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1. Important

The monitor is intended for use with Medical Equipment to display alpha, numerical and graphical data. The subject equipment Philips monitor is powered by an external recognized AC/DC adapter (IEC/EN60601-1).

1.1 Safety Information

Power adapter

This adapter (Manufacture: Philips, Model: TPV-15W-05) is a forming part of the medical device.

The connection of external equipments

External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL / IEC standard (e.g. UL 60950 for IT equipment, UL 60601 and ANSI/AAMI ES606011 / IEC 60601 series for systems – shall comply with the standard IEC 60601-1-1, Safety requirements for medical electrical systems. Equipment not complying with MOPP of ANSI/AAMI ES606011 shall be kept outside the patient environment, as defined in the standard.

Disconnecting Device

The mains plug or appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable. Always completely disconnect the power cord set from your product whenever you are working or cleaning on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.

Classification

- Degree of protection against the ingress of water: IPX0
- Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide. (Non AP or APG Category)
- Mode of operation: Continuous
- Type of protection against electric shock: Class II equipment
- No applied part.

Shutdown Procedure

We strongly recommended that you should shut down the system before you start to clean any single components.

Please follow the steps below.

- Close all application programs
- Close operating software
- Turn off power switch
- Disconnect power cord set
- Remove all devices

Safety Symbol Description

The following safety symbols are the further explanations for your reference.

	Medical component With respect to electric shock, fire and mechanical hazards only in accordance with ANSI/AAMI ES60601-1, and CAN/CSA C22.2 NO. 60601-1
	Attention, consult ACCOMPANYING DOCUMENTS.
	Attention, consult ACCOMPANYING DOCUMENTS.
	Type of protection against electric shock: Class II equipment
	Type of Current- AC
	European Community Approval The monitor complies with the 93/42/EEC and 2007/47/EC and conforms to the applicable following standards: EN60601-1, EN 60601-1-2, EN 61000-3-2 and EN 61000-3-3.
	TUV Type Testing Approval The monitor complies with the EN60601-1 and IEC60601-1 of European Standards.

Note

- **Caution: Use suitable mounting apparatus to avoid risk of injury.**
- **Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standards of your particular country.**
- **Keeping to clean your monitor by monthly.**

1. Important

Guidance and manufacturer's declaration – electromagnetic emissions – for all EQUIPMENT and SYTEMS

The monitor is intended for use in the electromagnetic environment specified below. The customer or the user of the monitor should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The monitor uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The monitor is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class D	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

1. Important

Guidance and manufacturer's declaration – electromagnetic immunity – for all EQUIPMENT and SYTEMS:

The monitor is intended for use in the electromagnetic environment specified below. The customer or the user of the monitor should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	6 kV contact 8 kV air	6 kV contact 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	2 kV for power supply lines 1 kV for input/output lines	2 kV for power supply lines 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	1 kV line(s) to line(s) 2 kV line(s) to earth	1 kV line(s) to line(s) 2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	<5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the monitor requires continued operation during power mains interruptions, it is recommended that the monitor be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Note

UT is the a.c. mains voltage prior to application of the test level.

1. Important

Guidance and manufacturer's declaration – electromagnetic immunity – for EQUIPMENT and SYSTEMS that are not LIFE-SUPPORTING:

The monitor is intended for use in the electromagnetic environment specified below. The customer or the user of the monitor should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment – guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	<p>Portable and mobile RF communications equipment should be used no closer to any part of the monitor, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter:</p> <p>Recommended separation distance:</p> $d = 1.2 \sqrt{P}$ <p>$d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz</p> <p>$d = 1.2 \sqrt{P}$ 800 MHz to 2.5 GHz</p> <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey:</p> <ol style="list-style-type: none"> Should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	

Note

- At 80 MHz and 800 MHz, the higher frequency range applies.
- These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.
- Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the monitor is used exceeds the applicable RF compliance level above, the monitor should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the monitor.
- Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

1. Important

Recommended separation distances between portable and mobile RF communications equipment and the EQUIPMENT or SYSTEM – for EQUIPMENT and SYSTEMS that are not LIFE-SUPPORTING:

The monitor is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the monitor can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the monitor as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter (Meter)		
	150 kHz to 80 MHz $d = 1.2 \sqrt{P}$	80 MHz to 800 MHz $d = 1.2 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3 \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

Note

- For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter; where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.
- At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
- These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

1.2 Safety precautions and maintenance

Warnings

- We strongly recommended that you should shut down the system before you start to clean any single components.
- No modification of this equipment is allowed.
- 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

- Please keep the monitor out of direct sunlight, very strong bright lights and away from any other heat source. Lengthy exposure to this type of environment may result in discoloration and damage to the monitor.
- 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 monitor panel. When moving your monitor, grasp the frame to lift; do not lift the monitor by placing your hand or fingers on the monitor 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: 10°C to 40°C
 - Humidity: 30% to 75%
 - Atmospheric pressure: 700 to 1060 hPa

Important information for Burn-in/Ghost image

- 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” will disappear gradually over a period of time after the power has been switched off.

Warning

Failure to activate a screen saver, or a periodic screen refresh application may result in severe “burn-in” or “after-image” or “ghost image” symptoms that 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.

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.

1.3 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:

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.

1.4 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.

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will

help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product

Taking back/Recycling Information for Customers

Philips establishes technically and economically viable objectives to optimize the environmental performance of the organization's product, service and activities.

From the planning, design and production stages, Philips emphasizes the importance of making products that can easily be recycled. At Philips, end-of-life management primarily entails participation in national take-back initiatives and recycling programs whenever possible, preferably in cooperation with competitors, which recycle all materials (products and related packaging material) in accordance with all Environmental Laws and taking back program with the contractor company.

Your display is manufactured with high quality materials and components which can be recycled and reused.

To learn more about our recycling program please visit: <http://www.philips.com/sites/philipsglobal/about/sustainability/ourevironment/productrecyclingservices.page>.



MMD Monitors & Displays Nederland B.V.

Prins Bernhardplein 200, 6th floor
1097 JB Amsterdam, The Netherlands

Disposal of Waste Equipment by Users in Private Household in the European Union.

1.5 AntiMicrobial

Do you ever wonder how many germs thrive on your equipment?

Germs have become a growing problem in hospitals worldwide, as they cause disfiguring and life-threatening infections. These bacteria are not only dangerous but also hard to eliminate and may even become multiresistant against antibiotics and disinfectants, experts warn.

With its AntiMicrobial material, Philips Clinical review displays are best suitable for your clinical environment.

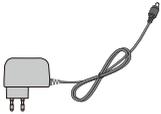
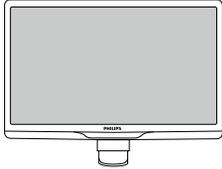
Note

Alcohol is not recommended to clean the monitor . due to potential to plastics and actual screen and its relevant coatings.

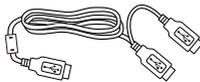
2. Setting up the monitor

2.1 Installation

1 Package contents



AC/DC Adapter



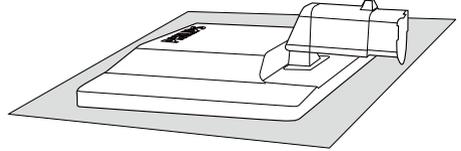
USB Cable (Y-Type)

Note

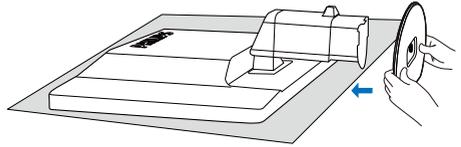
Use only the AC/DC adapter model:
Philips TPV-15W-05 (5V/3A)

2 Install base stand

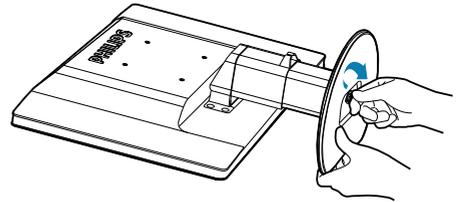
1. Place the monitor face down on a smooth surface. Pay attention not to scratch or damage the screen.



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

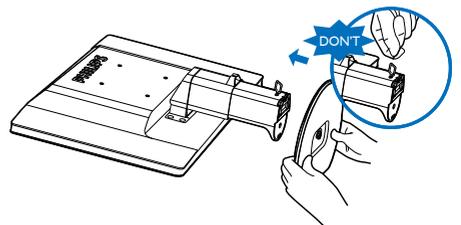


3. Attach the monitor base stand to the base column then fasten base stand.



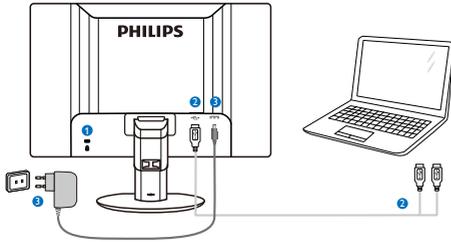
Caution

Do not release the height adjustment pin lock from the base column before the base stand is firmly fixed.



2. Setting up the monitor

3 Connecting to your computer



- 1 Kensington anti-theft lock
- 2 USB connection
- 3 AC-DC Adapter: TPV-15W-05
Input: 100-240VAC, 50-60Hz, 0.5-0.3A
Output: 5VDC/3A.

Note

- Please note that the DisplayLink software has to be installed in your laptop before you start to use the monitor.
- This display works with NB which has USB2.0 or higher connections to ensure stable power supply. If required, you may use the bundled external power cable.

Connect to laptop

1. Install Display link software in your laptop.
2. Connect the supplied USB "Y" cable between your laptop and monitor. The single connector side connects to the Monitor, and the "Y" dual side connector to the laptop.
3. The monitor will be recognized by the OS, and will automatically turn on after windows installs the driver.
4. The monitor is ready to be used as second monitor.

Note

- You may have to re-boot your laptop in order to recognize the monitor correctly.
- Note that the monitor cannot be connected as a primary monitor to a stand-alone PC.

Warning

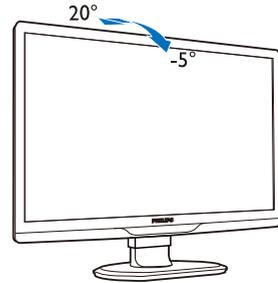
Never remove covers unless qualified to do so. This unit contains dangerous voltages. Use only DC Adapter listed in the user instruction.

4 Resolution notification

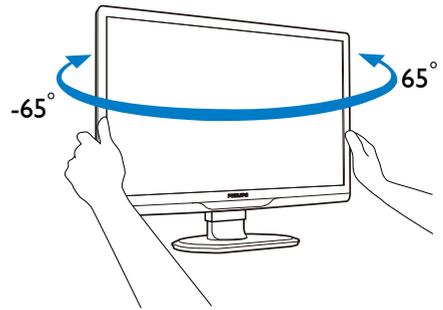
This monitor is designed for optimal performance at its native resolution, 1920 × 1080 @ 60 Hz.

5 Physical Function

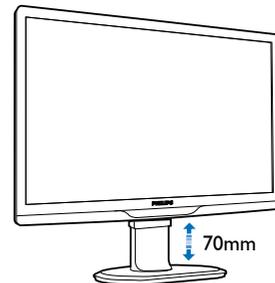
Tilt



Swivel



Height adjustment



Note

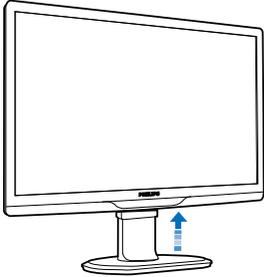
- Remove the height adjustment pin lock before adjusting the height.
- Insert the height adjustment pin lock before lifting the monitor.

2.2 Remove Base Stand and Base

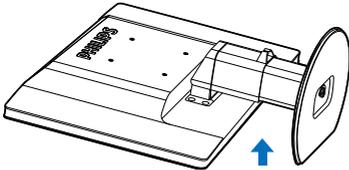
1 Remove the Base Stand

Before you start disassembling the monitor base, please follow the instructions below to avoid any possible damage or injury.

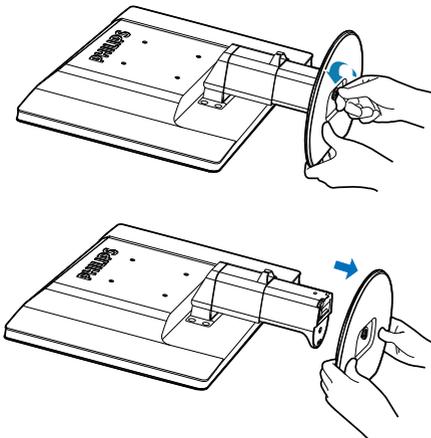
1. Extend the monitor base to its maximum height.



2. Place the monitor face down on a soft and smooth surface to avoid scratching or damaging the screen.



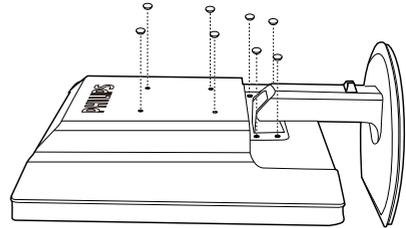
3. Release the lock of base stand then pull the base stand away from the base column.



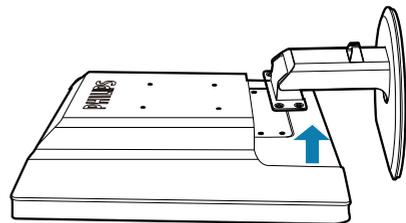
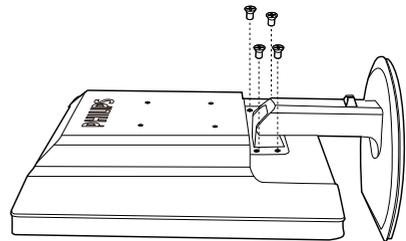
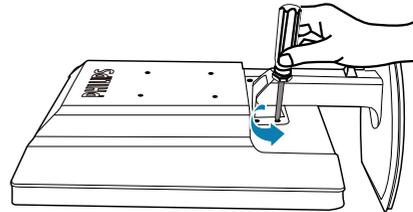
2 Remove the base

Condition: For VESA standard mounting applications.

1. Remove the 8 screw covers.



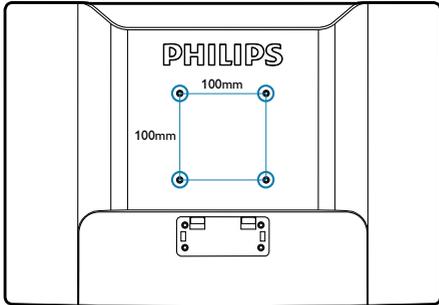
2. Remove the 4 screws and then remove the base from the monitor.



2. Setting up the monitor

Note

This monitor accepts a 100mm x 100mm VESA-Compliant mounting interface.
(Screw type: M4x10)



3. Operating the monitor

3.1 Introduction

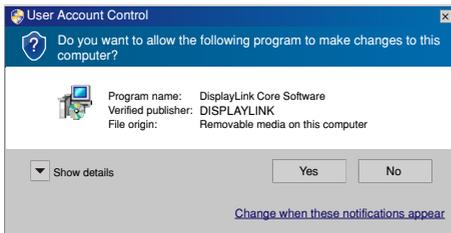
This monitor allows you to share the images between your laptop and the monitor by simply connecting USB cable to your laptop.

3.2 DisplayLink Graphics Software Installation

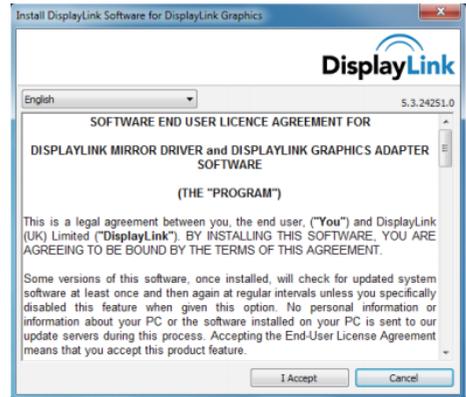
In order to use your USB monitor as a secondary display, DisplayLink Graphic software is required to be installed in your Windows system. Moreover, the software allows you to easily control your preference when viewing images. The driver is compatible with Microsoft Windows systems including Microsoft Windows 7, Vista and XP. Please note that this display will not work in DOS.

The installation procedure:

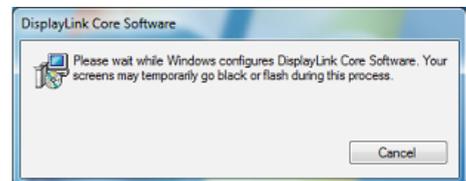
1. Double click **Setup.exe** file in CD disk enclosed, then the **User Account Control** window pops-out. (if enabled in the OS)



2. Click [**Yes**], then DisplayLink software end user license agreement window opens.



3. Click [**I Accept**], then software start to install.



Note

The screen may flash or go black during the installation. The installation box above will disappear but no message will be shown at the end of the installation.

4. After the software is installed completely, connect your USB monitor to your laptop with USB cable and then below "Found new device" will be shown on the taskbar.



5. When the device is found, then DisplayLink Graphics will automatically install.
6. After the installation has completed, your laptop will require to reboot the system in order to start to use the USB monitor.
7. You will be able to see pictures on the USB monitor after Windows completes bootup process.

3.3 How to control the display

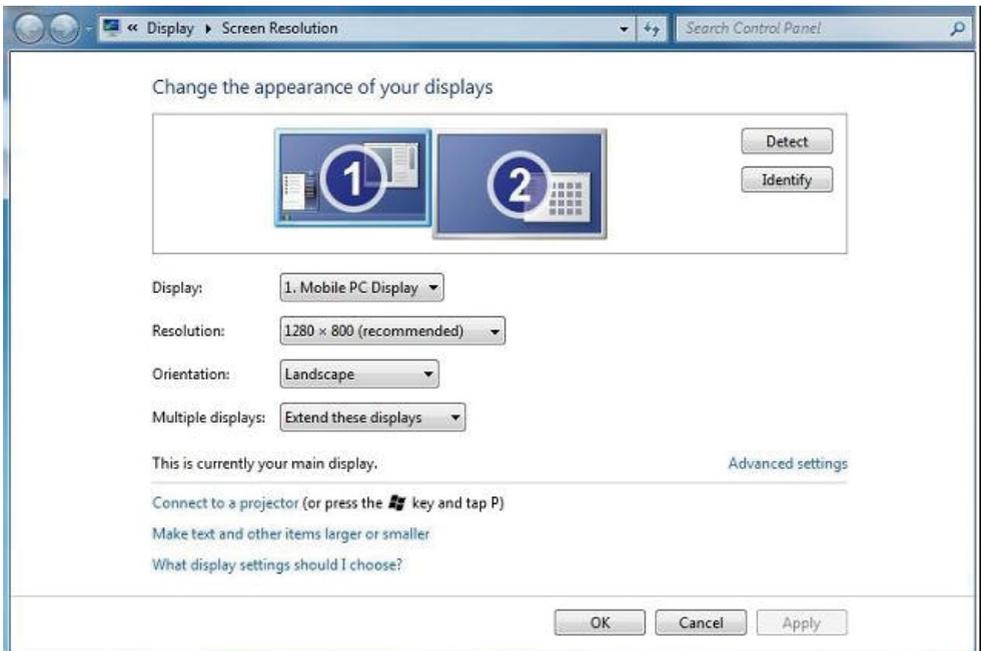
1 Windows 7 system

On Windows 7, you can configure a DisplayLink device through the use of **Windows Display Properties (WDP)**. WDP provides a simple method to attach, rotate, duplicate or extend screens as well as modify screen resolution.

To open WDP:

There are several ways to open WDP:

A	<ol style="list-style-type: none"> 1. Right-click on the desktop. 2. Select Screen Resolution from the menu. 3. WDP opens.
B	<ol style="list-style-type: none"> 1. From Start menu → Devices and Printers. 2. Double-click the DisplayLink device icon. 3. WDP opens.
C	<ol style="list-style-type: none"> 1. Right click on the DisplayLink icon . 2. Click Advanced Configuration. 3. WDP opens.



To set the display

Follow this procedure to set the display.

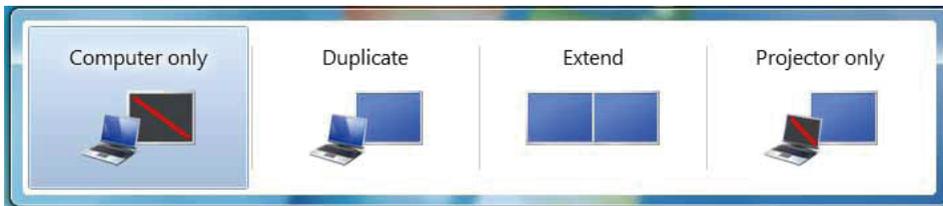
1. Open Screen Resolution.
2. Set the display options. Refer to the table below for details on each option.

Menu Option	Sub-menu Option	Description
Display		Use the drop down list to select a display to be configured.
Resolution		Use the drop down list and use the slider to choose a resolution.
Orientation (Use this function if you upgrade with Ergonomics base)	Landscape	Sets the display to landscape view
	Portrait	Sets the display to portrait mode
	Landscape (flipped)	Sets the display to upside down landscape mode
	Portrait (flipped)	Sets the display to upside down portrait mode
Multiple displays	Duplicates these displays	Reproduces the main display on the second display.
	Extend these displays	Extends the main display onto the secondary display.
	Shows Desktop only on 1	The desktop appears on the display marked 1. The display marked 2 becomes blank.
	Shows Desktop only on 2	The desktop appears on the display marked 2. The display marked 1 becomes blank.

To control the behaviour of an attached DisplayLink display, it is also possible to use Windows key+P to display the menu (and cycle through it) to switch mode.

To control the Display:

1. Select the Windows key+P. The following menu appears.



2. Click on one of the options. The display updates to reflect your choice.

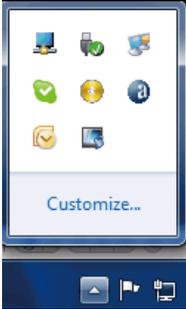
The DisplayLink icon application

You can configure the behaviour of the DisplayLink USB Graphics through the DisplayLink icon application on the taskbar, where present.

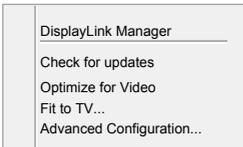
3. Operating the monitor

To show the DisplayLink Manager menu:

1. From the taskbar, click the show hidden icons arrow to show all available icons.



2. Click the DisplayLink icon , menu appears with several options as below



3. Refer to the table below for details on each option:

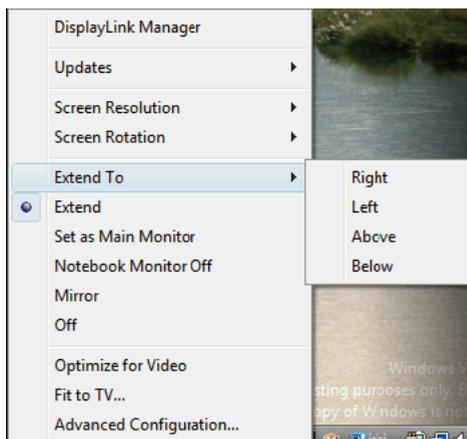
Menu	Description
DisplayLink Manager	Opens the Windows display setting window.
Check for updates	Connects to the Windows update and checks for newer versions and downloads them, if available.
Optimize for Video	Select this option for better movie playback performance on the DisplayLink enabled displays. Only select this option when playing back video content. Note: Text may appear less clear when enabled.
Fit to TV	If the Windows desktop does not completely appear on the monitor, this option can be used to adjust the size of the Windows desktop (The resolution of screen).
Advanced Configuration	Opens the Windows Display Properties (WDP).

2 Windows Vista and Windows XP system

When the monitor is attached to your laptop with Windows Vista and Windows XP system, a DisplayLink icon appears in the taskbar. This provides the access to the DisplayLink Manager menu.

To use the DisplayLink Manager menu

1. Click the DisplayLink icon  on the taskbar. The menu appears as shown below.



2. Refer to the table below for details on each option.

Menu Option	Sub-menu Option	Description
DisplayLink Manager		Opens the Windows display setting window.
Updates	Check Now	Connects to the update server to check for newer driver versions and downloads them, if available.
	Configure	Opens the update options window where you can configure automatic updates.
Screen Resolution		Displays a list of available resolutions (1920 x 1080). This option is not available in mirror mode, as the resolution is defined as the resolution of the main monitor.
Screen Rotation (Use this function if you upgrade with Ergonomics base)	Normal	No rotation is applied to the DisplayLink display.
	Rotated Left	Rotates the extended or mirrored display by 270 degrees.
	Rotated Right	Rotates the extended or mirrored display by 90 degrees.
	Upside-Down	Rotates the extended or mirrored display by 180 degrees.

Menu Option	Sub-menu Option	Description
Extend To	Right	Extends the display to the right of the main display.
	Left	Extends the display to the left of the main display.
	Above	Extends the display above of the main display.
	Below	Extends the display below the main display.
Extend		Extends your desktop onto the secondary display.
Set as Main Monitor		Sets the secondary display as the main display.

3. Operating the monitor

Notebook Monitor Off		Switches off the display of an attached notebook and makes the DisplayLink display primary.
Mirror		Copies what is on the main display and reproduces it on the secondary display
Off		Switches off the secondary display
Optimize for Video (Vista and Windows 7 Only)		Select this option for better movie playback performance on the DisplayLink enabled displays. Only select this option when playing back video content. Note: Text may appear less clear when enabled.
Fit to TV		If the Windows desktop does not completely appear on the monitor, this option can be used to adjust the size of the Windows desktop. See "Fit to TV" for details on how to configure this feature (The resolution of screen).

Note

Please visit DisplayLink website <http://www.displaylink.com/support/downloads.php> for more detailed DisplayLink software updated information.

4. Technical Specifications

Picture/Display	
Monitor Panel Type	TFT-LCD
Backlight	LED
Panel Size	21.5" (54.6 cm)
Aspect Ratio	16:9
Pixel Pitch	0.2842 × 0.2842 mm
Brightness	150 cd/m ²
Contrast Ratio (typ.)	1000:1
Response Time (typ.)	5 ms
Optimum Resolution	1920 × 1080 @ 60 Hz
Viewing Angle	160° (H) / 150° (V) @ C/R > 10
Display Colors	16.7M
Connectivity	
Video Signal Input	USB 2.0
Convenience	
Other Convenience	Kensington Lock
Stand	
Tilt	-5° / +20°
Swivel	-65° / +65°
Height Adjustment	70 mm
Power	
Power Input	100-240VAC, 50-60Hz, 0.5-0.3A
Monitor Input	5VDC, 3A
On Mode	10.3 W (typ.)
Standby Mode	0.3 W (typ.)
Off	0 W
Power Adapter	Model:TPV-15W-05 Input: 100 - 240 VAC, 50 - 60 Hz Output: 5 VDC, 3A
Dimension	
Product with stand (WxHxD)	507 × 400 × 220 mm
Product without stand (WxHxD)	507 × 323 × 59 mm
Weight	
Product with stand	4.55 kg
Product without stand	2.91 kg
Product with packaging	6.27 kg

4. Technical Specifications

Operating Condition	
Operation Condition	Temperature: +10°C to +40°C Humidity: 30% to 75% RH Atmospheric pressure: 700 to 1060 hPa
Non-operation Condition	Temperature: -40°C to +70°C Humidity: 10% to 90% RH Atmospheric pressure: 500 to 1060 hPa
MTBF	30,000 hrs
Environmental	
ROHS	YES
Packaging	100 % recyclable
Compliance and standards	
Regulatory Approvals	CE Mark, FCC Class B, GOST
AntiMicrobial	
AntiMicrobial material	Yes
Cabinet	
Color	White
Finish	Texture

Note

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

4.1 Resolution & Preset Modes

Recommended Resolution: 1920 x 1080 @ 60 Hz

Note

The monitor works with USB 2.0 480 Mbps.

5. Regulatory Information

Lead-free Product



Lead free display promotes environmentally sound recovery and disposal of waste from electrical and electronic equipment. Toxic substances 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.

CE Declaration of Conformity

This product is in conformity with the following standards

- EN60950-1:2006+A11:2009+A1:2010+A12:2011 (Safety requirement of Information Technology Equipment)
- EN55022:2010 (Radio Disturbance requirement of Information Technology Equipment)
- EN55024:2010 (Immunity requirement of Information Technology Equipment)
- EN61000-3-2:2006 +A1:2009+A2:2009 (Limits for Harmonic Current Emission)
- EN61000-3-3:2008 (Limitation of Voltage Fluctuation and Flicker) following provisions of directives applicable.
- EN60601-1-2:2002 (Medical electrical equipment. General requirements for safety Collateral standard, Electromagnetic compatibility Requirements and tests)
- 2006/95/EC (Low Voltage Directive)
- 2004/108/EC (EMC Directive)
- 2009/125/EC (ErP Directive, EC No. 1275/2008 Implementing Directive for Standby and Off mode power consumption)
- 93/42/EEC, 2007/47/EC (Medical Device Directive)
- 2011/65/EU (RoHS Directive)

and is produced by a manufacturing organization on ISO9000 level.

- ISO9241-307:2008 (Ergonomic requirement, Analysis and compliance test methods for electronic visual displays)
- GS EK1-2000:2011 (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)
- TUV IEC60601-1 (EN 60601-1:2006 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance)
- EN 60601-1-2:2007 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility - Requirements and tests

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.

5. Regulatory Information

- 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 Fédérale de la Communication (FCC Declaration)

- ⊖ Cet équipement a été testé et déclaré conforme aux limites des appareils numériques de class B, aux termes de l'article 15 Des règles de la FCC. Ces limites sont conçues de façon à fournir 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 essayer 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 specifically 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 štítku počítáno uvedeno, že spadá do třídy A podle EN 55022, spadá automaticky do třídy B podle EN 55022. Pro zařízení zařazená do třídy A (chranné pásmo 30m) podle EN 55022 platí následující. Dojde-li k rušení telekomunikačních nebo jiných zařízení je uživatel povinen provést takové opatření, aby rušení odstránil.

Polish Center for Testing and Certification Notice

The equipment should draw power from a socket with an attached protection circuit (a three-prong 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 powinno być zasilane z gniazda z przyłączonym obwodem ochronnym (gniazdo z kolkiem). Współpracujące ze sobą urządzenia (komputer, monitor, drukarka) powinny być zasilane z tego samego źródła.

Instalacja elektryczna pomieszczenia powinna zawierać w przewodzie fazowym rezerwową ochronę przed zwarciami, w postaci bezpiecznika o wartości znamionowej nie większej niż 16A (amperów).

W celu całkowitego wyłączenia urządzenia z sieci zasilania, należy wyjąć wtyczkę kabla zasilającego z gniazda, które powinno znajdować się w pobliżu urządzenia i być łatwo dostępne. Znak bezpieczeństwa "B" potwierdza zgodność urządzenia z wymaganiami bezpieczeństwa użytkowania zawartymi w PN-93/T-42107 i PN-89/E-06251.

Pozostałe instrukcje bezpieczeństwa

- Nie należy używać wtyczek adapterowych lub usuwać kolka obwodu ochronnego z wtyczki. Jeżeli konieczne jest użycie przedłużacza to należy użyć przedłużacza 3-żyłowego z prawidłowo połączonym przewodem ochronnym.
- System komputerowy należy zabezpieczyć przed nagłymi, chwilkowymi wzrostami lub spadkami napięcia, używając eliminatora przepięć, urządzenia dopasowującego lub bezakłócenieowego źródła zasilania.
- Należy upewnić się, aby nie leżało na kablach systemu komputerowego, oraz aby kable nie były umieszczone w miejscu, gdzie można byłoby na nie nadeptywać lub pochylić się o nie.
- Nie należy rozlewać napojów ani innych płynów na system komputerowy.
- Nie należy wpychać żadnych przedmiotów do otworów systemu komputerowego, gdyż może to spowodować pożar lub porażenie prądem, poprzez zwarcie elementów wewnętrznych.
- System komputerowy powinien znajdować się z dala od grzejników i źródeł ciepła. Ponadto, nie należy blokować otworów wentylacyjnych. Należy unikać kładzenia luznych papierów pod komputer oraz umieszczania komputera w ciasnym miejscu bez możliwości cyrkulacji powietrza wokół niego.

North Europe (Nordic Countries) Information

Placing/Ventilation

WARNING:

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

Placing/Ventilation

ADVARSEL:

SØRG VED PLACERINGSFOR, AT NETLEDNINGENS STIK OG STIKKONTAKT ER NEMT TILGÆNGLIGE.

Paikka/Ilmankierto

VAROITUS:

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

Placering/Ventilasjon

ADVARSEL:

NÅR DETTE UTSTYRET PLESSERES, 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 α 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.

EU Energy Label



The European Energy Label informs you on the energy efficiency class of this product. The greener the energy efficiency class of this product is the lower the energy it consumes.

On the label, you can find the energy efficiency class, the average power consumption of this product in use and the average energy consumption for 1 year.

ⓘ Note

The EU Energy Label will be **ONLY** applied on the models bundling with HDMI and TV tuners.

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 produced and sold for China market have to meet China RoHS request.

中国电子信息产品污染控制标识要求(中国RoHS法规标示要求)产品中有毒有害物质或元素的名称及含量

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	○	○	○	○	○	○
液晶显示屏/灯管	×	○	○	○	○	○
电路板组件*	×	○	○	○	○	○
电源适配线	×	○	○	○	○	○
电源线/连接线	×	○	○	○	○	○

*: 电路板组件包括印刷电路板及其构成的零部件, 如电阻、电容、集成电路、连接器等。

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在《电子信息产品中有毒有害物质的限量要求标准》规定的限量要求以下。

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出《电子信息产品中有毒有害物质的限量要求标准》规定的限量要求; 但是上表中打“×”的部件, 符合欧盟RoHS法规要求(属于豁免的部分)。



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: <http://www.energylabel.gov.cn/>

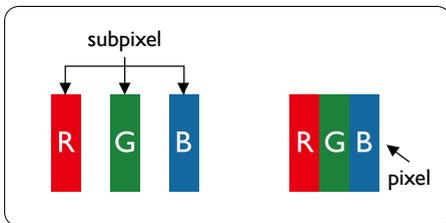
《废弃电器电子产品回收处理管理条例》提示性说明

为了更好地关爱及保护地球, 当用户不再需要此产品或产品寿命终止时, 请遵守国家废弃电器电子产品回收处理相关法律法规, 将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。

6. Customer care and warranty

6.1 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 Monitor 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 qualify for repair or replacement under warranty, the number of pixel defects on a TFT Monitor panel must exceed these acceptable levels. For example, no more than 0.0004% of the sub pixels on a 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

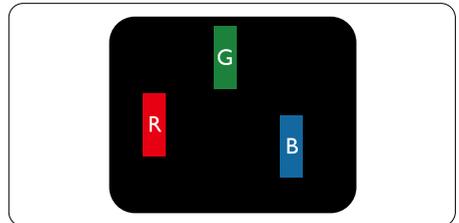
black pixel. Other combinations of lit and dark sub pixels appear as single pixels of other colors.

Types of Pixel Defects

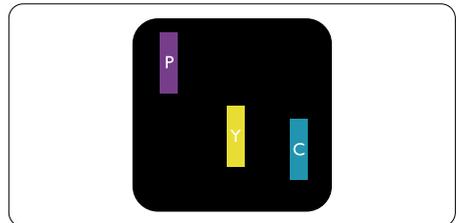
Pixel and sub pixel defects appear on the screen in different ways. There are two categories of pixel defects and several types of sub pixel defects within each category.

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.

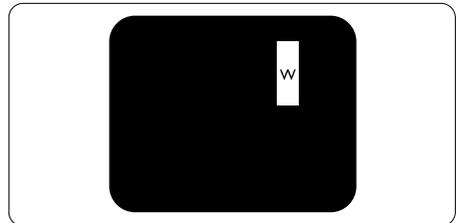


One lit red, green or blue sub pixel.



Two adjacent lit sub pixels:

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



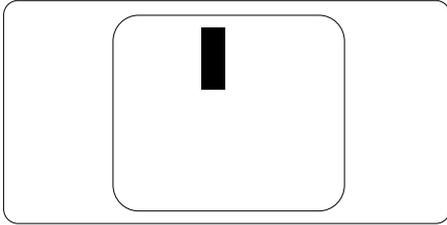
Three adjacent lit sub pixels (one white pixel).

Note

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.

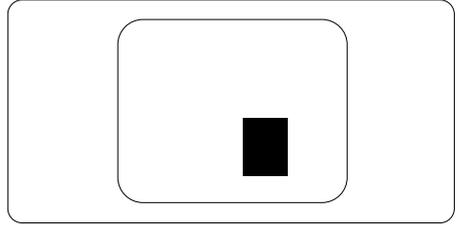
Black Dot Defects

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 Monitor 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
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
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
Total bright or black dot defects of all types	5 or fewer

Note

- 1 or 2 adjacent sub pixel defects = 1 dot defect
- This monitor is ISO9241-307 compliant, Class-I compliant. (ISO9241-307: Ergonomic requirement, analysis and compliance test methods for electronic visual displays)
- ISO9241-307 is the successor of formerly known ISO13406 standard, which is withdrawn by the International Organisation for Standardisation (ISO) per: 2008-11-13.

6.2 Customer Care & Warranty

For warranty coverage information and additional support requirement valid for your region, please visit www.philips.com/support website for details. You may also contact your local Philips Customer Care Center number listed below.

Contact Information for WESTERN EUROPE region:

Country	ASC	Consumer care number	Price
Germany	Siemens I&S	+49 01803 386 853	€ 0.09
United Kingdom	Invec Scotland	+44 0207 949 0069	Local call tariff
Ireland	Invec Scotland	+353 01 601 1161	Local call tariff
Spain	Eatsa Spain	+34 902 888 785	€ 0.10
Finland	A-novo	+358 09 2290 1908	Local call tariff
France	A-novo	+33 082161 1658	€ 0.09
Greece	Allman Hellas	+30 00800 3122 1223	Free of charge
Italy	A-novo	+39 840 320 041	€ 0.08
Netherlands	E Care	+31 0900 0400 063	€ 0.10
Denmark	A-novo	+45 3525 8761	Local call tariff
Norway	A-novo	+47 2270 8250	Local call tariff
Sweden	A-novo	+46 08 632 0016	Local call tariff
Poland	Zolter	+48 0223491505	Local call tariff
Austria	Siemens I&S	+43 0810 000206	€ 0.07
Belgium	E Care	+32 078 250851	€ 0.06
Luxembourg	E Care	+352 26 84 30 00	Local call tariff
Portugal	Eatsa Spain	+351 2 1359 1440	Local call tariff
Switzerland	A-novo	+41 02 2310 2116	Local call tariff

6. Customer care and warranty

Contact Information for CENTRAL AND EASTERN EUROPE region:

Country	Call center	ASC	Consumer care number
Belarus	NA	IBA	+375 17 217 3386
Bulgaria	NA	LAN Service	+359 2 960 2360
Croatia	NA	Renoprom	+385 1 333 0974
Estonia	NA	FUJITSU	+372 6519900
Latvia	NA	"ServiceNet LV" Ltd.	+371 7460399
Lithuania	NA	UAB "Servicenet"	+370 7400088
Romania	NA	Blue Ridge Intl.	+40 21 2101969
Serbia & Montenegro	NA	Kim Tec d.o.o.	+381 11 20 70 684
Slovenia	NA	PC H.and	+386 1 530 08 24
Ukraine	NA	Comel	+380 562320045
	NA	Topaz-Service Company	+38 044 245 73 31
Russia	NA	CPS	+7 (495) 645 6746 (for repair)
	NA	CEEE Partners	+7 (495) 645 3010 (for sales)
Slovakia	NA	Datalan Service	+421 2 49207155
Turkey	NA	Techpro	+90 212 444 4 832
Czech Rep.	NA	Asupport	800 100 697
Hungary	NA	Serware	+36 1 2426331
	NA	Profi Service	+36 1 814 8080

Contact Information for LATIN AMERICA region:

Country	Call center	Consumer care number
Brazil	Vermont	0800-7254101
Argentina		0800 3330 856

Contact Information for China:

China

Consumer care number : 4008 800 008

Contact Information for NORTH AMERICA:

Country	Call center	ASC	Consumer care number
U.S.A.	EPI - e-center	Qwantech	(877) 835-1838
Canada	Supercom	Supercom	(800) 479-6696

6. Customer care and warranty

Contact Information for APMEA region:

Country	Call center	ASC	Consumer care number
Australia	NA	AGOS NETWORK PTY LTD	1300 360 386
New Zealand	NA	Visual Group Ltd.	0800 657447
Hong Kong / Macau	NA	Smart Pixels Technology Ltd.	Hong Kong:Tel: +852 2619 9639 Macau:Tel: (853)-0800-987
India	NA	REDINGTON INDIA LTD	Tel: 1 800 425 6396 SMS: PHILIPS to 56677
Indonesia	NA	PT. Gadingsari elektronika Prima	Tel: 62 21 75909053, 75909056, 7511530
South Korea	NA	PCS One Korea Ltd.	080-600-6600
Malaysia	NA	After Market Solutions (CE) Sdn Bhd	603 7953 3370
Pakistan	NA	Philips Consumer Service	(9221) 2737411-16
Singapore	NA	Philips Electronics Singapore Pte Ltd (Philips Consumer Care Center)	(65) 6882 3999
Taiwan	PCCW Teleservices Taiwan	FETEC.CO	0800-231-099
Thailand	NA	Axis Computer System Co., Ltd.	(662) 934-5498
South Africa	NA	Sylvara Technologies Pty Ltd	086 0000 888
United Arab Emirates	NA	AL SHAHD COMPUTER L.L.C	00971 4 2276525
Israel	NA	Eastronics LTD	1-800-567000
Vietnam	NA	FPT Service Informatic Company Ltd.	+84 8 38248007 Ho Chi Minh City +84 5113.562666 Danang City +84 5113.562666 Can tho Province
Philippines	NA	Glee Electronics, Inc.	(02) 633-4533 to 34, (02) 637-6559 to 60
Sri Lanka	NA	no distributor and/or service provider currently	
Bangladesh	NA	Distributor: Computer Source Ltd (warranty buy-out)	880-2-9141747, 9127592 880-2-8128848 / 52
Nepal	NA	Distributor: Syakar Co. Ltd (warranty buy-out)	977-1-4222395
Cambodia	NA	Distributor: Neat Technology Pte Ltd (Singapore) (warranty buy-out)	855-023-999992

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)

- Check the connectors. Make sure the USB cable is firmly connected to the monitor.
- Disconnect and reconnect the USB cable again.
- Check the condition of the USB cable. If the cable is frayed or damaged, replace the cable. If the connectors are soiled, wipe them with a clean cloth.

No Picture (The screen is blank, although the computer power is on)

- Make sure the USB cable is properly connected the computer.
- Make sure the computer is on and working. The computer may be in sleep or powersaving mode, or displaying a blank screen saver. Move the mouse to "wake up" the computer.

Picture blinking, unstable due to insufficient power supply

- 5V/3A AC to DC adapter is used. Please refer to page 11 (AC to DC adapter information).

The picture "bounces" or moves in a wave-like pattern

- Move electrical devices that may cause electrical interference away from the monitor.

Cannot play DVDs using the Third-Party DVD player program

- Use the Media Player included in your operating system.

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

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. "Burnin", "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" 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.
- Failure to activate a screen saver, or a periodic screen refresh application may result in 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.

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

7.2 General FAQs

Q1: 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..

Q2: 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.

Q3: Are Philips LCD monitors Plug-and-Play?

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

Q4: What is Image Sticking, or Image Burnin, 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 "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.

Warning

Failure to activate a screen saver, or a periodic screen refresh application may result in 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.

Q5: Why is my Display not showing sharp text, and is displaying jagged characters?

Ans.: Your LCD monitor works best at its native resolution of 1920 x 1080 @ 60 Hz. For best display, please use this resolution.

7.3 Monitor FAQs

Q1: My monitor is not recognized by my laptop OS.

Ans.:

- Ensure that you have installed the supplied driver/software bundled with your monitor.
- You can download the latest "DisplayLink" driver from <http://www.displaylink.com/support/downloads.php>
- You may have to re-boot your laptop in order to recognize the monitor correctly.

Q2: My monitor does not display picture, flickers, shuts off and on.

Ans.: The monitor requires minimum USB 2.0 port connection. It will not work with older USB 1.x standard.

Q3: My monitor does not start up with my stand alone desktop PC. I cannot see anything with Desktop PC.

Ans.: Please note that the monitor is not designed to work with DOS yet. It is meant to be used as a "secondary display", therefore it must be used with

a Laptop type of computer which has a permanent primary display attached to it. This is because the monitor will display images only after the Windows login screen appears, as by then the monitor is recognized by the system.

Q4: Can I use my PC on Linux/ Apple system (systems other than Windows).

Ans.: Not at the moment.

Q5: I cannot find any adjustments on the monitor.

Ans.: As the monitor works directly from USB ports, it does not require any adjustments at all. It is fully plug and play.

Q6: I cannot find power on off button on the monitor.

Ans.: You do not require any power button as there is no direct power connection for the monitor. Once you shut off your laptop, or remove the USB connectors, the monitor will turn off completely.

Q7: Do I need to use USB 2.0 or USB 3.0 ports?

Ans.: You can use both technologies from the PC side. The monitor has USB 2.0 input.



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