

LCD Display

OPD-215E

OPD-215E

Industrial LCD Display

OPD-215E Manual 1st Ed
December 2008

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Packing List

The LCD monitor comes with the following standard parts shown as below. Check and make sure they are included and in good condition. If anything is missing or damaged, contact the dealer immediately.

- 1 OPD-215E
- 1 Utility CD-ROM
Contains User's Manual (in PDF format), Drivers and Utilities
- 1 Power adapter
- 1 VGA cable 1.8m
- 1 DVI Cable 1.8m
- Screws bag
- Cable. RS-232 (optional)

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

Safety & Warranty

1. Read these safety instructions carefully.
2. Keep this user's manual for later reference.
3. Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
- 8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.**
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
12. Never pour any liquid into an opening. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.

14. If any of the following situations arises, get the equipment checked by service personnel:

- a. The power cord or plug is damaged.
- b. Liquid has penetrated into the equipment.
- c. The equipment has been exposed to moisture.
- d. The equipment does not work well, or you cannot get it to work according to the users manual.
- e. The equipment has been dropped and damaged.
- f. The equipment has obvious signs of breakage.

15. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20° C (-4°F) OR ABOVE 60° C (140° F). IT MAY DAMAGE THE EQUIPMENT.

FCC

Warning!



This device complies with Part 15 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.

Caution:

It may cause the danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer.

Below Table for China RoHS Requirements

产品中有毒有害物质或元素名称及含量

AAEON Display

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板 及其电子组件	×	○	○	○	○	○
外部信号 连接器及线材	×	○	○	○	○	○
外壳	×	○	○	○	○	○
液晶模块	×	○	○	○	○	○
触控模块	×	○	○	○	○	○
电源	×	○	○	○	○	○
<p>O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。</p> <p>X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。</p> <p>备注： 一、此产品所标示之环保使用期限，系指在一般正常使用状况下。 二、上述部件物质触控模块为选购品。</p>						

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Chapter

1

**General
Information**

1.1 Introduction

Thank you for purchasing of the Industry Display Panel TFT LCD monitor - a marvelous contribution of cutting edge technology.

The LCD monitor has been designed with serious thoughts to present the best performance for most applications. Symbol of elegance, its compact and slim profile is well suited in working locations where space is at a premium.

The TFT LCD monitor displays sharper, more brilliant, crisper and flicker-free images. Complying with the power management regulations of VESA DPMS, the LCD monitor is extremely energy efficient and a power saver. Plus, the LCD monitor has extremely low radiation emissions and near zero electromagnetic fields which are supreme benefits.

Fully compatible with PC system, the LCD monitor provides full interface for all sorts of related standards. Supported by "Plug & Play" complying with DDC1/DDC2B, installing the LCD monitor is absolutely trouble free.

The On Screen Display menu provides user a convenient interface to make right adjustment for optimum display performance.

1.2 Features

This menu provides 15"(XGA) high-brightness, long lifetime TFT LCD monitor.

- Stainless steel open-frame architecture
- 15" XGA (1024 x 768 resolution)
- RGB and DVI directly input with A/D board interface offering multi-scan function
- RS-232, adapter, VGA terminals and AV+S Video input
- OSD (On Screen Display) function for display adjustment
- Touchscreen (Optional)
- AC-in/ DC-out external power adapter
- Swivel ARM: VESA 75/100 standard
- Aluminum front bezel
- Auto detect NTSC, PAL

1.3 Specification

- **Construction** Steel architecture
- **Mounting** VESA mount
- **Input signal** RGB, DVI Composite video, S-Video
- **Control** OSD (On Screen Display) on the front panel
- **Power Supply** External power adapter
- **Dimension** 16.34" (W) x 12.48" (H) x 1.93"(D) (415mm x 317mm x 49mm)
- **Gross Weight** 19.14 lb (8.7Kg)

TouchScreen (Optional)

- **Type** 5-wire, Analog resistive
- **Resolution** 2048 x 2048
- **Light transmission** 75%
- **Controller** RS-232 interface (optional)

Environmental

- **Operating temperature** 32°F ~113°F (0°C to 45°C)
- **Vibration** 5-500Hz, 1G random vibration
- **Shock** 15G peak acceleration (11 msec. Duration)
- **EMC** FCC / CE Class A
- **Safety** UL

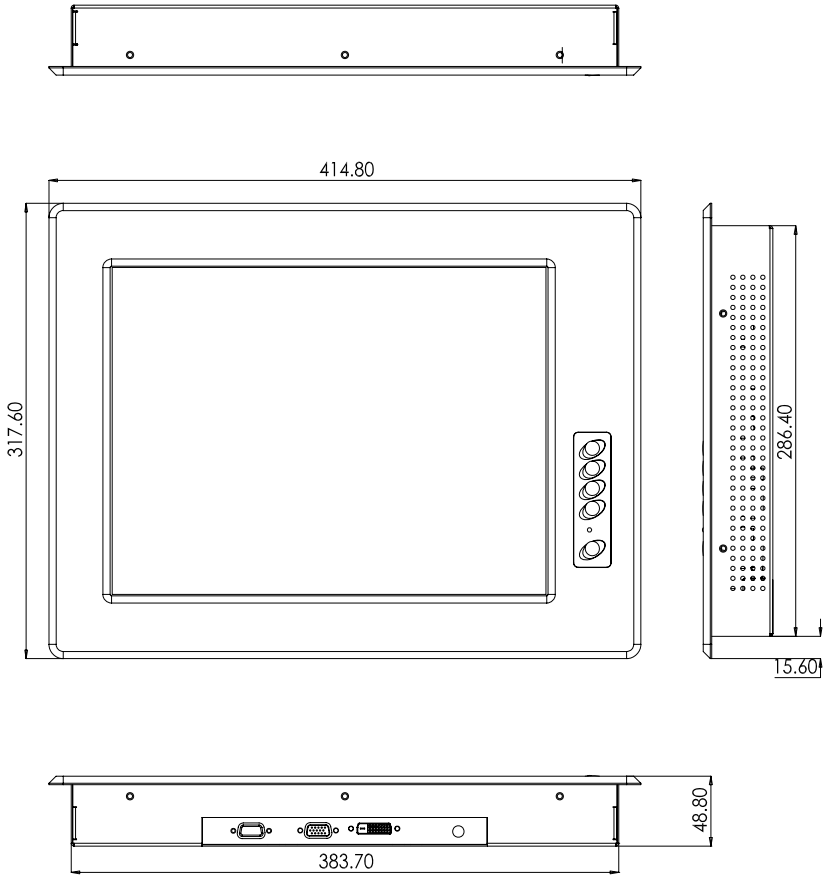
Panel

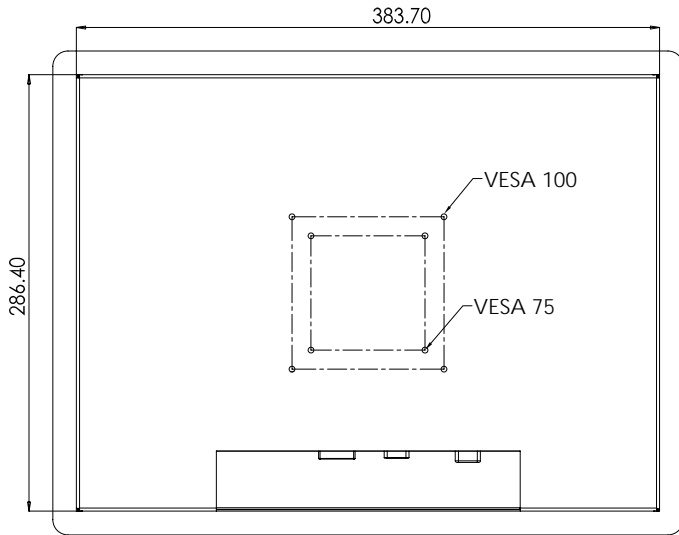
- Type Color TFT
- Size Diagonal "15"
- Brightness 250 cd/m² (TYP.)
- Back light MTBF 50,000 hrs
- Pixel Pitch 0.297(H) x 0.297(V) mm
- Viewing Angle (Horizontal) 130°
- Viewing Angle (Vertical) 145°
- Resolution 1024 x 768
- Display Modes Full Screen in 640x480,
800x600, 1024x768 Mode
- Color 262K

Power Consumption

- On Working 60Watts (Max.)
- Input Voltage AC 100-240V~1.8A, 50~60Hz
- Output DC 12V / 5A(Max)

1.4 Dimension





OPD-215E

Unit:mm

Chapter

2

**Hardware
Installation**

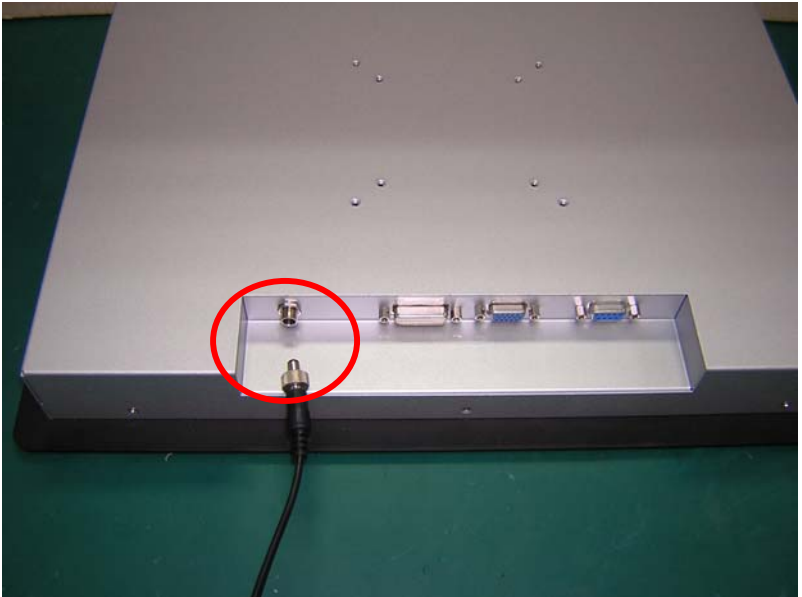
2.1 Before Unpacking

It is very important to locate the LCD monitor in a suitable environment.

- The surface for placing the LCD monitor should be stable and level.
- Make sure the place has good ventilation, and out of direct sunlight; away from sources of excessive dust, dirt, heat, water, moisture and vibration.
- Convenience for connecting the LCD monitor to the related facilities should be well considered too.

2.2 Connecting Power

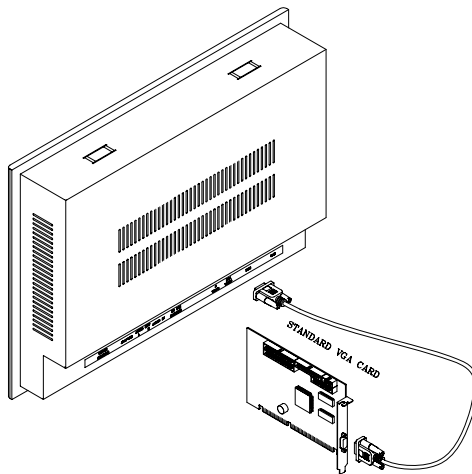
To power on the LCD monitor, use the provided AC-DC adapter and the power cord to connect to the power output socket of the monitor. Fasten the connections securely.



A "Surge Protection" device plugged between the AC-DC adapter and the wall outlet is recommended to prevent the effects of sudden current variations from reaching the LCD monitor. The sudden peaks of electricity may harm the LCD monitor.

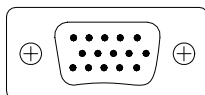
2.3 Connecting to the Computer

- Turn off the computer and the LCD monitor before connecting them.
- Use the Monitor-to-PC VGA cable to connect the LCD monitor to your computer. The cable heads are the same on either side.
- Fasten the connections securely.



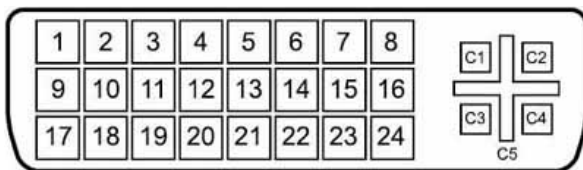
2.4 VGA Port Connector

It is a DB-15 VGA connector. The following table shows the pin-out assignments of this connector.



Pin	Signal	Pin	Signal
1	Red	2	Green
3	Blue	4	N.C.
5	GND	6	GND
7	GND	8	GND
9	N.C.	10	GND
11	N.C.	12	SDA
13	HSYNC	14	VSYNC
15	SCL		

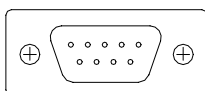
2.5 DVI Port Connector



Pin	Signal	Pin	Signal
1	RX2-	13	N.C.
2	RX2+	14	+5V DDC
3	SHLD2/4	15	GND
4	N.C.	16	HPD
5	N.C.	17	RX0-
6	SCL_DDC	18	RX0+
7	SCL_DDC	19	SHLD0/5
8	N.C.	20	N.C.
9	RX1-	21	N.C.
10	RX1+	22	SHLDCLK
11	SHLD1/3	23	RXC+
12	N.C.	24	RXC-

2.6 Serial Port Connector For Touch

It is a DB-9 COM Port connector. The following table shows the pin-out assignments of this connector.



Pin	Signal	Pin	Signal
1	Not Used	2	RXD, Receive Data
3	TXD, Transmit Data	4	Not Used
5	GND, Ground	8	Not Used
4	Not Used	9	Not Used
5	Not Used	10	Not Used

2.7 VESA Wall Mounting

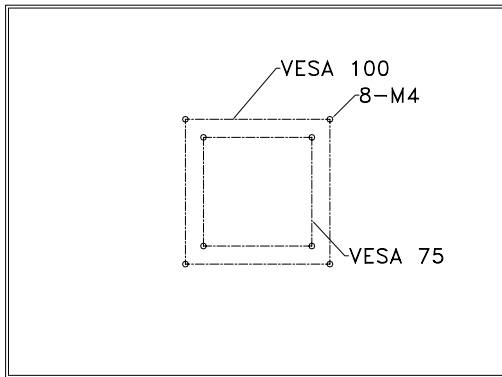
Mounting the Panel PC (Optional) for use only with UL Listed Wallmount Bracket. The Panel PC can be mounted on a monitor arm or wallmount plate.

Caution:

When mounting the monitor, take care to tighten the retention screws or bolts until fully secured, but do not over tighten. Over tightening the retention screws or bolts may cause them to become stripped, rendering them useless.

Monitor Arm or Wallmount Plate Installation

The Panel PC has Video Electronics Standards Association (VESA) standard mounting holes tapped into the rear panel. The standard holes are M4 set at 100mm x 100mm apart.



VESA Mounting Holes

To mount the Panel PC onto a monitor arm or wallmount plate, please follow the steps below.

Step 1: Line up the threaded holes on the monitor rear panel with the screw holes on the monitor arm or wallmount plate.

Step 2: Secure the monitor to the arm or stand with the retention screws supplied with the monitor arm or stand.

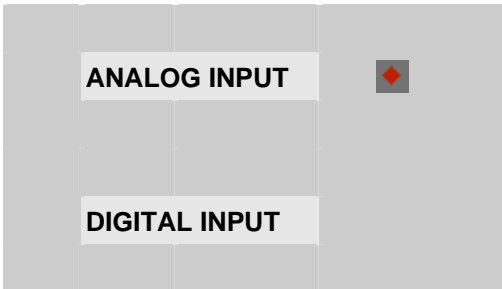
Chapter

3

On Screen Display Control

3.1 On Screen Display (OSD) Control Function

- **OSD Main Menu : Push the MENU key**



-Power : LCD monitor power on / off

-Menu / Enter : Turn off OSD menu

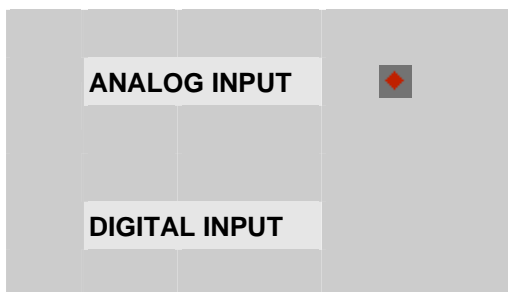
-Right / Down / Increase : Move the selector to the next option

-Left / Up / Decrease : Move the selector to the previous option

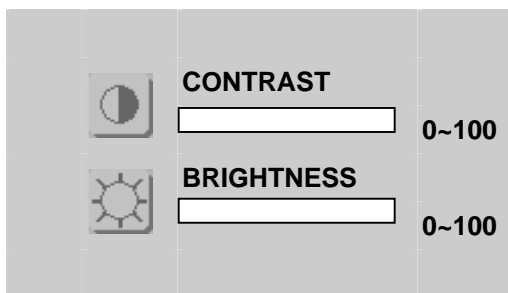
-Auto / Exit : Automatically adjust the clock, phase, H-position and V-position.

-Input select : Enter the selected option

- **Select input source**







- **Contrast/Brightness – Submenu**

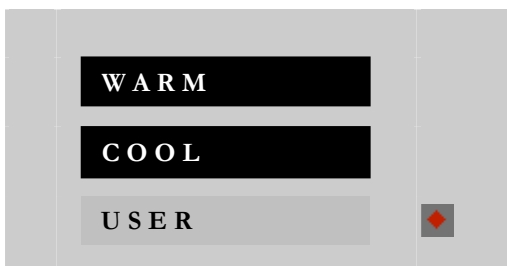


- **Geometry Menu**

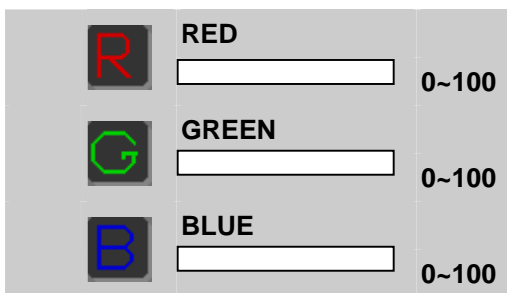


	FOCUS <input type="text"/>	0~100
	CLOCK <input type="text"/>	0~100
	H.POSITION <input type="text"/>	0~100
	V.POSITION <input type="text"/>	0~100

- **Color Temperature - Submenu**



- **RGB Color - Submenu**

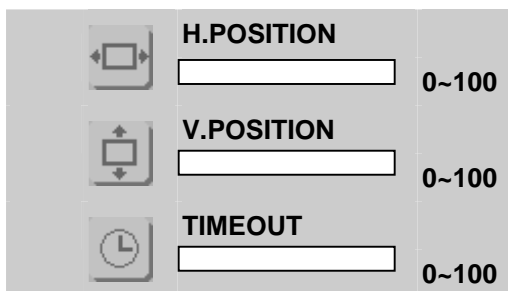


- **Language - Submenu**



ENGLISH	繁體中文
DEUTSCH	FRANCAIS
ESPAÑOL	ITALIANO
簡體中文	日本語

- **OSD Manager - Submenu**



- **Auto Config - Submenu**

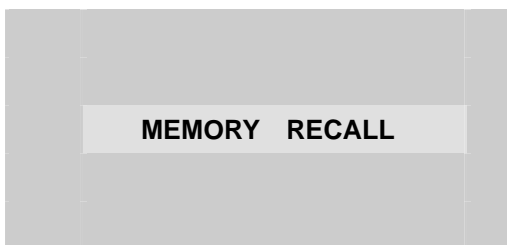


- **Mode Information - Submenu**



1024 X 768 75HZ

- **Memory Recall - Submenu**



- **Exit menu - Submenu**



Chapter

4

**Driver
Installation**

The first time you start Windows with a new monitor, the system will detect OPD display and automatically detect and install the Plug-and-Play device driver.

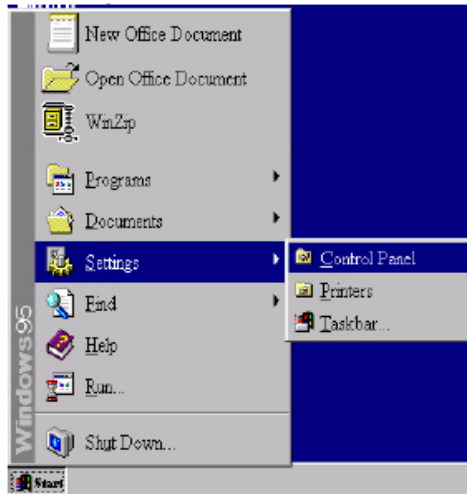
However, manual installation might be needed when your video card does not comply with DDC1/DDCB2 standard, the system can only detect Windows Default Monitor, not the OPD displays.

When your system detects Windows Default Monitor or cannot detect the display at all, follows the step-by-step installation guide below. The drivers for manual installation are provided in the supporting CD-ROM.

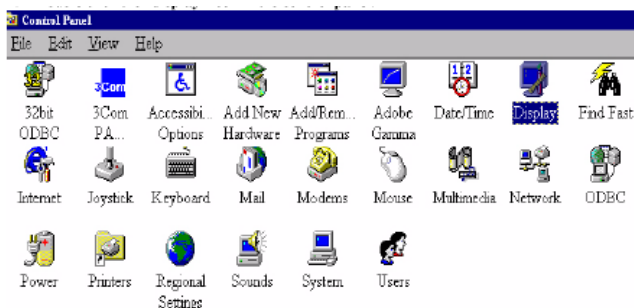
4.1 Display Driver Installation

Windows 98

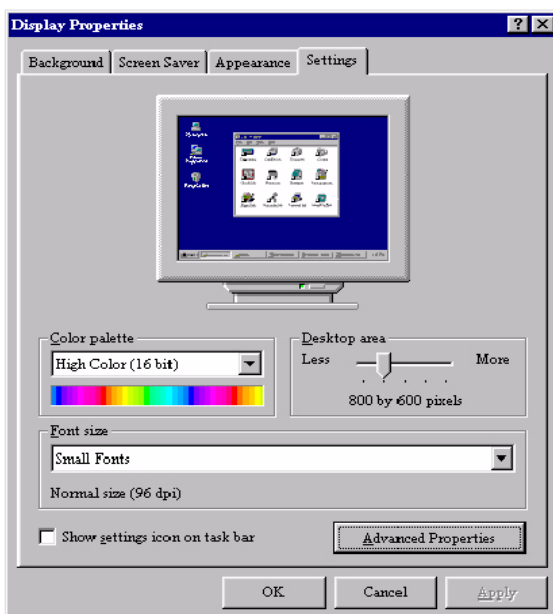
1. Insert the supporting CD-ROM into your CD-ROM Driver.
2. Click “**Start**” button and look for “**Control Panel**” under “**Settings**” menu.



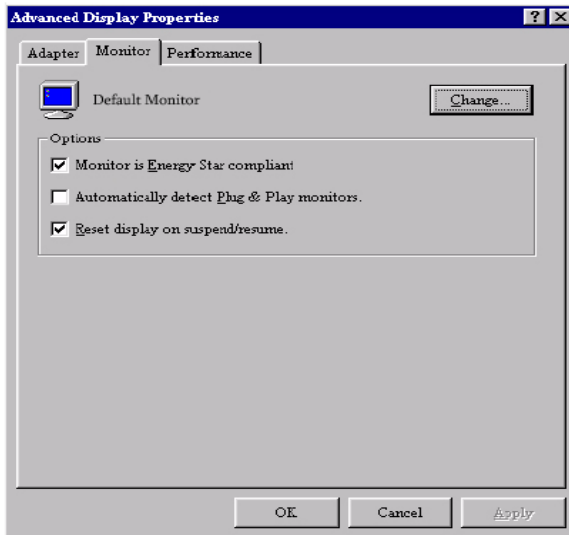
3. Double click the “**display**” icon in the **control panel**.



4. From the “**Display Properties**” window, select the “**settings**” tab. Click the “**Advanced Properties**” button on the bottom right corner.



5. Select the **“Monitor”** tab. Click the **“Change”** button in the top right corner.



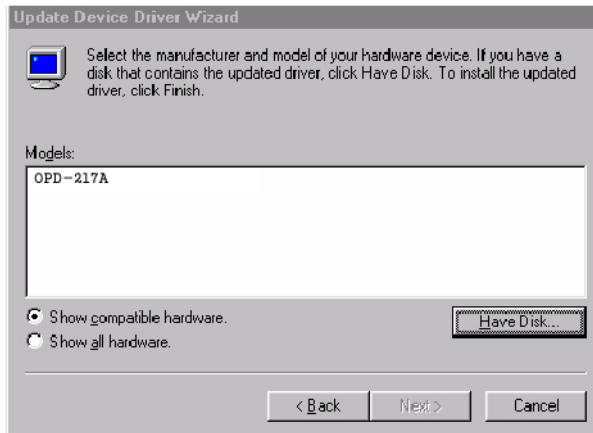
6. Now the **“Update Device Driver Wizard”** opens. Confirm by clicking **“Update”**.



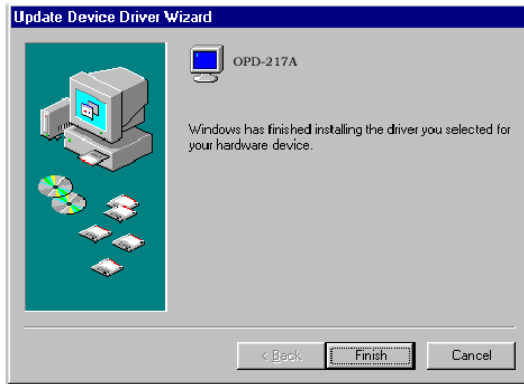
7. Select "**Display a list of all drivers in a specific location, so you can select the driver you want.**" and press "**Next**".



8. Now click the "**Have disk**" button in the bottom right corner. Another window appears, select the "**Browse**" button. Look for the ".inf" file extension for drivers update.



9. Close “**Update Device Driver Wizard**” by click “Finish” to complete the installation.

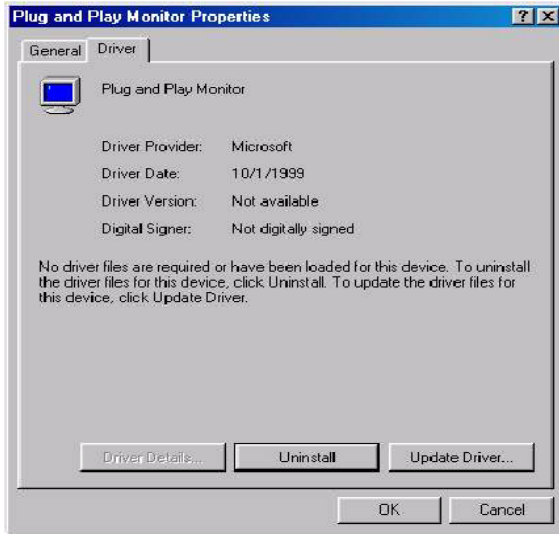


Windows 2000

1. Repeat steps 1 – 4 as in Windows 98 setup.
5. Select the “Monitor” tab. Click the “**Properties**” button.



6. Select **“Driver”** tab then click **“Update Driver”**.



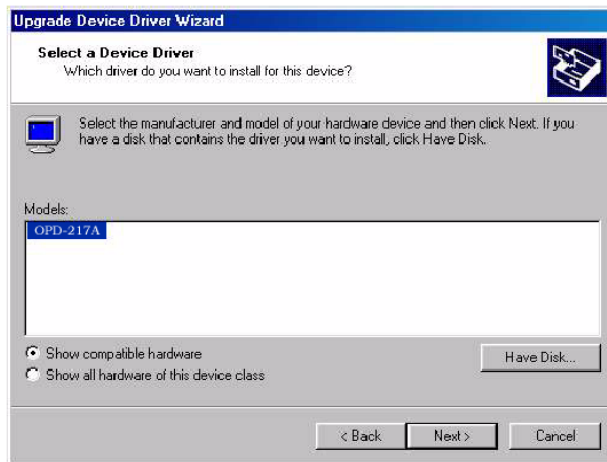
7. The **“Upgrade Device Driver Wizard”** will pop up. Then Click **“Next”**.



- The “Upgrade Device Driver Wizard” will pop up. Then Click “Next”.



- In the next window, click “Have Disk”, then “Install From Disk” window will pop up, click “Browse”, the “Located File” will pop up. Look for the “.inf” file extension for drivers update



- In the next window, click **“Have Disk”**, then **“Install From Disk”** window will pop up, click **“Browse”**, the **“Located File”** will pop up. Look for the **“.inf”** file extension for drivers update.



- The **“Digital Signature Not Found”** window will appear, click **“Yes”**, then click **“Finish”**.



12. Now the new drivers are installed to your computer.



4.2 Touchscreen Driver Installation

1. Click on the **Touch** folder and double click on **Setup** file
2. Follow the instructions that the window shows
3. The system will help you install the driver automatically

Appendix

A

Troubleshooting

A.1 Troubleshooting

To solve the following problems, you may need to refer to **Appendix A Standard Timing** for compatible display specifications.

- **Problem: Unclear or Unsteady Display**

Actions:

Activate the **AUTO** button. You might need to repeat to find balanced values for a good quality.

If the **AUTO** button cannot solve the problem, try to manual fine tune following steps below:

1. If the image size does not fit the screen, adjust the **Size** setting value under “**Quality**” menu.
2. If there is image pixel noise appears, adjust the **Phase** setting value under “**Quality**” menu. Pull and adjust the value bar to find out what is the best clarity range for your LCD display.
3. If the image is not centered after step 1 and 2, adjust **Image Position** under “**Position**” menu to center the image.
4. If you still have problem to fine-tune the image, call your local technical support for assistance.

- **Problem: No Display is shown on the LCD monitor.**

Actions:

1. Make sure the LCD monitor is powered on by checking if the Power LED is lit. Check if all the connections are secure and the system is running correctly.
2. If the power LED lights up green, but there is still nothing

displayed; connect your PC with another external monitor. If your PC works properly with that monitor, then it is possible that the VGA card timing of the system may be outside the LCD monitor's synchronous range. You may need a qualified technician for help.

- **Problem: "Not Supported Mode" is shown on the display.**

Action:

This could be a mistake you made in the OSD menu while choosing the INPUT SOURCE: RGB or VEDIO. Or, it is possible that you have chosen a timing that is outside the LCD monitor's synchronous range. Recall the factory default values may help to bring the screen back to normal.

- **Problem: The LCD monitor does not work properly under Windows, but it functions all right in DOS mode.**

Action:

Make sure the display mode you choose in Windows matches the LCD monitor.