LCD monitor with Ambiglow

Monitor

Momentum

27" (68.6 cm)

3840 x 2160 (4K UHD)

278M1R

Take console gaming to the next level

Step it up with a Momentum 4K UHD gaming monitor with Ambiglow. Low Input lag offers smooth gaming. HDR gives ultra-crisp and vibrant image quality to get you in the moment.

Features designed for gamers' needs
- Less eye fatigue with Flicker-Free technology
- SmartImage game mode optimised for gamers
- Tilt, swivel and height-adjust for an ideal viewing position
- 1 ms (MPRT) fast response for crisp images and smooth gameplay
- Effortlessly smooth gameplay with AMD FreeSync™ technology
- Low input lag reduces time delay between devices to monitor

Design to enhance the senses
- Ambiglow intensifies entertainment with a halo of light
- Enhanced audio with DTS Sound™

Expand your viewing experience
- UltraClear 4K UHD (3840 x 2160) resolution for precision
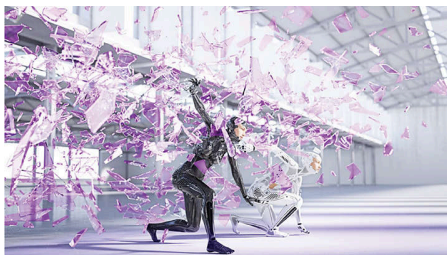- SmartImage HDR gives optimal viewing from your HDR content

Highlights

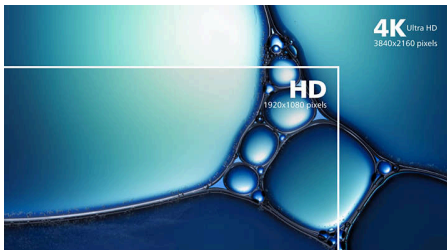## Ambiglow technology

OFF

ambiglow

Ambiglow adds a new dimension to your viewing experience. The innovative Ambiglow technology enhances the content on the screen by creating a halo of light from the monitor. Its fast processor analyses the incoming image content and continuously adapts the colour and brightness of the emitted light to match the image. Especially suited for watching movies, sports or playing games, Philips Ambiglow offers you a unique and immersive viewing experience.

DTS Sound™

DTS Sound is an audio-processing solution designed to optimise the playback of music, movies, streaming and games on the PC regardless of form factors. DTS Sound enables an immersive virtual surround sound experience, complete with rich bass and dialogue enhancement and maximised volume levels free of any clipping or distortion.

UltraClear 4K UHD Resolution

4K Ultra HD
3840x2160 pixels

HD
1920x1080 pixels

These Philips displays utilise high-performance panels to deliver UltraClear, 4K UHD (3840 x 2160) resolution images. Whether you are a

demanding professional requiring extremely detailed images for CAD solutions, a user of 3D graphics applications or a financial wizard working on huge spreadsheets, Philips displays will make your images and graphics come alive.

SmartImage HDR

SmartImage™ HDR

Select one of SmartImage HDR modes to best suit your needs. HDR Game: optimised for playing video games. With brighter white and darker black, the gaming scene is vivid and reveals more details, easily spot enemies hiding in the dark corners and shadows. HDR Movie: ideal for watching HDR movie. Delivers better contrast and brightness for a more realistic and immersive viewing experience. HDR Photo: enhanced red, green and blue for lively visuals. DisplayHDR: VESA DisplayHDR certified*. Personal: customised settings in picture menu. *Please refer to specification for HDR grade.

Ultra-smooth gaming

AMD FreeSync™ OFF
(simulation)

AMD FreeSync™ ON

Gaming shouldn't be a choice between choppy gameplay or broken frames. With the new Philips monitor it doesn't have to be. Get fluid, artefact-free performance at virtually any frame rate with AMD FreeSync™ technology, smooth, quick refresh and ultra-fast response time.

1 ms MPRT fast response

MPRT (motion picture response time) is a more intuitive way to describe response time, which directly refers to the duration between seeing blurry noise and clean, crisp images. The Philips gaming monitor with 1 ms MPRT effectively eliminates smearing and motion blur and delivers sharper and more precise visuals to enhance your gaming experience. The best choice for playing thrilling and twitch-sensitive games.

SmartImage Game mode

The new Philips gaming display has quick-access OSD fine-tuned for gamers, offering you multiple options. "FPS" mode (First person shooting) improves dark themes in games, allowing you to see hidden objects in dark areas. "Racing" mode adapts the display with the fastest response time and high colour, along with image adjustments. "RTS" mode (Real-time strategy) has a special SmartFrame mode that enables highlighting of specific area and allows for size and image adjustments. Gamer 1 and Gamer 2 enable you to save personal customised settings based on different games, ensuring best performance.
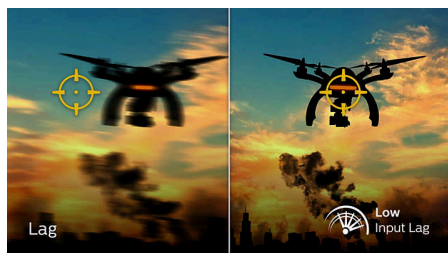

dts Sound | 4K Ultra HD | AMD FreeSync | 1ms Fast Response 1ms MPRT | SmartImage™ Game | Low Input Lag | Flicker-free | CompactErgo Base

Highlights

Low Input Lag

Input lag is the amount of time that elapses between performing an action with connected devices and seeing the result on screen. Low input lag reduces the time delay between entering a command from your devices to monitor, greatly improving play on twitch-sensitive video games, particularly important for playing fast-paced, competitive games.

Flicker-Free technology

Due to the way brightness is controlled on LED-backlit screens, some users experience flicker on their screen which causes eye fatigue. Philips Flicker-Free technology applies a new solution to regulate brightness and reduce flicker for more comfortable viewing.

Compact Ergo Base

The Compact Ergo Base is a people-friendly Philips monitor base that tilts, swivels and height-adjusts so each user can position the monitor for maximum viewing comfort and efficiency.

dts Sound®

4K Ultra HD

AMD FreeSync

1ms Fast Response 1ms MPRT

SmartImage™ Game

Low Input Lag

Specifications

Picture/Display

Panel Size: 27 inch/68.6 cm
Aspect ratio: 16:9
LCD panel type: IPS technology
Backlight type: W-LED system
Pixel pitch: 0.1554 x 0.1554 mm
Brightness: 350 cd/m²
Display colours: 1.07 Billion (8 bits + FRC)
Colour gamut (typical): NTSC 91%*, sRGB 105%*, Adobe RGB: 89%*
Contrast ratio (typical): 1000:1
SmartContrast: Mega Infinity DCR
Response time (typical): 4 ms (Grey to Grey)*
Viewing angle: 178º (H)/178º (V), @ C/R > 10
Picture enhancement: SmartImage game
Maximum resolution: 3840 x 2160 @ 60 Hz*
Effective viewing area: 596.736 (H) x 335.664 (V) mm
Scanning Frequency: 30–140 kHz (H) / 23–75 Hz (V)
sRGB
Delta E: < 2 (for sRGB)
Flicker-free
Pixel Density: 163 PPI
LowBlue Mode
Display Screen Coating: Anti-Glare, 3H, Haze 25%
SmartUniformity: 93 ~ 105%
MPRT: 1 ms*
Low Input Lag
AMD FreeSync™ technology
HDR: HDR ready
Ambiglow: 4 sided

Connectivity

Signal Input: HDMI 2.0 x 2, DisplayPort x 1
Sync Input: Separate Sync
Audio (In/Out): Headphone out
USB:: USB-B x 1 (upstream), USB 3.2 x 4 (downstream with 2 fast charge B.C 1.2)

Convenience

Built-in Speakers: 5 W x 2, DTS Sound
Plug and Play Compatibility: DDC/CI, Mac OS X, sRGB, Windows 10 / 8.1 / 8 / 7
User convenience: Power On/Off, Menu/OK, Input/Up, Game Settings/Down, SmartImage game/Back
OSD Languages: Brazil Portuguese, Czech, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Simplified Chinese, Swedish, Turkish, Traditional Chinese, Ukrainian
Other convenience: Kensington lock, VESA mount (100 x 100 mm)

Stand

Height adjustment: 130 mm
Swivel: -/+ 33 degree
Tilt: -5/20 degree

Power

Power supply: External, 100–240 VAC, 50–60 Hz
Off mode: < 0.3 W (typ.)
On mode: 35.1 W (typ.)
Standby mode: < 0.5 W (typ.)
Power LED indicator: Operation - White, Standby mode - White (flashing)
Energy Label Class: G

Dimensions

Packaging in mm (W x H x D): 730 x 475 x 224 mm
Product without stand (mm): 614 x 370 x 75 mm
Product with stand (max height): 614 x 567 x 251 mm

Weight

Product with packaging (kg): 9.22 kg
Product with stand (kg): 6.74 kg
Product without stand (kg): 4.53 kg

Operating conditions

Altitude: Operation: +12,000 ft (3658 m), Non-operation: +40,000 ft (12,192 m)
Temperature range (operation): 0°C to 40 °C
MTBF: 50 000 (Excluded backlight) hour(s)
Relative humidity: 20%-80 %
Temperature range (storage): -20°C to 60 °C

Sustainability

Environmental and energy: RoHS
Recyclable packaging material: 100 %
Specific Substances: Mercury free, PVC/BFR free housing

Compliance and standards

Regulatory Approvals: CB, CE Mark, TUV/ISO9241-307, TUV-BAUART, CU-EAC, UKRAINIAN, CCC, CEL, CECP

Cabinet

Colour: Black
Finish: Textured/Glossy

What's in the box?

Cables: DP cable, HDMI cable, USB upstream cable, Power cable
Monitor with stand
User Documentation

* "IPS" word mark / trademark and related patents on technologies belong to their respective owners.
* The maximum resolution works for either HDMI input or DP input.
* For best output performance, please always ensure that your graphic card is capable of achieving the maximum resolution and refresh rate of this Philips display.
* Response time value equal to SmartResponse
* MPRT adjusts the brightness for blur reduction, so the brightness cannot be adjusted while MPRT is turned on. To reduce motion blur, the LED backlight will strobe in time with the screen refresh rate, which may cause a noticeable change in brightness.
* MPRT is a gaming-optimised mode. Turning on MPRT may cause noticeable screen flickering. It is recommended to turn this mode off when you are not using the gaming function.
* NTSC Area based on CIE 1976
* sRGB Area based on CIE1931
* Adobe RGB Coverage based on CIE 1976
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* The monitor may look different from feature images.