

PVM-2551MD

24.5-inch Full HD 2D OLED
medical monitor



Overview

A higher standard in medical imaging with Sony OLED

The PVM-2551MD features Sony's unique Super Top Emission OLED technology. The 24.5-inch Sony Medical monitor has full HD resolution (1,920 x 1,080 pixels) with 10-bit signal processing for more accurate colour management. The monitor incorporates revolutionary TRIMASTER EL technology that improves the performance of professional flat-screen displays. The PVM-2551MD thereby achieves an outstanding image performance, a wide colour scale and an extremely good black level.

The PVM-2551MD is designed for medical applications, offering high resolution, improved contrast (compared to LCD) and colour reproduction. The monitor is housed in a lightweight white casing.

Features

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

The PVM-2551MD Super Top Emission OLED display panel features Full HD resolution (1920 x 1080) and RGB 10-bit driver to create smoother gradation from dark to bright portions of a scene.

TRIMASTER EL offers enhanced picture quality

TRIMASTER EL technology is a design architecture that contributes colour accuracy, imaging precision and 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.

Superb black performance

Thanks to Sony OLED display technology, all details in the black can be easily seen. It provides improved colour reproduction and resolution of subtle detail, especially for dark images.

Uniformity of image across screen

The PVM-2551MD monitor incorporates a specially-developed OLED processor to bring out the full performance of the Sony OLED panels. This OLED processor offers superb uniformity across the whole screen.

For medical applications

The PVM-2551MD is UL 60601-1 listed and complies with CSA 22.2 No.60601 and EN 60601-1 safety regulations. It is therefore suitable for use in professional medical applications.

Variety of scan and display modes

There are various image scan modes – such as Normal/Over scan, Under scan, Full, Zoom and Native – allowing users to select the most suitable scan mode depending on the requirements. Furthermore, the PVM-2551MD provides a variety of display modes including Mirror Image, Side-by-Side, Picture-in-Picture, and Picture-out-Picture, which allow users to view images according to each particular application.

Variety of gamma curve settings

Users can choose from a variety of gamma settings – 1.8, 2.0, 2.2, 2.4, 2.6, and DICOM GSFD (Grayscale Standard Display Function) – depending on their requirements.

Noise filter

The PVM-2551MD employs a high-performance noise filter, which reduces effects on the monitor image that can be caused by other devices operating in the vicinity.

Rich user memory presets

The PVM-2551MD is equipped with 20 memory presets, which allow users to save and load settings such as colour and gamma. This feature means users can instantly select optimum settings for each different application.

Direct input selection

This feature allows users to switch image sources during a procedure simply by pressing input select buttons on the front panel.

Key-inhibit

Users can activate/deactivate control panel buttons with just one touch, helping to prevent inadvertent operation. When the menu item KEY-INHIBIT is set to ON, control panel buttons cannot be used – this prevents unauthorised alteration of settings.

Design features for hygiene

The PVM-2551MD is liquids resistant and designed to be easily wiped clean of liquids and gels, assisting with more effective hygiene. It also features rounded corners, which is beneficial in a busy and space-limited environment such as an operating room.

Installation-friendly cabling

All the connectors face downwards, allowing for easy and organised cable connection.

VESA-mounting Compatibility

The PVM-2551MD complies with the 100 x 100 mm hole spacing VESA-mounting standard for use in a variety of installations.

Variety of Inputs and easy expandability

The PVM-2551MD is equipped with a variety of inputs including Composite, Y/C, RGB/Component, HD15, and DVI-D as standard. Furthermore, two built-in option ports greatly expand the range of input signals this monitor can accept. These ports allow users to easily select and change input/output signals for ultimate flexibility via a variety of available option boards.

Compatible with a variety of input signal formats

The PVM-2551MD supports a variety of video formats from 525i/50 (NTSC) and 625i/60 (PAL) up to 1080p/50 and 1080p/60.* In addition, a variety of computer signal formats are supported in Preset 1, and other computer signal formats are additionally supported in Presets 2-8.

*To support 1080p/50 and 1080p/60 input other than input from DVI-D requires an optional BKM-250TG 3G/HD/SD-SDI input adaptor.

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

Viewing angle (panel specification)	89°/89°/89°/89° (typical) (up/down/left/right, contrast > 10:1)
-------------------------------------	--

Input

Composite input (NTSC/PAL) connector	BNC type (x1), 1 Vp-p \pm 3 dB sync negative
Y/C input connector	Mini-DIN 4-pin (x1) Y: 1 Vp-p \pm 3 dB sync negative, C: 0.286 Vp-p \pm 3 dB (NTSC burst signal level) 0.3 Vp-p \pm 3 dB (PAL burst signal level)
RGB/component input connectors	BNC type (x3), RGB: 0.7 Vp-p \pm 3 dB (Sync On Green, 0.3 Vp-p sync negative) Component: 0.7 Vp-p \pm 3 dB (75% chrominance standard color bar signal)
External synchronized input connector	BNC type (x1) 0.3 Vp-p to 4.0 Vp-p \pm bipolarity ternary or negative polarity binary
	D-sub 15-pin (x1) R/G/B: 0.7 Vp-p, sync positive (Sync On Green, 0.3 Vp-p sync negative)

HD15 input connector	Sync: TTL level (polarity free, H/V separate sync) Plug & Play function: corresponds to DDC2B
DVI-D input connector	DVI-D (x1), TMDS single link
Parallel remote	Modular connector 8-pin (x1)
Serial remote (LAN)	D-sub 9-pin (RS-232C) (x1) RJ-45 modular connector (x1) (Ethernet, 10BASE-T/100BASE-TX)
Optional input port	2 ports, Signal format: H: 15 kHz to 45 kHz, V: 48 Hz to 60 Hz
DC IN connector	XLR-type 4-pin (male) (x1), DC 5 V/24 V (output impedance 0.05 ohms or less)

Output

Composite output connector	BNC type (x1), Loop-through, with 75 ohms automatic terminal function
Y/C output connector	Mini-DIN 4-pin (x1), Loop-through, with 75 ohms automatic terminal function
	BNC type (x3), Loop-through, with

RGB/component output connectors	75 ohms automatic terminal function
---------------------------------	-------------------------------------

External synchronized output connector	BNC type (x1), Loop-through, with 75 ohms automatic terminal function
--	---

General

Power

OLED monitor (PVM-2551MD)	DC IN: 24 V/5.0 A, 5 V/0.030 A (Supplied from AC adaptor)
---------------------------	--

AC Adaptor (Sony, AC-110MD)	AC IN: 100 V to 240 V, 50/60 Hz, 1.53 A to 0.58 A DC OUT: 24 V/5.0 A, 5 V/0.060 A
-----------------------------	--

Power consumption	Approx. 135 W (max.) Approx. 80 W (average power consumption in the default status)
-------------------	--

Operating conditions

Temperature	0°C to 35°C (32°F to 95°F)
-------------	----------------------------

Recommended temperature	20°C to 30°C (68°F to 86°F)
-------------------------	-----------------------------

Humidity	30% to 85% (no condensation)
----------	------------------------------

Pressure	700 hPa to 1060 hPa
----------	---------------------

Storage and transport temperature	-20°C to +60°C (-4°F to +140°F)
Storage and transport humidity	0% to 90% (no condensation allowed)
Storage and transport pressure	700 hPa to 1060 hPa
Dimensions (W x H x D)	618.4 x 376 x 102.1 mm (24 3/8 x 14 7/8 x 4 1/8 inches) (without a stand)
	618.4 x 471.5 x 302 mm (24 3/8 x 18 5/8 x 12 inches) (with SU-560 optional stand)
Mass	8.1 kg (17 lb 14 oz) (when the optional stand and the input adaptor are not installed)
	8.5 kg (18 lb 12 oz) (when the optional stand is not installed and two BKM-229X are installed)
Accessories supplied	AC adaptor (AC-110MD) (1), AC power cord (1), AC plug holder (2), Instructions for Use (1), CD-ROM (1), Using the CD-ROM Manual (1), Quick

Reference (1),
When you First Use the Monitor (1),
Sales Companies Guide (1)

Gallery

