

15B2322Q

GETTING STARTED

How to use the On Screen Display FRONT PANEL CONTROLS Brightness......4 MAIN MENU MAIN MENU / ADVANCED CONTROLS WINDOW MAIN MENU / COLOR TEMPERATURE WINDOW

MAIN MENU / GEOMETRY WINDOW MAIN MENU / SIZE & POSITION WINDOW **ADDITIONAL INFORMATION**

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BECAUSE OF A POLICY OF CONTINUOUS PRODUCT IMPROVEMENT,

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

Introduction

The Philips 105MB color monitor displays sharp and brilliant images of text and graphics with a maximum resolution of 1280x1024 pixels. It is optimal for Windows, CAD / CAM / CAE, desktop publishing, spread sheets, multi-media, and any other application that demands a large screen size and high resolutions.

The monitor automatically scans horizontal frequencies from 30KHz to 70KHz, and vertical frequencies from 50Hz to 160Hz. With microprocessor-based digital-controlled circuitry and On Screen Display (OSD) controls, 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

• An anti-glare, anti-static, anti-reflection, high-contrast screen coating eliminates any bad effects caused by room light reflecting on and dust attracted to the screen's surface.

• With the Color Adjustment feature, you can easily choose different preset color temperatures or set your own customized color parameters.

• The Image Tilt Adjustment feature corrects a rotated image. This adjustment compensates for the distortions caused by elements such as the Earth's magnetic field.

• The full-size feature expands the image on the monitor to fill the screen when used in factory preset modes.

• Optional USB Connector at the back of the monitor is prepared for the Universal Serial Bus hub. You can easily and flexibly connect USB-designed devices – such as a mouse or keyboard – to the monitor for true Plug-and-Play function. The USB hub is an accessory that may be purchased from you local Philips dealer.

• Green Design – including automatic power saving function (NUTEK) and low-emission compliance (optional TCO '95) – shows your commitment to the environment.

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

• Moire Cancellation eliminates diffraction, a fringe pattern in the picture.

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.

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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.

DESCRIPTION OF CONTROLS





FRONT PANEL BUTTONS / ROTARY KNOB



PEDESTAL – With the built-in 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.



USING THE FRONT PANEL BUTTONS – Select one of the four front panel buttons, then use the Rotary knob to make the adjustment or select an additional feature. To adjust a particular feature, see the page for that feature. For example, Contrast is on page 4.

ON SCREEN DISPLAY – Your monitor is preset at the factory. However, you can adjust it using the ON SCREEN DISPLAY button and the ROTARY knob described on page 2. The way to do so is through the On Screen Display (OSD). Below is a brief description of the seven On Screen Display windows.



FRONT PANEL CONTROLS



FRONT PANEL CONTROL / MAIN MENU



MAIN MENU WINDOWS



ADVANCED CONTROLS WINDOW





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ADVANCED CONTROLS WINDOW



ADVANCED CONTROLS WINDOW





... after you have exited completely, press the OSD button and use the ROTARY knob to select that feature, for example, COLOR TEMPERATURE.

the steps under that feature, for example, SYNC INPUT SELECT.

COLOR TEMPERATURE WINDOW

9300° K / 6500° K

Your monitor has two preset options you select: 9300° K or 6500° K. Computer Aided Design (CAD) usually works best with the 9300° K setting. Desktop Publishing (DTP) usually works best with the 6500° K setting. The screen will change as you scroll between these two settings. Select the one that works best for you, or set up your own setting under USER 1 or USER 2 on the next page.



next page.

... to select the other preset setting (9300° K or 6500° K), press the OSD button and repeat steps 2 -5.

COLOR TEMPERATURE WINDOW





After returning to Color TEMPERATURE ...

- ... to continue to User 2, turn the ROTARY knob until User 2 is highlighted. Then, press the ON SCREEN DISPLAY button and follow steps 4 7.
- ... to continue to the Main Menu, press the ON SCREEN DISPLAY button once more after completing step 7 above. Now, to select another window from the Main Menu for example, GEOMETRY turn to the next page and follow steps 2a 5c.
- ... to exit the ON Screen Display completely, press the ON Screen Display button twice more after completing step 7 above.



- for example Size & Position is highlighted. Now, turn to Size & Position on the next page and follow the instructions, starting with step 2.
- ... completely, press the ON SCREEN DISPLAY button twice. The On Screen Display disappears. All changes will be saved.
- To make changes to one item, follow the steps for that item. Then, follow "To exit GEOMETRY CONTROLS"

To return to factory presets, see "To Reset the OSD" on page 15.

SIZE & POSITION WINDOW





How to Use the On Screen Display (OSD) SIZE & POSITION WINDOW HORIZONTAL ERTICAL POSITION BIZE **ERTICAL** SIZE HORIZONTAL SIZE expands or contracts the image on your screen, VERTICAL POSITION adjusts the image on your screen pushing it out toward the left and right sides or pulling it in either up or down. Use this feature if your image does toward the center. not appear centered. VERTICAL SIZE expands or contracts the image on your screen, pushing it out toward the top and bottom of pulling it in toward the center. Press the ON SCREEN Press the ON SCREEN DISPLAY button. DISPLAY button. Turn the ROTARY knob Turn the ROTARY knob HAIN MENU HAIN MENU until SIZE & POSITION until SIZE & POSITION window is window is highlighted. highlighted. Next, Next, press the ON press the ON SCREEN SCREEN DISPLAY button. DISPLAY button. Then. Then, turn the ROTARY turn the ROTARY knob knob until Vertical until Horizontal Size is POSITION OF VERTICAL SIZE highlighted. is highlighted. SIZE & POSITION SIZE & POSITION 6 RIZONTAL POSITION RIZONTAL SIZE Press the ON RIZONTAL POSITION Press the ON SCREEN DISPLAY SCREEN DISPLAY VERTICAL POSITION ERTICAL POSITION ERTICAL SIZE button to add your button to add your SIZE & POSITION change and return to change and return to DRIZONTAL POSITION DRIZONTAL SIZE the Main Menu. the Main Menu. Press again to exit. Press again to exit. D VERTICAL SIZE See below for other See below for other SAVE & RETURN TO HAIN MENU options. options. Press the ON SCREEN DISPLAY Press the ON SCREEN \$ 17.5 A POS IT 108 LITE & POSITION button to bring up DISPLAY button to bring the HORIZONTAL SIZE up the VERTICAL screen. POSITION OF VERTICAL SIZE screen. HORIZONTAL SIZE VERTICAL SIZE VERTICAL POSITION Turn the Rotary knob to When you When you adjust the horizontal size. are done, are done, Note: the screen expands or press the ON press the contracts as you turn the ROTARY Turn the ROTARY knob until SCREEN DISPLAY ON SCREEN button. knob. the image is vertically DISPLAY button. balanced or the vertical size you want. SMART HELP SMART HELP

To make other changes in the SIZE & POSITION window . . .

... after returning to the SIZE & POSITION window [but before press the On Screen Display (OSD) button in step 6], turn the ROTARY knob until another feature – for example, VERTICAL POSITION – is highlighted. Next, follow steps 2 - 6 under VERTICAL POSITION.

 \dots after you have exited completely, press the OSD button and follow the steps under that feature, for example, VERTICAL POSITION.

To make other changes in the Main Menu ...

feature and follow the steps.

the steps under that feature.

. after returning to the Main Menu [but before press the On Screen

... after you have exited completely, press the OSD button and follow

Display (OSD) button a second time in step 6], turn the ROTARY knob

until another feature is highlighted. Next, turn to the page for that

SAVE, CANCEL, EXIT OSD, AND RESET





Refer to the owner's manuals included with your earphones and microphone for a detailed guide to setting up these items.

USB (OPTIONAL)

USB (Universal Serial Bus) is an innovation in connecting your IBM-compatible computer to your monitor. By using the USB, you will be able to connect your keyboard, mouse, printer, and other peripherals to your monitor instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. Plus, you will have true plug-and-play capability. While the software is still being developed, Philips has included the hardware so you will be ready to take advantage of this next generation in computer development.

For an IBM-compatible Computer:

- 1. Turn off the computer.
- Connect the (optional) USB Hub and cable to the computer and to the monitor. (Computer must have a USB port.)
- **3.** Connect the power cable.j
- 4. Turn on the monitor. Then turn on the computer.
- With the installation of the correct software, you will be able to connect specially-made peripherals to the monitor.



Refer to the "Setting Up your Philips monitor" foldout for a more detailed guide to setting up your monitor.

Additional Information

POWER SAVING FEATURE / GLOSSARY

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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. To turn this feature on and off, see page 7. The table at right shows the 8 factory preset resolution modes. The maximum number of modes is 12 This leaves room for additions.

Power Management Definition						
VESA's mode	Video	H-sync	V-sync	Power	Power	LED
				used	saving(%)	color
ON	Active	Yes	Yes	< 100W	0%	Green
Stand-by	Blanked	No	Yes	< 15W	86%	Yellow
Suspend	Blanked	Yes	No	< 15W	86%	Yellow
OFF	Blanked	No	No	< 5W	95%	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	43.3	85	VESA/85
4	800 x 600	46.9	75	VESA/75
5	800 x 600	53.7	85	VESA/85
6	1024 x 768	60	75	VESA/75
7	1024 x 768	68.7	85	VESA/85
8	1280 x 1024	64	60	VESA/60

GLOSSARY

 Here are a few definitions that may help you.

 Brightness
 Refers to how light or dark the overall screen is.

 Color
 A term used to refer to the color balance, uniformity, and saturation settings on your monitor screen. Color (even white, gray, and black) on your screen is achieved by blending (or balancing) three primary colors: red, green, and blue. As you increase or decrease any one of these colors, the color temperature changes. For example, at 9300° K, you are using more blue in your color temperature; therefore, your screen will be saturated with more blue and should appear uniformly "bluer"

blue in your color temperature; therefore, your screen will be saturated with more blue and should appear uniformly "bluer" from one side of the screen to the other. At 6500° K, you are using more red in your mixture. True color balance is achieved when a gray object shows no traces of either red, green, or blue, regardless of the brightness of the image.
 Contrast
 Refers to the sharpness of objects on the screen and the ability to easily distinguish one from the other.

Degauss The process by which metal parts of the screen are demagnetized in order to reduce screen distortion and color impurity.

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).

Geometry A set of controls that allows you to adjust the alignment of the picture on the monitor screen. The goal is to "square up" the picture. This is done by adjusting such items as balanced pincushion, pincushion, parallelogram, rotation, and trapezoid.

Moire A fringe pattern caused by the interference between two superimposed line patterns.

Noise Term used to refer to interference with the monitor's picture.

USB Universal Serial Bus. A way to connect your IBM-compatible computer, monitor, and peripherals for true Plug-and-Play functions. This is an emerging technology.



COMING TO TERMS WITH THIS BOOK

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Power plug	

SPECIFICATIONS

GENERAL CRT

Screen size Viewable Image Size (VIS) Dot pitch Phosphor

Screen treatment

Display area Factory preset Maximum usable

Scanning frequency Horizontal (line) Vertical (frame)

Input power Power consumption Thermal dissipation

Input signal Video Sync

Pedestal Tilt

Swivel Physical Unit dimension (WxHxD)

Net weight Operating conditions

Temperature Humidity Storage conditions

Temperature Humidity :-25° C - 65° C :5% - 95%

:15" (38.1 cm) flat & square :13.8"

:P22 or equivalent, medium short

:0.28 mm (horizontal)

persistence :Anit-glare, anti-static

:270 mm (H) x 202 mm (V) :280 mm (H) x 210 mm (V)

:30-70kHz (AutoScan)

:50-160 Hz (AutoScan)

:238.9 BTU normal, 341.3 BTU maximum

:Separate sync. TTL Composite sync. TTL level Sync on green video

:100 - 240 V AC, 50 - 60 Hz

:75 Watt normal, 100Watt max.

:0.7 Vpp, 75 Ohm impedance

:5° forward, 11° backward :90° left, 90° right

:382 x 392 x 424 mm (15.04" x 15.43" x 16.69")

:14.0 kg (39.6 lbs.)

:0° C - 40° C

:10% - 90%

Specifications subject to change without notification.

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

PIN ASSIGNMENT

Pin No.	Assignment	
1	Red video input	
2	Green video input	
3	Blue video input	
4	Identical output	1 (• • • • •) •
	 connected to pin 10 	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 Make sure the Power cable is plugged in the wall and back of the monitor. Power button on top of the monitor should be in the ON position. (Power LED not lit) Disconnect the monitor from the power outlet for about one minute. No Picture Make sure the computer is turned on. Make sure the monitor cable is properly connected to your computer. (Power LED is Amber or Yellow) Check to see if the monitor cable has bent pins. The Energy Saving Feature may be activated. See pages 7 and 17 for details. No Picture Make sure the Brightness and Contrast controls are set correctly. See page 4 for details (Power LED is Green) 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. Screen shows Make sure the monitor cable is properly connected to your computer. See Setting Up Guide. Check to see if the monitor cable has bent pins. Make sure the computer is turned on **NO SYNC INPUT** when you turn on the monitor. No Color or intermittent If you are using a non-VESA-DDC standard video card, turn the DDC1 / 2B feature Off. See page 8. Black-and-White The picture may need degaussing. See page 6 for details. Color appears blotchy Remove any nearby magnetic objects. Face the monitor East for best picture quality. Missing one or Check user settings of Color Temperature. See pages 10 and 11 for details. more colors Make sure the monitor cable is properly connected to your computer. Check to see if the monitor cable has bent pins. Adjust Sync Input Select. See page 9 for details. **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. Adjust Sync Input Select. See page 9 for details. Picture is too large Adjust the Horizontal and/or Vertical Size. See pages 13 and 14 for details. Adjust the Zoom. See page 13 for details. or too small Edges of the picture The geometry controls require adjusting. See page 12 for details. are not square Picture has a double Eliminate the use of a video extension cable and/or video switch box. image Face the monitor East for best picture quality. Picture is not sharp Check to make sure Moire is switched off. See page 9. Adjust Sync Input Select. See page 9 for details. No Audio Make sure mute is not activated. See page 5 for details. Make sure the Audio-in cable is securely plugged into the monitor and the audio source. See pages 2 and 16 for details. Unstable Picture Increase your refresh rate. Consult your computer manual for details. Windows '95 cannot Select "Super VGA" under Standard Display Types, or contact your video card manufacturer find your video card for the right drivers.

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