BOSCH

Invented for life

Bosch Professional Large Full HD LCD Monitors

- ▸ **Support up to 1920 x 1080 Full HD resolution**
- ▸ **Picture-in-picture (PIP) or split screen function**
- ▸ **HDMI, DVI, VGA, S-Video inputs**
- ▸ **Two composite BNC inputs and loop-through outputs**
- ▸ **Trigger and Auto Switching features**
- ▸ **High contrast ratio 4,000:1 (UML-262-90) and 3,500:1 (UML-422-90)**
- ▸ **178 degree horizontal and vertical viewing angles**
- ▸ **Color enhancement engine and built-in speaker**
- ▸ **Anti-image retention mode and Super High Resolution of 600 TV Lines**

The Bosch Professional Large Full HD LCD monitors are 1080p Full HD resolution, color monitors ideal for use with analog video, digital video recorders (DVRs), and with PC applications. The monitors feature a color LCD flat-screen panel and are available with 26-inch or 42-inch viewable picture areas. Each monitor features a wide range of horizontal and vertical viewing angles that provide comfortable, clear viewing – whether you place it on a desktop or mount it to a wall or a ceiling.

Functions

Excellent image quality

The Bosch Professional Large Full HD LCD monitors automatically adapt to the input resolution of the incoming video signal, and support up to 1920 x 1080 resolution (Full HD). The monitors' analog VGA input easily accommodates the widespread use of PCs in today's security surveillance systems. Their high contrast ratio (4000:1 or 3500:1) and high brightness rating (450 or 700 cd/m^2) offer excellent color accuracy and imaging for easier viewing and interpretation of images. The panel refreshes every eight milliseconds, so you get crisp, clear images with less smearing - and less image "ghosting" in fast-motion video.

True color enhancement

The monitors provide true color performance. The monitors automatically focus on setting the correct color, temperature, and gamma curve settings to deliver the highest possible picture quality.

Super high resolution

The Bosch Professional Large Full HD LCD monitors offer 600 TV Lines of resolution to offer a sharp, clear picture.

Certifications and Approvals

Region	Safety Certification
Canada	cUL
Europe	EN60950, CE Declaration of Conformity, CB scheme
Japan	PSE
USA	UL60950
Electromagnetic Compatibility (EMC)	
Emission	EN55022 class B, FCC part 15 class B
Immunity	EN50130-4 (CE)
Environmental	
Vibration and Shock Level 5 Energy Star Certificate (UML-422-90 only)	

Parts Included

Quant.	Component
1	Bosch Full HD Color LCD Flat Panel Monitor
2	3-wire power cords with a grounded plug 1.8 m (6 ft): one (1) with a European/Continental plug type and one (1) with a U.S. plug type
1	Power adapter (UML-262-90)
1	1 DVI-D to DVI-D cable, 1.8 m (6 ft)
1	1 VGA to VGA (D-Sub), cable, 1.8 m (6 ft)
1	Trigger cable
1	Remote control
2	AAA batteries for remote control
1	Installation Manual (English or Japanese)
1	CD-ROM with multi-language Installation Manual

Technical Specifications

Electrical

	UML-262-90	UML-422-90
Rated Voltage	24 VDC, 5A (monitor) 120/230 VAC, 50/60 Hz (power adapter)	120/230 VAC, 50/60 Hz
Voltage Range	100–240 VAC, 50/60 Hz	
Frequency	Horizontal: 60–73 KHz Vertical: 47–63 Hz	
Power at Rated Voltage		
• On	70 W	210 W
• Active Off	1 W	1 W

Video

	UML-262-90	UML-422-90
Sync Format	PAL/NTSC	PAL/NTSC
LCD Panel	CCFL	CCFL
Viewable Picture Area	26.02 in.	42.02 in
Screen Size (H x V)	576 x 324 mm (22.68 x 12.76 in.)	930.24 x 523.26 mm (36.62 x 20.60 in.)
Pixel Pitch (H x V):	0.3 x 0.3 mm	0.485 x 0.485 mm
Resolution[1]	1920 x 1080	1920 x 1080
Aspect Ratio	16:9	16:9
Display Colors	16.7 million	1,073 million
Response Time	8 ms (typical)	8 ms (typical)
Backlight	50,000 hours (CCFL)	60,000 hours (CCFL)

1. Pixel Policy: Bosch monitors follow the ISO 13406-2 Class II standard.

LCD Panel Optical Characteristics

	UML-262-90	UML-422-90
Luminance	450 cd/m^2 (typical)	700 cd/m^2 (typical)
Contrast Ratio	4000:1 (typical)	3500:1 (typical)
Viewing Angle	Horizontal/Vertical: 178°, typical	Horizontal/Vertical:178°, typical

Video Input	All Models
Composite Video (CVBS)	1.0 Vp-p (0.5–1.5 Vp-p), automatic switching from 75 Ohm unbalanced termination to Hi-Z with passive loop-through operation
Y/C (S-video)	0.7 Vp-p (Y-signal), 0.3 Vp-p (C-signal), 75 Ohm termination
Audio Input	2.0 V line level, mono

RGB Timing Modes

	UML-262-90	UML-422-90
640 x 480	60/72/75 Hz	60/72/75 Hz
720 x 400	70 Hz	70 Hz
800 x 600	60/75 Hz	60/75 Hz
1024 x 768	60/75 Hz	6075 Hz
1280 x 1024	60 Hz	60 Hz
1280 x 960	60 Hz	60 Hz
1280 x 1024	60/75 Hz	60/75 Hz
1366 x 768	60 Hz	60 Hz
1440 x 900	60/75 Hz	60/75 Hz
1080p	60 Hz	60 Hz

DVI Timing Modes

640 x 480	60/72/75 Hz	60/72/75 Hz
720 x 400	70 Hz	70 Hz
800 x 600	60/75 Hz	60/75 Hz
1024 x 768	60/75 Hz	60/75 Hz
1280 x 768	60 Hz	60 Hz
1280 x 960	60 Hz	60 Hz
1280 x 1024	60/75 Hz	60/75 Hz
1366 x 768	60 Hz	60 Hz
1920 x 1080	60 Hz	60 Hz
480p	60 Hz	60 Hz
576p	50 Hz	50 Hz
720p	50/60 Hz	50/60 Hz
1080i	50/60 Hz	50/60 Hz
1080p	50/60 Hz	50/60 Hz

HDMI Timing Modes

640 x 480	60/72/75 Hz	60/72/75 Hz
720 x 400	70 Hz	70 Hz
800 x 600	60/75 Hz	60/75 Hz
1024 x 768	60/75 Hz	60/75 Hz
1280 x 768	60 Hz	60 Hz

1280 x 960	60 Hz	60 Hz
1280 x 1024	60/75 Hz	60/75 Hz
1366 x 768	60 Hz	60 Hz
1920 x 1080	60 Hz	60 Hz
PAL 576i	50 Hz	50 Hz
NTSC 480i	60 Hz	60 Hz
480p	60 Hz	60 Hz
576p	50 Hz	50 Hz
720p	50/60 Hz	50/60 Hz
1080i	50/60 Hz	50/60 Hz
1080p	50/60 Hz	50/60 Hz
Audio Input	2.0 V line level, mono	

Controls

Input	All Models
Control Panel	Push-buttons
Input	Selects: Video1, Video2, S-video, VGA, HDMI, DVI-D
Menu	Selects on-screen display (OSD), up cursor, down cursor/auto adjust, left cursor, right cursor
Power	On/Off
Control Panel Lockout	Multiple push-button combination

On-screen Display	All Models
Video Mode	Input Source, Screen, OSD, Utility

Indicators	All Models
LED	Power On (green) Power Off, Standby (red)
On-screen	VGA: Check input signal Video: Flashes "AV1" or "AV2" when there is a black screen

Connectors	All Models
Video 1 (AV1)	Composite video: two (2) BNC (1 in, 1 out)
Video 2 (AV2)	Composite video: two (2) BNC (1 in, 1 out)
Digital	Two (2) DVI-I
HDMI	One (1)
VGA	One (1) RGB 15-pin D-sub in
Y/C (S-video)	One (1) mini-DIN, 4-pin (1 in)
Audio	One (1) RCA IN (right/left),
Trigger Input	One (1) 1/8 in. mini phono plug
Power Input	
• UML-262-90	Mini-DIN 4P DC input jack
• UML-422-90	IEC C-14 connector
Power Adapter	Model: STD 24050 (included with UML-262-90)
• Input	100–240 VAC, 50/60 Hz
• Output	24 VDC, 5 A

Mechanical

	All Models
Cabinet Material	ABS plastic
Finish	Black
Mount	Wall mounting compatible with standard bracket

	UML-262-90	UML-422-90
VESA Mounting Compliance	100 x 100 mm, or 100 x 200 mm	400 x 200 mm
Dimensions (W x H x D)		
• Monitor	632 x 388.1 x 211.1 mm (24.9 x 15.3 x 8.3 in.)	932 x 536 x 119.7 mm (36.7 x 21.1 x 4.7 in.)
• With Packaging	722 x 544 x 302 mm (28.4 x 21.4 x 11.9 in.)	1115 x 707 x 275 mm (43.9 x 27.8 x 10.8 in.)
Weight		
• Monitor Weight	11.3 kg (24.91 lb)	24.8 kg (54.67 lb)
• Shipping Weight	14.0 kg (30.86 lb)	29.0 kg (63.93 lb)

Environmental

	All Models
Operating Temperature	0℃ to 40℃ (32℉ to 104℉)
Storage Temperature	−20℃ to 60℃ (−4℉ to 140℉)
Humidity	Maximum 90% relative, non-condensing

Ordering Information

UML-262-90 26-inch Full High-Definition LCD Monitor 26-in. 1080p LCD CCFL monitor with RGB, DVI, and HDMI inputs	**UML-262-90**
UML-422-90 42-inch Full High-Definition LCD Monitor 42-in. 1080p LCD CCFL monitor with RGB, DVI, and HDMI inputs	**UML-422-90**

Accessories

UMM-LW-20B Fixed Wall Mount Fixed wall mount for flat panel LCD monitors, black	**UMM-LW-20B**
UMM-LW-30B Swivel/Tilt Wall Mount Swivel/Tilt wall mount for flat panel LCD monitors, black	**UMM-LW-30B**
ST660 Universal Tilt Wall Mount Tilt wall mount for an LCD 32 in. to 60 in., black	**ST660**