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# UML-19P-90 19-inch Color LCD Display Monitor (VGA)



The Bosch UML-19P-90 is a 19-inch, high-resolution LCD monitor with analog (VGA) and digital (DVI) inputs for use with digital video recorders (DVR) and PC applications. The monitor is equipped with a color liquid crystal display (LCD) flat screen display panel with a horizontal and vertical viewing angle of 160°, providing comfortable, clear viewing whether placed on a desktop, wall mounted, or rack mounted. In addition, the monitor has two (2) internal speakers for tracking audio with the incoming video signal.

## Functions

### Excellent image quality

The Bosch UML-19P-90 LCD monitor automatically adapts to the input resolution of the incoming video signal (up to 1280 x 1024 pixels or 1.3 Megapixels). The monitor's analog VGA input easily accommodates the widespread use of PCs in today's security surveillance systems. The high contrast ratio (800:1) and high brightness rating (300 cd/m<sup>2</sup>) offers excellent color accuracy and imaging for easier viewing and interpretation of images. The panel refreshes every five milliseconds, so you get crisp, clear images with less smearing - and less image "ghosting" in fast-motion video.

- ▶ Supports up to 1280 x 1024 resolution-1.3 Megapixels
- ▶ Maximum brightness of 300 cd/m<sup>2</sup>
- ▶ Maximum contrast ratio of 800:1 for excellent color accuracy and consistency
- ▶ Minimum response time of five ms reduces smearing and ghosting
- ▶ 100/240 VAC, 50/60 Hz auto-ranging internal power supply
- ▶ Low power consumption (less than 40 W)
- ▶ VGA and DVI inputs for DVR or PC applications
- ▶ Optional rack and wall mounts

### Key benefits of LCD monitor

Long-life fluorescent backlights help avoid luminance degradation on the LCD monitor – so it easily maintains its brightness level over time. This is an advantage over aging CRT-type monitors that become progressively dimmer. The consistent brightness also provides a sharp display image, without the constant flickering that you typically see in CRT monitors. This allows you to use the LCD monitor longer without eyestrain or excessive fatigue.

### Additional advantages

The Bosch UML-19P-90 LCD monitor also features:

- Low power consumption
- Automatic adaptation to fluctuating electricity loads while protecting your circuitry
- Standard 100 mm (3.9 in.) mounting holes to easily accommodate a range of VESA wall mounts
- User-friendly, on-screen menus and bottom panel controls for adjusting monitor display parameters to your specific preferences

## Certifications and Approvals

Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003, and CE regulations
Product Safety	Complies with CE regulations, UL, CSA, EN, and IEC standards

## Technical Specifications

### Electrical

Rated Voltage	120/230 VAC, 50/60 Hz
Voltage Range	100-240 VAC
Power at Rated Voltage	40 W operation, 3 W standby
Sync Format	Separator Sync (H, V sync)
LCD Panel	TFT LCD
Screen Size (H x V)	376.0 x 301.0 mm (14.8 x 11.9 in.)
Viewable Picture Area	19 in. (482 mm) measured diagonally
Pixel Pitch: (H x V)	0.294 x 0.294 mm (0.01 x 0.01 in.)
Resolution	Up to 1280 x 1024 pixels
Aspect Ratio	5:4
Display Colors	8-bit interface; 16.7 million colors
Response Time	5 ms
Backlight	Four (4) cold cathode fluorescent tubes, rated life 50,000 hours

### LCD Panel Optical Characteristics

Luminance	300 cd/m <sup>2</sup> , anti-glare, hard-coating treatment
Contrast Ratio	800:1
Viewing Angle	160°/160°

### PC Input

Analog RGB	0.7 Vp-p (0.5–1 Vrms)
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### PC Timing Modes

640 x 480	60/72/75 Hz
800 x 600	60/72/75 Hz
1024 x 768	60/70/75 Hz
1280 x 1024	60/75 Hz

### Controls

#### Video Input

Bottom Panel	Push-buttons
Input	Selects: VGA, DVI
Menu	Selects on-screen display (OSD), up cursor, down cursor/auto adjust, input select, left cursor, right cursor, audio mute
Power	On/Off

#### On-screen Display

PC Mode	Auto adjust, Screen, Color, Utility, Language, OSD, Audio
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### Indicators

LED	Power On (green) Standby (red) Unsupported Mode (green) Power Off (red)
On-screen	VGA, DVI: Check input signal

### Connectors

Audio	PC: one (1) 1/8 in. mini phono plug
RGB, DVI	One (1) VGA cable included One (1) DVI-D cable included
Power Input	5.5 mm DC input jack
Power Adapter (included)	Input: 100–240 VAC, 50/60 Hz Output: 12 VDC, 4.16 A

### Mechanical

Cabinet Material	ABS plastic
Finish	Black
Mount	Wall mounting compatible with standard bracket, 100 mm (3.9 in.) centers, M4 thread

### Dimensions (W x H x D)

Monitor with Base	430 x 428 x 200 mm (16.9 x 16.9 x 7.9 in.)
Monitor Only	430 x 374 x 60 mm (16.9 x 14.7 x 2.4 in.)

### Weight

Monitor with Base	5.9 kg (13.1 lb)
Monitor Only	5.1 kg (11.2 lb)

### Environmental

Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	–20°C to 60°C (–4°F to 140°F)
Humidity	Maximum 90%, non-condensing

### Parts Included

One (1) Bosch General Purpose Color LCD Flat Panel Monitor  
 One (1) VGA to VGA cable  
 One (1) DVI-D to DVI-D cable  
 One (1) Audio cable PC-style  
 One (1) Power adapter  
 Two (2), 3-wire power cords with a grounded plug: one (1) with a European/Continental plug type and one (1) with a U.S. plug type

### Ordering Information

**UML-19P-90 19-inch LCD Flat Panel Monitor** **UML-19P-90**

19-inch (483 mm) color LCD monitor, 1280 X 1024 resolution, VGA, DVI, audio, 120/230 VAC, 50/60 HZ

#### Accessories

**UMM-LW-30B Swivel/Tilt Wall Mount** **UMM-LW-30B**  
Swivel/Tilt wall mount for flat panel LCD monitors, black

**UMM-LW-20B Fixed Wall Mount** **UMM-LW-20B**  
Fixed wall mount for flat panel LCD monitors, black

**UMM-LCDUB-RM Rack Mount Bracket for LCD Monitors** **UMM-LCDUB-RM**  
Supports dual 8.4-in. and single 8.4- to 19-in. LCD monitors in a standard VESA rack cabinet

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