

BenQ FP547

LCD Color Monitor

15.0" (38.1cm) LCD Panel Size

User's Manual

BenQ

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Safety Instructions

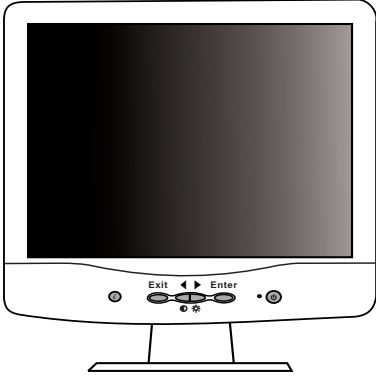
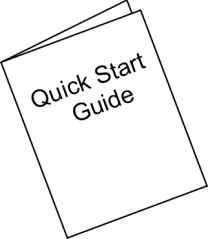
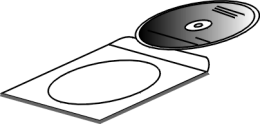
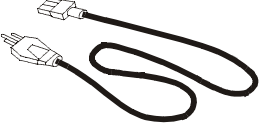
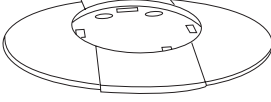
1. The AC plug isolates this equipment from the AC supply.
2. Unplug this product from the wall outlet before cleaning. Clean the LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any cleaning solution or glass cleaner.
3. Slots and openings on the back or top of the cabinet are provided for ventilation. They must not be blocked or covered. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
4. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
5. Never push objects of any kind, or spill liquid of any kind into this product.
6. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltages or other risks. If any above mentioned misuse or other accident (dropping, mis-operations) occurs, contact qualified service personnel for servicing.
7. The power supply cord serves as a power disconnect device for pluggable equipment. The socket outlet shall be installed near the equipment and shall be easily accessible.

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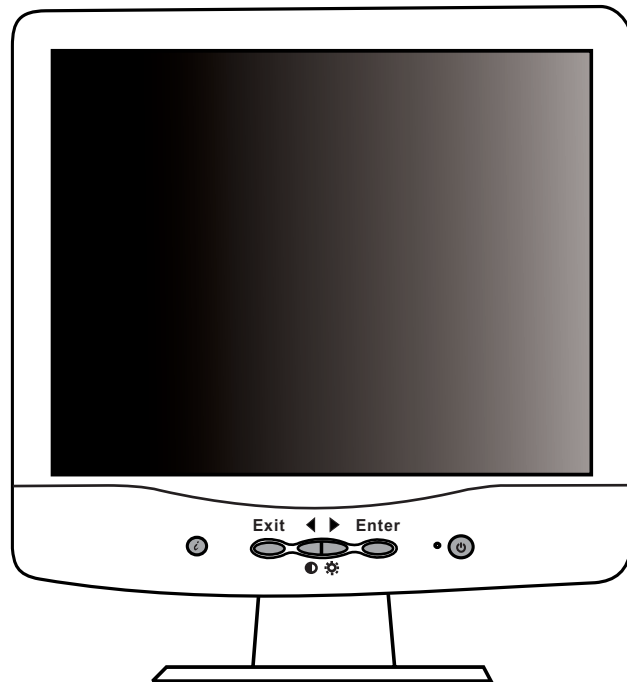
Unpacking

Please check you have the following items. If they are missing or are damaged, please contact the dealer at which you purchased the goods.

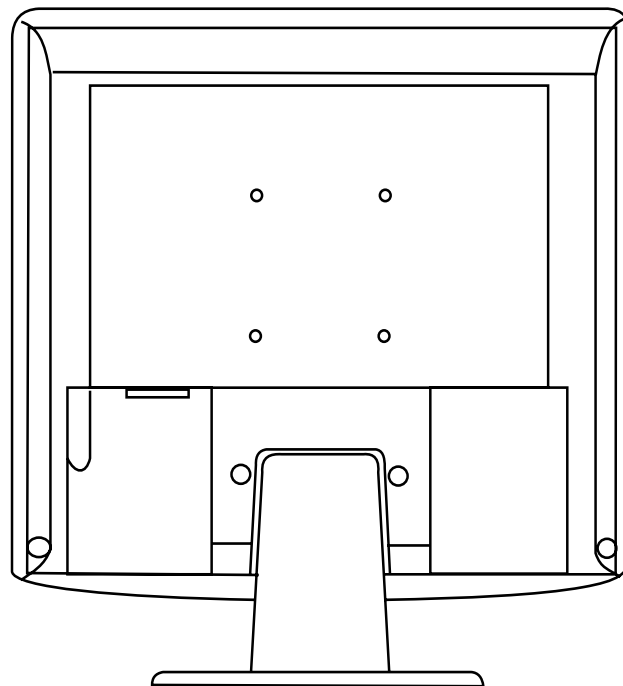
LCD monitor with undetachable signal cable	
Quick Start Guide	
CD-ROM	
Power Cord	
Extension Base	

Views of the Monitor

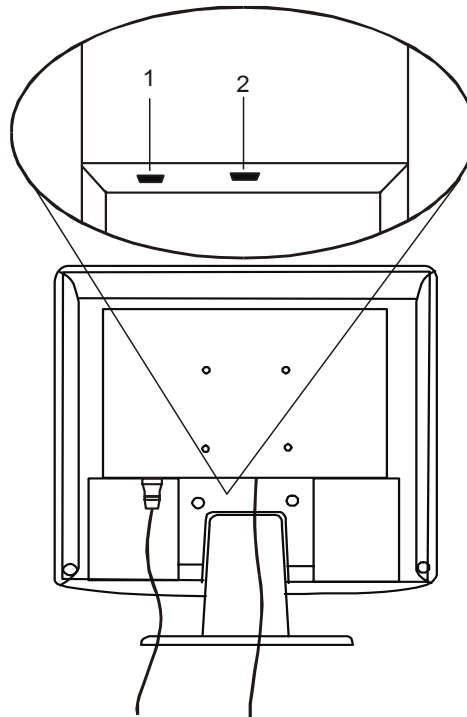
Front View



Back View (I)



Back View (2): Locations of plugs & sockets



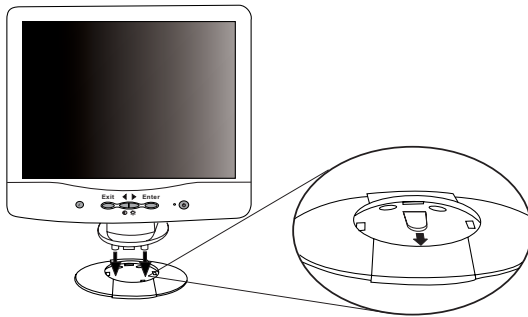
1. Power cord

2. Signal cable

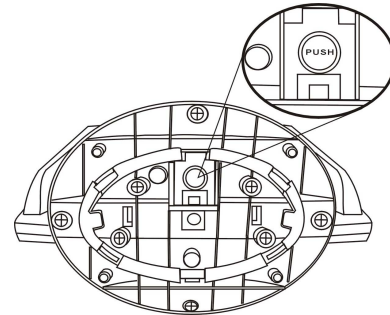
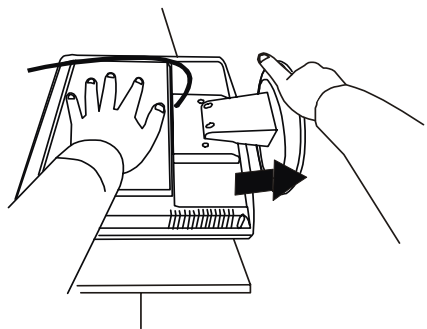
Installation

Hardware Installation

A. Make sure that the computer and monitor's power are both turned off. Please follow the steps to install your LCD monitor.



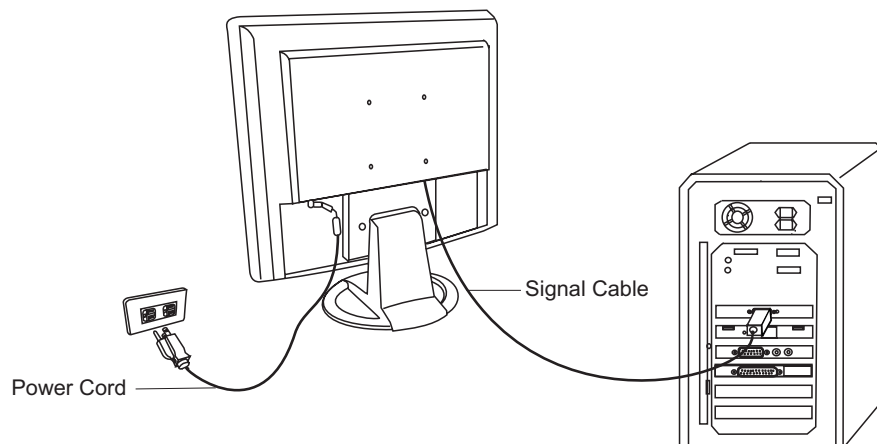
Place the arrow on the base and the front side of the monitor in corresponding direction. The arrow on the base indicates the front of the base. Place the monitor into the base until it locks into place. There will be a clicking sound.



Place the monitor face down on a soft surface. Hold the back of the monitor with one hand. Using the other hand, press the release button on the base and push outward in the direction of the arrow to detach the base extension.

B. Connect the signal cable to the VGA output of the graphics card on the computer.

C. Connect the power cord at the back of the monitor to an AC power socket. Please make sure that the socket is not blocked or covered, so you can disconnect the unit from AC supply if you need to. Your monitor is equipped with an automatic power supply for a voltage range from 100 to 240 Volt at a frequency of 50 to 60 Hz. Be sure that your local power is within the supported range. If you are unsure, ask your electricity supplier.



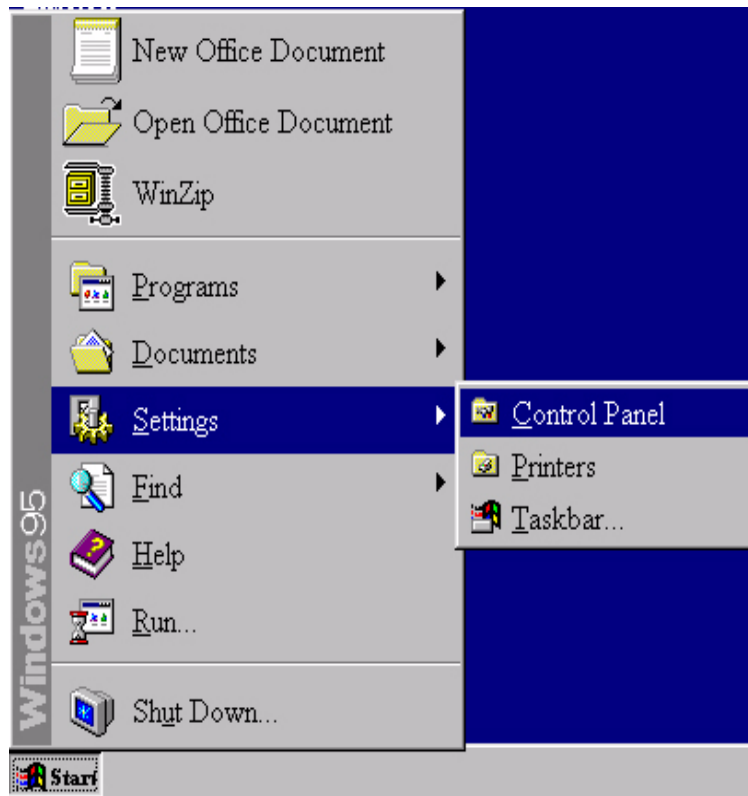
Software Installation

A. Microsoft® Windows® 95 / 98 / 2000

If you are using Windows 95, Windows 98 or Windows 2000 as an operating system, you have to set up the correct monitor driver.

Windows 95 The first time you start Windows with a new monitor, the system will detect it and automatically install the driver for plug and play displays. To install the current driver from CD, proceed as follows:

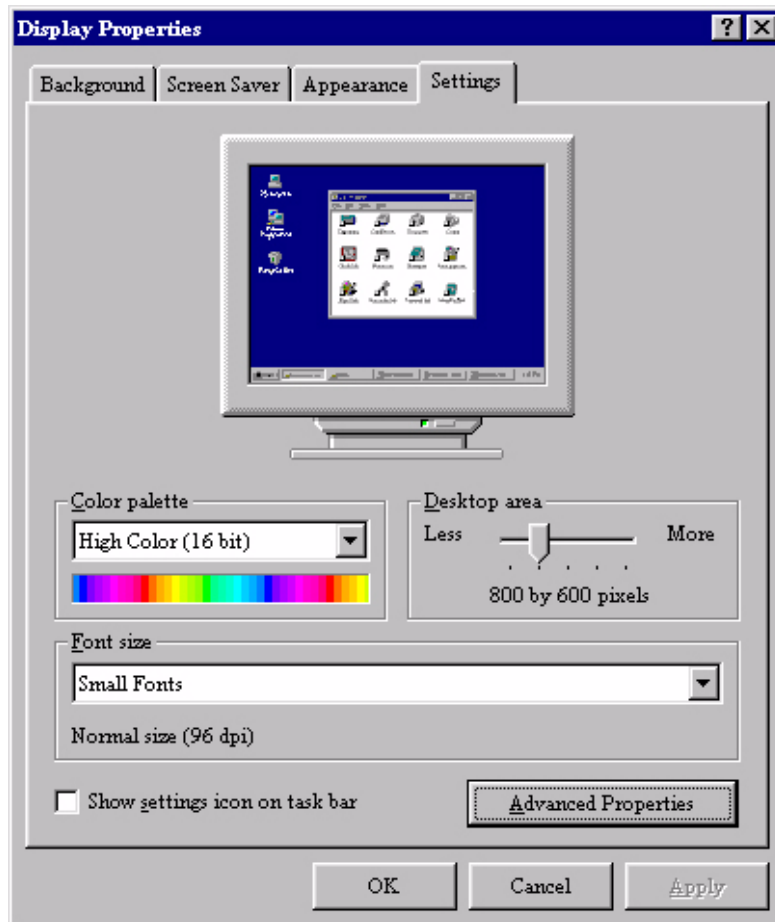
1. Insert “**BenQ LCD Monitor**” CD-ROM into your CD-ROM Driver.
2. Click “**Start**” then “**Settings**”.



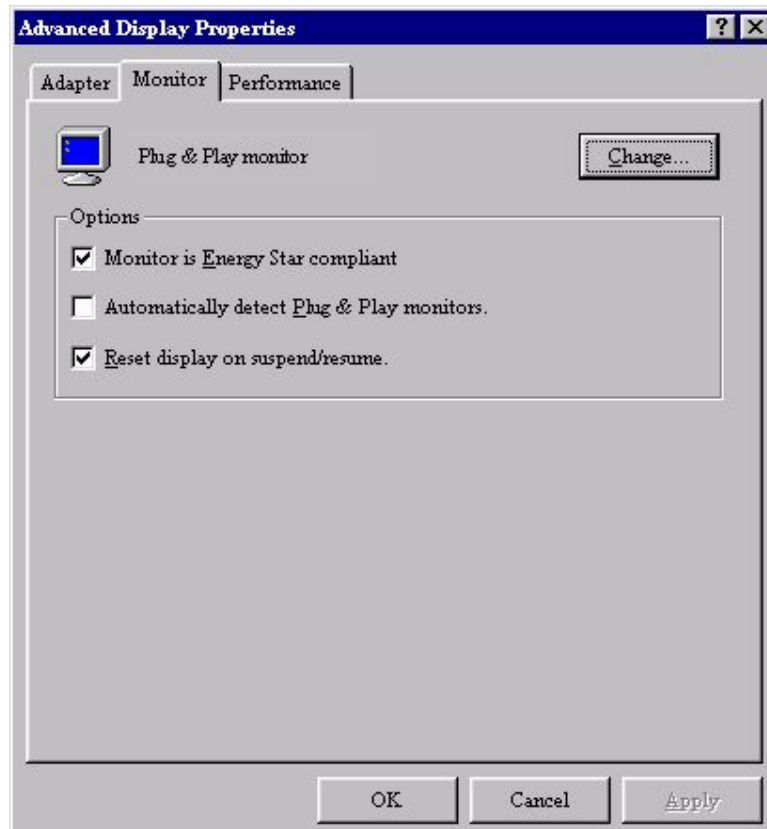
3. Double click the “**Display**” icon in the Control Panel.



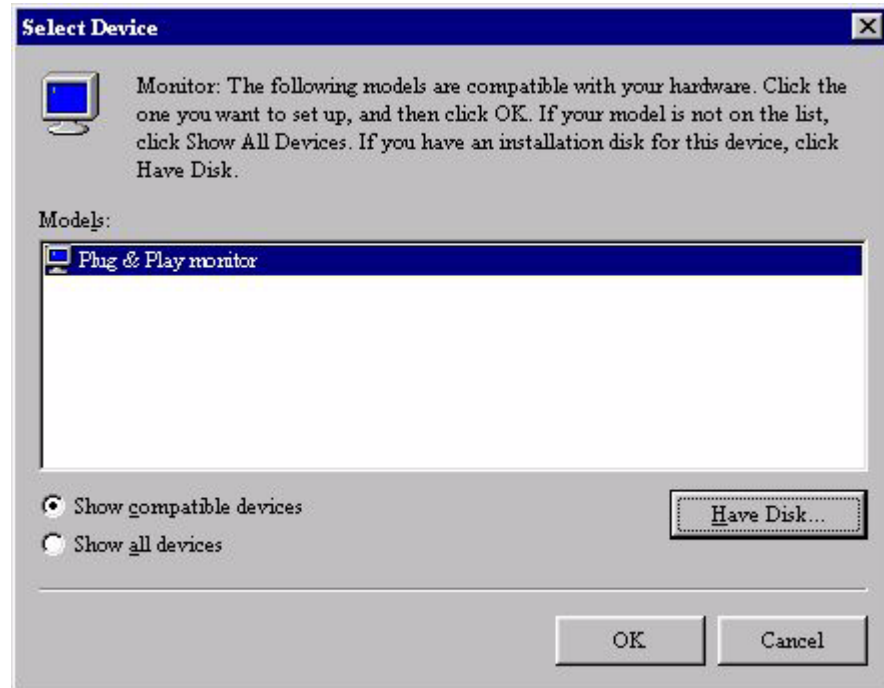
- From the “**Display Properties**” window, select the “**Settings**” tab. Click the “**Advanced Properties**” button in the bottom right corner.



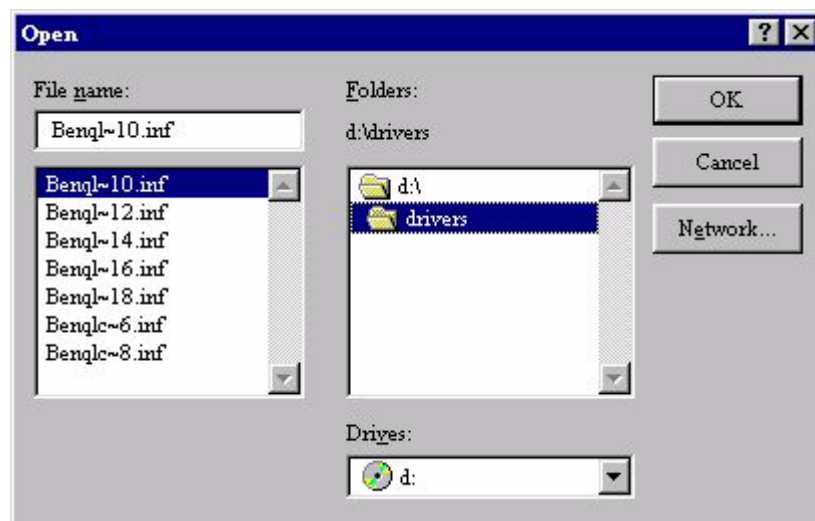
- Select the “**Monitor**” tab. Click the “**Change**” button in the top right corner.



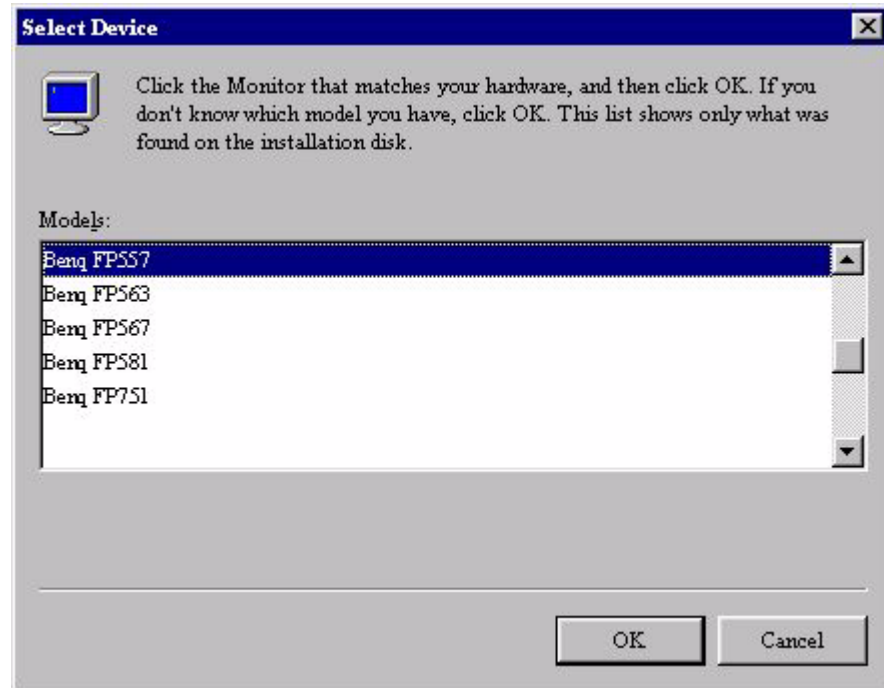
- Now click the **“Have Disk”** button in the bottom right corner. Another window appears, select the **“Browse”** button.



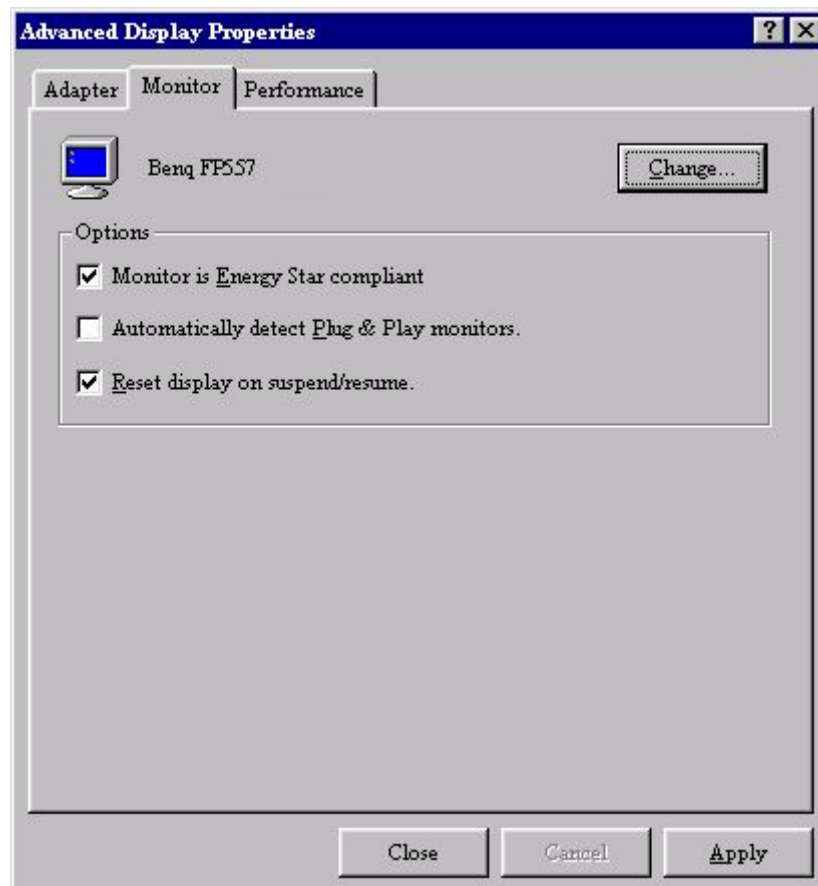
- Insert the supplied CD into your computer. Select the CD-drive from the drop-down menu.
- In the field above the drive selection, change to the **“Drivers”** folder. The current driver files are located there. Press **“OK”** and the window closes.



9. By pressing “OK” again in the next window you will be given a list of compatible devices. Select “FP547” from the list and press “OK” again.



10. You are now back at “Advanced Display Properties”. Close this window by clicking “OK” and confirm the following messages with “Yes”. Click “OK” and “Yes” again. The installation is now completed. You can close “Display Properties”.

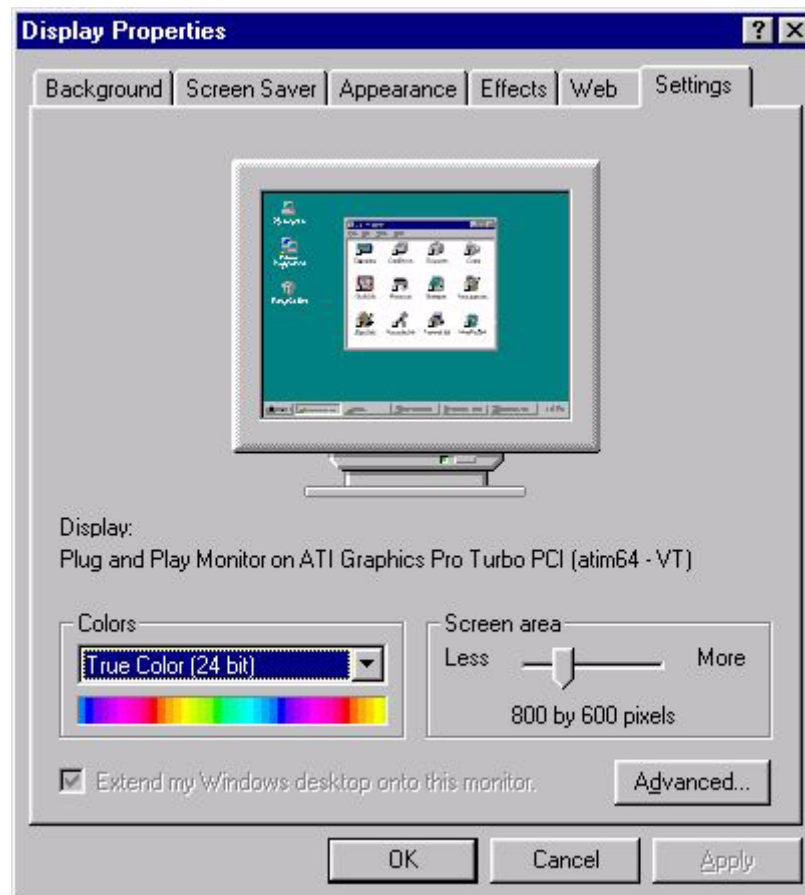


Windows98. To manually install or update the driver, perform the following steps:

1. Open the control panel and double-click "**Display**" icon.



2. From the "**Display Properties**" window, select the "**Settings**" tab. Click the "**Advanced...**" button in the bottom right corner. .



3. Select the **"Monitor"** tab. Click the **"Change"** button in the top right corner. .



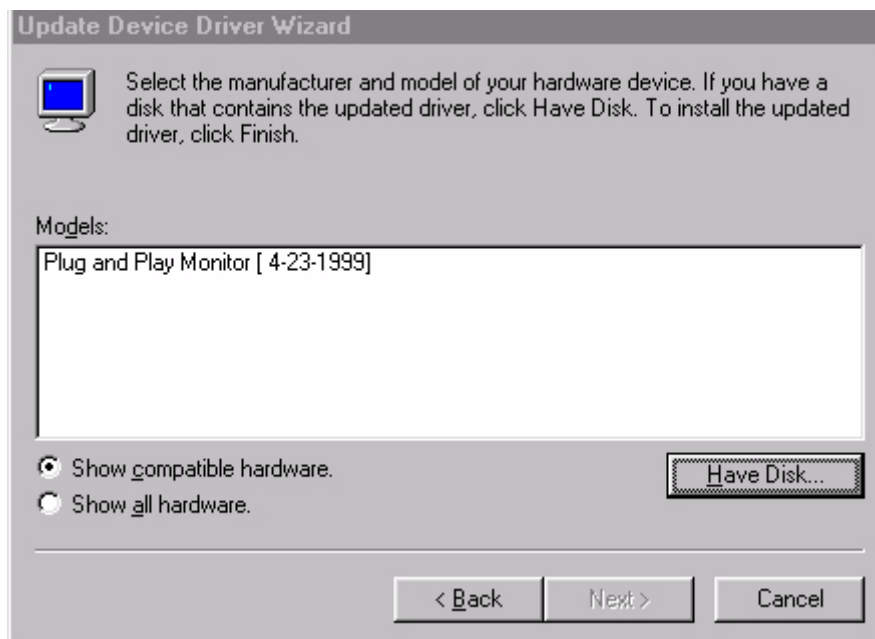
4. The **"Update Device Driver Wizard"** opens. Confirm by clicking **"Next"**.



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



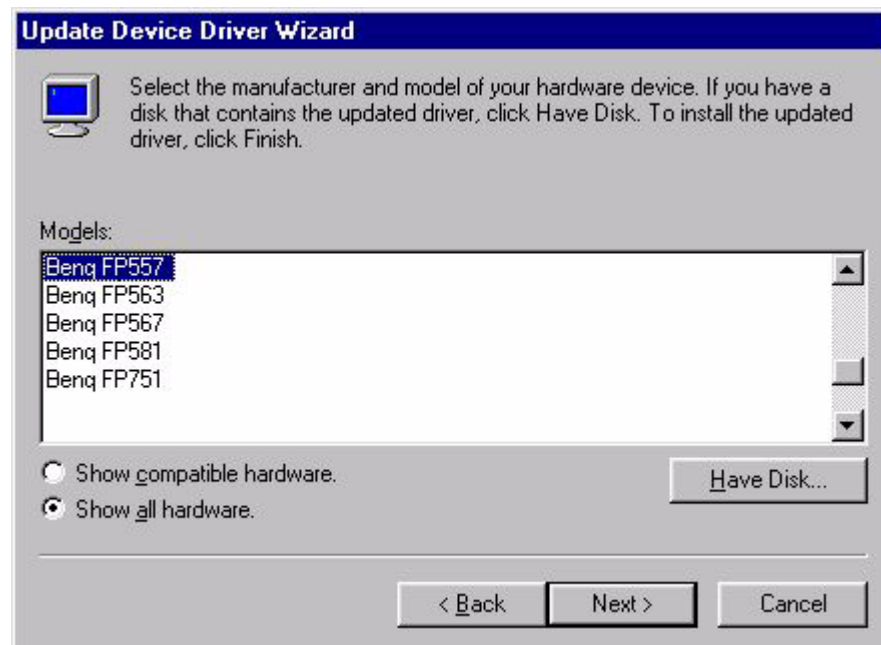
6. Now click the “**Have Disk**” button in the bottom right corner. Another window appears, select the “**Browse**” button.



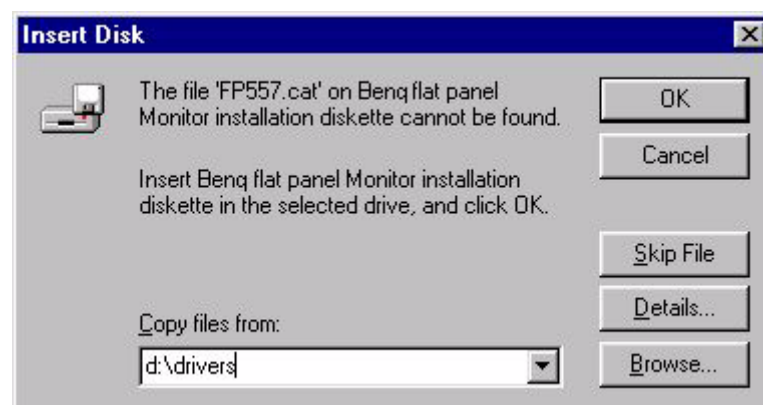
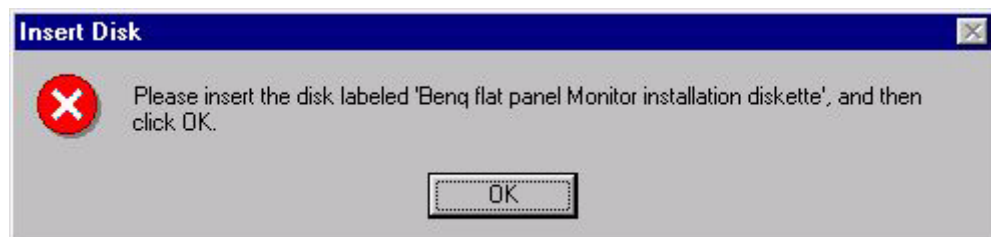
7. Insert the supplied CD into your computer. Select the CD-drive from the drop-down menu. .



8. By pressing “**OK**” again in the next window you will be given a list of compatible devices. Select “**FP547**” from the list and press “**Next**” again.



9. An “**Insert Disk**” dialogue box appears. Click “**OK**”, and then click “**Skip File.**”

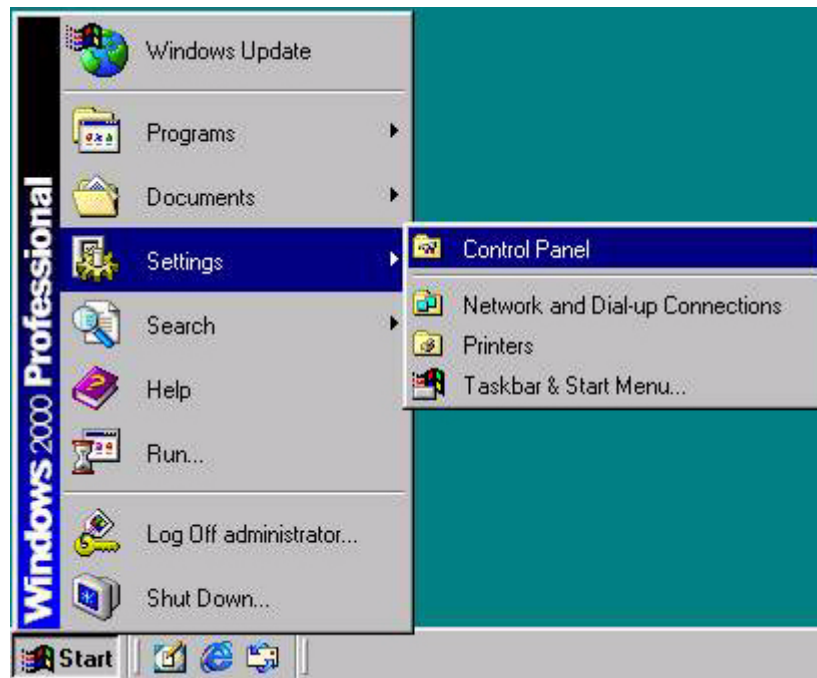


10. Close **“Update Device Driver Wizard”** by clicking **“Finish”** to complete the installation. .

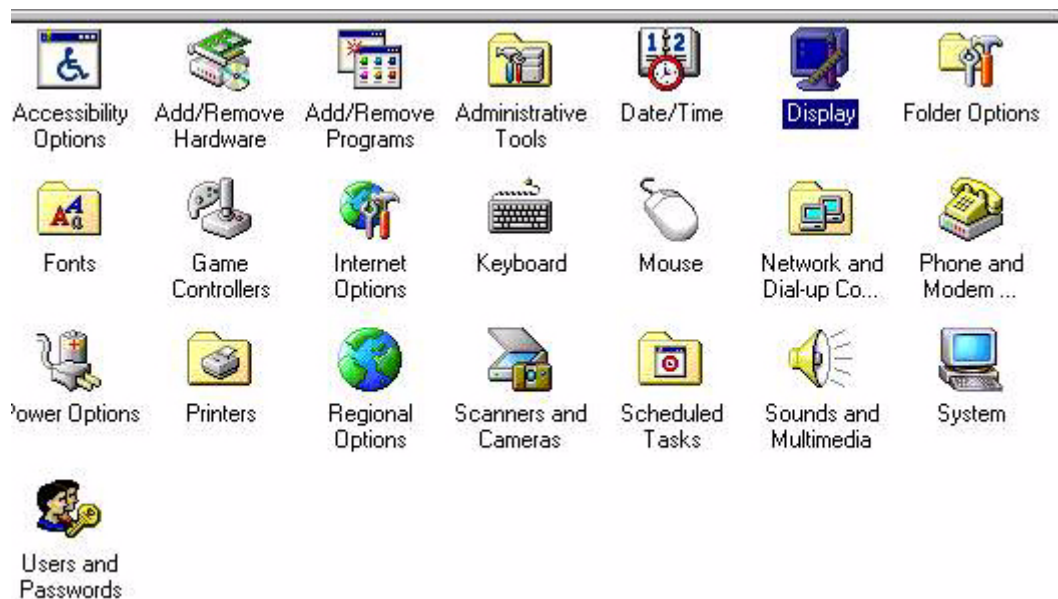


Windows 2000 The first time you start Windows with a new monitor, the system will detect it and automatically start the “**Add New Hardware Wizard**”. Carry out the instructions beginning at step 4.

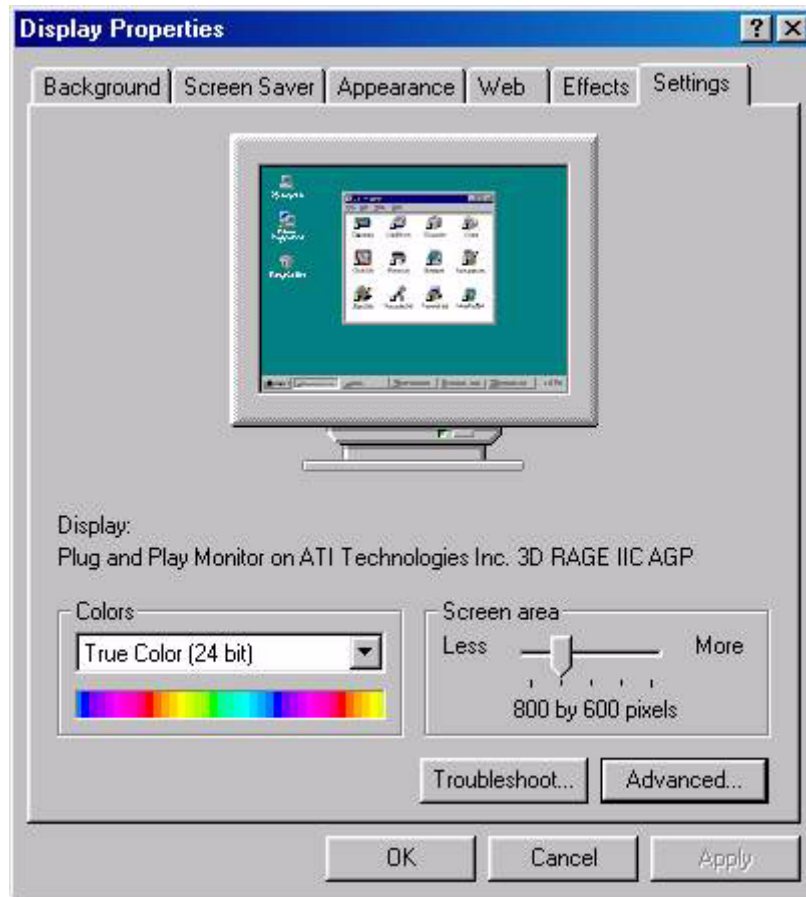
1. Insert “**BenQ LCD Monitor**” CD-ROM into your CD-ROM Driver.
2. Click “**Start**” then “**Settings**”.



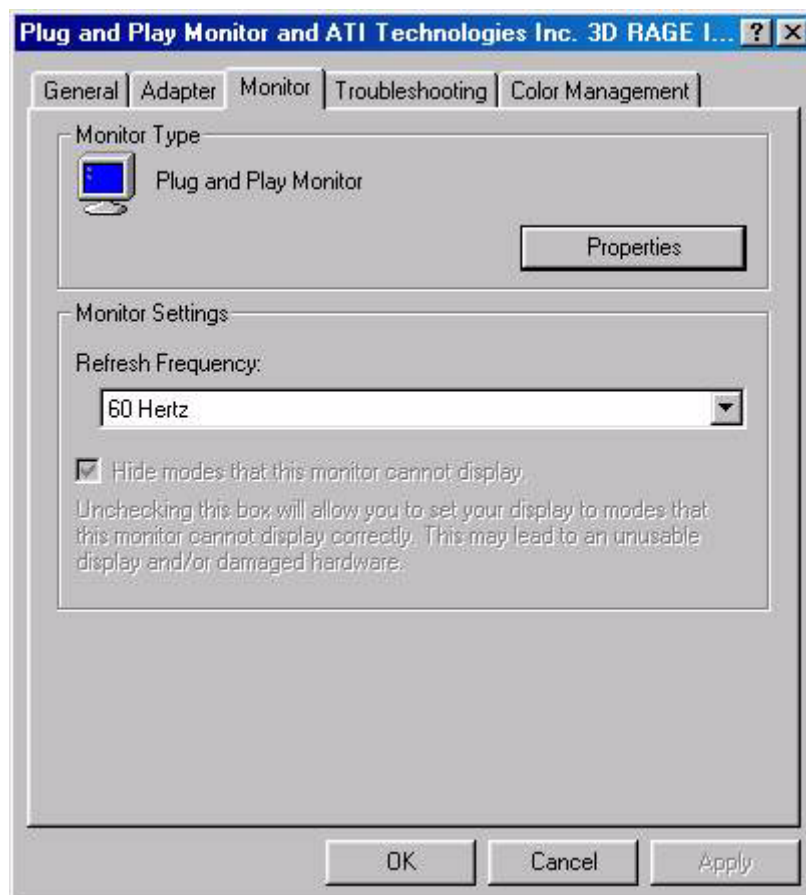
3. Open the Control Panel and double click on the “**Display**” icon.



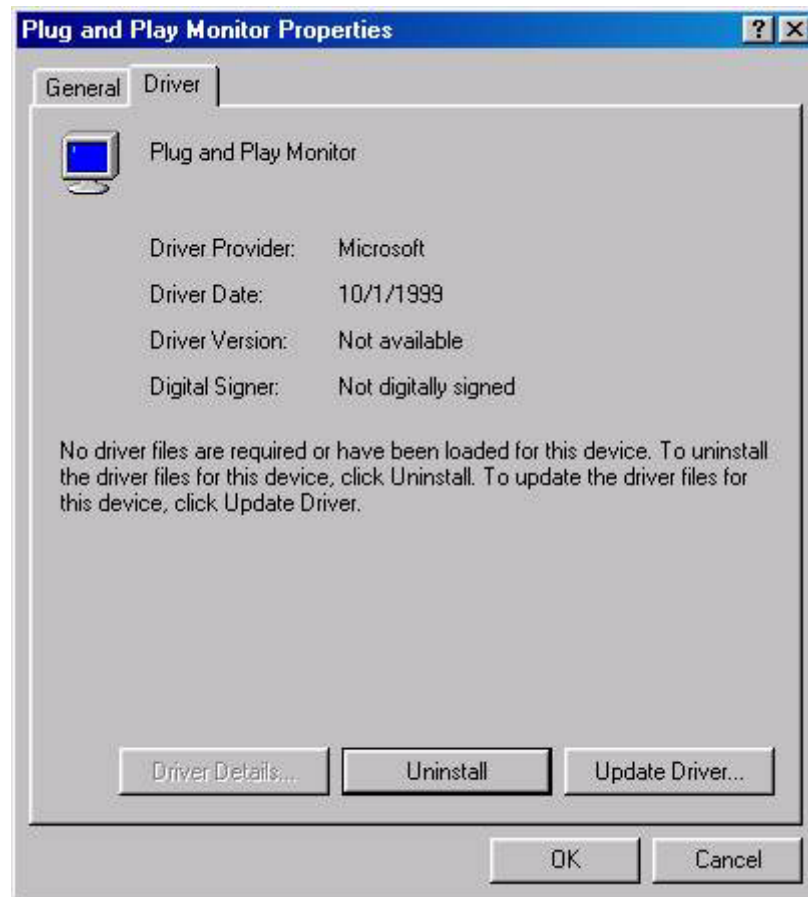
- From the **“Display Properties”** window, select the **“Settings”** tab. Click the **“Advanced...”** button in the bottom right corner.



- Select **“Monitor”** tab, then click **“Properties”**.



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



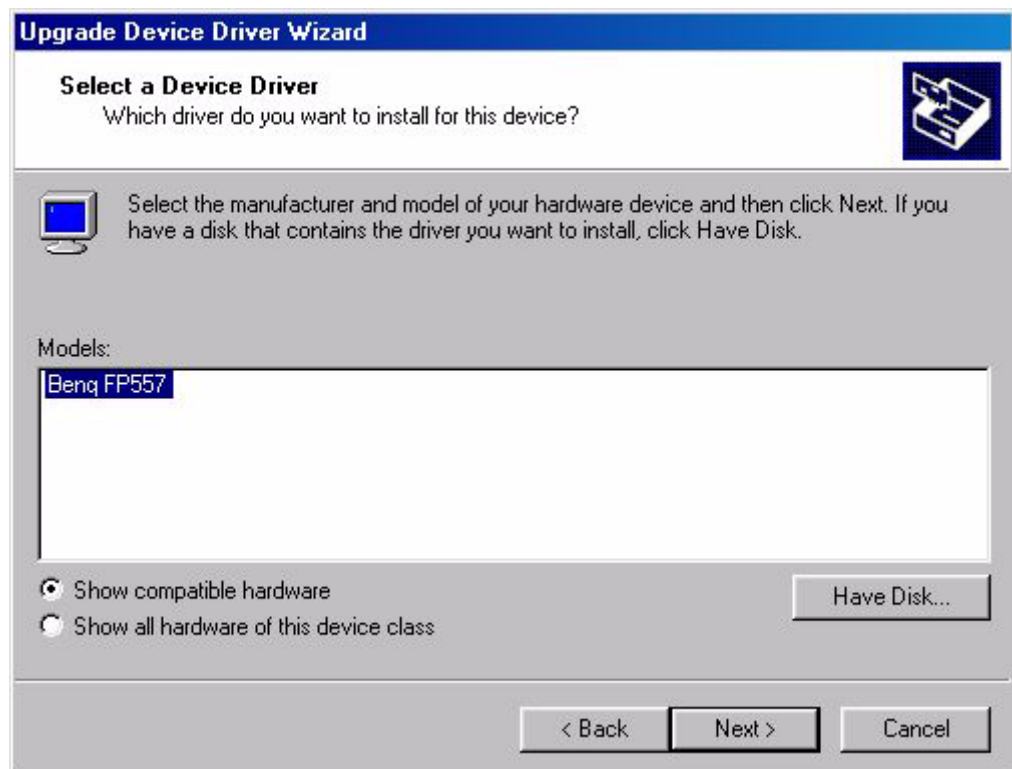
7. The **“Upgrade Device Driver Wizard”** will pop up. Then Click **“Next”**.



8. Select “**Display a list of the known drivers for this device so that I can choose a specific driver**” then click “**Next**”.

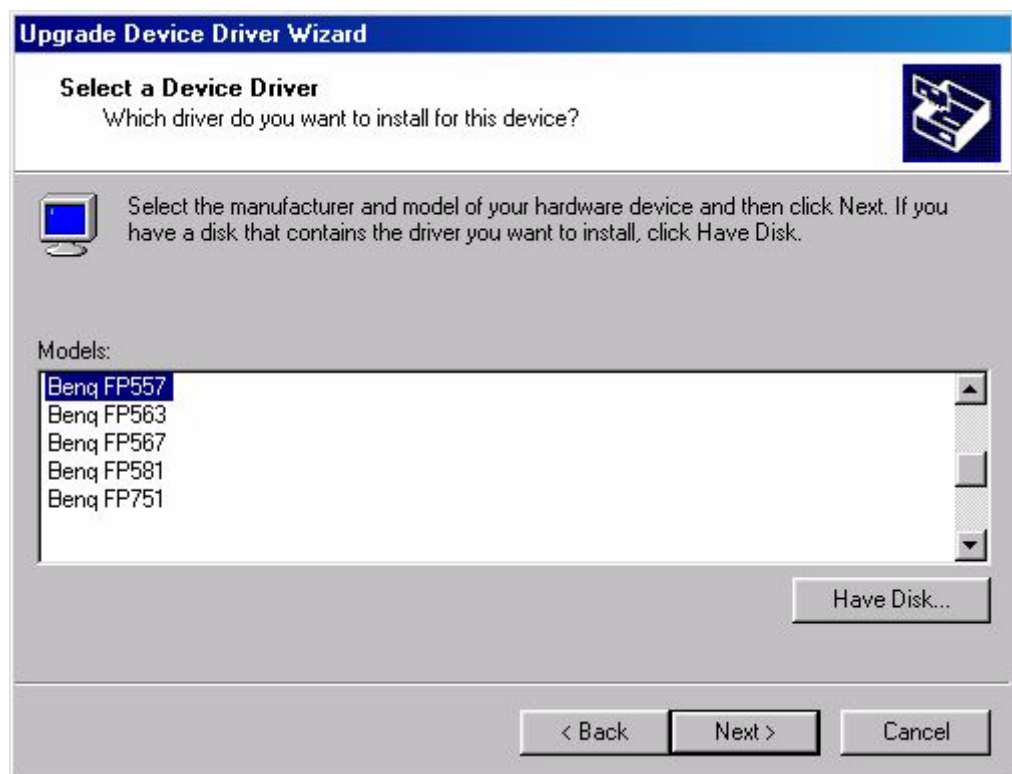


9. In the next window, click “**Have Disk**”, then “**Install From Disk**” window will pop up, click “**Browse**”, the “**Located File**” will pop up.

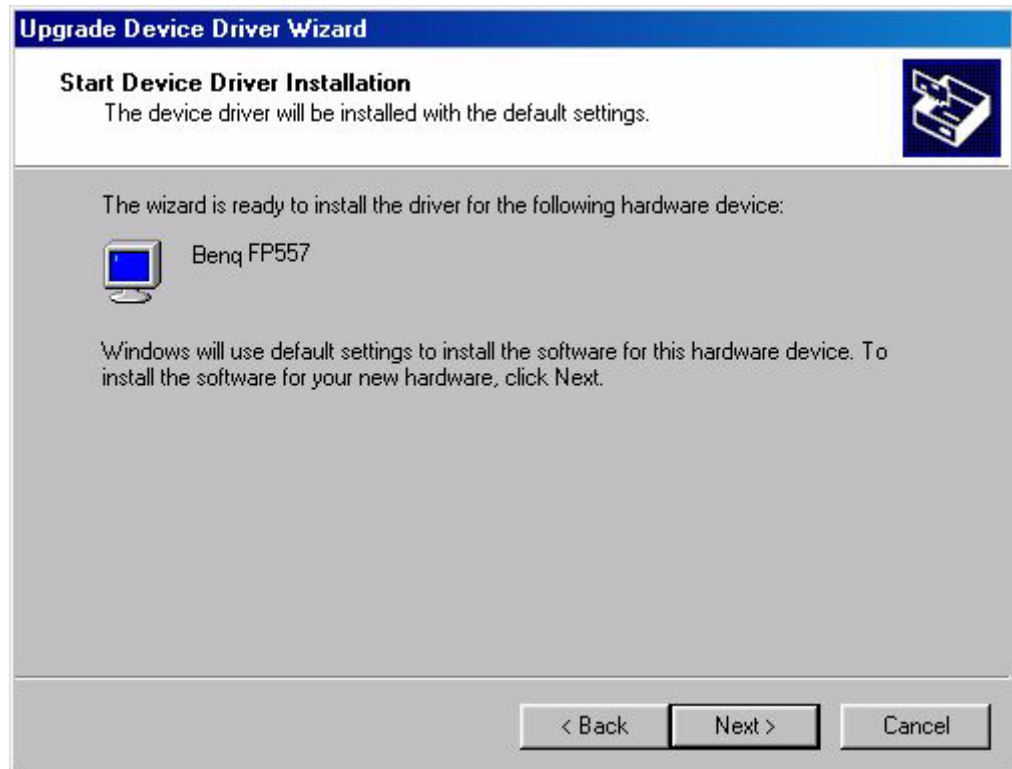




10. Scroll down and select your CD ROM Driver, then click “**Next.**” .



11. In the list of folders within the CD-ROM, select "**Drivers**" folder then click "**Open**" twice, then click "**OK**". Select your LCD Mode (FP547) from the list in the next window then click "**Next**" twice.



12. The "**Digital Signature Not Found**" window will appear, click "**Yes**", then click "**Finish**".

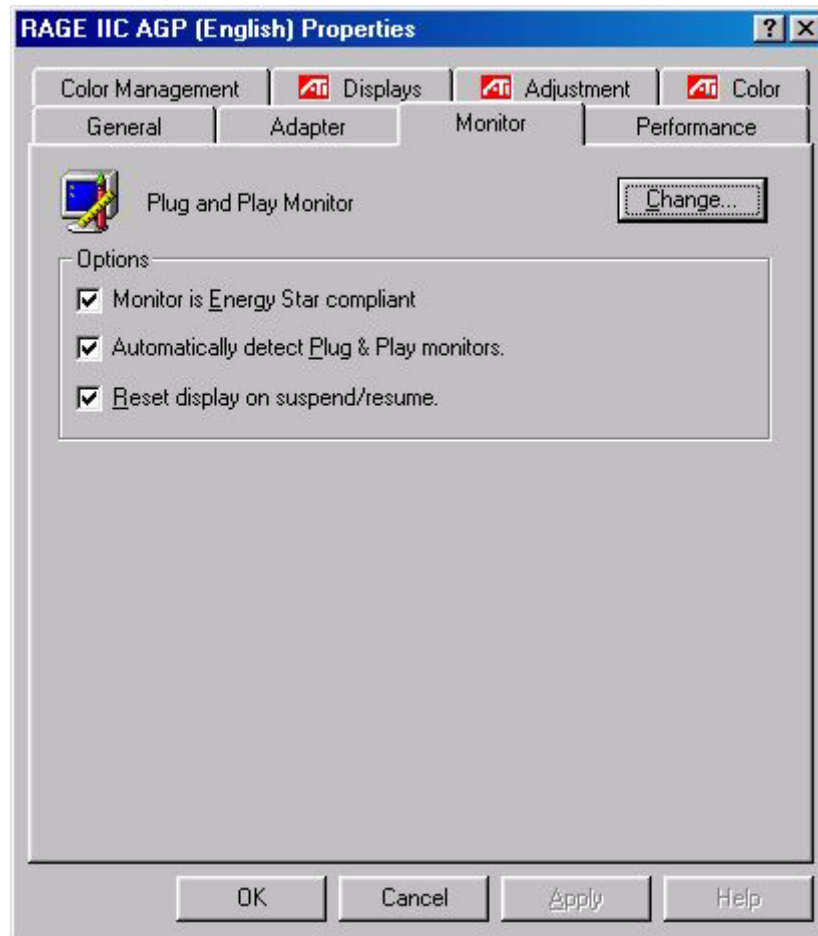


13. The new drivers are now installed on your computer. .



Windows ME To manually install or update the driver, perform the following steps:

1. Click **“Start”**, **“Settings”**, **“Control Panel”** and then double-click **“Display.”**
2. In the Display Properties window, click the **“Settings”** tab and click **“Advanced...”**.
3. Click the **“Monitor”** tab and then click **“Change”**.



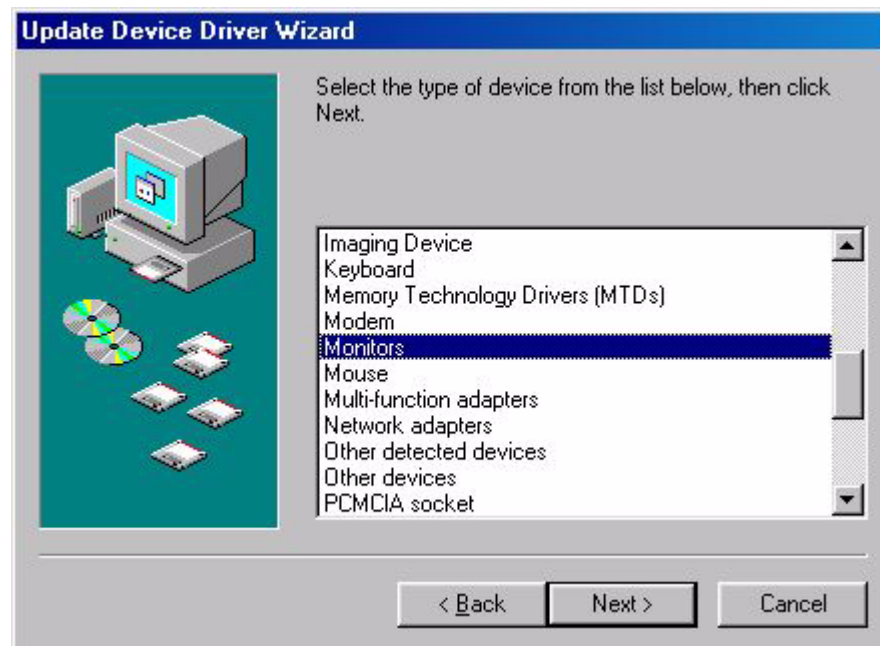
4. **“Update Device Driver Wizard”** dialogue box appears. Choose **“Specify the location of the driver (Advanced)”** and then click **“Next”**.



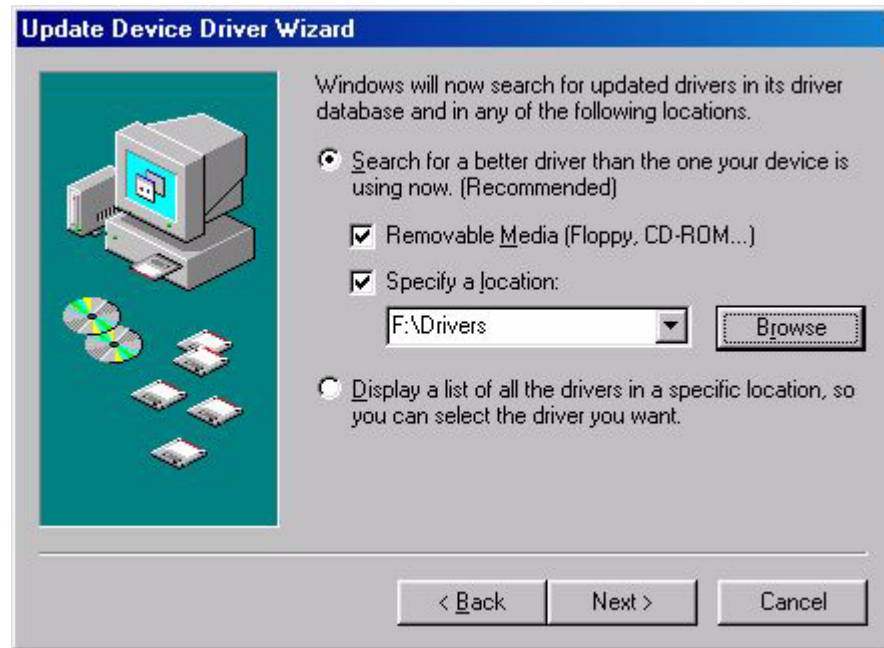
5. Choose “**Display a list of all the drivers in a specific location, so you can select the driver you want**” and click “**Next**”.



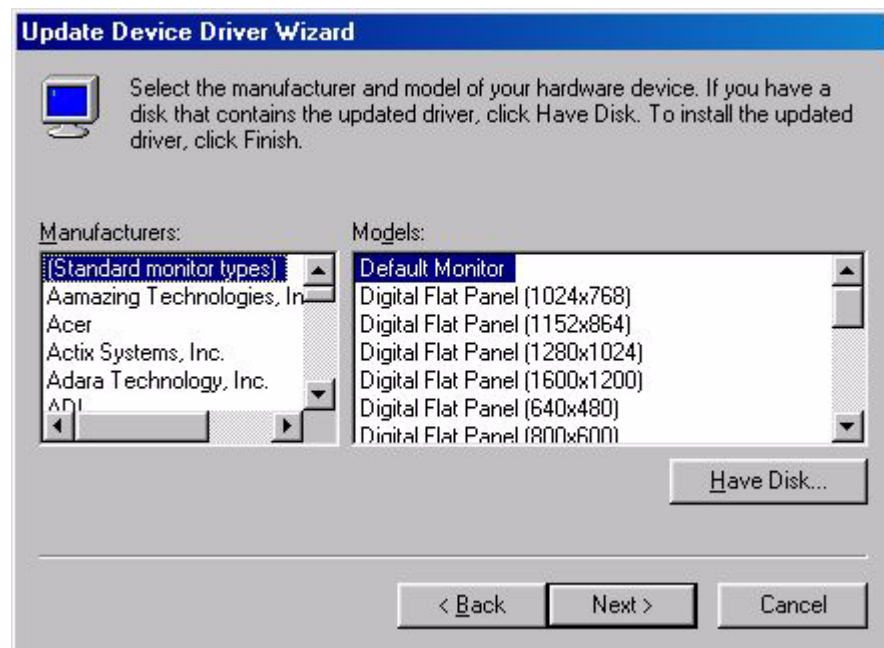
6. Choose “**Monitors**” from the list, then click “**Next**”.



7. Choose “**Display a list of all the drivers in a specific location, so you can select the driver you want.**”.

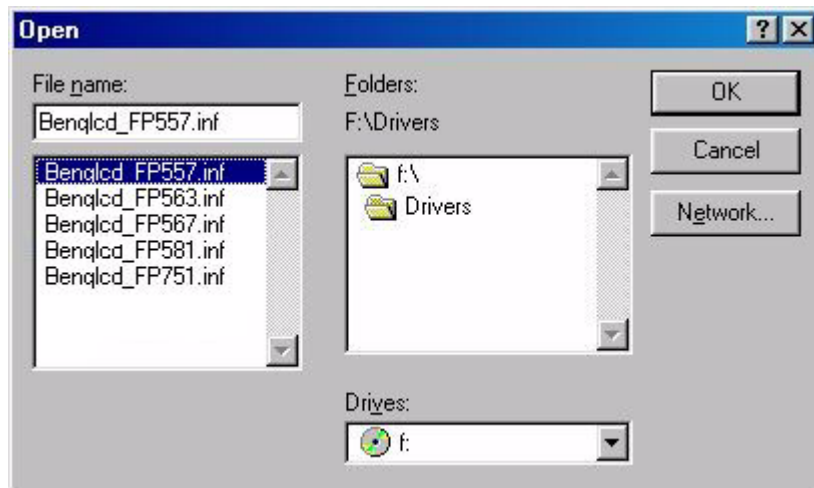


8. Click “**Have Disk**” and then click “**Browse...**”.

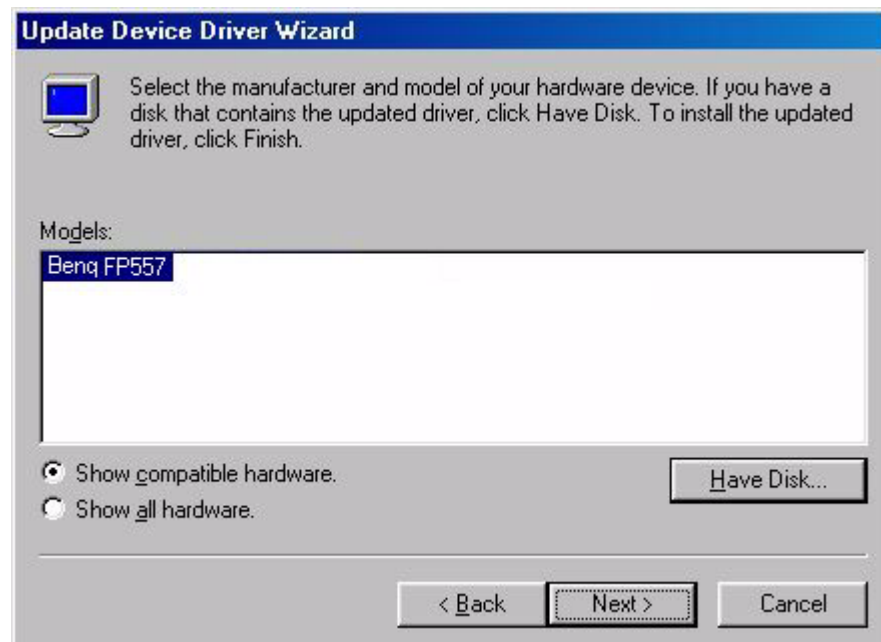


9. Insert “**BenQ LCD Monitor’s CD**” into your CD-ROM and type d:\ (change the driver letter to match your CD-ROM driver if it is not drive D). Enter “**Drivers**” folder to select the model from the list left. Click “**OK**”.





10. Click **“OK”** on the **“Install From Disk”** window. The dialogue box **“Update Device Driver Wizard”** appears. Choose the model from the list, then click **“Next”**.



11. Click "**Next**".



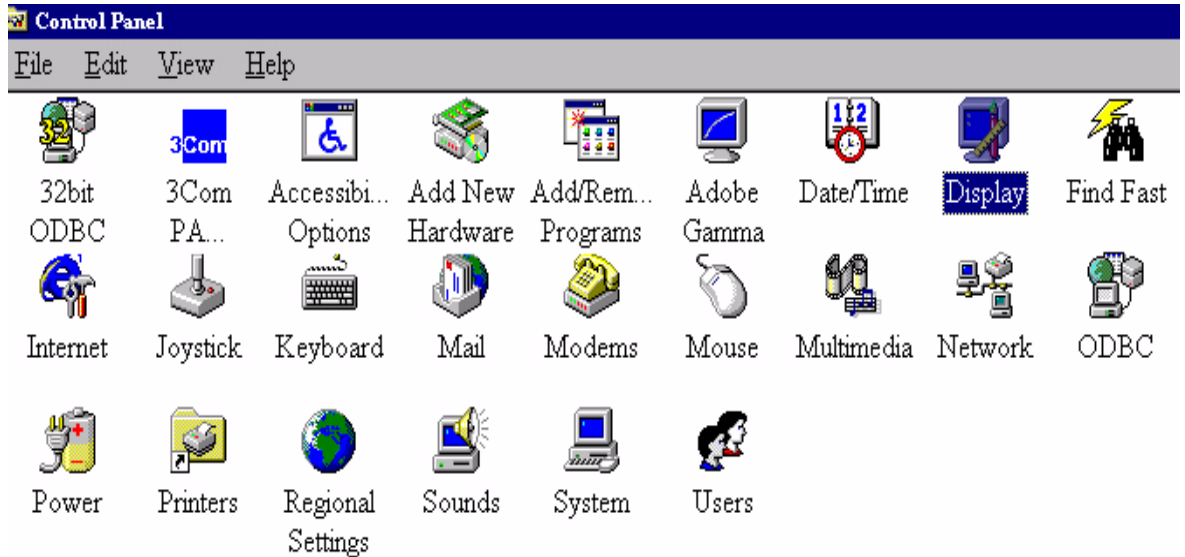
12. Click "**Finish**" to complete the installation.



B. Choosing the best resolution

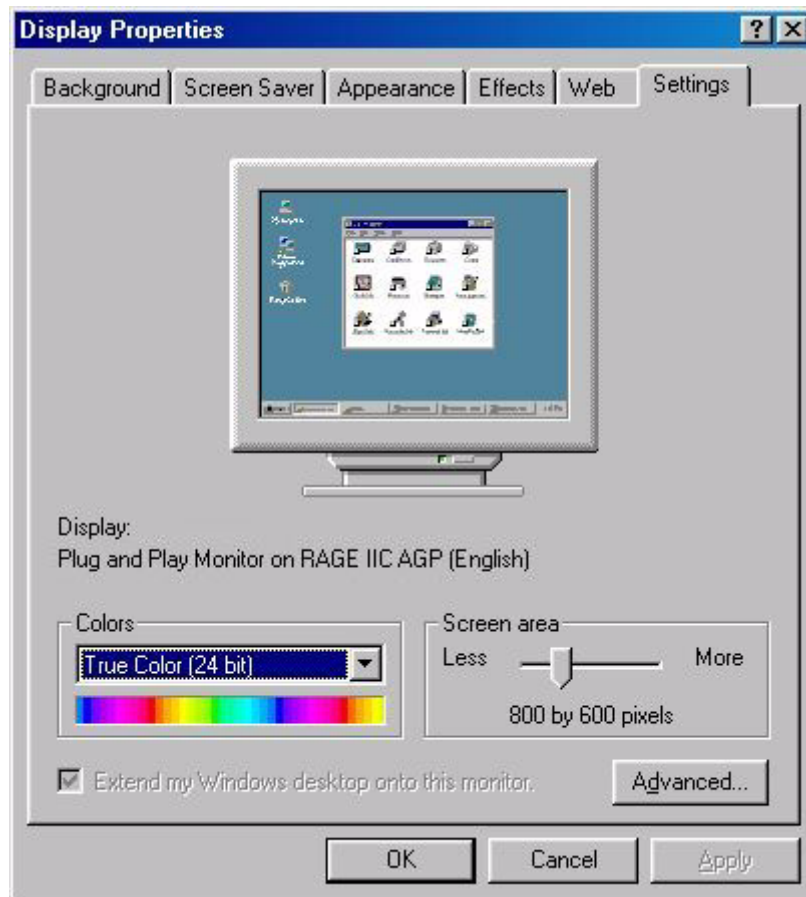
Due to the technology of an LC display, it always provides a fixed resolution. For the FP547 this is a resolution of 1024x768. This is called the "Native Resolution", which also represents the maximal resolution. Lower resolutions are displayed on a full screen through an interpolation circuit. Flaws do occur with the interpolated resolution compared to the native resolution. If you want to have all the advantages of LCD technology you must use the native resolution. Using Windows 95/ 98/ 2000 you can change the resolution as follows:

1. Double-click the "**Display**" icon in the Control Panel.

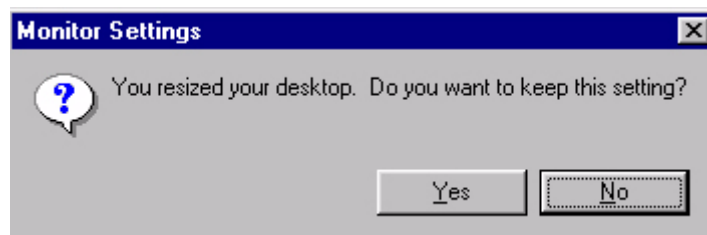
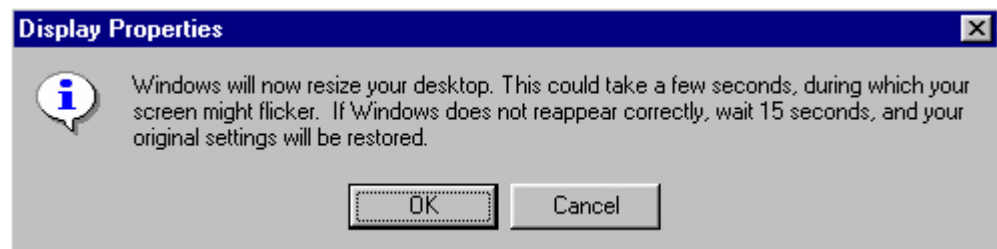


2. From the "**Display Properties**" window, select the "**Settings**" tab. There is a slider on the right-hand side in the middle of the window. There you can alter the resolution.

3. Select a resolution of 1024x768. Then click "**Apply**".



4. In the subsequent windows, press "**OK**" and "**Yes**."



5. You can now close "**Display Properties**".

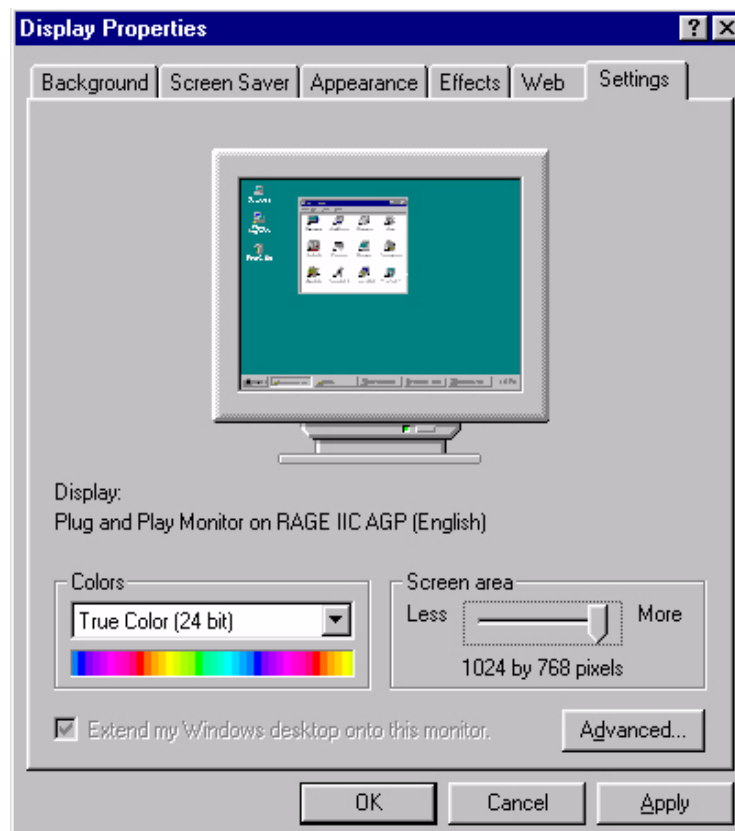
C. Refresh Rate Selection

There is no need to choose the highest possible refresh rate on a LC display. It is not technically possible for an LC display to flicker. Even at a refresh rate of 60 Hz you will get an absolutely flicker-free image. More important is that you make sure that you use one of the factory modes. In contrast to a modern CRT monitor, which is a multiscan monitor, the LC display is a multi-frequency monitor. This means, the best results are only obtained by using the factory modes. You will find a table with the factory modes in this user's guide. For the native resolution of 1024x768, these, for example, are 60, 70 and 75 Hertz, not 72 Hz; however, in Windows 95/ 98/ 2000 you can change the refresh rate as follows:

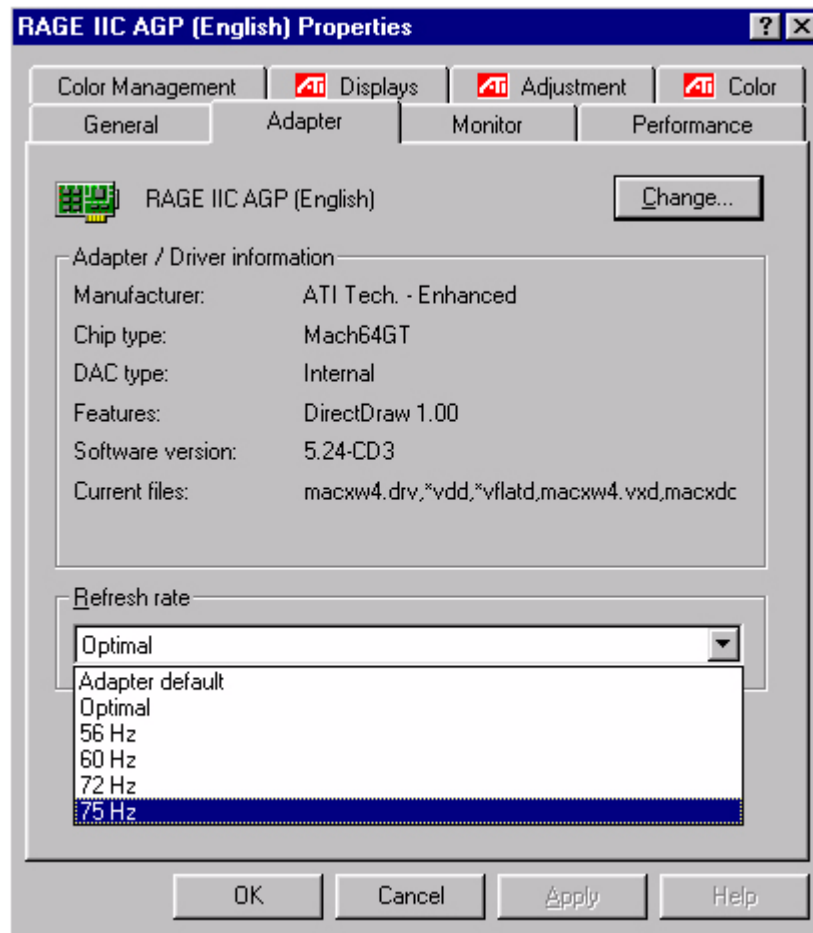
1. Double click the **"Display"** icon in the Control Panel.



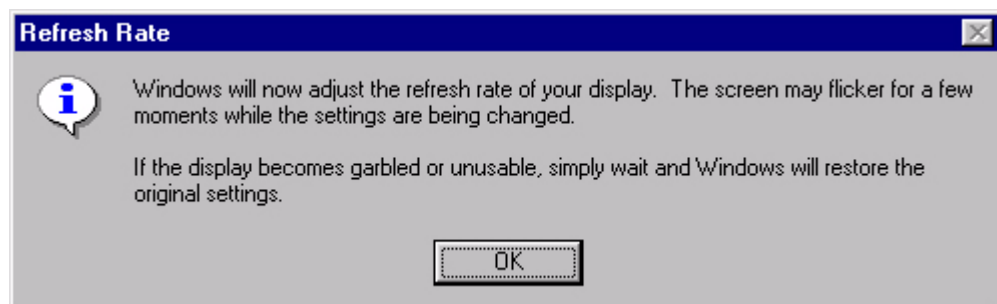
2. From the **"Display Properties"** window, select the **"Settings"** tab. Click the **"Advanced..."** button in the bottom right corner.



3. Select the “**Adapter**” tab. The refresh rate selection field is located in the center at the bottom of the window. .



4. Choose a refresh rate from the table with the factory modes, which can be found in the user's guide, and select this in the settings field.
5. In the subsequent windows press “**Change**”, “**OK**” and “**Yes**”.



6. You can now close “**Display Properties**”.

D. Picture Optimization

The easiest way to obtain an optimal picture is by using the *ikey* function. The function works correctly if using the supplied adjustment software (auto.exe) and provided the device is in a factory-mode.

1. Start the auto.exe program from the CD, supplied with the monitor. A test pattern appears.
2. Now press the *ikey*. The device carries out an automatic adjustment. In most cases optimal results will be obtained. You can quit the auto.exe with a single mouse click and clicking on “**Exit**”.

If you are still not satisfied with the result, you can still attempt to enhance the image by means of manual adjust.

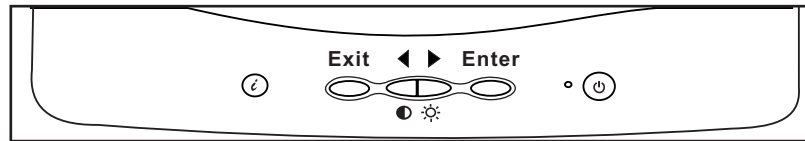
1. To do this restart the auto.exe test pattern, which is the best way of observing possible changes. You also can use any other image, such as the desktop of an operating system.
2. You can access the OSD menu by pressing the **Enter** button on the monitor.
3. Using the “<” or “>” key on the monitor, navigate to the submenu for the Geometry values and then press **Enter**.
4. Adjust the “**Pixel Clock**” by pressing “<” or “>” key to optimize the picture quality.
5. To Exit **Clock** submenu by pressing **Exit** twice (Geometry submenu).

If you need further adjustment, back to Geometry submenu and select “**Phase**” by pressing “<” or “>” key to reach the best status. If you are still not satisfied with the result, repeat the procedure using a different refresh rate.

You must use one of the factory modes. If the *i-key* is not working, or the “**Not supported mode**” message is on the OSD you are not using one of the supported modes. If you are having difficulties generating a supported mode, ask the manufacturer of your graphics card for assistance.

Adjusting the Monitor

A Look at the Control Panel



There are 6 keys for user's control including "iKey", "Exit", "Enter", "<" and ">" key and a power switch. The following descriptions are the introduction of these keys & switch.

1. "Power": Turn the power on or off.
2. "iKey" : Adjust vertical position, phase, horizontal position and pixel clock automatically.
3. "Exit" key: Back to main menus, save menu or exist OSD menu without saving.
4. "Enter" key: Enter sub-menus, select items or save items.
5. "<": For Left adjustment. Left key is the hot key for Contrast adjustment.
6. ">": For Right adjustment. Right key is the hot key for Brightness adjustment.

Hot Key Mode

Contrast hot-key

<ol style="list-style-type: none"> 1. Press "<" key to enter the Contrast hot-key mode. 2. Press "<" or ">" key to make adjustment. The scale can be adjusted from maximum (100) to minimum (0). 3. Press the "Exit" to leave OSD operation. The adjustment can be auto-saved. 	
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Brightness hot-key

<ol style="list-style-type: none"> 1. Press ">" key to enter the Brightness hot-key mode. 2. Press "<" or ">" key to make adjustment. The scale can be adjusted from maximum (100) to minimum (0). 3. Press the "Exit" to leave OSD operation. The adjustment can be auto-saved. 	
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Main Menu Mode

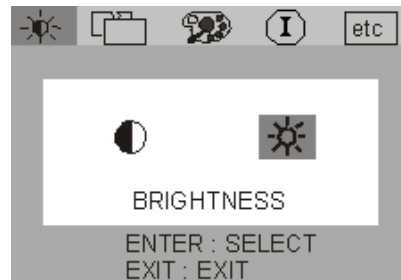
Control Functions Available in Main Menu


I. Luminance

Press “<” or “>” key to select this item and press “**Enter**” to enter sub-menu. There are two items for luminance adjustments.



 **Brightness:** adjusts the brightness of the display.

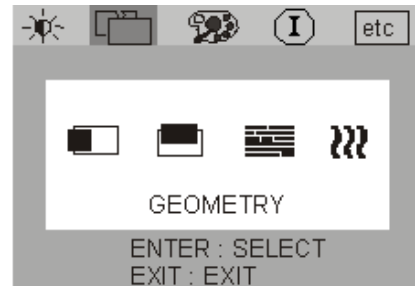



 **Contrast:** adjusts the difference between the light and dark areas.

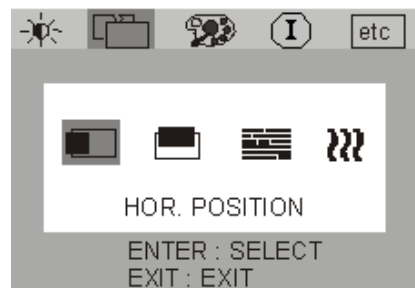



2. Geometry

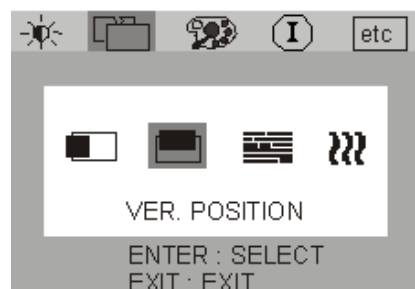
Press “<” or “>” key to select this item and press “**Enter**” to enter sub-menu. There are four items for geometry adjustments.




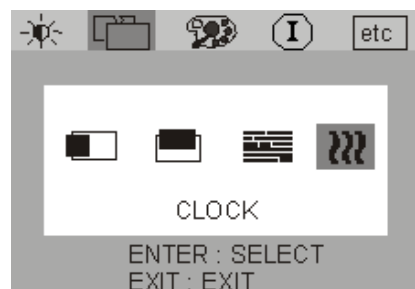
 H. (Horizontal) Position: adjusts the horizontal position of the display.




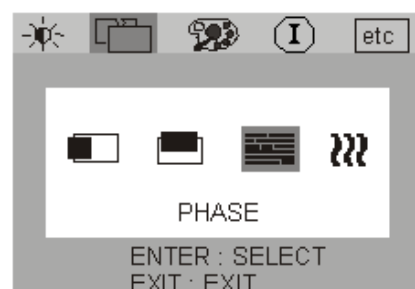
 V. (Vertical) Position: adjusts the vertical position of the display.



 Phase: adjusts the phase of pixel clock.

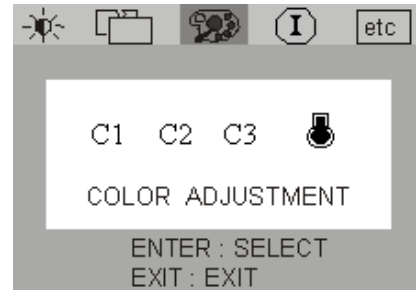


 Pixel Clock: adjusts the frequency of the pixel.

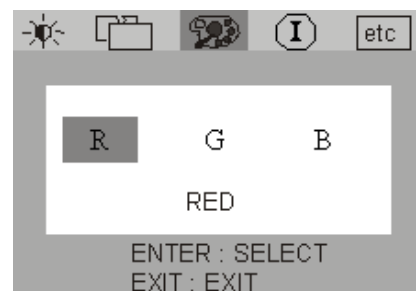


3. Color Adjustment

Press “<” or “>” key to select this item and press “**Enter**” to enter sub-menu. There are four items for color adjustments.




There are three items to adjust. Press “<” or “>” key to select a color and press “**Enter**” to adjust color temperature.

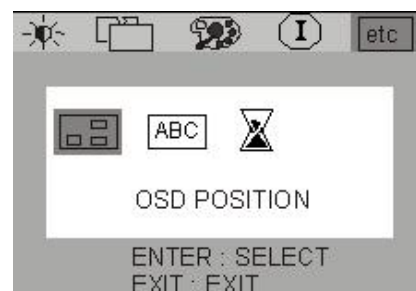



4. Miscellaneous

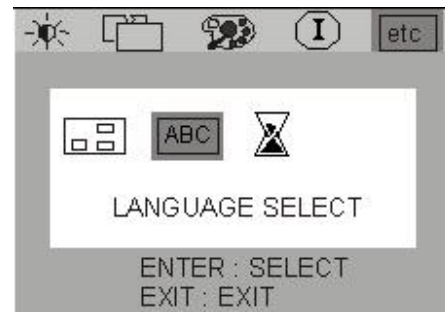
Press “<” or “>” key to select this item and press “**Enter**” to enter sub-menu. There are three items for miscellaneous.




 OSD Position : to adjust position of OSD.




 Language: to select OSD language.




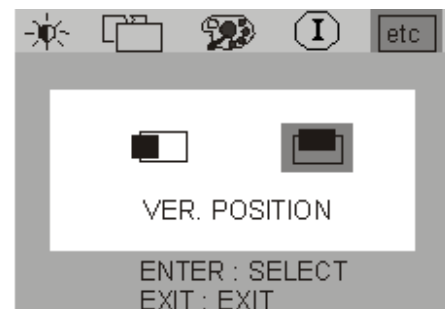
 OSD Time: to set the standby time of OSD.



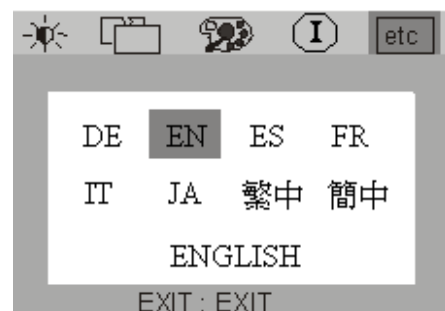
 H. (Horizontal) Position: adjusts the OSD horizontal position of the display.




 V. (Vertical) Position: adjusts the OSD vertical position of the display.

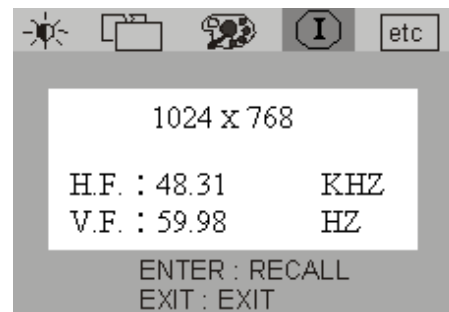


Press “<” or “>” key to select a language then press “Exit” to back to previous menu.



5. Information

 “Information” sub menu the OSD display the resolution, horizontal and vertical refresh rate.
Press “**Enter**” to recall to factory settings.



Troubleshooting

Frequently Asked Questions (FAQ)

✓ The image is blurred:

☞ Read the chapter, "Installation/Adjustment" and select the correct resolution, refresh rate and make adjustments based on these instructions.

☞ Do you use a VGA extension cable?

Remove the extension cable for the test. Is the image now in focus? If not, optimize the image working on the description in the chapter, "Installation/Adjustment." It is normal for blurring to occur due to conduction losses in extension cables. You can minimize these losses by using an extension cable with better conduction quality or with a built-in booster.

☞ Does the blurring only occur at resolutions lower than the native (maximum) resolution?

Read the chapter "Installation/Adjustment." Select the native resolution.

✓ Pixel errors can be seen:

☞ One of several pixels are permanently black, one or more pixels are permanently white, one or more pixels are permanently red, green, blue or another color.

Read the chapter "Pixel Error Rates."

✓ The image has a faulty color appearance:

☞ It has a yellow, blue or pink appearance.

On the monitor press the "Enter" button and use the "<" or ">" keys to move to the "information" menu. Press "Enter" to "Recall" the preset mode. If the image is still not correct and the OSD also has a fault color appearance, then one of the three primary colors is missing in the signal input. Now check the VGA cable contacts. If any pins are bent or broken off, then contact your dealer or read the chapter, Additional Help, Repairs & Service.

✓ No image can be seen:

☞ Is the prompt on the display illuminated in green?

If the LED is illuminated in green, then press the "Exit" button on the monitor to access the On Screen Display. If the message "Not supported Mode" appears, read the chapter "Installation/Adjustment."

☞ Is the prompt on the display illuminated in orange?

If the LED is illuminated in orange, then the power management mode is active. Press a button on the computer keyboard or move the mouse. If that does not help, then check the VGA cable contacts. If any pins are bent or broken off, then contact your dealer or read the chapter, Additional Help, Repairs & Service.

☞ Is the prompt on the display not illuminated at all?

Check the power supply mains socket, the external power supply and the mains switch.

✓ **The image is distorted, flashes or flickers:**

- ☞ Read the chapter, "Installation/Adjustment" and then select the correct resolution, refresh rate and make adjustments based on these instructions.

✓ **The image is displaced in one direction:**

- ☞ Read the chapter, "Installation/Adjustment" and then select the correct resolution, refresh rate and make adjustments based on these instructions.

Need More Help?

If your problems remain after checking this manual, please contact your place of purchase or e-mail us at: Support@BenQ.com

Supported operating modes

Incoming display mode (Input timing)				
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Frequency (MHz)	Comment
640x350	31.47(P)	70.08(N)	25.17	DOS
720x400	31.47(N)	70.08(P)	28.32	DOS
640x480	31.47(N)	60.00(N)	25.18	DOS
640x480	37.86(N)	72.80(N)	31.50	VESA
640x480	37.50(N)	75.00(N)	31.50	VESA
800x600	35.16(P)	56.25(P)	36.00	VESA
800x600	37.88(P)	60.32(P)	40.00	VESA
800x600	48.08(P)	72.19(P)	50.00	VESA
800x600	46.87(P)	75.00(P)	49.50	VESA
1024x768	48.36(N)	60.00(N)	65.00	VESA
1024x768	56.48(N)	70.10(N)	75.00	VESA
1024x768	60.02(P)	75.00(P)	78.75	VESA

- Modes, which are not listed in the above table, may not be supported. For an optimal picture it is recommended to choose a mode listed in the table.
- There are 12 available modes that are compatible with Windows.
- Image disruption may occur as a result of signal frequency differences from VGA cards which do not correspond with the usual standard. This is not, however, an error. You may improve this situation by altering an automatic setting or by manually changing the phase setting and the pixel frequency from the "Geometry" menu.
- If you switch off the monitor, interference lines can occur on your screen. But do not be concerned about this, as it is normal.
- To extend the service life of the product, we recommend you use your computer's power management function.

Specifications

Model	FP547
Display type	15.0" ,active, TFT
Viewable diagonal	38.1 cm
Native (maximum) resolution	1,024X768
Colors	16.7 million
Contrast / Brightness	350:1 (Max. 400:1) / 250 cd/m ²
Response time	25 ms
Viewing angle (horizontal, vertical)	120, 100 (CR=10)
Line frequency	31.47 - 60.02 kHzMulti- frequency monitor
Image frequency	56.25 - 75.0 Hz modes within these parameters
Image checks	Digital, Screen OSD Technology, <i>iKey</i> (automatic image setting)
Controls	5 buttons and <i>iKey</i> .
iScreen functions	Contrast, brightness, vert. & hor. image position, phase, pixel clock, color balance, color palette, choice of language (8 language OSD), OSD position, status indicator
Microprocessor control	12 factory modes:3 DOS modes,9 VESA modes,
Power Management	VESA DPMS, EPA
Max. power consumption	30 Watt Max
Power saving mode	< 3 Watt
Input signal	RGB analog 0.7 Vpp/75 Ohm positive
Synchronisation	TTL separate signal connection 15-pin mini D-sub cable
Temperature (operating)	5 °C - 40 °C
Air humidity (operating)	20% - 80%
Certifications	TCO 99 (Optional), TÜV/Ergonomics, TÜV/ GS, IEC950, FCC Class B, ISO 13406-2, VCCI, UL, CB Report, CE, C-Tick, BSMI, Fimko, GOST-R.
Operating voltage	Automatic switched mode power supply, 90-264 V, 47-63Hz
Dimensions (W x H x D)	354x 362 x 190 mm
Weight	3.2 kg