# **191V2**



## www.philips.com/welcome

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### 1. Important

This electronic user's guide is intended for anyone who uses the Philips monitor. Take time to read this user manual before you use your monitor. It contains important information and notes regarding operating your monitor.

The Philips guarantee applies provided the product is handled properly for its intended use, in accordance with its operating instructions and upon presentation of the original invoice or cash receipt, indicating the date of purchase, dealer's name and model and production number of the product.

#### 1.1 Safety precautions and maintenance

#### Warnings

Use of controls, adjustments or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards and/or mechanical hazards.

Read and follow these instructions when connecting and using your computer monitor.

#### Operation

- Keep the monitor out of direct sunlight and away from stoves or any other heat source.
- Remove any object that could fall into ventilation holes or prevent proper cooling of the monitor's electronics.
- Do not block the ventilation holes on the cabinet.
- When positioning the monitor, make sure the power plug and outlet are easily accessible.
- If turning off the monitor by detaching the power cable or DC power cord, wait for 6 seconds before attaching the power cable or DC power cord for normal operation.
- Please use approved power cord provided by Philips all the time. If your power cord is missing, please contact with your local service center: (Please refer to Customer Care Consumer Information Center)

- Do not subject the monitor to severe vibration or high impact conditions during operation.
- Do not knock or drop the monitor during operation or transportation.

#### Maintenance

- To protect your monitor from possible damage, do not put excessive pressure on the LCD panel. When moving your monitor, grasp the frame to lift; do not lift the monitor by placing your hand or fingers on the LCD panel.
- Unplug the monitor if you are not going to use it for an extensive period of time.
- Unplug the monitor if you need to clean it with a slightly damp cloth. The screen may be wiped with a dry cloth when the power is off. However, never use organic solvent, such as, alcohol, or ammonia-based liquids to clean your monitor.
- To avoid the risk of shock or permanent damage to the set, do not expose the monitor to dust, rain, water, or excessive moisture environment.
- If your monitor gets wet, wipe it with dry cloth as soon as possible.
- If foreign substance or water gets in your monitor, please turn the power off immediately and disconnect the power cord. Then, remove the foreign substance or water, and send it to the maintenance center.
- Do not store or use the monitor in locations exposed to heat, direct sunlight or extreme cold.
- In order to maintain the best performance of your monitor and use it for a longer lifetime, please use the monitor in a location that falls within the following temperature and humidity ranges.
  - Temperature: 0-40°C 32-95°F
  - Humidity: 20-80% RH

IMPORTANT: Always activate a moving screen saver program when you leave your monitor unattended. Always activate a periodic screen refresh application if your monitor will display unchanging static content. Uninterrupted display of still or static images over an extended period may cause "burn in", also known as "after-imaging" or "ghost imaging", on your screen.
 "Burn-in", "after-imaging", or "ghost imaging" is a well-known phenomenon in LCD panel technology. In most cases, the "burned in" or "after-imaging" or "ghost imaging" vill disappear gradually over a period of time after the power has been switched off.

#### **Warning**

Severe" burn-in" or "after-image" or "ghost image" symptoms will not disappear and cannot be repaired.The damage mentioned above is not covered under your warranty.

#### Service

- The casing cover should be opened only by qualified service personnel.
- If there is any need for any document for repair or integration, please contact with your local service center. (please refer to the chapter of "Consumer Information Center")
- For transportation information, please refer to "Technical Specifications".
- Do not leave your monitor in a car/trunk under direct sun light.

#### Solution Note

Consult a service technician if the monitor does not operate normally, or you are not sure what procedure to take when the operating instructions given in this manual have been followed.

#### 1.2 Notational Descriptions

The following subsections describe notational conventions used in this document. Notes, Cautions and Warnings Throughout this guide, blocks of text may be accompanied by an icon and printed in bold or italic type.These blocks contain notes, cautions or warnings.They are used as follows:

#### Solution Note

This icon indicates important information and tips that help you make better use of your computer system.

#### Caution

This icon indicates information that tells you how to avoid either potential damage to hardware or loss of data.

#### **Warning**

This icon indicates the potential for bodily harm and tells you how to avoid the problem. Some warnings may appear in alternate formats and may not be accompanied by an icon. In such cases, the specific presentation of the warning is mandated by the relevant regulatory authority.

#### 1.3 Disposal of product and packing material

Waste Electrical and Electronic Equipment-WEEE



This marking on the product or on its packaging illustrates that, under European Directive 2002/96/ EC governing used electrical and electronic appliances, this product may not be disposed of with normal household waste. You are responsible for disposal of this equipment through a designated waste electrical and electronic equipment collection. To determine the locations for dropping off such waste electrical and electronic, contact your local government office, the waste disposal organization that serves your household or the store at which you purchased the product.

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.

All redundant packing material has been omitted. We have done our utmost to make the packaging easily separable into mono materials.

Please find out about the local regulations on how to dispose of your old monitor and packing from your sales representative.

#### **Recycling Information for Customers**

There is currently a system of recycling up and running in the European countries, such as The Netherlands, Belgium, Norway, Sweden and Denmark.

In Asia Pacific, Taiwan, the products can be taken back by Environment Protection Administration (EPA) to follow the IT product recycling management process, detail can be found in web site www.epa.gov.tw

The monitor contains parts that could cause damage to the nature environment. Therefore, it is vital that the monitor is recycled at the end of its life cycle.

For help and service, please contact Consumers Information Center or F1rst Choice Contact Information Center in each country.

#### 3 Connecting to your PC

### 2. Setting up the monitor

#### 2.1 Installation



1 Package contents



2 Install base stand

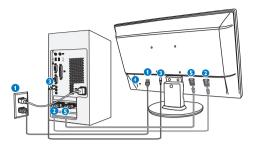
#### 191V2

1. Place the monitor face down a smooth surface taking care to avoid scratching or damaging the screen.



2. Hold the monitor base stand with both hands and firmly insert the base stand into the base column.





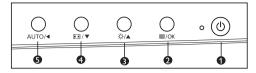
- 1 AC power input
- 2 VGA input
- 3 PC Audio input(Available for selected models)
- 4 Kensington anti-thief lock
  - DVI-D input(Available for selected models)

#### Connect to PC

- Connect the power cord to the back of 1. the monitor firmly.
- 2. Turn off your computer and unplug its power cable.
- 3. Connect the monitor signal cable to the video connector on the back of your computer.
- Plug the power cord of your computer 4. and your monitor into a nearby outlet.
- Turn on your computer and monitor. 5. If the monitor displays an image, installation is complete.

#### 2.2 Operating the monitor





1 Front view product description

① ① : To switch monitor's power ON and OFF
 ② ■/oK : To access the OSD menu
 ③ ☆/▲ : To adjust brightness of the display
 ④ ■/▼ : Auto picure control switching in wide and 4:3 format

S AUTO/4 : Automatically adjust the horizontal position, vertical position, phase and clock settings./ Return to previous OSD level.

#### 2 Description of the On Screen Display

#### What is On-Screen Display (OSD)?

On-Screen Display (OSD) is a feature in all Philips LCD monitors. It allows an end user to adjust screen performance or select functions of the monitors directly through an on-screen instruction window. A user friendly on screen display interface is shown as below:

Mo	onitor Setup	Input	
<b>,</b>	Input	VGA	
0	Picture		
	Audio		
۲	Color		
39	Language		
	OSD Settings		
Ф	Setup		

#### Basic and simple instruction on the control keys

In the OSD shown above users can press  $\checkmark \land$  buttons at the front bezel of the monitor to move the cursor, **OK** to confirm the choice or change.

#### The OSD Menu

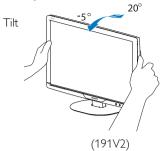
Below is an overall view of the structure of the On-Screen Display.You can use this as a reference when you want to work your way around the different adjustments later on.

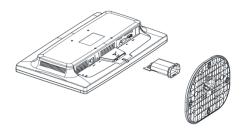
riam menu	Submenu
Input	VGA DVI (available for selective models)
Picture	Picture Format - 4:3, Wide screen Brightness
— Color	Contrast SmartContrast - On, Off Gamma - 1.8, 2.0, 2.2, 2.4, 2.6 Color Temp 5000K, 6500K, 7500K, 8200K, 9300K, 115004 sRGB User Define Red
Language	Green Blue English, Español, Français, Deutsch, Italiano
— OSD Settings	Portuguis, Pycck//й, 简体中文 Horizontal Vertical
	Transparency - Off, 1, 2, 3, 4 OSD Time out - 5, 10, 20, 30, 60
Setup	Power LED - 0, 1, 2, 3, 4 H. Position - 0 ~ 100 V. Position - 0 ~ 100 Phase - 0 ~ 100
	Clock - 0 ~ 100 Resolution Notification - On, Off Reset - Yes, No Information

#### 3 Resolution notification

This monitor is designed for optimal performance at its native resolution, 1366×768@60Hz. When the monitor is powered on at a different resolution, an alert is displayed on screen: Use 1366×768@60Hz for best results. Display of the native resolution alert can be switched off from Setup in the OSD (On Screen Display) menu.

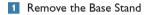
#### 4 Physical Function





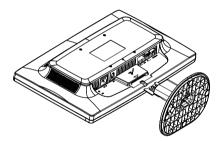
This monitor accepts a 100mm × 100mm VESA-Compliant mounting interface.

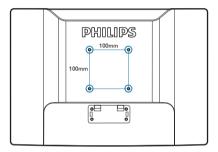
#### 2.3 Remove Base Stand and Base



#### 191V2

Place the monitor face on a safe surface, pull the base stand away from the monitor.





#### 2 Remove the Base

Condition:

- For VESA standard mounting applications
- 1. Separate the base from the base stand.

### 3. Product information

#### 3.1 SmartContrast

#### 1 What is it?

Unique technology that dynamically analyzes displayed content and automatically optimizes a LCD monitor's contrast ratio for maximum visual clarity and viewing enjoyment, stepping up backlighting for clearer, crisper and brighter images or dimming backlighting for clear display of images on dark backgrounds.

#### 2 Why do I need it?

You want the very best visual clarity and viewing comfort for every type of content. SmartContrast dynamically controls contrast and adjusts backlighting for clear, crisp, bright gaming and video images or displays clear, readable text for office work. By reducing your monitor's power consumption, you save on energy costs and extend the lifetime of your monitor.

#### 3 How does it work?

When you activate SmartContrast, it will analyse the content you are displaying in real time to adjust colors and control backlight intensity. This function will dynamically enhance contrast for a great entertainment experience when viewing videos or playing games.

#### 3.2 Philips SmartControl Lite

The new SmartControl Lite software by Phillips allows you to control your monitor via an easy to use on-screen graphic interface. Complicated adjustments are a thing of the past as this user friendly software guides you through fine-tuning resolution, Color calibration, Clock/Phase adjustments, RGB White point adjustment, etc.

Equipped with latest technology in core algorithm for fast processing and response, this Windows 7 compliant eye catching animated Icon based software is ready to enhance your experience with Philips monitors!

#### 1 Installation

- Follow the instruction and complete the installation.
- You can launch after installation is completed.
- If you want to launch later, you can either click the shortcut on desktop or toolbar.



#### First launch -Wizard

- The first time after installation of SmartControl Lite, it will automatically go to Wizard for first time launch.
- The wizard will guide you through adjustment your monitor performance step by step.
- You can go to Plug-in menu to launch wizard later on as well.
- You can adjust more options without wizard by Standard pane.



#### 2 Start with Standard pane:

#### Adjust menu:

- Adjust Menu allow you to adjust Brightness, Contrast, Focus, Position and Resolution.
- You can follow the instruction and do the adjustment.
- Cancel prompts user if you want to cancel installation.





#### Color menu:

- Color Menu allow you to adjust RGB, Black Level, White Point, Color Calibration, and SmartImage Lite (Please refer to SmartImage Lite section).
- You can follow the instruction and do the adjustment.
- Refer to below table for sub-menu item base on your input.
- Example for Color Calibration

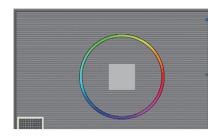






- 1. "Show Me" starts color calibration tutorial.
- 2. Start starts the 6-step color calibration sequence.
- 3. Quick View loads the before/after images.
- 4. To return to Color home pane, click the Cancel button.
- Enable color calibration by default is on. If unchecked, does not allow for color calibration to happen, dimes out start and quick view buttons.
- 6. Must have patent info in calibration screen.

#### First color Calibration Screen:



- Previous button is disabled until the second color screen.
- Next goes to the succeeding target (6-targets).
- Final next goes File>Presets pane.
- Cancel closes the UI and returns to the plug in page.

#### SmartImage Lite

Allows user to change setting for better display setting based on content.

When Entertainment is set, SmartContrast and SmartResponse are enabled.



**Options>Preferences** - Will only be active when selecting Preferences from the drop-down Options menu. On a non-supported display capable of DDC/Cl, only the Help and Options tabs are available.



- Displays current preference settings.
- A checked box enables the feature. The check box is a toggle.
- Enable Context Menu on desktop is checked (On) by default. Enable Context menu displays SmartControl Lite selections for Select Preset and Tune Display in the desktop right-click context menu. Disabled removes SmartControl Lite from the right click context menu.
- Enable Task Tray icon is checked (On) by default. Enable context menu shows the task tray menu for SmartControl Lite. A right click on the task tray icon displays the menu options for Help, Technical Support. Check for Upgrade, About, and Exit. When Enable task tray menu is disabled, the task tray icon will only display EXIT.
- Run at Startup is checked (On) by default. When disabled, SmartControl Lite will not launch at start or be in the task tray. The only way to launch SmartControl Lite is either from the desktop short cut or from the program file. Any preset set to run at startup will not load when this box is unchecked (Disabled).
- Enable transparency mode (Windows 7, Vista, XP). Default is 0% Opaque.

**Options>Input** - Will only be active when selecting Input from the drop-down Options menu. On a non-supported display capable of DDC/CI, only the Help and Options tabs are available. All other SmartControl Lite tabs are not available. **Options>Audio** - Will only be active when selecting Volume from the drop-down Options menu.

On a non-supported display capable of DDC/Cl, only the Help and Options tabs are available.



- Display the Source instruction pane and current input source setting.
- On single input displays, this pane will not be visible.



Help>User Manual - Will only be active when selecting User Manual from the drop-down Help menu. On a non-supported display capable of DDC/Cl, only the Help and Options tabs are available.

SmartContro	ol Lite	PHILIPS
Aduat Aduat Coor Options Ng	User Manuar Gistar Disorts Disorts Disorts Disorts Disorts Disorts Disorts Disorts Disorts Disorts Disort Disort Disort Disort Disort Disort Disort Disort Disort Disort Disort Disorts Disort	User Manual  The search and the setting up on everyting information of the setting of the setting up on everyting information of the setting

Help>Version - Will only be active when selecting Version from the drop- down Help menu. On a non-supported display capable of DDC/CI, only the Help and Options tabs are available.



#### Context Sensitive menu

The Context Sensitive menu is Enabled by default. If Enable Context Menu has been checked in the Options>Preferences pane, then the menu will be visible.

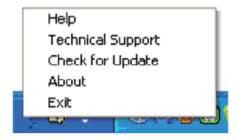


The Context Menu has four entries:

- SmartControl Lite When selected the About Screen is displayed.
- Select Preset Provides a hierarchical menu of saved presets for immediate use. A check mark shows the currently selected preset. Facoty Preset can also be called from the drop down menu.
- Tune Display Opens the SmartControl Lite control panel.
- SmartImage Lite Check current settings, Standard, Internet, Game.

#### Task Tray Menu Enabled

The task tray menu can be displayed by rightclicking on the SmartControl Lite icon from the task tray. Left Click will launch the application.



The task tray has five entries:

- Help Access to User Manual file: Open User Manual file using the default browser window.
- Technical Support displays the tech support page.
- Check for Update takes the user to PDI Landing and checks the user's version against the most current available.
- About Displays detailed reference information: product version, release information, and product name.
- Exit Close SmartControl Lite To run SmartControl Lite again either select SmartControl Lite from Program menu, double-click the desktop PC icon or restart the system.

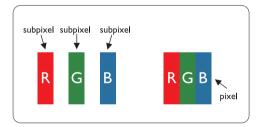


#### Task Tray Menu Disabled

When the Task Tray is disabled in the preference folder, only the EXIT selection is available. To completely remove SmartControl Lite from the task tray, disable Run at Startup in Options>Preferences.

#### 3.3 Philips' Flat Panel Monitors Pixel Defect Policy

Philips strives to deliver the highest quality products. We use some of the industry's most advanced manufacturing processes and practice stringent quality control. However, pixel or sub pixel defects on the TFT LCD panels used in flat panel monitors are sometimes unavoidable. No manufacturer can guarantee that all panels will be free from pixel defects, but Philips guarantees that any monitor with an unacceptable number of defects will be repaired or replaced under warranty. This notice explains the different types of pixel defects and defines acceptable defect levels for each type. In order to gualify for repair or replacement under warranty, the number of pixel defects on a TFT LCD panel must exceed these acceptable levels. For example, no more than 0.0004% of the sub pixels on a 18.5" XGA monitor may be defective. Furthermore, Philips sets even higher quality standards for certain types or combinations of pixel defects that are more noticeable than others. This policy is valid worldwide



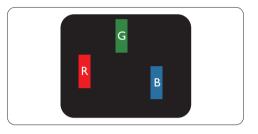
#### Pixels and Sub pixels

A pixel, or picture element, is composed of three sub pixels in the primary colors of red, green and blue. Many pixels together form an image. When all sub pixels of a pixel are lit, the three colored sub pixels together appear as a single white pixel. When all are dark, the three colored sub pixels together appear as a single black pixel. Other combinations of lit and dark sub pixels appear as single pixels of other colors.

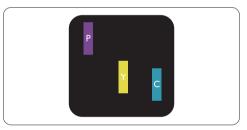
#### Types of Pixel Defects

Pixel and sub pixel defects appear on the screen in different ways. There are two categories of pixel defects and several types of sub pixel defects within each category.

Bright Dot Defects Bright dot defects appear as pixels or sub pixels that are always lit or 'on'. That is, a bright dot is a sub-pixel that stands out on the screen when the monitor displays a dark pattern. There are the types of bright dot defects:

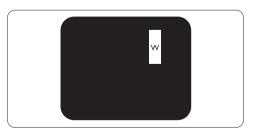


One lit red, green or blue sub pixel



Two adjacent lit sub pixels:

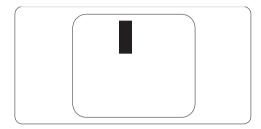
- Red + Blue = Purple
- Red + Green = Yellow
- Green + Blue = Cyan (Light Blue)

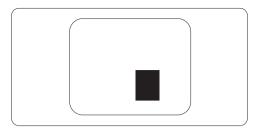


Three adjacent lit sub pixels (one white pixel)

A red or blue bright dot must be more than 50 percent brighter than neighboring dots while a green bright dot is 30 percent brighter than neighboring dots.

Black Dot Defects Black dot defects appear as pixels or sub pixels that are always dark or 'off'. That is, a dark dot is a sub-pixel that stands out on the screen when the monitor displays a light pattern. These are the types of black dot defects:





#### Proximity of Pixel Defects

Because pixel and sub pixels defects of the same type that are near to one another may be more noticeable, Philips also specifies tolerances for the proximity of pixel defects.

#### **Pixel Defect Tolerances**

In order to qualify for repair or replacement due to pixel defects during the warranty period, a TFT LCD panel in a Philips flat panel monitor must have pixel or sub pixel defects exceeding the tolerances listed in the following tables.

BRIGHT DOT DEFECTS	ACCEPTABLE LEVEL
MODEL	191V2
1 lit subpixel	3
2 adjacent lit subpixels	1
3 adjacent lit subpixels (one white pixel)	0
Distance between two bright dot defects*	>15mm
Total bright dot defects of all types	3

BLACK DOT DEFECTS	ACCEPTABLE LEVEL
MODEL	191V2
1 dark subpixel	5 or fewer
2 adjacent dark subpixels	2 or fewer
3 adjacent dark subpixels	0
Distance between two black dot defects*	>15mm
Total black dot defects of all types	5 or fewer

TOTAL DOT DEFECTS	ACCEPTABLE LEVEL
MODEL	191V2
Total bright or black dot defects of all types	5 or fewer

#### Solution Note

1 or 2 adjacent sub pixel defects = 1 dot defect This monitor is ISO9241-307 compliant.

## 4 Technical Specifications

#### 191V2

Picture/Display				
LCD panel type	TFT-LCD			
Backlight	CCFL			
Panel size	18.5" W( 47 cm)			
Aspect ratio	16:9			
Pixel Pitch	0.300 × 0.300 mm			
Brightness	250 cd/m <sup>2</sup>			
SmartContrast	300000:1			
Contrast ratio (typ.)	1000:1			
Response time (typical)	5 ms			
Optimum Resolution	1366x768 @ 60Hz			
Viewing angle	176° (H) / 170° (V) @ C/R > 5			
Picture Enhancement	Smartcontrol Lite			
Display colors	16.7 M			
Vertical refresh rate	56Hz -76Hz			
Horizontal Frequency	30kHz - 80kHz			
sRGB	YES			
Connectivity				
Signal input	DVI-D (digital, HDCP),VGA (Analog)			
Input Signal	Separate Sync, Sync on Green			
Convenience				
User Convenience	4:3 Wide/▼, Power On/Off , Menu (OK),			
	Brightness/A, AUTO/back,			
OSD Languages	English, French, German, Italian, Russian, Spanish,			
	Simplified Chinese, Portuguese			
Other convenience	VESA mount (100 x 100mm), Kensington lock			
Plug & Play Compatibility	DDC/Cl, sRGB, Windows 7/Vista/XP, Mac OSX, Linux			
Stand				
Tilt	-5/+20 (191V2)			

Power			
On mode	16.6W		
(EnergyStar 5.0 test method)			
Energy Consumption	AC Input Voltage at	AC Input Voltage at	AC Input Voltage at
(EnergyStar 5.0 test method)	100VAC +/-5VAC,	115VAC +/-5VAC,	230VAC +/-5VAC,
	50Hz +/- 3Hz	60Hz +/- 3Hz	50Hz +/ -3Hz
Normal Operation (typical)	15.66W	15.48W	15.55W
Sleep	0.15W	0.16W	0.2W
Off	0.15W	0.14W	0.12W
Heat Dissipation*	AC Input Voltage at	AC Input Voltage at	AC Input Voltage at
	100VAC +/-5VAC,	115VAC +/-5VAC,	230VAC +/-5VAC,
	50Hz +/ -3Hz	60Hz +/ -3Hz	50Hz +/ -3Hz
Normal Operation	15.83W	15.98W	16.12W
Sleep	0.15W	0.15W	0.18W
Off	0.11W 0.12W 0.14W		
Power LED indicator	On mode: Green, Standby/Sleep mode: Amber		
Power Supply	Build-in, 100-240VAC, 50/60Hz		
Dimension			
Product with stand (WxHxD)	445 x335 x161mm		
Product without stand (WxHxD)	445x270x64mm		
Box dimension (WxHxD)	490x350x128mm		
Weight			
Product with stand	3.48kg		
Product without stand	3.23kg		
Product with packaging	4.61Kg		
Operating Condition			
Temperature range (operation)	ge (operation) 0°C to 40 °C		
Temperature range (operation)	-20°C to 60°C		
Relative humidity	20% to 80%		
Altitude	Non-operation: + 12,000 ft ( 3,658 m)		
	operation: + 40,000 ft ( 12,192 m)		
MTBF	50000 hrs		

Environmental		
ROHS	YES	
EPEAT	Silver. (www.epeat.net)	
Packaging	100% recyclable	
Compliance and standards		
Regulatory Approvals	CE Mark, FCC Class B, SEMKO, TCO5.0, TÜV/	
	GS,TÜV Ergo, UL/cUL, Energy star 5.0,TCO5.0	
Cabinet		
Color	Black/Black	
Finish	Texture	

#### 

This data is subject to change without notice. Go to <u>www.philips.com/support</u> to download the latest version of leaflet.

#### 4.1 Resolution & Preset Modes

1 Maximum Resolution

#### For 191V2

1366 x 768 at 60 Hz (analog input) 1366 x 768 at 60 Hz (digital input)

2 Recommended Resolution

#### For 191V2

1366 x 768 at 60 Hz (digital input)

H. freq (kHz)	Resolution	V. freq (Hz)
31.469	640x350	70.086
31.469	720×400	70.086
31.469	640x480	59.940
35.000	640x480	67.000
37.500	640x480	75.000
35.156	800×600	56.250
37.879	800×600	60.317
46.875	800×600	75.000
48.363	1024×768	60.004
60.023	1024×768	75.029
63.981	1280×1024	60.020
79.976	1280×1024	75.025
55.469	1440×900	59.901
55.935	1440×900	59.887
70.635	1440×900	74.984
66.587	1920×1080	60.000
		(reduce blinking)
65.290	1680×1050	60.000
64.674	1680×1050	60.000

#### 4.2 Automatic PowerSaving

If you have VESA DPM compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. If an input from a keyboard, mouse or other input device is detected, the monitor will 'wake up' automatically. The following table shows the power consumption and signaling of this automatic power saving feature:

Power Management Definition						
VESA Mode	Video	H-sync	V-sync	Power Used	LED color	
Active	ON	Yes	Yes	< 16.6 W (typ.) < 29 W (max.)	Green	
Sleep	OFF	No	No	< 0.8 W (typ.)	Amber	
Switch Off	OFF	-	-	< 0.5 W (typ.)	OFF	
This monitor is ENERGY STAR® compliant. As an ENERGY STAR®						

The following setup is used to measure power consumption on this monitor.

Native resolution: 1366 x 768 Contrast: 50% Brightness: 250 nits Color temperature: 6500k with full white pattern Audio (Off)

#### Note

guidelines for energy efficiency.

This data is subject to change without notice.

## 5 Regulatory Information

#### Lead-free Product



like Lead has been eliminated and compliance with European community's stringent RoHs directive mandating restrictions on hazardous substances in electrical and electronic equipment have been adhered to in order to make Philips monitors safe to use throughout its life cycle.

#### TCO Displays 5.0 Information



This display carries the TCO Certified label. This ensures that the display is designed for minimal impact on the climate and natural environment, while offering all the performance expected from top of the line electronic products. TCO Certified is a third party verified program, where every product model is tested by an accredited independent test laboratory. TCO Certified represents one of the toughest certifications for displays worldwide.

# Some of the Usability features of the TCO Displays 5.0 requirements:

#### Visual Ergonomics

Good visual ergonomics in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are:

• Light levels without color tint, Uniform color and luminance, Wide color gamut

- Calibrated color temperature and gamma curve
- Wide luminance level, Dark black levels, Low motion blur

#### **Electrical Safety**

- Product fulfills rigorous safety standards Emissions
- Low alternating electric and magnetic fields emissions
- Low acoustic noise emissions Some of the Environmental features of the TCO Displays 5.0 requirements:
- The brand owner demonstrates corporate social responsibility and has a certified environmental management system (EMAS or ISO 14001)
- Very low energy consumption both in on- and standby mode
- Restrictions on chlorinated and brominated flame retardants, plasticizer and polymers
- Restrictions on heavy metals such as cadmium, mercury and lead (RoHS compliance)

#### EPEAT

(www.epeat.net)



"The EPEAT (Electronic Product Environmental Assessment Tool) program evaluates computer desktops, laptops, and monitors based on 51 environmental criteria

developed through an extensive stakeholder consensus process supported by US EPA. EPEAT system helps purchasers in the public and private sectors evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes. EPEAT also provides a clear and consistent set of performance criteria for the design of products, and provides an opportunity for manufacturers to secure market recognition for efforts to reduce the environmental impact of its products."

#### Benefits of EPEAT

Reduce use of primary materials Reduce use of toxic materials Avoid the disposal of hazardous waste EPEAT'S requirement that all registered products meet ENERGY STAR's energy efficiency specifications, means that these products will consume less energy throughout their life.

CE Declaration of Conformity

This product is in conformity with the following standards

- EN60950-1:2006 (Safety requirement of Information Technology Equipment)
- EN55022:2006 (Radio Disturbance requirement of Information Technology Equipment)
- EN55024:1998+A1:2001+A2:2003 (Immunity requirement of Information Technology Equipment)
- EN61000-3-2:2006 (Limits for Harmonic Current Emission)
- EN61000-3-3:1995+A1:2001+A2:2005 (Limitation of Voltage Fluctuation and Flicker) following provisions of directives applicable
- 2006/95/EC (Low Voltage Directive)
- 2004/108/EC (EMC Directive)
- 2005/32/EC (EuP Directive, EC No. 1275/2008 mplementing Directive for Standby and Off mode power consumption) and is produced by a manufacturing organization on ISO9000 level. The product also comply with the following standards
- ISO9241-307:2008 (Ergonomic requirement, Analysis and compliance test methods for electronic visual displays)
- GS EK1-2000:2009 (GS mark requirement)
- prEN50279:1998 (Low Frequency Electric and Magnetic fields for Visual Display)
- MPR-II (MPR:1990:8/1990:10 Low Frequency Electric and Magnetic fields)
- TCO Displays 5.0 (Requirement for Environment Labeling of Ergonomics, Energy, Ecology and Emission, TCO: Swedish Confederation of Professional Employees) for TCO versions

This monitor is equipped with a function for saving energy which supports the VESA Display Power Management (DPM) standard.This means that the monitor must be connected to a computer which supports VESA DPM.Time settings are adjusted from the system unit by software.

	VESA State	LED Indicator	Power Consumption
Normal operation	ON (Active)	Green	< 16.6 W (typ.)
Power Saving Alternative 2 One step	Sleep Switch Off	Amber OFF	< 0.8 W (typ.) < 0.5 W (typ.)



As an ENERGY STAR<sup>®</sup> Partner, we have determined that this product meets the ENERGY STAR<sup>®</sup> guidelines for energy efficiency.

#### Note

We recommend you switch off the monitor when it is not in use for a long time.

#### Federal Communications Commission (FCC) Notice (U.S. Only)

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Use only RF shielded cable that was supplied with the monitor when connecting this monitor to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

#### FCC Declaration of Conformity

Declaration of Conformity for Products Marked with FCC Logo,

United States Only



This device complies with Part 15 of the 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.

## Commission Federale de la Communication (FCC Declaration)

- Cet équipement a été testé et déclaré conforme auxlimites des appareils numériques de class B.aux termes de l'article 15 Des règles de la FCC. Ces limites sont concues de facon à fourir une protection raisonnable contre les interférences nuisibles dans le cadre d'une installation résidentielle. CET appareil produit, utilise et peut émettre des hyperfréquences qui, si l'appareil n'est pas installé et utilisé selon les consignes données, peuvent causer des interférences nuisibles aux communications radio. Cependant, rien ne peut garantir l'absence d'interférences dans le cadre d'une installation particulière. Si cet appareil est la cause d'interférences nuisibles pour la réception des signaux de radio ou de télévision, ce qui peut être décelé en fermant l'équipement, puis en le remettant en fonction. l'utilisateur pourrait essaver de corriger la situation en prenant les mesures suivantes:
- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Brancher l'équipement sur un autre circuit que celui utilisé par le récepteur.
- Demander l'aide du marchand ou d'un technicien chevronné en radio/télévision.
- Toutes modifications n'ayant pas reçu l'approbation des services compétents en matière de conformité est susceptible d'interdire à l'utilisateur l'usage du présent équipement.

N'utiliser que des câbles RF armés pour les connections avec des ordinateurs ou périphériques.

CET APPAREIL NUMERIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU REGLEMENT SUR LE MATERIEL BROUILLEUR DU CANADA.

#### EN 55022 Compliance (Czech Republic Only)

This device belongs to category B devices as described in EN 55022, unless it is epacifically stated that it is a Class A device on the specification label. The following applies to devices in Class A of EN 55022 (radius of protection up to 30 meters). The user of the device is obliged to take all steps necessary to remove sources of interference to telecommunication or other devices.

Pokud není na typovém štitku počítače uvedeno, že spadá do do třídy A podle EN 55022, spadá automatický do třídy IB podle EN 55022. Pro zařízení zahazená do třídy A (chranné pásmo 30m) podle EN 55022 platí následující. Dojde-li k rušení telekomunikačních nebo jiných zařízení je užívatel povinnen provět taková opaťtýní, aby rušení dotstralil.

## Polish Center for Testing and Certification Notice

The equipment should draw power from a socket with an attached protection circuit (a threeprong socket). All equipment that works together (computer, monitor, printer, and so on) should have the same power supply source.

The phasing conductor of the room's electrical installation should have a reserve short-circuit protection device in the form of a fuse with a nominal value no larger than 16 amperes (A).

To completely switch off the equipment, the power supply cable must be removed from the power supply socket, which should be located near the equipment and easily accessible.

A protection mark "B" confirms that the equipment is in compliance with the protection usage requirements of standards PN-93/T-42107 and PN-89/E-06251.

#### Wymagania Polskiego Centrum Badań i Certyfikacji

Urządzenie powiano być zasilane z gniazda z przyłączonym obwodem ochronnym (gniazdo z kołkiem). Współpracujące ze sobą urządzenia (komputer, monitor, drukatka) powinny być zasilane z tego samego źródła.

Instalacja dektryczna pomieszczenia powina zawienić w przewodre fazowym rezzwowa ochorup przed zwarciani, w potsieć beprzenia a wratekie zamionowej nie wijskej nie 16 A (amperior). W celu całkowitego wyłącocnia urządzenia z teici zasilania, należy wyjeć wtyczkę labła zasilającego z zmiada, które powino zmajdować się w polskla urządzenia i być latwo dostępne. Zask beprjeczeństwa <sup>16</sup> Proviedza zgodność urządzenia z wymaganiami bezpieczeństwa użytkownia zawarymi w 19-03-1210 (z 19-08-21).

#### Pozostałe instrukcje bezpieczeństwa

- Nie należy używać wtyczek adapterowych lub usuwać kołka obwodu ochronnego z wtyczki. Jeżeli konieczne jest użycie przedłużacza to należy użyć przedłużacza 3-żylowego z prawidłow połączonym przewodem ochromnym.
- System komputerowy należy zabezpieczyć przed nagłymi, chwilowymi wzrostami lub spadkami napięcia, używając eliminatora przepięć, urządzenia dopasowującego lub bezzaktóceniowego źródła zasilania.
- Należy upewnić się, aby nie nie leżało na kablach systemu komputerowego, oraz aby kable nie były umieszczone w miejscu, gdzie można byłoby na nie nadeptywać lub potykać się o nie.
- Nie należy rozlewać napojów ani innych płynów na system komputerowy.
   Nia należi uzwachć indusch przedmiotów do obrodzi wstarzy komputerowyca odo
- Nie nakcji wspęchać zdrucych przedmiatów do otworów wystam komputerowego, gdyż node to spowodować podra lub poznacine pradjem, pozreze zwarcie cielennemi w owwęterzych.
   System komputerowy powinien znajdować się z dala od zrzejników i źrźdel ciepta. Ponadto, nie należy błokować otworów wo wrytkycnych. Nakcji unkać kładzenia lużnych pipierów pod komputer oraz umieszczania komputera w ciasnym miejscu bez możliwości cyrkulacji powietrza wokół niego.

#### North Europe (Nordic Countries) Information

#### Placering/Ventilation

#### VARNING:

FÖRSÄKRA DIG OM ATT HUVUDBRYTARE OCH UTTAG ÄR LÄTÅTKOMLIGA, NÄR DU STÄLLER DIN UTRUSTNING PÅPLATS.

#### Placering/Ventilation

ADVARSEL:

SØRG VED PLACERINGEN FOR, AT NETLEDNINGENS STIK OG STIKKONTAKT ER NEMTTILGÆNGELIGE.

#### Paikka/Ilmankierto

#### VAROITUS:

SIJOITA LAITE SITEN, ETTÄ VERKKOJOHTO VOIDAAN TARVITTAESSA HELPOSTI IRROTTAA PISTORASIASTA.

#### Plassering/Ventilasjon

ADVARSEL:

NÅR DETTE UTSTYRET PLASSERES, MÅ DU PASSE PÅ AT KONTAKTENE FOR STØMTILFØRSEL ER LETTE Å NÅ.

#### BSMI Notice (Taiwan Only)

符合乙類資訊產品之標準

#### Ergonomie Hinweis (nur Deutschland)

Der von uns gelieferte Farbmonitor entspricht den in der "Verordnung über den Schutz vor Schäden durch Röntgenstrahlen" festgelegten Vorschriften.

Auf der Rückwand des Gerätes befindet sich ein Aufkleber, der auf die Unbedenklichkeit der Inbetriebnahme hinweist, da die Vorschriften über die Bauart von Störstrahlern nach Anlage III ¤ 5 Abs. 4 der Röntgenverordnung erfüllt sind.

Damit Ihr Monitor immer den in der Zulassung geforderten Werten entspricht, ist darauf zu achten, daß

- 1. Reparaturen nur durch Fachpersonal durchgeführt werden.
- 2. nur original-Ersatzteile verwendet werden.
- 3. bei Ersatz der Bildröhre nur eine bauartgleiche eingebaut wird.

Aus ergonomischen Gründen wird empfohlen, die Grundfarben Blau und Rot nicht auf dunklem Untergrund zu verwenden (schlechte Lesbarkeit und erhöhte Augenbelastung bei zu geringem Zeichenkontrast wären die Folge).

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 beträgt 70dB (A) oder weniger.

ACHTUNG: BEIM AUFSTELLEN DIESES GERÄTES DARAUF ACHTEN, DAß NETZSTECKER UND NETZKABELANSCHLUß LEICHT ZUGÄNGLICH SIND.

#### China RoHS

The People's Republic of China released a regulation called "Management Methods for Controlling Pollution by Electronic Information Products" or commonly referred to as China RoHS. All products including CRT and LCD monitor which are produced and sold for China market have to meet China RoHS request.

#### 中国大陆RoHS

根据中国大陆《电子信息产品污染控制管理办法》(也称为中国大陆RoHS), 以下部分列出了本产品中可能包含的有毒有害物质或元素的名称和含量

本表适用之产品

显示器(液晶及CRT)

有毒有害物质或元素

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
外壳	0	0	0	0	0	0
CRT显示屏	×	0	0	0	0	0
液晶显示屏/灯管	×	×	0	0	0	0
电路板组件*	×	0	0	0	0	0
电源适配器	×	0	0	0	0	0
电源线/连接线	×	0	0	0	0	0
<ul> <li>*: 电路板组件包</li> <li>○:表示该有毒有</li> <li>《电子信息产品</li> <li>◇:电子信息产品</li> </ul>	害物质在该 品中有毒有著	部件所有均 書物质的限;	质材料中的 量要求标准	)含量均在 》规定的限量要素	求以下	語等

<:表示读有畫有筆物质至少在该部件的某一均质材料中的含量超出 (电子信息产品中有書有書應因的麗量要求稱准) 成定的限量要求;但是上衷中打"×"的部件, 符合改置用A-15法提要求(雇子麵食的配分)

## **シ** 环保使用期限

此标识指期限(十年),电子信息产品中含有的 有毒有害物质或元素在正常使用的条件下不 会发生外泄或突变,电子信息产品用户使用该 电子信息产品不会对环境造成严重污染或对 其人身、财产造成严重损害的期限.

#### 中国能源效率标识

根据中国大陆《能源效率标识管理办法》本显示器符合以下要求:

能源效率(cd/W)	> 1.05
能效等级	1级
能效标准	GB 21520-2008

详细有关信息请查阅中国能效标识网:<u>http://www.energylabel.gov.cn/</u>

### 6 Customer care and warranty

#### Customer Care & Warranty

PLEASE SELECT YOUR COUNTRY/AREA TO REVIEW DETAILS OF YOUR WARRANTY COVERAGE

#### WESTERN EUROPE

Austria / Belgium / Denmark / France / Germany / Greece / Finland / Ireland / Italy / Luxembourg / the Netherlands / Norway / Portugal / Sweden / Switzerland / Spain / United Kingdom / Poland

#### EASTERN EUROPE

Czech Republic / Hungary / Russia / Slovakia / Slovenia / Turkey

LATIN AMERICA Argentina / Brasil

NORTH AMERICA Canada / USA

PACIFIC Australia / New Zealand

#### ASIA

China / Hong Kong / India / Indonesia / Korea / Malaysia / Pakistan / Philippines / Singapore / Taiwan / Thailand / Vietnam

#### AFRICA South Africa

MIDDLE EAST United Arab Emirates

#### F1rst Choice Contact Information

Country	Code	Telephone number	Tariff
Austria	+43	0810 000206	€0.07
Belgium	+32	078 250851	€0.06
Denmark	+45	3525 8761	Local call tariff
Finland	+358	840 320 041	€0.08
Luxembourg	+352	26 84 30 00	Local call tariff
The Netherlands	+31	0900 0400 063	€0.10
Norway	+47	2270 8250	Local call tariff
Poland	+48	0223491505	Local call tariff
Portugal	+351	2 1359 1440	Local call tariff
Spain	+34	902 888 785	€0.10
Sweden	+46	08 632 0016	Local call tariff
Switzerland	+41	02 2310 2116	Local call tariff
United Kingdom	+44	0207 949 0069	Local call tariff

#### **Consumer Information Centers**

Argentina / Australia / Brasil / Canada / New Zealand / Belarus / Bulgaria / Croatia / Czech Republic / Estonia / United Arab Emirates / Hong Kong / Hungary / India / Indonesia / Israel / Latvia / Lithuania / Malaysia / Middle East + North Africa / New Zealand / Pakistan / Romania / Russia / Serbia & Montenegro / Singapore / Slovakia / Slovenia / South Africa / South Korea / Taiwan / Philippines / Thailand / Turkey / Ukraine / Vietnam

#### Eastern Europe

BELARUS Technic al Center of JV IBA M. Bogdanovich str: 155 BY - 220040 Minsk Tel: +375 17 217 33 86

#### BELARUS

Service.BY Petrus Brovky st. 19 – 101-B 220072, Minsk Belarus

#### BULGARIA

LAN Service 140, Mimi Balkanska Str. Office center Translog 1540 Sofia, Bulgaria Tel: +359 2 960 2360 www.lan-service.bg

#### CZECH REPUBLIC

General Consumer Information Center 800 142100

#### Xpectrum

Lu.ná 591/4 CZ - 160 00 Praha 6 Tel: 800 100 697 or 220 121 435 Email:info@xpectrum.cz www.xpectrum.cz

#### CROATIA

Renoprom d.o.o. Ljubljanska 4, Sv. Nedjelja,10431 Croatia Tel: +385 1 333 0974

#### estonia

FUJITSU SERVICES OU Akadeemia tee 21G EE-12618 Tallinn Tel: +372 6519900 www.ee.invia.fujitsu.com

#### HUNGARY

Serware Szerviz Vizimolnár u. 2-4 HU - 1031 Budapest Tel: +36 1 2426331 Email: inbox@serware.hu www.serware.hu

#### HUNGARY

Profi Service Center Ltd. 123 Kulso-Vaci Street, H-1044 Budapest (Europe Center) Hungary Tel: +36 1 814 8080 m.andras@psc.hu

#### LATVIA

ServiceNet LV Jelgavas iela 36 LV - 1055 Riga, Tel: +371 7460399 Email: serviss@servicenet.lv

#### LITHUANIA

ServiceNet LT Gaiziunu G. 3 LT - 3009 KAUNAS Tel: +370 7400088 Email: servisas@servicenet.lt www.servicenet.lt

#### ROMANIA

Blue Ridge Int'l Computers SRL 115, Mihai Eminescu St., Sector 2 RO - 020074 Bucharest Tel: +40 21 2101969

#### SERBIA & MONTENEGRO

Kim Tec d.o.o. Viline vode bb, Slobodna zona Beograd L12/3 11000 Belgrade Serbia Tel. +381 11 20 70 684

#### SLOVAKIA

General Consumer Information Center 0800004551

Datalan Servisne Stredisko Puchovska 8 SK - 831 06 Bratislava Tel: +421 2 49207155 Email: servis@datalan.sk

#### SLOVENIA

PC HAND Brezovce 10 SI - 1236 Trzin Tel: +386 1 530 08 24 Email: servis@pchand.si

#### RUSSIA

CPS 18, Shelepihinskaya nab. 123290 Moscow Russia Tel. +7(495)797 3434

#### Profservice:

14A -3, 2Karacharovskaya str, 109202, Moscow , Russia Tel. +7(095)170-5401

#### TURKEY

Türk Philips Ticaret A.S. Yukari Dudullu Org.San.Bolgesi 2.Cadde No:22 34776-Umraniye/Istanbul Tel: (0800)-261 33 02

#### UKRAINE

Comel Shevchenko street 32 UA - 49030 Dnepropetrovsk Tel: +380 562320045 www.csp-comel.com LLC Topaz Company Topaz-Service Company, Mishina str. 3, Kiev Ukraine-03151 Tel: +38 044 245 73 31

#### Latin America ARGENTINA

Azopardo 1480. (C1107ADZ) Cdad. de Buenos Aires Tel: 0800 3330 856 Email: CIC.monitores@Philips.com

#### BRASIL

Alameda Raja Gabaglia, 188 - 10°Andar - V. Olímpia - S. Paulo/SP - CEP 04551-090 -Brasil Tel: 0800-7254101 Email: CIC.monitores@Philips.com

#### Pacific AUSTRALIA

Company: AGOS NETWORK PTY LTD Address: 4/5 Dursley Road, Yenorra, NSW 2161, Australia Tel: 1300 360 386 Fax: +61-2-80808147 Email: philips@agos.com.au Service hours: Mon.~Fri. 8:00am-7:30pm

#### NEW ZEALAND

Company: Visual Group Ltd. Address: 28 Walls Rd Penrose Auckland Phone: 0800 657447 Fax: 09 5809607 E-mail: vai.ravindran@visualgroup.co.nz Service Hours: Mon.~Fri. 8:30am~5:30pm

#### Asia

#### HONG KONG/Macau

Company Name: PHK Service Limited Address: Flat A, 10/F., Pak Sun Building, 103 - 107 Wo Yi Hop Road, Kwai Chung, New Territories, Hong Kong Tel.: (852) 2610-6908 / (852) 2610-6929 for Hong Kong and (853) 2856-2277 for Macau Fax: (852) 2485 3574 for Hong Kong and (853) 2856 1498 for Macau E-mail: enquiry@phkservice.com.hk

Service Hours: Mon.~Sat. 09:00am~06:00pm

#### India

Company: REDINGTON INDIA LTD Address: SPL Guindy House, 95 Mount Road, Chennai 600032, India Tel: +9144-42243352/353 E-mail: aftersales@in.aocmonitor.com Service hours: Mon.~Fri. 9:00AM~5:30PM; Sat. 9:00AM~1:00PM

#### Indonesia

Company Name: PT. Gadingsari elektronika Prima Address: Kompleks Pinang 8, Jl. Ciputat raya No. 8F, Pondok Pinang. Jakarta Tel: 021-750909053, 021-750909056 Fax: 021-7510982 E-mail: gepta@cbn.net.id Service hours: Mon.~Fri. 8:30am~4:30pm; Sat. 8:30am~2:00pm

#### Additional service points:

- Philips Building Jl. Buncit Raya Kav 99. Jakarta Selatan.
   Phone: 021-7940040, ext 1722/1724, 98249295, 70980942
- 2. Jl.Tanah Abang 1 no 12S. Jakarta Pusat. Phone: 021-3455150, 34835453
- Rukan City Home no H31, Gading Square. Jl. Bulevar Barat. Kelapa Gading. Jakarta Utara. Phone: 021-45870601, 98131424

#### South Korea

Company: PCS One Korea Ltd. Address: 112-2, Banpo-dong, Seocho-ku, Seoul, 137-040, Korea Call Center Tel: 080-600-6600 Tel: 82 2 591 1528 Fax: 82 2 595 9688 E-mail: cic\_korea@philips.com Service hours: Mon.~Fri. 9:00AM~ 6:00PM; Sat. 9:00AM~1:00PM

#### Malaysia

Company: After Market Solutions (CE) Sdn Bhd Address: Lot 6. Jalan 225/51A, 46100 Petaling Jaya, Selangor DE, Malaysia. Phone: 603 7953 3370 Philips Info Line: 1-800-880-180 Fax: 603 7953 3338 E-mail: pceinfo.my@philips.com Service Hours: Mon.~Fri. 8:15am~5:15pm; Sat. 9:00am~1:00pm

#### Pakistan

Philips Consumer Service Address: Mubarak manzil, 39, Garden Road, Saddar, Karachi-74400 Tel: (9221) 2737411-16 Fax: (9221) 2721167 E-mail: care@philips.com Website: www.philips.com.p

#### Singapore

Company: Philips Electronics Singapore Pte Ltd (Philips Consumer Care Center) Address: 620A Lorong 1 Toa Payoh, TP4 Building Level 1, Singapore 319762 Tel: (65) 6882 3999 Fax: (65) 62508037 E-mail: consumer:care.sg@philips.com Service hours: Mon.~Fri. 9:00am~6:00pm; Sat. 9:00am~1:00pm

#### Taiwan

Company: FETEC.CO Address: 3F, No.6, Lane 205, Sec. 1, Chang Hsing Rd, Lu Chu Hs, Taoyuan, Taiwan R.O.C 33800 Consumer Care: 0800-231-099 Tel: (03)2120336 Fax: (03)3129184 E-mail: knlin08@xuite.net Service hours: Mon.~Fri. 8:30am~7:00pm

#### Thailand

Company: Axis Computer System Co., Ltd. Address: 1421 Soi Lardprao 94, Srivara Town In Town Soi 3 Road, Wangthonglang, Bangkok 10310 Thailand Tel: (662) 934-5498 Fax: (662) 934-5499 E-mail: axis5@axiscomputer.co.th Service Hours: Mon.~Fri. 08:30am~05:30pm

#### Glee Electronics Inc

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## 7 Troubleshooting & FAQs

#### 7.1 Troubleshooting

This page deals with problems that can be corrected by a user. If the problem still persists after you have tried these solutions, contact Philips customer service representative.

#### 1 Common Problems

#### No Picture (Power LED not lit)

- Make sure the power cord is plugged into the power outlet and into the back of the monitor.
- First, ensure that the power button on the front of the monitor is in the OFF position, then press it to the ON position.

#### No Picture (Power LED is Green)

- Make sure the computer is turned on.
- Make sure the signal cable is properly connected to your computer.
- make sure the monitor cable has no bent pins on the connect side. If yes, repair or replace the cable.
- The Energy Saving feature may be activated

#### Screen says



- Make sure the monitor cable is properly connected to your computer. (Also refer to the Quick Set-Up Guide).
- Check to see if the monitor cable has bent pins.
- Make sure the computer is turned on.

#### AUTO button doesn't function

• The auto function is applicable only in VGA- Analog mode. If the result is not satisfactory, you can do manual adjustments via the OSD menu.

#### Note

The Auto Function is not applicable in DVI-Digital mode as it is not necessary.

#### Visible signs of smoke or sparks

- Do not perform any troubleshooting steps
- Disconnect the monitor from mains power source immediately for safety
- Contact with Philips customer service representative immediately.

#### 2 Imaging Problems

#### Image is not centered

- Adjust the image position using the "Auto" function in OSD Main Controls.
- Adjust the image position using the Phase/ Clock of Setup in OSD Main Controls. It is valid only in VGA mode.

#### Image vibrates on the screen

• Check that the signal cable is properly securely connected to the graphics board or PC.

#### Vertical flicker appears



- Adjust the image using the "Auto" function in OSD Main Controls.
- Eliminate the vertical bars using the Phase/ Clock of Setup in OSD Main Controls. It is valid only in VGA mode.

#### Horizontal flicker appears

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- Adjust the image using the "Auto" function in OSD Main Controls.
- Eliminate the vertical bars using the Phase/ Clock of Setup in OSD Main Controls. It is valid only in VGA mode.

#### Image appears blurred, indistinct or too dark

• Adjust the contrast and brightness on On-Screen Display.

# An "after-image", "burn-in" or "ghost image" remains after the power has been turned off.

- Uninterrupted display of still or static images over an extended period may cause " burn in", also known as "after-imaging " or "ghost imaging", on your screen. "Burn-in", "afterimaging", or "ghost imaging" is a well-known phenomenon in LCD panel technology. In most cases, the "burned in" or "after-imaging" or "ghost imaging" will disappear gradually over a period of time after the power has been switched off.
- Always activate a moving screen saver program when you leave your monitor unattended.
- Always activate a periodic screen refresh application if your LCD monitor will display unchanging static content.
- Severe" burn-in" or "after-image" or "ghost image" symptoms will not disappear and cannot be repaired. The damage mentioned above is not covered under your warranty.

#### Image appears distorted. Text is fuzzy or blurred.

 Set the PC's display resolution to the same mode as monitor's recommended screen native resolution.

## Green, red, blue, dark, and white dots appears on the screen

 The remaining dots are normal characteristic of the liquid crystal used in today's technology, Please refer the pixel policy for more detail.

# The "power on" light is too strong and is disturbing

 You can adjust "power on" light using the power LED Setup in OSD main Controls.

#### 3 Audio problem

#### No sound

- Check if audio cable is connected to PC and monitor correctly.
- Ensure audio is not muted. Press OSD "Menu", select "Audio" then "Mute". Check it on "Off" position.
- Press "Volume" in OSD main control to adjust the volume.

For further assistance, refer to the Consumer Information Centers list and contact Philips customer service representative.

#### 7.2 SmartControl Lite FAQs

- Q1. I change the monitor on a PC to a different one and the SmartControl Lite becomes un-usable, what do I do?
- Ans.: Restart your PC and see if SmartControl Lite can work. Otherwise, you will need to remove and re-install SmartControl Lite to ensure proper driver is installed.

#### Q2. The SmartControl Lite functions worked well before, but it does not work anymore, what can I do?

- Ans.: If the following actions were executed, the monitor driver may need to be re-installed.
  - Changed video graphic adapter to another one
  - Updated video driver
  - Activities on OS, such as service pack or patch
  - Run Windows Update and updated monitor and/or video driver
  - Windows was booted with the monitor power off or disconnected.
     To find out, please right click My Computer and click on Properties >Hardware-> Device Manager.
     If you see "Plug and Play Monitor" shows under Monitor, then you need to re-install. Simply remove SmartControl Lite and re-install it.

- Q3. After installing SmartControl Lite, when clicking on SmartControl Lite tab, nothing shows up after a while or a failure message shows, what happened?
- Ans.: It might be your graphic adaptor is not compatible with the SmartControl Lite. If your graphic adaptor is one of the above mentioned brands, try to download the most updated graphic adaptor driver from corresponding companies' web site.

Install the driver: Remove SmartControl Lite, and re-install it once more. If it is still not working, we are sorry that the graphic adaptor is not supported. Please visit Philips website and check if an updated SmartControl Lite driver is available.

#### Q4. When I click on Product Information, only partial information is shown, what happened?

Ans.: It might be your graphic card adaptor driver is not the most updated version which fully supporting DDC/CI interface. Please try to download the most updated graphic adaptor driver from corresponding companies' web site. Install the driver. Remove SmartControl Lite and re-install it once more.



#### Q5. I forgot my PIN for Theft Deterrence Function. How can I do?

Ans.: Philips Service center has a right to ask for legitimate identification and authorization, in order to establish ownership of the monitor.

#### 7.3 General FAQs

- Q1: When I install my monitor what should I do if the screen shows 'Cannot display this video mode'?
- Ans.: Recommended resolution for Philips 18.5": 1366 × 768 @60Hz.
  - Unplug all cables, then connect your PC to the monitor that you used previously.
  - In the Windows Start Menu, select Settings/ Control Panel. In the Control Panel Window, select the Display icon. Inside the Display Control Panel, select the 'Settings' tab. Under the setting tab, in box labeled 'desktop area', move the sidebar to 1366 x 768 pixels (18.5").
  - Open 'Advanced Properties' and set the Refresh Rate to 60Hz, then click OK.
  - Restart your computer and repeat step 2 and 3 to verify that your PC is set at 1366 × 768@60Hz (18.5").
  - Shut down your computer, disconnect your old monitor and reconnect your Philips LCD monitor.
  - Turn on your monitor and then turn on your PC.

# Q2: What does the recommended refresh rate for LCD monitor?

**Ans.:** Recommended refresh rate in LCD monitors is 60Hz, In case of any disturbance on screen, you can set it up to 75Hz to see if that removes the disturbance.

#### Q3: What are the .inf and .icm files on the CD-ROM? How do I install the drivers (.inf and .icm)?

Ans.: These are the driver files for your monitor. Follow the instructions in your user manual to install the drivers. Your computer may ask you for monitor drivers (.inf and .icm files) or a driver disk when you first install your monitor. Follow the instructions to insert the ( companion CD-ROM) included in this package. Monitor drivers (.inf and .icm files) will be installed automatically.

#### Q4: How do I adjust the resolution?

Ans.: Your video card/graphic driver and monitor together determine the available resolutions. You can select the desired resolution under Windows<sup>®</sup> Control Panel with the "Display properties".

# Q5: What if I get lost when I am making monitor adjustments via OSD?

Ans.: Simply press the OK button, then select 'Reset' to recall all of the original factory settings.

#### Q6: Is the LCD screen resistant to scratches?

**Ans.:** In general it is recommended that the panel surface is not subjected to excessive shocks and is protected from sharp or blunt objects. When handling the monitor, make sure that there is no pressure or force applied to the panel surface side. This may affect your warranty conditions.

#### Q7: How should I clean the LCD surface?

Ans.: For normal cleaning, use a clean, soft cloth. For extensive cleaning, please use isopropyl alcohol. Do not use other solvents such as ethyl alcohol, ethanol, acetone, hexane, etc.

## Q8: Can I change the color setting of my monitor?

- Ans.: Yes, you can change your color setting through OSD control as the following procedures,
  - Press "OK" to show the OSD (On Screen Display) menu
  - Press "Down Arrow" to select the option "Color" then press "OK" to enter color setting, there are three settings as below.
    - 1. Color Temperature; The six settings are 5000K, 6500K, 7500K, 8200K, 9300K and 11500K. With settings in the 5000K range the panel appears 'warm,' with a red-white color tone, while a 11500K temperature yields 'cool, blue-white toning."
    - sRGB; this is a standard setting for ensuring correct exchange of colors between different device (e.g. digital cameras, monitors, printers, scanners, etc)
    - User Define; the user can choose his/her preference color setting by adjusting red, green blue color.

#### Solution Note:

A measurement of the color of light radiated by an object while it is being heated. This measurement is expressed in terms of absolute scale, (degrees Kelvin). Lower Kevin temperatures such as 2004K are red; higher temperatures such as 9300K are blue. Neutral temperature is white, at 6504K.

# Q9: Can the Philips LCD Monitor be mounted on the wall?

Ans.: Yes. Philips LCD monitors have this optional feature. Four standard VESA mount holes on the rear cover allows the user to mount the Philips monitor on most of the VESA standard arms or accessories. We recommend you to contact your Philips

#### sales representative for more information.

# Q10: Can I connect my LCD monitor to any PC, workstation or Mac?

Ans.: Yes. All Philips LCD monitors are fully compatible with standard PCs, Macs and workstations. You may need a cable adapter to connect the monitor to your Mac system. Please contact your Philips sales representative for more information.

#### Q11: Are Philips LCD monitors Plug-and- Play?

Ans.: Yes, the monitors are Plug-and-Play compatible with Windows 7/Vista/XP/NT, Mac OSX, Linux

## Q12: What kind of wide-angle technology is available?

Ans.: Currently, the IPS type panels offer the best Contrast Ratio, compared to MVA, or PVA technologies. TN panels have improved over the years, but IPS panel still gives superior results over TN panel.

- Q13: What is Image Sticking, or Image Burn-in, or After Image, or Ghost Image in LCD panels?
- Ans.: Uninterrupted display of still or static images over an extended period may cause "burn in", also known as "after-imaging" or "ghost imaging", on your screen. "Burn-in", "after-imaging", or "ghost imaging" is a well-known phenomenon in LCD panel technology. In most cases, the "burned in" or "atter-imaging" or "ghost imaging" will disappear gradually over a period of time after the power has been switched off. Always activate a moving screen saver program when you leave your monitor unattended.

Always activate a periodic screen refresh application if your LCD monitor will display unchanging static content.

#### Warning

Severe"burn-in" or "after-image" or "ghost image" symptoms will not disappear and cannot be repaired. The damage mentioned above is not covered under your warranty.

# Q14: Why is my Display not showing sharp text, and is displaying jagged characters?

Ans.: Your LCD monitor works best at its native resolution of 1366 × 768@60Hz. For best display please use this resolution.



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Version: M2191VE1T