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14B2320W

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THE INFORMATION MENTIONED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.



INTRODUCTION AND SAFETY

Introduction

The Philips 104B color monitor displays sharp and brilliant images of text and graphics with a maximum resolution of 1024x768 pixels. It is optimal for Windows, spread sheets and any other application.

The monitor automatically scans horizontal frequencies from 30KHz to 54KHz, and vertical frequencies from 50Hz to 120Hz. With microprocessor-based digital-controlled circuitry, the monitor can automatically adjust itself to the video card's scanning frequency and can display an image with the precise parameters you desire.

Features

- Global Styling demonstrates a soft & smart image.
- Digital Control feature provides user-friendliness and ease-of-use when operating the monitor.
- Anti-Glare and Anti-Static screen coating eliminates any adverse effects caused by the screen surface, such as reflection of the room lights, and dust attraction.
- 85Hz refresh rate: The maximum display resolution is 1024 x 768 pixels non-interlaced mode. The recommended optimum resolution is up to 800 x 600 pixels non-interlaced by maximum 85Hz refresh rate.
- Green Design including automatic power saving function (NUTEK) and low emission MPRII compliance shows our commitment in environmental care.

- DDC1 / DDC2B allows communication between the monitor and PC system for optimal video configuration.

NOTE: Your monitor operates according to the VESA-standard DDC level 1 / 2B. Only computers that support the same guidelines and operate at an equal or higher level can use this feature. If your computer does not support the relevant guidelines, you can still use your monitor and computer. However, you may need to manually specify the appropriate resolution in the computer.

As an ENERGY STAR[®] Partner, PHILIPS has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency.



Contact us at our web site: <http://www.monitors.be.philips.com>

Safety precautions and maintenance

- Unplug the monitor, if you are not going to use it for an extended period of time.
- Unplug the monitor, if you need to clean it with a slightly damp cloth. Wiping the screen with a dry cloth is okay when the power is disconnected. However, never use alcohol or ammonia-based liquids.
- Consult a service technician if the monitor does not operate normally when following the instructions in this manual.
- The back cover should be removed only by qualified service personnel.
- Keep the monitor out of direct sunlight and away from stoves or any other heat source.
- The top of the monitor is not a shelf. Remove any object that could fall into the vents or prevent proper cooling of the monitor's electronics.

- Keep the monitor dry. To avoid electric shock, do not expose it to rain or excessive moisture.
- Keep the monitor away from magnetic objects, such as speakers, electric motors, transformers, etc.
- When positioning the monitor, make sure the power plug and outlet are easily accessible.

End-of-life disposal

Your new monitor contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old monitor.

ENERGY STAR is a U.S. registered mark.

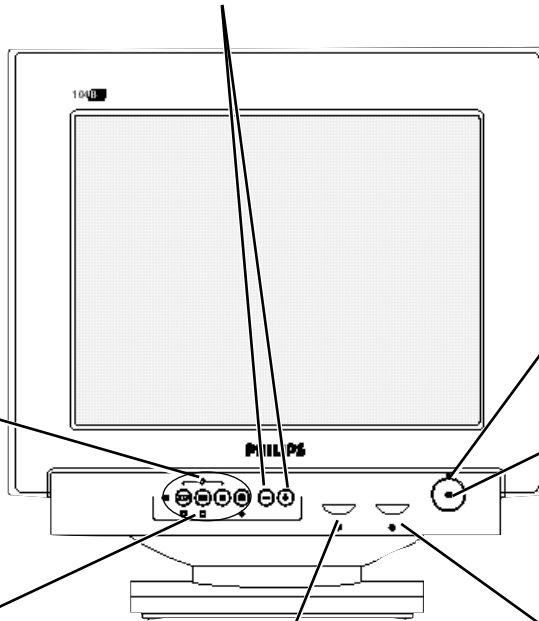
IBM, IBM PC, and Power PC are registered trademarks of International Business Machines Corporation. Apple, Macintosh, Quadra, Performa, and Centris are registered trademarks of Apple Computer, Inc.

DESCRIPTION OF CONTROLS



“-” or “+” (Decrease or Increase)
 Press “-” or “+” to adjust the selected function.

“” + “” Shift key –
 Used to select the level of the control functions.
 Shift with LED off – Control is on first level
 Shift with LED on – Control is on second level



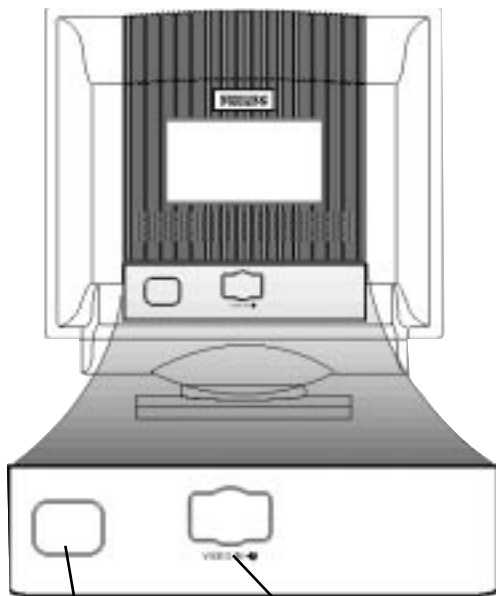
LED –
 Light Emitting Diode
 Turns green when the monitor is on and at full power.

Power Knob –
 Turns the electricity On and Off.

Function Knob –
 Adjust the picture or image.

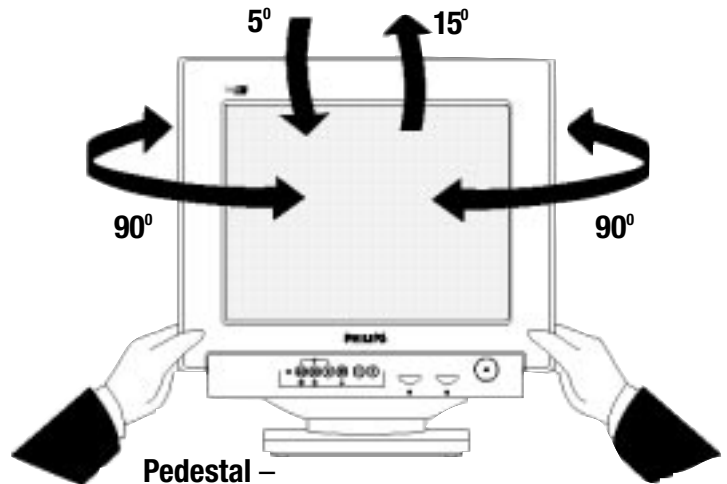
Brightness Knob –
 Adjust the screen's brightness.

Contrast Knob –
 Adjust the screen's contrast.



Power Plug – Plug the power cord in here.
 See foldout for details.

Video In jack – One end of the cable is already connected here.
 The other end connects to the computer.
 See foldout for details.



Pedestal –
 you can tilt and swivel the monitor to the most comfortable viewing angle.
 To best use your monitor, always place it at eye level.



HOW TO USE THE CONTROLS

CONTRAST

1 To adjust your screen's contrast. Contrast is the difference between the light and dark areas on the screen. A full contrast level is recommended.



Turn the contrast knob (at the lower right-hand corner of the monitor) to adjust the contrast.

BRIGHTNESS

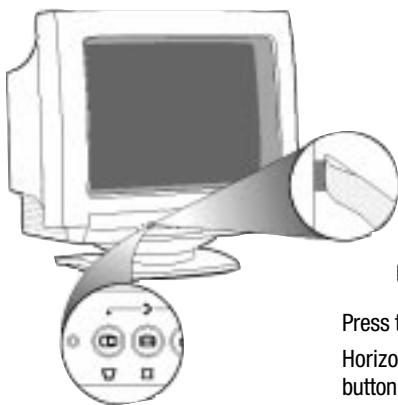
1 To adjust your screen's brightness. Brightness is the overall intensity of the light coming from the screen.




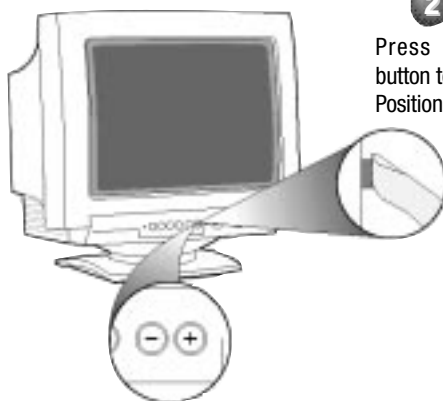
Turn the Brightness knob (at the lower right-hand corner of the monitor) to adjust the brightness.

HORIZONTAL POSITION

1 HORIZONTAL POSITION shifts the image on your screen either to the left or right. Use this feature if your image does not appear centered.



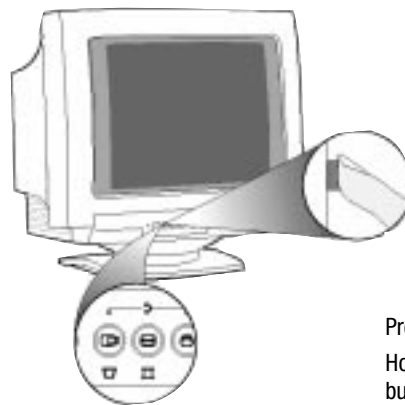
1
Press the "  " Horizontal Position key pad button.




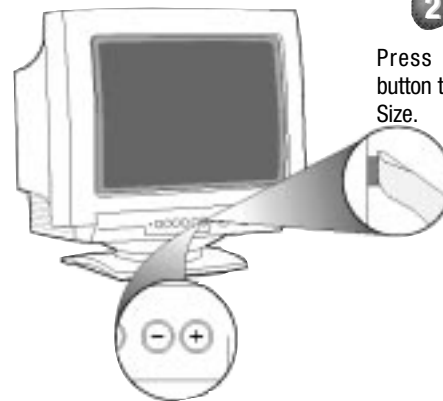
2
Press the " - " or " + " button to adjust Horizontal Position.

HORIZONTAL SIZE

1 HORIZONTAL SIZE expands or contracts the image on your screen, pushing it out toward the left and right sides or pulling it in toward the center.




1
Press the "  " Horizontal Size key pad button.

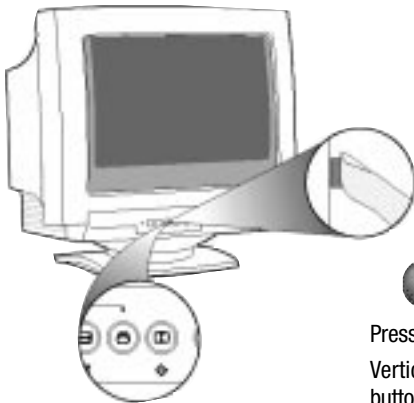



2
Press the " - " or " + " button to adjust Horizontal Size.

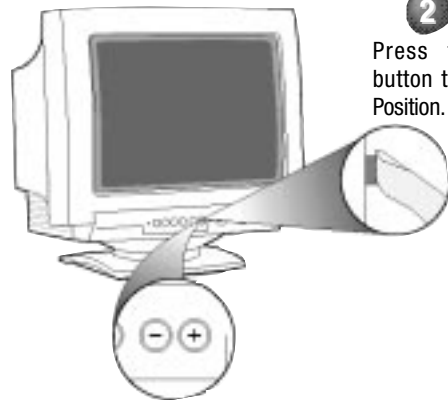


VERTICAL POSITION

 VERTICAL POSITION shifts the image on your screen either to the up or down. Use this feature if your image does not appear centered.




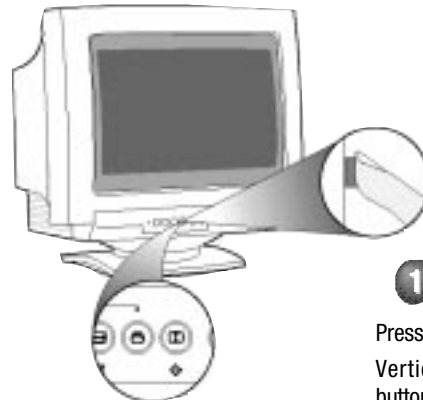
1 Press the “” Vertical Position key pad button.




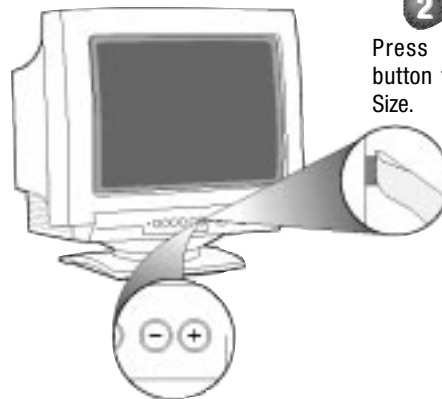
2 Press the “-” or “+” button to adjust Vertical Position.

VERTICAL SIZE

 VERTICAL SIZE expands or contracts the image on your screen, pushing it out toward the top and bottom sides or pulling it in toward the center.






1 Press the “” Vertical Size key pad button.

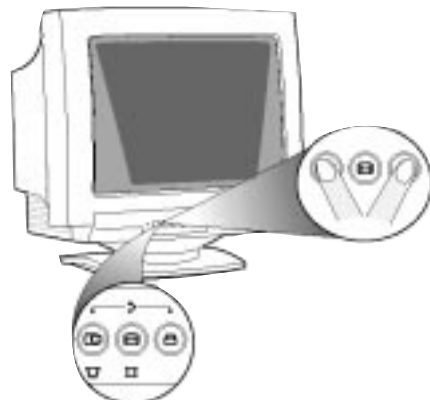



2 Press the “-” or “+” button to adjust Vertical Size.

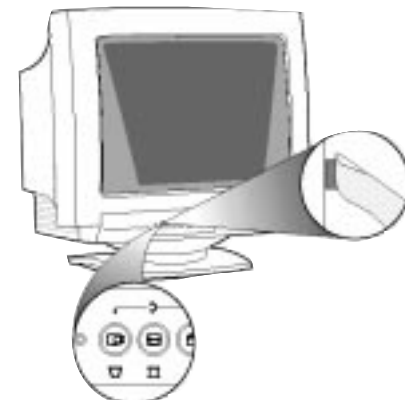
TRAPEZOID

 TRAPEZOID IS to correct the trapezoid distortion of the on-screen image.
Note: Use this feature only when the picture is not square.

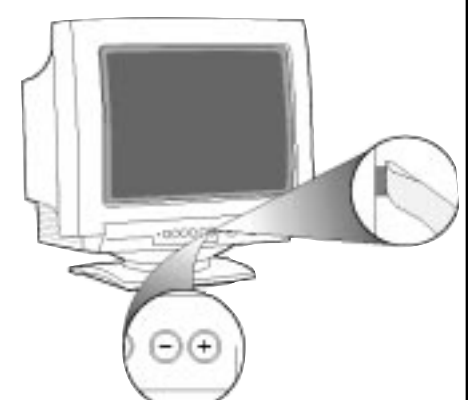
1 Press the “” + “” Shift key pad button at the same time, and wait two seconds, while “Shift” LED is on, control is on the second level.



2 Press the “” Trapezoid key pad button.



3 Press the “-” or “+” button to adjust Trapezoid.





HOW TO USE THE CONTROLS

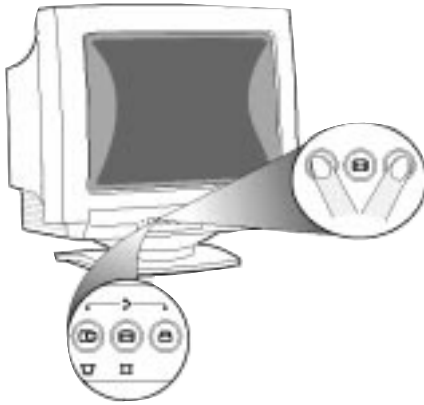
PINCUSHION



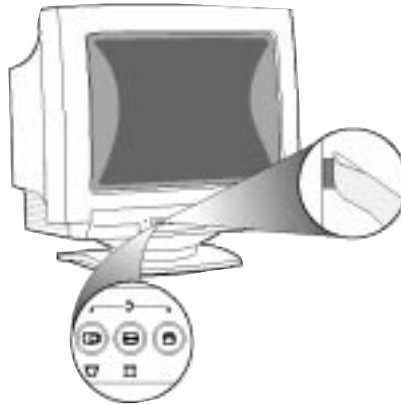
PINCUSHION IS to correct the pincushion distortion of the on-screen image.

Note: Use this feature only when the picture is not square.

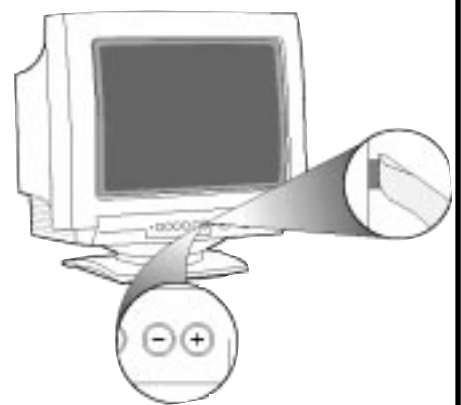
- 1 Press the “”+“” Shift key pad button at the same time, and wait two seconds, while “Shift” LED is on, control is on the second level.



- 2 Press the “” Pincushion key pad button.



- 3 Press the “-” or “+” button to adjust Pincushion.



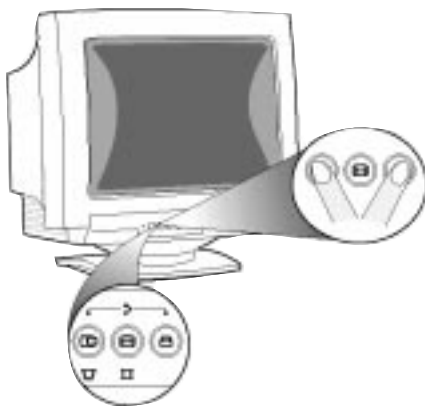
RESET



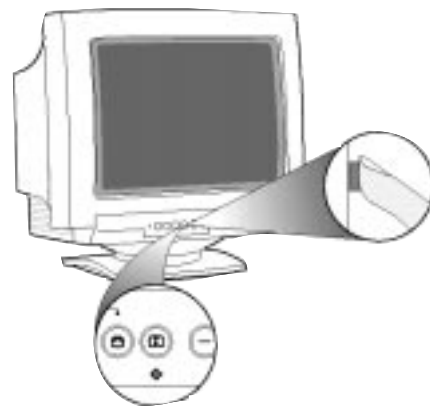
RESET IS to recall original factory preset modes.

Use this feature only when you want to return all your changes back to their original settings.

- 1 Press the “”+“” Shift key pad button at the same time, and wait two seconds, while “Shift” LED is on, control is on the second level.



- 2 Press the “” Reset key pad button to recall the factory settings.



ADDITIONAL INFORMATION



POWER SAVING FEATURE / GLOSSARY

AUTOMATIC POWER SAVINGS & PRESET RESOLUTION MODES

If you have VESA's DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If input from a keyboard, mouse, or other device is detected, the monitor automatically "wakes up." The table at left shows the power consumption and signalling of this automatic power-saving feature. The table at right shows the 6 factory preset resolution modes. The maximum number of modes is 10. This leaves room for additions.

Power Management Definition						
VESA's mode	Video	H-sync	V-sync	Power used	Power saving(%)	LED color
ON	Active	Yes	Yes	< 72W	0%	Green
Stand-by	Blanked	No	Yes	< 15W	80%	Yellow
Suspend	Blanked	Yes	No	< 15W	80%	Yellow
OFF	Blanked	No	No	< 8W	90%	Amber

This monitor is ENERGY STAR[®] compliant and power management compatible.



As an ENERGY STAR[®] Partner, PHILIPS has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency. The proper operation of the function requires a computer with VESA DPMS power management capabilities. When used with a computer equipped with VESA DPMS, the monitor is ENERGY STAR[®] compliant.

Factory Preset Resolution Modes				
MODE	RESOLUTION	H. FREQ. (KHz)	V. FREQ. (Hz)	STANDARD
1	640 x 400	31.5	70	VGA
2	640 x 480	31.5	60	VGA
3	640 x 480	37.5	75	VESA/75
4	800 x 600	46.9	75	VESA/75
5	800 x 600	53.7	85	VESA/85
6	1024 x 768	48.3	60	VESA/60

GLOSSARY

Here are a few definitions that may help you.

- Brightness** Refers to how light or dark the overall screen is.
- Contrast** Refers to the sharpness of objects on the screen and the ability to easily distinguish one from the other.
- DDC** (Display Data Channel) is a signaling standard established to help the performance of personal computers. In order to use this function, your computer must be designed for DDC. There are several types of DDC. Most computer monitors are designed for DDC1 and DDC2 Level B (DDC1 /2B).



ADDITIONAL INFORMATION

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SPECIFICATIONS

GENERAL

CRT

Screen size	:14" (35.5 cm) flat & square
Viewable Image Size (VIS)	:13.2"
Dot pitch	:0.28 mm (horizontal) (0.24 mm horizontal for 14B2320W/94N)
Phosphor	:P22 or equivalent, medium short persistence
Screen treatment	:Anit-glare, anti-static

Display area

Factory preset	:250 mm (H) x 188 mm (V)
Maximum usable	:274 mm (H) x 201 mm (V)

Scanning frequency

Horizontal (line)	:30-54kHz (AutoScan)
Vertical (frame)	:50-120 Hz (AutoScan)

Input power

:100 - 240 V AC, 50 - 60 Hz

Power consumption

:60 Watt normal, 72 Watt max.

Input signal

Video	:0.7 Vpp, 75 Ohm impedance
Sync	:Separate sync. TTL

Pedestal

Tilt	:5° forward, 15° backward
Swivel	:90° left, 90° right

Physical

Unit dimension (WxHxD)	:350x358x381 mm (13.78"x14.09"x15.47")
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Net weight :10.8kg (23.8lbs)

Operating conditions

Temperature	:0° C - 40° C (32° F - 104° F)
Humidity	:10% - 90%

Storage conditions

Temperature	:-25° C - 65° C (-13° F - 150° F)
Humidity	:5% - 95%

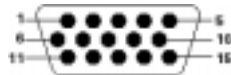
Mains Cord : non-shield

Specifications subject to change without notification.

PIN ASSIGNMENT

The 15-pin D-sub connector (male) of the signal cable:

Pin No.	Assignment
1	Red video input
2	Green video input
3	Blue video input
4	Identical output - connected to pin 10
5	Self test
6	Red video ground
7	Green video ground
8	Blue video ground
9	No pin
10	Logic ground
11	Identical output - connected to pin 10
12	Serial data line (SDA)
13	H. Sync / H+V
14	V. Sync (VCLK for DDC)
15	Data clock line (SCL)



ADDITIONAL INFORMATION

WHAT TO DO IF SOMETHING ISN'T WORKING



TROUBLESHOOTING

Having trouble? Something not working? Before calling for help, try these suggestions.

HAVING THIS PROBLEM?	CHECK THESE ITEMS
No Picture (Power LED not lit)	Make sure the Power cable is plugged in the wall and back of the monitor. Power button on the front of the monitor should be in the ON position. Disconnect the monitor from the power outlet for about one minute.
No Picture (Power LED is Amber or Yellow)	Make sure the computer is turned on. Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. The Energy Saving Feature may be activated. See pages 7 for details.
No Picture (Power LED is Green)	Make sure the Brightness and Contrast controls are set correctly. See page 4 for details Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. Make sure the computer Power button is on.
Color appears blotchy	Remove any nearby magnetic objects. Face the monitor East for best picture quality.
Missing one or more colors	Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins.
Dim Picture	Adjust the Brightness and Contrast controls. See page 4 for details. Check your video card and the manual instructions for it. It may be a non-VESA-DDC Standard card.
Picture is too large or too small	Adjust the Horizontal and/or Vertical Size. See pages 4 and 5 for details.
Edges of the picture are not square	See page 5 and 6 for details.
Picture has a double image	Eliminate the use of a video extension cable and/or video switch box. Face the monitor East for best picture quality.
Unstable Picture	Increase your refresh rate. Consult your computer manual for details.
Windows '95 cannot find your video card	Select "Super VGA" under STANDARD DISPLAY TYPES, or contact your video card manufacturer for the right drivers.

For further assistance, contact Philips at (800) 835-3506 or (423) 475-0280.

