



Philips Brilliance  
LCD widescreen monitor

48cm/19" wide  
WXGA+

190SW9FB

## Feature packed performance widescreen productivity

With SmartImage, SmartContrast and SmartControl to boost your work output plus TrueVision for the best-ever LCD display, the TCO'03 certified, Vista-ready Philips Brilliance widescreen 190SW9 is ready to get the job done.

### **Eco-friendly design**

- Green design conserves resources and reduces operating costs

### **Outstanding front of screen performance**

- SmartContrast: For incredible rich black details
- SmartImage: Optimized user-friendly display experience

### **Great convenience**

- Dual input accepts both analog VGA and digital DVI signals
- Easy picture format control switching in wide and 4:3 format
- Screen tilts to your ideal, individualized viewing angle
- Hassle-free display performance tuning with SmartControl II

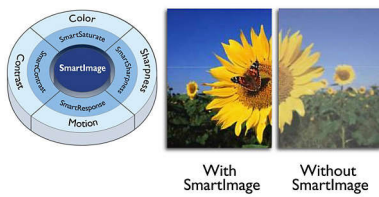
### **Best total cost of ownership solution**

- TrueVision: Laboratory quality display performance
- DVI-D input and HDCP support
- TCO'03 guarantees the highest safety and ergonomic standards
- Empowered for Windows Vista

# PHILIPS

# Highlights

## SmartImage



SmartImage is an exclusive leading edge Philips technology that analyzes the content displayed on your screen and gives you optimized display performance. This user friendly interface allows you to select various modes like Office, Image, Entertainment, Economy etc., to fit the application in use. Based on the selection, SmartImage dynamically optimizes the contrast, color saturation and sharpness of images and videos for ultimate display performance. The Economy mode option offers you major power savings. All in real time with the press of a single button!

## TrueVision



TrueVision is industry-leading, proprietary Philips testing and algorithm technology for monitor adjustment and fine tuning, an extensive process that ensures ultimate display performance in compliance with a standard four-times more stringent than Microsoft's Vista requirements from each and every monitor that leaves the factory - not just a few review samples. Only Philips goes to these lengths to deliver this exacting level of color accuracy and display quality in every new monitor.

## SmartContrast



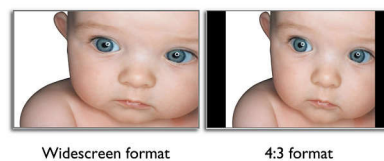
SmartContrast is a Philips technology that analyzes the contents you are displaying, automatically adjusting colors and controlling backlight intensity to dynamically enhance contrast for the best digital images and videos or when playing games where dark hues are displayed. When Economy mode is selected, contrast is adjusted and backlighting fine-tuned for just-right display of everyday office applications and lower power consumption.

## Dual input



Dual input provides connectors to accommodate input of both analog VGA and digital DVI signals.

## Easy picture format control



Philips easy picture format control on OSD is to switch from the 4:3 aspect ratio to the widescreen mode and back again to match the display's aspect ratio with your content for working with wide documents without scrolling or viewing widescreen media in the

widescreen mode and distortion-free, native mode display of 4:3 ratio content.

## Eco-friendly design

Eco-friendly design is based on environmentally conscious engineering of a display device to minimize power consumption, reduce packing materials and eliminate hazardous materials. Being at the forefront of sustainability and with our longstanding commitment to reduce the environmental impact of our products, we enable consumers to make simple, responsible choices about the products they buy and the impact they have before, during and at the end of their life cycle.

## HDCP ready

High-Bandwidth Digital Content Protection (HDCP) is a copyright protection system that is incorporated into the DVI connector. It helps stop unauthorized duplication of copyrighted content. HDCP allows you to play protected content media such as movies and concerts. It checks the signal to prevent piracy, allowing only legal copies of content to display.

## Adjustable tilt

Adjustable tilt is backward and forward movement of a screen on its base to achieve custom positioning for an ideal viewing angle and more comfort for people who spend long hours working on the computer.

## SmartControl II

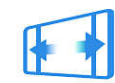
SmartControl II is monitor-based software with an easy-to-use on-screen graphic interface that guides you through fine-tuning resolution, color calibration and other display settings including brightness, contrast, clock & phase, position, RGB, white point and - on models with onboard speakers - volume adjustments.

## TCO '03 compliance

A TCO (Swedish Confederation of Professional Employees) standard even more stringent than MPR-II for safety and ergonomics, especially concerning alternating electric fields (AEF).



DualInput



# Specifications

## Connectivity

- Signal Input: VGA (Analog ), DVI-D
- Sync Input: Composite Sync, Separate Sync, Sync on Green

## Picture/Display

- Panel Size: 19 inch / 48.26 cm
- Aspect ratio: 16:10
- LCD panel type: TFT-LCD
- Pixel pitch: 0.2835 x 0.2835 mm
- Optimum resolution: 1440 x 900 @ 60 Hz
- Brightness: 300 cd/m<sup>2</sup>
- Display colors: 16.7 M
- Contrast ratio (typical): 1000:1
- SmartContrast ratio (dynamic): 10000:1
- Response time (typical): 5 ms
- Viewing angle: 176° (H) / 170° (V), @ C/R > 5
- Picture enhancement: SmartImage
- Horizontal Scanning Frequency: 30 - 83 kHz
- Vertical Scanning Frequency: 56 - 75 Hz
- sRGB

## Convenience

- Plug & Play Compatibility: DDC/CI, sRGB, Windows 98, Windows 2000, Windows XP, Windows Vista, Mac OS X
- User convenience: SmartControl II, SmartManage enabled, Picture format selection, On-screen Display
- Monitor Controls: Auto (Back), Brightness (Up), Input (Down), Menu (OK), Power On/Off, SmartImage
- Regulatory approvals: CE Mark, Energy Star, FCC Class B, SEMKO, TCO '03, TÜV/GS, TÜV Ergo, UL/cUL
- OSD Languages: English, French, German, Italian, Russian, Simplified Chinese, Spanish, Portuguese
- Other convenience: Kensington lock compatible

- Tilt: -5° to 20°
- VESA Mount: 100 x 100 mm

## Power

- Power supply: Built-in, 100-240VAC, 50/60Hz
- Consumption (On mode): < 36W (typical)
- Power LED indicator: Operation - Blue, Stand by/sleep -blue(blinking)
- Complies with: Energy Star
- Consumption (Off Mode): < 0.8 W
- Consumption (economy mode): 27 W

## Dimensions

- Box depth: 141 mm
- Set width (with stand): 436 mm
- Box height: 420 mm
- Set width (with stand) (inch): 17.2 inch
- Box width: 488 mm
- Set height (with stand): 373 mm
- Set height (with stand) (inch): 14.7 inch
- Set Width: 436 mm
- Set depth (with stand): 183 mm
- Set Height: 305 mm
- Set Depth: 68 mm
- Set depth (with stand) (inch): 7.2 inch
- Set Width (inch): 17.2 inch
- Temperature range (operation): 0°C to 40°C
- Set Height (inch): 12.0 inch
- Temperature range (storage): -20°C to 60°C
- Set Depth (inch): 2.68 inch
- Box depth (inch): 5.55 inch
- Box height (inch): 16.5 inch
- Box width (inch): 19.2 inch
- Product weight (+stand): 3.64 kg
- Product weight (+stand) (lb): 8.02 lb
- Weight incl. Packaging: 5.27 kg
- Weight incl. Packaging (lb): 11.6
- Relative humidity: 20% - 80%
- MTBF: 50,000 (excl. CCFL 40,000) hrs

