

**AZ DISPLAYS, INC.**  
*COMPLETE LCD SOLUTIONS*

**SPECIFICATIONS FOR  
8.0" OPEN FRAME MONITOR**

PART NUMBER:  
DATE:

AOM080S5R  
AUG 26, 2008

## **1. Introduction:**

### **1.1 About the Product**

AOM080S5R 8.0" Open Frame Monitor series are rugged, high performance Industrial LCD Monitors, designed for commercial and industrial applications, such as kiosks, arcade games, ATM Machines aviation simulators, military, medical, marine, security, industrial equipment, and instrumentation equipment. This product can provide high brightness and contrast to achieve better viewing effect.

### **1.2 Features**

8.0 inch SVGA Active Matrix Color TFT LCD Monitor

High Contrast 500:1 Typical

Recommend resolution:800×600(SVGA)

OSD controls: Allow on-screen adjustments of Brightness, Contrast, RGB Auto Color Balance, H-Position, V position

Multi system Video Input

Quick and easy integrations for Client solutions

Universal AC Power input and auto detection video system.

PMMA ( Poly Methyl MethAcrylate ) protection (option)

Touch screen (option)

## 2. Contents

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### 3. Specifications

Parameter	Specifications	Unit	Remark
<b>Model Name</b>	<b>AOM080S5R</b>		
<b>Screen Size</b>	<b>8.0" (diagonal)</b>	inch	
<b>Display Format</b>	<b>800 x (R.G.B) x 600</b>	dot	
<b>TFT-LCD Active Area</b>	<b>162 (H) x 121.5 (V)</b>	mm	
<b>Pixel Pitch</b>	<b>0.2025 (H) x 0.2025 (V)</b>	mm	
<b>Contrast Ratio</b>	<b>500:1(Typ.)</b>		
<b>Brightness</b>	<b>350(Typ.)</b>	Cd/m <sup>2</sup>	
<b>Viewing Angle</b>	<b>-70~70(H); -70~50(V)(Typ.)</b>	deg	
<b>Outline Dimension</b>	<b>225(W) x 161(H) x 32.6(D)</b>	mm	
	<b>Video and S-video /</b>		
<b>Input/Output Interface</b>	<b>D-Sub 15 pin female for VGA / USB or RS-232 (DB9 Female) for Touch Screen Driver (Option)</b>		
<b>Power Source</b>	<b>100-240V<sub>AC</sub> 50-60Hz, Universal / +12V<sub>DC</sub> @ 3A</b>		
<b>Power Consumption</b>	<b>&lt; 7W</b>		
<b>Touch Screen Controller</b>	<b>5 wire Resistive Driver USB/ RS232 (Option)</b>		
<b>Operating Temperature</b>	<b>-10~60</b>	.	
<b>Storage Temperature</b>	<b>-20~70</b>	.	
<b>LED Life Time</b>	<b>20000(Min.)</b>	hr	
<b>Weight</b>	<b>1.2</b>	Kg	

#### 4. Ordering Information

Parameter	AOM080S03-000R		AOM080S5U-000R		AOM080S5R-000R	
CVBS	1	1	1			
S-Video	1	1	1			
VGA	SVGA (800x600)		SVGA (800x600)		SVGA (800x600)	
Touch Panel Type	-		5W Resistive		5W Resistive	
Touch Screen Interface	-		USB		RS-232	
PMMA	⊙		-		-	

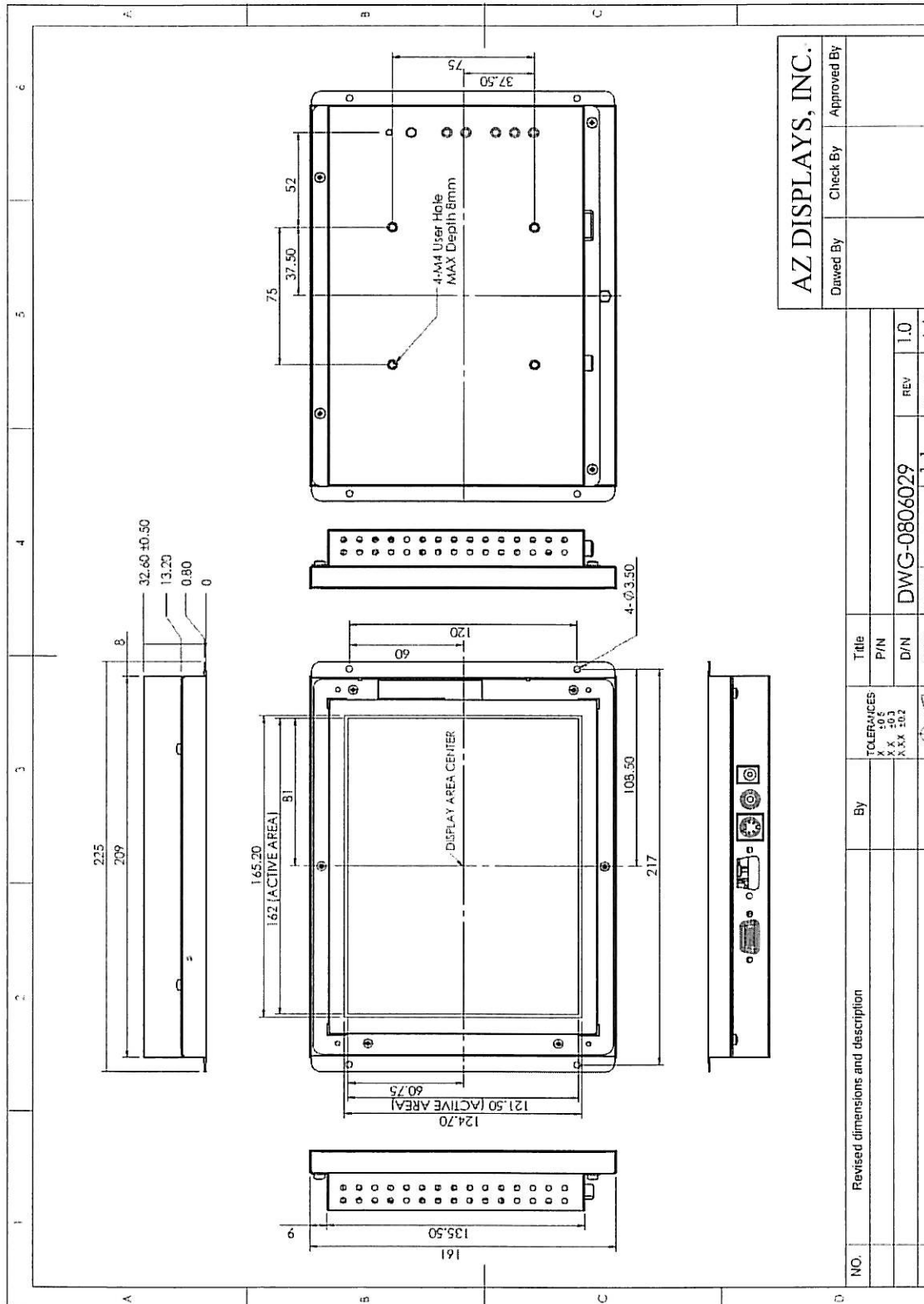
Parameter	AOM080S5U-010R		AOM080S5U-010R		AOM080S5R-010R	
CVBS	-	-	-			
S-Video	-	-	-			
VGA	SVGA (800x600)		SVGA (800x600)		SVGA (800x600)	
Touch Panel Type	-		5W Resistive		5W Resistive	
Touch Screen Interface	-		USB		RS-232	
PMMA	⊙		-		-	

## 5. VGA Input Format

	Mode	Family	Resolution	H-Freq. (KHz)		V-Freq. (KHz)	
<b>1</b>	<b>Mode 1</b>	<b>PC</b>	<b>720x350</b>	<b>31.47</b>	<b>(+)</b>	<b>70.1</b>	<b>(-)</b>
<b>2</b>	<b>Mode 2</b>	<b>PC</b>	<b>720x400</b>	<b>31.47</b>	<b>(-)</b>	<b>70.1</b>	<b>(+)</b>
<b>3</b>	<b>Mode 3</b>	<b>PC</b>	<b>640x480</b>	<b>31.47</b>	<b>(-)</b>	<b>59.9</b>	<b>(-)</b>
<b>4</b>	<b>Mode 4</b>	<b>VESA</b>	<b>640x480</b>	<b>37.86</b>	<b>(-)</b>	<b>72.8</b>	<b>(-)</b>
<b>5</b>	<b>Mode 5</b>	<b>VESA</b>	<b>640x480</b>	<b>37.50</b>	<b>(-)</b>	<b>75.0</b>	<b>(-)</b>
<b>6</b>	<b>Mode 6</b>	<b>VESA</b>	<b>800x600</b>	<b>35.16</b>	<b>(+)</b>	<b>56.3</b>	<b>(+)</b>
<b>7</b>	<b>Mode 7</b>	<b>VESA</b>	<b>800x600</b>	<b>37.88</b>	<b>(+)</b>	<b>60.3</b>	<b>(+)</b>
<b>8</b>	<b>Mode 8</b>	<b>VESA</b>	<b>800x600</b>	<b>48.08</b>	<b>(+)</b>	<b>72.2</b>	<b>(+)</b>
<b>9</b>	<b>Mode 9</b>	<b>VESA</b>	<b>800x600</b>	<b>46.88</b>	<b>(+)</b>	<b>75.0</b>	<b>(+)</b>
<b>10</b>	<b>Mode 10</b>	<b>VESA</b>	<b>1024x768</b>	<b>48.36</b>	<b>(-)</b>	<b>60.0</b>	<b>(-)</b>
<b>11</b>	<b>Mode 11</b>	<b>VESA</b>	<b>1024x768</b>	<b>56.48</b>	<b>(-)</b>	<b>70.1</b>	<b>(-)</b>
<b>12</b>	<b>Mode 12</b>	<b>VESA</b>	<b>1024x768</b>	<b>60.02</b>	<b>(+)</b>	<b>75.0</b>	<b>(+)</b>
<b>13</b>	<b>Mode 13</b>	<b>VESA</b>	<b>1280x1024</b>	<b>63.98</b>	<b>(+)</b>	<b>60.0</b>	<b>(+)</b>
<b>14</b>	<b>Mode 14</b>	<b>VESA</b>	<b>1280x1024</b>	<b>79.98</b>	<b>(+)</b>	<b>75.0</b>	<b>(+)</b>

# 6. Mechanical Drawing

## 6.1 AOM080S03-000R

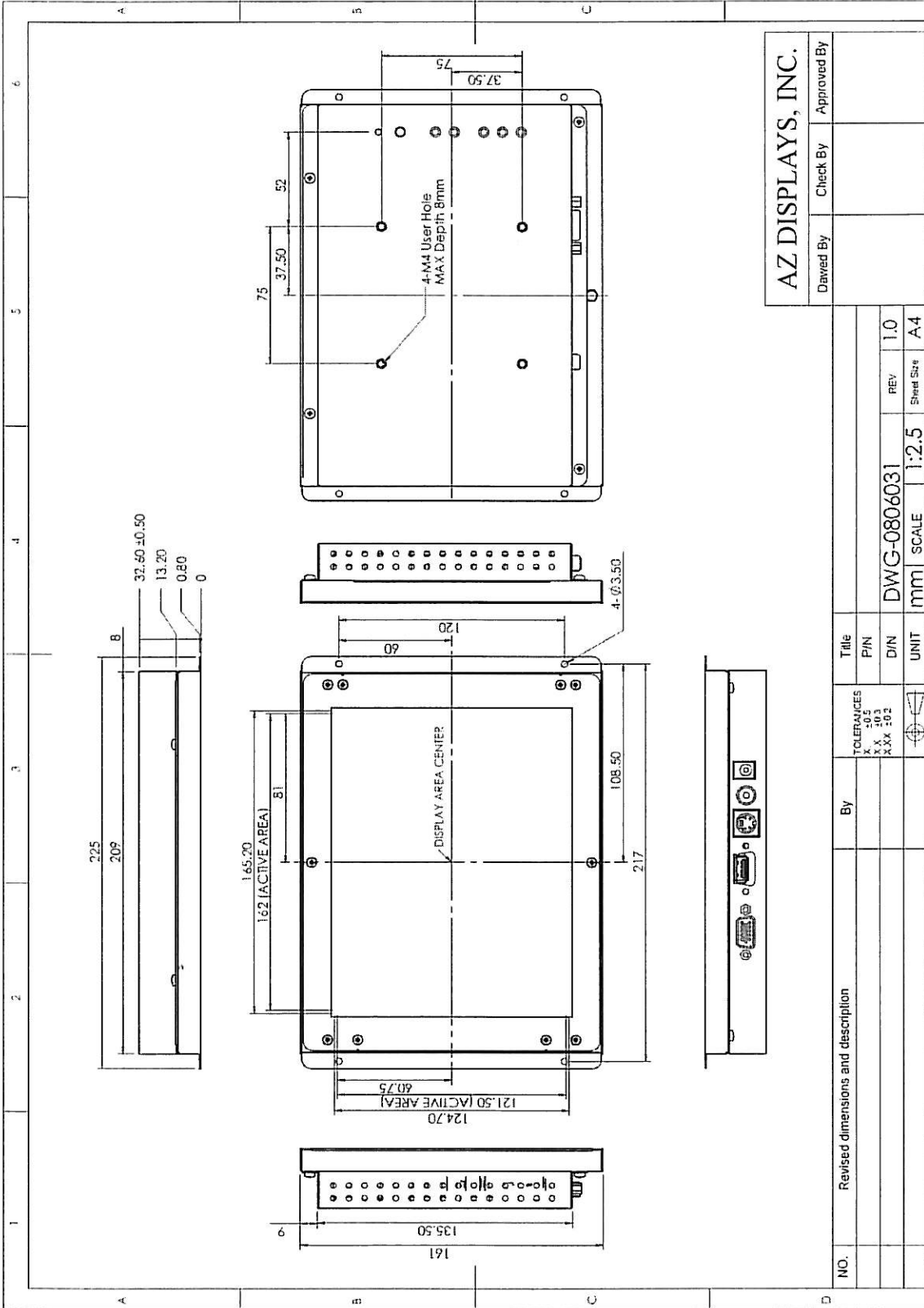


**AZ DISPLAYS, INC.**

Drawn By	Check By	Approved By

NO.	Revised dimensions and description			By	Title
	TOLERANCES			X	P/N
	X X ±0.3			X	D/N
X XX ±0.2			X	UNIT	REV
			mm	SCALE	Sheet Size
			1:1	DWG-0806029	1.0
					A.J

6.1 AOM080S5U-000R



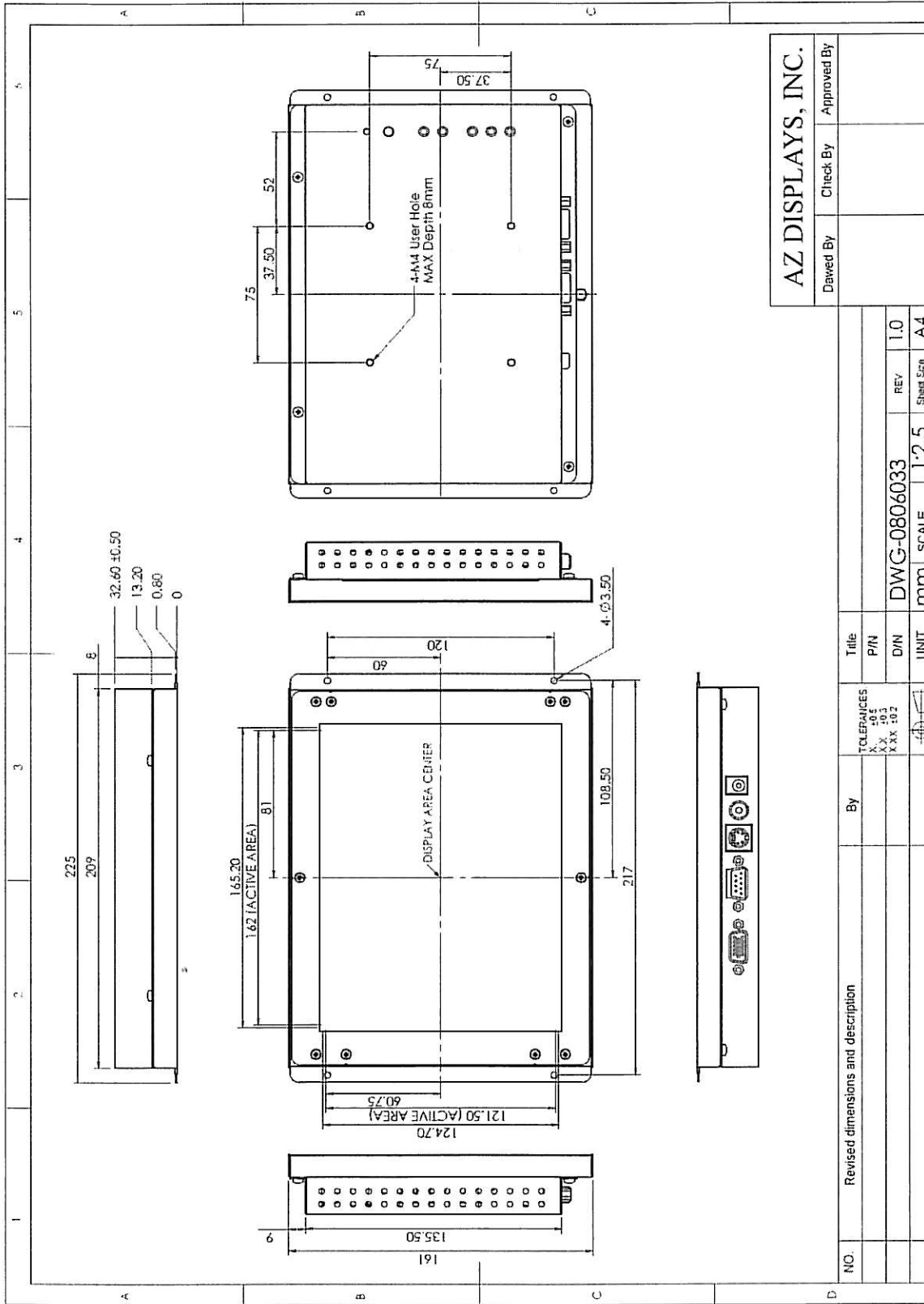
**AZ DISPLAYS, INC.**

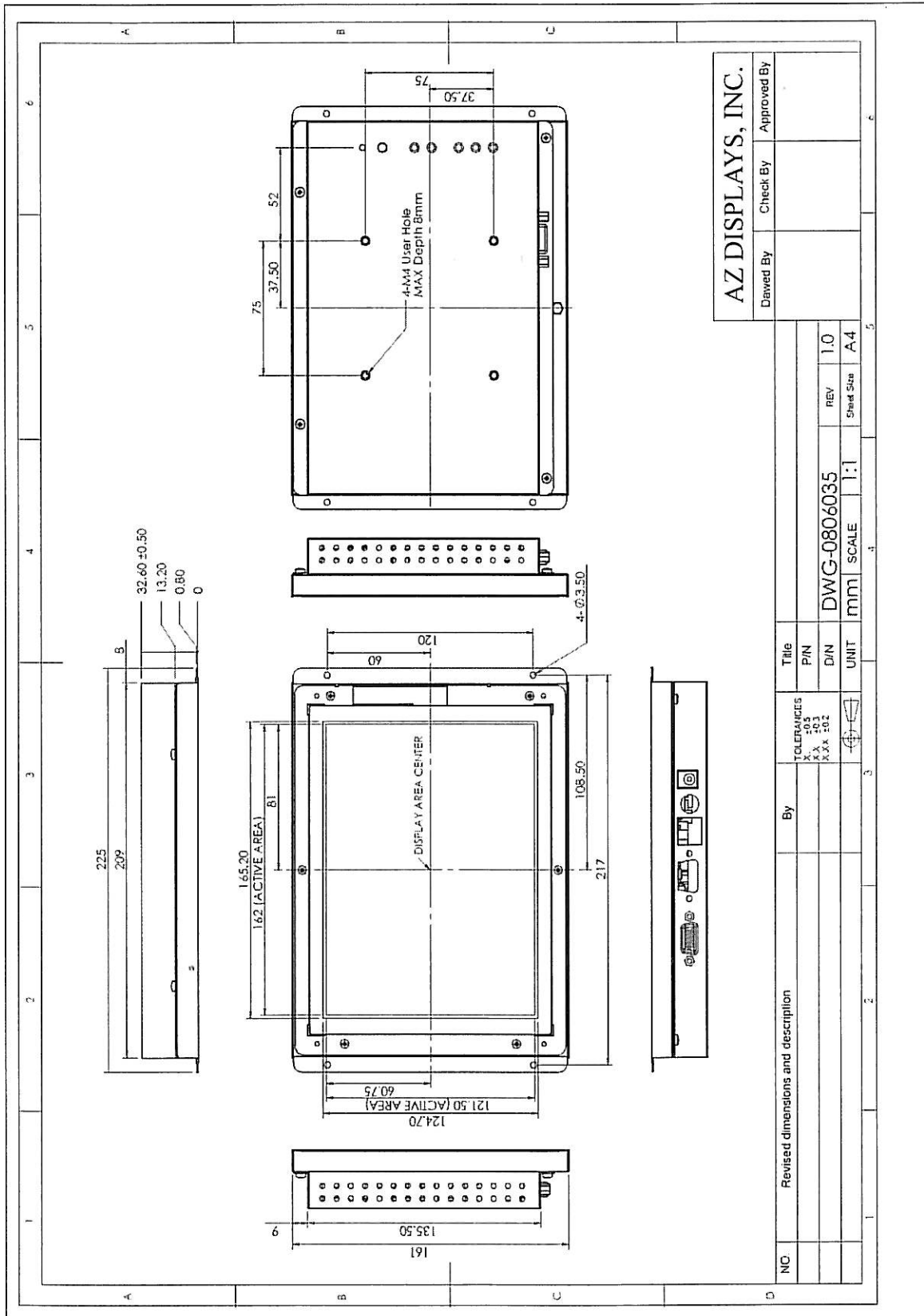
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			X ±0.5 XX ±0.1 XXX ±0.2	P/N	mm	DWG-0806031	1.0	A4
				D/N		1:2.5		



6.3 AOM080S5R-000R

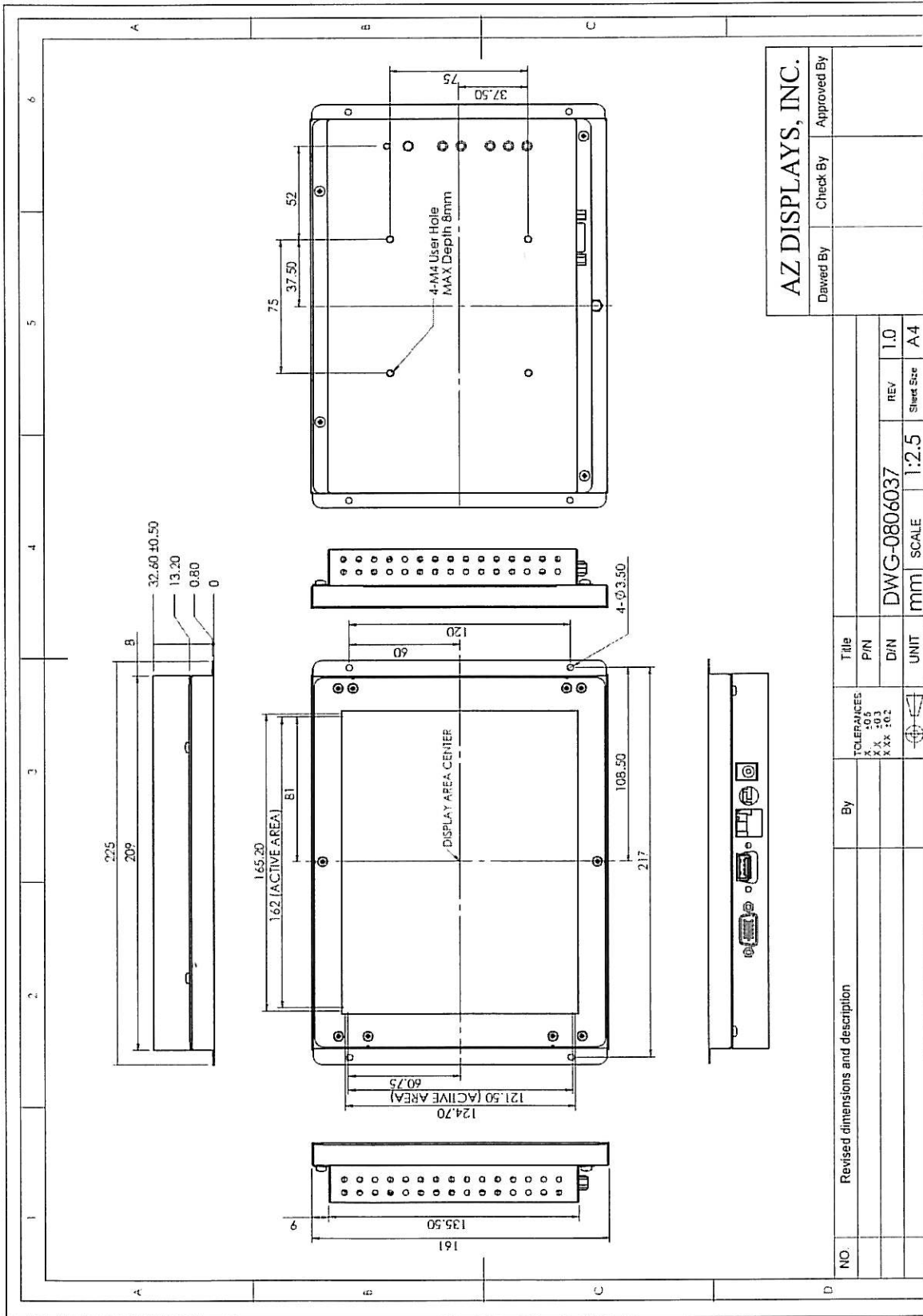




**AZ DISPLAYS, INC.**

Drawn By: \_\_\_\_\_ Check By: \_\_\_\_\_ Approved By: \_\_\_\_\_

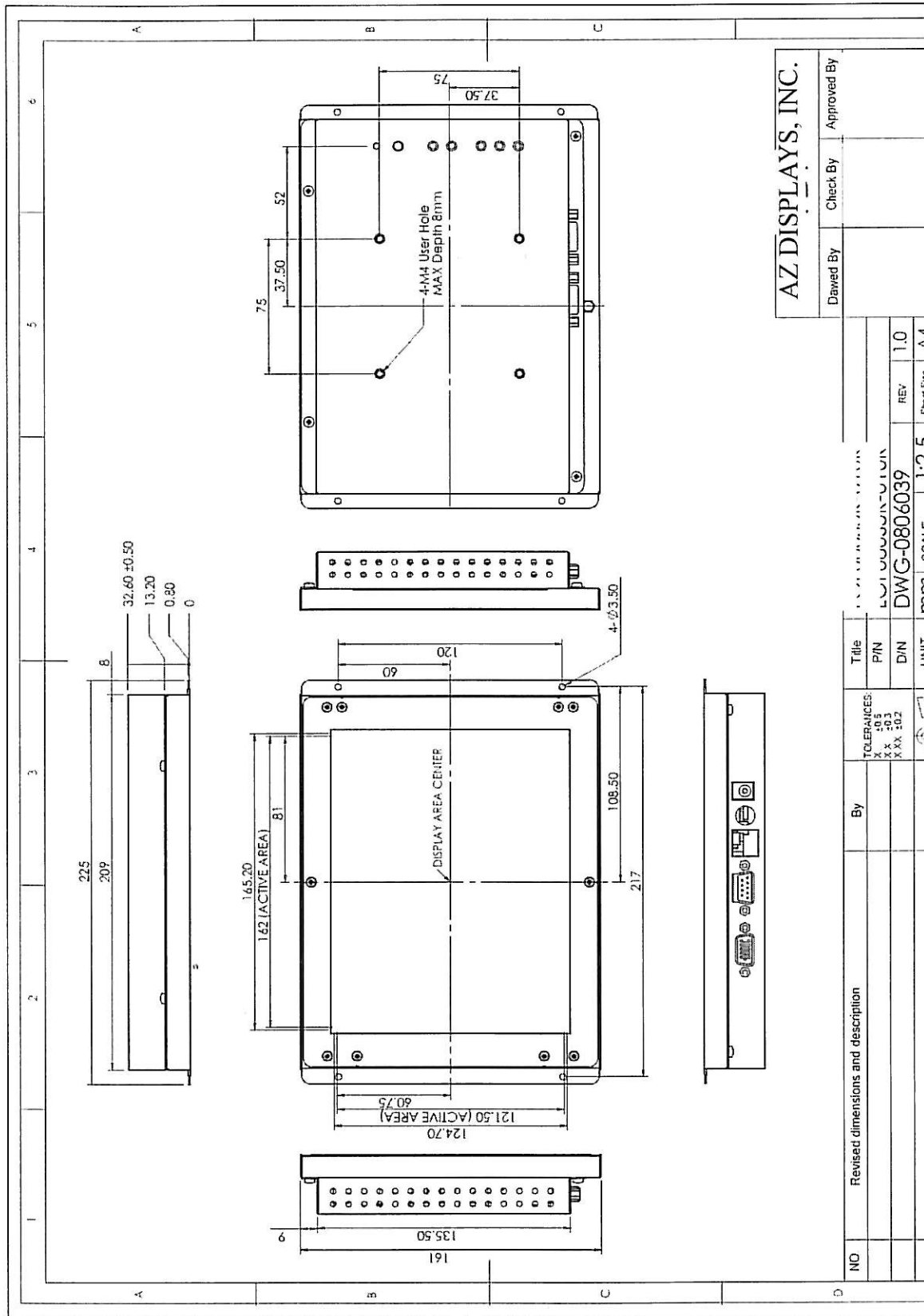
NO.	Revised dimensions and description	By	Title		UNIT	SCALE	Sheet Size
			TOLEANCES	P/N			
			X ±0.5		mm	1:1	A4
			X X ±0.3				
			X X ±0.2				
				DWG-0806035	REV	1.0	



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Drawn By	Check By	Approved By

Title	DWG-0806037	REV	1.0
P/N		Sheet Size	A4
D/N		SCALE	1:2.5
UNIT	mm		

NO	Revised dimensions and description	By	
TOLERANCES: X.X .05 X.X .10 X.XX .02			



**AZ DISPLAYS, INC.**

Drawn By: \_\_\_\_\_ Check By: \_\_\_\_\_ Approved By: \_\_\_\_\_

NO	Revised dimensions and description	By	Title	UNIT	mm	SCALE	REV	Sheet Size
			TOUCH SCREEN			1:2.5		A4
			P/N					
			D/N					
			DWG-0806039				1.0	

## 7. Packing List

Before you begin installing the Open Frame Monitor, please make sure that the following materials have been shipped:



A



B



C



D



E



F



G



H

A. AC to DC Adapter (100-240V<sub>AC</sub> 50-60Hz or +12V<sub>DC</sub> @ 3A)

B. Power Cord

C. Video Cable(AOM080S~~xx~~-000R Only)

D. S-Video Cable(AOM080S~~xx~~-000R Only)

E. VGA Cable

F. USB Cable (AOM080S5U Only)

G. RS-232 Cable(AOM080S5R Only)

H. Touch Screen Driver CD Disk(AOM080S5U & AOM080S5R Only) / User Manual

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

## ***8. Installing the Monitor***

### **8.1 Power cable connection:**

Connect the power cord to the AC outlet, and connect the power to the monitor through the AC/DC adapter.

### **8.2 VGA signal cable connection:**

Plug one end of the 15-pin signal cable to the VGA connector at the rear of the PC system and the other end to the Open Frame monitor.

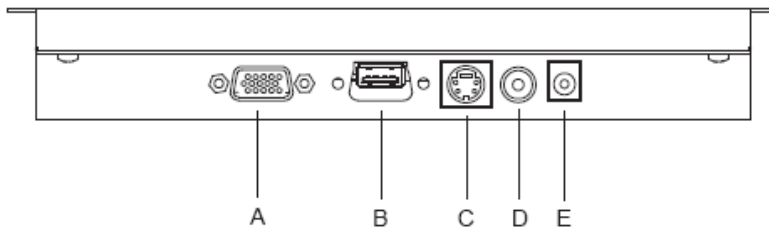
Secure the connectors with the screws on the cable connector at both ends.

### **8.3 Video / S-Video Cable connection:**

If required, connect Video / S-Video Cable from the Open Frame Monitor to the DVD or CCD Ca

### **8.4 Switch on the power:**

Switch on the power switch on the rear cover of the Open Frame Monitor.



A. VGA D-sub 15 (Female)

B. USB / RS-232 Port (For Controller)

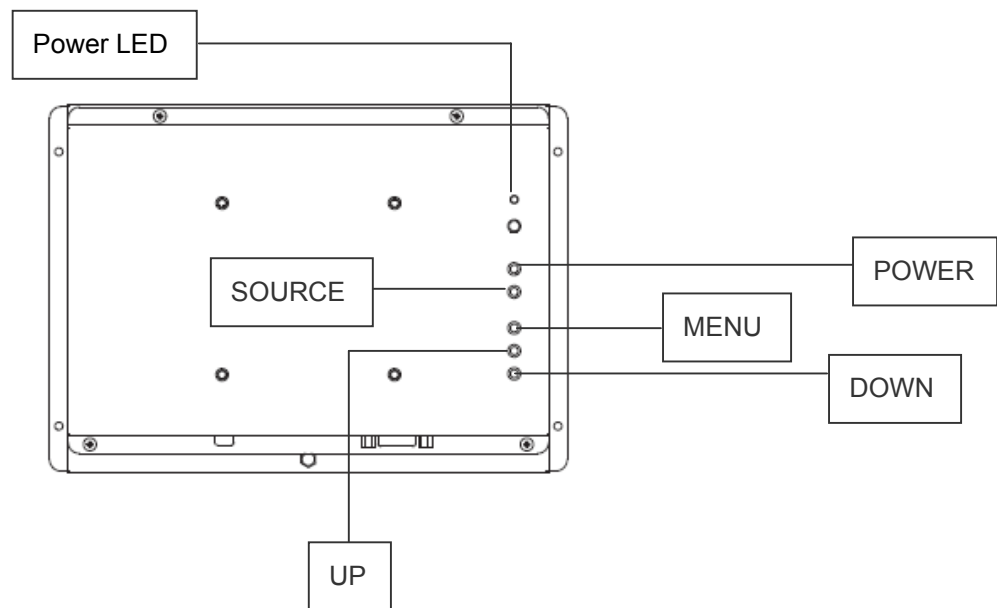
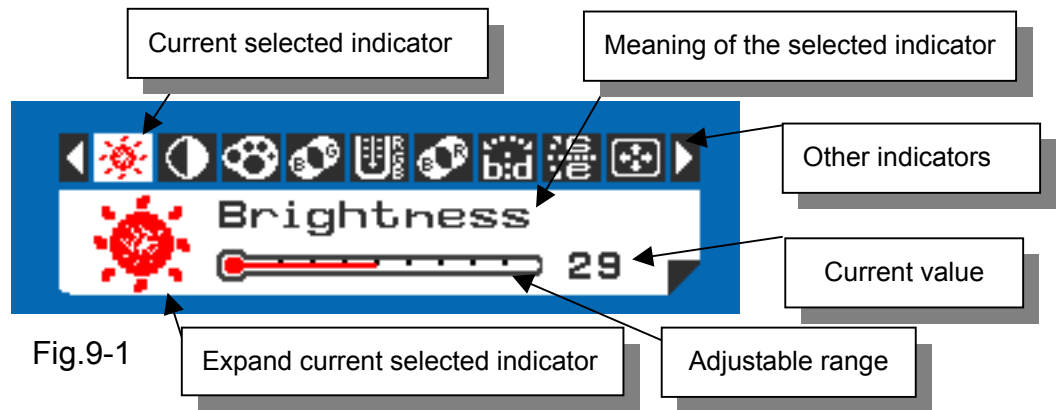
C. S-Video (Y/C Video) In

D. Video (CVBS) In

E. DC-In (+12V<sub>DC</sub> The DC jack core is positive)

## 9. Key Function by OSD

### 9.1 Menu Operation



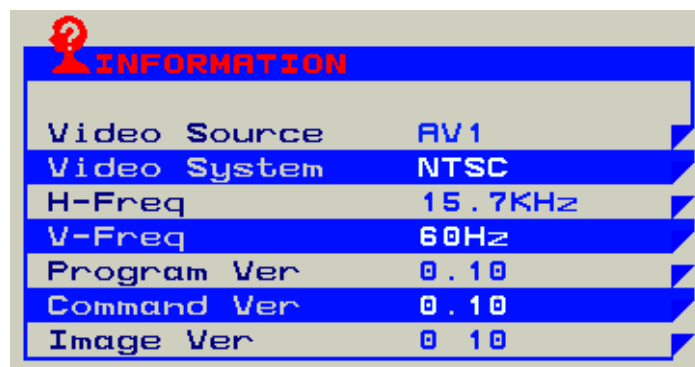
#### Operations of key board :

1. To navigate the menu, press [MENU]. (Fig.9-1)
2. The indicator lighting up in white color is the selected adjustment item.
3. To Next Item of the menu, press [MENU] again.
4. The operations below are only available when "Menu" is started.
5. Press [UP] / [DOWN] to adjust the value of the selected item.

Overview of the menu :

Indicator	Meaning	Adjustable range	For	Remark
	Brightness	0 64	AV / S-Video / VGA	Adjust-Bar
	Contrast	0 64	AV / S-Video / VGA /	Adjust-Bar
	Color	0 64	AV / S-Video	Adjust-Bar
	Tint	0 32	AV / S-Video	Adjust-Bar
	Sharpness	0 16	AV / S-Video	Adjust-Bar
	Color Tone	Normal / Warm / Cool	AV / S-Video / VGA	
	Mirror	OFF / ON	AV / S-Video / VGA	
	Flip	OFF / ON	AV / S-Video / VGA	
	H-Position	-10 +10	VGA	Balance-Bar
	V-Position	-10 +10	VGA	Balance-Bar
	Auto		VGA	
	Scale	Full / 4:3	AV / VGA	
	Information		AV / VGA	Fig.9-2
	Memory Recall		AV / VGA	

Fig.9-2





**9.2 Operations**

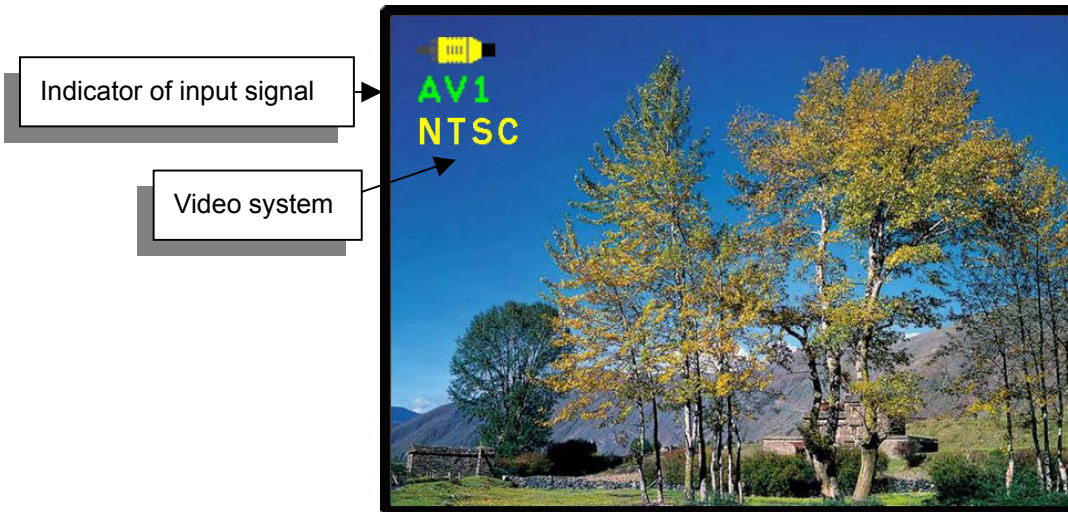





Fig.9-3

[Power] : Monitor power on / off

[Source] : Input signal switch

**Overview of input signals :**

Indicator	Input signal	Interface	Video system
	AV1	Composite	NTSC / PAL / SECAM
	S-Video1	Y/C	NTSC / PAL / SECAM
	VGA	Analog RGB	640x480_60 / 800x600_60 / 1024x768_60 / 1280x1024_60

## 10. Trouble Shooting

If experiencing trouble with the monitor, or it fails to operate correctly, please refer to the following instructions before calling for repairs.

Condition	Check	Point
1. The picture does not appear	<ul style="list-style-type: none"> <li>● Check to see that all the I/O and power cables is firmly seated in the socket.</li> <li>● Check the Power LED is Lighting When the monitor was turned ON.</li> <li>● Check if the brightness control is at the appropriate position, not at the minimum.</li> </ul>	
2. The screen is not synchronized	<ul style="list-style-type: none"> <li>● Check if the I/O signal cable is firmly seated in the socket.</li> <li>● Check if the output level matches the input level.</li> <li>● Make sure the signal timings of the computer system are within the specification of the monitor.</li> </ul>	
3. The position of the screen is not in the center	<ul style="list-style-type: none"> <li>● Adjust the H-position, and V-position, or perform the auto adjustment Or Memory Recall.</li> </ul>	
4. The screen is too bright (too dark).	<ul style="list-style-type: none"> <li>● Check if the brightness or contrast control is at the appropriate position, not at the Maximum (Minimum).</li> </ul>	
5. The Screen is shaking or waving	<ul style="list-style-type: none"> <li>● Press the Auto adjustment control to adjust. Moving all objects which emit a magnetic field such as motor or transformer, away from the monitor. Check if the specific voltage is applied.</li> <li>● Check if the signal timing of the computer system is within the specification of monitor.</li> </ul>	

If you are unable to correct the fault by using this chart, stop using your monitor and contact us.