

AOD 420 OPEN FRAME

USER'S MANUAL





ALLINONE DISPLAY INC.

In opdracht van:



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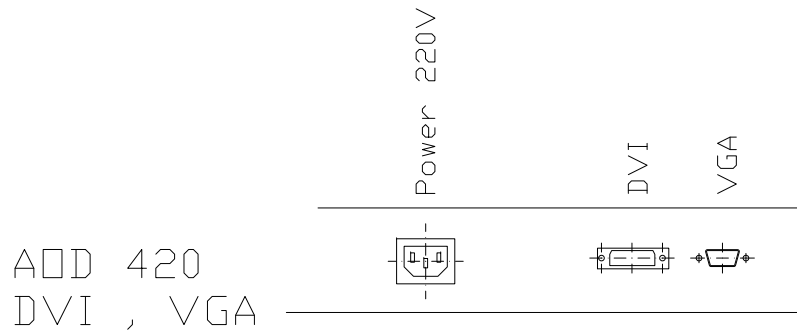


All In One



All In One

0. Connection To the Monitor



1. Installation

- Connect the signal(VGA) cable to the VGA port of computer. Tighten the two thumbscrews by turning clockwise.
- You can adjust the connection for your PC environment.
- Plug the Power cord to electrical outlet socket(110V/220V)

2. Features

- AOD420 is 42" LCD monitor and support up to 75Hz.
- You can adjust brightness, contrast, horizontal & vertical positions by OSD menus and use auto adjust function for instant adjustment.
- High-qualified LCD Controller inside
- Compact space saving design and power saving mode
- 100% compatible with Windows PC environment without the installation of driver CD or software program.



3. Plug and Play Function

AOD420 can be installed and connected automatically to any computer systems without driver CD or software programs. Monitor will recognize the optimized value of video mode by DDC(Display Data Channel) method that makes the graphic card of computer to communicate with the monitor.

AOD420 supports VESA DDC 1/2B.

4. Safety Precaution

We strongly recommend that you carefully read this User's Manual before operating your LCD monitor. FOLLOW INSTRUCTIONS in this manual. Please read and comprehend all using directives before use this machine.

● Power

— Use the type of power indicated on the marking label.

● Adapter

— Only use an adapter designed of the LCD monitor.

● Plug

— Do not remove any of the prongs of the monitor's three-pronged power plug.

— Disconnect the power plug from the AC outlet if you will not use it for an indefinite period of time.

● Power and extension cord

— Use the proper power cord with ground conductor

— Do not overload wall outlets or power cords. Ensure that the total of all units plugged into the wall outlet does not exceed 7 amperes.

— Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

● Care and maintenance

— Slots and openings in the cabinet are provided for ventilation. Do not block or cover these openings.

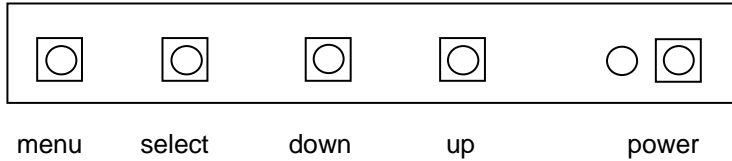
— Do not push objects of any kind into cabinet slots or openings. The screen surface is easily scratched.

— Do not use paper towels to clean the display. Avoid touching it with your fingers, pens, or pencils.

— Turn off the AC adapter and the monitor over long periods when not in use.



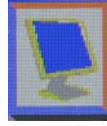


5. OSD (On-Screen-Menu)







Button	Function	Status
POWER	Power ON or OFF	ON/OFF
LED	Indicate working status	Green : On Red : Stand-by Orange : No signal
UP	Launch OSD Menu or Add Value	Move to OSD Menu
DOWN	Launch OSD Menu or Down value	Move to OSD Menu
SELECT	Select OSD Menu	
MENU	On / Off OSD Menu	

6. OSD Menu

6.1. OSD Menu for APADM2.2 board

OSD Menu		Description	Remarks
 Picture	Brightness	Adjust the brightness of the screen	
	Contrast	Adjust the contrast of the screen	
	H.Position	Adjust the horizontal position of the screen's image	
	V.Position	Adjust the vertical position of the screen's image	
	Phase	Adjust the focus of the screen's image	
	Clock	Adjust the horizontal size of the screen's image	
 Color	Color Temp	User 6500K 9300K	Control the temperature of the color
	Red	Control the intensity of the color of the screen's image (Usable when Color temperature is USER mode.)	
	Green		
	Blue		
 OSD	OSD H.Posi.	Select OSD MENU horizontal position	
	OSD V.Posi.	Select OSD MENU vertical position	
	OSD Timer	OSD MENU disappear from over the screen after setting time	
	Transparency	Adjust the transparency of the OSD menu	

 Misc.	Input Select	Analog	Analog signal(RGB)	
		Digital	DVI digital signal	
		Component	Y, Pb, Pr signal	
		Svideo	SVHS signal	
		CVBS	Composite signal	
		TV	TV Composite signal(NTSC or Pal or SECAM)	
	Volume	Adjust volume level		
	Audio	Audio ON/OFF select		
Audio Input	Audio Input select(Main or Sub Audio)			
Timer	Sleep timer(option)			
Auto Color	Adjust the color balance of the screen			
Auto Adjust	Automatically adjust the Horizontal position, Vertical position, Horizontal size, and Phase Window's background or characters should be displayed on your Full screen prior to proceed this function			
Recall	Initialize the current mode & setting value			
 Language	Language	English Spanish German Spanish Italian Korean Japanese	Select one of the seven language	
 TV	Auto Progam	Automatically scan Channel		
	Edit Channel	Channel Select		
	Channel Edit	Add/Delect the channel of the TV		
	Fine Tuning	Adjust Channel Frequency		
	Tv Mode	Tv Mode (Catv,tv) selsect		
	Manual Progam			

 Pip	PIP Select		PIP, PBP Select or ON/OFF	
	PIP Source	SVIDEO	SVHS select	
		CVBS	CVBS select	
		TV	Tv select	
	PIP Position	L UP	PIP Position select	
		R UP		
		L DOWN		
		R DOWN		
	PIP Size	Size1	PIP size select	
		Size2		
Size3				
Size4				

7. Specifications

Model	AOD420
PANEL	
Supplier	LG Philips LCD Co., Ltd.
Model	LC420WU1
Display	
Type	42." Color Active Matrix TFT LCD
Color	8-bits, 16,7M colors
Pixel	0.4845mm x 0.4845mm
Resolution (Max)	1920 X 1080
Contrast Ratio	800:1
Response time	8ms
Brightness	550 cd/m ²
Video	
Frequency	Horizontal: 31.5 ~ 80KHz Vertical: 56~75KHz
Compatibility	
Plug and Play	VESA DDC 1/2B
Compatibility	VESA / IBM / MAC
Power	VESA Standard, DPMS
Operation Environment	
Power Consumption	Operation Mode: 140 watt max Stand-by: 4 watt max.
Temperature	Operation Mode : 0 °C ~ 40 °C Stand-by: -20 °C ~ 60 °C
Humidity	Operation Mode: 10% ~ 85% R.H. Stand-by: 90% R.H. Max.
User's Mode	
OSD Key	Menu / Enter / Down / Up / Power
Dimension & Weigh	
Dimension	1064(W) x 132(D) x 657(H) mm for Normal type
Weight	about 30kg(Net) / 35kg(gross)

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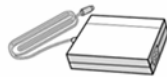
8. Contents Of the Retail Package



Monitor



User's Manual



AC/DC Adaptor



Power Cord



VGA Cable



Audio Cable
(Option)



Touch Driver (Option)



Composite
Cable (Option)



S-video Cable
(Option)



Remote control &
battery (Option)

9. Troubleshooting

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER.

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The monitor does not respond after you turn on the system.

Make sure that the monitor is turned on.

Turn off the power and check the monitor's power cord, AC adaptor, and signal cable for proper connection.

Appear the " No Input the Signal"

Check the connecting of the audio cable between the monitor and the computer.

Appear the " Input Not the Supported"

Input signal are insuperable, reset the video mode.

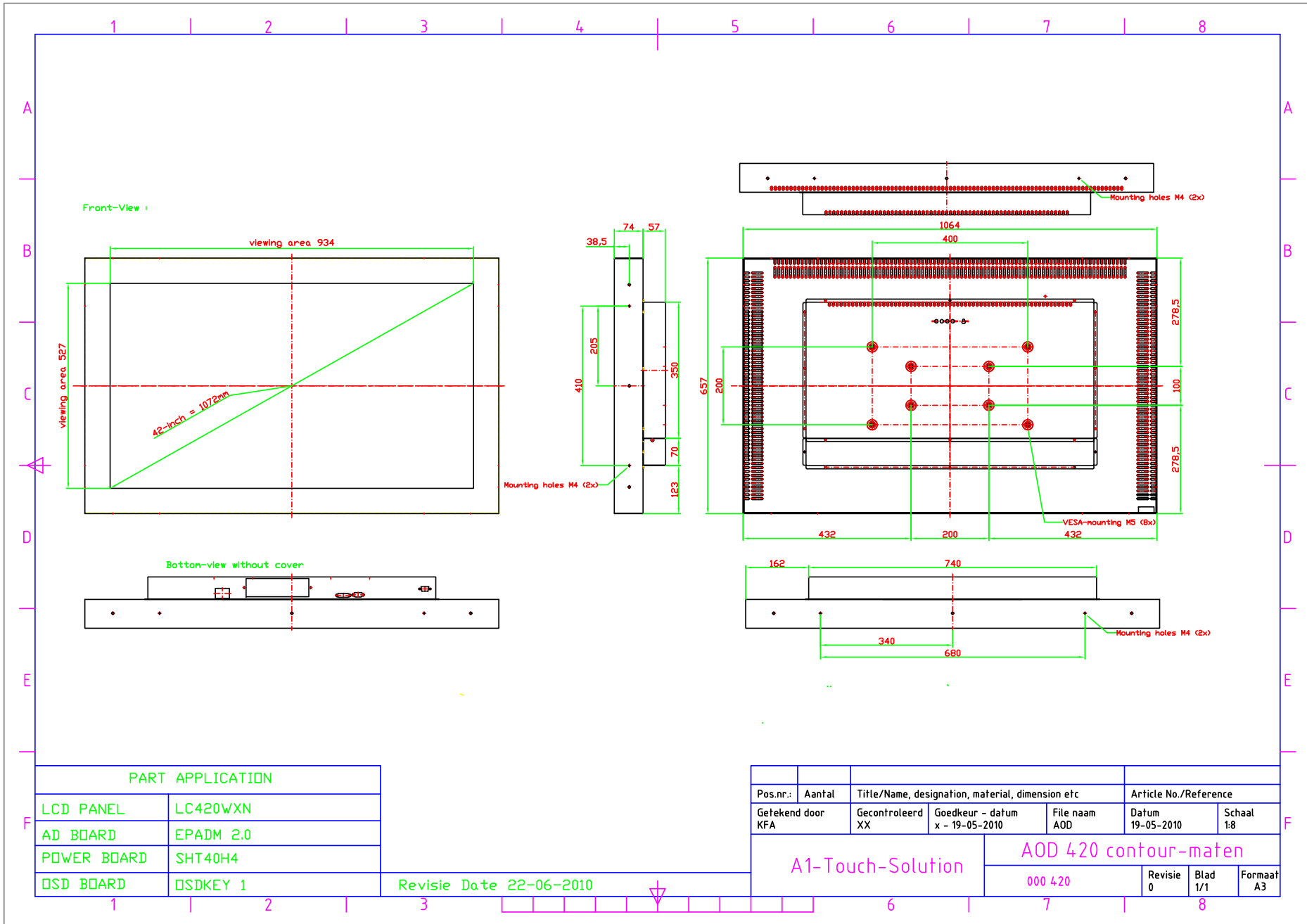
The appearance is not at the screen center.

Use "AUTO ADJUST", refer to the Controls section.

The characters on the screen are too dim or too bright

Choose fit color temperature, use "AUTO COLOUR ADJUST or manually adjust "RGB ADJUSTMENT", refer to the Control section.

1.10. Drawings



PART APPLICATION	
LCD PANEL	LC420WXN
AD BOARD	EPADM 2.0
POWER BOARD	SHT40H4
OSD BOARD	OSDKEY 1

Revisie Date 22-06-2010

Pos.nr.:	Aantal	Title/Name, designation, material, dimension etc			Article No./Reference	
Getekend door KFA	Gecontroleerd XX	Goedkeur - datum x - 19-05-2010	File naam AOD	Datum 19-05-2010	Schaal 1:8	
A1-Touch-Solution				AOD 420 contour-maten		
000 420				Revisie 0	Blad 1/1	Formaat A3



11. SAW touch (Option)



SURFACE ACOUSTIC WAVE TOUCH PANEL

C. Electrical Characteristics

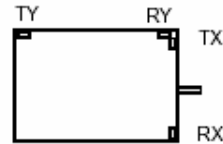
- 1. Supply Voltage**
+5VDC
- 2. Electrostatic Protection**
Per EN 61000-4-2, 1995 : Meets Level 4
(15 kV air / 8 kV contact discharges).
- 3. Resolution**
Based on controller resolution of 4096 x 4096.

D. Mechanical Characteristics

1. Construction

There are four transducers attached to the beveled edge of the glass.

- 1×TY on left side upper corner
 - 1×RY on right side upper corner
 - 1×TX on right side upper corner
 - 1×RX on right side down corner
- (Based on the cable exiting from the right side)



2. Cable and Connector

Cable typically exits from the right side, with a 2 x 6, 0.635 mm square post receptacle.

3. Touch Activation Force

Less than 85 grams.

4. Positional Accuracy

Standard deviation of error is less than ±1%.

5. Life Performance

More than 50 million touches in one location.
(Tested by a stylus similar as finger).

6. Input Medium

Finger or gloved hand (rubber, cloth or leather).

7. Surface Durability

Optical glass surface, Mohs' hardness rating : 7.



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SURFACE ACOUSTIC WAVE TOUCH PANEL

For Tempered SAW only

1. Construction

Pure 6mm-thickness heat strengthened glass with transducers attached to the beveled edge of the glass.

2. Break Resistance

Meets UL-1950 Steel Ball Drop Test

A 1-pound steel ball drops from height of 130 cm onto the center of the glass without breaking.

For Protected SAW only

1. Construction

Pure 6mm-thickness heat strengthened glass with transducers attached on the edge of the glass surface.

The reflectors and transducers are sealed inside the ABS plastic frame.

2. Break Resistance

Meets UL-1950 Steel Ball Drop Test

3. Dustproof

The ABS plastic frame around the panel prevents dust and dirt from accumulating on the reflectors and transducers.

4. Waterproof

Special glue is applied to the gap between the ABS plastic frame and glass substrate to prevent water infiltration.

Test Method : Set the touchscreen horizontally, and pour water on the panel surface without overflow over the ABS plastic frame. The panel surface is soaked in water for 1 hour. The panel is in normal condition after water poured out and dried.

E. Optical Performance

Light Transmission 90% (per ASTM D1003)



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F. Glass Substrate Quality

1. Circular Defects

Description	Length {mm}	Comments {mm}
Glass defects spots, stains, etch defects, surface chips	>0.51	None allowed
	$\geq 0.38, \leq 0.51$	2 per 50.8 diameter circle
	<0.38	Accumulated length must be less than 1.27 in a 50.8 diameter circle
	When evaluating defects with distortion include the entire distorted area when measuring.	

2. Linear Defects

Description	Width {mm}	Comments {mm}
Glass scratch	>0.102	None allowed
	0.102	12.7max length w/ minimum separation of 6.35
	0.076	25.4 max length w/ minimum separation of 3.81
	0.051	38.1 max length w/ minimum separation of 1.27
	< 0.051	Disregard

3. Edge Chips

Description	Comments {mm}
Four edges excluding four corners	1.27 W × 1.27 L × 1/3 glass thickness
Four corners	2.54 W × 5.08 L × 1/2 glass thickness