

PVM-1741A

16,5-inch TRIMASTER EL™ OLED professional picture monitor with wide viewing angle



Overview

TRIMASTER EL™ professional picture monitor with dramatically improved viewing angle

The PVM-1741A is an all-in-one OLED picture monitor, delivering unparalleled picture quality with the performance features and functions found in more expensive monitors, all contained in a compact, stylish design. PVM-1741A flexible mount options make the 16.5-inch monitor ideal for desktop editing, office viewing, studio monitor walls and OB vans. 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.

Superb picture performance

The Super Top Emission OLED display panel benefits from TRIMASTER EL™ technology. It offers superb black performance, wide colour gamut and quick response with virtually no motion blur. By combining the Sony OLED display panel (Full HD, 10-bit driver) and Sony's OLED processing technologies, the PVM-1741A OLED monitor delivers ground-breaking picture quality.

Accepts computer signals via HDMI

The PVM-1741A accepts various computer signals input up to 1920 x 1080 through its HDMI connector.

Features

Sony OLED panel with full HD and RGB 10-bit driver

The PVM-1741A Super Top Emission OLED display panel features full HD resolution (1920 x 1080) and RGB 10-bit driver to create life-like and smoother-than-ever gradation from dark to bright portions of a scene.

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.

TRIMASTER EL offers highest picture quality

TRIMASTER EL technology is a design architecture that enables the highest level of colour accuracy, precision imaging, and picture-quality consistency. Because the EL (Electro-Luminescence) layer inherently responds to any electrical current input, it emits light immediately. This allows excellent quick response characteristics in fast-motion images. This efficient, blur-free, fast response time is beneficial across a variety of applications and scenes, such as sports broadcasting, the monitoring of camera panning and text scrolling.

Superb Black Performance

Thanks to Sony OLED display technology, all details in the black can be easily seen.

Wide colour gamut

The PVM-1741A provides the colour gamut specifications of the main broadcast standards: ITU-R BT.709, EBU and SMPTE-C.

High-purity deep colour reproduction

Sony's Super Top Emission™ technology uses micro-cavity and colour filters. The micro-cavity structure uses an optical resonance effect and the colour filters enhance the colour purity of each RGB colour. The technology also reduces ambient light reflection, so deep colour reproduction can be achieved without degradation, even in bright environments.

Uniformity of image across screen

The PVM-1741A monitor incorporates an OLED processor to bring out the full performance of the Sony OLED panels. This OLED processor offers superb uniformity across the whole screen. At the factory, the OLED panel uniformity is precisely measured and corrected using a sophisticated RGB LUT (Look-Up Table) adjustment system.

Selection of four I/P modes

The PVM-1741A monitor provides four I/P modes so that users can select the most suitable mode for their purpose:

Inter-field:

This mode interpolates images between fields. This is used for optimum picture quality reproduction, for example, to reduce the jagged effect on moving pictures.

Intra-field:

This mode interpolates images within the field, and delivers naturally reproduced images and lower video delay. This mode is available for 1920 x 1080 SDI signal input.

Field merge:

This mode combines lines alternately in odd and even fields, regardless of picture movements. This is used for PsF (Progressive Segmented Frame) processing and still image monitoring.

Line Doubler:

This mode interpolates by repeating each line. This is used for editing and monitoring fast-moving images and checking line flicker. The minimum processing time is less than one field (0.5 frames).

Maximum flexibility with lightweight compact design

The PVM-1741A incorporates a lightweight, compact metal body. It supports VESA mounting of 100 mm pitch and an EIA 19-inch standard rack mount. Although the monitor has its own display stand, an optional stand SU-561 is available for height and tilt picture adjustment. These features make the monitor ideal for use in a variety of applications, such as desktop editing, office viewing, studio monitor walls, or installing in an OB van.

Easy-to-use control panel

A rotary-type switch and seven function-assignable buttons allow users speedy and intuitive operation. Operation buttons with LED indicators enable error-free operation, even in dark environments. The LED lights can be switched on and off, as required.

Waveform and Vector Scope monitoring

The combination of the vector scope and waveform monitor functions allows simple measurement without additional measurement equipment. The input signal's waveform with a 2-channel audio level meter can be displayed on screen. Scaling data are available for quick measurement. The waveform can display field or line status. A zoom function is available between 0 and 20 IRE so that black level can be adjusted more precisely. The Vector Scope has scaling data for 75% and 100%. Zoom function is also available for the low levels.

Input versatility

The PVM-1741A is equipped with built-in standard input interfaces: 2 x 3G/HD/SD-SDI; 1 x HDMI input; 1 x analogue composite.

Audio level monitoring

When an SDI interface is connected, the embedded audio channels up to 16 can be displayed on screen with an 8-channel audio level meter.

Time code display

A time code superimposed on SDI signals can be displayed on screen. Users can select either LTC or VITC.

Automatic adjustment of white balance

The colour temperature (white balance) of the PVM-1741A can be automatically adjusted by using a PC software based colour calibration function together with an external colour probe 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

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External remote control

The PVM-1741A has an external remote control capability for input/output signal selection and adjustment of various items via Ethernet (10BASE-T/100BASE-TX) connection. Up to 32 monitors and up to four control units can be connected via Ethernet connection and controlled remotely on the network. The PVM-1741A also supports some (though not all) of the functions of the BKM-16R – an optional remote control unit for BVM-E/BVM-L/PVM-L Series monitors – such as power on/off switch and Input Select function.

Specifications

Picture Performance

Panel	OLED panel
Picture size (diagonal)	419.7 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
Panel drive	RGB 10-bit
Viewing angle (panel specification)	89°/89°/89°/89° (typical) (up/down/left/right contrast > 10:1)

Input

Composite	BNC (x1), 1.0 Vp-p \pm 3 dB sync negative
SDI	BNC (x2)
HDMI	HDMI (x1)
Audio	Stereo mini jack (x1), -5 dBu 47 kilohms or higher
Parallel remote	Modular connector 8-pin (x1) (pin-assignable)

Serial remote (LAN)	RJ-45 modular connector (Ethernet) (x1) (10BASE-T/100BASE-TX)
DC IN connector	DC 12 V (output impedance 0.05 ohms or less)

Output

Composite	BNC (x1), loop-through, with 75 ohms automatic termination
SDI	BNC (x1), output signal amplitude: 800 mVp-p \pm 10%, output impedance: 75 ohms unbalanced
Audio monitor out	Stereo mini jack (x1)
Speaker (Built-in)	1.0 W (mono)
Headphones output	Stereo mini jack (x1)

General

Power requirement	AC 100 V to 240 V, 50/60 Hz, 1.0 A to 0.5 A, DC 12 V 7.0 A
Power consumption	Approx. 90 W (maximum), Approx. 70 W (average power consumption in the default status)

Operating temperature	0°C to 35°C (32°F to 95°F), Recommended: 20°C to 30°C (68°F to 86°F)
Operating humidity	30% to 85% (no condensation)
Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)
Storage and transport humidity	0% to 90%
Operating, storage, and transport pressure	700 hPa to 1060 hPa
Dimensions (W x H x D) (with stand)	436.0 x 305.6 x 161.0 (17 1/4 x 12 1/8 x 6 3/8 inches)
Dimensions (W x H x D) (without stand)	436.0 x 289.6 x 120.0 (17 1/4 x 11 1/2 x 4 3/4 inches)
Mass	7.2 kg (15 lb 14 oz) 9.3 kg (20 lb 8 oz) (with an optional SU-561 monitor stand)
Supplied accessories	AC power cord (1), AC plug holder (1), Mounting bracket (2) (including 4 screws), Operating Instructions (1), CD-ROM (1), Using the CD-ROM

manual (1), Warranty book (1)

Supplied Accessories

AC power cord

AC plug holder

Mounting bracket (including 4 screws)²

Operating Instructions

CD-ROM

Using the CD-ROM Manual

Warranty book

Gallery



