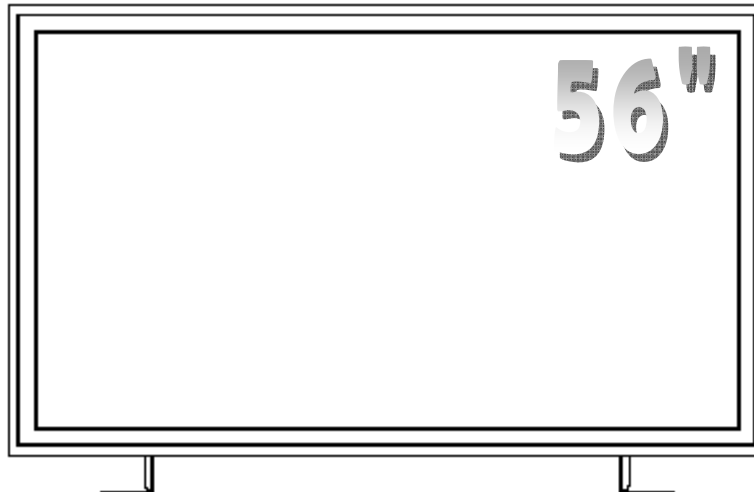


User Manual

LCD monitor

Model: ST-HB56A1X

4 DVI



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※ 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 your own and other people's property from potential damage and ensure your own and other people personal safety.

- ◆ Be sure to observe the following instructions with understanding meaning below.
- ◆ For your safety, be sure to observe the warning in this manual.
- ◆ The installation or adjustment, please follow this manual instructions or 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 .

If the monitor is still used in this condition, it may cause a fire or an electrical shock.
Make sure that the smoke or smell stopped, after that contact your dealer for inspection.

If there isn't picture, remove the power plug from the outlet immediately .

If the monitor is still used in this condition, it may cause a fire or an 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.

If the monitor is still used in this condition, it may cause a fire or an 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 .

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

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

Don't install in the high-temperature environment.

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

Don't install in the high-humidity environment such as a bathroom or close to a humidifier.

This may cause overheating or an 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 an electric shock.

Don't overload outlets or cables beyond electricity capacity.

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

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

This may cause a fire or an 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 an electric shock.

Don't place the monitor on an unstable shelf or desk, such as a shaky table.

The monitor may fall down and cause injury damage. Please install on a horizontal, stable surface.

Don't place objects on the monitor.

- ◆ If the monitor is covered under the newspaper, tablecloth or curtain, the monitor vent could be clogged, and it may make the monitor overheating and cause the fire.
- ◆ If metal or liquid (putting the vase, glass or the cosmetics) get into the monitor, it may cause a fire or an electrical shock.
- ◆ If you put the heavy object on the monitor, it may fall down and cause the injury
- ◆ Please Keep 10cm minimum distance between the monitor and the wall for sufficient ventilation.

Don't move the monitor when it is connecting power cord and cables.

- ◆ When moving the monitor, make sure to take off the power plug and cables from the outlet or sync source. If not, a fire and an electric shock may occur. If the power plug is damaged, injury may result from the monitor is falling down.
- ◆ When unpacking or carrying the monitor, at least 2 people are needed. Make sure the monitor is upright.
- ◆ When moving or putting the monitor, avoiding to face the monitor up or down.
- ◆ Handle the monitor so as not to jolt the monitor.

Use Notice

When getting problem at installation, please contact your distributor to install for you. Don't repair or open the monitor by yourself.

It may cause a fire or an electric shock. The monitor repair, please ask your distributor.

Protect and correctly use the power cord/ plug.

- ◆ Don't heavy press the power cord/ plug, don't step on the power cord/plug.
- ◆ Connect the power cord and the monitor, before insert the power plug into the wall outlet.
- ◆ Don't operate the monitor with a damaged power cord, otherwise the monitor will be damaged.

Using the extension line precautions

If use the extension line, the current power of the voltage should be equal to the power consumption of the monitor at least, if the power of the voltage is smaller than the monitor, it will cause the overheated phenomenon.

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

This may cause an electric shock.

When remove the power plug from outlet on wall, don't revolve the power cord.

This may cause the power cord damaged. When take off the power plug, please hold the plug, don't revolve.

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

- ◆ If the monitor is sprinkled by any kind of liquid, please be sure to take off the power plug and ask a qualified service personnel to check the monitor.
- ◆ If the monitor's surface is touched by water, please clean it with a dry and soft cloth immediately.
- ◆ Don't sprinkle volatile liquid on the monitor such as insecticide.
- ◆ If the liquid enter the monitor, it may cause the electrical failure.

Don't insert or take off the power plug with wet hands.

This may cause an electric shock.

If the monitor isn't in use for a long time, for safety, please take off the power plug.

This may cause breakdown, or it may cause a fire.

If the monitor isn't in use for a long time, take off the power plug and store it in the proper package. The original carton and packing should be used, if possible.

Don't compress on the monitor panel.

This may cause personnel injury or panel damage and break-down.

Don't push or shake the monitor.

This may cause breakdown and the injury.

- ◆ If the glass of the monitor panel is broken, liquid crystals may transude. Please don't touch the liquid crystals.
- ◆ If liquid crystals get into your eyes or touch your skin, wash with the clean water and go to a doctor immediately.

Clean Notice

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

The dust may cause a fire due to reduced insulation of the plug.

Take off the power plug before cleaning.

If not, it may cause an electric shock. Don't revolve the power cord and the plug from the outlet.

Or, it may cause electric shock.

Cleaning the surface of the monitor.

- ◆ When the surface of the monitor is polluted, please wipe the surface with the cotton or clean cloth lightly.
- ◆ If pollution is not easy to clean out, can use the cloth with 50% of the alcohol .
- ◆ Please notice carefully that not to let alcohol enter the monitor, it may cause electrical failures.

Warning For Use

On using

- ◆ The monitor may produced overheat phenomenon during operation. Please be careful.
- ◆ In case of the moving of long distance, please wrap the monitor with blanket to avoid damages. Please be careful not to bump to the monitor.
- ◆ Don't expose in the rubber or vinyl for a long time. It will damage the coating.
- ◆ Avoid keeping a static picture on this monitor, or it may cause a "burn in" image (image retention).
- ◆ "Burn in" image (image retention) is not covered under warranty.
- ◆ Make sure change the image on the monitor periodically. Ex. after working for 18 hours, turn off the monitor for 6 hours pre days.

Exemptions

- ◆ This product isn't liable for any damage 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 liable 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 liable for any damage cause by inappropriate operation, or not follows the user manual.
- ◆ This product isn't liable for any damage cause by misuse or malfunction through simultaneous use of this product and the connected equipment or software.
- ◆ This product isn't liable for any damage cause by neglect of the instructions described about installation.
- ◆ This product isn't liable for any damage cause by improper installation.
- ◆ This product isn't liable for any damage cause by disassembled, modified or maintained by non- authorized service center or people.

Features

Ultra High-resolution monitor

This monitor supports 3840 x 2160 Quad Full High Definition (QFHD) format and can display true 16.7M colors, you can enjoy extreme fine pictures and mode-landscape, map.

Shiny finish with a mirror plane

Low reflection coating < 2% reflection

MVA system less-reflection

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, enough to enjoy clear images at any view angle.

Offer a dimmer control wheel.

Control the monitor backlight directly.

Package Contents

Packing list

Q'ty	Item	Q'ty	Item
1 set	ST-HB56A1X	4 pcs	DVI-D(M) dual link cable
1 pcs	Power cord		

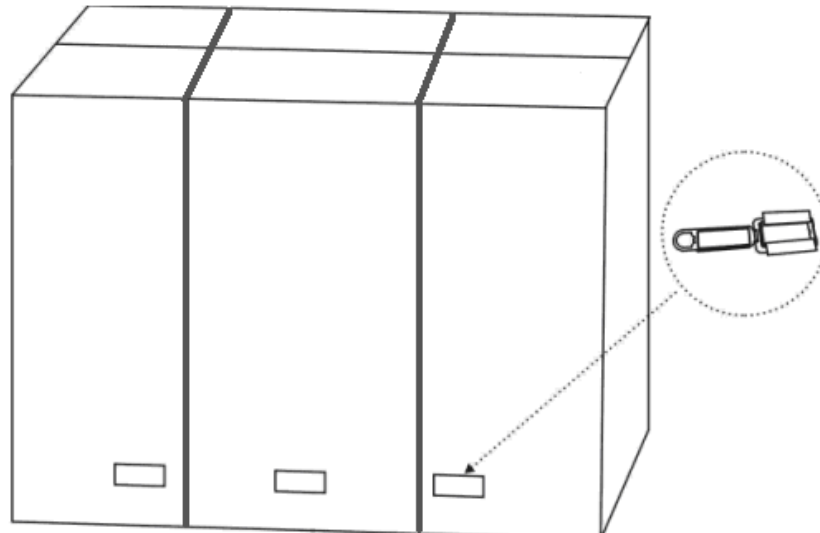
Unpacking

ST-HB56A1X is packed by the carton box. During transportation, in order to protect the monitor, ST-HB56A1X is packed by cushions to be safe protect and package.

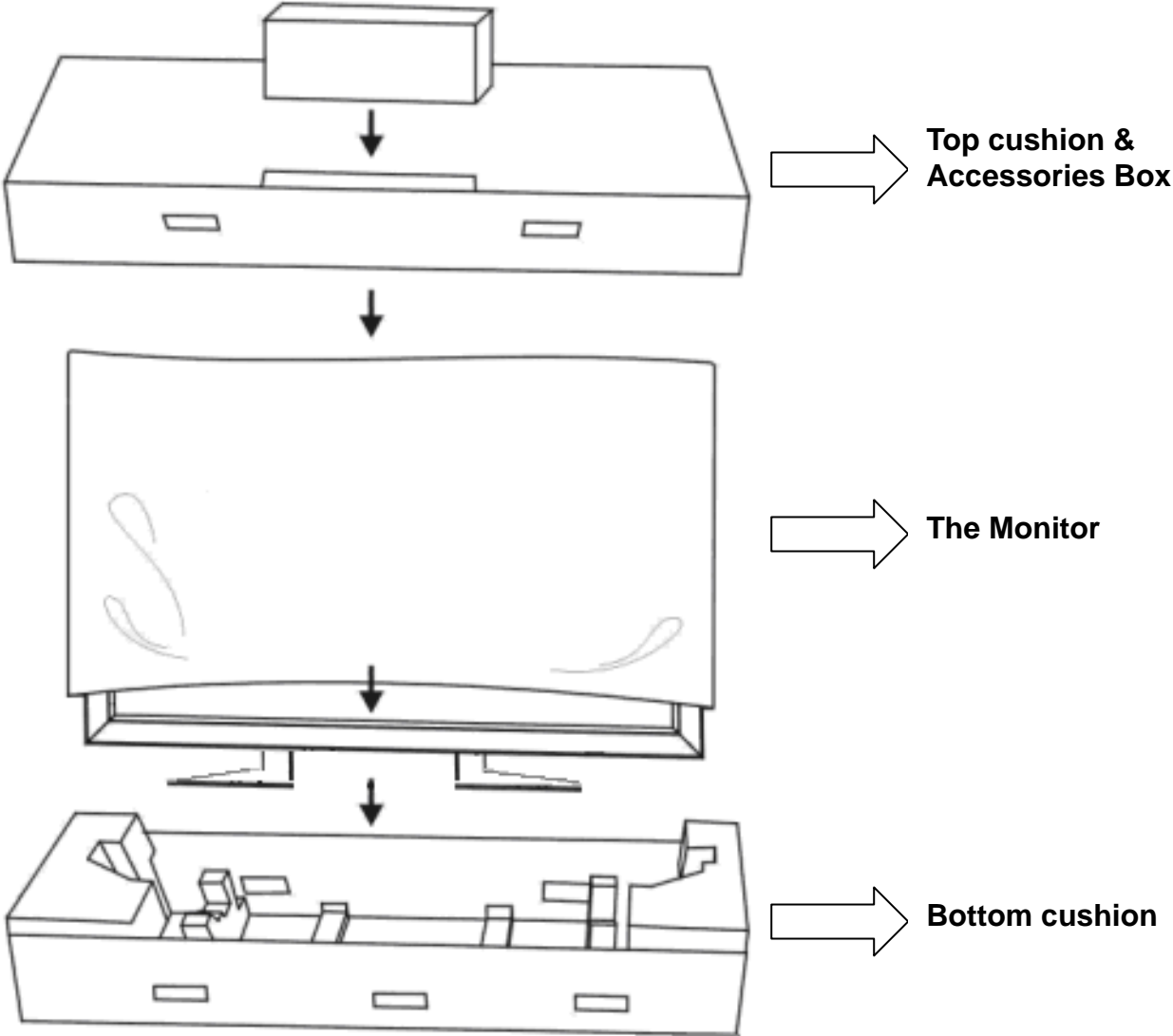
Before unpacking your monitor, prepare a stable, level, and clean surface near a wall outlet for your monitor first.

Set the LCD Monitor box in an upright position and open from the top of the box before removing the top cushions.

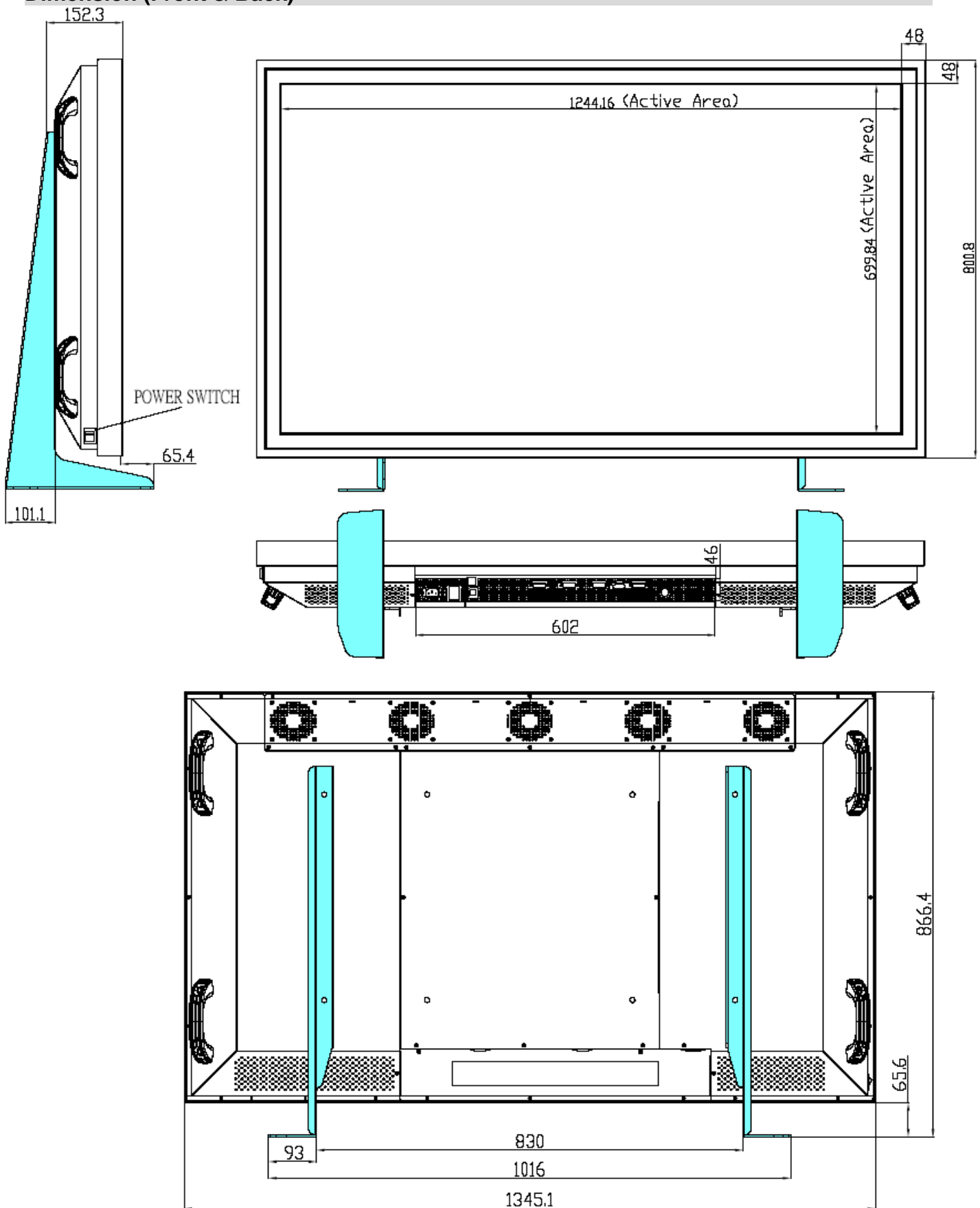
- Step 1: Remove the white handle and cut the bundle



- Step 2: Remove the top cushion and take the accessories box out.



Dimension (Front & Back)



Installation

Power Input

Environmental state

- Operating temperature : 5°C ~ 40°C (Fahrenheit : 41°F ~ 104°F)
- Humidity : max. 85%

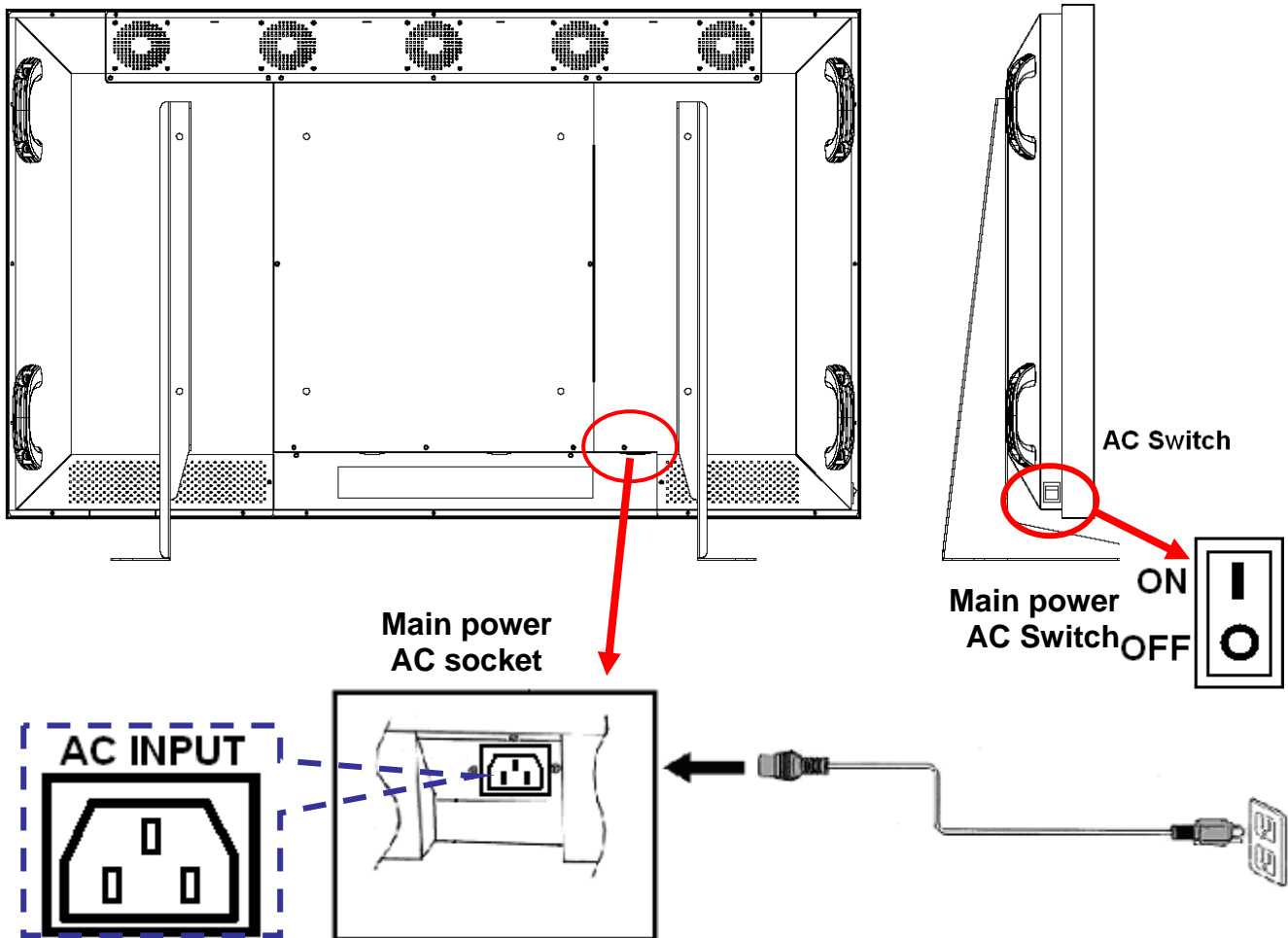
Power Cord

AC Power cord - 15A/ 125V

This power cord is used to connect the back controls of the LCD monitor and the wall outlet. Connect the power cord into main power of the monitor.

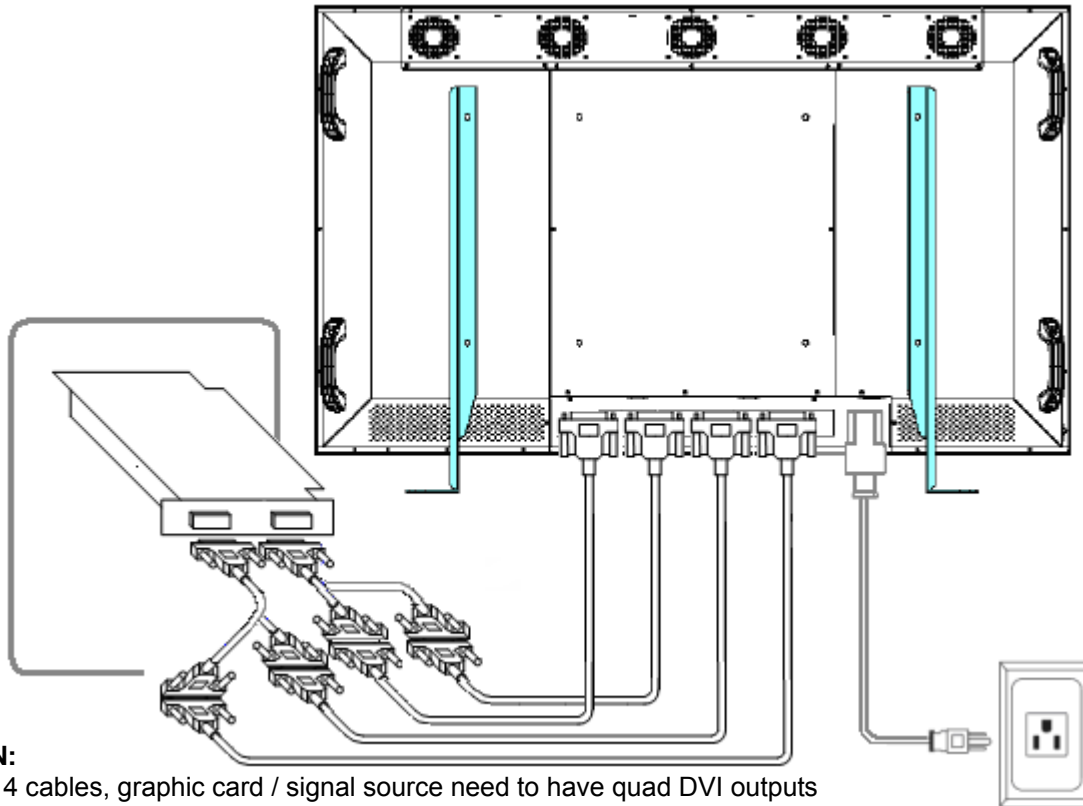
AC switch – Side of monitor, “|” is power on, “○” is power off.

Input : 100-240V~ 10A 50/60Hz



Don't connect the power cord with a wet hand.

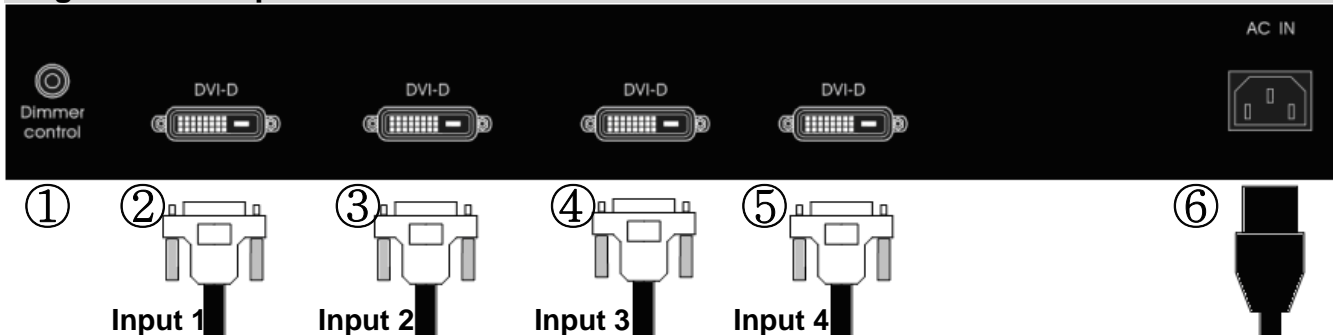
Connection



CARTION:

Dual link, 4 cables, graphic card / signal source need to have quad DVI outputs

Single Source Input



NO.	Name	Remarks
1	Dimmer control	Backlight control wheel
2	DVI-D Input 1	DVI-D (M)24 pin
3	DVI-D Input 2	DVI-D (M)24 pin
4	DVI-D Input 3	DVI-D (M)24 pin
5	DVI-D Input 4	DVI-D (M)24 pin
6	AC switch / Power cord input	AC input

Dimmer Control Backlight control

Turn the wheel right or left to control backlight brightness.

Dual DVI-D (M) input

RGB signals	Connection type	Signal
Digital DVI-D Input 1	DVI-D 24 pins	RGB Digital
Digital DVI-D input 2	DVI-D 24 pins	RGB Digital
Digital DVI-D Input 3	DVI-D 24 pins	RGB Digital
Digital DVI-D input 4	DVI-D 24 pins	RGB Digital

Operating The Monitor

Power ON Process

1. Check the power cord and DVI-D cable is connected.
2. Turn on the power of single source firstly.
3. Then press "ON" AC switch on side of monitor.

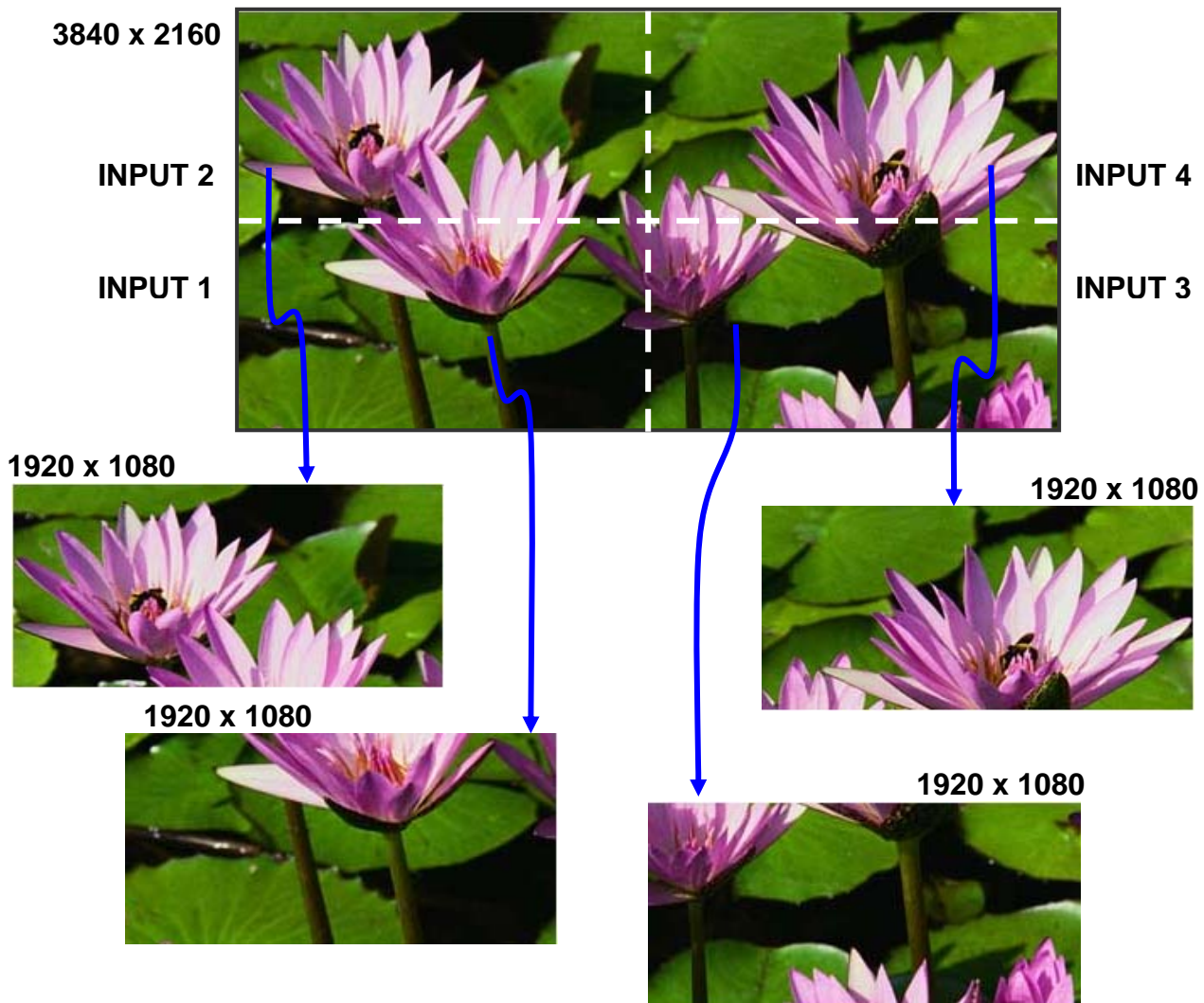


Power OFF Process

1. Press "OFF" AC switch on side of monitor, before exit the single source program.
2. Then turn off the power of single source.
3. For safety, disconnect power cord from the outlet.

Display Mode

Signals input to INPUT 1 to 4 connectors are as below.



To display image at resolution 3840x2160, input 1920x2160 signals to each of DVI inputs 1 to 4.

When position of picture part 1(INPUT 1) or picture part 2(INPUT 2) is reversed, switch the DVI connectors to solve the problem.

Equipment PC- system requirement

- Power Supply : 500W or above
- Motherboard : Intel 915, 945 , 955 , 975 chipset with one or two PCI-Ex16 slots
- CPU : P4(LGA 775) 3.0G or above
- Memory : 512M (DDR4)for dual channel support or above
- Hard Disk : SATA_2 , 7200RPM,8M buffer.
- DVD ROM Drive
- Specific Graphic Driver- dual DVI outputs

Suggestion software environment

- Windows® XP with Service Pack 2 (SP2)
- Windows® XP Professional x64 Edition
- Windows® XP Media Center Edition
- DX 9C.

Specification

Item		Specification	Unit
LCD panel	Active Area	1244.16 (H) x 699.84 (V) (56.2" diagonal)	mm
	Driver Element	a-si TFT Active Matrix	-
	Pixel Number	3840 x RGB x 2160	pixel
	Pixel Arrangement	0.108 (H) x 0.324 (V)	-
	Display Color	16.7M	color
	Trans-missive Mode	Normally Black	-
	Viewing Angle (H / V)	176 / 176	degree
	Brightness	450	cd/m2
	Contrast Ratio	1200	-
	Response Time	6.5 (Gray to Gray, typ.)	msec
Graphic	Input Connector	4 DVI-D (M) 2 Inputs, Graphic card need to have dual DVI outputs	-
Power supply		AC100-240V, 50/60Hz, ≤500W	V
Physical	Dimension, (WxHxD)	1345x 132 x 86 (W x D x H)	mm
	Net Weight	58	KG
	Gross Weight	68	KG
Wall mount		VESA standard 200x 200 ;200x 600	mm

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 11 “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	Check the power plug insert on wall outlet.. Check the main power switch Check the DVI-D cable is correctly version-DVI-D(M) Dual link If AC socked is OK, please check another set of equipment. Check input single, the signal may not be suitable.
Display is not in the center.	If the signal timing of the computer is within the spec.
Display is shaking.	If the signal timing of the computer is within the spec.
The picture color is pale, or not clear	Check picture quality to adjust. 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

Warning:

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

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

VCCI

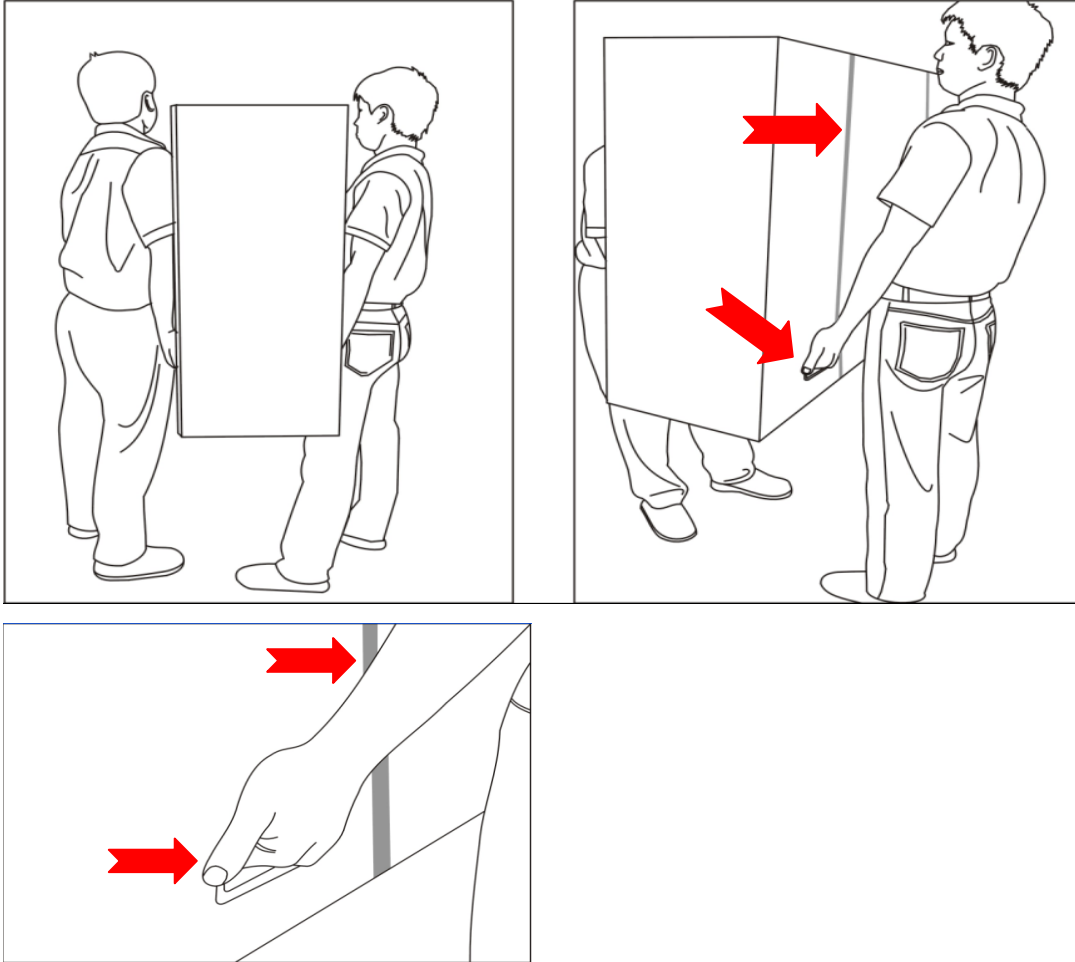
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Appendix I

◆ 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 and be sure to make the bundle. If not, it may drop and a serious injury may result. Please see as below pictures.



◆ 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.

