

# 19" TFT LCD SXGA monitor

# 190B<sub>4CS</sub>

- 19-inch color LCD monitor with excellent display performance
- Dual input - displays DVI-D digital and VGA analog inputs
- Embedded universal AC power supply
- Advanced AUTO adjustment optimizes picture quality
- Adjustable tilt and swivel functions
- Adjustable viewing height
- sRGB compliant



# PHILIPS

# 19" TFT LCD SXGA monitor



## Technical Specifications

### LCD panel

- Type TFT LCD
- Screen size 19 inch/ 48.26 cm
- Pixel pitch 0.294 x 0.294 mm
- LCD panel type 1280 x 1024 pixels  
R.G.B vertical stripe  
Anti-glare polarizer, hard coated
- Effective viewing area 376.32 x 301.06 mm
- Display colors 16M colors

### Scanning

- Vertical refresh rate 56~76 Hz
- Horizontal frequency 30~82 KHz

### Video

- Video dot rate (Max.) 135 MHz
- Input impedance
  - Video 75 Ohm
  - Sync 2K Ohm
- Input signal levels 0.7 Vpp
- Sync input signal Separate sync  
Composite sync  
Sync on green
- Sync polarities Positive and negative
- Video interface Analog (D-Sub) input

### Optical characteristics

- Contrast ratio 500 (typical)
- Brightness 250 cd/m<sup>2</sup> (typical)
- Peak contrast angle 6 o'clock
- White chromaticity
  - x: 0.283 y: 0.297 (at 9300°K)
  - x: 0.313 y: 0.329 (at 6500°K)
- Viewing angle (C/R >10)
  - Upper ≥ 85° (typical)
  - Lower ≥ 85° (typical)
  - Left ≥ 85° (typical)
  - Right ≥ 85° (typical)
- Response time ≤ 25ms (typical)  
(Tr ≤ 15ms, Tf ≤ 10ms)

### Resolution & preset modes

- Maximum 1280 x 1024 at 75 Hz
  - Recommended 1280 x 1024 at 60 Hz
  - User definable modes 15
  - Factory preset modes 15
- |             | H.freq (KHz) | V.freq (Hz) |
|-------------|--------------|-------------|
| 640 x 350   | 31.5         | 70          |
| 720 x 400   | 31.5         | 70          |
| 640 x 480   | 31.5         | 60          |
| 640 x 480   | 35.0         | 67          |
| 640 x 480   | 37.5         | 75          |
| 800 x 600   | 35.2         | 56          |
| 800 x 600   | 37.9         | 60          |
| 800 x 600   | 46.9         | 75          |
| 832 x 624   | 49.7         | 75          |
| 1024 x 768  | 48.4         | 60          |
| 1024 x 768  | 60.0         | 75          |
| 1152 x 870  | 69.0         | 75          |
| 1152 x 900  | 71.8         | 76          |
| 1280 x 1024 | 63.9         | 60          |
| 1280 x 1024 | 80.0         | 75          |
- (Interlace mode is not applicable)

### Plug and play compatibility

- Display data channel DDC-CI (VESA)
- Microsoft Windows® Me/2000 & XP compatible

### Power management

- Complies with EPA Energy Star and NUTEK specifications
- Typical operation 40 W (typical)
- Sleep mode 1 W

### Low-emission characteristics

- Complies with TCO '03, MPRII and prEN50279 (so called MPRIII) specifications

### Monitor controls and functions

- Front
  - Power on/off - Tact switch
  - OK - Tact switch
  - Auto - Tact switch
  - Up/Down - Tact switch
  - (Brightness)
  - Left/Right - Tact switch
- LED indicator
  - Blue Power on
  - Amber Power saving/off mode
  - Flashing blue New mode

### Connections and cables

- Connections on monitor body
  - Video 15-pin D-sub (analog) and DVI-D
  - Power IEC/CEE-22 type male power inlet on monitor body
- Cables D-Sub video cable, power cord

### Regulatory approvals

- TÜV/GS, TÜV-Ergo
- FCC-B, UL, CSA
- SEMKO
- prEN50279 Low Emission
- CE Mark
- NUTEK, Energy Star
- TCO '03

### Physical specifications

- Dim. incl. base (W x H x D) 425 x 377 x 235 mm (in lowest position)
- Dim. excl. base (W x H x D) 425 x 360 x 65 mm
- Tilt/swivel -5°-30°/ ±175°
- Height adjustment range 70 mm
- Weight 7 Kg (Net)
- Power supply 100 - 240 VAC, 50/60 Hz
- Power consumption 40 W\* (typical)
- Temperature (operating) +5°C to +35°C
- Temperature (storage) -20°C to +60°C
- Relative humidity 20% to 80%
- System MTBF 50K hrs (excluding CCFL 40K hrs)

\* Resolution 1280 x 1024, standard size, contrast maximum brightness 50%, 9300°K, full white pattern

We recommend using 1280 x 1024 at 60 Hz non-interlaced mode for the best picture quality

As an Energy Star partner, Philips has determined that this product meets the Energy Star guidelines for energy efficiency. Microsoft and Windows are registered trademarks of Microsoft Corporation

Macintosh is a registered trademark of Apple Computer, Inc.

All data subject to change without notice

Release date: November 2003

[www.philips.com](http://www.philips.com)

