Professional Monitor Family Catalog 2011 SONY PVM Series OLED / LMD Series LCD Monitor make.believe







Broadening the Line-up - Sony Expands its Range of OLED*1 and **LCD Professional Monitors**

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

Sony is now proud to add to its professional monitor line-up two models of organic lightemitting diode (OLED) picture monitors: the 24.5-inch^{*2} PVM-2541 and 16.5-inch^{*3} PVM-1741. These TRIMASTER EL[™] Series monitors inherit technology from BVM-E and BVM-F Series OLED master monitors, and offer top-end picture monitor quality.

The PVM-2541 and PVM-1741, as well as the PVM-740, incorporate Sony's OLED panel with unique Super Top Emission OLED technology, and deliver superb picture quality outstanding black performance, quick response with virtually no motion blur, and a wide colour gamut...capabilities that are unachievable with LCD technology.

Along with these brand-new OLED picture monitors, Sony continues to enhance its widely acclaimed professional LCD monitor line-up - the LMD Series. The latest additions include LMD-51 Series 3D monitors (LMD-4251TD^{*4} and LMD-2451TD^{*5}), LMD-41 Series slim-bezel compact-design monitors (LMD-2341W^{*6}, LMD-2041W^{*7}, and LMD-1541W^{*8}), and LMD-10 Series excellent cost-to-performance entry-level monitors (LMD-2110W*⁹ and LMD-1510W^{*10}).

This broad and powerful professional OLED and LCD monitor line-up continues to meet the broadest range of application needs, from broadcast and post-production, to surveillance and demanding semi-professional applications.

- *2 623.4 mm viewing area, measured diagonally.

^{*1} Organic light-emitting diode (OLED).

^{*3 419.7} mm viewing area, measured diagonally. *4 42-inch (1067 mm), *5 24-inch (613.2 mm), *6 23-inch (584.2 mm), *7 20-inch (508 mm), *8 15.3-inch (388.6 mm), *9 21.5-inch (547 mm), *10 15.6-inch (395 mm) viewing areas, measured diagonally.

Sony's Professional Monitor Line-up





Sony's OLED - Self-emitting Display Device

Sony's OLED 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 colour 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 colour filters. This cavity structure uses an optical resonance effect to enhance colour purity and improve light-emission efficiency. In addition, the colour filter of each RGB also enhances the colour 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 OLED processor - Dedicated to eliciting full performance.

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

Dedicated Sony's OLED 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-740 is equipped with a different processing technology (ChromaTRU™).

Accurate gamma control

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



Superb uniformity control

Sony's OLED 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 Sony's OLED 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, Sony's OLED is capable of reproducing accurate black with each individual pixel, enabling users to evaluate each picture image faithfully to the signal.





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



LCD*



Sony's OLED*

* Simulated images

Accurate Colour Reproduction

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





* Colour gamut images based on Sony's test results

Quick Response with Virtually No Motion Blur

The Sony's OLED grey-to-grey 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.





IMASTER technology is a desig

LCD*

IMASTER technology is a desig Sony's OLED*

* Simulated images

Mide Dynamic Range

Sony's OLED technology has the ability to control each individual pixel from an absolute black to peak white. Each pixel can display the entire dynamic range of the image with no interference to the adjacent pixels.



OLED Picture Monitor

TRIMASTER <mark>EL</mark>

For Critical Picture Viewing



Groundbreaking Picture Performance with Sony's OLED Technologies

Sony's 24.5-inch, 16.5-inch, and 7.4-inch Super Top Emission OLED display panels provide unparalleled black performance, a wide colour gamut, and quick pixel response with virtually no motion blur.

By combining Sony's OLED display panel (Full HD^{*1}, 10-bit driver) and Sony's OLED processing technologies^{*2}, the PVM Series of OLED monitors deliver exceptional picture quality never before seen in conventional picture monitors.

*1 The PVM-740 delivers Quarter HD (960 x 540) resolution.

*2 The PVM-740 is equipped with the ChromaTRU processing technology.

Main Features

Sony's OLED with Full HD* and 10-bit RGB

The PVM-2541 and PVM-1741 OLED panel with Full HD resolution (1920 x 1080) and a 10-bit RGB driver, together with Sony's Super Top Emission OLED display panel, creates lifelike and smoother-than-ever gradation from dark to bright portions of a scene such as in a sunrise or sunset. * The PVM-740 delivers Quarter HD (960 x 540) resolution.



8-bit (256-levels) image*

10-bit (1024-levels) image* * Simulated images

Superb Black Performance

Thanks to Sony's OLED system, deep blacks can be accurately displayed and the black portion of an image is not degraded.



Black performance image

* Simulated image

Mide Colour Gamut and Highpurity Deep Colour Reproduction

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



PVM Series OLED monitors colour aamut

Quick Response with Blur-free Motion

Because the OLED electroluminescent layer inherently responds to any electrical current input, it emits light immediately. By this mechanism, excellent quick response characteristics can be achieved on fast-motion images. This efficient blur-free, fast response benefits a variety of applications and scenes, e.g., in sports broadcasting, monitoring of camera panning, and text scrolling.



Superb Uniformity

The PVM-2541 and PVM-1741 monitors incorporate a newly developed OLED process to bring out the full performances of the Sony's OLED panels.

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

Waveform Monitor, Audio Level Meter, and Time Code Display

Input signal waveform with a 2-channel audio level meter can be displayed on screen. When an SDI interface is connected, the embedded audio level can be displayed on screen with an 8-channel audio level meter. Time code embedded on SDI signals can be displayed on screen. Users can select either LTC or VITC.

* The Audio Level Meter function works only when receiving SDI-embedded audio signals.



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



The 8-channel audio level meter*

* Simulated images

I/P Mode Selection

The PVM-2541 and PVM-1741 monitors provide four 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).

INTRA-FIELD:

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.

FIELD MERGE:

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

LINE DOUBLER:

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



LINE DOUBLER I/P mode image

Lightweight Compact Design - Flexible Mounting For Picture **Monitoring**

The PVM-2541 and PVM-1741 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-1741 only is available with standard rack-mount brackets.







PVM-2541 front

PVM-2541 rear

PVM-2541 side



PVM-1741 front

PVM-2541

standard



PVM-1741 rear





PVM-2541 without stand

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-2541 and PVM-1741 monitors are equipped with built-in standard input interfaces: 3G/HD/SD-SDI (x2), HDMI (HDCP) input (x1) and composite (x1).







PVM-2541 with optional SU-561





Auto White Balance

The PVM-2541 and PVM-1741 as well as PVM-740 monitors employ a software-based white balance calibration function, which is called "AutoWhiteBalance". Combined with a PC and commercially available calibration tool*, this function enables simple adjustment of the monitor's white balance.

* The X-Rite i1 (Eye-one) Pro. In addition, the PVM-2541 and PVM-1741 will support Konica Minolta CA-210/CA-310/CS-200, and DK-Technologies PM5639/06.





PVM-1741 with white balance probe (X-Rite i1 (Eye-one) Pro)

"AutoWhiteBalance" GUI image

External Remote Control Function

The PVM-2541 and PVM-1741 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.*

* The PVM-2541 and PVM-1741 do not support all BKM-16R functions.

Input Signals

PVM-2541 / PVM-1741 / PVM-740 Signal Formats

	Signal standard							
System		SDI (3G)	/HD/SD)	HDM				
	Andiogue composite	PVM-2541 / PVM-1741	PVM-740					
575/50i (PAL)	0	0	0	0				
480/60i (NTSC)*1	0	0	0	0				
576/50p	-	-	-	0				
480/60p*1	-	-	-	0				
640 x 480/60p*1	-	-	-	0				
1080/24PsF*1*2	-	O*3	0	-				
1080/25PsF*2	-	O*3	0	-				
1080/30PsF*1*2	-	O*3	-	-				
1080/24p*1	-	O*3	0	0				
1080/25p	-	O*3	0	0				
1080/30p*1	-	O*3	0	0				
1080/50i	-	O*3	0	0				
1080/60i*1	-	O*3	0	0				
1080/50p	-	O*4	O*4	O*6				
1080/60p*1	-	O*4	O*4	O*6				
720/24p*1	-	O*5	-	-				
720/25p	-	O*5	-	-				
720/30p*1	-	O*5	-	-				
720/50p	-	O*3	0	O*6				
720/60p*1	-	O*3	0	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-2541 and PVM-1741 can accept DVI signals via the HDMI interface using a conversion cable.

PVM-2541 / PVM-1741 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	

• 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.



7.4-inch OLED panel

OLED Portable Picture Monitor - PVM-740

The PVM-740 is a portable monitor in the PVM Series of OLED monitors. It packs high performance and a variety of features and functions in its robust and compact body.

- Sony's Super Top Emission OLED panel with a 10-bit driver
- Deep black and high contrast, high-purity deep colour reproduction, and quick response with virtually no motion blur
- Wide colour gamut and accurate gamma supporting broadcast standards (SMPTE-C, EBU, and ITU-R BT.709)
- Audio level meter and waveform monitor
- Screen saver function
- Silent mode
 - External remote function

Robust, light-weight, and compact body

Incorporating a light-weight and compact aluminium-diecast body with a detachable AR-coated protection panel, this model is flexible enough to change style according to user requirements: with or without stand (which is easily detachable), tilted on a stand (15-degree slant), rack-mounted, or set on a camera pedestal.



PVM-740

with supplied

stand tilt (15°)





PVM-740 installed in the optional MB-531 19" mounting bracket with MB-532 mounting panel

Screw holes for camera pedestal

With 3/8-inch and 1/4-inch screw holes on its base, the PVM-740 can be installed in a camera pedestal.



PVM-740 rear and bottom

Detachable AR (anti-reflection) -coated protection panel

AR-coated protection panel keeps the OLED panel surface from scratch and keeps reflection from ambient light to a minimum.



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.



PVM-740 with VF-510 ENG Kit

Camera focus function

The PVM-740 can control and increase the aperture level of a video signal, and display images on the screen with sharpened edges to help camera focus operation. This camera focus function can even be enhanced when combined with native scan mode.



Flip function

The PVM-740 monitor has a feature to flip a picture without frame delay, horizontally, vertically, or horizontally and vertically. This feature is useful and beneficial - for example, when using a 3D image acquisition system with a 3D rig camera. This allows for much simpler system integration and greater cost efficiency.



Input versatility

The PVM-740 is equipped with built-in standard input interfaces: 3G/HD/SD-SDI (x1), composite (x1), and HDMI input (x1).





LMD Series Technology & features



10-bit Signal Processing

LMD-51 LMD-40/41 LMD-30/10

All LMD Series monitors, from the high-grade LMD-51 Series to the entry-level LMD-30/10 Series, incorporate high-purity RGB colour filters and a 10-bit signal processing engine to offer stunning 109% peak white reproduction without clipping and a smooth grey scale along CRT-like gamma.





10-bit (1024-levels) image*

8-bit (256-levels) image*

* Simulated images



In this diagram, the raw light output of a LMD-51 Series and LMD-40/41 Series LCD panel is compared with that of a CRT from Sony using a CIE u' v' chart, which enables evaluation of light output from display devices. The triangular areas show their different colour reproduction capabilities (Colour Space). The green and red dots indicate the colour of light output from the LMD-51 Series and LMD-40/41 Series LCD panel and from the CRT for certain RGB input signals. Note that the same light colour is not obtained from the same video input. The ChromaTRU process, on the other hand, reproduces consistent light output extremely close to that of a CRT.



Image of Auto white balance calibration

ChromaTRU Colour Processing

Chroma**TRU** LMD-51 LMD-40/41

For an extra level of colour-reproduction accuracy, every LCD panel used in LMD-51 Series and LMD-40/41 Series monitors is precisely colour calibrated at the factory, providing characteristics consistent with those of CRT displays. The colourimetry of an LCD display, by nature, can exhibit inaccurate R, G, B colour coordinates and unbalanced R, G, B gamma curves, which can make precise colour matching between multiple monitors a challenge. These are also the primary reasons why LCD colour tone can differ slightly from CRT tone. LMD-51 Series and LMD-40/41 Series monitors solve this problem by precisely calibrating each LCD panel's light output so that the R, G, B colour coordinates are virtually the same as those of a CRT monitor. A second calibration is further applied so that white balance is maintained at a consistent colour temperature throughout all grey scale levels. The result of these precise calibrations is colour reproduction reminiscent of Sony's CRT displays.

Mhite Balance Calibration Function

LMD-51 LMD-40/41

LMD-51 Series and LMD-40/41 Series monitors are adjusted at the factory to achieve optimized colour, brightness, and gamma prior to shipment. LCD monitor performance, however, typically changes over time and requires regular recalibration to maintain its original performance. These monitors employ a software-based white balance calibration function, which is called LMD_AutoWhiteBalance. Combined with a PC and commercially available calibration tool*, this function enables simple adjustment of the monitor's white balance.

* The X-Rite i1 (Eye-one) Pro.

Extremely Wide Viewing Angle with IPS Panels

LMD-51 LMD-40/41 LMD-30

LMD-51 Series, LMD-40/41 Series, and LMD-1530 monitors offer stable images when viewed from various angles: both horizontally and vertically, with virtually no reduction in picture contrast, colour saturation, or hue shift. 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.



* Simulated image

Sophisticated I/P Conversion and I/P Mode Selection

LMD-51 LMD-40/41 LMD-30/10

LMD Series monitors incorporate a sophisticated I/P conversion and provide selectable I/P modes so that users can select the most suitable mode for each purpose:

INTER-FIELD¹

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

■ FIFI D MERGE*

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

LINE DOUBLER:

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

* Is not supported with LMD-30/10 Series.



3G-SDI Input

LMD-40/41 MD-51

LMD-51 Series and LMD-40/41 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. When an upgrade to these 1080/p systems is required, this single-link 3G-SDI system is an ideal, future-proof solution.

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



LMD-2451W with the **BKM-250TG 3G-SDI board**



Parallel remote / Serial remote

> LMD-2341W / LMD-2041W / LMD-1541W Interfaces

External Remote Control Function

Serial Remote

LMD-51 LMD-40/41

LMD-51 Series and LMD-41 Series have an external remote control capability for input/output signal selection and adjustment of various items via Ethernet (10BASE-T/100BASE-TX) connection.

Up to 32 monitors and up to four control units can be connected via Ethernet connection and controlled remotely on the network. Also these monitors support some functions of the BKM-16R - an optional remote control unit for BVM-L/ PVM-L/BVM-E Series monitors - such as the power on/off switch and the Input Select function.*

* The LMD-51 Series and LMD-41 Series monitors do not support all BKM-16R functions

Parallel Remote

LMD-51 LMD-40/41 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.

Power-saving Mode

LMD-51 LMD-40/41

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.

LMD-51 Series - High-grade LCD Monitors

ChromaTRU



Model Types

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

- 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 colour processing technology
- Auto white balance calibration function for colour 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 probe X-Rite i1 (Eye-one) Pro.

*3 The LMD-4251TD does not support this.



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 colour filters, allowing the reproduction of colours with stunning depth and saturation to create highly natural images.

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

10-bit signal processing and ChromaTRU colour matching technology ChromaTRU

Added to the high-grade LCD panels, a 10-bit signal processing and ChromaTRU technology offer a smooth grey 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 this function.





* 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.

Colour temperature

Colour 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, grey, and dark grey.

Users can also select either a black or grey 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	Ye	es			
Safety Area	80%, 85%, 88%, 90%, 93%				





4:3 aspect marker image 16:9 aspect marker image



Safety area marker image

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-2451W / 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-2451W, LMD-2451TD, 12 V: LMD-1751W
- Setup Level for Analogue Component and NTSC signal
- Sub Control on Contrast, Chroma, Phase, and Brightness
- Blue-Only Mode
- Monochrome Mode
- Auto Chroma / Phase Setup
- Three-colour 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 analogue 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-4251TD

LMD-2451TD

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 flicker-free 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 alasses 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.

Vertical Viewing Angle in 3D Mode





LMD-2451TD (24-inch^{*2}). These monitors are supplied with the BKM-30G circular-polarizer 3D glasses as a standard accessorv.*3

- *1 1067-mm viewing area, measured diagonally.
- *2 613-mm viewing area, measured diagonally.
- *3 Also available BKM-31G clip-on type 3D alasses as an option.

LMD-51TD Series – 3D Monitors



* 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*4	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*3	0	0	0	-	-	
720/60P*2*3	0	0	0	-	-	
1920 x 1080/50Hz	-	-	-	0	-	
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.

ÌВ

*3 720/50P and 60P signals are displayed as a native scan in a window pattern.

*4 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} – 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.^{*2} 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.

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

Disparity simulation [3D mode]^{*1} Either the left or right signal phase (or both phases) of a 3D image can be shifted horizontally. In this way, users can simulate the amount of 3D image parallax.



Difference display*4

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^{*4}

The primary function is to display arbitrary multiple numbers of vertical lines for users to review the overall parallax of captured images. Users can set the numbers of vertical lines at 0.1% (2-pixel) pitch. In addition, this function provides display of horizontal lines, which helps users to set 3D cameras on a rig system.



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

Disparity ruler*4

This function works to precisely measure disparity by setting L-line and R-line to L/R objects respectively on the screen. The amount of disparity can be measured both in 0.1% steps and 2-pixel pitch steps.



Checker board [2D mode] *1

Left and right input signals are displayed in a grid pattern on screen – divided into 9 blocks vertically and 16 blocks horizontally. By comparing adjacent images, users can recognize a difference in brightness and colour setting of the left and right images.



L/R switch [2D mode] *3

Left and right signals can be swapped in a moment without inserting black frames, simply by manually pushing a function key. This instant-swap capability enables users to compare whole images and check for any sense of incongruity or for unnatural images. Automatic sequential mode is also available.*⁴



3D/2D colour matching function (3D offset adjustment) *4

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

Non-squeezed side-by-side signals display [3D mode]^{*4}

Left and right non-squeezed side-byside signals can be displayed.



Dual time code display [3D modes]^{*4}

Left and right channels' individual time codes can be displayed on the screen. The display area is selectable either to the upper or lower section of the screen.



Upper side display

* Time code displays and images are simulated

Lower side display

Flip H [3D mode]^{*1} 😁

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.

As illustrated below, when a delay in signal processing occurs, both the left and right signals synchronize to the delayed signal.



Delayed for synchronization

Horopter check [3D mode]^{*2}

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

Channel-assign information about the payload ID data of input signals is displayed on the menu screen. This tells users how the left and right channels are assigned in the menu.

*1 3G-SDI (level-B) or HD-SDI (dual-stream or side-by-side) signals are input via the BKM-250TG input adaptor.

*2 Either 3G-SDI (level-B) or dual-stream HD-SDI signals are input via the BKM-250TG input adaptor.

*3 Dual-stream HD-SDI signals are input via the BKM-250TG input adaptor.

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

LMD-40/41 Series - Slim-bezel LCD Monitor

ChromaTRU



LMD-2341W

LMD-2041W

LMD-1541W

LMD-940W

Model Types

	LMD-2341W	LMD-2041W	LMD-1541W	LMD-940W	
Panel size (diagonal)	23-inch	20-inch	15.3-inch	9.4-inch	
Resolution (pixels)	1920 x 1080 (Full HD)	1600 x 900	1280 x 768 (WXGA)	800 x 480 (WVGA)	
Aspect ratio	16:9	16:9	15:9	15:9	
Dosktop stand	Ontional SIL 561	Supplied	Optional SU-561	Supplied	
Deskiop sidila	Ophonal 30-301	Optional SU-561	Optional SU-562	Supplied	
EIA 19-inch rack-mount	N/A	Supplied brackets	Optional MB-534	Optional MB-531	
VESA mounting (mm)	100 x 100	100 x 100	100 x 100	N/A	

- Slim-bezel and compact-design
- All-in-one features
- Multi-format inputs including 3G-SDI inputs
- Suitable for monitor wall installations
- Waveform monitor, Audio level meter, and Time code display^{*1}
- IMD (in-monitor display)*2

Superb picture performance and colour consistency with 10-bit signal processing and ChromaTRU technology

- Auto white balance calibration function for colour consistency^{*3}
- Wide viewing angle with an IPS panel
- Variety of marker settings
- Native scan framing function*4

*1 Time code display is not supported with the LMD-940W.

*3 The LMD-2341W, LMD-2041W, and LMD-1541W only. *3 This function uses a PC and the commercially available calibration probe X-Rite i1 (Eye-one) Pro.

*4 The LMD-2041W and LMD-1541W only.



All-in-one Features in Compact Design

Slim bezel, compact design for monitor-wall Installation

Incorporating a lightweight and robust aluminium 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.



Desk-top editing and office viewing

LMD-2041W is supplied with a standard stand. 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-2041W with supplied stand*

LMD-1541W with SU-562*

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

In-monitor display (IMD) function

The LMD-2341W, LMD-2041W, and LMD-1541W 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 colour and the tally lamp colour are separately selectable either in a commanded colour or in one of eight preinstalled colours.*2

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

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

The input signal's waveform with a 2-channel audio level meter can be displayed on screen. When an SDI interface is connected, the embedded audio level can be displayed on screen with an 8-channel audio level meter. A time code superimposed on SDI signals can be displayed on screen. Users can select either LTC or VITC.

* The Audio Level Meter function works only when receiving SDI-embedded audio signals.





The IMD, waveform monitor, The IMD. 8-channel audio 2-channel audio level meter, and time code display³

level meter, and time code display. '

* Simulated images

External remote control function

The LMD-2341W, LMD-2041W, and LMD-1541W have an external remote control capability for input/output signal selection and adjustment of various items via Ethernet (10BASE-T/100BASE-TX) connection. Up to 32 monitors and up to four control units can be connected via Ethernet connection and controlled remotely on the network.

Easy-to-use control panel

A rotary-type switch and seven function-assignable buttons allow users speedy and intuitive operation. Operation buttons with LED indicators enable error-free operation, even in dark environments.* The control panel of the LMD-2341W can be covered with a supplied control panel cover to simplify its appearance on a monitor wall.

* LED lights can be switched on/off.



Control panel with LED lights-on

The LMD-2341W with a control panel cover

Ideal for CRT monitor replacement

The LMD-1541W and the PVM-14L2, Sonv'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.



Superb Picture Performance and Convenient Features

High-quality LCD panels and processing technology

The LMD-2341W (23-inch) full-HD resolution (1920 x 1080 pixels), LMD-2041W (20-inch) (1600 x 900 pixels), and LMD-1541W (15.3-inch) WXGA resolution (1280 x 768 pixels) high-performance LCD panels reproduce lifelike precise images and accurate colour. Incorporating an IPS panel, the LMD-2341W, LMD-2041W, and LMD-1541W offer a wide viewing angle.

A combination of Sony's unique ChromaTRU colour matching technology and 10-bit signal

ChromaTRU

processing delivers a stunning smooth grey scale, emulating the colours and gammas of broadcast-standard CRT monitors. Users can select the required colour space within this gamut. In addition, ChromaTRU technology provides these monitors with colour consistency in a multi-monitor system, and offers the best solution for a monitor-wall installation.





8-bit (256-levels) image*

10-bit (1024-levels) image* * Simulated images

Auto white balance calibration

This function ensures simple adjustment of each monitor's white balance. This function works with the combination of a PC and a commercially available calibration tool (X-Rite i1 (Eye-one) Pro).



A variety of marker settings

LMD-2341W, LMD-2041W, and LMD-1541W 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

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, topright, 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)

Input versatility

The LMD-2341W, LMD-2041W, and LMD-1541W are equipped with buil-in standard input interfaces: two SDI (3G/HD/SD-SDI), one composite, and one HDMI input.



The LMD-2341W, LMD-2041W, and LMD-1541W connector panel

Other features

- Key Inhibit function
- I/P mode selection
- H/V Delay function
- Blue Only mode
- Auto chroma/phase setup
- Power-saving function
- DC operation LMD-2341W: 24 V
- LMD-2041W and LMD-1541W: 12 V
- VESA standard mounting (100 x 100 mm pitch)
- EIA 19-inch standard rack-mount with the supplied mounting brackets (LMD-2041W), and the optional MB-534 mounting bracket (LMD-1541W)



The LMD-940W is a 9-inch*, WVGA resolution (800 x 480 pixels) ChromaTRU LMD high-grade type high-performance monitor incorporating a 10-bit signal processing and Sony's unique ChromaTRU technology to deliver superb picture performance and consistency. It also offers a convenient compact size with the mobility and smart functions required for both indoor and outdoor use.

LMD-940W

Usable Body Design for Indoor, **Outdoor Uses**

Robust, lightweight, and compact body

Incorporating a lightweight and compact aluminium-diecast body, this model is flexible enough to change style according to user requirements: with or without a stand, tilted on a stand (15-degree slant), EIA 19-inch standard rack-mounted, or set on a camera pedestal.







1/4 inch hole 3/8 inch hole

* 227 mm viewable area, measured diagonally.

Tilt stand

With stand Without stand

LMD-940W with optional MB-531 and MB-532

LMD-940W base with camera pedestal holes

Detachable AR (anti-reflection)-coated protection panel

AR-coated protection panel keeps the LCD panel surface from scratch. Added to this, it provides a high transmission rate of the internal light source to keep the picture as bright as possible, and it keeps reflection from ambient light to a minimum.



Protection panel

ENG Kit VF-510

The optional VF-510 ENG Kit provides a viewing hood, carrying handle, and connector protector.

LMD-940W with VF-510

Control panel design

The LMD-940W incorporates a new control panel design. Seven functions can be allocated to the assignable buttons. Button lights are dimmable and indicator lights are on/off switchable. This function allows users to easily operate a monitoring in a dark environment without interference of the lights.



Operational Convenience

Camera focus function

The LMD-940W can control and increase the aperture level of a video signal, and display images on the screen with sharpened edges to help camera focus operation. This camera focus function can be even enhanced when combined with the native scan mode.

Waveform monitor and audio level meter display*

An input signal's waveform with a 2-channel audio level meter can be displayed on screen. An SDI-embedded audio level can be displayed on screen with an 8-channel audio level meter. * The LMD-940W supports the on-screen audio level meter when it receives an SDI-embedded audio signal.





Audio level meter

Waveform monitor

Center marker and aspect marker setting

The LMD-940W can display a center marker and aspect markers. The brightness of these markers can be selected from three different levels: white, grey, and dark grey. Users can also select either a black or grey mat to fill the outer area of the aspect markers.





4:3 aspect marker image

16:9 aspect marker image

- Other features
- Fan-motor control function
- Excellent picture Quality with its WVGA panel (NTSC/PAL)
- AC/DC operations

Common features with the LMD high-grade type

- Colour Temperature (D65, D93, or user preset)
- Scan Setting: Normal (0%), Over scan (5%), Native scan
- Auto White Balance Calibration Function
- External Remote Control Function
- Protected Controls (Key Inhibit Function)
- I/P Mode Selection
- Power-saving Mode
- Blue Only Mode
- Three-colour Tally Auto Chroma/Phase Function
- H/V Delay Mode
- Select Language Display

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



LMD-1530W

LMD-2110W

LMD-1510W

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	Supplied	Supplied	Supplied
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 colour filters, and excellent brightness and contrast

- 109% peak white and 10-bit signal processing
- Colour 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-SDI input with the optional BKM-341HS HD/SD-SDI input adaptor and SD-SDI input with the optional BKM-320D input adaptor.



High Picture Performance

High purity colour filters

Equipped with high-purity RGB colour filters, LMD-30/10 Series monitors achieve colour 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 colour filters allows these monitors to reproduce colours with stunning depth and saturation – creating highly natural images.

109% peak white and 10-bit signal processing

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





8-bit (256-levels) image*

10-bit (1024-levels) image* * Simulated images

Colour temperature/gamma selection

With the LMD-30/10 Series monitors, users can select from high, low, or preset colour 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.



4:3 aspect marker image



16:9 aspect marker image



Safety area marker image

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-colour 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 colour: 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 analogue SD inputs including analogue composite NTSC and PAL, Y/C (S-Video), and 525i/625i component and RGB. These monitors can also handle HD-SDI input with an optional BKM-341HS HD/SD-SDI input adaptor and SD-SDI input, using the optional BKM-320D SD-SDI input adaptor. This optional feature allows this monitor to connect to HD-SDI equipment for wide range of broadcast and post-production applications. Furthermore, these monitors offer an HD signal input capability via their HDMI and analogue component interface, and also can accept DVI signals via the HDMI interface.*



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

Control panel

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



Tally lamp
 standby swich and indicator
 KEY INHIBIT indicator
 VOLUME buttons
 Menu operation buttons
 ASPECT select button
 SCAN select button

BLUE ONLY button
 EXT SYNC (external sync) button
 SDI button
 RGB/COMPONENT button
 HDMI button
 LINE
 GSpeaker

Connector panel

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



HDMI IN connector
HDMI cable holder
OPTION In connector
OPTION AUDIO In (Phono jack)
EXT SYNC In/Out (external sync) (BNC)
RGB/COMPONENT (BNC), Audio (Phono jack)
PARALLEL REMOTE (modular connector)
LINE [composite (BNC), Y/C (Mini DIN 4-pin), Audio (Phono jack)]

OAC In



LMD-1510W



LMD-1510W

LMD-51/40/41 Series Input signals / Input adaptors (As for the 3D signals, refer to the page 19.)

		Inpu	t signals		LMD-24	51W / LMD-17	51W / LMD-4251TD / LMD-2451TD			LMD-2341W / LMD-2041W LMD-1541W / LMD-940W		
Video Signal					Composite Y/C	RGB Component	SDI 4:2:2	HD-SDI SD-SDI	3G/HD/ SD-SDI	Composite	3G/HD/ SD-SDI	HDMI
Formats	Total	Active	Aspect	Frame	Stan	dard					Standard	
	Line	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	0	0	0
480/60i (NTSC)*1	525	483	16:9 & 4:3	30	0	0	0	0	0	0	0	0
576/50p	625	576	16:9 & 4:3	50	N.A.	0	N.A.	N.A.	N.A.	N.A.	N.A.	0
480/60p	525	483	16:9 & 4:3	60	N.A.	0	N.A.	N.A.	N.A.	N.A.	N.A.	0
640 x 480/60p*1	525	480	4:3	60	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0
1080/24PsF*1*3	1125	1080	16:9	24	N.A.	O*2	N.A.	0	0	N.A.	0	N.A.
1080/25PsF*3	1125	1080	16:9	25	N.A.	O*2	N.A.	0	0	N.A.	0	N.A.
1080/24p*1	1125	1080	16:9	24	N.A.	O*2	N.A.	0	0	N.A.	0	0
1080/25p	1125	1080	16:9	25	N.A.	O*2	N.A.	0	0	N.A.	0	0
1080/30p*1	1125	1080	16:9	30	N.A.	O*2	N.A.	0	0	N.A.	0	0
1080/50i	1125	1080	16:9	25	N.A.	0	N.A.	0	0	N.A.	0	0
1080/60i*1	1125	1080	16:9	30	N.A.	0	N.A.	0	0	N.A.	0	0
720/50p	750	720	16:9	50	N.A.	O*2	N.A.	0	0	N.A.	0	O*4
720/60p*1	750	720	16:9	60	N.A.	0	N.A.	0	0	N.A.	0	O*4
1080/50p	1125	1080	16:9	50	N.A.	N.A.	N.A.	N.A.	O*5	N.A.	O*5	O*4
1080/60p*1	1125	1080	16:9	60	N.A.	N.A.	N.A.	N.A.	O*5	N.A.	O*5	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 LMD-2341 and LMD-1541 can accept DVI signals via the HDMI interface using a conversion cable.
*5 10-bit 4:2:2 Y/CB/CR is supported.

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

	Input	Signal				Interface		
Sustom	Total	Active	Aspect	Composite Y/C	Composite Y/C Component		HD-SDI SD-SDI	HDMI
System	Line	Line	Ratio	Stan	dard	Opt	ions	Standard
				3011	aala	BKM-320D	BKM-341HS	Sidhada
575/50i (PAL)	625	575	16:9/4:3	0	0	0	0	0
480/60i (NTSC)*1	525	483	16:9/4:3	0	0	0	0	0
576/50p	625	576	16:9/4:3	N.A.	0	N.A.	N.A.	0
480/60p	525	483	16:9/4:3	N.A.	0	N.A.	N.A.	0
1080/24PsF	1125	1080	16:9	N.A.	N.A.	N.A.	0	N.A.
1080/25PsF	1125	1080	16:9	N.A.	N.A.	N.A.	0	N.A.
1080/24p*1	1125	1080	16:9	N.A.	O*2	N.A.	0	0
1080/25p	1125	1080	16:9	N.A.	O*2	N.A.	0	0
1080/30p*1	1125	1080	16:9	N.A.	O*2	N.A.	0	0
1080/50i	1125	1080	16:9	N.A.	0	N.A.	0	0
1080/60i*1	1125	1080	16:9	N.A.	0	N.A.	0	0
720/50p	750	720	16:9	N.A.	O*2	N.A.	0	0
720/60p*1	750	720	16:9	N.A.	0	N.A.	0	0

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

LMD-51 Series HD-15 Input Signal Format

Deschulien	н	н	v	v	Dot Clock	fH	fV	Sync P	olarity		LMD-2451TD	1000 175100
Resolution	Total	addr.	Total	Addr.	[MHz]	[kHz]	[Hz]	Horizontal	Vertical	LMD-42511D	LMD-2451W	LIVID-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	Ν	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	Ν	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	Ν	0	0	0
1024 x 768@60Hz	1184	1024	790	768	56.000	47.297	59.870	Р	Ν	0	0	0
1024 x 768@70Hz*	1328	1024	806	768	75.000	56.476	70.069	N	Ν	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	Ν	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	Ν		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-2451W	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 141.000 MHz					
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-2541	PVM-1741	PVM-740	LMD-4251TD	LMD-2451TD	LMD-1751W	
Panel type		OLED			a-Si TET Active Matrix I CD		
Picture size		OLLD					
(viewable area, measured diagonally)	24.5-inch	16.5-inch	7.4-inch	42-inch	24-inch	17-inch	
Resolution (pixels)	1920 x 108	80 (Full HD)	960 x 540 (QHD)	1920 x 1080 (Full HD)	1920 x 1200 (WUXGA)	1280 x 768 (WXGA)	
Aspect ratio	16:9			16:9	16:10	15:9	
Panel drive / Colours	10-bit Approx. 16.7 million colour			'S			
Input interface							
Composite	BNC (x1)		BNC (x1), Optional BKM-227W BNC (x1)				
Y/C		-		Mini-DIN 4-pin (x	Mini-DIN 4-pin (x1), Optional BKM-227W Mini-DIN 4-pin (x1)		
RGB / Component		-		BNC (x3), Optional BKM-229X BNC (x3)			
	DNO	(-O)		Ontional	Optional BKM-243HS_BKM-244CC_BNC (x2)		
3G/HD/SD-SDI	DING	(XZ)	DING (XT)	Optional BKM-243HS, BKM-2446C BNC (X2)			
HDMI	HDMI	(v1)*1	HDML(v1)				
DVI-D	HDIWI	_		DVI-D (x1)			
HD15		-		D-sub 15-pin (x1)			
Audio		Stereo mini jack (x1)			Phono jack (x2) (L/R)		
External sync		_		BNC (x	1), Optional BKM-229X BI	VC (x1)	
Option slot		-			2 slots		
Output interface							
Composite		BNC (x1)*2		BNC (x1)	*2, Optional BKM-227W B	NC (x1)*2	
Y/C		-		Mini-DIN 4-pin (x1)	*2, Optional BKM-227W M	ini-DIN 4-pin (x1)*2	
RGB / Component		-			BNC (x3)*2		
SD-SDI		2112 (2110)		Ор	tional BKM-220D BNC (x1)*2	
HD/SD-SDI		BNC (x1)*2		Optional E	3KM-243HS, BKM-244CC E	3NC (x1)*2	
3G/HD/SD-SDI				Optional BKM-2501G BNC (x2)*2			
Audio monitor out		Stereo mini iack (x1)					
Speaker (built-in)	1 O W (0.5 W (mono)	1.0 W + 1.0 W (stereo)			
Headphone output	1.0 11 (Stereo mini jack (x1)			-		
Remote control							
Parallel remote	Modular connector 8-pin (x1)		M	odular connector 8-pin (x	1)		
Serial remote (LAN)	DL45 modular connector (Ethernet) (v1)		RJ-45 m	nodular connector (Etherr	et) (x])		
	DL/5 m	odular connector (Etherr					
	RJ-45 m	odular connector (Etherr	iei) (x1)	C)-sub 9-pin (RS-232C) (x1)	
Features	RJ-45 m	odular connector (Etherr	iei) (XT)	C)-sub 9-pin (RS-232C) (x1)	
Features Signal processing	RJ-45 m	10-bit	lei) (x1)		10-sub 9-pin (RS-232C) (x1)	
Features Signal processing Auto white balance calibration*3 UP mode calendian	RJ-45 m	10-bit	2 modes	С 	10-bit O)	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power swing mode	RJ-45 m	10-bit O odes	3 modes		-sub 9-pin (RS-232C) (x1		
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen snyer	RJ-45 m	10-bit 0 bdes 0	3 modes		-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0		
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers	RJ-45 m 4 ma	10-bit 0 Ddes - 0 nter. Safety	3 modes		-sub 9-pin (RS-232C) (x1 10-bit O 3 modes*4 O - Aspect. Center. Safety		
Features Signal processing Auto white balance calibration*3 //P mode selection Power saving mode Screen saver Markers Waveform monitor	RJ-45 m 4 mc Aspect, Cer	10-bit 0 bdes - 0 nter, Safety 0	3 modes Aspect, Center		-sub 9-pin (RS-232C) (x1 10-bit O 3 modes*4 O - Aspect, Center, Safety O		
Features Signal processing Auto white balance calibration*3 //P mode selection Power saving mode Screen saver Markers Waveform monitor Autio level meter (SDI-embedded audio)	RJ-45 m 4 mc Aspect, Cer	I0-bit O D-bit O D o nter, Safety O O	3 modes Aspect, Center		-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0*5		
Features Signal processing Auto white balance calibration*3 //P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code)	RJ-45 m 4 mc Aspect, Cei	I0-bit O D-bit O D o nter, Safety O O O	3 modes Aspect, Center		-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0*5) 	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user)	RJ-45 m 4 mc Aspect, Cer	I0-bit I0-bit O odes - O nter, Safety O O O O	3 modes Aspect, Center		-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0*5 0 0))]] *6	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption	RJ-45 m 4 ma Aspect, Ce	I0-bit O D-bit O D D O O O - O O - O O - O - O - O - O - O - O - O - - - - - - - - - - - - -	3 modes Aspect, Center	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0*5 0 0 0 0 0 0 0 0 0 0 0 0 0)))))) * 6) * 6) BKM-244CC)	
Features Signal processing Auto white balance calibration*3 //P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3)	RJ-45 m 4 ma Aspect, Ce	I0-bit I0-bit O odes - O nter, Safety O O O - O - O - O	3 modes Aspect, Center _	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0*5 0 0 0 0 0 0 0 0 0 0 0 0 0))))) *6 BKM-244CC)	
Features Signal processing Auto white balance calibration*3 //P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native)	RJ-45 m 4 ma Aspect, Cel	I0-bit I0-bit O odes - O nter, Safety O O O - O O O O O O O O O O O O O	3 modes Aspect, Center _	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0*5 0 0 0 0 0 0 0 0 0 0 0 0 0)))))) * 6) * 6) * 6) * 6) * 6)) * 6))) * 6))))	
Features Signal processing Auto white balance calibration*3 //P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only UM detre:	RJ-45 m 4 ma Aspect, Cel	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	3 modes Aspect, Center _	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0))))) *6)) *6) BKM-244CC)) *7	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tatle.	RJ-45 m 4 ma Aspect, Cel	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	3 modes Aspect, Center	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0)))) *6 BKM-244CC))*7	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only HV delay Tally	RJ-45 m 4 ma	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	3 modes Aspect, Center - Optional MB-531	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0))))*6 BKM-244CC))*7 Optional M8-530	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mountion	RJ-45 m 4 ma Aspect, Cer	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	3 modes Aspect, Center Optional MB-531	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0))*6 BKM-244CC))*7 Optional MB-530 100 x 100 mm	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mounting	RJ-45 m 4 ma Aspect, Cel Co Co Co Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	3 modes 3 modes Aspect, Center - Optional MB-531 -	EIA 608 (star	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0)))))) * 0) * 7) * 7)) * 7) ()) * 7) ()) * 7) ())) ()) ())) ()))) ())) ()))) ())) ())))) ())))) ())))) ())))) ())))) ()))) ()))) ()))) ())) ()))) ()))) ()))) ()))) ()))) ()))) ()))) ()))) ()))) ())))) ()))))) ())))))))) ()))))))) ())))))))))) ()	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mounting Desktop stand	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531	EIA 608 (star 0 0 0 0 0 0 0 0 0 0 0 0 0	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0)))))))))))))))))))	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	3 modes Aspect, Center - Optional MB-531 - Standard	EIA 608 (star 0 1 1 1 1 1 1 1 1 1 1 1 1 1	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0)))))))))))))))))))	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531 Coptional Allocation	EIA 608 (star 	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0)) BKM-244CC))*7 Optional MB-530 100 x 100 mm 75 x 75 mm Optional SU-561 12 V	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531 V	EIA 608 (star 	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0))) BKM-244CC))*7 Optional MB-530 100 x 100 mm 75 x 75 mm Optional SU-561 12 V	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay Tally EIA 19-inch rack-mounting VESA mounting Desktop stand DC operation 3D Features Micro-polarizer 3D filter Light-weight circular polarizer 3D glasses	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	Aspect, Center Aspect, Center Optional MB-531 Standard V	EIA 608 (star 	-sub 9-pin (RS-232C) (x1 10-bit 0 3 modes*4 0 - Aspect, Center, Safety 0 - Aspect, Center, Safety 0 0 0 0 0 0 0 0 0 0 0 0 0))))))))))))))	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay 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* ^a	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O nter, Safety O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531 Conter Standard V	ElA 608 (star 	-sub 9-pin (RS-232C) (x1 10-bit O 3 modes*4 O - Aspect, Center, Safety O *5 O 0 0 0 0 0 0 0 0 0 0 0 0 0))))))))))))))	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay 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	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531	ElA 608 (star 	-sub 9-pin (RS-232C) (x1 10-bit O 3 modes*4 O - Aspect, Center, Safety O *5 O 0 0 0 0 0 0 0 0 0 0 0 0 0))))))))))))))	
Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay 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 HD-SDI input*6	RJ-45 m 4 ma Aspect, Cer Co Co Co Co Co Co Co Co Co Co	I0-bit I0-bit O odes - O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531	C	-sub 9-pin (RS-232C) (x1 10-bit O 3 modes*4 O - Aspect, Center, Safety O *5 O 0 0 0 0 0 0 0 0 0 0 0 0 0))))))))))))))	
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Features Signal processing Auto white balance calibration*3 I/P mode selection Power saving mode Screen saver Markers Waveform monitor Audio level meter (SDI-embedded audio) Time code display (SDI-embedded time code) Colour temperature (D65, D93, and user) Closed caption Aspect switch (16:9, 4:3) Scan mode (Normal (0%), Over (5%), Native) Blue only H/V delay 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 DVI-D line-by-line input 3D display functions*6 DP/2D input*6 DVI-D line-by-line input 3D display functions*6	RJ-45 m	IQUIAr connector (Etherr IQ-bit O Jdes - O O O O O O O O O O O O O	Aspect, Center Aspect, Center Coptional MB-531 Coptional MB-531 V	C	-sub 9-pin (RS-232C) (x1 10-bit O 3 modes*4 O - Aspect, Center, Safety O - Aspect, Center, Safety O - Aspect, Center, Safety O - C O - C O - C O - C O - C O - C O - C O - C O - C O - C O - C O - C - - - - - - - - - - - - -))))))))))))))	

*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 tool (X-Rite i1 (Eye-one) Pro). *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-2451W and LMD-1751W further support a full scan mode. The full scan and native scan modes work on specific signal formats.

	LMD-2341W	LMD-2041W	LMD-1541W	LMD-940W	LMD-1530W	LMD-2110W	LMD-1510W	
Panel type	a-Si TFT Active Matrix LCD			a-Si TFT Active Matrix LCD				
Picture size								
(viewable area, measured diagonally)	23-inch	20-inch	15.3-inch	9-inch	15.3-inch	21.5-inch	15.6-Inch	
Resolution (pixels)	1920 x 1080 (Full HD)	1600 x 900	1280 x 768 (WXGA)	800 x 480 (WVGA)	1280 x 768 (WXGA)	1920 x 1080 (Full HD)	1366 x 768 (WXGA)	
Aspect ratio	16	5:9	18	5:9	15:9 16:9			
Panel drive / Colours		Approx. 16.7 r	million colours		Approx. 16.7 million colours			
Input interface								
Composite		BNC (x1)				BNC (x1)		
Y/C			_			Mini-DIN 4-pin (x1)		
RGB / Component			_		BNC (x3)			
SD-SDI					Optional BKM-320D BNC (x1)			
HD/SD-SDI		BNC (x2)		BNC (x1)	Optional BKM-341HS BNC (x1)			
3G/HD/SD-SDI					-			
HDMI		HDMI (x1)*1		HDMI (x1)		HDMI (x1)*1		
DVI-D			_			-		
HD15			_			-		
Audio		Stereo mir	ni jack (x1)			Phono jack (x3)		
External sync		-	_			BNC (x1)		
Option slot		-	_			-		
Output interface								
Composite		BNC	(X1)*2		BNC (x1)*2			
Y/C		-	_		Mini-DIN 4-pin (x1)*2			
RGB / Component					BNC (x3)*2			
SD-SDI					-			
HD/SD-SDI		BNC	(X1)*2		-			
3G/HD/SD-SDI					-			
External sync		-	-			BNC (x1)*2		
Audio monitor out		Stereo mir	ni jack (x1)			Phono jack (x2)		
Speaker (built-in)		1.0 W (mono)		0.5 W (mono)		0.5 W (mono)		
Headphone output		Stereo mir	ni jack (x1)			-		
Remote control								
Parallel remote		Modular conne	ector 8-pin (x1)		Mod	lular connector 8-pin	(x1)	
Serial remote (LAN)	RJ-45 modular connector (Ethernet) (x1)				-			
Features								
Signal processing	10-bit			10-bit				
Auto white balance calibration*3		(2		-			
I/P mode selection		3 m	odes		2 modes			
Power saving mode			2	1	-			
Markers		Aspect, Center, Safety Aspect, Center			Aspect, Center, Safety			
Waveform monitor	0			-				
Audio level meter (SDI-embedded audio)		(2	1	-			
Time code display (SDI-embedded time code)		0		-	-			
Colour temperature (D65, D93, and user)	0			High, Low, User				
Closed caption				-				
Aspect switch (16:9, 4:3)	0			0				
Scan mode (Normal (0%), Over (5%), Native)	0			0%, 5%, Full				
Blue only		0			0			
H/V delay		(ر		-			
lally		3 co	lours		3 colours			
EIA 19-inch rack-mounting	-	Supplied brackets	Uptional MB-534	Optional MB-531	Optional MB-533	Uptional MB-529	Optional MB-535	
VESA mounting		100 x 100 mm	0 11 1011515	-		100 x 100 mm		
Desktop stand	Optional SU-561	Standard, Optional SU-561	Optional SU-561, SU-562	Standard		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 tool (X-Rite i1 (Eye-one) Pro).

Specifications

PVM Series









PVM-2541

PVM-1741

PVM-740

Piciure Periormance					
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 r	bixels (Full HD)	960 x 540 pixels (QHD)		
Aspect					
Panel drive		RGB 10-bit			
Viewing angle (panel specification)	89°/8	39°/89°/89° (typical) (up/down/left/right contrast >	10:1)		
Composite		BNC (x1), 1.0 Vp-p ±3 dB sync negative			
SDI	BNC	(x2)	BNC (x1)		
HDMI		HDMI (x1)			
Audio		Stereo mini jack (x1), -5 dBu 47 kilohms or higher			
Parallel remote		Modular connector 8-pin (x1) (pin-assianable)			
Serial remote (LAN)	RJ-45 r	nodular 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	Site (xi)/ super sign	Stereo mini jack (x1)			
Speaker (Built-in)	10W	(mono)	0.5W (mono)		
Headphones output		Stereo mini jack (x1)			
General					
Power requirement		AC 100 V to 2/0 V 50/60 Hz 1 0 A to 0 5 A	AC 100 V to 2/0 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. 27 W (max.)		
	the default status)	consumption in the default status)			
Operating temperature	0°C to 35°C (32°F to 95°F)	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)		
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)	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		
			(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		
			(when AC adaptor is detached)		
Mass	10.6 kg	7.2 kg	2.0 kg		
	23 lb 5.9 oz	15 lb 14 oz	4 lb 6 oz		
	12./ kg	9.3 kg	2.6 kg		
		20 ID 8 OZ	5 ID 12 OZ		
Cumplied approaching	(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),	AU power cord (1), AU plug holder (1),	AC power cord (1), AC plug holder (1),		
	Operating Instructions (1), CD-ROM (1),	Operating Instructions (1) OD DOM (1) Using	AC power adaptor (1), Operating Instructions (1),		
	Using the CD-ROM manual (1)	the CD DOM manual (1).	CD-ROM (1), Using the CD-ROM manual (1)		







LMD-1751W

Picture Performance				
Panel	a-Si TFT Active Matrix LCD			
Picture size (diagonal)	613.2 mm	431.1 mm		
, , , , , , , , , , , , , , , , , , ,	24 inches	17 inches		
Effective picture size (H x V)	518.4 x 324.0 mm	369.6 x 221.8 mm		
	20 1/2 x 12 7/8 inches	14 5/8 x 8 3/4 inches		
Resolution (H x V)	1920 x 1200 pixels (WLIXGA)	1280 x 768 pixels (WXGA)		
Aspect	16:10	15:9		
Colours	Approx 16.7 r	million colours		
Viewing gngle	80°/80°/80°/ (typical) (up/	down/left/right contrast > 10.1)		
Input				
Composito		2 dB supe poggtive		
V/C	Mini DIN			
1/6	Vil OVer 2d			
	C: 0.286 \/p.p. +3 dP. (NTSC burst signal lo	(a) 0.3 \/p p + 3 dP (PAL burst signal lavel)		
DCR Component				
Kob, component	DINO DCB: 0.7 Vp. p. 13 dB (Sypp. Op.	(xo) Groon 0.3 \/n n syna nagativa)		
	(0.0, 7) $(0.0, 7)$	Green, 0.5 vp-p sync negurive)		
DV/LD				
	DVI-D (XT), IVI			
CI UH		-prir (x r)		
	R/G/D. U. 7 VP-P Sync positive (Sync			
	Diug & Digu function of	nice, n/v separate sync)		
Audio	Plug & Plug inicition. C	dPu 47 kilohmo or higher		
Audio	PTIOTIO JUCK (X2) (L, K), -0			
External sync	DNC 0.3.Ve p to 4.0.Ve p + bipelarity t	(XI) torpany or pogativo polarity hinany		
Ontion slot	0.0 VP-P 10 4.0 VP-P ± bipotaniy i			
	Signal format: H: 15 kHz to	o 45 kHz V· 48 Hz to 60 Hz		
Parallel remote	Modular connector 8-pi	in (x1) (Pin-assignable)		
Serial remote	D-sub 9-pin (RS-232C) (x1), RJ-45 modular con	nnector (Ethernet) (x1) (10BASE-T/100BASE-TX)		
DC in	XLR-type 4-pin (male) (x1), DC 24 V (output impedance 0.05 ohms or less) XLR-type 4-pin (male) (x1), DC 12 V (output impedance 0.05 ohms or less)			
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	BNC (x3), loop-through, with 75 ohms automatic termination			
External sync	BNC (x1), loop-through, with 75 ohms automatic termination			
Audio monitor out	Phono jack (x2) (L, R)			
Speaker (built-in)	1.0 W + 1.0 W (stereo)			
General				
Power requirements	AC 100 V to 240 V 50/60 Hz, 1.5 A to 0.7 A	AC 100 V to 240 V, 50/60 Hz, 0.8 A to 0.4 A		
	DC 24 V, 5.7 A	DC 12 V, 5.7 A		
Power consumption	Approx. 130 W (max.) (with 2 x BKM-229X)	Approx. 77 W (max.) (with 2 x BKM-229X)		
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	o 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)	602 4 x 407 0 x 260 0 mm	439.5 x 385.7 x 269.9 mm		
	0U2.4 X 497.9 X 209.9 mm 17 3/8 X 15 1/4 X 10 3/4			
		(stand is optional)		
Dimensions (W x H x D) (without stand)	602.4 x 386.2 x 110.0 mm	439.5 x 284.0 x 105.0 mm		
	23 3/4 x 15 1/4 x 4 3/8 inches	17 3/8 x 11 1/4 x 4 1/4 inches		
Mass (with options)	11.4 kg	8.8 kg		
	25 lb 2 oz	19 lb 6 oz		
	(with 2 x BKM-229X)	(with SU-561 and 2 x BKM-229X)		
Mass	11.0 kg	6.3 kg		
Cupplied geographics		I 3 ID 14 0Z		
Supplied accessories	AC power cord (1), AC plug holder (1), Operating Instructions (1), CD-ROM (1), Using the CD-ROM Manual (1)			







LMD-4251TD Picture Performance Panel a-Si TFT Active Matrix LCD Picture size (diagonal) 1067.0 mm 613.2 mm 42 1/8 inches 24 1/4 inches Effective picture size (H x V) 930.0 x 523.0 mm 518.4 x 324.0 mm 36 3/4 x 20 3/4 inches 20 1/2 x 12 7/8 inches Resolution (H x V) 1920 x 1080 pixels (Full HD) 1920 x 1200 pixels (WUXGA) Aspect 16:9 16:10 Colours Approx, 16.7 million colours 89°/89°/89°/89° (typical) (up/down/left/right contrast > 10:1) Viewing angle (2D mode) Vertical viewing angle (3D mode) 40° at a viewing distance more than 600 mm, 50° at a viewing distance more than 300 mm, crosstalk less than 7% (typical) crosstalk less than 7% (typical) 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 dB (NTSC burst signal level), 0.3 Vp-p ±3 dB (PAL burst signal level) RGB, Component BNC (x3) RGB: 0.7 Vp-p ±3 dB (Sync On Green, 0.3 Vp-p sync negative) Component: 0.7 Vp-p \pm 3 dB (75% chrominance standard colour bar signal) DVI-D DVI-D (x1), TMDS single link HD15 D-sub 15-pin (x1) R/G/B: 0.7 Vp-p sync positive (Sync On Green, 0.3 Vp-p sync negative) Sync: Total level (polarity free, H/V separate sync) Plug & Play function: corresponds to DDC2B Audio Phono jack (x2) (L, R), -5 dBu 47 kilohms or higher External sync BNC (x1) 0.3 Vp-p to 4.0 Vp-p \pm bipolarity ternary or negative polarity binary Option slot 2 slots Signal format: H: 15 kHz to 45 kHz, V: 48 Hz to 60 Hz Parallel remote Modular connector 8-pin (x1) (Pin-assignable) D-sub 9-pin (RS-232C) (x1), RJ-45 modular connector (Ethernet) (x1) (10BASE-T/100BASE-TX) Serial remote XLR-type 4-pin (male) (x1), DC 24 V (output impedance 0.05 ohms or less) DC in Output BNC (x1), loop-through, with 75 ohms automatic termination Composite Y/C Mini DIN 4-pin (x1), loop-through, with 75 ohms automatic termination RGB, Component BNC (x3), loop-through, with 75 ohms automatic termination BNC (x1), loop-through, with 75 ohms automatic termination External sync Audio monitor out Phono jack (x2) (L, R) 1.0 W + 1.0 W (stereo) Speaker (built-in) General

Power requirements	AC 100 V to 240 V, 50/60 Hz, 2.3 A to 1.1 A	DC 24 V, 5.7 A			
Power consumption	Approx. 250 W (max.) (with 2 x BKM-229X) Approx. 130 W (max.) (with 2 x BKM-229X)				
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	o 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 ta	o 1060 hPa			
Dimensions (W x H x D) (with stand)		602.4 x 497.9 x 269.9 mm			
	_	23 3/4 x 19 5/8 x 10 3/4 inches			
Dimensions (W x H x D) (without stand)	1027.0 x 616.0 x 130.0 mm	602.4 x 386.2 x 110.0 mm			
	40 1/2 x 24 3/8 x 5 1/8 inches 23 3/4 x 15 1/4 x 4 3/8 inches				
Mass (with options)	23.5 kg	11.5 kg			
	51 lb 13 oz	25 lb 6 oz			
	(with 2 x BKM-229X)	(with 2 x BKM-229X)			
Mass	23.0 kg	11.0 kg			
	50 lb 11 oz 24 lb 4 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)				

LMD-40/41 Series			5012	
	LMD-2341W	LMD-2041W	LMD-1541W	LMD-940W
Picture Performance		a Si TET Activ	a Matrix LCD	
Picture size (diagonal)	584.2 mm	508.0 mm	388.6 mm	227 () mm
(alagonar)	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	195.0 x 117.0 mm 7 3/4 x 4 5/8 inches
Resolution (H x V)	1920 x 1080 pixels (Full HD)	1600 x 900 pixels	1280 x 768 pixels (WXGA)	800 x 480 pixels (WVGA)
Aspect	10	5:9	15	5:9
Colours		Approx. 16.7 m	nillion colours	
Viewing angle		89°/89°/89°/89° (typical) (up/o	lown/left/right contrast > 10:1)	
Input	1			
		BNC (x1), 1.0 Vp-p ±	3 dB sync hegative	
HDMI		HDMI	(x1)	BING (XT)
Audio		Stereo mini iack (x1), -5 c	IBu 47 kilohms or higher	
Parallel remote		Modular connector 8-pi	n (x1) (pin-assignable)	
Serial remote		RJ-45 modular connector (Ethern	et) (x1) (10BASE-T/100BASE-TX)	
DC in	XLR-type 4-pin (male) (x1), DC 24 V (output impedance 0.05 ohms or less)	XLR-type 4-pin (male) (x1), DC 12 V (output impedance 0.05 ohms or less)
Output				
Composite		BNC (x1), loop-through, with 75	o ohms automatic termination	
SDI		Output signal amplitur	(XI)	
		Output signal amplitation	5 ohms unbalanced	
Audio monitor out		Stereo min	i jack (x1)	
Speaker (built-in)	1.0 W	(mono)	0.5 W ((mono)
Headphones output		Stereo min	i jack (x1)	
General				
Power requirements	AC 100 V to 240 V,	AC 100 V to 240 V,	AC 100 V to 240 V,	AC 100 V to 240 V,
	50/60 HZ, 0.8 A TO 0.4 A	50/60 HZ, 0.8 A to 0.4 A,	50/60 HZ, U.8 A to U.4 A	50/60 HZ, U.4 A to U.2 A
Power consumption	Approx 70 W (max)	Approx 66 W (mgx)	Approx 50 W (mgx)	Approx 27 W (mgx)
Operating temperature				0°C to 40°C (32°F to 104°F)
	Red	0°C to 35°C (32°F to 95°F) commended: 20°C to 30°C (68°F to 86	°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)		482.0 X 332.8 X 1 / 1.4 mm	3/3.2 X 423.9 X 269.9 mm	
	549.5 x 467.4 x 269.9 mm	(with supplied stand)	(with optional stand SU-561)	222.4 x 183.5 x 161.8 mm
	21 3/4 x 18 1/2 x 10 3/4 inches	482.6 x 452.0 x 269.9 mm	373.2 x 319.0 x 264.5 mm	8 7/8 x 7 1/4 x 6 3/8 inches
	(with optional stand SU-561)	19 x 17 7/8 x 10 3/4 inches	14 3/4 x 12 5/8 x 10 1/2 inches	(when AC adaptor is attached)
		(with SU-561 optional stand)	(with optional stand SU-562)	
Dimensions (W x H x D) (without stand)	549.5 x 352.5 x 100.3 mm	482.6 x 314.8 x 100.2 mm	373.2 x 265.5 x 70.4 mm	222.4 x 166.0 x 70.0 mm
	21 3/4 x 14 x 4 inches	19 x 12 1/2 x 4 inches	14 3/4 x 10 1/2 x 2 7/8 inches	(when AC adaptor is detached)
Mass (with stand)		6.9 kg	7.2 kg	
, <i>,</i> ,	11.2 kg	15 lb 3 oz	15 lb 14 oz	2.4 kg
	24 lb 15 oz	(with supplied stand)	(with optional stand SU-561)	2.0 Kg 5 lb 12 oz
	(with optional stand SU-561)	8.8 kg	6.8 kg	(when AC adaptor is installed)
	, , , , , , , , , , , , , , , , , , , ,	19 lb 6 oz	14 lb 16 oz	
Mass (without stand)				2 🛛 ka
	9.2 kg (20 lb 4.5 oz)	14 lb 12 oz	11 lb 4.2 oz	2.0 kg 4 lb 6 oz
Supplied accessories		AC power cord (1), AC plug holder		
	AC power cora (XT), AC plug holder (X1), Control papel cover	(1), Mounting bracket (2) (including		
	(including 3 screws) (x1). Operating	8 screws), Stand (2) (including 6	AC power cord (1), AC plug holder (1), AC power adaptor (1), Operating
	Instructions (x1), CD-ROM (x1),	screws), Uperating Instructions (1),	Instructions (1), CD-ROM (1), I	using the CD-ROM Manual (1)
	Using the CD-ROM Manual (x1)	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	5:9		
Colours		Approx. 16.7 million colours			
Viewing angle	89°/89°/89°/89° (typical)	170°/160	1° (typical)		
	(up/down/left/right contrast > 10:1)	(horizontal/vertica	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: U.286 Vp-p ±3	dB (NISC burst signal level), U.3 Vp-p ±3 dB (PAL t	burst signal level)		
RGB, Component	200	BNC (x3)			
	RGB:	U.7 Vp-p ±3 dB (Sync Un Green, U.3 Vp-p sync neg	ative)		
	Component		ir bar signal)		
Audio		Phone igek (v2) 5 dBu 47 kilohms or higher			
Addio		IN ALIDIO IN: Phono igek (x_2) , -5 abu 47 kilohinis of higher	higher		
External sync		BNC (x1), 0.3 Vp-p to 4 Vp-p negative polarity bingr	V		
Option in connector		D-sub 9-pin (x1), female			
Parallel remote		Modular connector 8-pin (x1) (pin-assianable)			
Output	1				
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	BNC (x3), loop-through, with 75 ohms automatic termination				
External sync	BNC (x1), loop-through, with 75 ohms automatic termination				
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, 0.6 A to 0.4 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. 40 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)	3/2.0 x 336.0 x 264.0 mm	515.0 x 403.0 x 264.0 mm	3/8.0 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 //8 X 10 1/2		
Dimensions (W X H X D) (without stand)	3/2.0 X 200.0 X 100.0 IIIII 14 3/4 x 11 3/8 x 4 inchos	20 3/8 x 1/4 x 3 1/2 inchos	3/0.0 X 200.0 X 90.0 MM		
Mass	5 0 ka	20 0/0 X 14 X 0 1/2 IIIGIRS 8 6 km	5 8 ka		
Widdo	13.1b	18 lb 15 oz	12 lb 13 oz		
Mass (without stand)	4.2 kg	6.9 kg	4.] ka		
	9 lb 4 oz	14 lb 19 oz	9 lb 6 oz		
Supplied accessories	AC power cord (1), AC plug holder (1), Operating Instructions (1), CD-ROM (1), Using the CD-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 Analogue Component Adaptor (for LMD-51 Series)



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



SU-561 Monitor Stand (for PVM-2541, PVM-1741, 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-740 and LMD-940W)



MB-532 Mounting Panel (for PVM-740 and LMD-940W)



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



VF-510 ENG Kit (Viewing Hood, Carrying Handle and Connector Protector) (for PVM-740 and LMD-940W)



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



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



BKM-31G **3D** Glasses (for LMD-4251TD and LMD-2451TD)



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



BKM-320D SD-SDI Input Adaptor (for LMD-30/10 Series)



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



Dimensions

PVM Series



PVM-1741

Front

Rear Side 120 (4 3/4) 90 (3 5/8) 389.6 (15 3/8) 40 (1 5/8) 100 (4) 10.4 (4 3/8) 100 (4) Has at 0 ŝ 35 (1 7/16) 161 (6 ³/8)

PVM-1741 with the optional SU-561 stand

Front



Side

PVM-740

Front



436 (17 1/4)

322 (12 3/4)

2

.6 (11 289.

(28/12) (28/12)

Side

(2)



LMD-51 Series

LMD-4251TD



LMD-2451TD/LMD-2451W



Unit: mm (inches)

LMD-1751W



LMD-40/41 Series









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The PVM-2541, PVM-1741, and PVM-740 are produced under control of Sony EMCS Corporation Tokai Tec, which has received ISO14001 Environmental Management System certification.



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