SONY

BVM-E250A

24.5-inch TRIMASTER EL™ OLED
critical reference monitor with
wide viewing angle

Overview

TRIMASTER EL™ reference monitor with dramatically improved viewing angle for critical picture evaluation

For professional applications such as colour grading, high-end editing, broadcasting and scientific research, Sony's leading edge Organic Light-Emitting Diode (OLED) technology and signals processing technology ensures absolutely outstanding performance with the BVM-E250A. The colour shift depending on the viewing angle has reduced to less than half compared to a conventional OLED panel. It allows several people to evaluate the image with extreme accuracy at the same time, increasing the monitor's versatility in top end monitoring solutions.

State-of-the-art product

Super Top Emission technology enhances OLED's intrinsic benefits to deliver outstanding black performance, a quick response time with virtually no motion blur, and a wide colour gamut. A 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-E250A accepts various computer signals input up to 1920 x 1080 through its HDMI connector. It is also equipped with Digital Cinema features.

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 time with virtually no motion blur
Very high contrast ratio

Dramatically improved viewing angle
The colour shift depending on viewing angle has reduced to less than half (less than 50%) compared to a conventional OLED panel. Viewing angle is no longer an issue in practical usage, where three people in front of the monitor can evaluate at the same time across a 45 degrees angle.

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 Sony 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-E250A monitor can accept almost any SD or HD video format, both analogue and digital, and variable computer signals up to 1920 × 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 connector. In addition, four option ports are available to accept analogue or digital input adaptors.

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

By installing the optional BKM-250TG 3G/HD-SDI input adaptor*, the BVM-E250A can support a variety of 3D signal analyses. 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 "A" Series monitors can be automatically adjusted by the Auto White Balance function using specified colour temperature probes, such as
Konica Minolta: CA-210, CA-310, CS-200,
DK-Technologies: PM5639/06,
X-Rite: i1 (Eye-One) Pro and i1Pro2.
Photo Research: PR-655, PR-670
Klein: K-10
Jeti: Specbos 1211

High quality I/P conversion technology

The BVM-E250A 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-E250A display engine ensures a picture delay that is less than one field.

Panel calibration

Every BVM-E250A 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-E250A monitor achieves the stability required for broadcast critical monitoring applications.

Interlaced display mode

Faithfully reproduces interlaced signals, emulating CRT monitors.

Picture & Picture mode

The unique Picture & Picture function of the BVM-E250A allows

simultaneous display of two input signals on the monitor's screen. This function is extremely convenient for making instant adjustments to two input sources. Four modes are available 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-E250A master monitor incorporates a Gamut Error Display function that detects irregular signal input.

S-LOG gamma

BVM-E250A master monitor incorporates gamma tables to reproduce images captured using S-LOG. S-LOG gamma is a technique used in Sony's digital cinematography cameras that allows the full latitude of the camera sensor to be maintained throughout the production chain.

2K picture resolution

The 2048 Image Slide function of the BVM-E250A 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. The monitor is equipped with a slide function that allows the display of missing pixels in native mode from the left and right part of the picture.

Scan Switch

The Scan Switch function allows switching between under scan (-3%), normal scan (0%), and over scan (5%).

Native Scan (pixel-to-pixel display)

The Native Scan function is a unique display mode that reproduces images withoutchanging the input signal's pixel

count.

HD Frame Capture mode
The HD Frame Capture function of the BVM 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. This picture file can be used as a reference for various purposes, for example, for picture-tone adjustments between past images and for camera-framing adjustments.

Separate control unit with memory stick slot
A separate control unit BKM-16R is available for the BVM-E250A. It is equipped with a Memory Stick socket enables users to download and save all monitor set-ups such as input channel configuration, control preset adjustments, white balance settings and maintenance parameters.

Centralised monitor-wall control
The BVM Series monitors and the BKM-16R Monitor Control Unit are equipped with an Ethernet port, allowing remote control of display parameters across a standard Ethernet connection. One BKM-16R Monitor Control Unit can control up to thirty-two (32) BVM monitors.

Character Off button
To facilitate parameter adjustments, the On-Screen Menu indication can be taken off the screen, while in Menu mode. The On-Screen Menu indication can be toggled on or off with a simple press of a button on the BKM-16R's front panel.

Copy function for monitor setup and adjustment data
The optional BKM-16R control unit includes a Memory Stick slot to save and load monitor configuration and adjustment settings. This is useful for multiple monitor systems, allowing the transfer of one monitor's setup and adjustment data to another.This data can also be transferred via the BVM's Ethernet connection.

+12dB Chroma UP function

A Chroma UP button located on the front panel of the BKM-16Rallows the chroma level to be boosted by +12dB. This is a convenient feature for adjusting camera white balance with a higher degree of accuracy.

Marker settings

BVM Series monitors can display various markers, including an aspect marker, safe area marker and centre marker. In addition to this flexible selection of marker types, detailed display settings of each marker are offered. For example, the colour, brightness, horizontal/vertical position and width of aspect markers can all be controlled, while the height and width of safe area markers can be adjusted.

Aspect switch

The aspect ratio can be switched between 4:3, 16:9, 2.39: 1 and 1.896:1 depending on the input signal.

Wide variety of functions

The user has a wide variety of over 40 functions to choose from. Each of these can be assigned to any of the 16 function buttons (F1 to F16) on the BKM-16R controller.Press ENTER to display the F1 to F8 (or F9 to F16) button assignment on screen.

Status display

Simply assign STATUS to one of the function buttons (F1 to F16) on the BKM-16R controller. The user can instantly grasp the whole monitor status and configurations without having to search through menus.

Specifications

Picture Performance	
Panel	OLED panel

Picture size (diagonal)	623.4 mm (24 5/8 inches)
Effective picture size (H x V)	543.4 x 305.6 mm (21 1/2 x 12 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 the 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, 1.6 A to 0.8 A, 50/60 Hz
Power consumption	Approx. 72 W normally with input from a standard HDMI input. Approx 145 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)	576.0 x 424.0* x 148.0 mm (22 3/4 x 16 3/4 x 5 7/8 inches) * Height without legs
Mass	13.0 kg (28 lb 11 oz)

Supplied Accessories

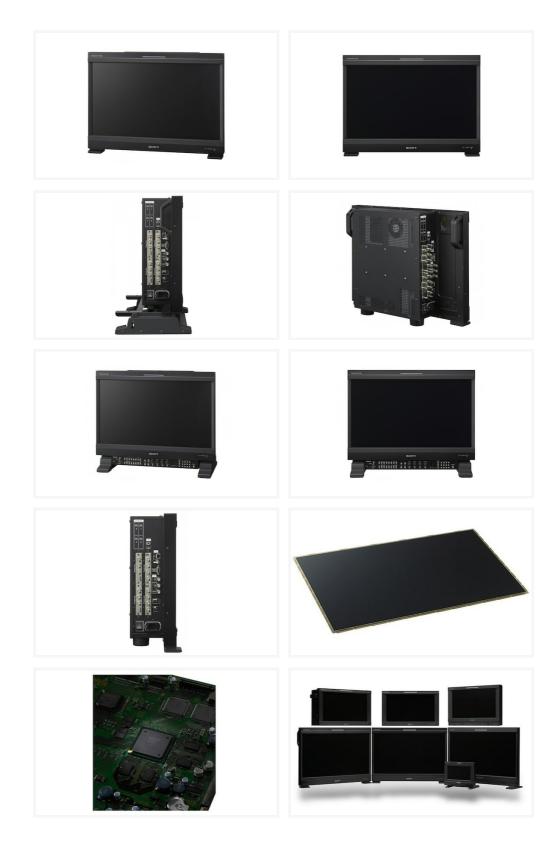| |
|---|
| AC power cord x1 |
| AC plug holder x1 |
| Bracket x1 |
| Operation Manual (Japanese, English), each x1 |
| CD-ROM x1 |
| Using the CD-ROM Manual x1 |

Related products

F65

Super 35mm 8K CMOS sensor SRMASTER camera

PMW-F55

Super 35mm 4K CMOS sensor compact CineAlta camera records HD/2K/4K on SxS memory plus 16-bit RAW 2K/4K output

Gallery