User Manual

LCD monitor

Model: XVI G€ SERIES

42"

※ **Please read this user's manual cautiously and completely before operating this monitor.**

Important Safety Instructions

Before using the monitor, please read this user's manual thoroughly to help protect against damage to your own and other people's property and ensure your own and other people personal safety.

◆ Be sure to observe the following instructions.
◆ For your safety, be sure to observe the warnings located in this manual.
◆ For installation or adjustment, please follow this manuals instruction and refer all servicing to qualified service personnel.

Safety Precautions

If smoke or peculiar smell comes from the monitor, remove the power plug from the outlet immediately.

Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.

If the monitor has been turned on but there isn't a picture, remove the power plug from the outlet immediately.

Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.

If water is spilled or objects are dropped inside the monitor, remove the power plug from the outlet immediately.

Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.

If the monitor is dropped or the cabinet is damaged, remove the power plug from the outlet immediately.

Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.

To turn off the power of the monitor, press "O" on the main power switch at side of monitor.

The power standby/on indicator will go off and the monitor cannot to be turned on/off by using the POWER button on the remote control. (To turn on/off the monitor by the remote control, press the main power switch again and light the power standby/on indicator.)

◆ When turning off the monitor by pressing the POWER button on the remote control, the main power of the monitor is not turned off completely.
◆ To disconnect the monitor completely from power supply, remove the power plug from the outlet.

Press"O"to turn off monitor completely

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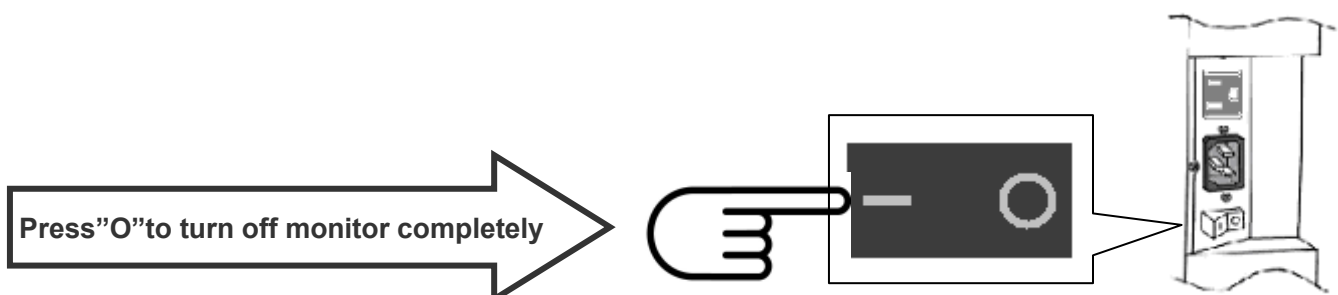
If the power cord or plug is damaged or becomes hot, turn off the main power switch of the monitor, make sure the power plug has cooled down and remove the power plug from the outlet.

If the monitor is still used in this condition, it may cause a fire or an electrical shock.
Contact your dealer for replacement.

Installation **(when install the monitor, please follow the instruction on the manual)**

Don't install in a high-temperature environment.

If the monitor is used in high-temperature or in direct sunlight, it may cause the case or other parts become distorted or damaged resulting in overheating or electric shock.

Don't install in a high-humidity environment.

This may cause overheating or electric shock.

Don't install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.

This may cause a fire or electric shock.

Don't overload outlets or cables beyond electrical capacity.

Don't use extension cords as it may cause a fire or electric shock.

Don't insert the power plug into an outlet other than 100~240V AC.

This may cause a fire or electric shock.
- ◆ Don't use a damaged power plug or worn outlet.
- ◆ Don't insert the improper power plug it may cause a fire and electric shock.

Don't place the monitor on an unstable shelf or surface.

The monitor may fall causing injury. Please install on a horizontal, stable, level surface.

Don't place objects on the monitor.
- ◆ If the monitor is covered or the vents are blocked, the monitor could overheat and cause a fire.
- ◆ If metal or liquid gets into the monitor, it may cause a fire or an electrical shock.
- ◆ Do not put heavy objects on the monitor as it may fall causing injury.
- ◆ Please keep a10cm minimum distance between the monitor and the wall for sufficient ventilation.

Don't move the monitor when it is connected to the power cord and AV cables.
- ◆ When moving the monitor, make sure to remove the power plug and cables from the outlet or source.
- ◆ When unpacking or carrying the monitor, at least 2 people are needed. Make sure the monitor is carried upright.
- ◆ Transport the monitor upright. Avoid placing the monitor face up or down.
- ◆ Handle the monitor gently. Do not drop.

Use

If you encounter a problem during installation, please contact your dealer for assistance.

Don't repair or open the monitor by yourself.

Failure to do so may result in fire or electrical shock. Contact your dealer for inspection.

Protect and correctly use the power cord/plug.

◆ Don't press heavily on the power cord/plug.
◆ Don't step on the power cord/plug.
◆ Before inserting the power plug into the wall outlet, connect the power cord to the monitor.
◆ Don't operate the monitor with a damaged power cord or it may damage the monitor.

Using the extension cords (not recommended)

If an extension cord must be used, ensure the voltage rating exceeds the max power consumption of the monitor, if the voltage rating is less than the monitor, it will cause the extension cord to overheat.

If there is thunder or lightning, don't touch the monitor or the power plug.

This may cause an electric shock.

Don't use any kind of liquid on the monitor.

◆ If liquid is spilled on the monitor, remove the power and ask a qualified service personnel to check the monitor.
◆ If the liquid get's on the monitor's screen, please clean it with a dry and soft cloth immediately.
◆ Don't use any harsh chemical on the monitor.
◆ If metal or liquid gets into the monitor, it may cause a fire or an electrical shock.

Don't install or remove the power plug with wet hands.

This may cause an electric shock.

If the monitor will not be used for a long period of time, unplug the monitor.

This may cause premature wear of electrical components or fire.

Don't press on the LCD panel.

This may cause personnel injury or panel damage.

Don't push or shake the monitor.

This may cause damage or injury.

◆ If the glass of the monitor panel is broken, liquid may escape. Please don't touch the liquid.
◆ If liquid get into your eyes or touches your skin, wash with the clean water and seek medical attention immediately.

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Precautions with the remote control batteries.

◆ Please only use approved AAA type batteries.

◆ Please be sure to insert batteries by matching the + and -.

◆ Don't recharge, heat, disassemble, short or throw batteries into a fire.

◆ Don't mix a new battery with a used one.

◆ Don't mix different types of batteries together (only use the specified type). Or, it may cause burn and injury.

Clean

If dust has collected on the power plug, removed the plug from the outlet and clean off the dust.

Dust build-up may cause a fire.

Take off the power plug before cleaning.

Failure to do so may result in electrical shock or damage.

Cleaning the surface of the monitor.

◆ When the surface of the monitor becomes dirty, please wipe the surface lightly with a soft clean cloth.

◆ If the surface requires additional cleaning, lightly moisten the cloth with rubbing alcohol.

◆ Do not to let alcohol enter the monitor as it may cause electrical shock or damage.

Warning For Use

Use

◆ Do not use this "VT420 model" on the ground.

◆ The monitor may overheat during operation. Please be careful.

◆ Transport the monitor upright with proper packaging. Avoid placing the monitor face up or down. Be careful not to bump to the monitor.

◆ Do not send a static (non moving) image this monitor, or it may cause image 'burn-in' or image retention.

◆ "Burn in" and/or image retention is not covered under warranty.

◆ Make sure to change the image on the monitor periodically. It is recommended to turn off the monitor for at least 6 hours after 18 hours of usage in a day to avoid image retention.

Exemptions

◆ This product isn't warranted for any damage caused by natural disaster (such as earthquake, thunder, etc), fire, acts by third parties, accidents, owner's intentional misuse and fault, or uses in other improper conditions.

◆ This product isn't warranted for incidental damages (such as profit loss or interruption in business, modification or erasure of record data, etc.) caused by use or inability to use of this product.

◆ This product isn't warranted for any damage caused by inappropriate operation, or from not following the user manual.

◆ This product isn't warranted for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment or software.

◆ This product isn't warranted for any damage caused by neglect of the instructions described about installation.

◆ This product isn't warranted for any damage caused by improper installation.

◆ This product isn't warranted for any damage caused by disassembly, modification or repair by non-authorized service center or people.

Features

High-resolution Full-HD 60Hz panel
This monitor supports a 1920 x 1080 HDTV format and can display true 16.7M colors.

MVA system less-reflection black TFT LCD panel
MVA system and Black TFT LCD panel offer bright and wide images with clear contrast. Even placed near the windows, the monitor shows bright and clear image with little reflection. The viewing angles of the monitor are as wide as 176° both horizontally and vertically, enou gh to enjoy clear images at any view angle.

Full array of PID connectivity

| Video system Input:		RGB Input:	Communication
HDMI	x2	PC (VGA D-Sub 15pin) x1	RS-232C in D-sub 9pin
COMPONENT (RCA)	x1 (★option)	PC (DVI D-sub 24 pin) x1 (★option)	RS-485 in/out
VIDEO (RCA)	x1 (★option)		
S-VIDEO (Mini Din 4 pin)	x1 (★option)		

★option: only available on VT420

Other functions
◆ High color saturation.
◆ 2 HDMI v1.3 inputs with HDCP.
◆ SPDIF output.
◆ Signal source auto detection.
◆ OSD keypad lock function.
◆ PIP/ PBP function. Please see the chapter "**Display mode** "
◆ Overscan function.
◆ Supports input main / sub source detection.

Package Contents

Unpacking
◆ The VT420 is packed in a carton box and banded to a custom pallet. The VT420 is packed using cushions to protect the monitor during shipping.
◆ Before unpacking your monitor, prepare a stable, level, and clean surface near a wall outlet.
◆ Set the LCD Monitor box in an upright position and open from the top of the box before removing the top cushions.

● Step 1: Remove the white handle and cut the banding

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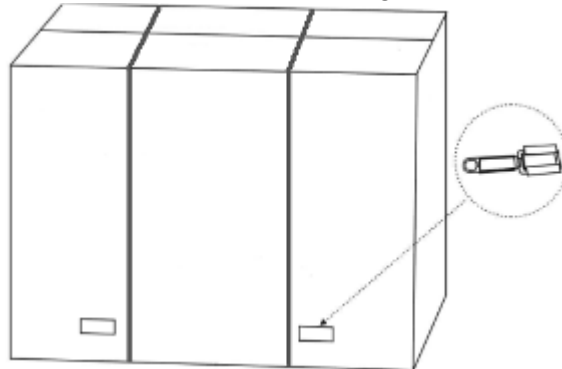
- Step 2: Remove the top cushion and take the accessories Bag out.
- Packing list
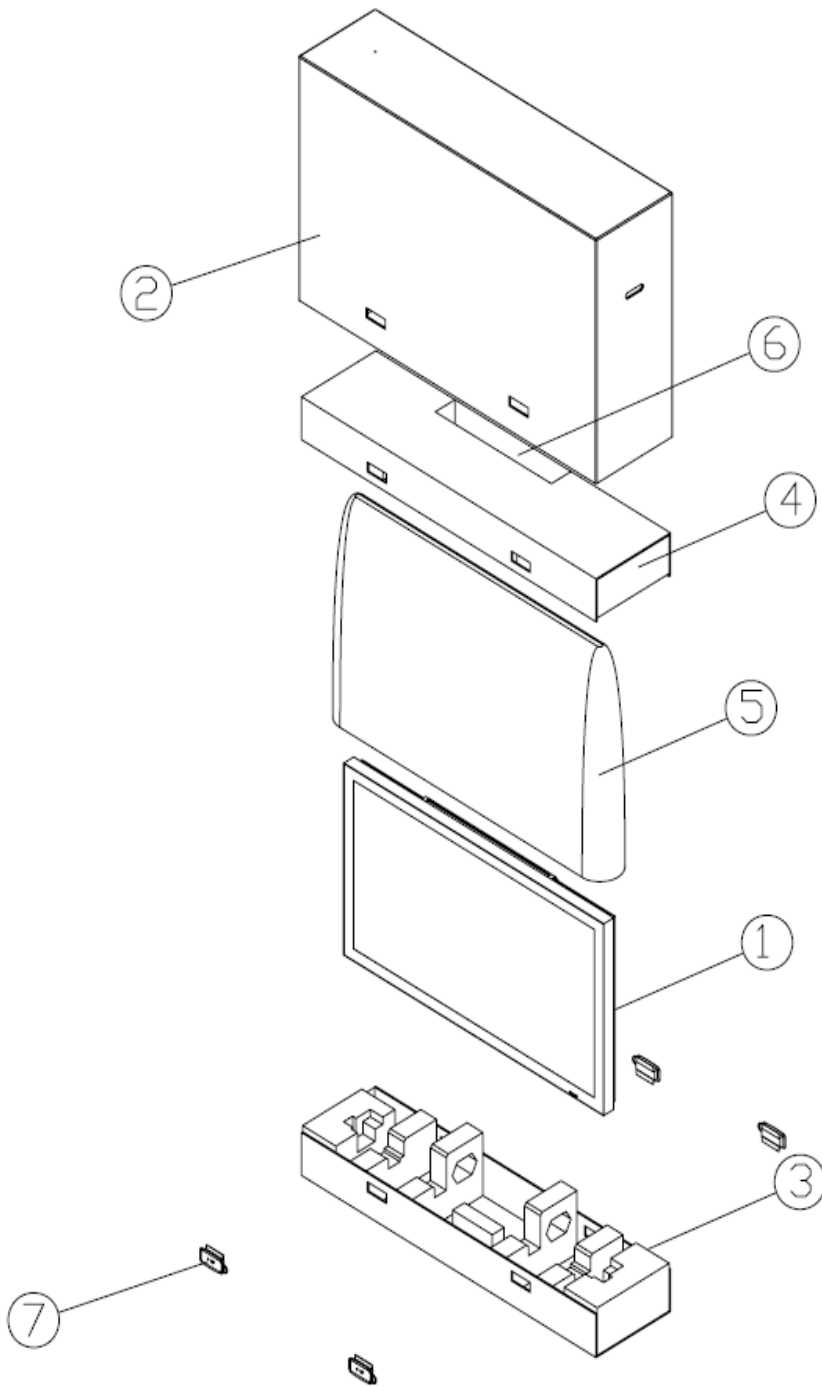
	Item	Q'ty
1	VT420	1 set
2	Carton	1 pcs
3	Bottom cushion	1 pcs
4	Top cushion	1 pcs
5	Packing bag	1 pcs
6	Accessories Bag	
	Remote control	1 pcs
	Batteries	2 pcs
	Power cord	1 pcs
	D-SUB 15pin cable	1 pcs
7	Carton lock	4 pcs

Contents of the Accessory Bag

VGA Cable (D-sub)

Power Cord –black

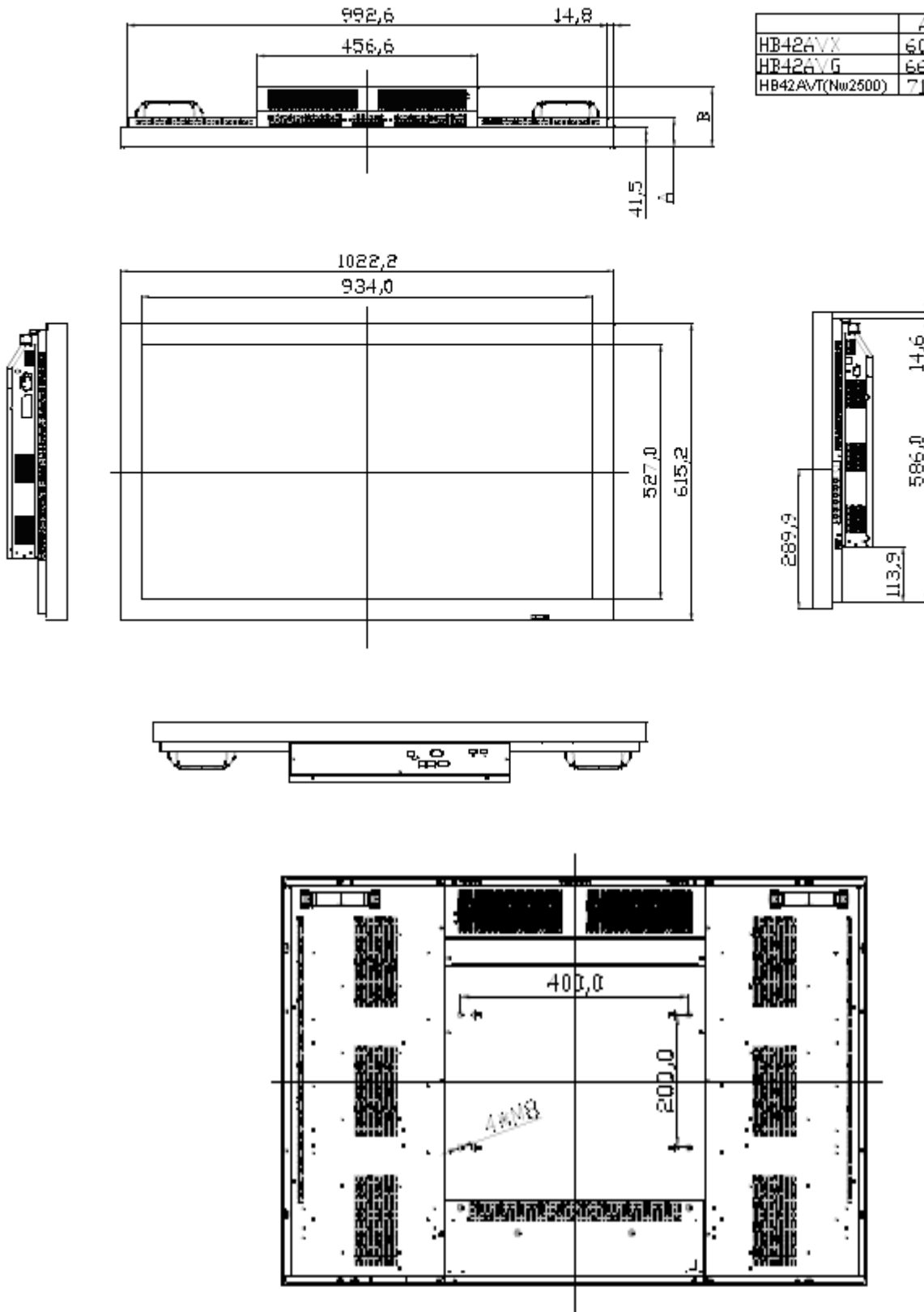### OSD Remote Control

2 piece batteries (AAA) inside.

USB Cable

Dimension (Front & Back)

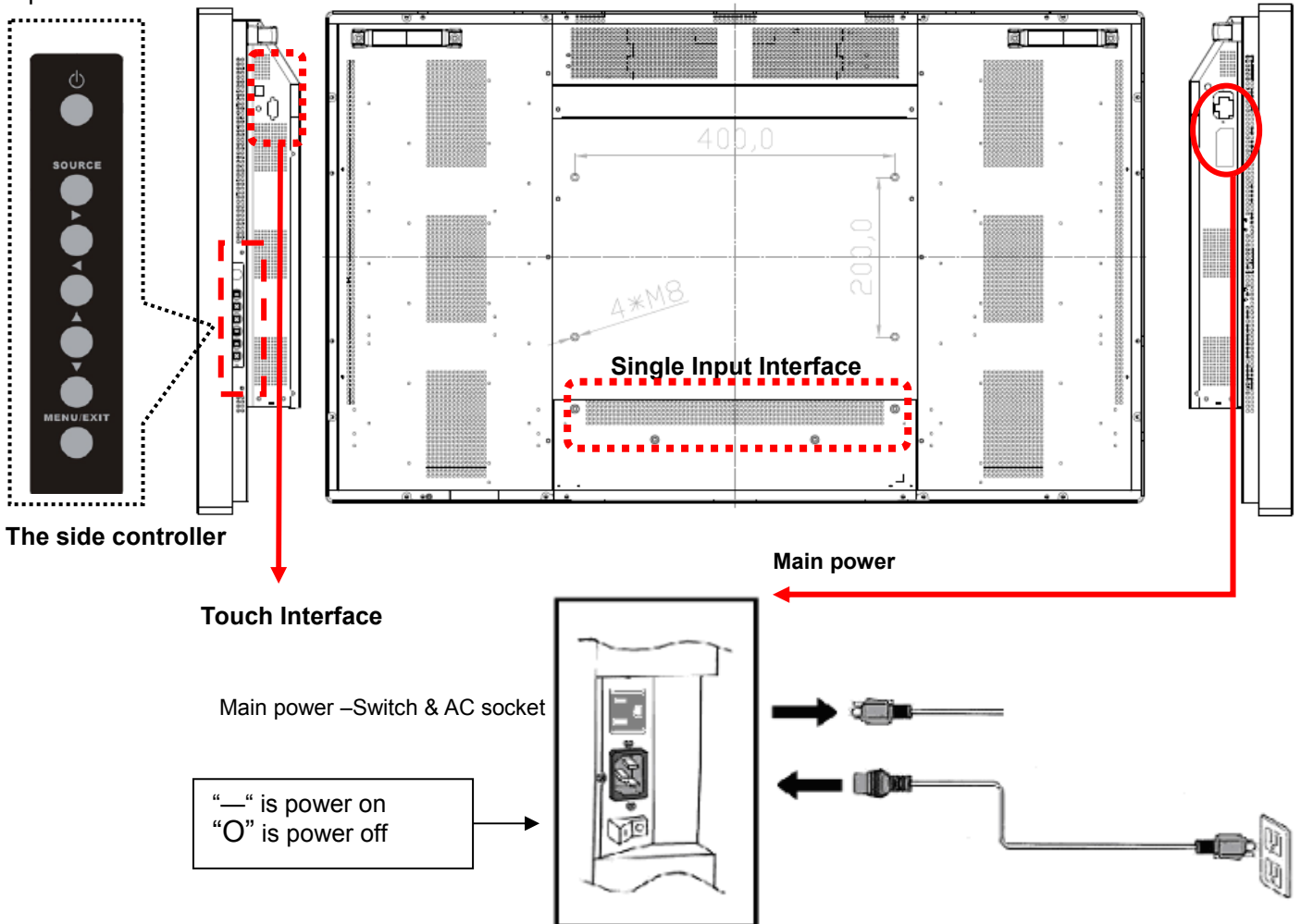|	A	B
HB42AVX	60,8	124,4
HB42AVG	66,8	130,4
HB42AVT(Nw2500)	71,8	135,4

Installation

Environmental state
◆ Operating temperature: 5℃ ~ 35℃ (Fahrenheit : 41℉ ~ 95℉)
◆ Humidity : 85% RH (Max)

Power Input

Power Cord

The included power cord is used to connect the side controls of the LCD monitor and the wall outlet.

Connect the power cord into main power of the monitor, "-" is power on, "O" is power off.

Input : 100-240V~ 5A   50/60Hz

The side controller

Single Input Interface

Touch Interface
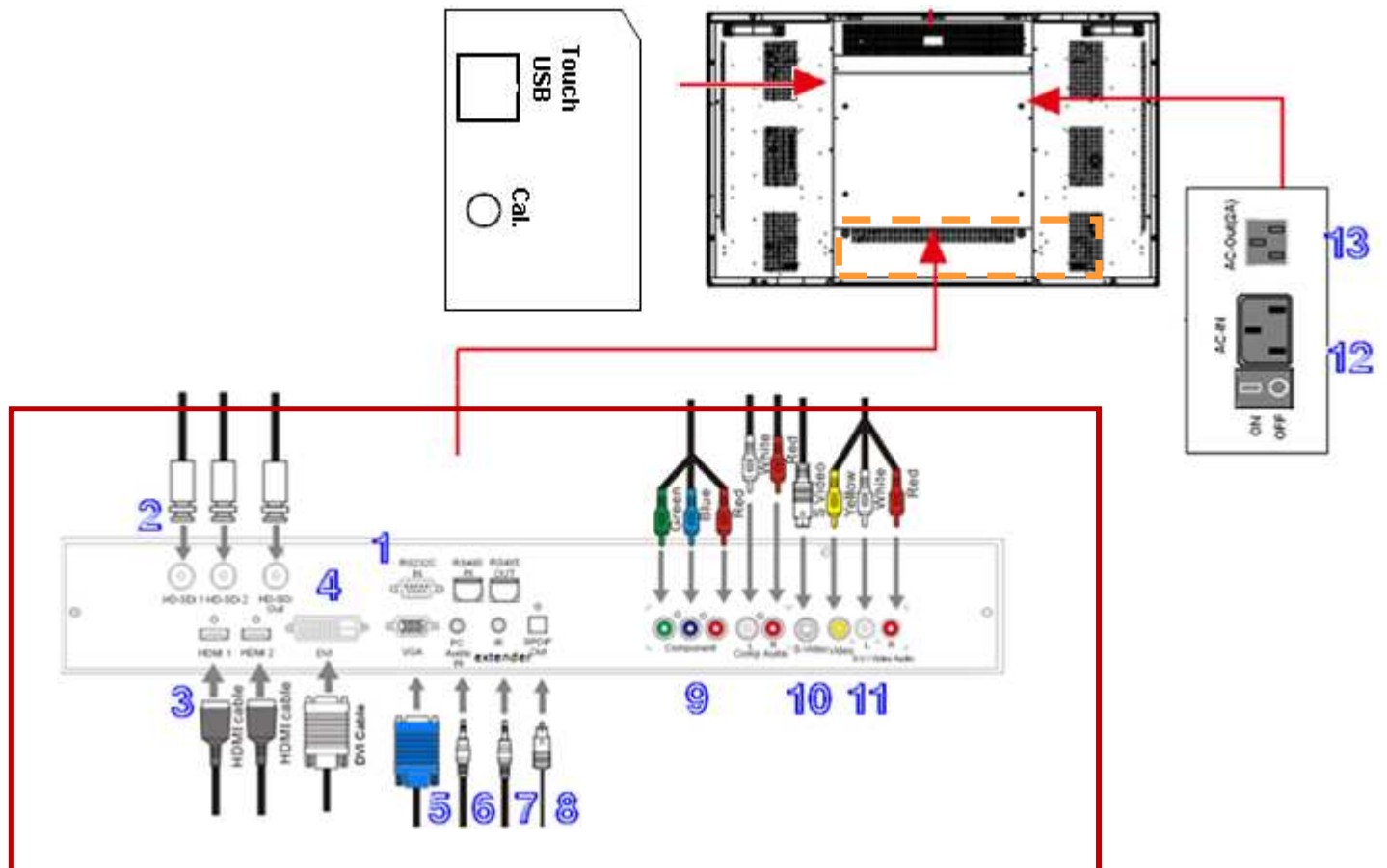
Main power

Main power –Switch & AC socket

"—" is power on
"O" is power off

Power Interface

◆ Main interface- switch & AC socket. Please see the chapter "**Power input** "

◆ Side controller of the monitor
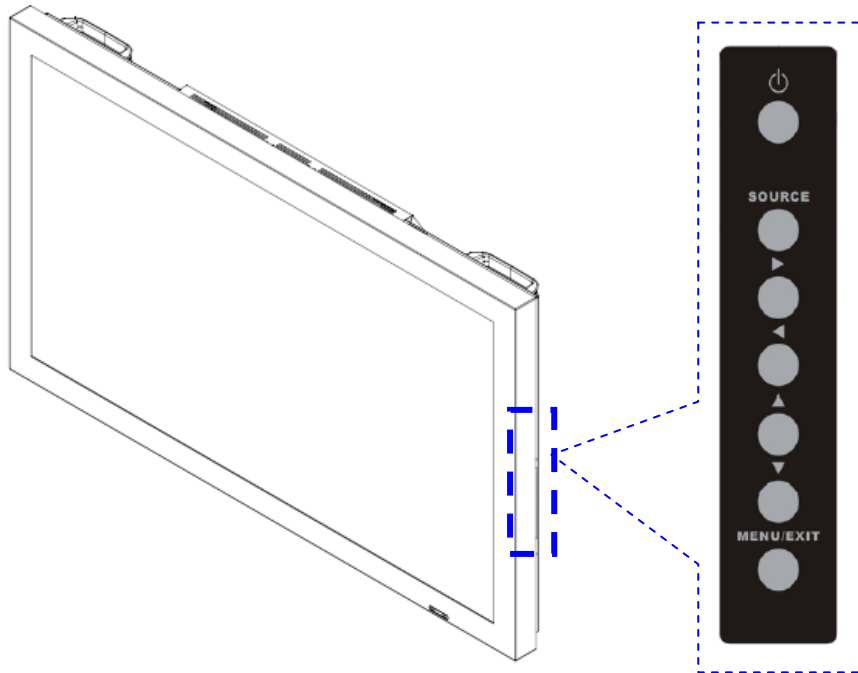
◆ The remote control (RCU)

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Input Source Connection

	Name	Connecter	Remarks
1	RS232C input x 1	D-Sub 9 pin	All Models
	RS485 input x1	RJ-45	All Models
	RS485 output x1	RJ-45	All Models
2	HD-SDi 1 input x1	BNC	
	HD-SDi 2 input x1	BNC	Optional for Advanced ver.
	HD-SDi output x1	BNC	
3	HDMI 1 input x1		All Models
	HDMI 2 input x1		All Models
4	DVI-D input x1	D-Sub 24 pin	Advanced ver.
5	VGA (PC) input x 1	D-Sub 15 pin	All Models
6	PC audio in x1	Mini jack	Advanced ver.
7	IR Extender x1	Mini jack	Advanced ver.
8	SPDIP output x 1		All Models
9	Y-Pb-Pr (Y-Cb-Cr) input x 1	RCA G/B/R	Advanced ver.
	Audio for Component input x 1	RCA L/R	Advanced ver.
10	S-video input x 1	Mini Din 4 pin	Advanced ver.

	Video input x 1	RCA	Advanced ver.
11	Audio for S-Video/Video input x 1	RCA L/R	Advanced ver.
12	Power cord output	AC output	All Models
13	Power cord input	AC input	All Models
14	AC switch	ON/OFF	All Models
15	RS232 for Touch	D-Sub 9 pin	Optional for AVT version
16	Touch USB	Type B Female	AVT version only

Operating The Monitor

The Side Controller Of The Monitor

OSD Key Pad function List

Key	Descriptions
Power	Power on/Power off
Source	Source selection (toggle)
▶	Menu Right/Volume +
◀	Menu Left/Volume -
▲	Menu Up
▼	Menu Down
Menu/Exit	Menu/Exit selection

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-Power ON-Stand by Indicator
-Remote Control Receiver

LED ON:

Power Status	Condition
Green	Power On
Orange	Power Off
	Power saving mode
	Select LED on via menu (Front LED: On)
Off	AC off
	Power on
	Select LED on via menu (Front LED: Off)

LED OFF:

The LED turns completely off when in the "off" mode regardless of the monitor being on or off.

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The Remote Control (RCU) Instructions

No	Function	Description
①	⏻	Turns the monitor on and off
②	INFO	Provides source and resolution information
③	VGA	Selects the PC RGB source
	DVI	Selects the PC DVI source (AA ver. only)
	HDMI 1	Selects the HDMI source 1
④	COMP 1	Selects the Component source (AA ver. only)
	AV 1 (VIDEO 1)	Selects the Composite Video source (AA ver. only)
	HDMI 2	Selects the HDMI source 2
⑤	COMP 2	Not available at this model
	AV 2 (VIDEO 2)	Not available at this model
	HD-SDi 1	Selects the HD-SDi source 1 (Option for AA ver.)
⑥	PIP	Turns the PIP feature on and off
	S-V	Selects the S-Video source (AA ver. only)
	HD-SDi 2	Selects the HD-SDi source 2 (Option for AA ver.)
⑦	SWAP	Swaps the main source & sub source picture
⑧	P-SOURCE	Selects the secondary sub-source
⑨	MENU	Opens the monitor's on-screen menu system. When the menu system is already open, pressing this button will select the previous submenu
	▲, ◄, ►, ▼	Navigates through submenus and settings
⑩	EXIT	Closes the menu system
⑪	ENTER	Selects highlighted menu choices
⑫	SCALING	Toggles between different aspect ratios (Auto, Native, 4x3, 16x9, 16x10 and Letterbox)
	FREEZE	Freezes the current source image
	MUTE	Turns off the sound
	BRIGHT	Adjusts the brightness
	CONTRAST	Adjusts the contrast
	AUTO	Synchronizes the monitor to the source
	SOURCE	Allows selection of the different sources
	VOLUME-	Decreases the sound volume
	VOLUME+	Increases the sound volume

★ **Hot Key : OSD Menu Lock/Unlock Control**

Lock: Press **Enter**, **Enter**, **Exit**, **Exit**, **Enter** and **Exit** on the controller by sequence and OSD will be locked.

Unlock: Press **Enter**, **Enter**, **Exit**, **Exit**, **Enter** and **Exit** on the controller by sequence again and OSD will be unlocked.
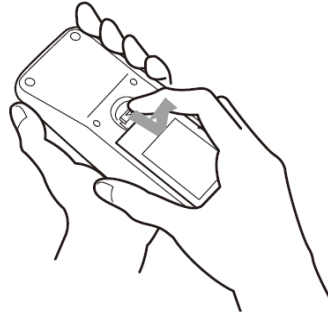
Key Locked   Key Unlocked

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Change The RCU Battery
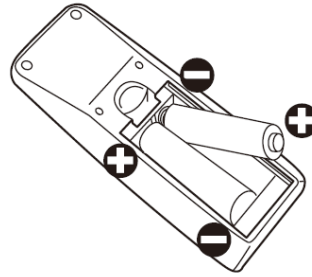
1. Remove the battery cover

   Slide back and remove the battery cover in the direction of the arrow.
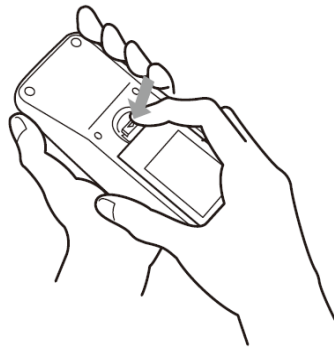
2. Insert the batteries

   Align and insert two AAA batteries according to their plus and minus ports (as indicated in the remote control).

3. **Close the battery cover**

   Replace the battery cover in the direction of the arrow and snap it back into place.

   i. Used batteries needed to follow the city rule to be discarded.
   ii. Avoid keeping used, old batteries inside the remote control, causing leakage of internal liquid resulting metal rust or fatal damage to the remote control hand unit.
   iii. Battery to be used according to the instruction

⚠ CAUTION

About the remote control
◆ Don't drop, shake or bump.
◆ Don't place on wet materials.
◆ Don't dismantle.
◆ Don't place in locations with exposure to high-temperature or high-humidity levels.

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Display Mode

Turning the monitor on
1. Correctly insert the power cord into monitor and into the power outlet.
2. Ensure the AC switch is set to "—".
3. Press the power button on the remote or side control panel.

Turning the monitor off
With the power on, press the power button on the remote or side control panel to put the monitor in a standby mode. To turn off power completely, turn the AC switch to "O" or disconnect the AC power cord from the power outlet.

> ✎ **Note:**
> If there is no signal input for a period of time, the monitor will automatically go to standby mode.

Adjusting the Volume
1. Using the remote, press the **VOLUME-** or **VOLUME+** to increase or decrease the volume.
2. Press the **MUTE** button to temporarily turn off all sound. To restore the sound, press the **MUTE** button again.
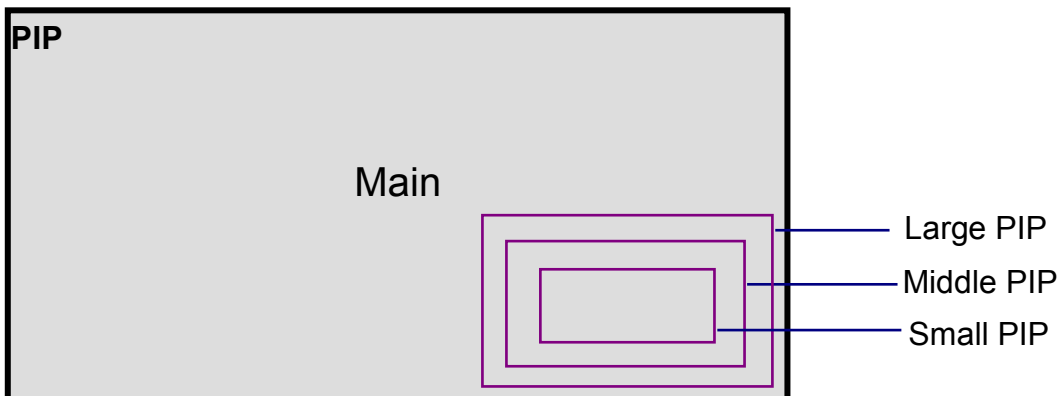
Selecting the input source
1. Using the remote, press the desired source button (VGA, HDMI1, HDMI2, COMP, VIDEO or S-V)
2. Or press **SOURCE** on the monitor keypad, use the arrow buttons (▲ ▼) to navigate to the desired input source, and press **ENTER**:
   - ◆ **HDMI 1**
   - ◆ **HDMI 2**
   - ◆ **VGA**
   - ◆ **Component (AA version only)**
   - ◆ **S-Video (AA version only)**
   - ◆ **Composite Video (AA version only)**
   - ◆ **DVI (AA version only)**
   - ◆ **HD-SDi (AA version option)**
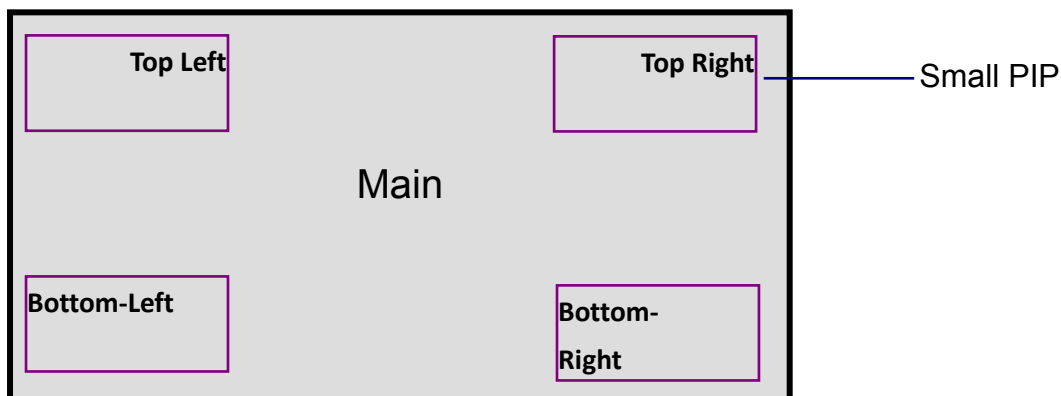3. When the monitor cannot find a source, a "No signal" message will appear.

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PIP mode

1. **Select the main source** – Using the remote, press the desired source button (VGA, HDMI1, HDMI2, COMP, VIDEO or S-V).

2. **Turn on PIP**: Using the remote, press **PIP.**

```
PIP

              Main

                         ———— Large PIP
                         ———— Middle PIP
                         ———— Small PIP
```

3. **To select the PIP/ sub-source:** Using the remote, press **P-SOURCE** and use the arrow buttons (▲ ▼) to navigate to the desired sub-source. Press **ENTER**.

4. **To change the size and position of the sub-source:** Using the remote, press **P-POSITION** to toggle through the options.

```
Top Left              Top Right   ———— Small PIP

              Main

Bottom-Left           Bottom-
                      Right
```

5. **To switch the main source and the subsource:** Using the remote, press **SWAP.**

```
SWAP



                         Main
```
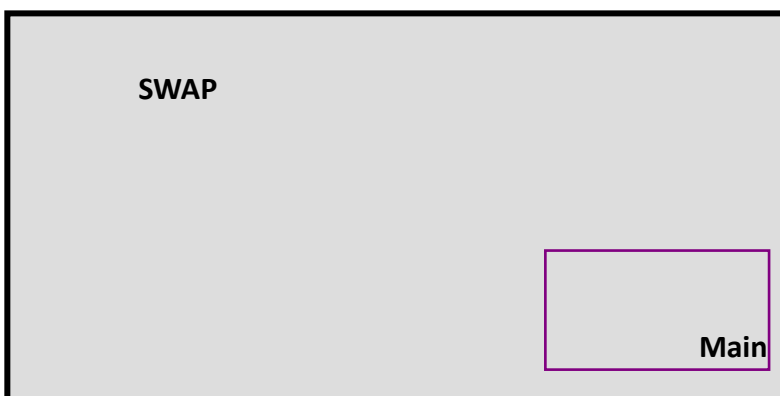
6. **To switch audio between the main source and the subsource:** Using the remote, press **AUDIO.**

7. **Note:** For additional **PIP** functionality, press **MENU** and navigate to the **Display Settings** menu. Use the arrow buttons (▲ ▼) to navigate to the desired **PIP** feature and press **ENTER**. Press ▶ to toggle through the associated options and press **ENTER** to select the highlighted option.
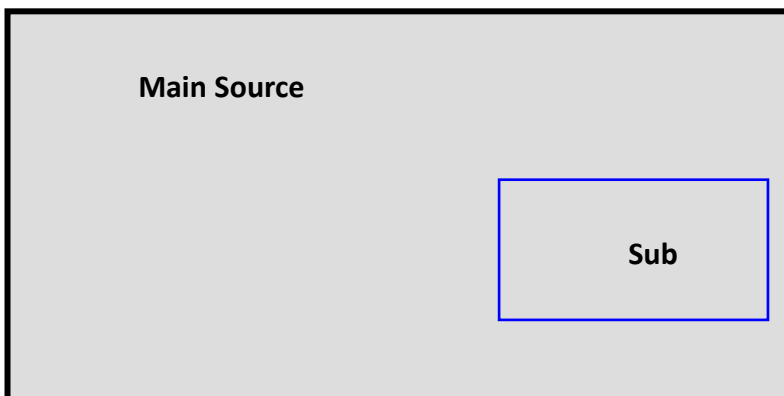
8. **Side by Side (Picture-by-Picture):** Press **P-POSITION** button choose "Side by side" mode, then the main source and the subsource will be on the screen display.
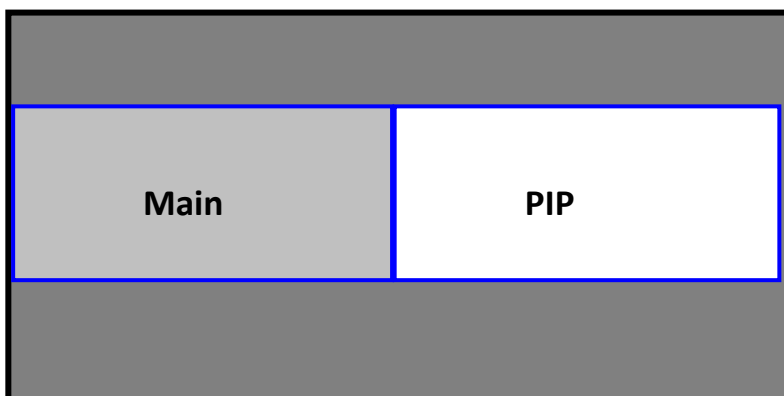
PIP Screen Table

	HDMI 1	HDMI 2	VGA	Component	S-Video	Video
HDMI 1	—	—	Yes	Yes	Yes	Yes
HDMI 2	—	—	Yes	Yes	Yes	Yes
VGA	Yes	Yes	—	Yes	Yes	Yes
Component	Yes	Yes	Yes	—	Yes	Yes
S-Video	Yes	Yes	Yes	Yes	—	Yes
Video	Yes	Yes	Yes	Yes	Yes	—

OSD (On Screen Display) Menu Function

Graphics Mode

Main Menu	Sub-Menu	Sub-Sub menu	Description	Setting
Image Settings	Scheme		Disabled in Graphics mode	
	Brightness		Adjust the brightness of the screen	0~100
	Contrast		Adjust the contrast of the screen	0~100
	Sharpness		Adjust the sharpness of the screen	0~24
	Saturation		Disabled in Graphics mode	
	Hue		Disabled in Graphics mode	
	Backlight		Adjust the backlight	0~100
	Color Temp & Gamma	Gamma	Select the Gamma	2.2, Off
		Color Temp	Select the Color Temp	5000K ,6500K,7500K, 9300K,User
		Red Gain	Select the Red Gain	128 ~ 384
		Green Gain	Select the Green Gain	128 ~ 384
		Blue Gain	Select the Blue Gain	128 ~ 384
		Red Offset	Select the Red Offset	-50 ~ 50
		Green Offset	Select the Green Offset	-50 ~ 50
		Blue Offset	Select the Blue Offset	-50 ~ 50
Display Settings	Main	Aspect Ratio	Adjust the aspect ratio of the screen	Full screen, Pillar Box Letter Box ,Native
		Zoom	Adjust the zoom function	►◄
		Auto Scan	Select the Auto scan function	Off, On
		Select source	Select the main input source	VGA,HDMI1/2, AA option: Video,S-V,Comp DVI,SDi 1/2
	PIP	PIP mode	Select PIP mode	Off, Large PIP, Medium PIP, Small PIP, Side by Side
		PIP Position	Select PIP location	Bottom-Right, Top-Left Top-Right, Bottom-Left
		Aspect Ratio	Adjust the aspect ratio of the screen	Full screen, Pillar Box Letter Box
		Side by Side Scale		► PIP
				◄ Main
				▲ Zoom IN
				▼ Zoom Out
		Auto Scan	Select the Auto scan function	Off, On
		Select source	Select the main input source When PIP mode is enable	VGA,HDMI1/2, AA option: Video,S-V,Comp DVI,SDi 1/2
Audio Settings (AA Option)	Volume		Adjust volume	0 ~ 100
	Bass		Adjust Bass vol	0 ~ 20
	Treble		Adjust Treble volume	0 ~ 20
	Balance		Adjust the balance of the screen	0 ~ 20
	HDMI Audio Input		SPDIF & audio input Control	HDMI/PC
Basic Settings	OSD Transparent		Adjust the OSD transparent function	0 ~ 100
	OSD Location		Adjust the OSD location	►◄▲▼
	OSD Zoom		Adjust the OSD size (Disable in portrait type)	Off, On
	OSD Rotation		Adjust the OSD rotation	0˚/90˚/180˚/270˚
	OSD Language		Select the OSD language	English/ Chinese
	OSD Timeout		Select the OSD timeout seconds	5~120 sec.
	Sleep Timer		Select the sleep timer	Off, 15,30,60,90,120 Min.
	Real Time Clock		Setup Date & Time	

Main Menu	Sub-Menu	Sub-Sub menu	Description	Setting
Advanced Settings	Auto Adjustment		Select Auto adjustment function	Off, On
	Image Position		► 0~ -100 ◄ 0 ~ 100 ▲ according to resolution ▼ according to resolution	
	Phase		According to resolution	
	Clock		According to resolution	
	Flesh Tone		Disabled in Graphics mode	
	Front LED		Select the front LED function	Off, On
	IRFM		Select the anti burn in mode function	Off, On
	Band rate		Setting the band rate of monitor	115200,38400,19200,9600
	Monitor ID		Setting the ID of monitor	1 ~ 255
	Light Sensor		Select light sensor function	Off, On
	Factory Reset		Reset to the factory default setting	Yes, No
	VGA ADC Settings		User ADC calibration	
System Status	Channel Information	Source	Show the name of input source	
		Resolution	Show the current resolution	
		Firmware Version	Show the firmware of the monitor	

Video Mode

Main Menu	Sub-Menu	Sub-Sub menu	Description	Setting
Image Settings	Scheme		Select the scheme	User,Vivid,Cinema,Game Sport
	Brightness		Adjust the brightness of the screen	0~100
	Contrast		Adjust the contrast of the screen	0~100
	Sharpness		Adjust the sharpness of the screen	0~24
	Saturation		Adjust the saturation of the screen	0~100
	Hue		Adjust the hue of the screen	0~100
	Backlight		Adjust the backlight	0~100
	Color Temp & Gamma	Gamma	Select the Gamma	2.2, Off
		Color Temp	Select the Color Temp	5000K,6500K,7500K, 9300K,User
		Red Gain	Select the Red Gain	128 ~ 384
		Green Gain	Select the Green Gain	128 ~ 384
		Blue Gain	Select the Blue Gain	128 ~ 384
		Red Offset	Select the Red Offset	-50 ~ 50
		Green Offset	Select the Green Offset	-50 ~ 50
		Blue Offset	Select the Blue Offset	-50 ~ 50
Display Settings	Main	Aspect Ratio	Adjust the aspect ratio of the screen	Full screen, Pillar Box, Letter Box, Native
		Zoom	Adjust the zoom function	►◄
		Auto Scan	Select the Auto scan function	Off, On
		Select source	Select the main input source	VGA,HDMI1/2, AA option: Video,S-V,Comp DVI,SDi 1/2
	PIP	PIP mode	Select PIP mode	Off, Large PIP, Medium PIP, Small PIP, Side by Side
		PIP Position	Select PIP location	Bottom-Right, Top-Left Top-Right, Bottom-Left
		Aspect Ratio	Adjust the aspect ratio of the screen	Full screen, Pillar Box Letter Box
		Side by Side Scale		► PIP
				◄ Main
				▲ Zoom IN
				▼ Zoom Out
		Auto Scan	Select the Auto scan function	Off, On
		Select source	Select the main input source When PIP mode is enable	VGA,HDMI1/2, AA option: Video,S-V,Comp DVI,SDi 1/2
Audio Settings (Audio Setting)	Volume		Adjust volume	0 ~ 100
	Bass		Adjust Bass volume	0 ~ 20
	Treble		Adjust Treble volume	0 ~ 20
	Balance		Adjust the balance of the screen	0 ~ 20
	HDMI Audio Input		SPDIF & audio input Control	HDMI/PC
Basic Settings	OSD Transparent		Adjust the OSD transparent function	0 ~ 100
	OSD Location		Adjust the OSD location	►◄▲▼
	OSD Zoom		Adjust the OSD size (Disable in portrait type)	Off, On
	OSD Rotation		Adjust the OSD rotation	0°/90°/180°/270°
	OSD Language		Select the OSD language	English/ Chinese
	OSD Timeout		Select the OSD timeout seconds	5~120 sec.
	Sleep Timer		Select the sleep timer	Off, 15,30,60,90,120 Min.
	Real Time Clock		Setup Date & Time	

Main Menu	Sub-Menu	Sub-Sub menu	Description	Setting
Advanced Settings	Auto Adjustment		Disabled if not a VGA mode	
	Image Position		Disabled if not a VGA mode	
	Phase		Disabled if not a VGA mode	
	Clock		Disabled if not a VGA mode	
	Flesh Tone		Select the flesh tone setting	Off, High, Medium, Low
	Front LED		Select the front LED function	Off, On
	IRFM		Select the anti burn in mode function	Off, On
	Band rate		Setting the band rate of monitor	115200,38400,19200,9600
	Monitor ID		Setting the ID of monitor	1 ~ 255
	Light Sensor		Select light sensor function	Off, On
	Factory Reset		Reset to the factory default setting	Yes, No
	VGA ADC Settings		Disabled if not a VGA mode	
System Status	Channel Information	Source	Show the name of input source	
		Resolution	Show the current resolution	
		Firmware Version	Show the firmware of the monitor	

On-Screen Display (OSD)

Menu Overview
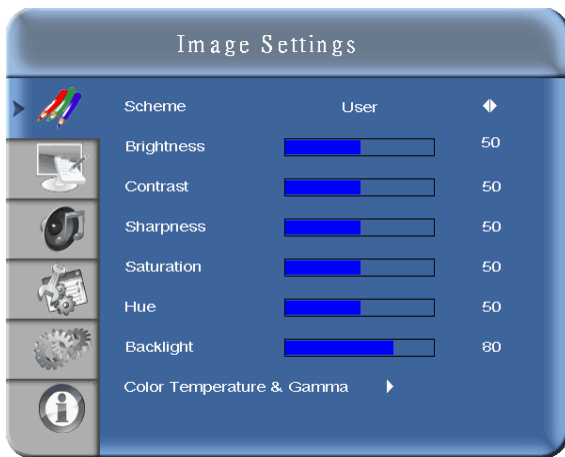### Navigating through the Menu System
1.   With the power on, press **MENU. T**he **Image Settings** menu will display.
2.   Within the menu, use ▲,▼,◄, ►, and **ENTER** to navigate through the menus and adjust options.
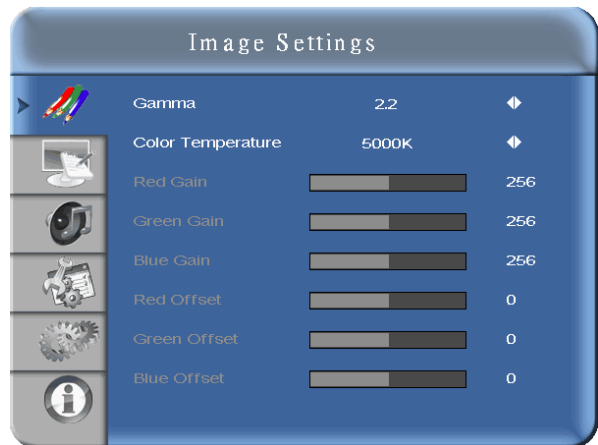3.   Press **MENU** to return to the previous menu. To exit the menu system, press **EXIT**.

Image Settings Menu
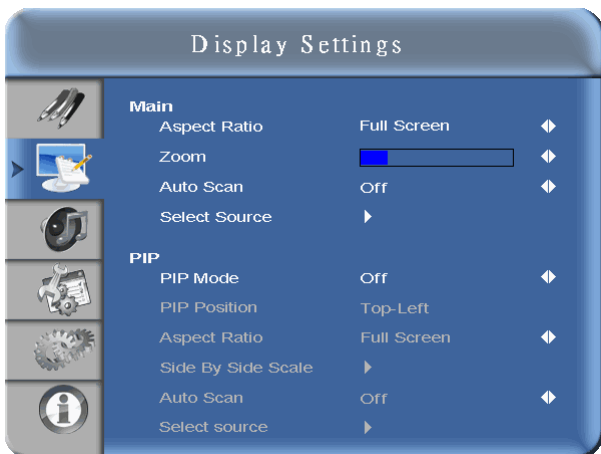
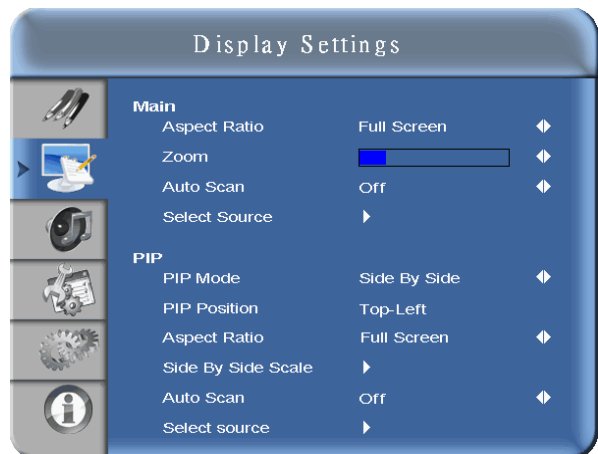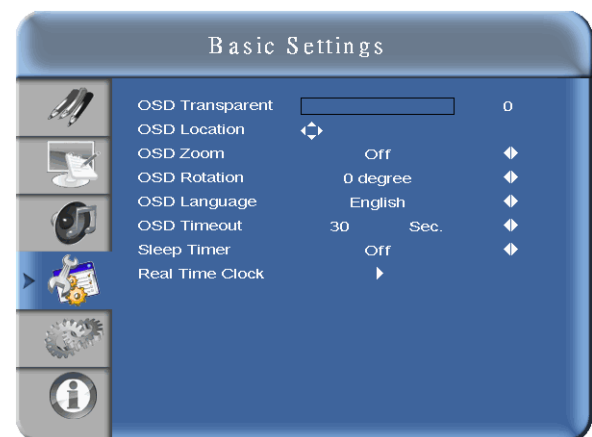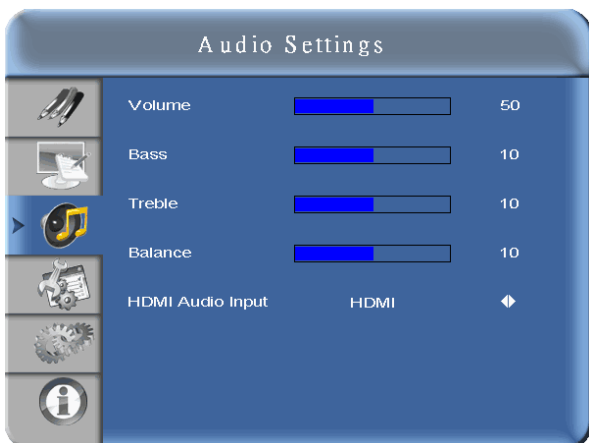This menu is used for making common image adjustments.

Image settings – Main setting

Display settings

PiP

Audio Settings (AA option)

Basic Settings

25

System Status   **Advanced Settings**

System Status

Channel Information		
	Source	Resolution
Main	HDMI1	1024x768@60.0Hz
PIP	VGA	1024x768@60.0Hz

Firmware Version   V 0.01

Advanced Settings

Auto Adjustment	No	◆
Image Position	▶	
Phase	[====]	0
Clocks	[====]	0
Flesh Tone	Off	
Front LED		◆
IRFM	Off	◆
Baud Rate	115200	◆
Monitor ID	0	◆
Light Sensor	Off	◆
Factory Reset	No	◆
VGA ADC Settings	▶	

VT420 Series   www.vartechsystems.com

Scheme	
	Press ◄ or ► to select one of the following: **Options:** User, Vivid, Cinema, Game, Sport **Default:** User
Brightness	
	Increases or decreases the brightness of picture. Press ◄ or ►, select the desired level, and then press **ENTER**. **Range:** 0~100; **Default**: 50
Contrast	
	Increases or decreases the contrast of picture. Press **◄ or ►,** select the desired level, and then press **ENTER**. **Range:** 0~100; **Default**: 50
Sharpness	
	Adjusts the definition of picture. Press **◄ or ►,** select the desired level, and then press **ENTER**. **Range:** 0~24; **Default**: 10
Saturation	
	Adjusts the brilliance and brightness (only Video Mode). Press ◄ or ►, select the desired level, and then press **ENTER**. **Range:** 0~100; **Default**: 50
Hue	
	Increases or decreases the green hue (Only Video Mode). Press **◄ or ►,** select the desired level, and then press **ENTER.** **Range:** 0~100; **Default**: 50
Back Light	
	Range: 0~100; **Default**: 80
Color Temp and Gamma	Adjusts red, green, blue gain and red, green blue offset.

Image Settings Menu (continued)
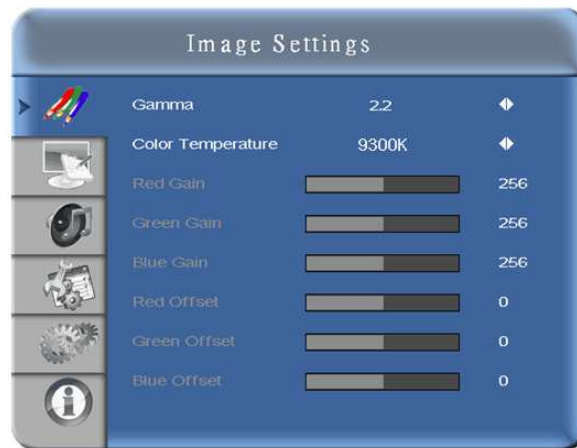
Gamma	
	Options: Off, 2.2
	Default: 2.2
Color Temp	
	Options: User, 5000K, 6500K, 7500K and 9300K.
	Default: 9300K
Red Gain	
	Set Color Temperature to "User Mode" in order to adjust this setting.
	Range: 128~384
	Default: 256
Green Gain	
	Set Color Temperature to "User Mode" in order to adjust this setting.
	Range: 128~384
	Default: 256
Blue Gain	
	Set Color Temperature to "User Mode" in order to adjust this setting.
	Range: 128~384
	Default: 256
Red Offset	
	Set Color Temperature to "User Mode" in order to adjust this setting.
	Range: -50~50
	Default: 0
Green Offset	
	Set Color Temperature to "User Mode" in order to adjust this setting.
	Range: -50~50
	Default: 0
Blue Offset	
	Set Color Temperature to "User Mode" in order to adjust this setting.
	Range: -50~50
	Default: 0

Display Settings Menu

This menu is used for common source adjustments.
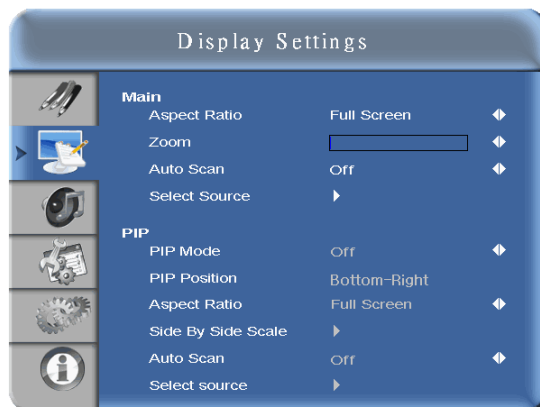
Main	
	The Display Setting Mode.
Aspect Ratio	
	Changes the picture aspect ratio Press ◄,► to select the following options: **Options:** Full screen, Pillar Box, Letter Box ,Native **Default:** Full screen
Zoom	
	Range: 0~10 **Default**: 0
Auto Scan	
	Range: On, Off **Default**: On
Select Source	
	Options: HDMI1, HDMI2, VGA, Component, S-Video and Video **Default**: HDMI1
PIP	
PIP Mode	
	Options: Off, Large PIP, Middle PIP, Small PIP and Side-by-Side **Default**: Off
PIP Position	
	Options: Bottom-Right, Top-Left, Top-Right and Bottom-Left **Default**: Bottom-Right
Aspect Ratio	
	Options: Full screen, Pillar Box, Letter Box **Default**: Full screen
Side by Side Scale	
	Submenu Options: Zoom In, Zoom Out, Main, PIP, Default and Return
Auto Scan	
	Options: On, Off **Default**: On
Select Source	
	Options: HDMI1, HDMI2, VGA, Component, S-Video and Video **Default**: VGA

Audio Settings Menu

This menu is used for adjusting volume settings.

| **Volume**	
	Adjust the sound. Press ◄ or ►, select the desired level, and then press **ENTER**.
	Range: 0~100
	Default: 50
Bass	
	Adjust the sound in low tones (bass). Press ◄ or ►, select the desired level, and then press **ENTER**.
	Range: 0~20
	Default: 10
Treble	
	Adjust the sound in high tones (Treble). Press ◄ or ►, select the desired level, and then press **ENTER**.
	Range: 0~20
	Default: 10
Balance	
	Adjust the balance of the left and right speakers. Press ◄ or ►, select the desired level, and then press **ENTER**.
	Range: 0~20
	Default: 10
HDMI Audio Input	
	Select HDMI and PC audio input mode.
	Default: HDMI

Basic Settings Menu

This menu is used to make initial set-up adjustments to the OSD (On-Screen Display) menu and other on-screen messages.
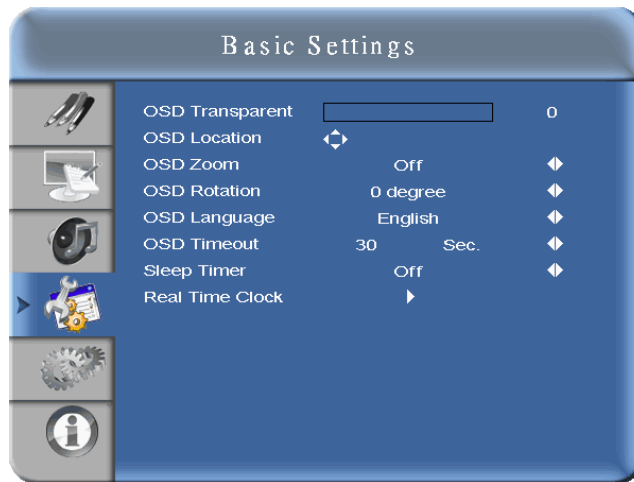
OSD Transparent	
	Set the menu transparency. Press ◄ or ► to select the desired level, and then press **ENTER**. **Range:** 0~100 **Default**: 0
OSD Location	
	Adjust the menu location on the monitor (Up, Down, Left, Right).
OSD Zoom	
	Options: On, Off **Default**: Off
OSD Rotation	
	Select the OSD Rotation. Press ◄ ► select the rotation. **Options:** 0, 90, 180, 270 **Default**: 0 degree
OSD Language	
	Options: English and Chinese **Default:** English
OSD Timeout	
	Options: 5~120 **Default**: 30
Sleep Timer	
	Set a period of time after which the monitor will switch to standby mode automatically. Press ◄ ► to select the desired time limit. **Options:** Off, 15, 30, 45, 60, 90, 120 Min **Default**: Off
Real Time Clock	
	Set date, and switch alarm on and off. Use ▲,▼,◄,► to adjust these options.

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Advanced Settings Menu

Auto Adjustment

Forces the monitor to reacquire and lock to the input signal. This is useful when the signal quality is marginal. Note: This feature does not continually reacquire the signal.
Options: No, Yes
Default: No

Image Position

Image location can be adjusted (Only VGA Mode).
Options: Up, Down, Left, Right

Phase

Range: 0~63 (Only VGA Mode)

Clocks

Range: 0~100 (Only VGA Mode)

Flesh Tone

Options: Off, Low, Medium and High (Only Video Mode)
Default: Off

Front LED

Options: On and Off
Default: On

IRFM

Creates slight frame motion to help avoid image retention.
Options: Off, On
Default: Off

Baud Rate

Options: 115200, 38400, 19200, 9600
Default: 115200

Monitor ID

Options: 1~ 255
Default: 0

Light Sensor

Options: On and Off
Default: Off
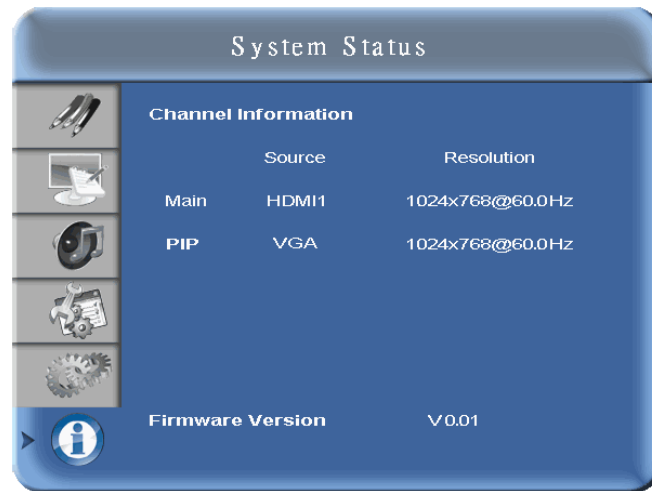
Factory Reset

Restores all settings to their default.
**Options:** No, Yes
Default: No

System Status Menu

This read-only menu provides information on the active sources and the latest firmware version.

User ADC Calibration

1. When using VGA as signal source, go to Advanced Settings in OSD menu and select VGA ADC Settings, then choose User ADC Calibration.
2. A warning message (see image below) will show to make sure proper image is displayed on screen before ADC calibration begins
   i. Image in the green boxes, displayed on both side of the screen, has to be white and black in order to run the calibration accurately (the black and white image can be made using software like Microsoft PowerPoint)
   ii. The white in the left green box has to be the brightest white.
   iii. The black in the right green box has to be the darkest black.
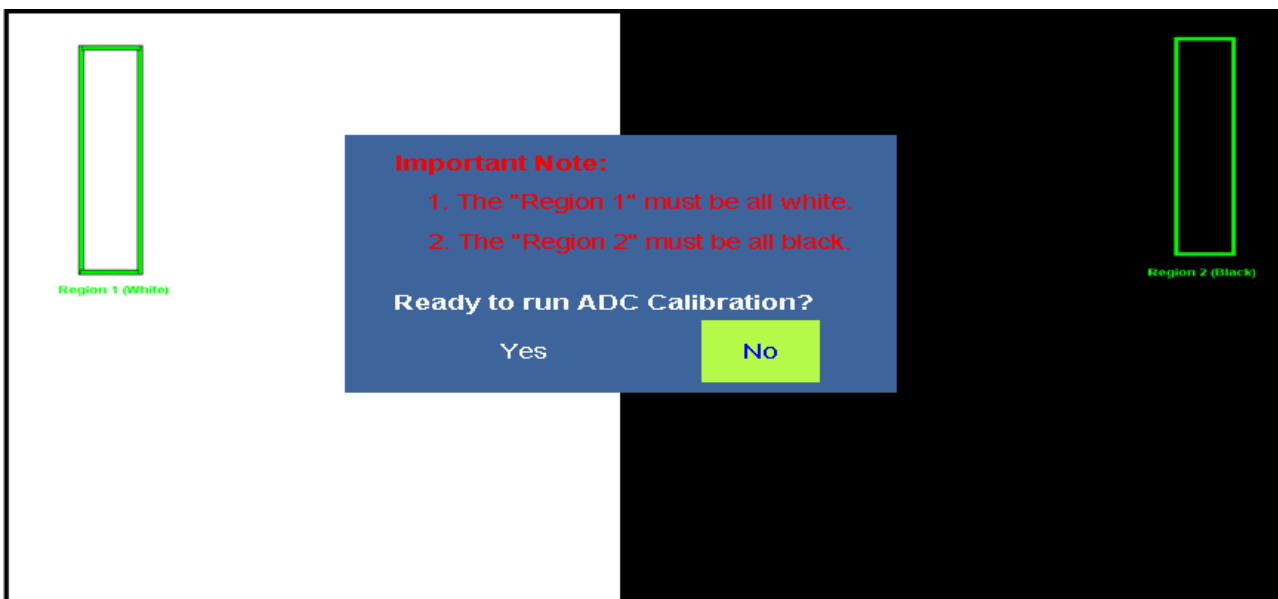
3. After proper image is displayed, click "Yes" to begin ADC calibration
4. During calibration process, the following image will show to notify user to wait for the calibration.

5. After calibration is completed, the display will notify user if the process is done successfully by different messages.


Default Setting

Item	Default Value
Brightness	80
Scheme	Users
Contrast	50
Color temp.	9300K
Language	English
Gamma	2.2
Over-scan	0%
Auto Scan	Off
Default input	HDMI 1
Power status	On
IRFM	Off
Baud rate	115200

Touch Operation

1. Connect the signal cable witch monitor, and then turn on computer.
2. Connect the USB cable with monitor and computer.
3. Turn on the monitor (AC switch on).
4. Connect one side of USB cable (Type-B USB connector) on the monitor side. See below picture. (Check "Connection" section for exact location).
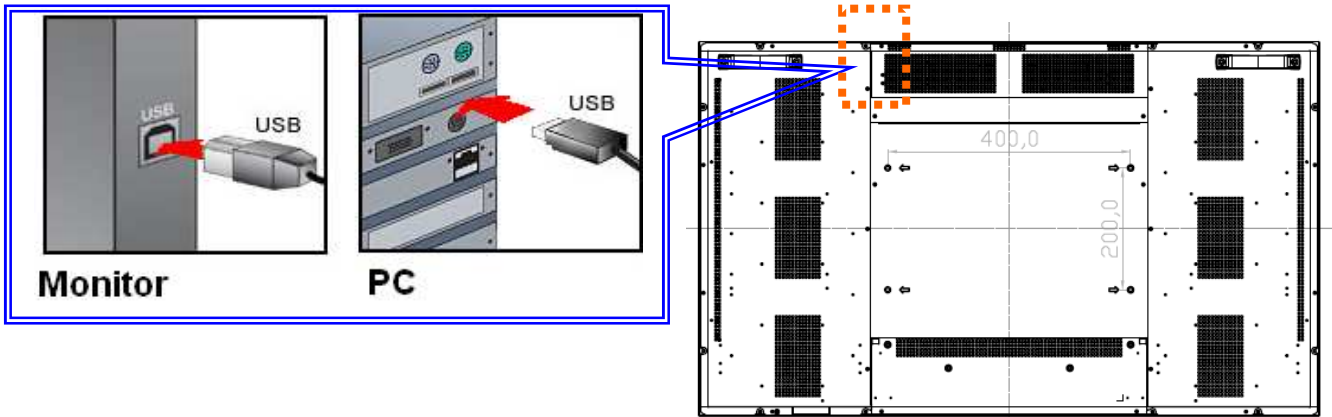
5. Connect the other side of USB cable (Type-A USB) to the USB port on computer. See picture below.
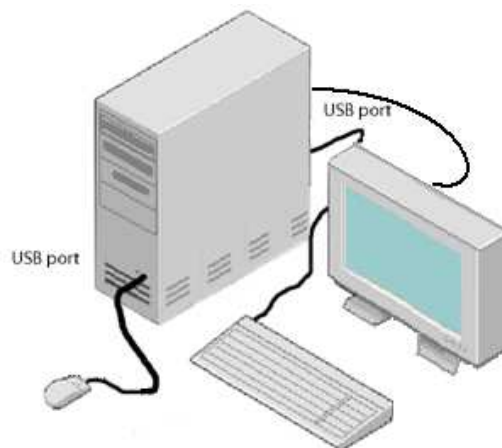
6. Wait for 5 seconds and the touch function is ready to go. It can be activated by pen, finger, or any other pointer.

7. This touch monitor support Operation System: Windows 2000/XP/Vista/7. (driver required)
   In order to active, go to http://www.nextwindow.com/nextwindow_support/downloads.html to download the 2500 Series latest driver. Follow the direction in the **NW Multitouch Device Driver Installation Guide** (part of the compressed file along with the driver) to install the driver.

8. Once the driver is installed, restart the PC and the touch function is ready to go with MS Windows 2000/XP/Vista/7.

   .

Supported Timing

Timing			fH (kHz)	fV (Hz)	Dot clock (MHz)	HDMI	VGA	Component(AA)	S-Video(AA)	Composite(AA)	DVI (AA)	HD-SDi (AA opteion)
VESA	VGA 640x480		31.469	59.94	25.175	O	O				O	
			37.861	72.809	31.5	O	O				O	
			37.5	75	31.5	O	O				O	
			43.269	85.008	36	O	O				O	
	SVGA 800x600		35.156	56.25	36	O	O				O	
			37.879	60.317	40	O	O				O	
			48.077	72.188	50	O	O				O	
			46.875	75	49.5	O	O				O	
			53.674	85.06	56.25	O	O				O	
	XGA 1024x768		48.363	60.004	65	O	O				O	
			56.476	70.069	75	O	O				O	
			60.023	75.029	78.75	O	O				O	
			68.677	84.997	94.5	O	O				O	
	WXGA1360x768		47.712	60.015	85.5	O	O				O	
	1280 x 720		44.444	59.98	64	O	O				O	
			44.772	59.86	74.5	O	O				O	
			56.456	74.78	95.75	O	O				O	
	1280 x 768		47.776	59.87	79.5	O	O				O	
			47.396	59.995	68.25	O	O				O	
			68.633	84.837	117.5	O	O				O	
	1280 x 800		49.306	59.91	71	O	O				O	
			49.702	59.81	83	O	O				O	
	SXGA	1152x864	67.5	75	108	O	O				O	
		1280x1024	63.981	60.02	108	O	O				O	
			79.976	75.025	135	O	O				O	
			91.146	85.024	157.5	O	O				O	
	SXGA+	1400 x 1050	64.744	59.95	101	O	O				O	
			65.317	59.98	121.75	O	O				O	
	1440 x 900		55.469	59.901	88.75	O	O				O	
			55.935	59.88	106.5	O	O				O	
	WSXGA+ 1680 x1050		64.674	59.883	119	O	O				O	
			65.29	59.954	146.25	O	O				O	
	UXGA 1600 x 1200		75	60	162	O	O				O	
	1920 x 1080		66.587	59.93	138.5	O	O				O	
	WUXA 1920 x 1200		74.038	59.95	154	O	O				O	
SDTV	NTSC		15.734	29.97	13.5	480i		O	O	O	480i	487i
	PAL		15.625	25	13.5	576i		O	O	O	576i	576i
EDTV	480p		31.5	60	27.03	O		O			O	
	576p		31.25	50	27	O		O			O	
HDTV	720p 1280x720		37.5	50	74.25	O		O			O	O
			44.995	59.94	74.176	O		O			O	O
			45	60	74.25	O		O			O	O
	1080i 1920x1080		28.13	50	74.25	O		O			O	O
			33.716	59.94	74.176	O		O			O	O
			33.75	60	74.25	O		O			O	O
	1080p 1920x1080		27	24	74.25	O						O
			33.75	30	74.25							O
			56.25	50	148.5	O		O			O	O
			67.433	59.94	148.352	O		O			O	O
			67.5	60	148.5	O		O			O	O

V means supported the timing.
480i means supported 480i@60Hz(YPbPr).
576i means supported 576i@60Hz(YPbPr)

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Specification

Item		Specification
LCD panel	Resolution	1920 x 1080 (Full-HD monitor format)
	Brightness	450 cd/m²
	Contrast Ratio	4000
	Response time (GTG)	6.5 ms
	Aspect Ratio	16:9
	Horizontal Sync.	Positive / Negative
	Vertical Sync.	Positive / Negative
	Connectors	HDMI x2/ VGA/ SPDIF/ DVI(★)/ PC audio in(★)/ IR Extender(★)/Audio amplifier (Speaker ready) (★)/ AV(★) /Component(★)/ S-V(★)/ Audio in x2 (★)/ HD-SDi(★)
Scan Rate	Horizontal	31~91 KHz
	Vertical	56~85 Hz
Performance	Auto Adjust	Clock, Phase, H-Position and V-Position
	Screen Scaling	VGA/SVGA/XGA/WXGA/HD monitor Full Screen Display, WUXGA
	Power Management	VESA DPMS
	OSD Language	English and Chinese
Power Source	Power Input	AC 100V~240V
Power Consumption	Operation Mode (Typ.)	231 W
	Power Saving Mode (Typ.)	1W
	Input Frequency Range	50 - 60 Hz
	Rated Input Volt	AC 100-240V
Physical	Dimension (W×H×D)	1022*615.2*135.4mm
	Net Weight	29.0 KG
	Gross Weight w/ packing	33.0 KG
Environment	Storage Temperature	Min -5℃ ~ Max 50℃
	Operating Temperature	Min 5℃ ~ Max 35℃
	Humidity	90% RH @40℃
Function	Plug and Play	DDC 2B Compliance
	RS232	D-Sub 9-pin / RJ-45 in&out
	OSD key	7 keys (⏻,SOURCE, ▶,◀, ▲,▼, MENU/EXIT)
	Wall mount	400 x200 VESA standard
Option	Speaker	Input 1Vp-p, Output: 10W/4Ω x2
Touch Function (42AVT)	Technology	Optical
	Method	Finger, gloved hand, or any other pointer
	Interface	USB (type B female)
	Transmittance	88%
	Operating System	Windows 98/NT/2000/XP/Vista/7 (driver required), Mac OS and Linux

★   Input connecters available on Advanced version only

★   HD-SDi is an option with the Advanced version option.

Troubleshooting

Before calling service personnel, please check the following chart for a possible cause to the trouble you are experiencing.

◆ Perform the adjustments according to page 13 "**Operation The Monitor**"
◆ Refer to the following items if you can't find a proper item listed in the Operating the Monitor or if the problem remain.
◆ if the problem you have experienced isn't described below or you can't correct the problem, stop using the monitor and call service personnel or your dealer.

Problem	Check these things
No Display	Ensure the power plug is installed correctly on both ends.
	Check the main power switch is set to "—"
	Check that source equipment is operating correctly.
	Check the input signal is compatible with this display.
The image is not centered	Check the input signal is compatible with this display.
The image is not locked correctly	Check the input signal is compatible with this display.
The remote control doesn't work	Make sure the batteries fresh and are installed correctly.
	Ensure the remote is aimed at the IR sensor on the front of the display
The picture color looks poor	Check the picture settings.
	Reset the display.
	If you are using YUV terminals, make sure cables are correctly connected.

Compliance

FCC Compliance Statement:
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warning
This is class A products. In a domestic environment this product may
Cause radio interference in which case the user may be required to take adequate
measures.

This device complies with Part 15 of the FCC Rules. Operation is subject to the
following two conditions : (1) this device may not cause harmful interference,
and (2) this device must accept any interference received, including interference
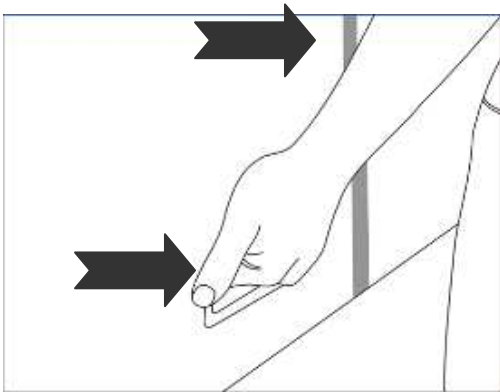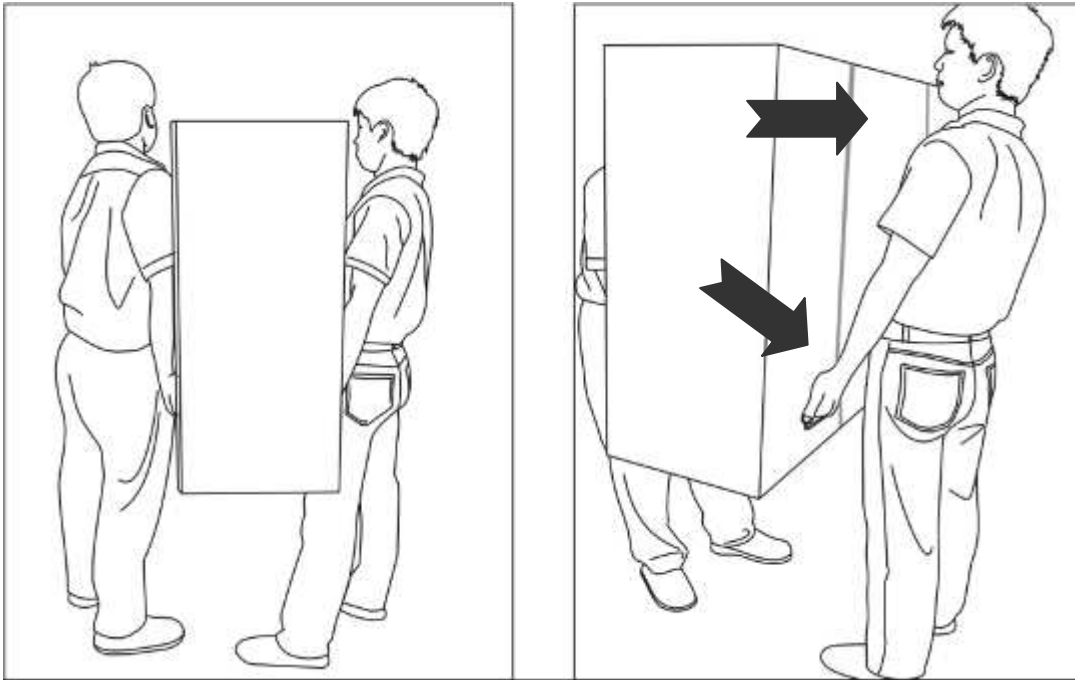that may cause undesired operation.
CE

EN 55022、EN 61000-3-2、EN-61000-3-3
EN 55024、IEC61000-4
EN 60950 [Low-Voltage Directive (73/23/EEC)]

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Appendix I

Moving Notice:

Moving the monitor requires at least two people. If not, it may drop and a serious injury may result.

Moving/shipping the monitor, please hold the white handles.

◆ Carrying Notice :

This monitor is heavy, please follow as below instruction, when you ready to carry the monitor. If not, it may cause an injury.

Appendix II

◆ Installing the table stand kit:

1. Place the monitor (LCD screen face down) on a flat, stable surface, which has been covered with a soft cloth. This will help prevent the monitor from being scratched.
2. Remove the screws (**M8*15 screw x4**) from the stand bracket at the back of the monitor.
3. Align the stand brackets with the mounting holes and attach the brackets to the monitor using the screws removed in Step 2.
4. **Caution: Longer screws will damage the monitor.**

Remove the 4 screws from back of the monitor

Use maximum 15mm/0.59" long screws.

8mm Metric

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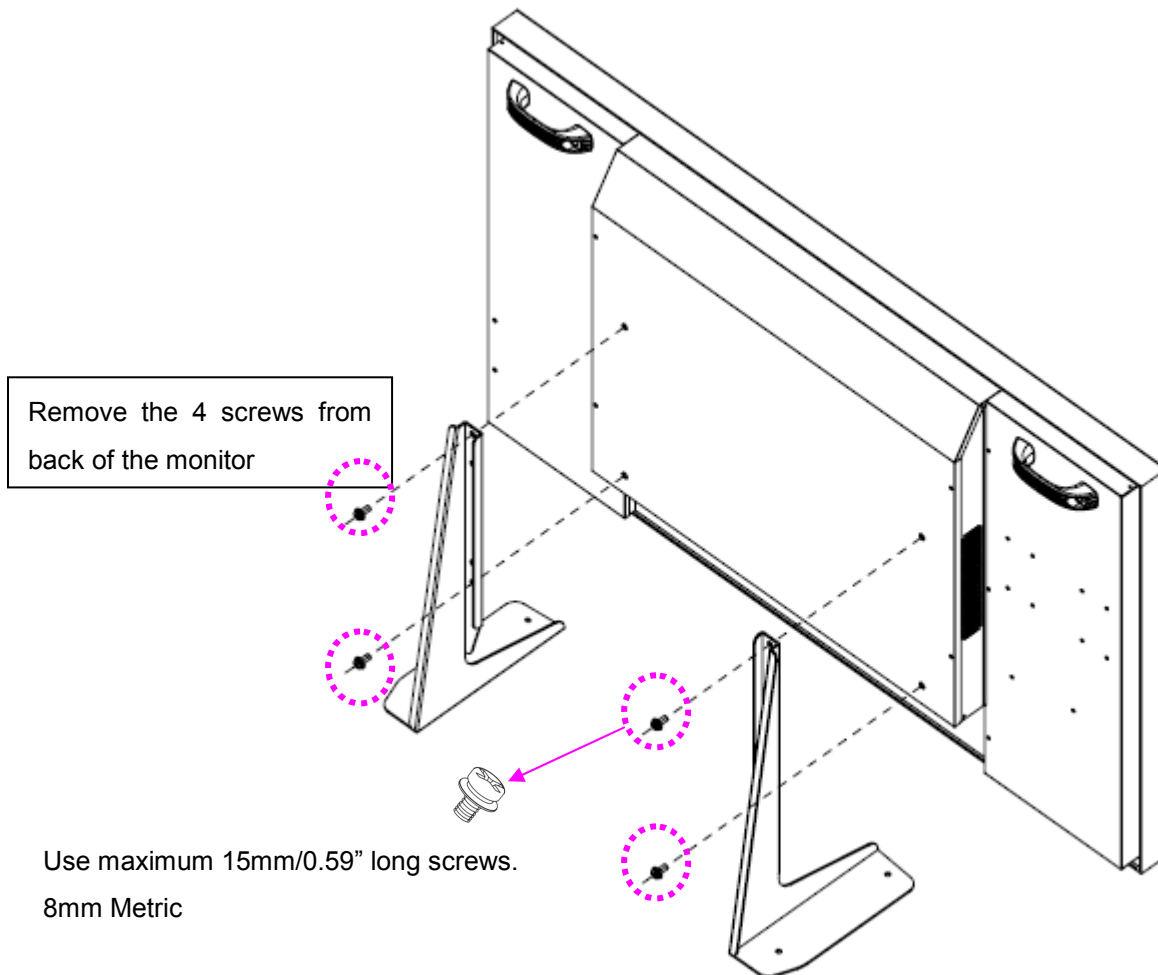
◆ Installing the wall mount kit:

1. Follow the manual instructions for the type of mount you have selected. Refer all servicing to qualified service personnel.
2. Moving the monitor requires at least two people.
3. Before installing, please make sure the wall is strong enough to hold the necessary weight of the display and the mount.

Step1. Keep the display facing the ground and place it on a flat object.
Step2. Remove the 4 screws (M8*15) from the back of the monitor.
Step3. Align the wall brackets with the mounting holes and attach the brackets to the monitor using the screws removed in Step 2.
Caution: Longer screws will damage the monitor.

Remove the 4 screws from back of the monitor

Use maximum 15mm/0.59" long screws.

8mm Metric
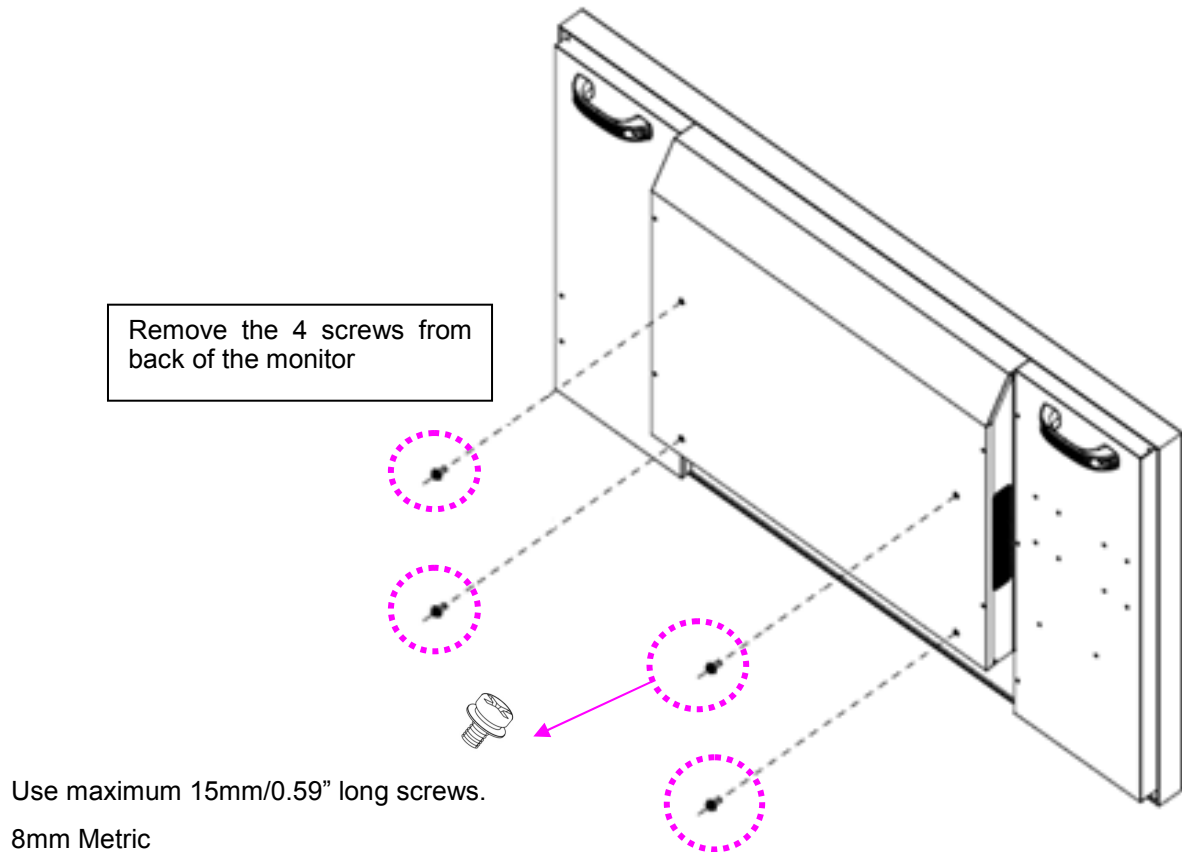
## Appendix III

Wall mounting safety Notes

1. Please make sure if the bracket is fixed to the solid wall / solid pillar for fear of falling due to heavy weight.
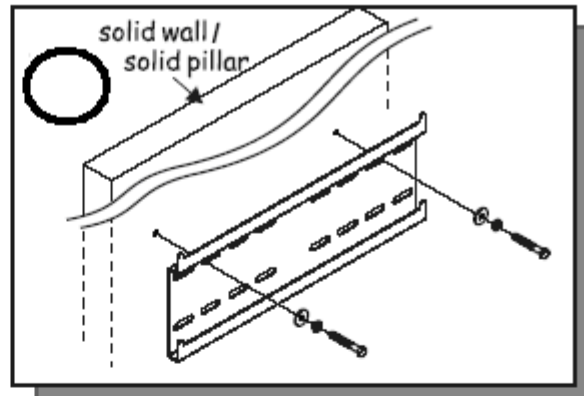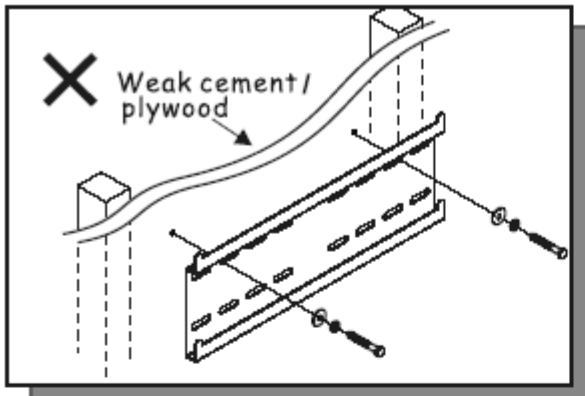
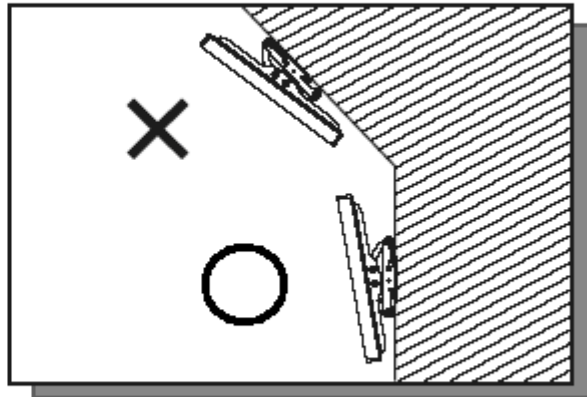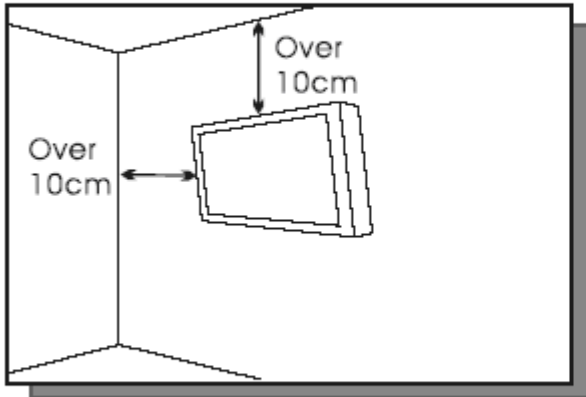**2.** After assembling, please don't pull or shake violently.
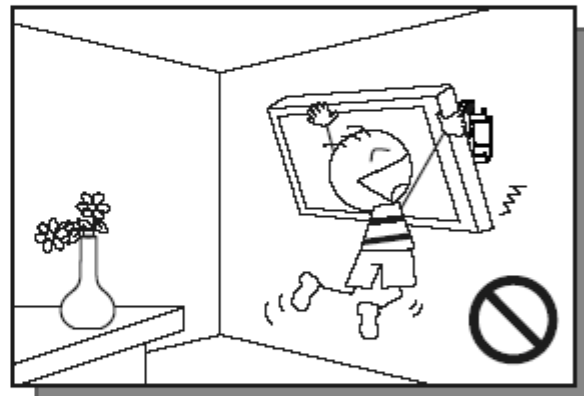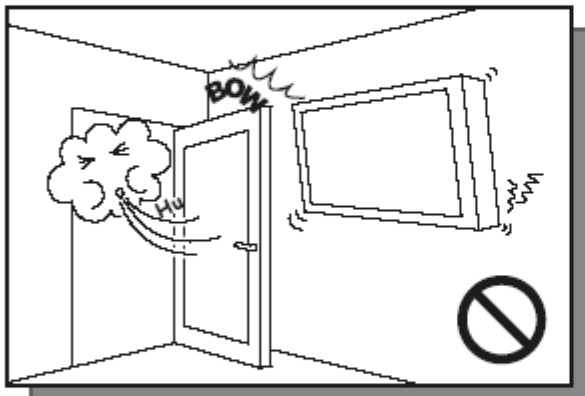
3. Please don't install the bracket directly under the sunshine or humidity / high temperature places for fear that the quality is effected.

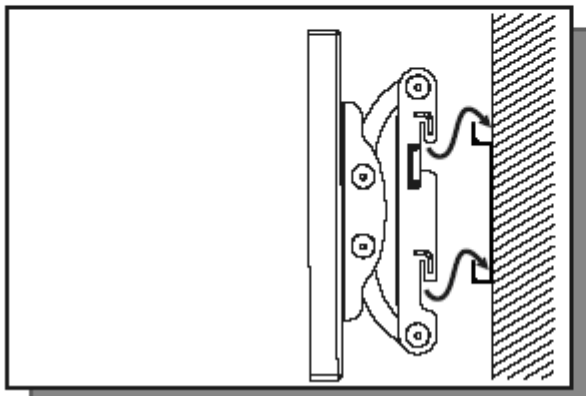VT420 Series   www.vartechsystems.com
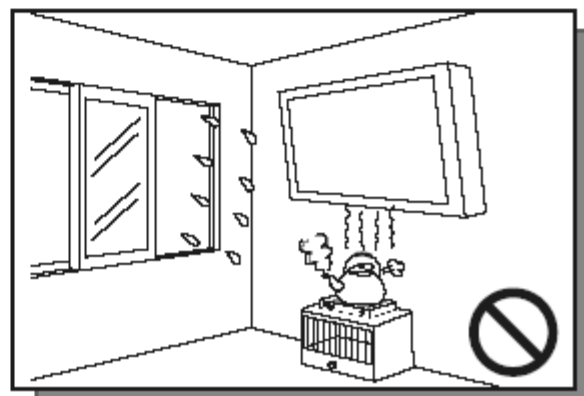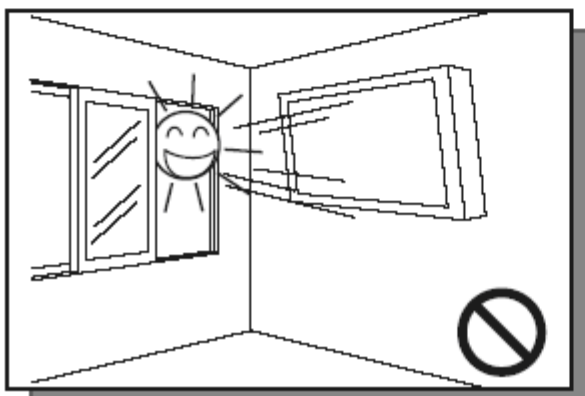
4.

Installing the brakcet over 10 cm from each wall side and being vertical to the ground is the suggested installing position.

5.

Please make sure to hang on the mounting hooks firmly.

6.

The flat screen must be put in the mid of the bracket for fear of slope.