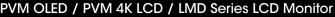
Professional Monitor Family 2013 PVM OLED / PVM 4K LCD / LMD Series LCD Monitor









Comprehensive, Innovative, Reliable Line of Picture Monitors

Building on a long history as a leading supplier of high-definition technology products, Sony continues to offer professional monitors in a variety of types and sizes, suitable for a wide range of applications in the studio and in the field.

Now, incorporating innovative wider viewing angles^{*1}, the TRIMASTER EL[™] OLED (organic light-emitting diode) picture monitors include the new A Series: the PVM-2541A (25-inch^{*2}) and PVM-1741A (17-inch^{*3}).

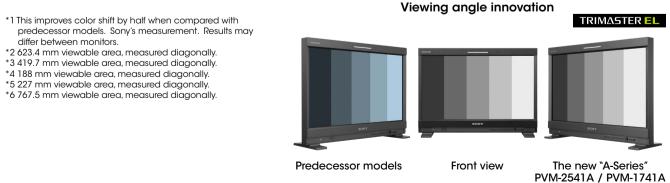
These two new monitors enable group monitoring – for example, video engineers or colorists can view the display properly from many different angles. This allows greater efficiency and improves quality during content creation.

There is more good news for the PVM-2541A and PVM-1741A. These PVM-41 Series monitors, along with LMD-41 Series monitors (the LMD-2341W, LMD-2041W, and LMD-1541W), are equipped with a variety of convenient professional features including new waveform capabilities, vector scope, closed caption display, and camera focus in color.

Two small monitors in the PVM / LMD-41 Series – the PVM-741 7-inch^{*4} OLED monitor and LMD-941W 9-inch^{*5} LCD monitor – also offer these new professional features in their compact bodies. And these small-size monitors are further upgraded with the addition of two 3G/HD-SDI interfaces. Moreover, the LMD-941W incorporates a full-HD resolution LCD panel, delivering superb crisp picture quality.

The PVM-X300 30-inch^{*6} true-4K (4096 x 2160 pixels) resolution LCD monitor also joins Sony's picture monitor lineup. This monitor is ideal for 4K previewing in onset and editing applications.

Designed for every professional need, it's time you experienced the immense value of Sony's new picture monitors.



^{*} Simulated images

Sony's Professional Monitor Lineup

PVM Series – TRIMASTER EL Picture Monitors



LMD-41 Series - LCD Picture Monitors



LMD-30/10 Series - Entry LCD Monitors





Sony Picture Monitor Technology and Features



Wide Viewing Angles

PVM-41 LMD-41 LMD-51 LMD-30

PVM-2541A and PVM-1741A monitors feature significantly improved viewing angles, reducing the color shift by half* when compared with their predecessor models, offering the industry-leading wide viewing angles in the professional flat panel market.

LMD-41/51/30 series monitors incorporating IPS LCD panels offer stable images when viewed from various angles: both horizontally and vertically. This allows precise images to be clearly viewed from various positions and angles – a critical requirement in professional video monitoring – and makes these monitors suitable for group viewing.

* Sony measured. Results may differ between monitors.



PVM-2541A with an OLED panel

LMD-2341W with an IPS LCD * Simulated images

10-bit Signal Processing

PVM-41 LMD-41 LMD-51 LMD-30/10

All PVM-41 Series and LMD Series monitors incorporate a 10-bit signal processing system to offer a smooth gray scale along CRT-like gamma.





8-bit (256-levels) image*



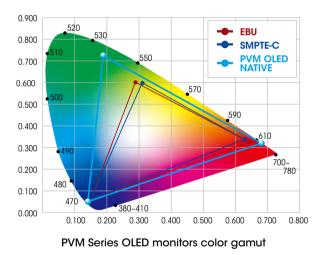
ChromaTRU Color Processing



For an extra level of color-reproduction accuracy, every LCD panel used in LMD-41 and LMD-51 Series monitors is precisely color calibrated at the factory, providing characteristics consistent with those of broadcast standards. Also white balance is maintained at a consistent color temperature throughout all gray scale levels. The ChromaTRU[™] process reproduces consistent light output extremely close to that of a CRT.

Wide Color Gamut and High-purity Deep Color Reproduction

TRIMASTER EL technology shows the largest color range of any Sony monitor ever offered. Color standards such as ITU-R BT.709, EBU, and SMPTE-C are displayed more accurately and, if desired, the OLED panel's native color gamut can be displayed. Sony's micro-cavity structure uses an optical resonance effect in combination with accurate color filters to calibrate and stabilize RGB color accuracy. This combination is also effective in reducing ambient light reflection, and consequently deep color reproduction can be achieved without degradation, particularly in bright environments.



▲ 3G-SDI Input

PVM-41 LMD-41 LMD-51

PVM-41, LMD-41 and LMD-51 Series monitors can accept 3G-SDI input.* Sony's 3G-SDI interface is compliant with the SMPTE 425 standard, transmitting up to 4:2:2/10-bit 1080/50p and 1080/60p video data using one SDI cable.

* The LMD-51 Series monitors require an optional BKM-250TG 3G-SDI input adaptor. No models support a dual-link HD-SDI interface.



SDI (3G/HD/SD) input (x2) output (x1) Composite input / output Audio input / output HDMI IN

LMD-2451TD with the BKM-250TG 3G-SDI board Serial remote



PVM-41, LMD-41 Series interfaces

I/P Mode Selection

PVM-41 LMD-41 LMD-51 LMD-30/10

The PVM and LMD Series monitors provide a variety of I/P modes so that users can select the most suitable mode for each purpose:

INTRA-FIELD:*1

This mode interpolates images within the field, and delivers naturally reproduced images and quick picture processing. This mode is available for 1920 x 1080 SDI signal input.

INTER-FIELD:

This mode interpolates images between fields. This is used for picture quality precedence (e.g., to reduce the jagged effect on moving pictures).

FIELD MERGE:*2

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).

*1 PVM-41 and LMD-41 Series only. *2 PVM-41, LMD-41, and LMD-51 Series only.

Auto White Balance

PVM-41 LMD-41 LMD-51

The PVM-41, LMD-41, and LMD-51 Series monitors employ a software-based white balance calibration function, which is called "Monitor_AutoWhiteAdjustment". Combined with a PC and commercially available calibration tools*, this function enables simple adjustment of the monitor's white balance.

* Konica Minolta CA-210, CA-310, CS-200, DK-Technologies PM5639/06, X-Rite i1 Pro/i1 Pro2, Photo Research PR-655/670, Klein K-10, and JETI specbos 1211.



"Monitor_AutoWhiteAdjuestment" GUI image

External Remote Control Function

Serial Remote

PVM-41 LMD-41 LMD-51

The PVM-41, LMD-41, and LMD-51 Series have an external remote control capability for input/output signal selection and adjustment of various items via an 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. Also these monitors support some functions of the BKM-16R – an optional remote control unit for BVM-E/BVM-L/PVM-L Series monitors – such as the power on/off switch and the Input Select function.*

* PVM-41, LMD-41, and LMD-51 Series do not support all BKM-16R functions.

Parallel Remote

LMD-41 LMD-51 LMD-30/10

All LMD monitors can be remotely controlled via their parallel remote 8-pin modular connector. Seven of each monitor's available functions can be assigned to the available connector pins, such as tally switching, marker switching, and input switching.

A variety of marker settings

PVM-41 LMD-41 LMD-51 LMD-30/10

All PVM and LMD Series monitors can display a center marker, aspect markers, and safety area markers.



4:3 aspect marker image



16:9 aspect marker image



Safety area marker image

Power-saving Mode

LMD-41 LMD-51

When no input signal is received for over a minute, the monitor goes into power-saving mode and consumes minimal power. This function prevents unnecessary electrical consumption.



TRIMASTER EL – Self-emitting Display Device

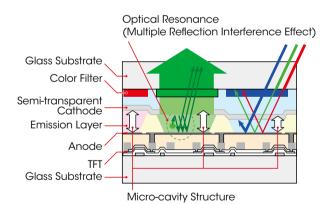
TRIMASTER EL creates light by recombining an electron and a hole within certain organic materials. The process of emitting light is extremely efficient when compared to other technologies currently used for display. Its organic materials react to the control of the electrical current immediately, and do not emit light in the absence of an electrical current. In this way, the OLED display panel features superb black performance and quick response to fast-motion pictures. In addition, Sony's OLED display panel delivers a wider color gamut.

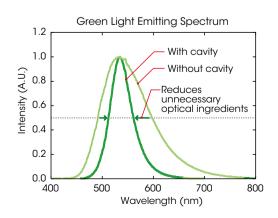
Super Top Emission Technology

Sony's Super Top Emission OLED panel is designed to deliver light emission with the TFT layer on the rear side of the panel. Therefore, the top emission structure offers more efficient light emission than is typical with bottom emission structures where TFT layers are placed on the front side of the panel, limiting the light-emission aperture.

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

Sony's Super Top Emission OLED panel is completely sealed by a glass substrate, and the electroluminescent layer is fully isolated from outside air and moisture. This contributes to stability and reliability.







The TRIMASTER EL processor - Dedicated to eliciting full performance.

- Accurate signal processing across all signal levels
- Accurate gamma control
- Superb uniformity control

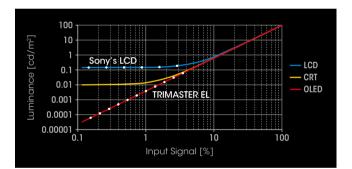
Dedicated TRIMASTER EL Processor*

The PVM Series of OLED monitors incorporate newly developed OLED-dedicated signal processors to elicit and maximize OLED panel performance. This technology allows these TRIMASTER EL monitors to provide the level of performance required for critical imaging. These processors accurately control gamma and uniformity, and deliver precision stability control.

* The PVM-741 is equipped with a different processing technology (ChromaTRU).

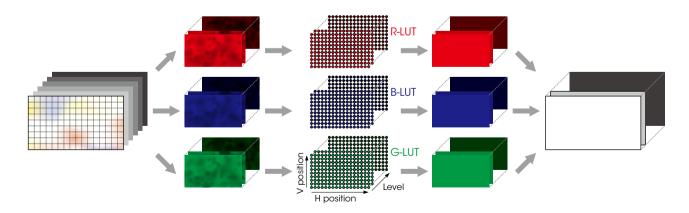
Accurate gamma control

Since TRIMASTER EL panel can display a deeper black than any other display device, the TRIMASTER EL processor controls gamma accuracy (black reproduction) by increased signal processing bit depth.



Superb uniformity control

TRIMASTER EL processor offers superb uniformity across all signal levels at every point of the screen. At the factory, OLED-panel uniformity is precisely measured and corrected using a proprietary RGB LUT (look-up table) adjustment system.



Accurate Black Reproduction

A key advantage of TRIMASTER EL is the fact that each pixel can be turned completely off. No other display technology is able to offer this. LCD either raises black luminance due to intrinsic light leakage, or reduces black luminance with artificial local dimming technologies. CRT always applies a bias voltage to place the gun at the proper operating level. All of these display devices have some limitation in accuracy of black reproduction. In comparison, TRIMASTER EL is capable of reproducing accurate black with each individual pixel, enabling users to evaluate each picture image faithfully to the signal.



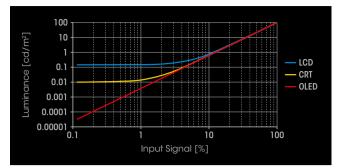
LCD*



TRIMASTER EL*
* Simulated images

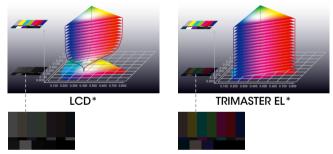
Accurate Color Reproduction

Sony's Super Top Emission technology not only offers a wide color gamut with its purity of the three primary colors, but also maintains this wide color gamut throughout the entire luminance range. While all other display devices have limitations in reproducing accurate colors, especially in the low signal levels, TRIMASTER EL system is truly an ideal display device for picture evaluation. With OLED, users see the details in the blacks, and see the colors as well.





Gray scale images corresponding to the input signal * Gray scales are simulated images.

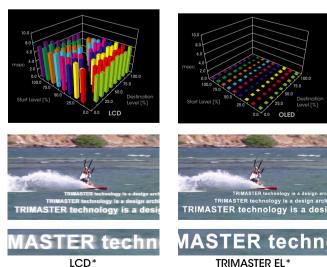


* Color gamut images based on Sony's test results

Quick Response with Virtually No Motion Blur

The TRIMASTER EL gray-to-gray switching speed (measured in microseconds, µs) is much faster than that of the LCD (measured in milliseconds, ms).* This fast response benefits a variety of applications and uses. For example, in sports broadcasting, when camera pans would become blurred with an LCD, they remain sharp and clear with OLED. And with moving titles or graphics, when text can be difficult to read on an LCD, OLED displays clear text, regardless of speed or direction.

* Sony's test results.



41 Series - All-in-one Features

PVM-41 OLED Picture monitor





PVM-2541A







LMD-41 LCD Picture monitor



LMD-2341W



LMD-1541W



- Compact metal chassis and lightweight, robust metal body
- 3G/HD/SD-SDI input (x2), HDMI (HDCP) (x1), and Composite (x1)
- Built-in analyzers
- Waveform monitor, vector scope, audio level meter, time code, camera focus in color
- Closed caption display
- Easy-to-use control panel
 - Rotary-type switch for quick menu access
 - Seven function-assignable buttons for direct and quick access
- DC 12V operations (PVM-1741A, PVM-741, LMD-2041W, LMD-1541W, LMD-941W)
- Auto white Adjustment with PC application software
- Fast I/P conversion with the INTRA-FIELD process mode

PVM-41:

Sony's Super Top Emission OLED display panel with 10-bit RGB:

LMD-41:

Slim-bezel suitable for monitor wall installations

- IMD (in-monitor display)
- Wide viewing angle with an IPS panel
- 9" Full HD (1920 x 1080 pixels) resolution LCD panel (LMD-941W)

Lightweight Compact Design – Flexible Mounting For Picture Monitoring

The PVM-2541A and PVM-1741A incorporate a lightweight, compact metal body. Their design offers flexibility, and can be adapted according to the application: a desktop unit with standard table feet, or used with an optional SU-561 stand, or without the stand for wall applications.

These monitors support VESA™ mounting with a 100 mm pitch, and EIA 19-inch standard racks.* This allows the monitors to be used for all types of application – desktop editing, office viewing, on a studio monitor wall, or installed in OB vans.

* The PVM-1741A only is available with standard rack-mount brackets.





PVM-2541A rear

PVM-2541A front



PVM-2541A

standard



PVM-2541A with optional SU-561



PVM-2541A side

- LMD-41 only

Slim bezel, compact design for monitor-wall Installation

Incorporating a lightweight and robust aluminum slim bezel and compact body, the LMD-2341W, LMD-2041W, and LMD-1541W are a highly appropriate solution for monitor-wall installation, both in studio sub-control rooms and OB vans.



Easy-to-use Control Panel

A rotary-type switch and seven function-assignable buttons allow users quick and intuitive operation. Operation buttons with LED indicators enable error-free operation, even in dark environments.*

* LED lights can be switched on/off.



Control panel with LED lights-on

Input Versatility

The PVM-41 and LMD-41 Series monitors are equipped with built-in standard input interfaces: 3G/HD/SD-SDI (x2), HDMI (HDCP) input (x1) and composite (x1).

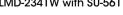


Desk-top editing and office viewing

With a standard-supplied monitor feet or by installing an optional monitor stand*, the LMD-2341W, LMD-2041W, and LMD-1541W can be used as desk-top monitors both for editing and office viewing.

* The optional SU-561 stand can be used for any 41 Series monitors, and the optional SU-562 stand is for the LMD-1541W only.







LMD-1541W with SU-562*



LMD-2041W with supplied monitor feet*

* Simulated images * The SU-561 and SU-562 monitor stands are optional

Waveform Monitor and Vector Scope Display

An input signal's waveform and vector scope with an SDI-embedded 2-channel audio level meter can be displayed on screen. Both the waveform monitor and vector scope have various modes, including a zoom function (in an area of 0 to 20 IRE) with the waveform monitor, and a zoom function (in the central black area) with the vector scope, for adjusting white balance. The waveform of a specified line can also be displayed.





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Vector scope

Time Code Display

Time code embedded on SDI signals can be displayed on screen. Users can select either LTC or VITC.



* Simulated image

Camera Focus Function

The PVM-41 and LMD-41 Series monitors can control the aperture level of a video signal, and display images on the screen with sharpened edges to help camera focus operation. Further to this, the sharpened edges can be displayed in user-selectable colors (white, red, green, blue, and yellow) for more precise focusing. This camera focus function can even be enhanced when combined with native scan mode.



Closed-caption Display

When inputting SD-SDI or HD-SDI signals, closed-caption signals of EIA/CEA-608 and EIA/CEA-708 are decoded and displayed on screen.

LMD-41 only

In-monitor display (IMD) function

The LMD-2341W, LMD-2041W, LMD-1541W, and LMD-941W support the TSL UMD protocol and can display on screen two tally lamps and dynamic text information received via Ethernet. Up to 16 unicode characters^{*1} can be displayed. IMD text can be positioned at the top or bottom of the screen. Both the text color and the tally lamp color are separately selectable either in a commanded color or in one of eight preinstalled colors.^{*2}

*1 English alphabets, numbers, symbolic codes, and Japanese letters. *2 White, red, green, blue, yellow, cyan, magenta, and amber.





The IMD, waveform monitor, 2-channel audio level meter, and time code display*

The IMD, 8-channel audio level meter, and time code display.*

* Simulated images

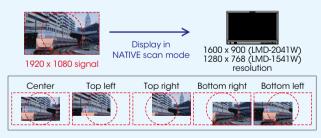
Scan mode selection

Scan size can be selected from normal scan (0%), over scan (5%), full scan, and native scan modes.*

• The aspect ratio can be switched between 16:9 and 4:3 according to the input signal.

As a new function of the LMD-2041W and LMD-1541W, when a 1920 x 1080i or 1080p signal is input, the image frame of native scan can be shifted in five patterns: center, top-left, top-right, bottom-right, and bottom-left.

* Full Scan and Native Scan modes work on specific signal formats.



Native scan framing image (LMD-2041W and LMD-1541W)

Ideal for CRT monitor replacement

The LMD-1541W and the PVM-14L2, Sony's most popular 14-inch 4:3 aspect CRT monitor, share almost the same viewable area height. The body of the LMD-1541W – which houses a 15.3-inch diagonal, 15:9 aspect screen – is 74.5 mm shorter in height and only 27.2 mm wider than the PVM-14L2 body. And with its space-saving design, the LMD-1541W can be installed effectively in small spaces.





PVM-741

- Sony's Super-Top-Emission OLED panel with a 10-bit driver
- 960 x 540 pixels resolution



LMD-941W

 Full HD (1920 x 1080 pixels) resolution IPS LCD panel

*Simulated images

PVM / LMD-41 Series features

- Two 3G/HD/SD-SDI and an HDMI input interfaces
- Waveform monitor, Vector scope, Audio level meter, Time code, Closed caption display, Camera focus function

Easy-to-use control panel

Robust, light-weight, and compact body

Incorporating a light-weight and compact aluminum-diecast body with a detachable AR-coated protection panel, this model is flexible enough to change style according to user requirements.





MB-531 19" mounting bracket

with MB-532 mounting panel

AR-coated protection panel

Retractable Carrying Handle

A retractable carrying handle is provided as a supplied accessory, allowing users to carry these monitors anytime, anywhere.

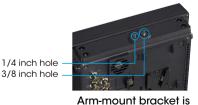


PVM-741 with carrying handle

Easy Mounting into A Camera System

With 3/8-inch and 1/4-inch screw holes on its base, the PVM-741 and LMD-941W can be installed in a camera system. Also with the supplied arm-mount bracket fixed on the top, these monitors can be installed in a camera arm.





Rear and bottom

ENG Kit VF-510

For use in ENG and EFP field, the optional VF-510 ENG Kit provides a viewing hood, carrying handle, and connector protector.



attached on the top

VF-510 ENG Kit

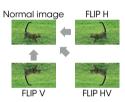
Input versatility

The PVM-741 and LMD-941W are equipped with built-in standard input interfaces: 3G/HD/SD-SDI (x2), composite (x1), and HDMI input (x1).

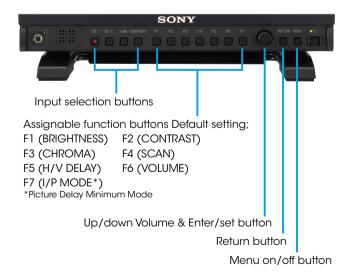


Flip function (PVM-741 only)

The PVM-741 monitor has a feature to flip a picture without frame delay, horizontally, vertically, or horizontally and vertically.



Easy-to-use control panel design





It's Time for 4K Don't Miss the Wave; Catch the PVM-X300 4K Monitor

Full-HD production has widely impacted the broadcast and video production industry, yet now another wave is forming – the 4K content creation wave. Its rise is rapid, and it looks set to dramatically change the content creation industry, especially digital cinema.

Seeing this wave develop, you may be looking around for a versatile, dependable 4K video monitor. You can catch one right now – a right-size, easy-to-use monitor for every element of the production workflow including 4K cinema production (onset monitoring, dailies, and editing), 4K live production (camera control and program preview) and real-time 4K presentation.

Sony is proud to introduce the PVM-X300, 30-inch^{*1} true 4K (4096 x 2160 pixels) resolution LCD video monitor, ideal for 4K previewing in onset and editing applications.

The PVM-X300 monitor realizes true 4K resolution in a portable 30-inch size. It's packed with features such as a wide-viewing-angle IPS LCD panel, and versatile input interfaces including 3G/HD-SDI x 4, HDMI x 4, and DisplayPort*² x 2 inputs. In addition, it delivers a user-friendly monitor control system, and supports an optional 4K SxS[™] player, BKM-XP1.

Want to review immediately the 4K images from your camera without an external box, and would you like to free yourself from complicated wired connections? It's easy with an optional 4K SxS player. Combine the PVM-X300 4K video monitor with this player to achieve an integrated total workflow with Sony's PMW-F55 4K cameras.

Catch every advantage of the 4K wave not just in film and TV production, but also in a wide range of other applications. The PVM-X300 is also ideal in industrial design and visualization systems, computer graphics systems, and in museum and laboratory environments. Catch it now!

*1 767.5 mm viewing area, measured diagonally. *2 Supported by V1.2.



* Produced by TV Globo with the F65

True 4K (4096 x 2160) Resolution Panel

The PVM-X300 incorporates a 30-inch wide-viewingangle IPS LCD panel delivering true 4K (4096 x 2160) resolution. This new professional video monitor also incorporates a RGB 10-bit panel with uniformity control, and can accurately display the industrystandard ITU-R BT.709 color space.

With its convenient size, you can easily carry the PVM-X300 to an onset site to monitor 4K resolution motion pictures. You can also achieve 4K monitoring in postproduction by putting the PVM-X300 monitor on a desk in the edit suite. From acquisition to editing, you'll have a true 4K workflow all the way. Soon you'll be wondering how you ever managed without the PVM-X300 in your production and postproduction environments!



4K Resolution image

Application images



Onset monitoring



OBVAN, Program/Preview



Edit suite

Versatile Input Interfaces

The PVM-X300 4K monitor is equipped with variable interfaces including 3G/HD-SDI x 4 and HDMI x 4, allowing a direct connection with any type of 4K cinema camera and live product.

3G/HD-SDI x 4 inputs

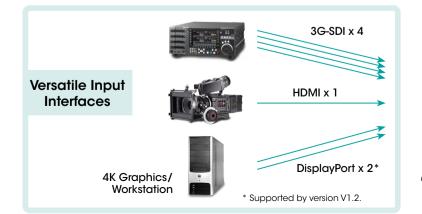
This monitor supports 3G-SDI receiving a wide range of 3G-SDI signals up to 4096 x 2160, 50p/60p, 10-bit Y/CB/CR 4:2:2.

HDMI x 4 inputs

This monitor supports 4096 x 2160/24p and 3840 x 2160/24p, 25p, 30p with one single HDMI cable. The PVM-X300 is also equipped with a unique capability – it can display 4096 x 2160/60p video signals with one single HDMI cable when connected to Sony's new PMW-F55 4K camera system.

DisplayPort* x 2 inputs

* Supported by V1.2.





PVM-X300 connector panel

AK SxS Player (BKM-XP1) (option)

You can combine the PVM-X300 with an optional 4K SxS player for easy playback of 4K content. Simply insert the newly developed SxS PRO+ high-speed memory media, which supports XAVC[™] 4K and XAVC HD high-frame-rate recording, into the player to achieve immediate viewing of 4K camera images and 4K programs from a nonlinear editing system. This frees you from using an expensive, fragile HDD external player and complicated wired connections.

Thumbnails of each clip recorded on SxS PRO+ media are displayed on the monitor and can be controlled by the monitor's control panel.



Thumbnail clip operation



Nonlinear Editing System**

4K SxS player (option)

** Nonlinear editing alliance partners support the XAVC format.



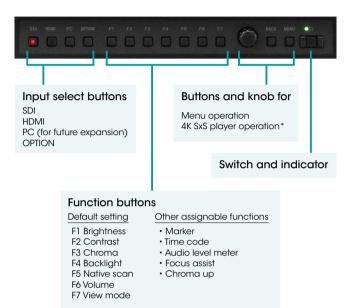
SxS PRO+ Media

This is a newly developed memory card for XAVC recording. XAVC is a scalable video format that supports HD, 2K, QFHD, and up to true 4K resolution. The XAVC 4K format provides exquisite 4K image quality in storage-efficient file sizes.

XAVC is an open format, and is supported by industry-leading manufacturers.

User-friendly Control Panel Design

With its user-friendly control panel design, the PVM-X300 allows seven functions to be allocated to assignable buttons. Button lights are dimmable and indicator lights are on/off switchable – this means you can operate the monitor easily in a dark environment.



* When the optional BKM-XP1 4K SxS player is installed, it can be operated with the monitor's control panel. In addition, the 4K SxS player can also be operated with an optional USB mouse. Operations include Clip Selection, PLAY/PAUSE, REV/FWD, and PREV/NEXT.



Thumbnail display and mouse operation

Display Mode

The PVM-X300 provides three basic display modes: 4K/QFHD, Quad View*, and 2K/HD Zoom.

4K/QFHD mode is used for displaying 4096 x 2160 or 3840 x 2160 signal inputs.

Quad View mode is used for displaying simultaneously four Full HD (1920 x 1080) signal inputs to confirm and compare four pictures at once on the same single screen.

2K/HD Zoom mode is for zooming and displaying 2048 x 1080 or 1920 x 1080 signal inputs scaled to the 4K screen.

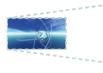
* HDMI quad-link will be supported by V1.2.





4K/QFHD Mode

Quad view mode*





2K/HD Zoom Mode

Zoom Function*

Each of the five divided areas of the screen can be magnified by scaling to full-screen size.

* Supported by V1.2.



Camera Focus Function

The PVM-X300 can control the aperture level of a video signal, and display images on screen with sharpened edges to help camera focus operation. Further to this, the sharpened edges can be displayed in user-selectable colors (white, red, green, blue, and yellow) for more precise focusing.



Focus in red



Focus in green

Marker Settings

This useful feature enables the PVM-X300 to display various markers including an aspect marker, safe area marker, and center marker.



Simulated image

Gamma Selection

The PVM-X300 supports Gamma 2.4 as specified by the ITU-R BT.1886. In addition, Gamma 2.2, 2.6, and S-Log2 can be selected.

Robust and Lightweight Aluminum Body

A solid aluminum housing ensures durability, especially for outdoor usage.

Auto White Adjustment*1

The PVM-X300 4K monitor employs a software-based color temperature (white balance) calibration function, which is called "Monitor_AutoWhiteAdjustment". Combined with a PC and commercially available color analyzers^{*2}, this function enables simple adjustment of the monitor's white balance.

*1 Supported with version 1.2.

*2 Konica Minolta CA-210, CA-310, CS-200, DK-Technologies PM5639/06, X-Rite i1 Pro/i1 Pro2, Photo Research PR-655/670, Klein K-10, and JETI specbos 1211. A connector is required for each color analyzer.



Other Convenient Features

- Audio: Stereo speakers, line out, and stereo headphone jack
- VESA mounting (200 x 100 mm pitch)
- Timecode display
- SDI-embedded 8-ch audio level meter display
- (1 to 8 ch or 9 to 16 ch)
- Chroma Up

LMD-51 Series - Versatile 3D/2D LCD Monitors

ChromaTRU



Model Types

	LMD-4251TD	LMD-2451TD	LMD-1751W		
Panel size (diagonal)	42-inch	24-inch	17-inch		
Resolution (pixels)	1920 x 1080 (Full HD)	1920 x 1200 (WUXGA)	1280 x 768 (WXGA)		
Aspect ratio	16:9	16:10	15:9		
Desktop stand	N/A	Standard	Optional SU-561		
EIA 19-inch rack-mount	N/A	N/A	Optional MB-530		
VESA mounting (mm)	400 x 400	100 x 100	100 x 100, 75 x 75		

- Stylish control panel design sheet-type switches with on/off switchable LED lights
- Option slots for flexibility and expandability
- Multi-format inputs including 3G-SDI input*1
- 3D display (LMD-4251TD and LMD-2451TD)
- 10-bit signal processing and ChromaTRU color processing technology
- Auto white balance calibration function for color consistency^{*2}
- Wide viewing angle with an IPS panel
- Sophisticated I/P conversion and I/P mode selection
- Waveform monitor, audio level meter, and time code display*³
- External remote control function (serial remote and parallel remote)
- Power-saving mode
- *1 The optional BKM-250TG 3G-SDI input adaptor is required.
- *2 This function uses a PC and the commercially available calibration probes: Konica Minolta CA-210, CA-310, CS-200, DK-Technologies PM5639/06, X-Rite i1 Pro/i1 Pro2, Photo Research PR-655/670, Klein K-10, and JETI specbos 1211.
- *3 The LMD-4251TD does not support waveform wontor. Audio level meter and Time code can be displayed when the optional BKM-250TG input adaptor is installed and SDI signal is received.



Superb Picture Performance and Convenient Features

High-performance LCD panels

The LMD-51 Series monitors incorporate high-resolution professional LCD panels* with an excellent wide viewing angle, and use precisely manufactured RGB color filters, allowing the reproduction of colors with stunning depth and saturation to create highly natural images.

* LMD-4251TD (42-inches, 1920 x1080 pixels), LMD-2451TD (24-inches, 1920 x 1200 pixels), and LMD-1751W (17-inches, 1280 x 768 pixels).

10-bit signal processing and ChromaTRU color matching technology

ChromaTRU

Added to the high-grade LCD panels, a 10-bit signal processing and ChromaTRU technology offer a smooth gray scale along CRT-like gamma and stable white balance.

Waveform monitor, audio level meter, and time code display*

The input signal's waveform can be displayed on screen. When an SDI interface is connected, the embedded audio level can be displayed on screen with a 2-channel audio level meter. Installing an optional BKM-250TG 3G-SDI input adaptor, the LMD-51 Series monitors can display on screen an 8-channel audio level meter and a time code – either LTC or VITC is selectable.

* The LMD-4251TD does not support waveform monitor. Audio level meter and Time code can be displayed when the optional BKM-250TG input adaptor is installed and SDI signal is received.





* Simulated images

Stereo audio monitoring

LMD-51 Series monitors are equipped with stereo speakers (1.0 W + 1.0 W) and a stereo headphone jack, which enable users to monitor audio. The SDI-embedded audio can be monitored by the built-in speakers and the monitor output.

Closed-caption decoder

The closed caption information embedded in EIA 608 and EIA 708* can be decoded for display.

* For EIA 708, the optional BKM-244CC Closed Caption Adaptor is required.

Color temperature

Color temperatures of D93, D65, or a user preset value can be Selected.

Selectable scan size for video input and aspect ratio

Scan size can be selected between Normal scan (0%), over Scan (5%), Full scan, and Native scan modes.* The aspect ratio can be switched between 16:9 and 4:3 according to the input signal.

* Full scan and native scan modes work on specific signal formats.

Marker settings

LMD-51 Series monitors can display various area markers, including a center marker, aspect markers, and safety area marker. The brightness of these markers can be selected from three different levels: white, gray, and dark gray.

Users can also select either a black or gray mat to fill the outer area of the aspect markers. These flexible marker controls, together with the choice of many different aspect markers, make the LMD-51 Series monitors extremely convenient display devices for a variety of shooting scenarios, from standard video acquisition to digital cinematography.

Marker settings

	16:9 Mode	4:3 Mode				
Aspect Marker	4:3, 15:9, 14:9, 13:9, 1.85:1. 2.35:1, 1.85:1 & 4:3	16:9				
Center Marker	Yes					
Safety Area	80%, 85%, 88%, 90%, 93%					

Mounting flexibility

The LMD-1751W is rack-mountable in the EIA 19-inch standard rack, using an optional MB-530 mounting bracket.

VESA mounting

LMD-51 Series monitors provide VESA standard mounting holes which support installation on a wall or ceiling: LMD-4251TD - 400 x 400 mm pitch LMD-2451TD - 100 x 100 mm pitch LMD-1751W - 100 x 100 mm and 75 x 75 mm pitch

Other features

- Multi-display mode
- H/V Delay Function
- ACC Off
- DC Operation
- 24 V: LMD-2451TD, 12 V: LMD-1751W
- Setup Level for Analog Component and NTSC signal
- Sub Control on Contrast, Chroma, Phase, and Brightness
- Blue-Only Mode
- Monochrome Mode
- Auto Chroma / Phase Setup
- Three-color Tally (LMD-4251TD is not equipped with Tally)
- Key-inhibit function
- Smart APA (Auto Pixel Alignment) for Computer Input

Input Versatility

Standard and optional signal interfaces

In addition to the standard input interfaces of analog composite, component and RGB, and Y/C (S-Video), LMD-51 Series monitors are equipped with two slots for optional input adaptors of any combination for SD or HD video inputs. Users can expand the input capability according to their budget and needs.

Computer signal interfaces

LMD-51 Series monitors are equipped with standard interfaces for HD-15 and DVI-D* interfaces, respectively.

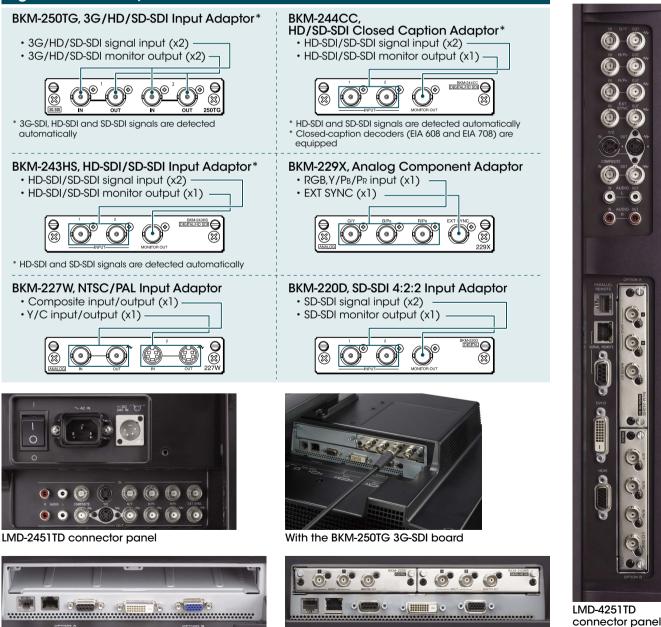
* 1920 x 1080 images are down-converted for display on the LMD-1751W.

Signal-interface Options

3G-SDI interface*

LMD-51 Series monitors can accept 3G-SDI input by installing on an optional BKM-250TG 3G-SDI input adaptor. Sony's 3G-SDI interface is compliant with the SMPTE 425 standard, transmitting up to 4:2:2/10-bit 1080/50p and 1080/60p video data using one SDI cable. When an upgrade to these 1080/p systems is required, this single-link 3G-SDI system is an ideal, future-proof solution.

* No models support a dual-link HD-SDI interface.



LMD-2451TD option slots

LMD-1751W connector panel and option slots

connector panel and option slots

3D Features

Sony offers two models of high-performance professional 3D LCD monitor: the LMD-4251TD (42-inch^{*1}) and the LMD-2451TD (24-inch^{*2}). These monitors are supplied with the BKM-30G circular-polarizer 3D glasses as a supplied accessory.^{*3}



*1 1067-mm viewing area, measured diagonally.

*2 613-mm viewing area, measured diagonally.

*3 Also available BKM-31G clip-on type 3D glasses as an option.

Circular-polarizer 3D system

The LMD-4251TD and LMD-2451TD incorporate a micropolarizer filter attached to the LCD panel. Wearing Sony's BKM-30G or BKM-31G 3D glasses, users experience smooth, uninterrupted viewing of multiple monitors and flickerfree 3D images. This image quality helps users to engage in 3D production operations with minimal stress.

Unique lightweight circular-polarizer 3D glasses

Sony provides two types of 3D glasses: the standard BKM-30G, and the clip-on BKM-31G.

BKM-30G and BKM-31G circular-polarizer 3D glasses are optimized for LMD-4251TD and LMD-2451TD 3D monitors. These 3D glasses are extremely lightweight^{*1} and comfortable to wear. Designed with a soft frame and center-support structure, BKM-30G glasses fit any size and shape of head and face, so the wearer experiences minimal stress even during continuous production tasks. The center-support structure of the BKM-30G does not put the lenses under stress, and so there is no lens distortion. With clip-on BKM-31G 3D glasses, the wearer can simply flip up the lenses when not required.

Both the BKM-30G and BKM-31G block approximately 99% of the sun's ultraviolet rays.*2

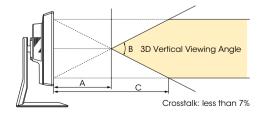
*1 BKM-30G glasses weigh approx. 18 g; BKM-31G glasses weigh approx. 16 g.

*2 These circular-polarizer glasses cannot be used as sunglasses. The blocked spectral range is 280 nm to 380 nm.

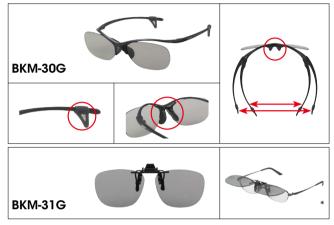
Fully compatible with 2D monitors

The LMD-4151TD and LMD-2451TD monitors are equipped with consistent quality, functionality, and operability – essential for professional monitors. Both 3D monitors can be used as 2D monitors, and their features are fully compatible with those of current LMD-51W Series monitors.*

* The LMD-4251TD does not support 2-channel audio level meter and waveform monitor display.



	A (typical)	B (typical)	C (typical)
LMD-2451TD	320 mm	54°	640 mm
LMD-4251TD	620 mm	46°	1240 mm



* Clip-on BKM-31G glasses are worn with the user's own corrective glasses

Multiple 3D input signal formats and interfaces

The LMD-4251TD and LMD-2451TD accept a variety of 3D signal formats including 3G-SDI, Dual-stream HD-SDI, HD-SDI side-byside, HD-SDI Line interleave (line-by-line), HD-SDI Field sequential using an optional BKM-250TG 3G-SDI input adaptor, and DVI Line interleave (line-by-line). This input flexibility enables versatile 3D production both in the studio and the field.

Various 3D signals and video formats support

Type of	3G (level-B) Dual-stream	Side-by-side*3	Line-by-l	ine	Sequential
3D signals	3G*1/HD-SDI x 2*1	HD-SDI*1	HD-SDI*1	DVI	HD-SDI*1
1080/50i	0	0	-	-	-
1080/60i*2	0	0	-	-	-
1080/24P	0	0	0	-	-
1080/25P	0	0	0	-	-
1080/30P*2	0	0	0	-	-
1080/50P	-	-	0	-	-
1080/60P	-	-	0	-	-
1080/24PsF*2	0	0	-	-	0
1080/25PsF	0	0	-	-	0
720/50P	0	0	0	-	-
720/60P*2	0	0	0	-	-
1920 x	_	_	_	0	_
1080/50Hz					
1920 x 1080/60Hz	-	-	-	0	-

*1 BKM-250TG (Ser.7100001 or later) is required for the 3D 3G/HD-SDI signals.

*2 The frame rates are also compatible with 1/1.001.

*3 L/R pictures are displayed as "side-by-side" in 2D display mode, and are displayed as "line-by-line" in 3D display mode. The pictures is aligned as side by side in 2D display mode are not compressed vertically.

Variety of 3D/2D display functions

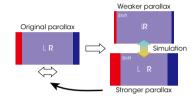
There is a variety of convenient 3D production features^{*1*2} – ideal for high-quality creative 3D production. These capabilities are assignable to function keys on the front panel of the LMD-4251TD and LMD-2451TD, and can also be assigned to an external remote control unit. Plus and minus menu switches ("+" and "-") are also assignable to the parallel remote.^{*3} The 2D/3D select function is assigned to the front panel buttons or parallel remote, locations that are very convenient for users who frequently switch between 2D and 3D mode during 3D production work.

*1 These functions work when the optional BKM-250TG 3G-SDI input adaptor is installed. Some features are unavailable depending on input signals or display modes. Multiple functions may not be used simultaneously.

*2 The 1920 x 1080 image displays with black bands at the top and bottom of the LMD-2451TD WUXGA screen. *3 This function will be available from V1.10, and requires a BKM-250TG serial number of 740001 or higher.

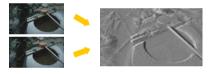
Disparity simulation [3D mode] 😁

Either the left or right signal phase (or both phases) of a 3D image can be shifted horizontally.



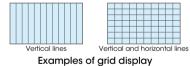
Difference display*

This function displays the difference between the luminance signal of the left (L) and right (R) images of the 3D signal. This function is useful for checking the amount of parallax.



Grid display*

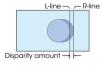
The primary function is to display arbitrary multiple numbers of vertical lines for users to review the overall parallax of captured images.



* Number of vertical lines can be set variable with 0.1% (2-pixel) pitch.

Disparity ruler*

This function works to precisely measure disparity by setting L-line and R-line to L/R objects respectively on the screen.



Virtual Subject Marker*

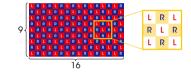
This function simulates disparity in a subject on any part of the screen, before the shot is taken.





Checker board [2D mode]

Left and right input signals are displayed in a grid pattern on screen. By comparing adjacent images, users can recognize a difference in brightness and color setting of the left and right images.



L/R switch [2D mode]

Left and right signals can be swapped in a moment without inserting black frames, simply by manually pushing a function key. Automatic sequential mode is also available.*



3D/2D color matching function (3D offset adjustment)*

In 3D mode, this function offsets the white balance of a 3D image. This enables closer image color matching between a 3D image viewed through 3D glasses and a 2D image when the viewer takes off their 3D glasses.

720p Scan Mode Selection*

With this resolution scan size (1280 x 720 pixels), users can choose either Normal or Native display mode. Normal mode enlarges the 720p image size to 1920 x 1080 pixel resolution.





* Screen images are simulated.

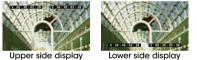
Side-by-side signals display

In addition to the popular squeezed side-by-side display (SBS1) mode, non-squeezed side-by-side display (SBS2) mode is also provided.* * The SBS2 mode is available from V1.10.



Dual time code display [3D modes]* 🔂

Left and right channels' individual time codes can be displayed on the screen.



* Time code displays and images are simulated.

Flip H [3D mode] 😁

The Flip H function turns the reversed image to the normal view. This is helpful because the user can refer directly to the rig camera, achieving a simple and cost-saving system.



Horopter check [3D mode] 😁

This function helps users to perceive the subtle difference of depth between different objects placed on the 3D screen surface.

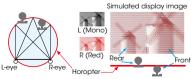


Image overview when viewed from above

Payload ID display

This function allows users simply to check whether the left and right channels of 3D signals are connected correctly in the menu.

* This function will be available from V1.10, and requires a BKM-250TG serial number of 740001 or higher.

LMD-30/10 Series - Entry-level LCD Monitor



LMD-1530W

LMD-2110W



Model Types

	LMD-1530W	LMD-2110W	LMD-1510W		
Panel size (diagonal)	15.3-inch	21.5-inch	15.6-inch		
Resolution (pixels)	1280 x 768 (WXGA)	1920 x 1080 (Full HD)	1366 x 768 (WXGA)		
Aspect ratio	15:9	16:9	16:9		
Desktop stand	Standard	Standard	Standard		
EIA 19-inch rack-mount	Optional MB-533	Optional MB-529	Optional MB-535		
VESA mounting (mm)	100 x 100	100 x 100	100 x 100		

High-purity color filters, and excellent brightness and contrast

- 109% peak white and 10-bit signal processing
- Color temperature and gamma selection
- Picture delay minimum mode (LINE DOUBLER)
- Versatile signal inputs including SDI* and HDMI

Marker setting including aspect markers, a center marker, and safety area markers

* HD/SD-SDI input with the optional BKM-341HS HD/SD-SDI input adaptor.



High Picture Performance

High purity color filters

Equipped with high-purity RGB color filters, LMD-30/10 Series monitors achieve color reproduction with stunning depth and saturation.

Excellent brightness and contrast

LMD-30/10 Series monitors provide high-brightness, high contrast images thanks to their wide aperture LCD panels. In addition, the use of precisely manufactured RGB color filters allows these monitors to reproduce colors with stunning depth and saturation – creating highly natural images.

109% peak white and 10-bit signal processing

Incorporating high-purity RGB color filters and 10-bit signal processing engine, LMD-30/10 Series monitors offer stunning 109% peak white reproduction without clipping and a smooth gray scale along CRT-like gamma.

Color temperature/gamma selection

With the LMD-30/10 Series monitors, users can select from high, low, or preset color temperatures. A variety of gamma modes can also be selected.



Incorrect gamma image*



Correct gamma image*

* Simulated images

I/P mode selection

LMD-30/10 Series monitors provide two I/P modes so that users can select the most suitable mode for each purpose: INTER-FIELD:

This mode interpolates images between fields. This is used for picture quality precedence (e.g., to reduce the jagged effect on moving pictures).

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).

Picture Delay Minimum

Audio is just as much a part of the show as video, and timing is always an issue. Picture Delay Minimum mode is selectable to minimize I/P conversion times for audio synchronization during editing. By selecting "LINE DOUBLER" in IP mode, the signal processing (I/P conversion) period is less than one field (0.5 frames).

Operational Convenience

Marker settings

LMD-30/10 Series monitors can display a center marker, aspect markers, and safety area markers in different sizes.* The brightness of these markers can be set at different levels. These flexible marker settings make these monitors extremely convenient display devices for a variety of shooting scenarios.

* 80%, 85%, 88%, 90%, or 93% can be selected.

Selectable scan size for video input and aspect ratio

With LMD-30/10 Series monitors, the scan size can be selected: Normal (0%), Over (5%), and Full scan. The aspect ratio can be switched between 16:9 and 4:3 according to the input signal.

Three-color tally

LMD-30/10 Series monitors are equipped with a tally lamp that can be lit via a parallel remote connector. The status of the signal displayed on the monitor can be identified by the tally color: red, green, or amber.

Monaural audio monitoring

LMD-30/10 Series monitors are equipped with a speaker (0.5 W), which enables the user to monitor audio.

Protected controls

With LMD-30/10 Series monitors, the key-inhibit function helps prevent inadvertent operation from the control panel.

Mounting Flexibility and **Remote Access**

Mountable in an EIA 19-inch Standard Rack

LMD-30/10 Series monitors can be mounted in a EIA 19-inch standard rack using optional mounting brackets. The 7U-high LMD-1530W uses the MB-533 and LMD-1510W uses MB-535 respectively. The 9U-high LMD-2110W uses MB-529 Mounting Bracket.

VESA mounting

VESA standard mounting holes (100 x 100 mm pitch) are provided on LMD-30/10 Series monitors to enable wall or ceiling installation.

Parallel remote control

These entry-level type LMD-30/10 Series monitors can be controlled remotely via their parallel remote connectors. In the remote menu, there are 16 functions for the LMD-1530W and LMD-2110W, and 21 functions for the LMD-1510W, of which seven can be allocated to the remote connector.

Input Versatility

Standard inputs and expandability

LMD-30/10 Series monitors are equipped with a full range of analog SD inputs including analog composite NTSC and PAL, Y/C (S-Video), and 525i/625i component and RGB. These monitors can also handle HD/SD-SDI input with an optional BKM-341HS HD/SD-SDI input adaptor. This optional feature allows this monitor to connect to HD/SD-SDI equipment for wide range of broadcast and post-production applications. Furthermore, these monitors offer an HD signal input capability via their HDMI and analog component interface, and also can accept DVI signals via the HDMI interface.*

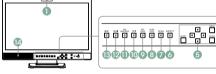
* Requires a DVI conversion cable.



LMD-30/10 Series with the optional BKM-341HS HD/SD-SDI adaptor

Control panel

LMD-1530W / LMD-2110W / LMD-1510W



Tally lamp 2 standby swich and indicator **SKEY INHIBIT indicator OVUME** buttons 6 Menu operation buttons **OASPECT** select button SCAN select button

BLUE ONLY button © EXT SYNC (external sync) button SDI button **I**RGB/COMPONENT button BHDMI button BUNE Speaker

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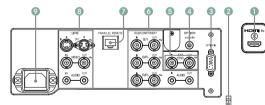
432

SONY

LMD-1510W

Connector panel

LMD-1530W / LMD-2110W / LMD-1510W



HDMI IN connector 2 HDMI cable holder **③OPTION** In connector OPTION AUDIO In (Phono jack) SEXT SYNC In/Out (external sync) (BNC) @RGB/COMPONENT (BNC), Audio (Phono jack) PARALLEL REMOTE (modular connector) BLINE [composite (BNC), Y/C (Mini DIN 4-pin), Audio (Phono jack)] OAC In



LMD-1510W

PVM-2541A / PVM-1741A / PVM-741 LMD-2341W / LMD-2041W / LMD-1541W / LMD-941W Signal Formats

0	Signal standard							
System	Analog composite	HD/SD-SDI	3G-SDI	HDMI				
575/50i (PAL)	0	0	-	0				
480/60i (NTSC)*1	0	0	-	0				
576/50p	-	-	-	0				
480/60p*1	-	-	-	0				
640 x 480/60p*1	-	-	-	0				
1080/24PsF*1*2	-	0	O*3	-				
1080/25PsF*2	-	0	O*3	-				
1080/30PsF*1*2	-	-	O*3	-				
1080/24p*1	-	0	O*3	0				
1080/25p	-	0	O*3	0				
1080/30p*1	-	0	O*3	0				
1080/50i	-	0	O*3	0				
1080/60i*1	-	0	O*3	0				
1080/50p	-	-	O*4	O*6				
1080/60p*1	-	-	O*4	O*6				
720/24p*1	-	-	O*5	-				
720/25p	-	-	O*5	-				
720/30p*1	-	-	O*5	-				
720/50p	-	0	O*3	O*6				
720/60p*1	-	0	O*3	O*6				

*1 Compatible with 1/1.001 frame rates. *2 1080/24PsF, 25PsF, and 30PsF are displayed as 1080/48i, 50i, and 60i on the screen, respectively.

*3 10-bit 4:4:4 Y/CB/CR and 4:4:4 RGB of 3G-SDI signals are supported.

*4 10-bit 4:2:2 Y/CB/CR of 3G-SDI signal is supported.

*5 10-bit 4:4:4 Y/CB/CR of 3G-SDI signal is supported.

*6 PVM-2541A, PVM-1741A, LMD-2341W, LMD-2041W, and LMD-1541W can accept DVI signals via the HDMI interface using a conversion cable.

PVM-2541A / PVM-1741A LMD-2341W / LMD-2041W / LMD-1541W DVI Input Signals

Resolution	Dot clock (MHz)	fH (kHz)	fV (Hz)
640 x 480	25.175	31.5	
1280 x 768	68.250	47.4	
1280 x 1024	108.000	64.0	60
1360 x 768	85.500	47.7	00
1440 x 900	88.750	55.5	
1680 x 1050	119.000	64.7	

 $\boldsymbol{\cdot}$ When a DVI signal is input to the HDMI IN connector using a DVI conversion cable.

• Sides of the displayed picture may be hidden depending on the input signal.

PVM-X300 Signal Formats HD-SDI / 3G-SDI

Signal System	Signal Format			
HD-SDI Single-link				
1920 x 1080/60i*1, 50i, 30p*1, 30PsF*1, 25p, 25PsF, 24p*1, 24PsF*1				
1280 x 720/60p*1, 50p, 30p*1, 25p, 24p*1	4:2:2 YCBCR 10 bit			
2048 x 1080/30p*1, 30PsF*1, 25p, 25PsF, 24p*1, 24PsF*1				
Quad-Link HD-SDI*2				
3840 x 2160/30p*1, 30PsF*1, 25p, 25PsF, 24p*1, 24PsF*1		Crume division		
4096 x 2160/30p*1, 30PsF*1, 25p, 25PsF, 24p*1, 24PsF*1	4:2:2 YCBCR 10 bit	Square division		
3G-SDI				
1920 x 1080/60p*1, 50p	4:2:2 YCBCR 10 bit	Level A / Level B-DL		
1920 x 1080/60i ^{*1} , 50i, 30PsF ^{*1} , 25PsF, 24p ^{*1}	4:4:4 RGB 10/12 bit	Level A / Level B-DL		
1920 x 1080/30p*1, 25p, 24PsF*1	4:4:4 YCBCR 10 / 12 bit	Level A*4 / Level B-DL		
1280 x 720/60p*1, 50p, 25p, 24p*1	4:4:4 RGB 10 bit	Level A		
1280 x 720/30p*1	4:4:4 YCBCR 10 bit	Level A*4		
2048 x 1080/60p*1, 50p, 48p*1	4:2:2 YCBCR 10 bit	Level A*4 / Level B-DL		
2048 x 1080/30p*1, 30PsF*1, 25p, 25PsF, 24p*1, 24PsF*1	4:4:4 RGB 10/12 bit 4:4:4 YCBCR 10/12 bit	Level A*4 / Level B-DL		
Dual Link 3G-SDI*2				
1920 x 1080*3/60p*1, 50p	4:4:4 RGB 10/12 bit	Level A / Level B-DL		
2048 x 1080*3/60p*1, 50p, 48p*1	4:4:4 YCBCR 10 / 12 bit	Level A*4 / Level B-DL		
3840 x 2160/30p*1, 25p, 24p*1	4:2:2 YCBCR 10 bit	2-sample interleave division* ³ Level B-DS Square division		
3840 x 2160/30PsF*1, 25PsF, 24PsF*1		Level B-DS Square division		
4096 x 2160*3/30p*1, 25p, 24p*1	4:2:2 YCBCR 10 bit	2-sample interleave division* ³ Level B-DS Square division		
4096 x 2160*3/30PsF*1, 25PsF, 24PsF*1		Level B-DS Square division		
Quad Link 3G-SDI*2				
3840 x 2160/60p*1, 50p	4:2:2 YCBCR 10 bit	Level A / Level B-DL 2-sample interleave division*3 / Square division		
3840 x 2160/30p*1, 25p	_	Level A*4 / Level B-DL 2-sample interleave division*3 / Square division		
3840 x 2160/30PsF*1, 25PsF	4:4:4 RGB 10/12 bit	Level A / Level B-DL Square division		
3840 x 2160/24p*1	4:4:4 YCBCR 10 / 12 bit	Level A / Level B-DL 2-sample interleave division*3 / Square division		
3840 x 2160/24PsF*1		Level A*4 / Level B-DL Square division		
4096 x 2160/60p*1, 50p, 48p*1	4:2:2 YCBCR 10 bit	Level A ^{*4} / Level B-DL 2-sample interleave division ^{*3} / Square division		
4096 x 2160/30p* ¹ , 25p, 24p* ¹	4:4:4 RGB 10/12 bit 4:4:4 YCBCR 10/12 bit	Level A ^{*4} / Level B-DL 2-sample interleave division ^{*3} / Square division		
4096 x 2160/30PsF*1, 25PsF, 24PsF*1	4.4.4 TOBOR TU/ TZ DIT	Level A ^{*4} / Level B-DL Square division		

HDMI	
Signal System	Signal Format
640 × 480p@60*1	
720 × 480p@60*1	
800 × 600p@60	4:4:4 RGB 12/10/8 bit
1024 × 768p@60	4:4:4 YCBCR 12 / 10 / 8 bit
1280 × 720p@60*1	4:2:2 YCBCR 12 bit
720 × 576p@50	
1280 × 720p@50	
1920 × 1080i@60*1	
1920 × 1080i@50	
1920 × 1080p@60*1	4:4:4 RGB 12/10/8 bit
1920 × 1080p@50	4:4:4 YCBCR 12 / 10 / 8 bit
1920 × 1080p@30*1	4:2:2 YCBCR 12 bit
1920 × 1080p@25	
1920 × 1080p@24*1	
2048 × 1080p@60*1	
2048 × 1080p@50	
2048 × 1080p@48*1	4:4:4 RGB 12/10/8 bit 4:4:4 YCBCR 12/10/8 bit
2048 × 1080p@30*1	4:2:2 YCBCR 12 bit
2048 × 1080p@25	
2048 × 1080p@24*1	
3840 × 2160p@30*1	4:4:4 RGB 8 bit
3840×2160p@25	4:4:4 YCBCR 8 bit
3840 × 2160p@24*1	4:2:2 YCBCR 12 bit
4096 × 2160p@30*1	4:4:4 RGB 8 bit
4096 × 2160p@25	4:4:4 YCBCR 8 bit
4096 × 2160p@24*1	4:2:2 YCBCR 12 bit

*1 Also compatible with 1/1.001.
*2 The Square division signal is also supported for Quad Link 3G-SDI, Quad Link HD-SDI, or Dual Link 3G-SDI signal systems.
*3 Signal connectivity is currently being tested.
*4 Audio signal is not supported.

LMD-51 Series Input Signals / Input Adaptors (As for the 3D signals, refer to the page 21.)

	Input signals					LMD-4251TD / LMD-2451TD / LMD-1751W					
					Composite Y/C	RGB Component	SDI 4:2:2	HD-SDI SD-SDI	3G/HD/ SD-SDI		
Video Signal Formats	Total Line	Active Line	Aspect	Frame	Stand	dard					
Tonnais	Ioidi Line	ACTIVE LINE	Ratio	Rate*1			Options				
					BKM-227W	BKM-229X	BKM-220D	BKM-243HS BKM-244CC	BKM-250TG		
575/50i (PAL)	625	575	16:9 & 4:3	25	0	0	0	0	0		
480/60i (NTSC)*1	525	483	16:9 & 4:3	30	0	0	0	0	0		
576/50p	625	576	16:9 & 4:3	50	N.A.	0	N.A.	N.A.	N.A.		
480/60p	525	483	16:9 & 4:3	60	N.A.	0	N.A.	N.A.	N.A.		
1080/24PsF*1*3	1125	1080	16:9	24	N.A.	O*2	N.A.	0	0		
1080/25PsF*3	1125	1080	16:9	25	N.A.	O*2	N.A.	0	0		
1080/24p*1	1125	1080	16:9	24	N.A.	O*2	N.A.	0	0		
1080/25p	1125	1080	16:9	25	N.A.	O*2	N.A.	0	0		
1080/30p*1	1125	1080	16:9	30	N.A.	O*2	N.A.	0	0		
1080/50i	1125	1080	16:9	25	N.A.	0	N.A.	0	0		
1080/60i*1	1125	1080	16:9	30	N.A.	0	N.A.	0	0		
720/50p	750	720	16:9	50	N.A.	O*2	N.A.	0	0		
720/60p*1	750	720	16:9	60	N.A.	0	N.A.	0	0		
1080/50p	1125	1080	16:9	50	N.A.	N.A.	N.A.	N.A.	O*4		
1080/60p*1	1125	1080	16:9	60	N.A.	N.A.	N.A.	N.A.	O*4		

*1 Compatible with 1/1.001. *2 For component input only. *3 Displayed as 1080/48i and 1080/50i on the screen, respectively. *4 10-bit 4:2:2 Y/CB/CR is supported.

	Input	Signal		Interface					
				Composite Y/C	RGB Component	HD-SDI SD-SDI	HDMI		
System	Total Line	Active Line	Aspect Ratio	Chara.	-	Option	Others allowed		
				Sian	dard	BKM-341HS	Standard		
575/50i (PAL)	625	575	16:9/4:3	0	0	0	0		
480/60i (NTSC)*1	525	483	16:9/4:3	0	0	0	0		
576/50p	625	576	16:9/4:3	N.A.	0	N.A.	0		
480/60p	525	483	16:9/4:3	N.A.	0	N.A.	0		
1080/24PsF	1125	1080	16:9	N.A.	N.A.	0	N.A.		
1080/25PsF	1125	1080	16:9	N.A.	N.A.	0	N.A.		
1080/24p*1	1125	1080	16:9	N.A.	O*2	0	0		
1080/25p	1125	1080	16:9	N.A.	O*2	0	0		
1080/30p*1	1125	1080	16:9	N.A.	O*2	0	0		
1080/50i	1125	1080	16:9	N.A.	0	0	0		
1080/60i*1	1125	1080	16:9	N.A.	0	0	0		
720/50p	750	720	16:9	N.A.	O*2	0	0		
720/60p*1	750	720	16:9	N.A.	0	0	0		

LMD-30/10 Series Video Input Signals / Input Adaptors

*1 Compatible with 1/1.001. *2 For component input only.

LMD-51 Series HD-15 Input Signal Formats

Basakatian H	Н	н н	v	v	Dot Clock	fH	fV	Sync F	olarity			
Resolution	Total	addr.	Total	Addr.	[MHz]	[kHz]	[Hz]	Horizontal	Vertical	LMD-4251TD	LMD-2451TD	LMD-1751W
640 x 480@60Hz*	800	640	525	480	25.175	31.469	59.940	N	N	0	0	0
640 x 480@60Hz	800	640	494	480	23.625	29.531	59.780	Р	N	0	0	0
720 x 400@70Hz*2	900	720	449	400	28.322	31.469	70.087	N	Р	0	0	0
800 x 600@56Hz*	1024	800	625	600	36.000	35.156	56.250	Р	Р	0	0	0
800 x 600@60Hz*	1056	800	628	600	40.000	37.879	60.317	Р	Р	0	0	0
800 x 600@60Hz	960	800	618	600	35.500	36.979	59.837	Р	N	0	0	0
800 x 600@72Hz*	1040	800	666	600	50.000	48.077	72.188	Р	Р	0	0	0
800 x 600@75Hz*	1056	800	625	600	49.500	46.875	75.000	Р	Р	0	0	0
800 x 600@85Hz*	1048	800	631	600	56.250	53.674	85.061	Р	Р	0	0	0
1024 x 768@60Hz*	1344	1024	806	768	65.000	48.363	60.004	N	N	0	0	0
1024 x 768@60Hz	1184	1024	790	768	56.000	47.297	59.870	Р	N	0	0	0
1024 x 768@70Hz*	1328	1024	806	768	75.000	56.476	70.069	N	N	0	0	0
1024 x 768@75Hz*	1312	1024	800	768	78.750	60.023	75.029	Р	Р	0	0	0
1024 x 768@85Hz*	1376	1024	808	768	94.500	68.677	84.997	Р	Р	0	0	0
1152 x 864@75Hz*	1600	1152	900	864	108.000	67.500	75.000	Р	Р	0	0	
1280 x 768@50Hz	1648	1280	791	768	65.125	39.518	49.959	N	Р	0	0	0
1280 x 768@60Hz	1680	1280	795	768	80.125	47.693	59.992	N	Р	0	0	0
1280 x 768@60Hz	1440	1280	790	768	68.250	47.396	59.995	Р	N	0	0	0
1280 x 768@75Hz	1712	1280	802	768	102.875	60.091	74.926	N	Р	0	0	0
1280 x 800@60Hz*1					68.900	48.935	59.969	N	N	0	0	0
1280 x 960@60Hz*	1800	1280	1000	960	108.000	60.000	60.000	Р	Р	0	0	0
1280 x 960@60Hz	1440	1280	988	960	85.250	59.201	59.920	Р	N	0	0	
1280 x 1024@60Hz*	1688	1280	1066	1024	108.000	63.981	60.020	Р	Р	0	0	0
1280 x 1024@60Hz	1440	1280	1054	1024	91.000	63.194	59.957	Р	N	0	0	0
1360 x 768@50Hz	1760	1360	791	768	69.500	39.489	49.922	N	Р	0	0	
1360 x 768@60Hz	1776	1360	768	768	84.625	47.649	59.936	N	Р	0	0	
1360 x 768@60Hz	1520	1360	790	768	72.000	47.368	59.960	Р	N	0	0	
1600 x 1200@50Hz	2144	1600	1235	1200	132.375	61.742	49.994	N	Р		0	
1600 x 1200@60Hz	1760	1600	1235	1200	130.375	74.077	59.981	Р	N		0	
1920 x 1080@50Hz	2544	1920	1112	1080	141.375	55.572	49.975	N	Р	0	0	0
1920 x 1080@60Hz	2080	1920	1111	1080	138.625	66.647	59.988	Р	N	0	0	0

=VESA-DMT =VESA-CVT VCRT N = Negative P = Positive * SOG *1 Anycast Station *2 Matrix

LMD-51 Series DVI-D Input Signal Formats

	LMD-4251TD / LMD-2451TD	LMD-1751W	
Vertical frequency	50.0 Hz to 85.1 Hz		
Horizontal frequency	31.5 kHz to 77.0 kHz		
Dot clock	25.175 MHz to 148,500 MHz 25.175 MHz to 141.00		
Pcture size, phase	Automatically detected by the DE (Data Enable) signal		

LMD-30/10 Series DVI Input Signals

Resolution	Dot clock (MHz)	fH (kHz)	fV (Hz)	LMD-1530W	LMD-2110W / LMD-1510W
720 x 400 70Hz	28.322	31.469	70.087	0	0
800 x 600 56Hz	36.000	35.156	56.250	0	0
800 x 600 60Hz	40.000	37.879	60.317	0	0
1024 x 768 60Hz	65.000	48.363	60.004	0	0
1280 x 768 60Hz	79.500	47.776	59.870	0	-
1280 x 1024 60Hz	108.000	63.981	60.020	-	0

*A DVI conversion cable is required.

Feature Comparison

	PVM-2541A	PVM-1741A	PVM-741
Panel type		OLED	
Picture size (viewable area, measured diagonally)	24.5-inch	16.5-inch	7.4-inch
Resolution (pixels)	1920 x 1080		960 x 540 (QHD)
Aspect ratio		16:9	
Panel drive / Colors		10-bit	
Input interface			
Composite		BNC (x1)	
3G/HD/SD-SDI		BNC (x2)	
HDMI	HDMI (HDMI (x1)
Audio		Stereo mini jack (x1)	
Output interface			
Composite		BNC (x1)*2	
3G/HD/SD-SDI		BNC (x1)*2	
Audio monitor out		Stereo mini jack (x1)	
Speaker (built-in)	1.0 W (r	, , , ,	0.5 W (mono)
Headphone output	X	Stereo mini jack (x1)	
Remote control			
Parallel remote	Modular connector 8-pin (x1)		
Serial remote (LAN)	RJ-45 modular connector (Ethernet) (x1)		
Features			
Signal processing		10-bit	
Auto white balance calibration*3	0		
I/P mode selection	4 modes		
Screen saver	0		
Markers	Aspect, Center, Safety		
Waveform monitor	0		
Vector scope		0	
Camera focus in color		0	
Audio level meter (SDI-embedded audio)		0	
Time code display (SDI-embedded time code)		0	
Color temperature (D65, D93, and user)		0	
Closed caption		0	
Aspect switch (16:9, 4:3)		0	
Scan mode (Normal (0%), Over (5%), Native)		0	
Blue only		0	
H/V delay		0	
Tally		3 colors	
EIA 19-inch rack-mounting	-	Supplied brackets	Optional MB-531
VESA mounting	100 x 10	00 mm	-
Desktop stand	Standard monitor fee	et, Optional SU-561	Standard
DC operation	- 12V		V

*1 DVI signals can be input via the HDMI interface using a conversion cable.
*2 Loop-through, automatic termination.
*3 This works with the combination of a PC and a commercially available calibration tools (Konica Minolta CA-210, CA-310, CS-200, DK-Technologies PM5639/06, X-Rite i1 Pro/i1 Pro2, Photo Research PR-655/670, Klein K-10, and JETI specbos 1211).

	LMD-2341W	LMD-2041W	LMD-1541W	LMD-941W
Panel type		a-Si TFT Acti	ve Matrix LCD	
Picture size (viewable area, measured diagonally)	23-inch	20-inch	15.3-inch	9-inch
Resolution (pixels)	1920 x 1080 (Full HD)	1600 x 900	1280 x 768 (WXGA)	1920 x 1080 (Full HD)
Aspect ratio	16:9	i i	15:9	16:9
Panel drive / Colors		Approx. 16.7	million colors	
nput interface				
Composite		BNO	C (x1)	
3G/HD/SD-SDI			C (x2)	
HDMI		HDMI (x1)*1		HDMI (x1)
Audio			ni jack (x1)	
Output interface				
Composite		BNC	(x1)*2	
3G/HD/SD-SDI			(x1)* ²	
Audio monitor out			ni jack (x1)	
Speaker (built-in)		1.0 W (mono)		0.5 W (mono)
Headphone output			ni jack (x1)	
Remote control				
Parallel remote	Modular connector 8-pin (x1)			
Serial remote (LAN)			nector (Ethernet) (x1)	
Features				
Signal processing](D-bit	
Auto white balance calibration*3			0	
/P mode selection	4 modes			
Power saving mode	0			
Markers	Aspect, Center, Safety			
Waveform monitor	0			
/ector scope			0	
Camera focus in color			0	
Audio level meter (SDI-embedded audio)			0	
Time code display (SDI-embedded time code)			0	
Color temperature (D65, D93, and user)			0	
Closed caption			0	
Aspect switch (16:9, 4:3)			0	
Scan mode (Normal (0%), Over (5%), Native)			0	
Blue only			0	
H/V delay			0	
Tally		3 c	olors	
EIA 19-inch rack-mounting	-	Supplied brackets	Optional MB-534	Optional MB-531
/ESA mounting		100 x 100 mm		-
Desktop stand		Supplied monitor feet		0
	Optional S		Optional SU-561, SU-562	Standard
DC operation	24 V 12 V			

*1 DVI signals can be input via the HDMI interface using a conversion cable.
 *2 Loop-through, automatic termination.
 *3 This works with the combination of a PC and a commercially available calibration tools (Konica Minolta CA-210, CA-310, CS-200, DK-Technologies PM5639/06, X-Rite i1 Pro/i1 Pro2, Photo Research PR-655/670, Klein K-10, and JETI specbos 1211).

	PVM-X300	LMD-4251TD	LMD-2451TD	LMD-1751W	
Panel type	a-Si TFT Active Matrix LCD		a-Si TFT Active Matrix LCD		
Picture size (viewable area, measured diagonally)	30.2-inch	42-inch	24-inch	17-inch	
Resolution (pixels)	4096 x 2160 (True 4K)	1920 x 1080 (Full HD)	1920 x 1200 (WUXGA)	1280 x 768 (WXGA)	
Aspect ratio	17:9	16:9	16:10	15:9	
Panel drive / Colors	RGB 10-bit		Approx. 16.7 million colors		
Input interface					
Composite	-	F	BNC (x1), Optional BKM-227W BNC (x1)		
Y/C	_		-pin (x1), Optional BKM-227W Mini-DIN		
RGB / Component	_		BNC (x3), Optional BKM-229X BNC (x3)	· p (x.)	
SD-SDI	-	Optional BKM-220D BNC (x2)			
HD/SD-SDI	_	Optional BKM-243HS, BKM-244CC BNC (x2)			
3G/HD/SD-SDI	BNC (x4) (3G/HD-SDI)		Optional BKM-250TG BNC (x2)	-/	
HDMI	HDMI (x4)*1		-		
DVI-D	-		DVI-D (x1)		
HD15	_		D-sub 15-pin (x1)		
Audio	_		Phono jack (x2) (L/R)		
External sync	_		BNC (x1), Optional BKM-229X BNC (x1)		
Option slot	_		2 slots		
Output interface			2 0010		
Composite	_	BN	IC (x1)*2, Optional BKM-227W BNC (x1)	*2	
//C	-		in (x1)*2, Optional BKM-227W Mini-DIN		
RGB / Component	-	wiini-Din 4-p	BNC (x3)*2	- hu (v)	
SD-SDI	-		Optional BKM-220D BNC (x1)*2		
HD/SD-SDI	-	Ont	tional BKM-243HS, BKM-244CC BNC (x1))*2	
3G/HD/SD-SDI	BNC (x4) (3G/HD-SDI)*2	Opi)	
External sync	BNC (x4) (36/112-301)	Optional BKM-250TG BNC (x2)*2 BNC (x1)*2			
Audio monitor out	Stereo mini jack (x1)				
	1.0 W (stereo)		Phono jack (x2) (L/R) 1.0 W + 1.0 W (stereo)		
Speaker (built-in)	Stereo mini jack (x1)		1.0 W + 1.0 W (sieleo)		
Headphone output Remote control	Siereo mini juck (x1)	-			
Parallel remote	-		Modular connector 8-pin (x1)		
Serial remote (LAN)		RJ-45 modular connector (Ethernet) (x1))	
Sendi Terrible (LAN)	-	D-sub 9-pin (RS-232C) (x1)			
Features			D 300 7 pin (NO 2020) (x1)		
Signal processing	10-bit		10-bit		
Auto white balance calibration*3	O*8		0		
/P mode selection	-		3 modes*4		
Power saving mode	_		0		
Screen saver	_		-		
Markers	Aspect, Center, Safety		Aspect, Center, Safety		
Waveform monitor	-	_			
Audio level meter (SDI-embedded audio)	0		O*5		
Time code display (SDI-embedded time code)	0		 O*6		
Color temperature (D65, D93, and user)	0		0		
Closed caption	-	ειδ κρ	18 (standard), EIA 708 (optional BKM-24	1400)	
Aspect switch (16:9, 4:3)	-				
Scan mode (Normal (0%), Over (5%), Native)	_	0	0*	7	
Blue only	-	\sim	0		
H/V delay					
		0			
			3 colors		
Tally	-		3 colors	Ontional MR-530	
Tally EIA 19-inch rack-mounting	-		-	Optional MB-530	
Tally EIA 19-inch rack-mounting		400 x 400 mm	3 colors 	100 x 100 mm	
Tally EIA 19-inch rack-mounting VESA mounting	– 200 x 100 mm		- 100 x 100 mm	100 x 100 mm 75 x 75 mm	
fally EIA 19-inch rack-mounting /ESA mounting Desktop stand	– 200 x 100 mm Monitor feet	400 x 400 mm _ _	- 100 x 100 mm Standard	100 x 100 mm 75 x 75 mm Optional SU-561	
ally EIA 19-inch rack-mounting /ESA mounting Desktop stand DC operation	– 200 x 100 mm	-	- 100 x 100 mm Standard 24 V	100 x 100 mm 75 x 75 mm	
Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features	– 200 x 100 mm Monitor feet	- - LMD-4251TD	- 100 x 100 mm Standard 24 V LMD-2451TD	100 x 100 mm 75 x 75 mm Optional SU-561	
Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter	– 200 x 100 mm Monitor feet	- - LMD-4251TD	- 100 x 100 mm Standard 24 V LMD-2451TD O	100 x 100 mm 75 x 75 mm Optional SU-561	
Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter Light-weight circular polarizer 3D glasses	– 200 x 100 mm Monitor feet	– – LMD-4251TD Supplied BK!	- 100 x 100 mm Standard 24 V LMD-2451TD O M-30G (2 sets)	100 x 100 mm 75 x 75 mm Optional SU-561	
Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter Light-weight circular polarizer 3D glasses 3G-SDI level-B input*6	– 200 x 100 mm Monitor feet	- LMD-4251TD Supplied BKI	- 100 x 100 mm Standard 24 V LMD-2451TD O M-30G (2 sets) O	100 x 100 mm 75 x 75 mm Optional SU-561	
Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter Light-weight circular polarizer 3D glasses 3G-SDI level-B input*6 Dual-stream HD-SDI input*6	– 200 x 100 mm Monitor feet	– – LMD-4251TD Supplied BKI	- 100 x 100 mm Standard 24 V LMD-2451TD O M-30G (2 sets) O O	100 x 100 mm 75 x 75 mm Optional SU-561	
Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter Light-weight circular polarizer 3D glasses 3G-SDI level-B input*6 Dual-stream HD-SDI input*6	– 200 x 100 mm Monitor feet	– – LMD-4251TD Supplied BK	- 100 x 100 mm Standard 24 V LMD-2451TD O M-30G (2 sets) O O O	100 x 100 mm 75 x 75 mm Optional SU-561	
Inly Inly Italy It	– 200 x 100 mm Monitor feet	– – LMD-4251TD Supplied BK	- 100 x 100 mm Standard 24 V LMD-2451TD O M-30G (2 sets) O O	100 x 100 mm 75 x 75 mm Optional SU-561	

*1 DVI signals can be input via the HDMI interface using a conversion cable. *2 Loop-through, automatic termination. *3 This works with the combination of a PC and a commercially available calibration tools (Konica Minolta CA-210, CA-310, CS-200, DK-Technologies PM5639/06, X-Rite i1 Pro/i1 Pro2, Photo Research PR-670, Klein K-10, and JETI specbos 1211). *4 With the LMD-4251TD and LMD-2451TD 3D monitors, the I/P mode is fixed to Field Merge mode on 3D mode. *5 The 8-ch audio level meter can be displayed when the optional BKM-250TG input adaptor is installed. *6 An optional BKM-250TG 3G-SDI input adaptor is required. *7 LMD-1751W further support a full scan mode. The full scan and native scan modes work on specific signal formats. *8 Supported by V1.2.

	LMD-1530W	LMD-2110W	LMD-1510W	
Panel type	a-Si TFT Active Matrix LCD			
Picture size (viewable area, measured diagonally)	15.3-inch	21.5-inch	15.6-inch	
Resolution (pixels)	1280 x 768 (WXGA)	1920 x 1080 (Full HD)	1366 x 768 (WXGA)	
Aspect ratio	15:9	16:	9	
Panel drive / Colors		Approx. 16.7 million colors		
nput interface				
Composite		BNC (x1)		
//C		Mini-DIN 4-pin (x1)		
CB / Component		BNC (x3)		
ID/SD-SDI		Optional BKM-341HS BNC (x1)		
IDMI		HDMI (x1)*1		
udio		Phono jack (x3)		
External sync		BNC (x1)		
Dutput interface				
Composite	BNC (x1)*2			
/C	Mini-DIN 4-pin (x1)*2			
RGB / Component	BNC (x3)*2			
xternal sync	BNC (x1)*2			
Audio monitor out	Phono jack (x2)			
Speaker (built-in)	0.5 W (mono)			
Remote control				
Parallel remote		Modular connector 8-pin (x1)		
-eatures				
ignal processing		10-bit		
P mode selection		2 modes		
Aarkers		Aspect, Center, Safety		
Color temperature		High, Low, User		
spect switch (16:9, 4:3)		0		
can mode	0%, 5%, Full			
lue only		0		
ally		3 colors		
IA 19-inch rack-mounting	Optional MB-533 Optional MB-529 Optional MB-535			
ESA mounting	100 x 100 mm			
Desktop stand	Standard			

*1 DVI signals can be input via the HDMI interface using a conversion cable. *2 Loop-through, automatic termination.

Specifications

PVM Series







PVM-2541A

PVM-1741A

PVM-741

Picture Performance					
Panel	OLED panel				
Picture size (diagonal)	623.4 mm	419.7 mm	188.0 mm		
	24 5/8 inches	16 1/2 inches	7 1/2 inches		
Effective picture size (H x V)	543.4 x 305.6 mm	365.8 x 205.7 mm	163.9 x 92.2 mm		
	21 1/2 x 12 1/8 inches	14 1/2 x 8 1/8 inches	6 1/2 x 3 5/8 inches		
Resolution (H x V)	1920 x 1080	pixels (Full HD)	960 x 540 pixels (QHD)		
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 ±3 dB sync negative			
SDI		BNC (x2)			
IDMI		HDMI (x1) (HDCP correspondence)			
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 r	modular connector (Ethernet) (x1) (10BASE-T/100B	ASE-TX)		
DC IN connector	-	XLR-type 4-pin (male) (x1), 12 V DC (output impedance 0.05 ohms or less)		
Output					
Composite	BNC	(x1), loop-through, with 75 ohms automatic termin	ation		
SDI	BNC (x1), output sign	al amplitude: 800 mVp-p ±10%, output impedance:	75 ohms unbalanced		
Audio monitor out		Stereo mini jack (x1)			
peaker (Built-in)	1.0 W	(mono)	0.5 W (mono)		
leadphones output		Stereo mini jack (x1)	· ·		
General					
Power requirement		AC 100 V to 240 V, 50/60 Hz, 1.0 A to 0.5 A,	AC 100 V to 240 V, 50/60 Hz, 0.5 A to 0.3 A,		
	AC 100 V to 240 V, 50/60 Hz, 1.4 A to 0.6 A	DC 12 V, 7.0 A	DC 12 V, 1.9 A		
Power consumption	Approx. 130 W (max.)	Approx. 90 W (AC power supply) (max.)			
	Approx. 88 W (average power consumption in	Approx. 70 W (AC power supply) (average power	Approx. 30 W (max.)		
	the default status)	consumption in the default status)			
Dperating temperature	0°C to 35°C (0°C to 40°C (32°F to 104°F)			
	Recommended: 20°C	to 30°C (68°F to 86°F)	Recommended: 20°C to 30°C (68°F to 86°F)		
Dperating 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%			
Dperating, storage, and transport pressure		700 hPa to 1060 hPa			
Dimensions (W x H x D)	576.0 x 424.8 x 171.4 mm	436.0 x 305.6 x 161.0 mm	222.4 x 183.5 x 161.8 mm		
(with stand)	22 3/4 x 16 3/4 x 6 3/4 inches	17 1/4 x 12 1/8 x 6 3/8 inches	8 7/8 x 7 1/4 x 6 3/8 inches		
	22 3/4 x 10 3/4 x 0 3/4 mones	17 1/4 x 12 1/6 x 0 5/6 inclies	(when AC adaptor is attached)		
Dimensions (W x H x D)	576.0 x 408.8 x 110.0 mm	436.0 x 289.6 x 120.0 mm	222.4 x 166 x 70 mm		
without stand)	22 3/4 x 16 1/8 x 4 3/8 inches	17 1/4 x 11 1/2 x 4 3/4 inches	8 7/8 x 6 5/8 x 2 7/8 inches		
	22 3/4 x 10 1/6 x 4 3/6 menes	17 1/4 × 11 1/2 × 4 3/4 mones	(when AC adaptor is detached)		
lass	10.6 kg	7.2 kg	2.0 kg		
	23 lb 5.9 oz	15 lb 14 oz	4 lb 6 oz		
	12.7 kg	9.3 kg	2.6 kg		
	27 lb 16 oz	20 lb 8 oz	5 lb 12 oz		
	(with an optional SU-561 monitor stand)	(with an optional SU-561 monitor stand)	(When AC adaptor is installed)		
Supplied accessories			AC power cord (1), AC plug holder (1),		
	AC power cord (1), AC plug holder (1),	AC power cord (1), AC plug holder (1),	AC adaptor (1), Handle (1),		
	Before Using This Unit (1), CD-ROM (1)	Mounting bracket (2) (including 4 screws),	Arm mount bracket (1), Screws (4),		
		Before Using This Unit (1), CD-ROM (1)	Operating Instructions (1), CD-ROM (1),		
			Using the CD-ROM manual (1)		

LMD-41 Series				
		and the second se	- More - Control	
	LMD-2341W	LMD-2041W	LMD-1541W	LMD-941W
Picture Performance				
Panel Picture size (diagonal)	584.2 mm	a-Si TFT Activ 508.0 mm	e Matrix LCD 388.6 mm	228.0 mm
	23 inches	20 inches	15 3/8 inches	9 inches
Effective picture size (H x V)	509.1 x 286.4 mm 20 1/8 x 11 3/8 inches	442.8 x 249.1 mm 17 1/2 x 9 7/8 inches	334.1 x 200.5 mm 13 1/4 x 8 inches	198.7 x 111.8 mm 7 7/8 x 4 1/2 inches
Resolution (H x V)	1920 x 1080 pixels (Full HD)	1600 x 900 pixels	1280 x 768 pixels (WXGA)	1920 x 1080 pixels (Full HD)
Aspect	16		15:9	16:9
Colors Viewing angle		Approx. 16.7 89°/89°/89°/89° (typical) (up/		
Input		09 709 709 709 (Iypical) (up/		
Composite		BNC (x1), 1.0 Vp-p =	±3 dB sync negative	
SDI		BNC		
HDMI		HDMI (x1) (HDCP	, ,	
Audio		Stereo mini jack (x1), -5 (
Parallel remote Serial remote		Modular connector 8-pi RJ-45 modular connector (Etherr		
DC in	XLR-type 4-pin (male) (x1), DC 24 V (output impedance 0.05 ohms or less)		ale) (x1), DC 12 V (output impedance)	0.05 ohms or less)
Output				
Composite		BNC (x1), loop-through, with 7		
SDI	BNC (x1),		±10%, Output impedance: 75 ohms ur	balanced
Audio monitor out	1.0.00	Stereo mir		(mono)
Speaker (built-in) Headphones output	1.0 W ((nono) Stereo mir		(mono)
General		Siereo min		
Power requirements	AC 100 V to 240 V, 50/60 Hz, 0.8 A to 0.4 A DC 24 V, 2.4 A	AC 100 V to 240 V, 50/60 Hz, 0.8 A to 0.4 A, DC 12 V, 4.4 A	AC 100 V to 240 V, 50/60 Hz, 0.8 A to 0.4 A DC 12 V, 3.4 A	AC 100 V to 240 V, 50/60 Hz, 0.7 A to 0.4 A DC 12 V, 2.5 A
Power consumption	Approx. 70 W (max.)	Approx. 66 W (max.)	Approx. 50 W (max.)	Approx. 36 W (max.)
Operating temperature		0°C to 35°C (32°F to 95°F)	· • • • • • • • • • • • • • • • • • • •	0°C to 40°C (32°F to 104°F)
· • •	Rec	ommended: 20°C to 30°C (68°F to 86	5°F)	Rec.: 20°C to 30°C (68°F to 86°F)
Operating humidity		30% to 85% (no	,	
Storage and transport temperature		-20°C to +60°C		
Storage and transport humidity Operating, storage and transport pressure		0% to 700 hPa to		
Dimensions (W x H x D) (with stand)		700111010	373.2 x 283.5 x 171.4 mm	
	549.5 x 370.5 x 171.4 mm 21 3/4 x 14 5/8 x 6 3/4 inches (with supplied monitor feet) 549.5 x 467.4 x 269.9 mm 21 3/4 x 18 1/2 x 10 3/4 inches (with optional stand SU-561)	482.6 x 332.8 x 171.4 mm 19 x 13 1/8 x 6 3/4 inches (with supplied monitor feet) 482.6 x 452.0 x 269.9 mm 19 x 17 7/8 x 10 3/4 inches (with SU-561 optional stand)	14 3/4 x 11 1/4 x 6 3/4 inches (with supplied monitor feet) 373.2 x 423.9 x 269.9 mm 14 3/4 x 16 3/4 x 10 3/4 inches (with optional stand SU-561) 373.2 x 319.0 x 264.5 mm 14 3/4 x 12 5/8 x 10 1/2 inches (with optional stand SU-562)	222.4 x 183.5 x 161.8 mm 8 7/8 x 7 1/4 x 6 3/8 inches (when AC adaptor is attached)
Dimensions (W x H x D) (without stand)	549.5 x 352.5 x 100.3 mm 21 3/4 x 14 x 4 inches	482.6 x 314.8 x 100.2 mm 19 x 12 1/2 x 4 inches	373.2 x 265.5 x 70.4 mm 14 3/4 x 10 1/2 x 2 7/8 inches	222.4 x 166.0 x 70.0 mm 8 7/8 x 6 5/8 x 2 7/8 inches (when AC adaptor is detached)
Mass (with stand)	9.4 kg (20 lb 12 oz) (with supplied monitor feet) 11.3 kg (24 lb 15 oz) (with optional stand SU-561)	6.9 kg (15 lb 3 oz) (with supplied monitor feet) 8.8 kg (19 lb 6 oz) (with optional stand SU-561)	5.3 kg (11 lb 11 oz) (with supplied monitor feet) 7.2 kg (15 lb 14 oz) (with optional stand SU-561) 6.8 kg (14 lb 16 oz) (with optional stand SU-562)	2.6 kg (5 lb 12 oz) (when AC adaptor is installed)
Mass (without stand)	9.2 kg (20 lb 4.5 oz)	6.7 kg (14 lb 12 oz)	5.1 kg (11 lb 4.2 oz)	2.0 kg (4 lb 6 oz)
Supplied accessories	AC power cord (1), AC plug holder (1), Monitor foot (2) (including 6 screws), Before Using This Unit (1), CD-ROM (1)	AC power cord (1), AC plug holder (1), Mounting bracket (2) (including 8 screws), Monitor foot (2) (including 6 screws), Before Using This Unit (1), CD-ROM (1)	AC power cord (1), AC plug holder (1), Monitor foot (2) (including 6 screws), Before Using This Unit (1), CD-ROM (1)	AC power cord (1), AC plug holder (1), AC adaptor (1), Handle (1), Arm mount bracket (1), Screws (4), Operating Instructions (1), CD-ROM (1), Using the CD-ROM manual (1)

PVM-X300



PVM-X300

Picture Performance		
Panel	a-Si TFT Active Matrix LCD	
Picture size (diagonal)	767.5 mm	
	30.2 inches	
Effective picture size (H x V)	678.9 x 358.0 mm	
	26 3/4 x 14 1/8 inches	
Resolution (H x V)	4096 x 2160 pixels	
Aspect	17:9	
Panel drive	RGB 10-bit	
Viewing angle (panel specification)	89°/89°/89°/89° (typical) (up/down/left/right contrast > 10:1)	
Input		
SDI	BNC (x4)	
HDMI	HDMI (x4) (HDCP correspondence)	
Output		
SDI	BNC (x4)	
	Output signal amplitude: 800 mVp-p ±10%	
	Output impedance: 75 Ω unbalanced	
Audio monitor	Stereo mini jack (x1)	
Speaker (built-in)	1.0W (stereo)	
Headphone	Stereo mini jack (x1)	
General		
Power requirements	AC 100 V to 240 V, 2.4 A to 1.2 A, 50/60 Hz	
Power consumption	Approx. 200 W (max. without mounting the option)	
	Approx. 230 W (max. with the option mounted)	
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)*	754 x 457 x 120 mm	
	29 3/4 x 18 x 4 3/4 inches	
	754 x 475 x 205 mm (with monitor feet)	
	29 3/4 x 18 3/4 x 8 1/8 inches (with monitor feet)	
Mass 17 kg		
	37 lb 8 oz	
Supplied accessories	AC power cord (1), AC plug holder (1), Operating instructions (1), CD-ROM (1)	

 * The values for dimensions are approximate.



 Supplied accessories
 50 lb 11 oz
 24 lb 4 oz
 13 lb 14 oz

 Supplied accessories
 AC power cord (1), AC plug holder (1), 3D glasses (including case) (2), L/R labels (1), Operating Instructions (1), CD-ROM (1), Using the CD-ROM Manual (1)
 AC power cord (1), AC plug holder (1), Operating Instructions (1), CD-ROM (1), Using the CD-ROM Manual (1)
 Ac power cord (1), AC plug holder (1), Operating Instructions (1), CD-ROM (1), Using the CD-ROM Manual (1)

LMD-30/10 Series







LMD-1530W

LMD-2110W



Picture Performance					
Panel		a-Si TFT Active Matrix LCD			
Picture size (diagonal)	390.0 mm	547.0 mm	395.0 mm		
	15 3/8 inches	21 5/8 inches	15 5/8 inches		
Effective picture size (H x V)	334.0 x 200.0 mm	477.0 x 268.0 mm	344.0 x 194.0 mm		
	13 1/4 x 7 7/8 inches	18 7/8 x 10 5/8 inches	13 5/8 x 7 3/4 inches		
Resolution (H x V)	1280 x 768 pixels (WXGA)	1920 x 1080 pixels (Full HD)	1366 x 768 pixels (WXGA)		
Aspect	15:9	10	6:9		
Colors		Approx. 16.7 million colors			
Viewing angle	89°/89°/89°/89° (typical)				
	(up/down/left/right contrast > 10:1)	(horizontal/vertice	al contrast > 10:1)		
Input					
Composite		BNC (x1), 1.0 Vp-p ±3 dB sync negative			
Y/C		Mini DIN 4-pin (x1)			
		Y: 1.0 Vp-p ±3 dB sync negative			
	C: 0.286 Vp-p ±3	3 dB (NTSC burst signal level), 0.3 Vp-p ±3 dB (PAL	burst signal level)		
RGB, Component		BNC (x3)			
		0.7 Vp-p ±3 dB (Sync On Green, 0.3 Vp-p sync neg			
	Componen	t: 0.7 Vp-p ±3 dB (75% chrominance standard colo	r bar signal)		
HDMI		HDMI (x1) (HDCP correspondence)			
Audio		Phono jack (x2), -5 dBu 47 kilohms or higher			
	OPTION AUDIO IN: Phono jack (x1), -5 dBu 47 kilohms or higher				
External sync	BNC (x1), 0.3 Vp-p to 4 Vp-p negative polarity binary				
Option in connector	D-sub 9-pin (x1), female				
Parallel remote	Modular connector 8-pin (x1) (pin-assignable)				
Output					
Composite	BNC (x1), loop-through, with 75 ohms automatic termination				
Y/C	Mini DIN 4-pin (x1), loop-through, with 75 ohms automatic termination				
RGB, Component		(x3), loop-through, with 75 ohms automatic termin			
External sync	BNC	(x1), loop-through, with 75 ohms automatic termin	ation		
Audio monitor out		Phono jack (x2), loop-through			
Speaker (built-in)		0.5 W (mono)			
General					
Power requirements	AC 100 V to 240 V, 50/60 Hz, 1.0 A to 0.5 A	AC 100 V to 240 V, 50/60 Hz, 1.3 A to 0.6 A	AC 100 V to 240 V, 50/60 Hz, 0.7 A to 0.4 A		
Power consumption	Approx. 50 W (max.)	Approx. 69 W (max.)	Approx. 40 W (max.)		
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)	372.0 x 336.0 x 264.0 mm	515.0 x 403.0 x 264.0 mm	378.0 x 325.6 x 264.4 mm		
	14 3/4 x 13 1/4 x 10 1/2 inches	20 3/8 x 15 7/8 x 10 1/2 inches	15 x 12 7/8 x 10 1/2		
Dimensions (W x H x D) (without stand)	372.0 x 288.0 x 100.0 mm	515.0 x 355.0 x 86.0 mm	378.0 x 280.6 x 90.0 mm		
	14 3/4 x 11 3/8 x 4 inches	20 3/8 x 14 x 3 1/2 inches	15 x 11 1/8 x 3 5/8		
Mass	5.9 kg	8.6 kg	5.8 kg		
Marca (dilla a di atau di	13 lb	18 lb 15 oz	12 lb 13 oz		
Mass (without stand)	4.2 kg	6.9 kg	4.1 kg		
Compliant and an and a second	9 lb 4 oz	14 lb 19 oz	9 lb 6 oz		
Supplied accessories	AC power cord (1), AC plug h	nolder (1), Operating Instructions (1), CD-ROM (1), L	USING THE CU-ROM Manual (1)		

Optional Accessories



BKM-250TG 3G/HD/SD-SDI Input Adaptor (for LMD-51 Series)



BKM-244CC HD/SD-SDI Closed Caption Adaptor (for LMD-51 Series)



BKM-243HS HD/SD-SDI Input Adaptor (for LMD-51 Series)



BKM-220D SD-SDI 4:2:2 Input Adaptor (for LMD-51 Series)



BKM-229X Analog Component Adaptor (for LMD-51 Series)



BKM-227W NTSC/PAL Input Adaptor (for LMD-51 Series)



SU-561 Monitor Stand (for PVM-2541A, PVM-1741A, LMD-1751W, LMD-2341W, LMD-2041W, and LMD-1541W)



SU-562 Monitor Stand (for LMD-1541W)



MB-529 Mounting Bracket (for LMD-2110W)



MB-530 Mounting Bracket (for LMD-1751W)



MB-531 Mounting Bracket (for PVM-741 and LMD-941W)



MB-532 Mounting Panel (for PVM-741 and LMD-941W)



MB-534 Mounting Bracket (for LMD-1541W)



VF-510 ENG Kit (Viewing Hood, Carrying Handle and Connector Protector) (for PVM-741 and LMD-941W)



BKM-30G 3D Glasses (for LMD-4251TD and LMD-2451TD)



3D Glasses (for LMD-4251TD and LMD-2451TD)



BKM-341HS HD/SD-SDI Input Adaptor (for LMD-30/10 Series)



MB-533 Mounting Bracket (for LMD-1530W)



MB-535 Mounting Bracket (for LMD-1510W)

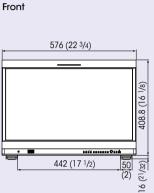


BKM-XP1 4K SxS Player (for PVM-X300)

Dimensions

PVM Series





436 (17 1/4)

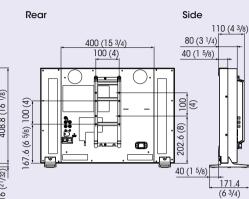
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2

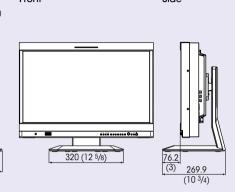
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(2)

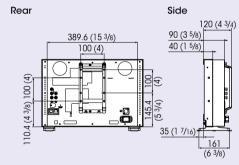


Unit: mm (inches) PVM-2541A with the optional SU-561 stand Side Front

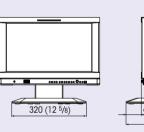


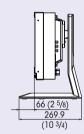
PVM-1741A

Front

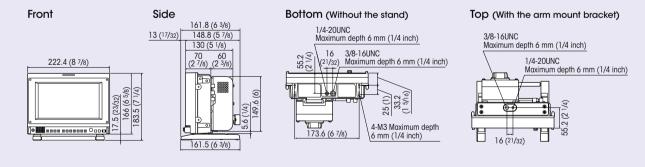


PVM-1741A with the optional SU-561 stand Front Side

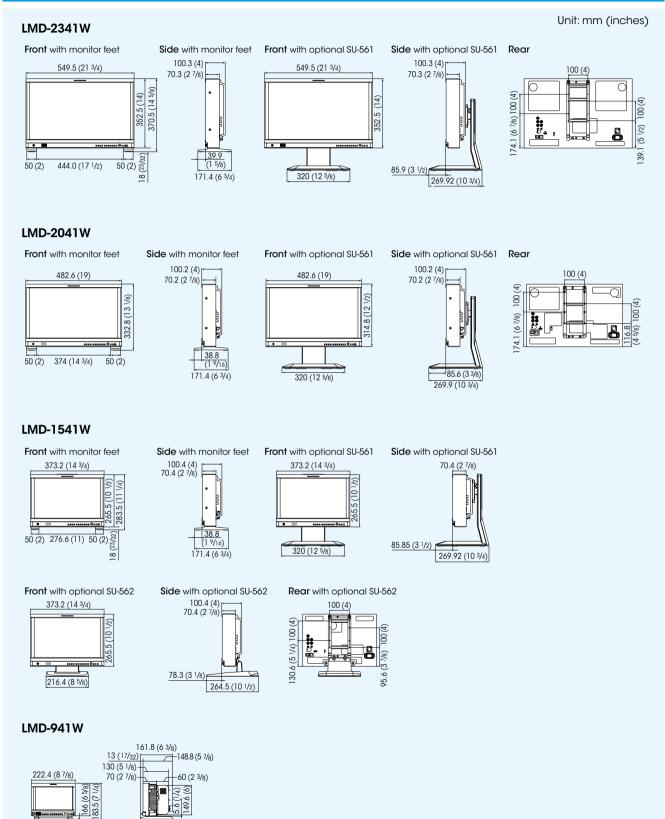




PVM-741



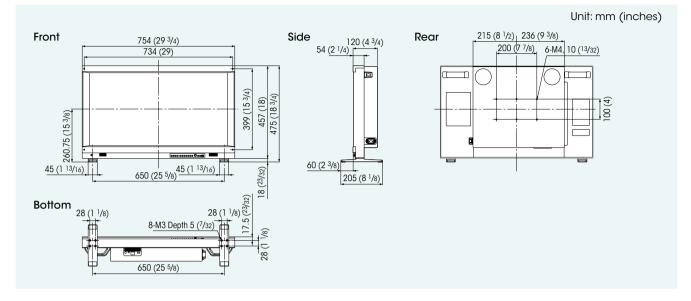
LMD-41 Series



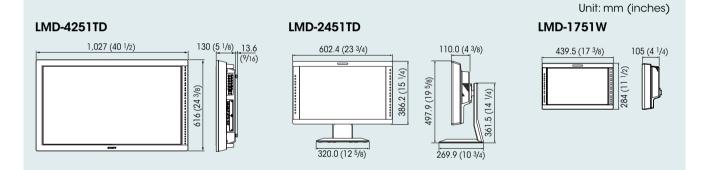
161.5 (6 3/8)

17.5 (23/32)

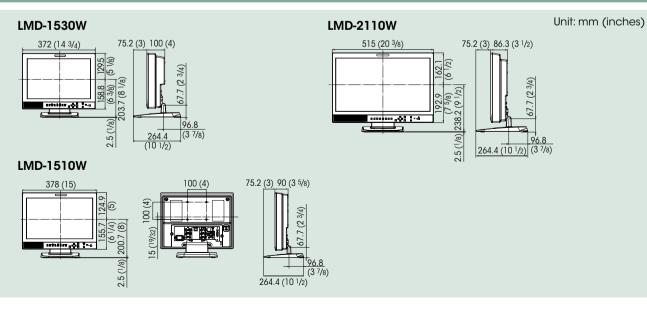
PVM-X300



LMD-51 Series



LMD-30/10 Series



TRIMASTER EL

OLED Master Monitor

BVM-E / BVM-F Series - Master Monitors for Critical picture evaluation

BVM-E Series for High-end Cinema / Broadcast Applications



BVM-E250A



BVM-E170A

BVM-F Series for Broadcast Applications



BVM-F250A



BVM-F170A



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