

BVM-E170

16.5-inch Full-HD Reference OLED Monitor

Professional applications

For professional applications such as camera control, on-set shooting, high-end editing, broadcasting and scientific research, Sony's leading edge Organic Light Emitting Diode (OLED) technology and signals processing expertise ensures absolutely outstanding performance with the BVM-E170.

State-of-the-art product

Super Top Emission technology enhances OLED's intrinsic benefits to deliver outstanding black performance, a quick response with virtually no motion blur, and a wide colour gamut. An all-new 12-bit output digital signal processing engine provides a nonlinear cubic conversion colour-management system that delivers precise colour reproduction, stunning picture uniformity, smoother-than-ever gamma performance, and picture quality consistency.

Accepts computer signals via HDMI

The BVM-E170 accepts various computer signals input up to 1920 x 1080 through its HDMI connector. It is also equipped with Digital Cinema features.

PrimeSupport

This product also comes with PrimeSupport – fast, hassle-free repairs and a helpline offering expert technical advice which gives you the peace of mind that Sony is looking after your equipment, and your business.

Features

Superb Picture Performance

Sony TRIMASTER EL technology combines the ultimate performance of Sony OLED display with the highly sophisticated TRIMASTER technology to provide the highest level of picture performance:

- Accurate Black Reproduction
- High purity and accurate colour reproduction
- Quick response with virtually no motion blur
- High Contrast Performance

Super Top Emission™ technology

Sony's Super Top Emission™ technology has a micro-cavity structure which incorporates colour filters. The micro-cavity structure uses an optical resonance effect to enhance colour purity and improve light-emission efficiency. In addition, the colour filter of each RGB further enhances the colour purity of emitted light, and reduces ambient light reflection.

Ultimate Display Engine

High-precision signal processing engine has been developed to fulfil the reference monitor criteria and is optimized to maximize OLED panel performance. This engine incorporates 12-bit output accuracy at each process, and provides both a high quality I/P conversion algorithm and a highly accurate colour management system.

Multi-format signal support

The BVM-E170 monitor can accept almost any SD or HD video format, both analogue and digital, and variable computer signals up to 1920 x 1080. In addition to the standard inputs, four option board slots are offered to configure this monitor according to different user needs.

Versatile video inputs

This monitor is equipped as standard with two 3G/HD/SD-SDI inputs, an HDMI (with HDCP) input and a Displayport* for future expansion. In addition, four option ports are available.

* DisplayPort input will be supported from monitor software version 1.1 or later.

Four Slots for Optional Video Input Decoders

The monitor can accept up to four optional video input boards simultaneously. Available formats include analogue, composite, Y/C, components, RGB and digital 3G/HD/SD SDI.

3D signal analyzing functions (3D signal input, 2D display)

By installing the optional BKM-250TG 3G/HD-SDI input adaptor*, the BVM-E170 can support a variety of 3D signal analyzes. The 3D signals* are displayed in 2D mode.

- Difference display

- Checkerboard display
- L/R switch display
- Horopter check display
- Flip H display

* Requires the BKM-250TG 3G-SDI input adaptor (serial number 7200001 or later). 3D signals are not displayed in stereoscopic view.

Auto White Balance

The colour temperature and white balance of BVM-E and F Series monitors can be automatically adjusted by the Auto White Balance function using specified colour temperature probes, such as the Konica Minolta CA-210, CS-200, DK-Technologies PM5639/06, and X-Rite i1 (Eye-One) Pro.

High Quality I/P Conversion Technology

The BVM-E170 monitor uses a sophisticated I/P conversion technique that keeps artefacts that are often seen in flat panel displays to a minimum such as edge jaggedness, conversion errors, etc.

Low video delay

The BVM-E170 display engine ensures a picture delay that is less than one field.

Panel Calibration

Every BVM-E170 monitor is carefully calibrated at the factory on an individual basis, providing a high level of accuracy and stability for characteristics such as gamma and uniformity.

Colour Feedback System

Using a colour feedback system, the BVM-E170 monitor achieves the stability required for Broadcast critical monitoring applications.

Interlaced Display Mode

Faithfully reproduces interlaced signals, emulating CRT monitors.

Picture & Picture modes

The unique Picture & Picture function of the BVM-E Series allows simultaneous display of two input

signals on the monitor's screen. The BVM-E Series offers four Picture & Picture modes to provide users with enhanced operational flexibility:

Side by Side, Wipe, Butterfly and Blending
Pixel Zoom Mode

A selected area of the displayed picture can be enlarged on a pixel basis, up to eight times in size both vertically and horizontally.

Gamut Error Display

BVM-E170 master monitor incorporates a Gamut Error Display function that detects irregular signal input.

S-LOG Gamma

BVM-E170 master monitor incorporates gamma tables to reproduce images captured using S-LOG Gamma technology. S-LOG gamma is a technique used in Sony's digital cinematography cameras that allows the full latitude of the camera CCD to be maintained throughout the production chain.

2K Picture Resolution

The 2048 Image Slide function of the BVM-E170 allows 2K resolution (2048 x 1080 pixels) images to be mapped, pixel-to-pixel, on the full-HD (1920 x 1080 pixels) panel without picture degradation.

HD Frame Capture Mode

The HD Frame Capture function of the BVM-F Series allows a picture frame from the 3G-SDI and HD-SDI input to be captured and saved as a picture file on a Memory Stick™ media.

Separate Control unit with memory stick slot

A separate control unit BKM-16R is available for the BVM-E170. It is equipped with a Memory Stick socket enables users to download and save all monitor setups such as input channel configuration, control preset adjustments, white balance settings and maintenance parameters.

Centralised Monitor-Wall Control

Multiple monitors can be easily managed by a single control unit BKM-16R via an Ethernet connection.

Technical Specifications

Picture Performance	
Panel	OLED panel
Picture size (diagonal)	420.0 mm (16 5/8 inches)
Effective picture size (H x V)	365.8 x 205.7 mm (14 1/2 x 8 1/8 inches)
Resolution (H x V)	1920 x 1080 pixels (Full HD)
Aspect	16:9
Pixel efficiency	99.99%
Panel drive	RGB 10-bit

Panel frame rate	48 Hz / 50 Hz / 60 Hz / 72 Hz / 75 Hz (48 Hz, 60 Hz, and 72 Hz are also compatible with 1/1.001 frame rates)
Viewing angle (panel specification)	89°/89°/89°/89° (typical) (up/down/left/right contrast >10:1)
Standard luminance	100 cd/m2 (preset1 to preset5) 48 cd/m2 (preset (D-Cine)) (1.0 Vp-p reference signal, 100% white signal input)

Input	
SDI	BNC (x2)
HDMI	HDMI (x1) (HDCP correspondence, deep colour correspondence)
DisplayPort	DisplayPort connector (x1) - DisplayPort will be supported from monitor software version 1.1 or later.
Option port	4 ports
Parallel remote	D-sub 9-pin (female) (x1)
Serial remote (LAN)	Ethernet (10BASE-T/100BASE-TX), RJ-45 (x1)

Output	
SDI	BNC (x1)
DC 5V out	Circle 4-pin (female) (x1)

General	
Power requirement	AC 100 V to 240 V, 1.4 A to 0.7 A, 50/60 Hz DC 24 V to 28 V, 4.7 A to 4.0 A

Power consumption	Approx. 65 W normally with input from a standard HDMI input. Approx. 115 W at maximum load, with four option slots in use and maximum luminance compensation for any deterioration due to aging.
Dimensions (W x H x D)	436.0 x 282.4 (266.4)* x 214.7 mm (17 1/4 x 11 1/4 (10 1/2)* x 8 1/2 inches) * Height without legs
Mass	8.5 kg (18 lb 11 oz)

Supplied Accessories	
	AC power cord x1
	AC plug holder x1
	Bracket x1
	Rack mount bracket x2
	Operation Manual (Japanese, English) each x 1
	CD-ROM x1
	Using the CD-ROM Manual x1

Accessories

Control Units	
	BKM-16R Monitor Control Unit

Monitors	
	BKM-220D 4:2:2 Sdi Input Adaptor
	BKM-243HS HDSDI/4:2:2 SDI Input Adaptor

Option Boards and Cables	
	BKM-227W NTSC / PAL input adaptor for LMD monitors
	BKM-229X Analogue component input adaptor for LMD monitors
	BKM-244CC HD/SDI Closed Caption Adaptor
	BKM-250TG 3G/HD/SD-SDI Input Adaptor

Stands

BKM-39H

Controller Attachment Stand

Other



SMF-700

Monitor Interface Cable for BVM-L Series