Brilliance
S221C7

PHILIPS

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1. For Your Safety

Before operating the SMART All-in-One, please read this manual thoroughly. This manual should be retained for future reference.

FCC Class B Radio Frequency Interference Statement
WARNING: (FOR FCC CERTIFIED MODELS)

NOTE:

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:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

NOTICE:

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.

WARNING:

To prevent fire or shock hazard, do not expose the SMART All-in-One to rain or moisture. Dangerously high voltages are present inside the SMART All-in-One. Do not open the cabinet. Refer servicing to qualified personnel only.

1.1 Precautions

- Do not use the SMART All-in-One near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the SMART All-in-One on an unstable cart, stand, or table. If the SMART All-in-One falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the SMART All-in-One.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the SMART All-in-One and to protect it from overheating, be sure these openings are not

blocked or covered. Do not place the SMART All-in-One on a bed, sofa, rug, or similar surface. Do not place the SMART All-in-One near or over a radiator or heat register. Do not place the SMART All-in-One in a bookcase or cabinet unless proper ventilation is provided.

• The SMART All-in-One should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.

• The SMART All-in-One is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.

• Unplug the unit during a lightening storm or when it will not be used for long period of time. This will protect the SMART All-in-One from damage due to power surges.

• Do not overload power strips and extension cords. Overloading can result in fire or electric shock.

• Never push any object into the slot on the SMART All-in-One cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the SMART All-in-One.

• Do not attempt to service the SMART All-in-One by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.

• To ensure satisfactory operation, use the SMART All-in-One only with UL listed computers which have appropriate configured receptacles marked between 100 - 240V AC, Min. 5A.

• The wall socket shall be installed near the equipment and shall be easily accessible.

• For use only with the attached power adapter (Output 20V DC) which have UL, CSA listed licensed (only for SMART All-In-One with power adapter).

   Model: ADPC2065

   Manufacturer: TPV ELECTRONICS (FUJIAN) CO., LTD.

1.2 Cleaning

• Clean the cabinet regularly with cloth. You can use soft-detergent to wipe out the stain, instead of strong-detergent which will cauterize the product cabinet.

• When cleaning, make sure no detergent is leaked into the product. The cleaning cloth should not be too rough as it will scratch the screen surface.

• Please disconnect the power cord before cleaning the product.

1.3 Special notes on SMART All-in-One

The following symptoms are normal with SMART All-in-One and do not indicate a problem.

⊜ Note

•	Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.

•	You may find slightly uneven brightness on the screen depending on the desktop pattern you use.

•	The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.

•	Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image when the same image has been displayed for a long time. The SMART All-in-One will slowly recover from this.

•	When the screen becomes black or flashing, or cannot illuminate any more, contact your dealer or service center to replace parts. Don't repair the screen by yourself!

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 2012/19/EU 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 SMART All-In-One 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 SMART All-In-One and packing from your sales representative.

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 important 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/a-w/about/sustainability.html

2. Setting up the SMART All-In-One

2.1 Installation

1 Package contents

![Package contents illustration showing monitor, Quick Start guide, CD, AC/DC Adapter, Audio cable, VGA, HDMI, and USB cables]

AC/DC Adapter   * Audio cable

* VGA   * HDMI   * USB

✎ Note

• Use only the AC/DC adapter provided by Philips.

• Do not install the SMART All-in-One in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.

• Save the original shipping carton and packing materials, as they will come in handy if you ever have to ship your SMART All-in-One.

• For maximum protection, repackage your SMART All-in-One as it was originally packed at the factory.

• To keep the SMART All-in-One looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the SMART All-in-One before cleaning it.

• Do not scratch the screen with hard things, it may cause permanent damage.

• Don't leak liquid into SMART All-in-One which will result in the damage of component.

2 Connection

![Connection diagram showing the rear ports of the SMART All-in-One]

 1 DC Power Input

 2 SDHC Card Slot

 3 VGA Input (D-Sub)

 4 HDMI Input

 5 LAN Port (RJ-45)

 6 USB Downstream (Type-A)

 7 USB Upstream (Type-B)

 8 Kensington Anti-theft Lock

 9 Earphone Output (3.5 mm Stereo)

 10 Audio Input (3.5 mm Stereo)

Insert your SD card

1. Disconnect the power cord.
2. Insert your SDHC card to the card slot.

Connect for VGA/HDMI input

1. Connect with VGA or HDMI cable from your PC or AV device to SMART All-in-One.
2. Connect power cord to SMART All-in-One firmly and press the power button on.
3. The SMART All-in-One turns on and enters the previous source input selected.
4. Press the input button ⊕ to select VGA or HDMI source.

Connect to either WiFi or Ethernet for SMART All-in-One input

1. Connect RJ-45 LAN cable to your LAN port for wired connection.
2. Connect power cord to SMART All-in-One firmly and press the power button on.
3. The SMART All-in-One turns on and enters the previous source input. selected
4. Press the input button ⊕ to select Android source.
5. Turn on the WiFi or Ethernet function in the Android system settings screen.
6. When use headphone with external microphone, the internal microphone will shutdown automatically. The external and internal microphone functionality is available under the android mode only.

3 Adjusting viewing angle

For optimal viewing, it is recommended to look at the full face of the SMART All-in-One, then adjust the SMART All-in-One's angle to your own preference.

The SMART All-in-One's tilted angle is adjustable from 12° to 54°.

⊜ Note

- Do not touch the LCD screen when you adjust the angle. It may cause damage or break the LCD screen.
- Careful attention is required not to catch your fingers or hands when you adjust the angle.
- It is recommended to stabilize with a fixed point in order to lock the stand if the tilted angle is equal to or over 12°.
- Do not adjust the tilt angle less than 12°. The SMART All-in-One may fall caused by instability.
- For displays with glossy bezels the user should consider the placement of the display as the bezel may cause disturbing reflections from surrounding light and bright surfaces.

2.2 Operating the SMART All-in-One

SMART All-in-One allows you to either use it as a stand-alone SMART All-in-One in Android system without any PC connection required, or as a normal PC SMART All-in-One when connecting with PC.

1 Front control

❶	○	Power indicator
❷	⏻	Press to turn SMART All-in-One's power ON or OFF.
❸	🔲/OK	Press to access the OSD menu. In the OSD menu, press to confirm the OSD adjustment.
❹	▲ ▼	In the OSD menu, adjust the OSD menu.
❺	🔊	Hotkey for internal speakers volume control.
❻	⊕	Press to select the input source: VGA, HDMI, or Android.
❼	◄	In the OSD menu, return to previous OSD layer.
❽	🖼	Hotkey for SmartImage selection.
❾	2.0 megapixel Webcam	
❿	Webcam activity light	

2 Description of the On Screen Display

What is On-Screen Display (OSD)?

On-Screen Display (OSD) is a feature in all Philips SMART All-in-Ones. It allows user to adjust screen performance or to select functions of the SMART All-in-One directly through an on-screen instruction window.

To enter OSD menu

1. Press the hotkey 🔲 on the front bezel.
2. Press ▲ ▼ buttons to select the menu options.
3. Press 🔲 button to confirm the OSD selection.
4. Press ◄ button to return to previous OSD layer.
5. Press ◄ button several times to exit the OSD menu.

A user-friendly OSD menu is shown below:

⬅ Input	**VGA**	•
	HDMI	•
📷 Picture	Android	•
		•
🔊 Audio		•
		•
🎚 Color		•
		•
💬 Language		•
▼		•

The OSD menu tree

Here is an overall view of the OSD structure for your reference to work your way around the different adjustments.

Main menu	Sub menu	
Input	VGA	
	HDMI	
	Android	
Picture	Picture Format	Wide Screen, 4:3
	Brightness	0~100
	Contrast	0~100
	Sharpness	0~100
	SmartKolor	On, Off
	SmartTxt	On, Off
	SmartResponse	Off, Fast, Faster, Fastest
	SmartContrast	On, Off
	Gamma	1.8, 2.0, 2.2, 2.4, 2.6
	Over Scan	On, Off
Audio	Volume	0~100
	Stand-Alone	On, Off
	Mute	On, Off
	Audio Source	Audio In, HDMI
Color	Color Temperature	5000K, 6500K, 7500K,
	sRGB	8200K,9300K,11500K
	User Define	Red: 0~100
		Green: 0~100
		Blue: 0~100
Language	English, Deutsch, Español, Ελληνική, Français, Italiano, Maryar, Nederlands, Português, Português do Brazil, Polski, Русский, Svenska, Suomi, Türkçe, Čeština, Українська, 简体中文, 繁體中文, 日本語, 한국어	
OSD Settings	Horizontal	0~100
	Vertical	0~100
	Transparency	Off, 1, 2, 3, 4
	OSD Time Out	5s, 10s, 20s, 30s, 60s
Setup	Auto	
	H.Position	0~100
	V.Position	0~100
	Phase	0~100
	Clock	0~100
	Resolution Notification	On, Off
	S.Power on sync	On, Off
	Reset	Yes, No
	Information	

3 Resolution notification

This SMART All-in-One is designed for optimal performance at its native resolution, 1920×1080@60Hz.

Display of the native resolution alert can be switched off from Setup in the OSD menu.

2.3 Detach the hinge for VESA

Before you start detaching the hinge, please follow the instructions below to avoid any possible damage or injury.

1. Place the SMART All-in-One face down on a smooth surface. Pay attention not to scratch or damage the screen.

2. Use your fingers to squeeze the hinge cover gently till the hook slip out of the slot.

3. Use a screwdriver to loosen 4 screws.

4. Remove the stand from the SMART All-in-One body.

⊜ Note

This SMART All-in-One accepts a 75mm x 75mm VESA-Compliant mounting interface.

2.4 SMART All-in-One Operation

Philips SMART All-in-One bundles with Android system which applies touch panel technology for users to use it as a stand-along PC. It does not require any PC connections and can be controlled with fingers – touching the panel for selection and confirmation.To enter the Android **Home** screen, press the hotkey ⊕ on the front bezel, and select Android as the input source.

2.4-1 Home screen

The **Home** screen is composed of five screen panels. By tapping and sliding on the screen, you can move left or right across the central **Home** screen, and look for more widgets, shortcuts, or other items located on each screen panel.

You can also add shortcuts, widgets or change the desktop wallpaper on each screen panel.

No.	Icon	Descriptions
1	◁	Back to previous page
2	⠿	Application Gallery
3	☐	Display recently used application
4	◻️	Snap for screen shot
5	○	Back to Android Home Screen
6	◁/◁	Volume

2.4-2 Customizing your Home Screen

Adding application icons, shortcuts, or widgets to the home screen as your preference. You can also change the wallpaper.

Add an item to the Home Screen:

1. Tap on the ⊞ icon in the ststem bar to enetr the APPS gallery screen.
2. Select [**APPS**] or [**WIDGETS**].
3. Tap and hold the item until it enlarged. Drag the item to the place you preferred on the Home Screen.

Move an item on the Home Screen:

1. tap and hold the item until it enlarged.
2. Drag the item to the place you preferred on the Home Screen.

Remove an item from the Home Screen:

1. Tap and hold the item until it enlarged. The Trash Can icon displayed.
2. Drag the item to the Trash Can icon to remove the item from the Home Screen.

Change the wallpaper:

1. Make a long tap (click and hold) on an empty space on the Home Screen.
2. A [**Choose wallpaper from**] configuration screen will appear.
3. Click one of the wallpaper sources among [**Gallery**], [**Live Wallpapers**], [**Select**], or [**Wallpapers**].
4. In the selected wallpaper source screen, select one and click [**Set wallpaper**] to change the wallpaper. Or right-click to exit the wallpaper source screen and go back to Home screen.
5. Some wallpapers allow changing the wallpaper color, such as [**Magic Smoke**]. If a [**Settings...**] prompt displays on screen, tap on it, a [**Tap to change**] prompt displays on the top of screen. Tap on the screen to configure and cycle through the different colors.
6. You can click the ◁ button to go back previous screen without renewing any changed settings.

⊜ Note

• All five Home Screen panels share the same background. You cannot set different wallpapers for each of them.

2.4-3 Broswer

1. Click on the 🔍 icon in the **Home** screen. The on-screen keyboard displayed.

2. Type a keyword or text in the URL box. As you type, the search results that fully or partially match the text being typed appear.

3. Scroll the listed search results and clcik the desired result.

4. The matching application or the browser with matching web links opens.

5. Click the desired link if you want to view a web page.

🖨 Note

·   The search engine may differ depending on countries.

2.4-4 APPS Gallery

1. Click on the ⊞ icon in the system bar to enter the APPS gallery screen.

2. Click on the application icon to open it.

3. Click on the ⭕ icon to return to the Home Screen, or click on the ◁ icon to return to the previous screen..

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2.4-5 Android system settings

Click the icon [icon] in the central Android **Home** screen.

Main Menu	Sub Menu	Item Description
"Wireless & networks"	Wi-Fi	Scan and Advanced
	Bluetooth	Bluetooth settings
	Data usage	
	More	Tethering &Portable Hotspot,Ethernet,VPN
Device	Display	"Set the wallpaper, sleep timer, and font size for the SMART All-in-One."
	Sound&notification	Set the volume level.
	Storage	Display the storage information.
	Apps	Manage the Apps installed.
	Users	add user
	ScreenshotSetting	Set up Screenshot
Personal	Location	Access to my location and LOCATION SOURCES.
	Security	Disable and set the safety security function.
	Accounts	add Accounts
	Language & input	Select and set the language option.
	Backup & reset	Recover to the factory default settings.

Sysytem	Date & time	Set up the system date and time.
	Accessibility	
	Printing	
	About device	Display the information for the SMART All-in-One.

⊜ Note

- The graphics are for illustration purpose only, they may differ depending on the countries. Please refer to the actual products.

3. Image Optimization

1 What is it?

SmartImage provides presets that optimize display for different types of content, dynamically adjusting brightness, contrast, color and sharpness in real time. Whether you're working with text applications, displaying images or watching a video, Philips SmartImage delivers great optimized SMART All-in-One performance.

2 Why do I need it?

You want a SMART All-in-One that delivers optimized display all your favorite types of content, SmartImage software dynamically adjust brightness, contrast, color and sharpness in real time to enhance your SMART All-in-One viewing experience.

3 How does it work?

SmartImage is an exclusive, leading edge Philips technology that analyzes the content displayed on your screen. Based on a scenario you select, SmartImage dynamically enhances the contrast, color saturation and sharpness of images to enhance the contents being displayed – all in real time with the press of a single button.

3.1 SmartImage

1. Press hotkey 🗗 to launch the **SmartImage** OSD.

2. Press ▼ or ▲ button to select one of the **SmartImage** settings.

3. The **SmartImage** OSD will remain on screen for 5 seconds, or you can also press ▤ button to confirm.

There are seven modes to select: Text, Office, Photo, Movie, Game, Economy and Off.

- **Text:** Helps improve reading of text based application like PDF ebooks. By using a special algorithm which increases the contrast and boundary sharpness of text content, the display is optimized for a stress-free reading by adjusting the brightness, contrast and color temperature of the SMART All-in-One.

- **Office:** Enhances text and dampens brightness to increase readability and reduce eye strain. This mode significantly enhances readability and productivity when you're

working with spreadsheets, PDF files, scanned articles or other general office applications.

- **Photo:** This profile combines color saturation, dynamic contrast and sharpness enhancement to display photos and other images with outstanding clarity in vibrant colors – all without artifacts and faded colors.

- **Movie:** Ramped up luminance, deepened color saturation, dynamic contrast and razor sharpness displays every details in darker areas of your videos without color washout in brighter areas maintaining a dynamic natural values for the ultimate video display.

- **Game:** Turn on over drive circuit for best response time, reduce jaggy edges for fast moving objects on screen, enhance contrast ratio for bright and dark scheme, this profile delivers the best gaming experience for gamers.

- **Economy:** Under this profile, brightness, contrast are adjusted and backlighting finetuned for just right display of everyday office applications and lower power consumption.

- **Off:** No optimization by SmartImage.

- LCD panel type: ADS 4 x USB Downstream (Type–A)

4. Technical Specifications

Picture/Display	
LCD Panel Type	TFT-LCD
Backlight Type	WLED system
Panel Size	21.5" / 54.6 cm
Aspect Ratio	16:9
Optimum Resolution	Android:1920x1080@60Hz
	PC:1920x1080@60Hz
Response Time (Typ.)	5 ms
SmartResponse	2 ms GtG
Brightness	250 cd/m²
Viewing Angle	170º (H) / 160º (V), @ C/R > 10
Picture Enhancement	SmartImage
Display Colors	16.7 M
Operation system	
Android	Android 5.1.1
Processor	Octa-core, Rockchip RK3368, 1.5GHz
Sound	
Built-in Audio	2.0W x 2
Video/Audio Playback	
Video Format	MPEG1,MPEG2,MPEG4,H.264
Audio Format	MP3,AAC, Ogg, WAV,Windows,Media
Photo Format	JPEG
Storage Media	
Bulit-in memory capacity	2GB DDR3, 16GB EMMC Flash
External memory expansion	Optional external SDHC card, or USB flash drive up to 64GB
Connectivity	
USB 2.0	4x USB Downstream (Type-A)
	1x USB Upstream (Type-B)
	1x Micro-USB (Mini-A)
Signal Input	VGA, HDMI, RJ-45
SD/MMC Card	SDHC Card Slot
Wireless connections	WiFi (Built-in), 802.11 a/b/g/n/ac , Bluetooth 4.1
Audio In/Out	PC Audio-in, Headphone Jack
Convenience	
Built-in Webcam	2.0 megapixel camera with microphone and LED indicator
User Convenience	⊞/◄ ⊕/▼ ◀/▲ ▤/OK ⏻
Preloaded Applications	Brower, Email, Gallery, Music, Camera, Setting, Calculator, Clock

OSD Languages	English, Deutsch, Español, Ελληνική, Français, Italiano, Maryar, Nederlands, Português, Português do Brazil, Polski, Русский, Svenska, Suomi, Türkçe, Čeština, Українська, 简体中文 , 繁體中文 , 日本語 , 한국어		
Other Convenience	Kensington lock, VESA mount (75 x 75 mm)		
Plug & Play Compatibility	DDC/CI, Mac OS X, sRGB, Windows 7/8/10		
LAN Speed	10/100Mbps		
Stand			
Tilt	12° – 54°		
Power			
Consumption	AC Input Voltage at 100VAC, 50Hz	AC Input Voltage at 115VAC, 60Hz	AC Input Voltage at 230VAC, 50Hz
Normal Operation (typ.)	21.8W	21.9W	22.0W
Android Sleep (Standby)	<5W (typ.)	<5W (typ.)	<5W (typ.)
Off	<0.3W (typ.)	<0.3W (typ.)	<0.3W (typ.)
Heat Dissipation*	AC Input Voltage at 100VAC , 50Hz	AC Input Voltage at 115VAC , 60Hz	AC Input Voltage at 230VAC , 50Hz
Normal Operation	74.4 BTU/hr	74.7 BTU/hr	75.1 BTU/hr
Android Sleep (Standby)	<17.06 BTU/hr	<17.06 BTU/hr	<17.06 BTU/hr
Off	<1.024 BTU/hr	<1.024 BTU/hr	<1.024 BTU/hr
On Mode(ECO mode)	14.6 W (typ.)		
Power LED indicator	Operation – White, Standby mode– White (blinking)		
Power Supply	Input: 100–240VAC, 50–60Hz Output: DC 20V		
Dimensions			
Product with Stand	524(W) x 373(H) x 73(D) mm		
Product without Stand	524(W) x 337(H) x 46(D) mm		
Product with Packaging	131(W) x 446(H) x 595(D) mm		
Weight			
Product with Stand	4.170KG		
Product without Stand	3.880KG		
Product with Packaging	6.161KG		
Operating conditions			
Temperature Range (operation)	0°C – 40°C		
Relative Humidity (operation)	20% – 80%		

Atmospheric pressure (operation)	700 to 1060hPa
Temperature range (Non-operation)	-20°C to 60°C
Relative humidity (Non-operation)	10% to 90%
Atmospheric pressure (Non-operation)	500 to 1060hPa
Sustainability	
Environmental and Energy	RoHS, China RoHS
Recyclable Packaging Material	100 %
Compliance and standards	
Regulatory Approvals	CEL, CCC
Cabinet	
Color	Black
Finish	Glossy

4.1 Resolution & Preset PC Modes

1 Maximum Resolution
1920x1080@60Hz (analog input)
1920x1080@60Hz (digital input)

2 Recommended Resolution
1920x1080@60Hz (digital input)

H. freq (kHz)	Resolution	V. freq (Hz)
31.47	720x400	70.09
31.47	640x480	59.94
35.00	640x480	66.67
37.86	640x480	72.81
37.50	640x480	75.00
37.88	800x600	60.32
46.88	800x600	75.00
48.36	1024x768	60.00
60.02	1024x768	75.03
63.89	1280x1024	60.02
79.98	1280x1024	75.03
55.94	1440x900	59.89
70.64	1440x900	74.98
65.29	1680x1050	59.95
67.50	1920x1080	60.00

⊜ **Note**

Please notice that your display works best at native resolution of 1920x1080@60Hz. For best display quality, please follow this resolution recommendation.

5. Customer care and warranty

5.1 Philips' Flat Panel SMART All-in-Ones 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 SMART All-in-One panels used in flat panel SMART All-in-Ones are sometimes unavoidable. No manufacturer can guarantee that all panels will be free from pixel defects, but Philips guarantees that any SMART All-in-One 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 SMART All-in-One panel must exceed these acceptable levels. For example, no more than 0.0004% of the sub pixels on a SMART All-in-One 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 SMART All-in-One 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 SMART All-in-One 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 SMART All-in-One panel in a Philips flat panel SMART All-in-One 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

5.2 Customer Care & Warranty

For warranty coverage information and additional support requirements valid for your region, please visit www.philips.com/support website for details or contact your local Philips Customer Care Center.

For extended warranty, if you would like to extend your general warranty period, an Out of Warranty service package is offered via our Certified Service Center.

If you wish to make use of this service, please be sure to purchase the service within 30 calendar days of your original purchase date. During the extended warranty period, the service includes pickup, repair and return service, however the user will be responsible for all costs accrued.

If the Certified Service Partner cannot perform the required repairs under the offered extended warranty package, we will find alternative solutions for you, if possible, up to the extended warranty period you have purchased.

Please contact our Philips Customer Service Representative or local contact center (by Consumer care number) for more details.

Philips Customer Care Center number listed below.

• Local Standard Warranty Period	• Extended Warranty Period	• Total Warranty Period
• Depend on different Regions	• + 1 Year	• Local Standard warranty period +1
	• + 2 Years	• Local Standard warranty period +2
	• + 3 Years	• Local Standard warranty period +3

**Proof of original purchase and extended warranty purchase required.

Contact Information for WESTERN EUROPE region:

Country	CSP	Hotline Number	Price	Opening Hours
Austria	RTS	+43 0810 000206	€ 0.07	Mon to Fri : 9am – 6pm
Belgium	Ecare	+32 078 250851	€ 0.06	Mon to Fri : 9am – 6pm
Cyprus	Alman	800 92 256	Free of charge	Mon to Fri : 9am – 6pm
Denmark	Infocare	+45 3525 8761	Local call tariff	Mon to Fri : 9am – 6pm
Finland	Infocare	+358 09 2290 1908	Local call tariff	Mon to Fri : 9am – 6pm
France	Mainteq	+33 082161 1658	€ 0.09	Mon to Fri : 9am – 6pm

Germany	RTS	+49 01803 386 853	€ 0.09	Mon to Fri : 9am – 6pm
Greece	Alman	+30 00800 3122 1223	Free of charge	Mon to Fri : 9am – 6pm
Ireland	Celestica	+353 01 601 1161	Local call tariff	Mon to Fri : 8am – 5pm
Italy	Anovo Italy	+39 840 320 041	€ 0.08	Mon to Fri : 9am – 6pm
Luxembourg	Ecare	+352 26 84 30 00	Local call tariff	Mon to Fri : 9am – 6pm
Netherlands	Ecare	+31 0900 0400 063	€ 0.10	Mon to Fri : 9am – 6pm
Norway	Infocare	+47 2270 8250	Local call tariff	Mon to Fri : 9am – 6pm
Poland	MSI	+48 0223491505	Local call tariff	Mon to Fri : 9am – 6pm
Portugal	Mainteq	800 780 902	Free of charge	Mon to Fri : 8am – 5pm
Spain	Mainteq	+34 902 888 785	€ 0.10	Mon to Fri : 9am – 6pm
Sweden	Infocare	+46 08 632 0016	Local call tariff	Mon to Fri : 9am – 6pm
Switzerland	ANOVO CH	+41 02 2310 2116	Local call tariff	Mon to Fri : 9am – 6pm
United Kingdom	Celestica	+44 0207 949 0069	Local call tariff	Mon to Fri : 8am – 5pm

Contact Information for China:

Country	Call center	Consumer care number
China	PCCW Limited	4008 800 008

Contact Information for NORTH AMERICA :

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

Contact Information for CENTRAL AND EASTERN EUROPE region:

Country	Call center	CSP	Consumer care number
Belarus	NA	IBA	+375 17 217 3386 +375 17 217 3389
Bulgaria	NA	LAN Service	+359 2 960 2360
Croatia	NA	MR Service Ltd	+385 (01) 640 1111
Czech Rep.	NA	Asupport	420 272 188 300
Estonia	NA	FUJITSU	+372 6519900(General) +372 6519972(workshop)
Georgia	NA	Esabi	+995 322 91 34 71
Hungary	NA	Profi Service	+36 1 814 8080(General) +36 1814 8565(For AOC&Philips only)
Kazakhstan	NA	Classic Service I.l.c.	+7 727 3097515
Latvia	NA	ServiceNet LV	+371 67460399 +371 27260399
Lithuania	NA	UAB Servicenet	+370 37 400160(general) +370 7400088 (for Philips)
Macedonia	NA	AMC	+389 2 3125097
Moldova	NA	Comel	+37322224035
Romania	NA	Skin	+40 21 2101969
Russia	NA	CPS	+7 (495) 645 6746
Serbia&Montenegro	NA	Kim Tec d.o.o.	+381 11 20 70 684
Slovakia	NA	Datalan Service	+421 2 49207155
Slovenia	NA	PC H.and	+386 1 530 08 24
the republic of Belarus	NA	ServiceBy	+ 375 17 284 0203
Turkey	NA	Tecpro	+90 212 444 4 832
Ukraine	NA	Topaz	+38044 525 64 95
Ukraine	NA	Comel	+380 5627444225

Contact Information for LATIN AMERICA region:

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

Contact Information for APMEA region:

Country	ASP	Consumer care number	Opening hours
Australia	AGOS NETWORK PTY LTD	1300 360 386	Mon.~ Fri. 9:00am–5:30pm
New Zealand	Visual Group Ltd.	0800 657447	Mon.~ Fri. 8:30am–5:30pm
Hong Kong Macau	Company: Smart Pixels Technology Ltd.	Hong Kong: Tel: +852 2619 9639 Macau:Tel: (853)–0800–987	Mon.~ Fri. 9:00am–6:00pm Sat. 9:00am–1:00pm
India	REDINGTON INDIA LTD	Tel: 1 800 425 6396 SMS: PHILIPS to 56677	Mon.~ Fri. 9:00am–5:30pm
Indonesia	PT. CORMIC SERVISINDO PERKASA	+62-21-4080-9086 (Customer Hotline) +62-8888-01-9086 (Customer Hotline)	Mon.~ Thu. 08:30–12:00; 13:00-17:30 Fri. 08:30-11:30; 13:00-17:30
Korea	Alphascan Displays, Inc	1661-5003	Mon.~ Fri. 9:00am–5:30pm Sat. 9:00am–1:00pm
Malaysia	R-Logic Sdn Bhd	+603 5102 3336	Mon.~ Fri. 8:15am–5:00pm Sat. 8:30am–12:30am
Pakistan	TVONICS Pakistan	+92-213-6030100	Sun.~ Thu. 10:00am-6:00pm
Singapore	Philips Electronics Singapore Pte Ltd (Philips Consumer Care Center)	(65) 6882 3966	Mon.~ Fri. 9:00am-6:00pm Sat. 9:00am–1:00pm
Taiwan	FETEC.CO	0800-231-099	Mon.~ Fri. 09:00 – 18:00
Thailand	Axis Computer System Co., Ltd.	(662) 934-5498	Mon.~ Fri. 8:30am~ 05:30pm
South Africa	Computer Repair Technologies	011 262 3586	Mon.~ Fri. 8:00am~ 05:00pm
Israel	Eastronics LTD	1-800-567000	Sun.~ Thu. 08:00–18:00

Vietnam	FPT Service Informatic Company Ltd. – Ho Chi Minh City Branch	+84 8 38248007 Ho Chi Minh City +84 5113.562666 Danang City +84 5113.562666 Can tho Province	Mon.~ Fri. 8:00– 12:00, 13:30– 17:30,Sat. 8:00– 12:00
Philippines	EA Global Supply Chain Solutions ,Inc.	(02) 655-7777; 6359456	Mon.~ Fri. 8:30am~ 5:30pm
Armenia Azerbaijan Georgia Kyrgyzstan Tajikistan	Firebird service centre	+97 14 8837911	Sun. to Thu. 09:00 – 18:00
Uzbekistan	Soniko Plus Private Enterprise Ltd	+99871 2784650	Mon. to Fri. 09:00 – 18:00
Turkmenistan	Technostar Service Centre	+(99312) 460733, 460957	Mon. to Fri. 09:00 – 18:00
Japan	フィリップスモニター・サポートセンター	0120-060-530	Mon. to Fri. 10:00 – 17:00

6. Troubleshooting & FAQs

6.1 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 SMART All-in-One.

• First, ensure that the power button on the front of the SMART All-in-One is in the OFF position, then press it to the ON position.

No Picture (Power LED is White)

• Make sure the computer is turned on.

• Make sure the signal cable is properly connected to your computer.

• Make sure the SMART All-in-One 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

> Attention
>
> Check cable connection

• Make sure the SMART All-in-One cable is properly connected to your computer. (Also refer to the Quick Start Guide).

• Check to see if the SMART All-in-One 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 SMART All-in-One 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

- 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", "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 SMART All-in-One unattended.
- Always activate a periodic screen refresh application if your SMART All-in-One 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 that 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 SMART All-in-One'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.

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

6.2 General FAQs

Q1: When I install my SMART All-in-One what should I do if the screen shows 'Cannot display this video mode'?

Ans.: Recommended resolution for this SMART All-in-One: 1920x1080@60Hz.

- Unplug all cables, then connect your PC to the SMART All-in-One 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 labelled 'desktop area', move the sidebar to 1920x1080 pixels.

- 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 1920x1080@60Hz.

- Shut down your computer, disconnect your old SMART All-in-One and reconnect your Philips SMART All-in-One.

- Turn on your SMART All-in-One and then turn on your PC.

Q2: What is the recommended refresh rate for SMART All-in-One?

Ans.: Recommended refresh rate in SMART All-in-Ones 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 SMART All-in-One. Follow the instructions in your user manual to install the drivers. Your computer may ask you for SMART All-in-One drivers (.inf and .icm files) or a driver disk when you first install your SMART All-in-One. Follow the instructions to insert the (companion CD-ROM) included in this package. SMART All-in-One drivers (.inf and .icm files) will be installed automatically.

Q4: How do I adjust the resolution?

Ans.: Your video card/graphic driver and SMART All-in-One together determine the available resolutions. You can select the desired resolution under Windows® Control Panel with the "Display properties".

Q5: What if I get lost when I am making SMART All-in-One 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 SMART All-in-One, 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 SMART All-in-One?

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; With settings in the 6500K range the panel appears "warm, with a red-white color tone", while a 9300K temperature yields "cool, blue-white toning".

    2. sRGB; this is a standard setting for ensuring correct exchange of colors between different device (e.g. digital cameras, SMART All-in-Ones, printers, scanners, etc)

    3. User Define; the user can choose his/her preference color setting by adjusting red, green blue color.

⊜ 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 I connect my SMART All-in-One to any PC, workstation or Mac?

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

Q10: Are Philips SMART All-in-Ones Plug-and- Play?

Ans.: Yes, the SMART All-in-Ones are Plug-and-Play compatible with Windows 7/8/10, Mac OSX, Linux

Q11: 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 SMART All-in-One unattended.
Always activate a periodic screen refresh application if your SMART All-in-One 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 that will not disappear and cannot be repaired. The damage mentioned above is not covered under your warranty.

Q12: Why is my Display not showing sharp text, and is displaying jagged characters?

Ans.: Your SMART All-in-One works best at its native resolution of 1920x1080@60Hz. For best display, please use this resolution.

Q13: What is the recommended refresh rate for SMART All-in-One?

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

6.3 SMART All-in-One FAQs

Q1: How can I download the Apps ?

Ans.: You can download APPS from dedicated Google Play store or Philips app store depends on the country you are. A preset Icon on the desktop is already configured to take you there with one click of the mouse.

Q2: How can I connect to Internet when it's on the SMART All-in-One mode?

Ans.: You can connect to Internet with built in Ethernet or WiFi.

Q3: Can I change my built in Android OS to Windows or Linux?

Ans.: No, you cannot replace the built in Android OS

Q4: How can I use it as a multi-OS display?

Ans.: This SMART All-in-One is powered by built-in Android system and therefore is a stand-alone product on its own without any additional requirement.
Additionally, it is also equipped with a standard VGA / HDMI connector. This enables it to also operate as a standard desktop SMART All-in-One, while connected your standard notebook or desktop computer. Your PC may have OS of your choice. You can now "switch" between its built-in Android system and external PC system as you wish.

Q5: Can I upgrade/ update the built in Android system?

Ans.: Yes, you can do that provided an official update is made available. Please contact the technical personnel to achieve system upgrade/update accuracy.

Q6: Can I rotate my display?

Ans.: No, you cannot rotate your display. Its default and only mode is landscape mode