR-Remote controller Descriptions

Key Name	Description
Power	► Power On/Off
Menu	► Same as “Menu key” on keypad.
Up	► Same as “Up key” on keypad
Down	► Same as “Down key” on keypad
Right	► Same as “Right key” on keypad
Left	► Same as “Left key” on keypad
Enter	► Same as “Select key” on keypad
EXIT	► Exit OSD menu
Info	► Displays input source information
Sleep	► Set minimum sleep timer value more than current sleep timer value when sleep timer OSD activated ► If sleet timer is maximum value, disables sleep timer
Mute	► Toggles sound status of speaker/headphone in mute.
Source	► Activates OSD of source change. ► Deactivates OSD of source change.
PSM(Picture Standard Mode)	► Activates OSD of picture standard mode. ► Deactivates OSD of picture standard mode.
SSM(Sound Standard Mode)	► Activates OSD of sound standard. ► Deactivates OSD of sound standard.
ARC	► Activates OSD of aspect ratio control. ► Deactivates OSD of aspect ratio control.
STILL	► Toggles picture status between motion and still image.
PRE_CH	► N/A
Dual I-II / MTS	► Activates OSD of MTS sound format. ► Deactivates OSD of MTS sound format.
PIP	► Toggles PIP status
PIP Input	► Change PIP input sources when PIP is on
PIP Size	► Change PIP image size when PIP is on
PIP Position	► Change PIP position when PIP image size is not double screen.
SWAP	► Swap main input source and PIP input source
S.Select	► Select main/PIP sound source when PIP is on
PC	► Selects input source of PC.
TV	► N/A
0~9	► Enter digit value to Active SET ID
BLUE	► Set Active SET ID
RED	► Delete Active SET ID

Connection Details



Interface Description

Interface	Description
RS-232	• Facility to control the screen via RS232 protocol
DVI-	• High Definition Multimedia Input
HDMI	• High Definition Multimedia Input
PC(RGB)	• PC Screen Input

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 (or ▶). 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:

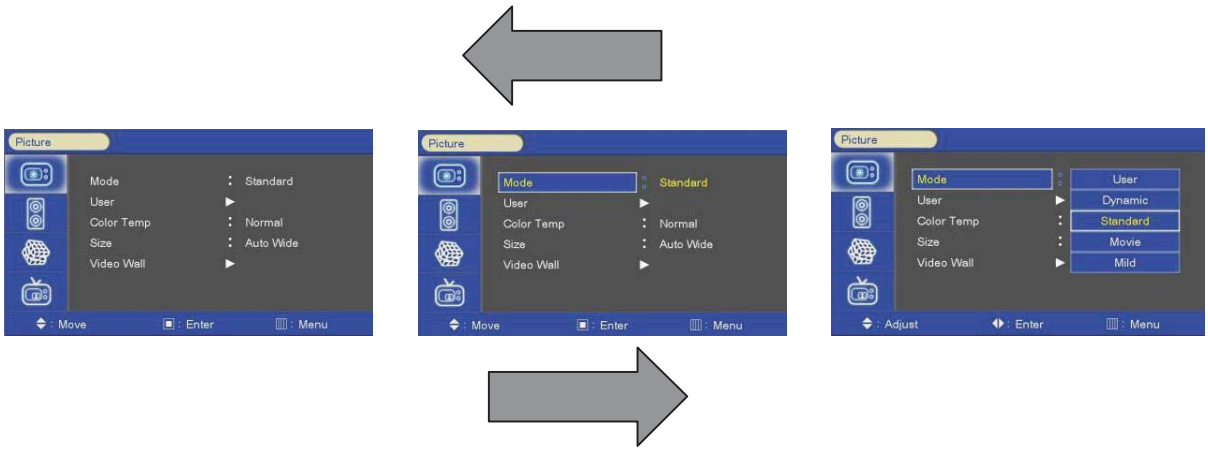
Press the MENU button on the Remote Control to display the menu. A second press of the MENU button or a press of the EXIT button will take you back to monitor viewing.

2) To go to the next level:

Press SELECT (or ▶) on the Remote Control.

3) To go back to the previous level:

Press MENU (or ◀) 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 ▶ or (SELECT) to move to the second level.
4. Use ▲/ ▼ to select the second menu option.
5. Press ▶ or (SELECT) to move to the third level: Some menu options require additional steps.
6. Press MENU to return to the previous menu or press EXIT on the Remote Control to return to monitor viewing.

2. BASIC OPERATION

1) Turning On the Monitor

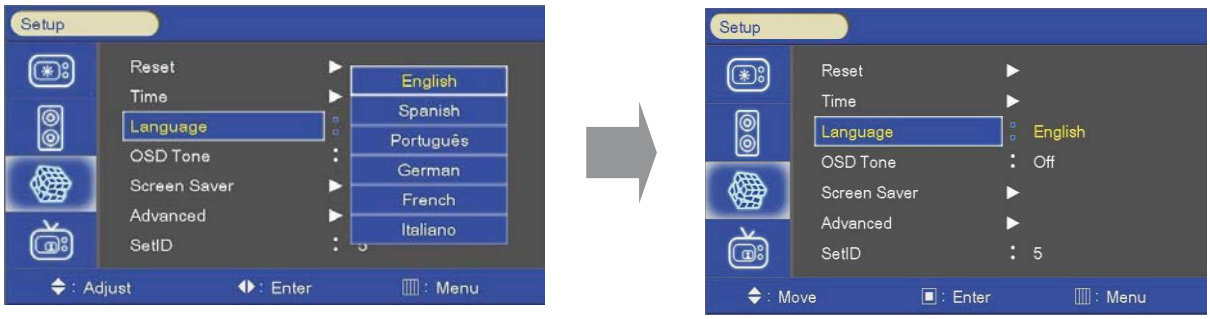
1. First, connect power cord correctly. At this moment, the monitor switches to standby or power on mode. In standby mode, in order to turn monitor on, press the POWER button on the remote control.

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.

4) On Screen Menus Language Selection



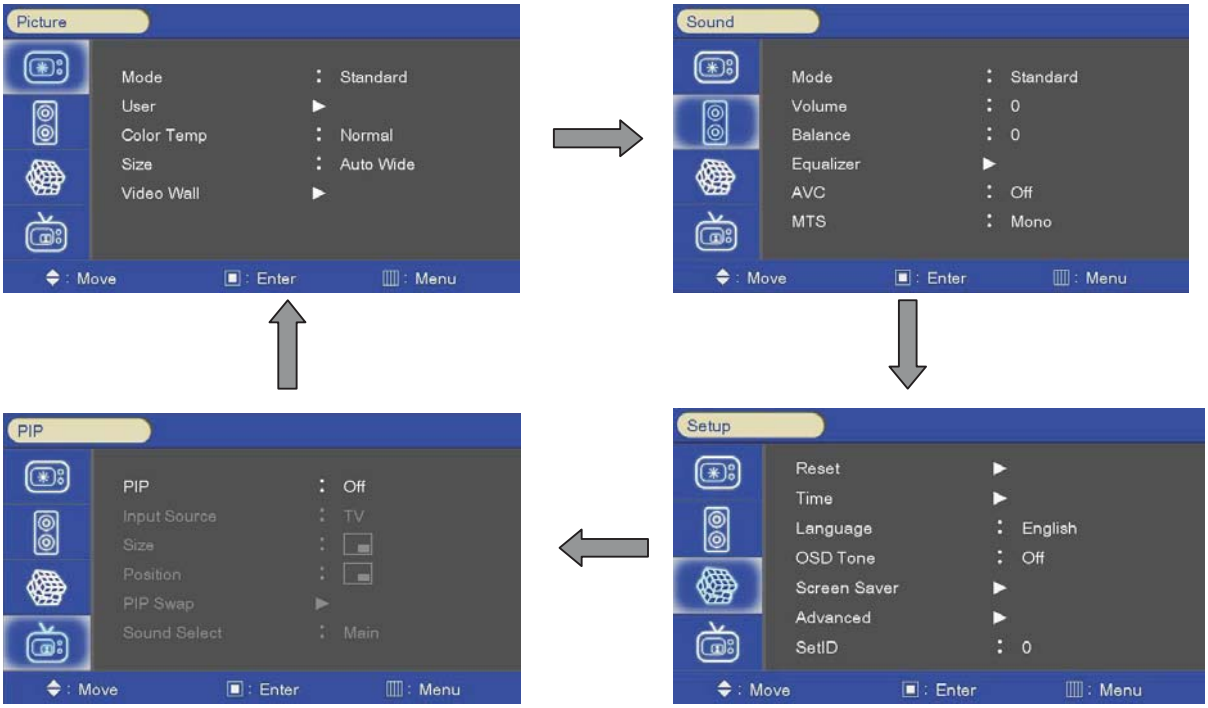
- The menus can be shown on the screen in the selected language. First select your language.

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select Menu Language menu.
3. Press the ▶ 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 EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

3. 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 ▶ button and then use ▲/▼/◀/▶ button to display the available menus.

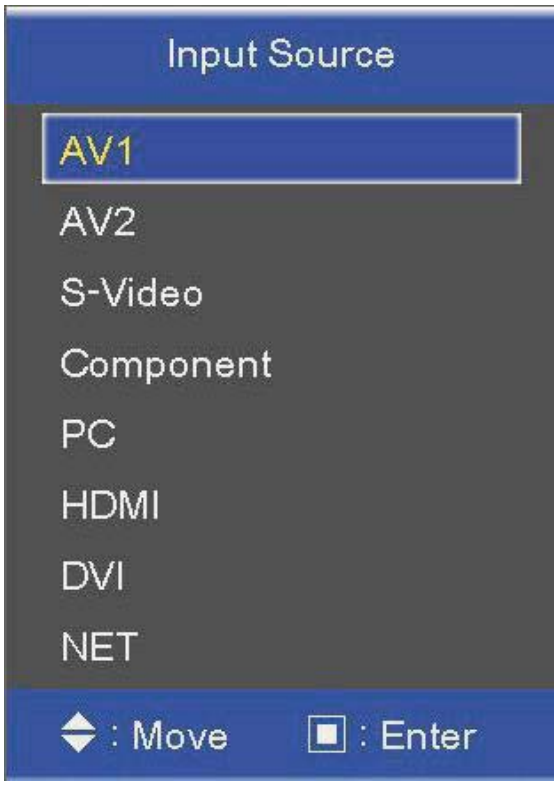


• Your monitor's OSD (On Screen Display) may differ slightly from what is shown in this manual.

4. SELECT VIDEO INPUT

1) How to Select Video Source by OSD (AV extension option)

1. Press the SOURCE button and then ▲/▼ button to select each video source.
2. Press the ▶ / SELECT button to go to desired video source

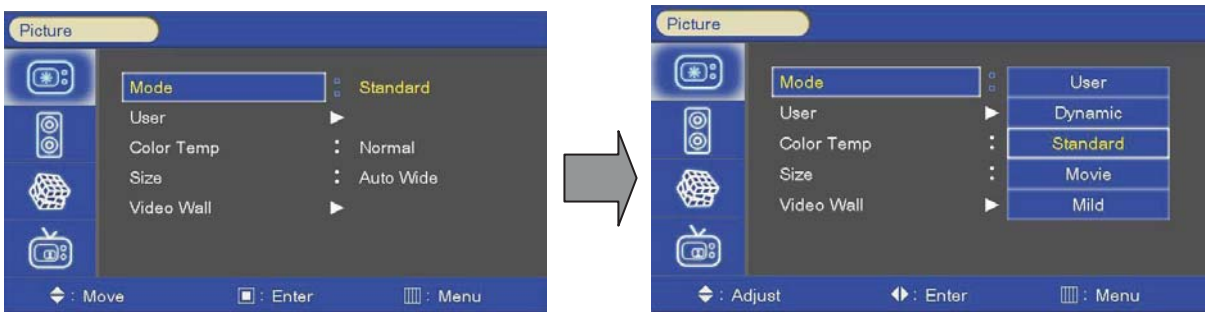


2) How to Select Video Source Directly (in case of Juno main only)

1. Press the SOURCE button.
2. Whenever pressing the SOURCE button, monitor will show and change the current video source.
3. When the video source changes as desired, stop pressing the SOURCE button.

5. PICTURE MENU OPTIONS

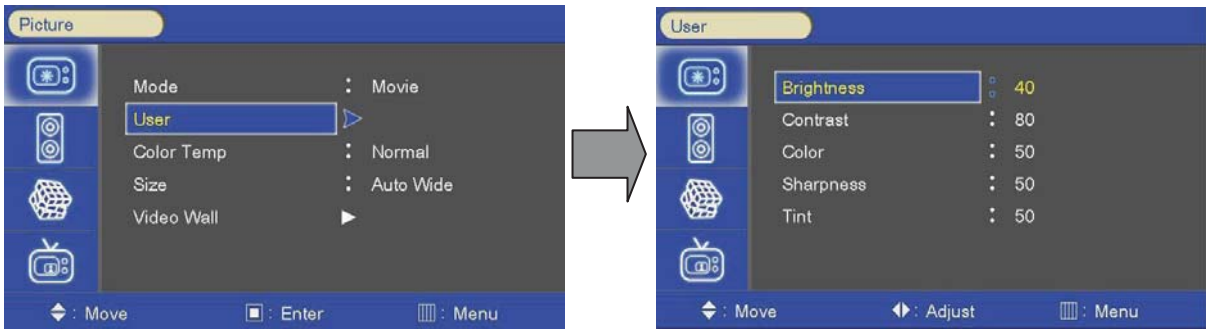
1) Picture Mode



- 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 ▲/▼ button to select the desired picture option;
   User, Dynamic, Standard, Movie, Mild.
3. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

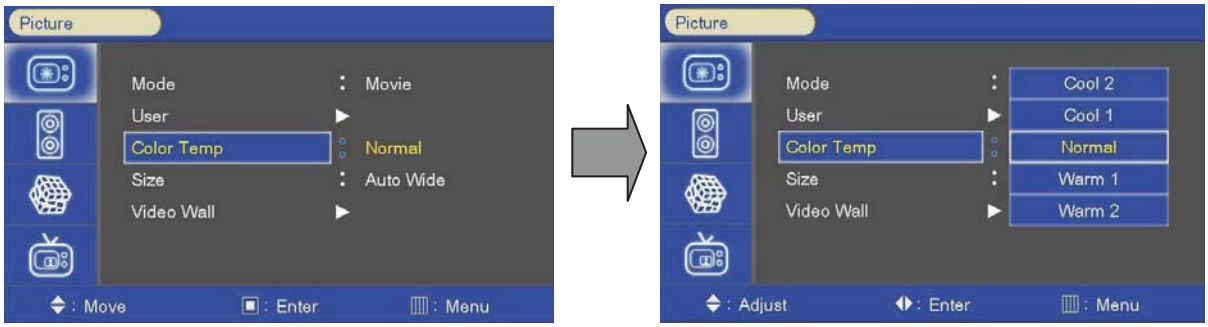
2) User Control



- Adjust 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 ▲/▼ button to select the desired picture option;
   Contrast, Brightness, Color, Sharpness (All Sources),
   Phase(Component), Tint(Video).
3. Press ▶ button and then use ◀/▶ button to make appropriate adjustments.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

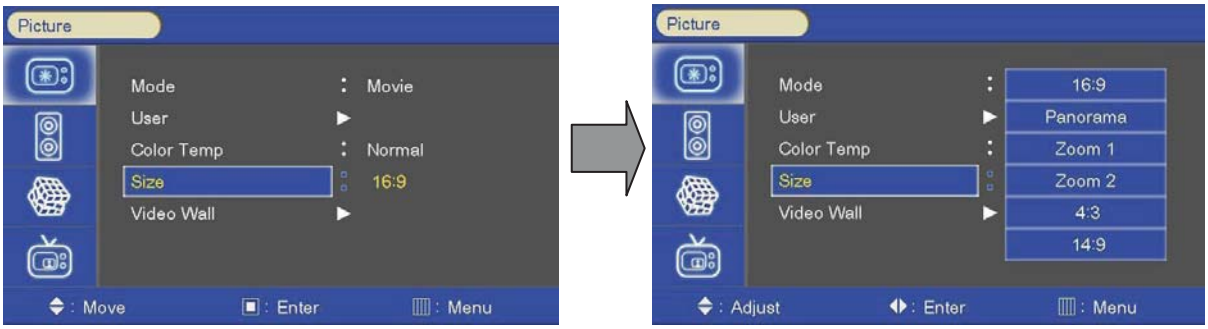
3) Color Temperature Control



- 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 ▲/▼ button to select Color Temperature menu.
3. Press the ▶ button and then use ▲/▼ button to select desired option:
   Cool2, Cool1, Normal, Warm1, Warm2.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

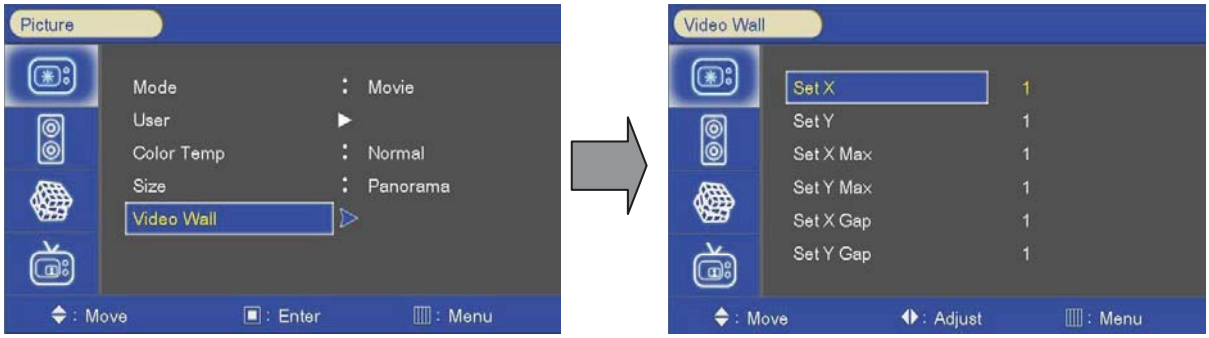
4) Aspect Ratio



- 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 ▲/▼ button to select Aspect Ratio menu.
3. Press the ▶ button and then use ▲/▼ button to select desired option:
   For Video Input - 16:9, Panorama, Zoom1, Zoom2, 4:3, 14:9.
   For PC Input - 16:9, 4:3, 1:1.
   For DVI, Component Input . Real Resolution, 16:9, Panorama, Zoom1, Zoom2, 4:3, 14:9.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

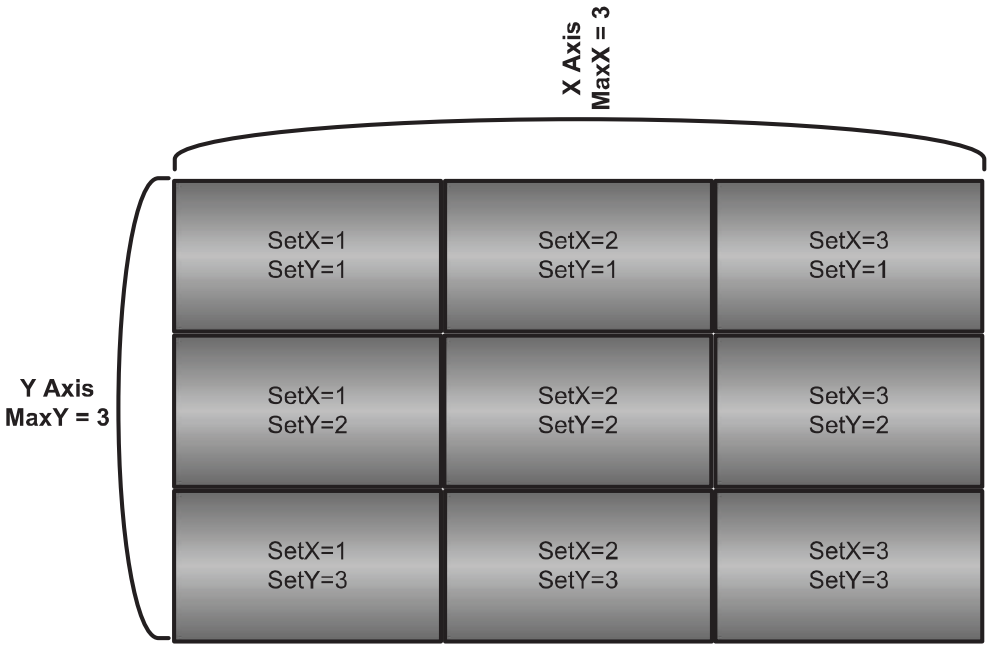
5) Video Wall



- For quick reset of all the Video menu options to their original factory preset values.

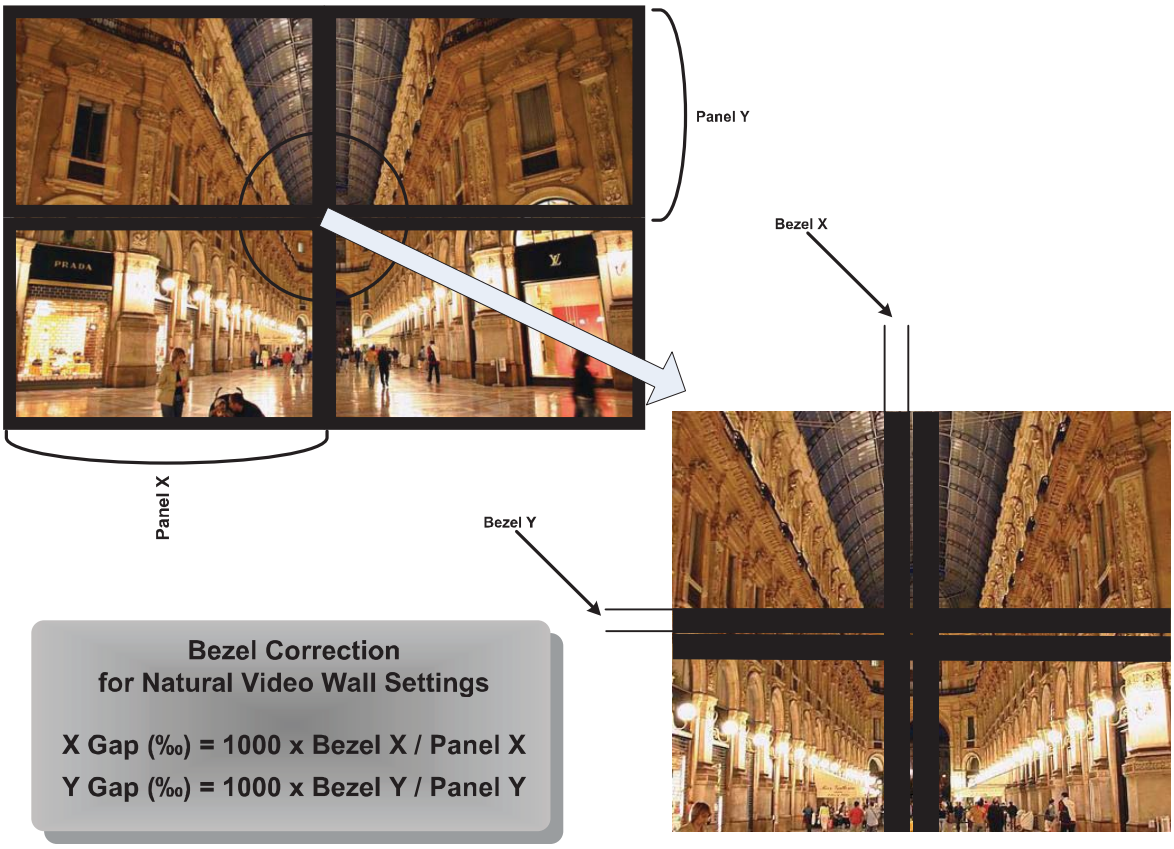
1. Press the MENU button and then use ▲/▼ button to select the PICTURE icon.
2. Press the ▶ button and then use ▲/▼ button to select Video Wall menu.
3. Press ◀/▶ button to make appropriate adjustments.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

• **Video Wall Layout Settings**



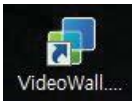
X Max : Maximum number of column tiles to divide video image.
Y Max : Maximum number of row tiles to divide video image.
Set X : Coordinate of video image's column position.
Set Y : Coordinate of video image's row position.

• **Setting the Bezel Corrections for Natural Tiled Image**

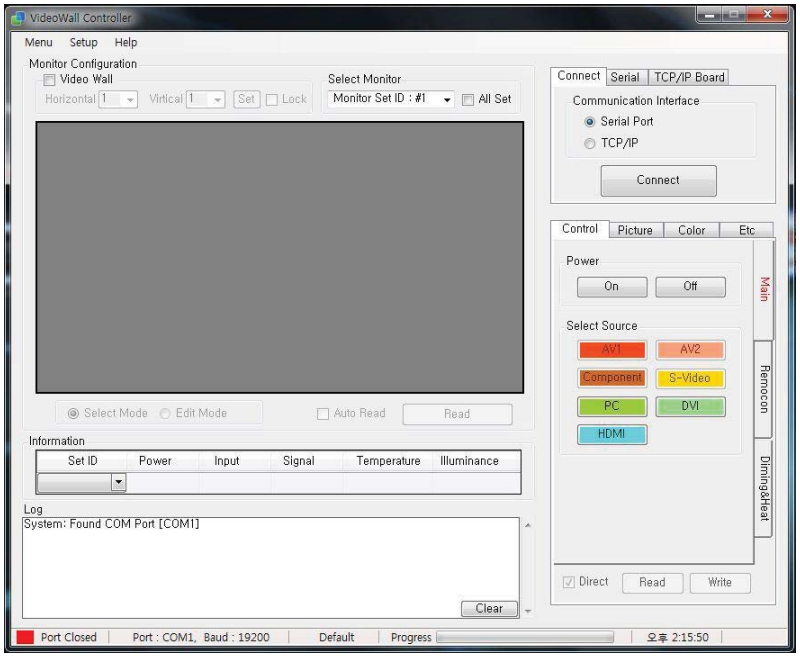


X Gap : Proportional Value of Vertical Bezel to Panel size by Per-mil unit.
Y Gap : Proportional Value of Horizontal Bezel to Panel size by Per-mil unit.

VideoWall program



After RS-232C cabling and start S/W program
you can see the image as below
If there are several com ports, You should match right comport which is connected by RS-232
After right comport setting, please make activate RS-232C signal communication by press connect button



To find right comport
Please go to the control panel on window and then go to device manager.
You will find which comport is connected
Please match the com port No. with device manager

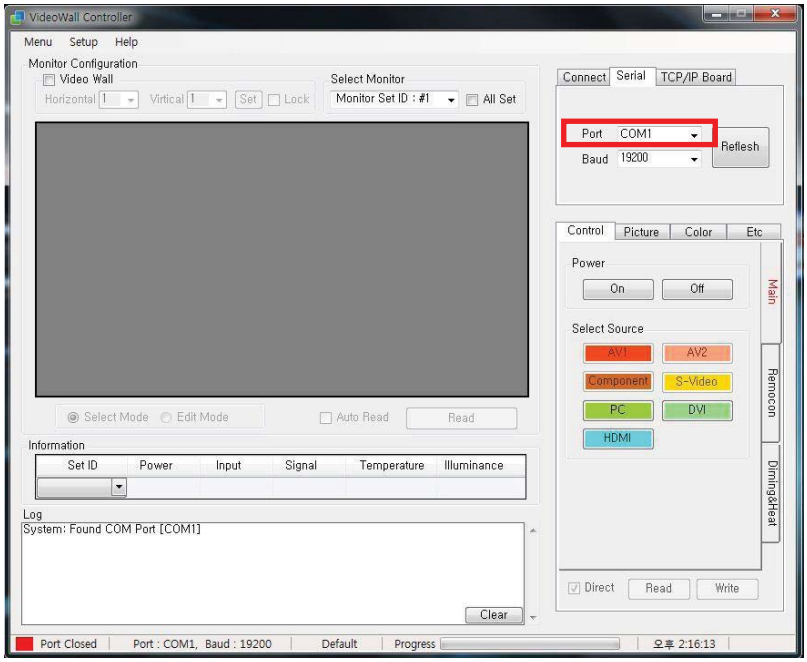
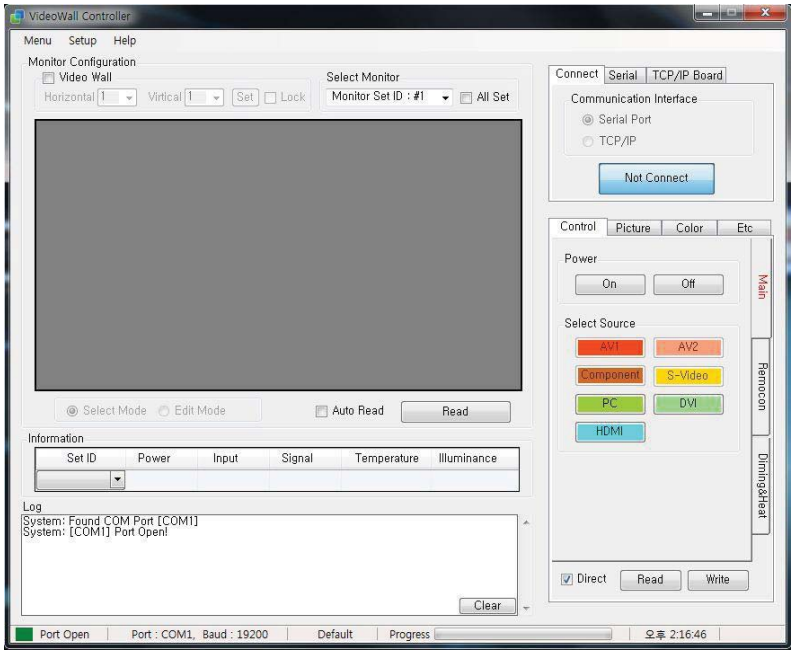
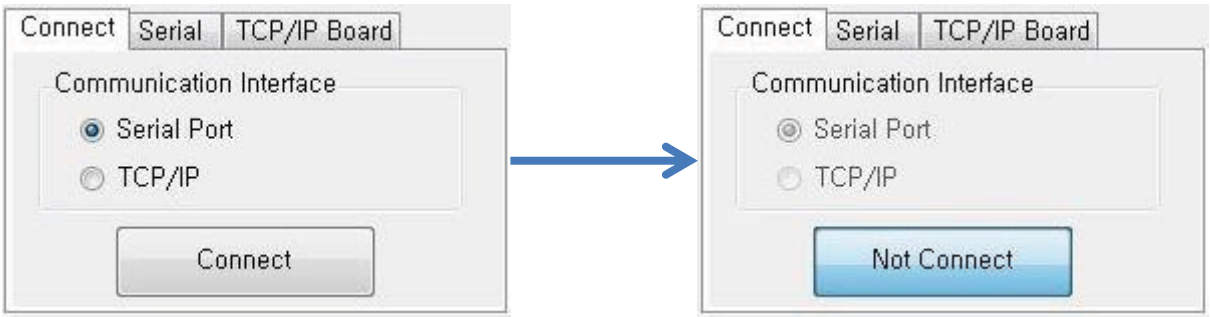


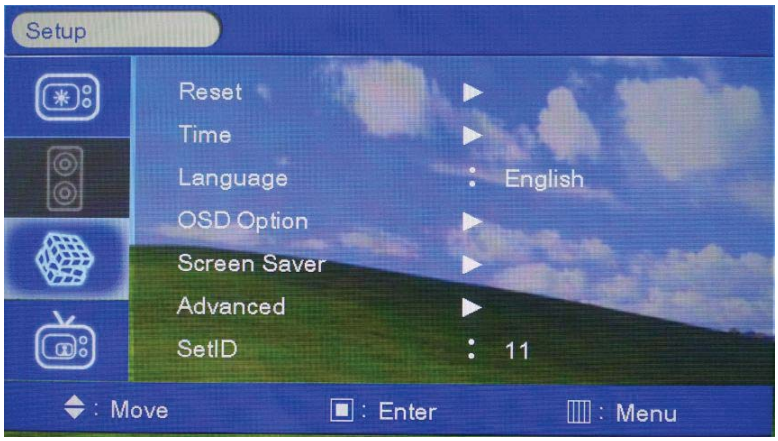
Image of activating RS-232
Once you contact comport, the open message will be shown up and the box at bottom left change the light Red to Green



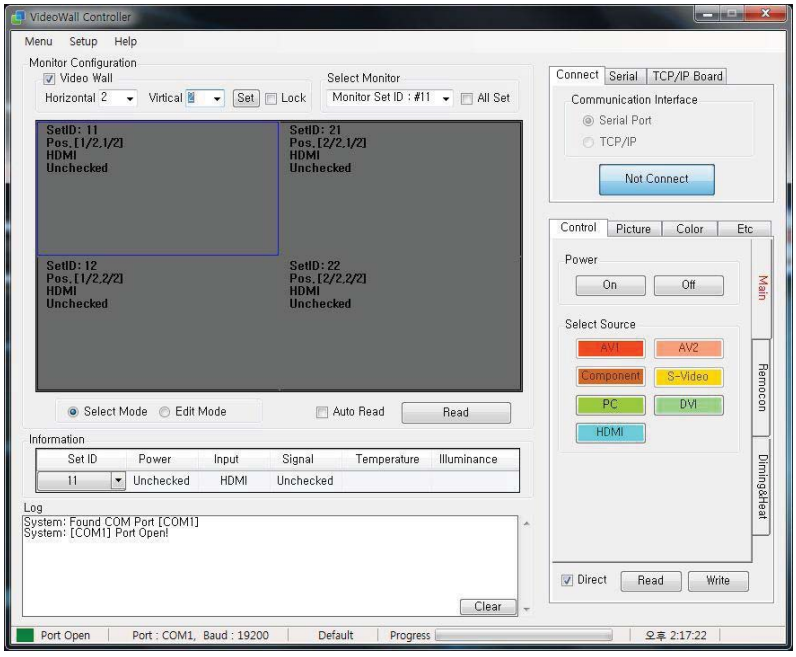
It will be changed as above image after press the Connect button

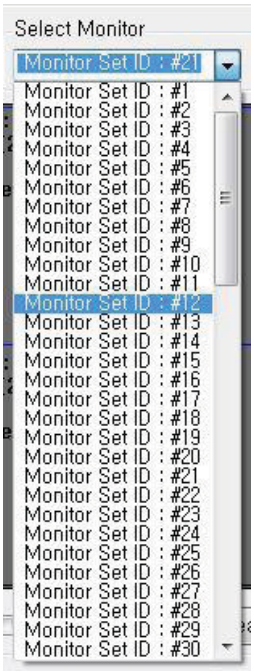


please applying for ID setting to each monitor before the installation
Do not use same ID at the same area linked by RS-232c

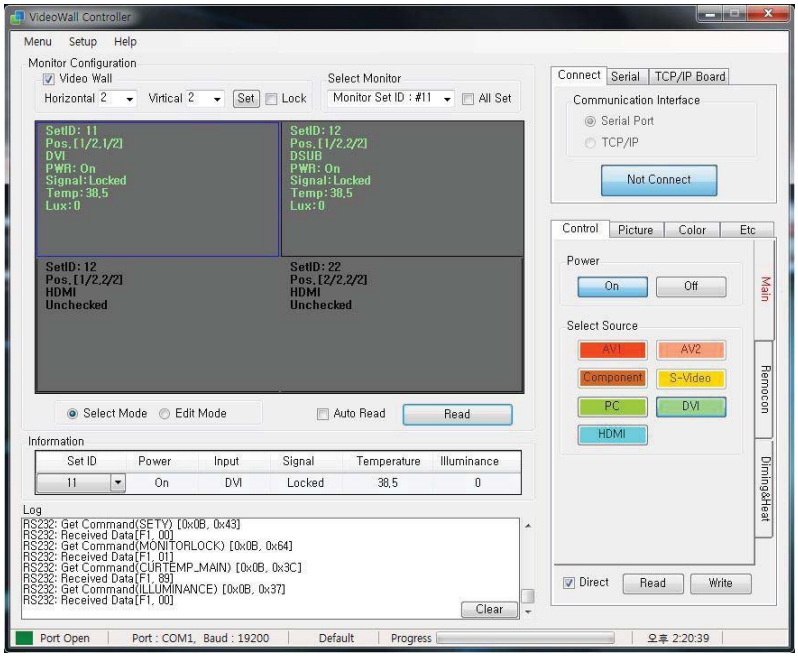


First, to use video wall mode, click the box on top lift now you can choose number of horizontal and vertical
For example of 2x2 If you choose horizontal : 2, Vertical : 2
You can see the program is changed as below ID will be set as configuration automatically
But it is possible to change the set ID, To do it, choose the monitor you want to change And change the number at "select monitor"
Note, should be choose the same no. as you have set to monitor





- "Select Mode" : when you apply to one set
- "Edit Mode" : when you apply to many sets
- "Auto Read" : call regularly the value of condition of monitor

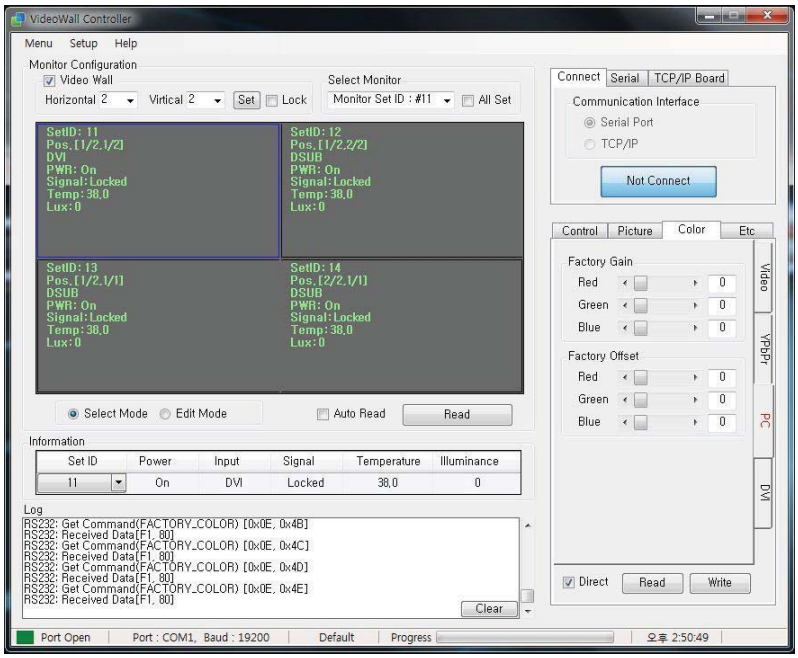


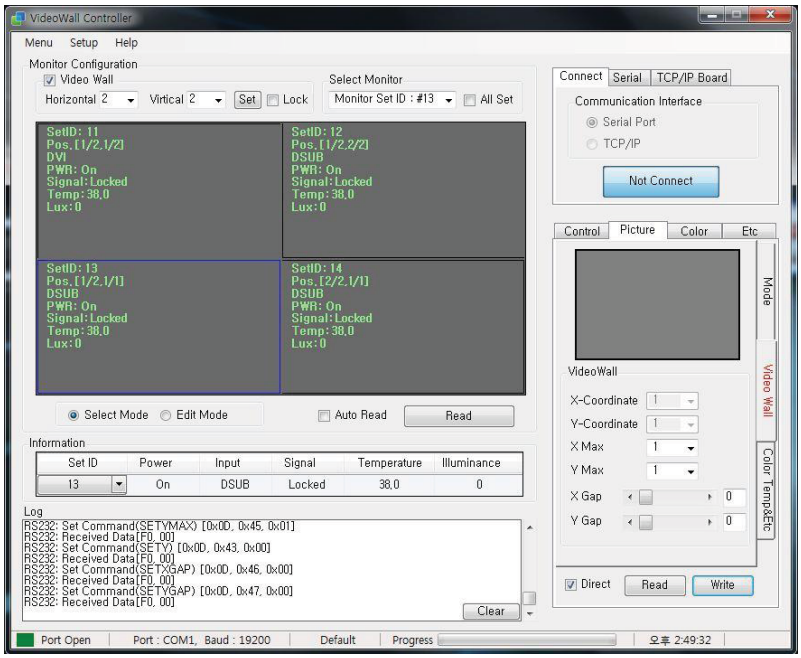
Change the Set ID to “11”, “12”, “13”, “14” By “Select Monitor”

To call a value condition -> ID set by Select Monitor->click the “Read” button.
(you need only one setting at the first time)

To adjust Gain value , please go to “Color” tap.
Possible to save Gain value each source as “Video”, “YPbPr”, “PC”, “DVI”

To call the save value, please press the “Read” button
To save the value, please press the “Write” button





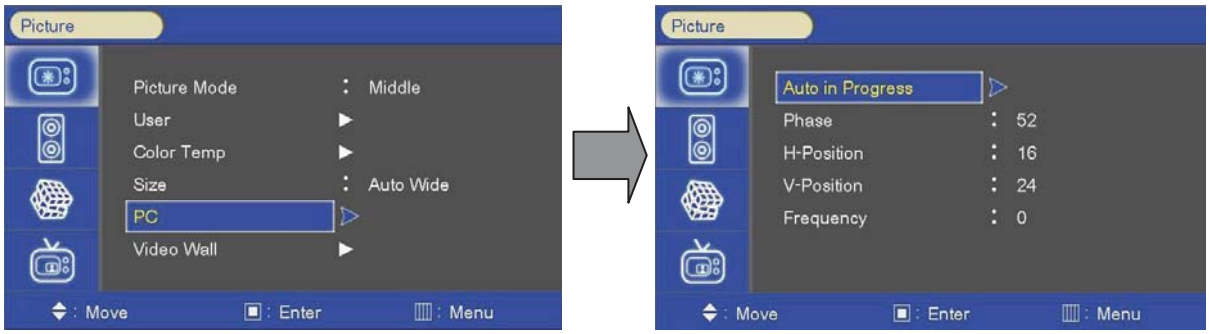
• For example of 2x2 setting manually

Manually setting for 2x2 X Max : 2 Y Max : 2 X-Coordinate : 1 Y-Coordinate : 1 → Click the "Write" button.	Manually setting for 2x2 X Max : 2 Y Max : 2 X-Coordinate : 2 Y-Coordinate : 1 → Click the "Write" button
Manually setting for 2x2 X Max : 2 Y Max : 2 X-Coordinate : 1 Y-Coordinate : 2 → Click the "Write" button	Manually setting for 2x2 X Max : 2 Y Max : 2 X-Coordinate : 2 Y-Coordinate : 2 → Click the "Write" button
For example of 2x2 setting automatically Please change the number 2 of X Max And change the number 2 of Y Max	

If you want to 1:1 set feeding the source directly to each monitor

Set the monitor as X Max:1 Y Max:1 X-Coordinate:1 Y-Coordinate:1 and click the "Write" button.

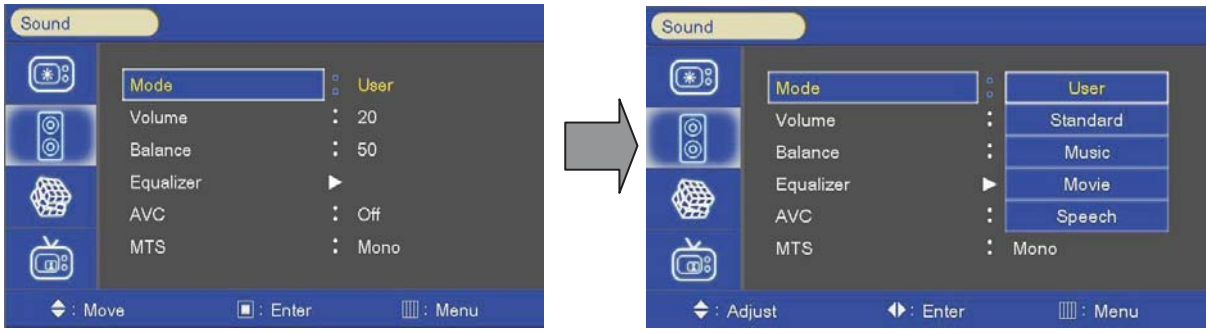
6) PC Menu



1. Press the MENU button and then use ▲/▼ button to select the PICTURE icon.
2. Press the ▶ button and then use ▲/▼ button to select PC Menu.
3. Press ▶ button and then use ◀/▶ button to make appropriate adjustments.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6. SOUND MENU OPTIONS (AV Extension only)

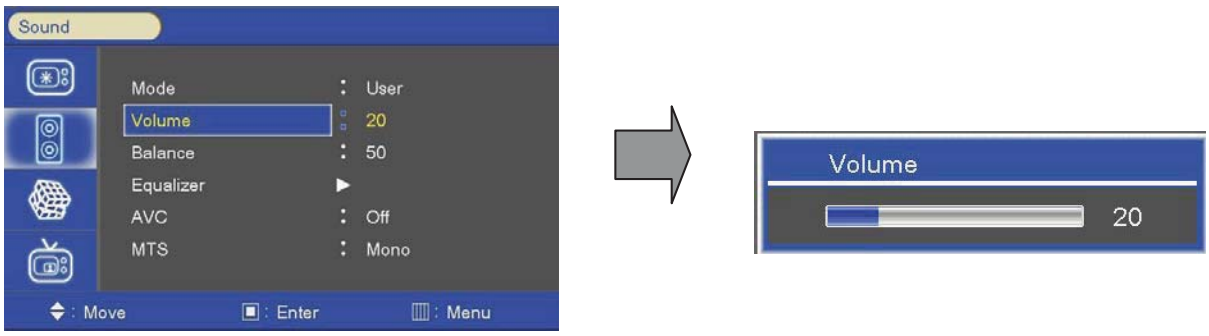
1) Sound Standard Mode



- 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 ▲/▼ button to select Mode menu.
3. Press the ▶ button and then use ▲/▼ button to select: **User, Standard, Music, Movie and Speech.**
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

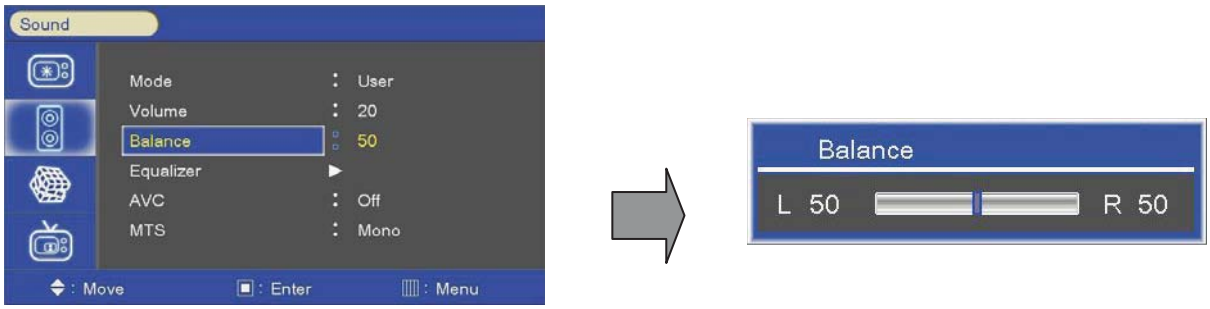
2) Volume



- 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 and then use ▲/▼ button to select the Volume menu.
3. Press ▶ button and then use ◀/▶ button to make appropriate adjustments.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

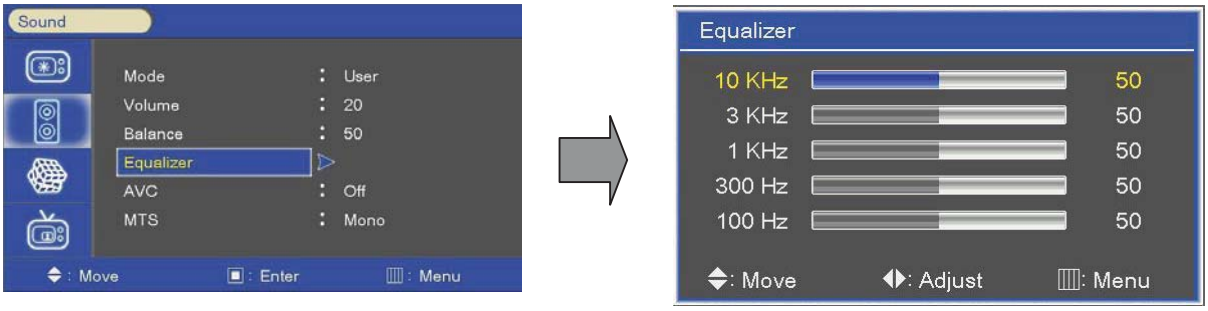
3) Sound Balance



- 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 ▲/▼ button to select the Balance menu.
3. Press ▶ button and then use ◀/▶ button to make appropriate adjustments.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

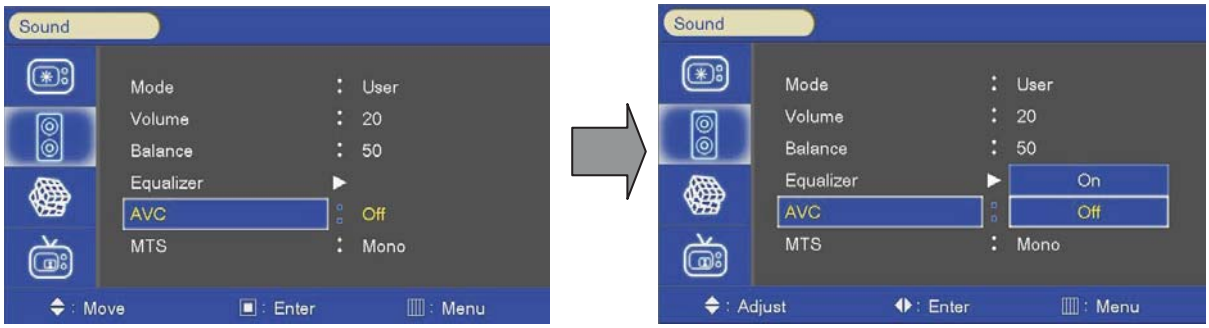
4) User Control for 5 Band Equalizer



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

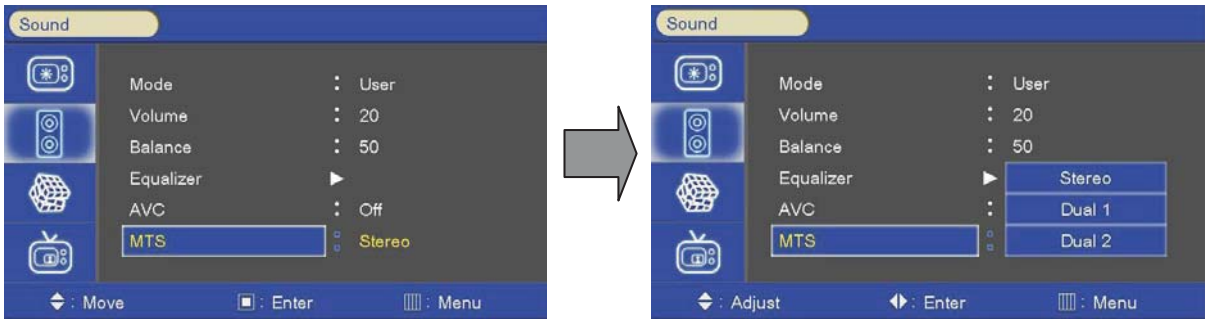
1. Press the MENU button and then use ▲/▼ button to select the SOUND icon.
2. Press the ▶ button and then use ▲/▼ button to select the Equalizer menu.
3. Press the ▶ button and then use ◀/▶ button to make appropriate adjustments;
   10 KHz, 3 KHz, 1 KHz, 300 Hz, 100 Hz Sound Band
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

5) AVC (Automatic Volume Level Control)



1. Press the MENU button and then use ▲/▼ button to select the SOUND icon.
2. Press the ▶ button and then use ▲/▼ button to select AVC menu.
3. Press the ▶ button and then use ▲/▼ button to select: **On, Off**
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6) MTS (Multi Channel Sound Control)



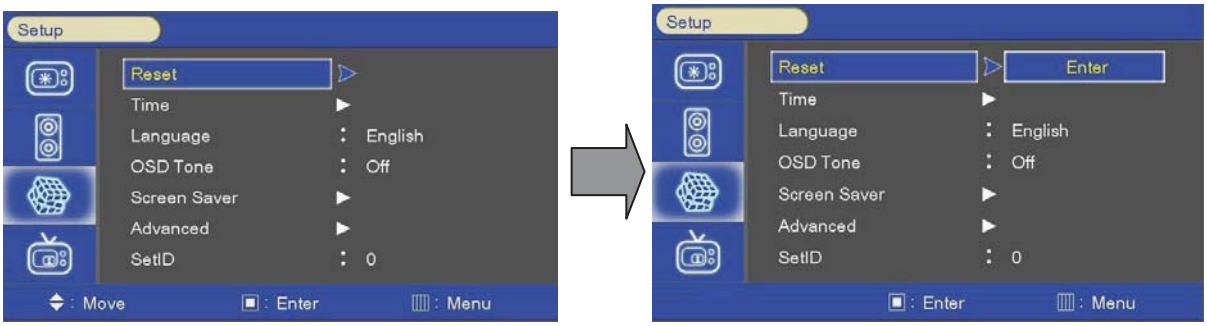
- MTS feature is selecting one(L or R) or both(L+R) channel of sound input generating bilingual stereo sound output.

1. Press the MENU button and then use ▲/▼ button to select the SOUND icon.
2. Press the ▶ button and then use ▲/▼ button to select MTS menu.
3. Press the ▶ button and then use ▲/▼ button to select: **Stereo, Dual 1, Dual 2**
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

7. SETUP MENU OPTIONS

1) Reset

Resets user setting values as default



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Reset menu.
3. Press the ▶ or SELECT button and then monitor's user settings are reset as default.

2) Time Settings

Enable the user to set up the clock information.

2-1) Clock

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

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select Time.
3. Press the ▶ button and then use ▲/▼ button to select Clock.
4. Press the ▶ button and then use ◀/▶ button to select the **Hour, Minute.**
5. Use ▲/▼ button to adjust clock.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

2-2) On Timer

Timer function operates only if current time has been set.

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select Time.
3. Press the ▶ button and then use ▲/▼ button to select On Timer.
4. Press the ▶ button and then use ◀/▶ button to select the **Hour, Minute, Activation.**
5. Use ▲/▼ button to adjust on time schedule and activation.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

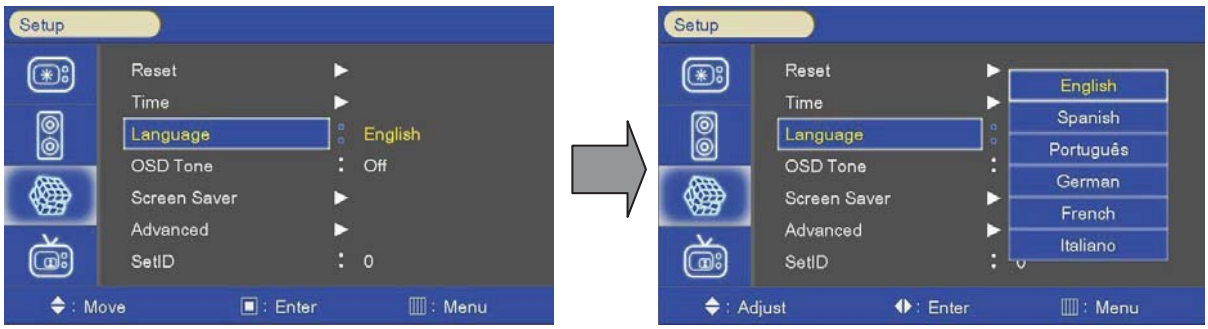
2-3) Off Timer

Timer function operates only if current time has been set.

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select Time.
3. Press the ▶ button and then use ▲/▼ button to select Off Timer.
4. Press the ▶ button and then use ◀/▶ button to select the **Hour, Minute, Activation.**
5. Use ▲/▼ button to adjust off time schedule and activation.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

3) Language

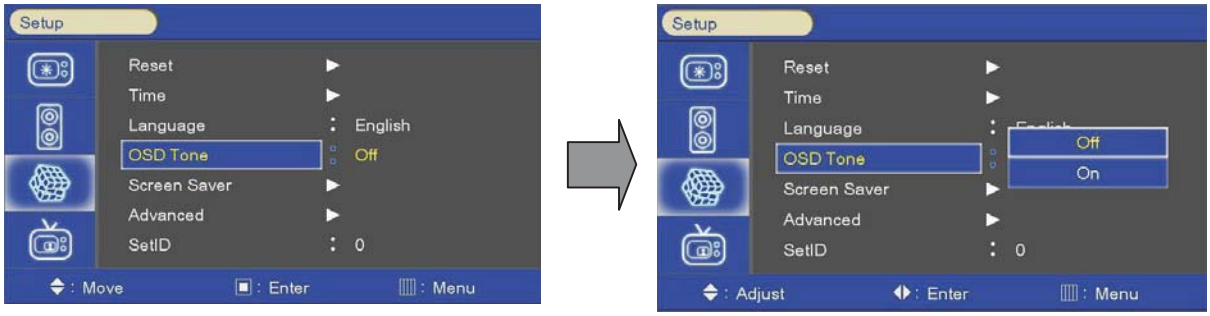
- Select a language for the menus to appear in.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Menu Language menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired option:
   English, Spanish, Portuguese, German, French, Italiano.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

4) OSD Tone Control

- Disable blending OSD background with video image.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the OSD Tone menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired option: **Off, On.**
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

5) Screen Saver

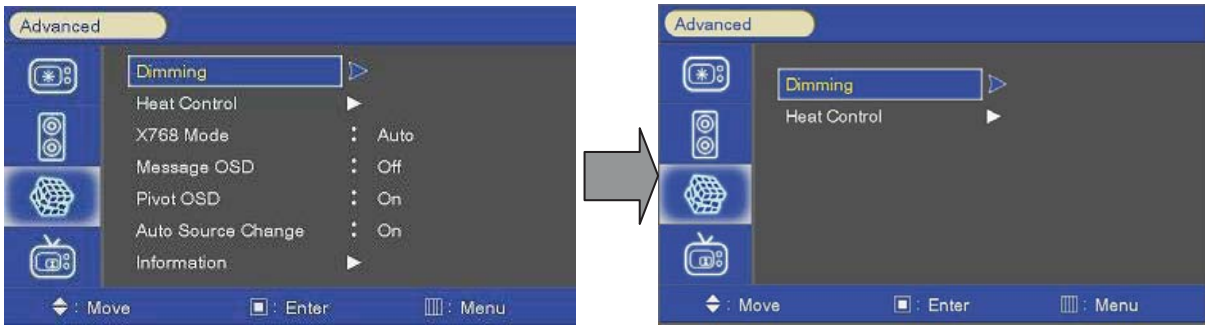
- Enables screen saver functions to avoid panel burning.

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Screen Saver Menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired functions.
4. Press the ▶ button and then use ▲/▼ ◀/▶ button to set Screen Saver options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6) Advanced Menu

6-1) Dimming

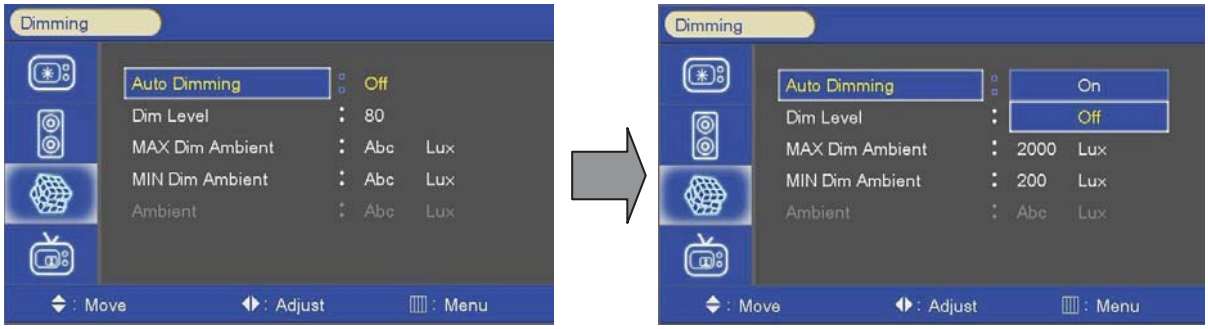
- Automatic dimming controls by light sensor in Dimming menu.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Dimming Menu.
4. Press the ▶ button and then use ▲/▼ ◀/▶ button to set Dimming options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-1-1) Dimming Menu - Auto Dimming (Light Ambient Sensor Option only)

- Enable/disables auto dimming control by light ambient sensor



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Dimming Menu.
4. Press the ▶ button and then use ▲/▼ button to select the Auto Dimming functions.
5. Press the ▶ button and then use ▲/▼ button to set Auto Dimming options.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-1-2) Dim Level

- Controls Inverter dimming level (0V - 3.3V)

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Dimming Menu.
4. Press the ▶ button and then use ▲/▼ button to select the Dim Level functions.
5. Press the ▶ button and then use ◀/▶ button to set Dim Level functions.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-1-3) Dimming Menu - MAX Dim 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 SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Dimming Menu.
4. Press the ▶ button and then use ▲/▼ button to select the MAX Dim Ambient functions.
5. Use ◀/▶ button to set detected light ambient value by LUX unit.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-1-4) Dimming Menu - MIN Dim Ambient (Light Ambient Sensor Option only)

- Adjusts detected light ambient to set the minimum dimming

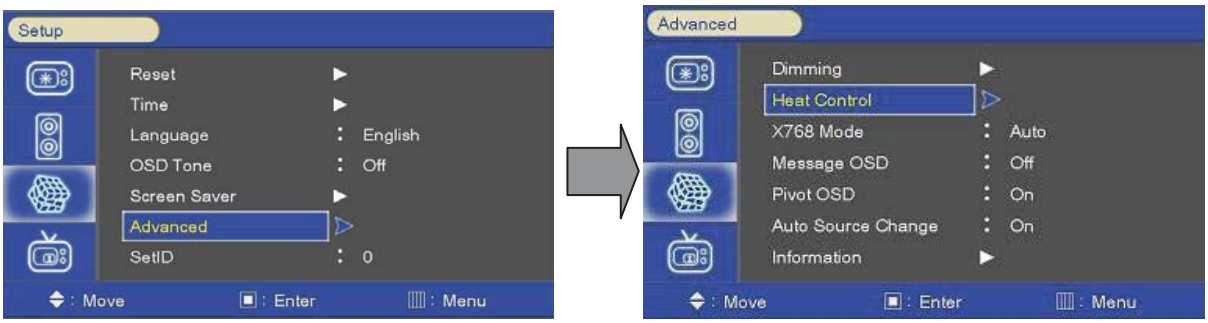
1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Dimming Menu.
4. Press the ▶ button and then use ▲/▼ button to select the MIN Dim Ambient functions.
5. Use ◀/▶ button to set detected light ambient value by LUX unit.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-1-5) Dimming Menu - Ambient (Light Ambient Sensor Option only)

- Displays current detected light ambient level by LUX unit.

6-2) Advanced Menu - Heat Control

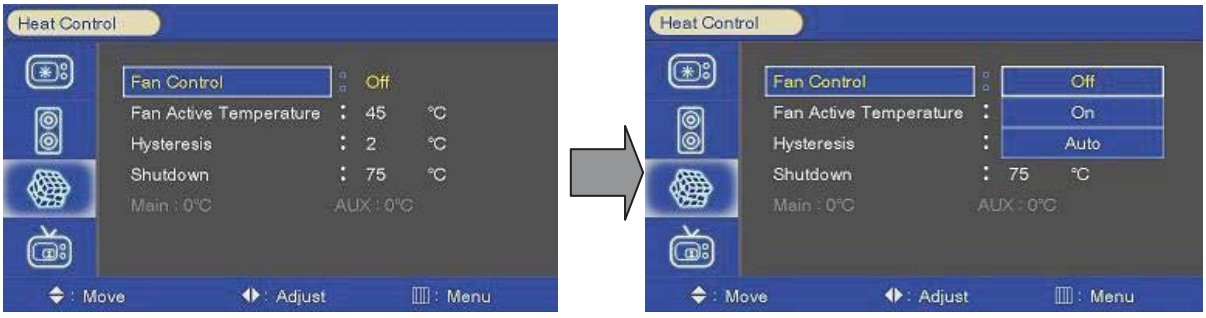
- Automatic Fan controls by internal/external temperature sensor in Dimming menu.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Heat Control Menu.
4. Press the ▶ button and then use ▲/▼ ◀/▶ button to set Heat Control options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-2-1) 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 SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Heat Control Menu.
4. Press the ▶ button and then use ▲/▼ button to select the Fan Control functions.
5. Press the ▶ button and then use ▲/▼ button to set Off, On, Auto options.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-2-2) 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 SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Heat Control Menu.
4. Press the ▶ button and then use ▲/▼ button to select the Fan Active Temperature Menu.
5. Use ◀/▶ button to set fan driving temperature by Celsius degree unit.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

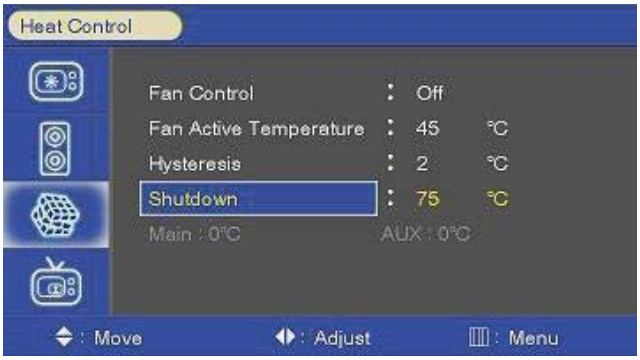
6-2-3) Heat Control Menu - Hysteresis

- Adjusts fan driving hysteresis temperature by Celsius degree.

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Heat Control Menu.
4. Press the ▶ button and then use ▲/▼ button to select the Hysteresis Menu.
5. Use ◀/▶ button to set fan driving hysteresis temperature by Celsius degree unit.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-2-4) Heat Control - Shutdown

- Adjusts shutdown mode temperature by Celsius degree.
When current temperature reaches the shutdown temp, the monitor enters shutdown mode.



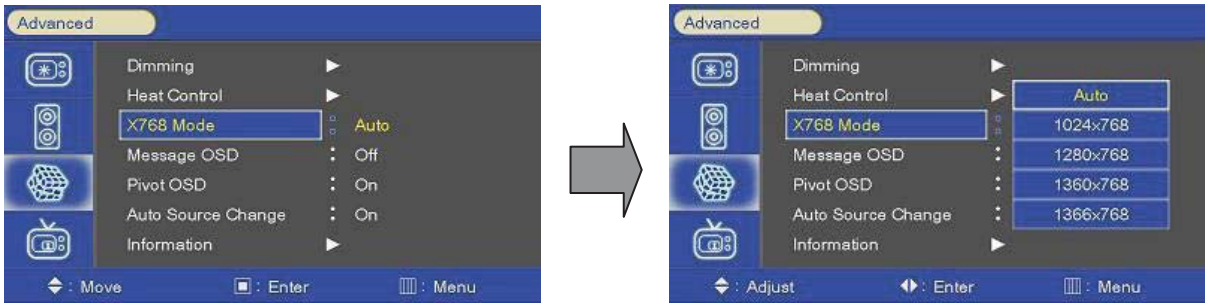
1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the shutdown Menu.
4. Press the ▶ button and then use ▲/▼ button to select the shutdown Menu.
5. Use ◀/▶ button to set fan driving hysteresis temperature by Celsius degree unit.
6. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-2-5) Heat Control - Current temperature

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

6-3) Advanced Menu - X768 Mode

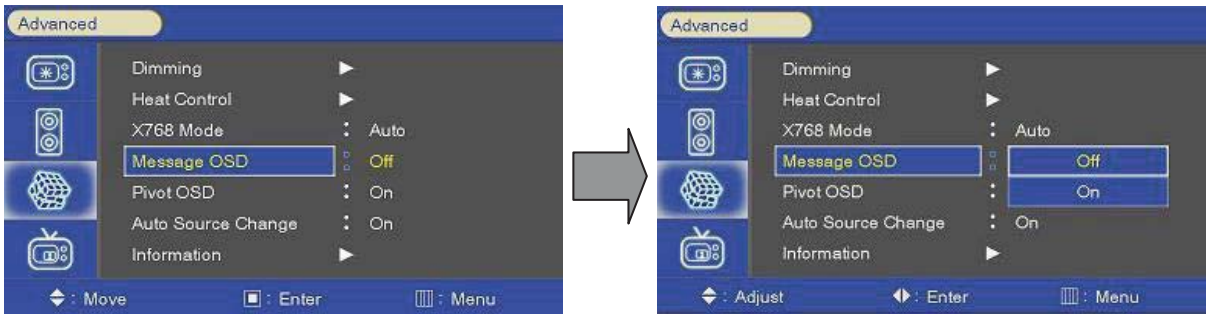
- When PC input resolution is x768 series, fix output resolution. .



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the X768 Mode Menu.
4. Press the ▶ button and then use ▲/▼ button to set output resolution options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-4) Advanced Menu - Message OSD

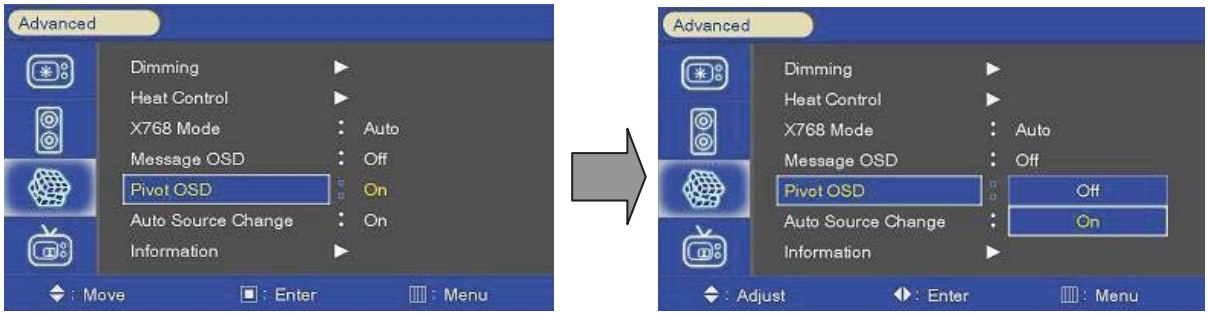
- When source change, source OSD display option.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Message OSD Menu.
4. Press the ▶ button and then use ▲/▼ button to set **Off, On** options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-5) Advanced Menu - Pivot OSD

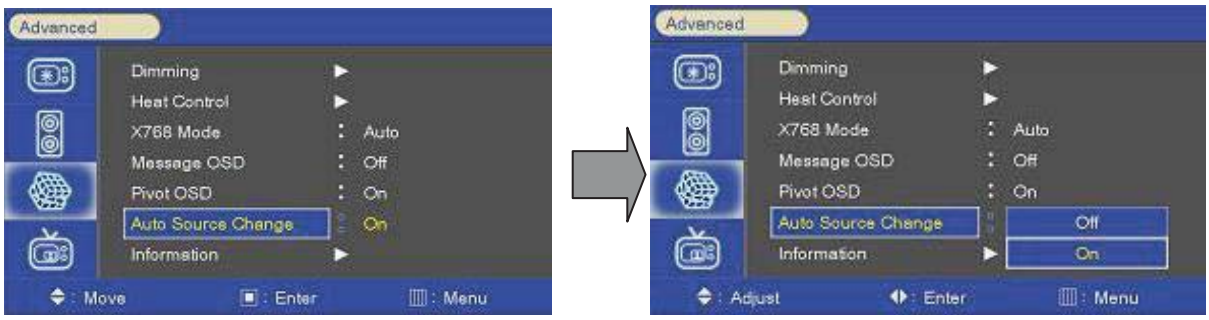
- Control angle of OSD when panel is portrait mode.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Pivot OSD Menu.
4. Press the ▶ button and then use ▲/▼ button to set **Off, On** options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6-6) Advanced Menu - Auto Source Change

- When present mode is no signal(not connect cable), auto detect other source and display.



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Auto Source Change Menu.
4. Press the ▶ button and then use ▲/▼ button to set **Off, On** options.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

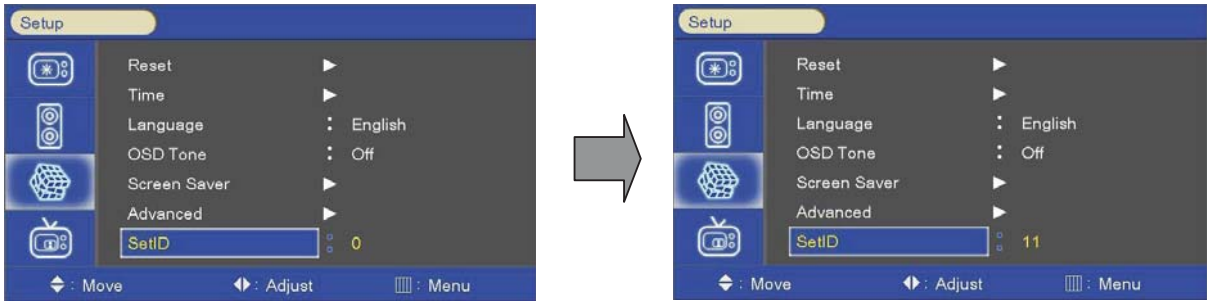
6-7) Advanced Menu - Information

- Show present F/W information

1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the Information Menu.
4. Press the ▶ button and then check information.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

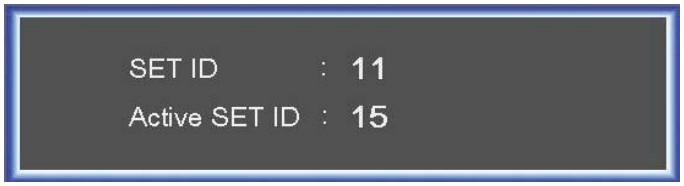
7) SetID

- If use video wall and control each Board, must set ID numbers of each Board (01~99).



1. Press the MENU button and then use ▲/▼ button to select the SETUP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Advanced Menu.
3. Press the ▶ button and then use ▲/▼ button to select the SetID Menu.
4. Press the ▶ button and then use ◀/▶ button to SetID numbers.
5. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

7-1) SetID & Active SET ID



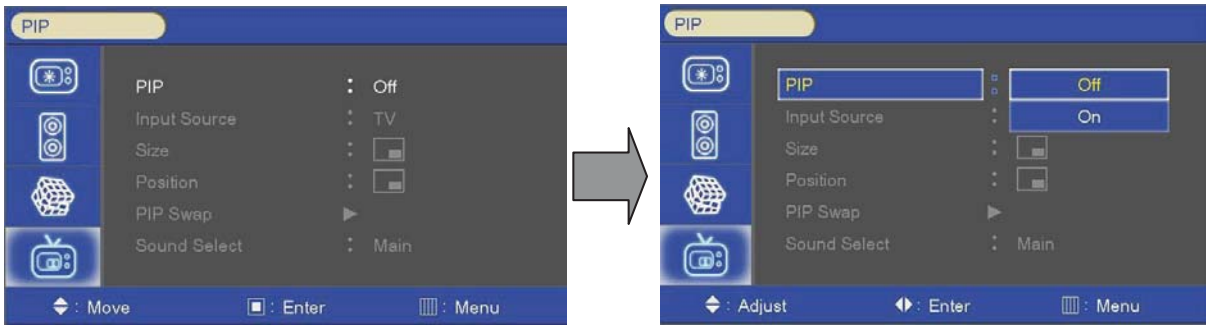
- Set Active SET ID number Before Control each Board by Remote control or RS-232
- If control only 15th Board, Active SET ID must set 15.

1. Press the BLUE button and then use 0~9 button to select the Active SET ID.
2. If Press the RED button, delete ID number.

8. PIP (Picture In Picture)

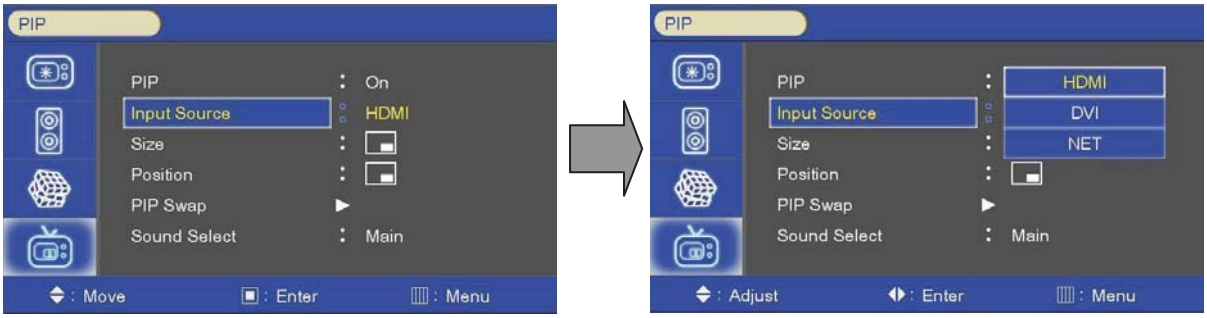
- Watch two programs or source at the same time. And set up PIP size and position.

1) PIP ON/OFF



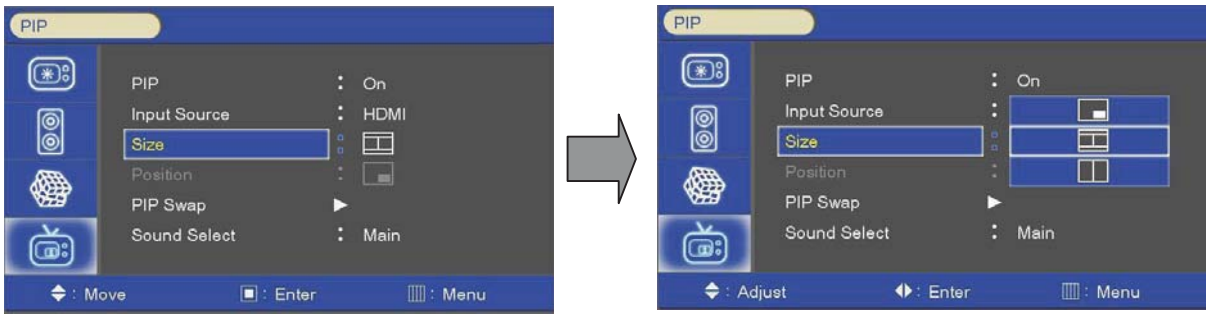
1. Press the MENU button and then ▲/▼ button to select the PIP icon.
2. Press the ▶ button and then use ▲/▼ button to select the desired PIP option; On, Off
3. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

2) Input Source



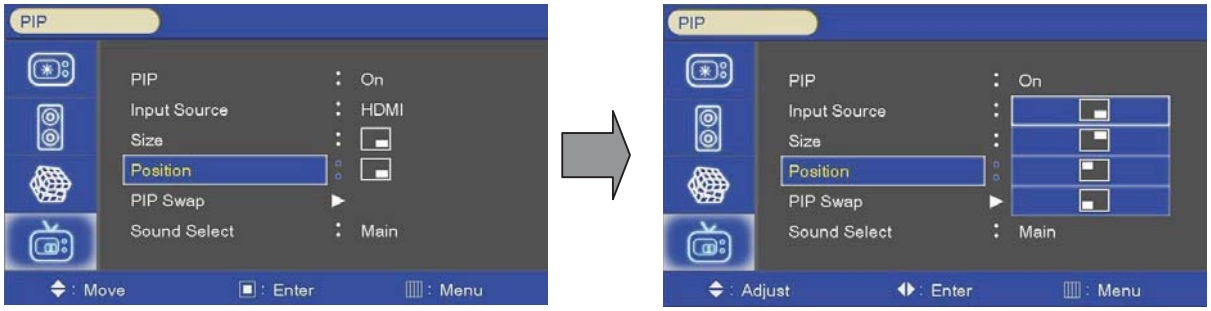
1. Press the MENU button and then use ▲/▼ button to select the PIP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Input Source Menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired Input Source option.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

3) Size



1. Press the MENU button and then use ▲/▼ button to select the PIP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Size Menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired Size option.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

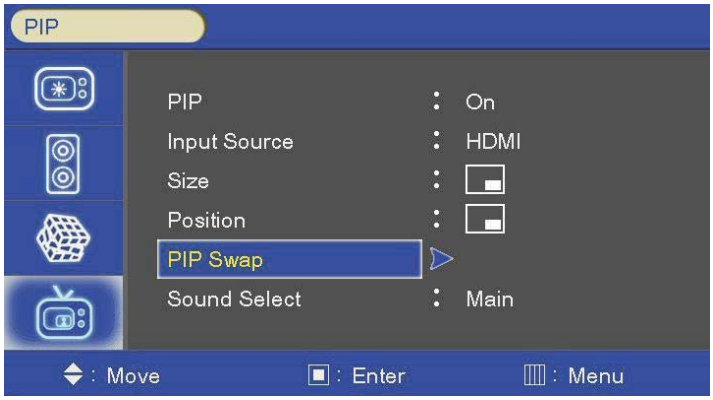
4) Position



1. Press the MENU button and then use ▲/▼ button to select the PIP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Position Menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired Position option.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

5) PIP Swap

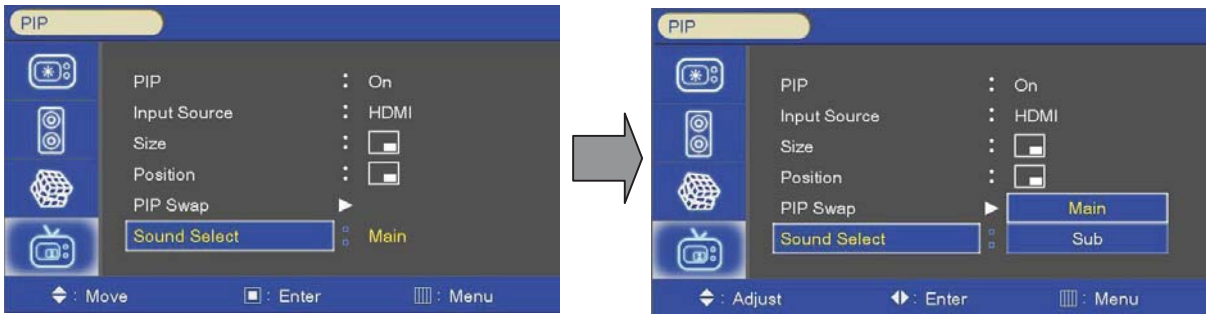
- Using Swap option, you can exchange two programs or source at the same time.



1. Press the MENU button and then use ▲/▼ button to select the PIP icon.
2. Press the ▶ button and then use ▲/▼ button to select the pip Swap Menu.
3. Press the ▶ button to select the PIP Swap option.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

6) Sound Select

- Using Sound Swap option, you can exchange the sound of two programs or source at the same time.



1. Press the MENU button and then use ▲/▼ button to select the PIP icon.
2. Press the ▶ button and then use ▲/▼ button to select the Sound Swap Menu.
3. Press the ▶ button and then use ▲/▼ button to select the desired Sound Swap option.
4. Press EXIT button to return to monitor viewing or press MENU button to return to the previous menu.

55” MLED(CL-55NMF10/20) Specification

PANEL		**Operation**	
Screen Size	55”	Operation Temperature	0℃ ~ 40℃
Seam Size(Bezel to Bezel)	3.5mm (2.25mm/1.25mm)	Humidity	10% ~ 80%
Aspect Ratio	16 : 9	Life Time	60,000Hours
Native Resolution	1,920 x1,080 (FHD)	**Power Input Condition**	
Brightness	500cd/m2 / 700cd/m2	Input Voltage	AC 100V to AC 240V
Contrast Ratio Dynamic CR	1,400 : 1 500,000 : 1	Normal Frequency	50/60Hz
Viewing Angle	178 x 178	**Physical Specification**	
Response Time	12ms(G to G)	Dimension(WxHxD)	1,215.6(W) x 684.3(H) x 103.2(D)
Color Depth	16.7M	Weight	35Kg
Power Consumption	160W	VESA Standard Mount Interface	600 x 400
Connectivity		**Accessory**	
In/Out connection [Daisy Chain]		Accessory	Remote Controller, Power cable, RGB Cable, DVI Cable, RS-232C Cable, User Manual
DVI In/Out	1 / 1	Option Accessory	Wall Mount Bracket, Stand Floor
PC[D-Sub] In/Out	1 / 1		
RS-232C In/Out	1 / 1		
HDMI In	1 / DVI Out		