LMD-2341W / LMD-1541W

Professional LCD Monitor





Inheriting the critical functions and performance of Sony's highly acclaimed LMD Series high-grade professional monitors – the LMD-51W Series – the outstanding new LMD-2341W (23-inch*1) and LMD-1541W (15.3-inch*2) high-grade LCD video monitors are the latest enhancement to this series.

These monitors incorporate a lightweight, robust aluminium slim bezel and compact body, plus built-in standard SDI (3G/HD/SD), composite, and HDMI interfaces. They are specially designed to suit monitor-wall installation in studios and outside broadcast (OB) vans. Not only this, but these monitors are ideal for a variety of professional video and industrial image-monitoring applications when critical picture quality and professional features are required.

■ High-brightness LCD panel with wide viewing angle

The 23-inch full-HD (LMD-2341W, 1920 x 1080 pixels) and 15.3-inch (LMD-1541W, 1280 x 768 pixels) high-performance LCD panels reproduce lifelike images and stunning colours.

■ Space-saving compact design with a lightweight aluminium slim bezel and body

The LMD-2341W and LMD-1541W are designed specially to suit monitor-wall installation in studios and OB vans. The LMD-1541W is an ideal replacement for 14-inch CRT monitors.

ChromaTRU™ colour matching technology

ChromaTRU technology avoids colour mismatching between monitors, and makes the LMD-2341W and LMD-1541W ideal for efficient use in multi-monitor systems.

■ In-monitor Display (IMD) function for source monitoring

With an external remote function via Ethernet, image source names and tally information can be displayed on screen.*3

■ Built-in multi-signal input signal interfaces

Multiple interface connectors are provided as standard: SDI (3G/HD/SD-SDI) (two inputs/one output), analogue composite, and HDMI input.

^{*1 584.2} mm, viewing area measured diagonally.

^{*2 388.6} mm, viewing area measured diagonally

^{*3} The LMD-2341W and LMD-1541W support the TSL system protocol.

Slim Bezel, Compact Design for Monitor-wall Installation

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



Easy-to-use Control Panel

A rotary-type switch and seven function-assignable buttons allow users 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

The LMD-2341W 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

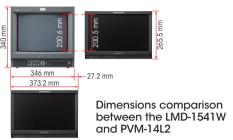
- *1 English alphabets, numbers, symbolic codes, and Japanese letters.
- *2 White, red, green, blue, yellow, cyan, magenta, and amber.



In-monitor display (IMD) image

■ Ideal for CRT Monitor Replacement

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



Desk-top Editing and Office Viewing

By installing an optional monitor stand*, the LMD-2341W 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 both monitors, and the optional SU-562 stand is for the LMD-1541W only.



LMD-2341W with SU-561*



LMD-1541W with SU-562*

* Simulated images

*Monitor stands are optional

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

The 8-c
meter*



The 8-channel audio level meter*

* Simulated images

External Remote Control Function

The LMD-2341W 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. Also these monitors support some functions of the BKM-16R – an optional remote control unit for BVM-L/PVM-L Series monitors – such as the power on/off switch and the Input Select function.*

* The LMD-2341W and LMD-1541W do not support all BKM-16R functions.

Superb Picture Performance and Colour Consistency



The LMD-2341W (23-inch) full-HD resolution (1920 x 1080 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 and LMD-1541W both offer a wide viewing angle.

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

Furthermore, the Auto White Balance Calibration 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 i1Pro series).



A Variety of Marker Settings

LMD-2341W and LMD-1541W monitors can display a center marker, aspect markers, and safety zone markers.





4:3 aspect marker image

16:9 aspect 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-1541W, when a 1920 x 1080i or 1080p signal is input, the image frame of native scan can be shifted in five patterns: center, top-left, top-right, bottom-right, and bottom-left.

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





An LMD-1541W native scan framing image

Input Versatility

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





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

Video input signal formats

System	Composite	SD/HD	3G	HDMI
575/50 (PAL)	0	0	-	0
480/60 (NTSC)*3	0	0	-	0
576/50p	-	-	-	0
480/60p*3	-	-	-	0
640 x 480/60p*3	-	-	-	0
1080/24PsF*1*3	-	0	-	-
1080/25PsF*2	-	0	-	-
1080/24p*3	-	0	-	0
1080/25p	-	0	-	0
1080/30p*3	-	0	-	0
1080/50i	-	0	_	0
1080/60i*3	-	0	-	0
720/50p	-	0	-	O*4
720/60p*3	-	0	-	O*4
1080/50p*5	-	_	0	○*4
1080/60p*3*5	-	-	0	O*4

- *1 The format on the screen is displayed as 1080/48i.
- *2 The format on the screen is displayed as 1080/50i.
- *3 The frame rate is also compatible with 1/1.001
- *4 Available when a DVI signal is input with a DVI conversion cable connected to the HDMI IN connector.
- *5 10-bit 4:2:2 Y/Cb/Cr is supported.

DVI-D input signal formats

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		

- · A DVI conversion cable is required.
- The sides of the displayed picture may be hidden depending on the input signal.

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-1541W: 12 V
- VESA standard mounting (100 x 100 mm pitch)
- EIA 19" standard rack mount with the optional MB-534 mounting bracket (LMD-1541W only)

///Specifications

	LMD-2341W	LMD-1541W			
Picture Performance					
Туре	a-Si TFT Active Matrix LCD				
Resolution	1920 x 1080 pixels (Full HD)	1280 x 768 pixels (WXGA)			
Effective picture size (H x W)	509.1 x 286.4 mm	334.1 x 200.5 mm			
(diagonal)	(20 1/8 x 11 3/8 inches)	(13 1/4 x 8 inches)			
	584.2 mm (23 inches)	388.6 mm (15 3/8 inches)			
Aspect	16:9	15:9			
Colours	Approx. 16.7 million colours				
Viewing angle	89°/89°/89°/89° (typical) (up/down/left/right contrast>10:1)				
Input					
Composite	BNC (x1), 1.0 Vp-p ±3dB sync negative				
SDI	BNC (x2)				
HDMI	HDMI (x1)				
Audio	Stereo mini jack (x1), -5 dBu 47 kilohms or higher				
Parallel remote	Modular connector 8-pin (x1) (pin-assignable)				
Serial remote	RJ-45 modular connector (Ethernet) (x1) (10BASE-T/100BASE-TX)				
DC in	DC 24 V (output impedance 0.05	, , , , , , , , , , , , , , , , , , , ,			
	ohms or less)	ohms or less)			
Output					
Composite	BNC (x1), Loop-through, with 75 ohms automatic termination				
SDI	BNC (x1), Output signal amplitude: 800 mVp-p ±10%				
	Output impedance: 75 ohms unbalanced				
Audio monitor out	Stereo mir	ni jack (x1)			
Speaker (built-in)	1.0 W (mono)	0.5 W (mono)			
Headphones output	Stereo mini jack (x1)				
General					
Power requirements	AC 100 V to 240 V, 50/60 Hz,	AC 100 V to 240 V, 50/60 Hz,			
	0.8 A to 0.4 A, DC 24 V 2.4 A	0.8 A to 0.4 A, DC 12 V 3.4 A			
Power consumption	Maximum approx. 70 W	Maximum approx. 50 W			
Operating temperature	0°C to 35°C (32°F to 95°F), Recomm	nended: 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	700 hPa to 1060 hPa				
pressure	700 TIPA IC) 1000 liPu			
Dimensions (W x H x D)	549.5 x 352.5 x 100.3 mm	373.2 x 265.5 x 70.4 mm			
(without stand)	(21 3/4 x 14 x 4 inches)	(14 3/4 x 10 1/2 x 2 7/8 inches)			
Dimensions (W x H x D)	549.5 x 467.4 x 269.9 mm	373.2 x 423.9 x 269.9 mm			
(with optional stand SU-561)	(21 3/4 x 18 1/2 x 10 3/4 inches)	(14 3/4 x 16 3/4 x 10 3/4 inches)			
Dimensions	_	373.2 x 319 x 264.5 mm			
(with optional stand SU-562)	_	(14 3/4 x 12 5/8 x 10 1/2 inches)			
Mass (without stand)	9.2 kg (20 lb 4.5 oz)	5.1 kg (11 lb 4.2 oz)			
Mass (with optional stand SU-561)	11.3 kg (24 lb 15 oz)	7.2 kg (15 lb 14 oz)			
Mass (with optional stand SU-562)	-	6.8 kg (14 lb 16 oz)			
Accessories supplied	AC power cord (x1), AC plug holder	AC power cord (x1), AC plug holder			
	(x1), Control panel cover (including 3	(x1), Operating Instructions (x1),			
	screws) (x1), Operating Instructions	CD-ROM (x1), Using the CD-ROM			
	(x1), CD-ROM (x1), Using the CD-	Manual (x1)			
	ROM Manual (x1)				

///Dimensions

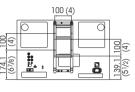
Unit: mm (inches)

LMD-2341W

Front with optional SU-561



Rear



Side with optional SU-561 100.3 (4)



LMD-1541W

Front with optional SU-561



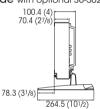
Side with optional SU-561



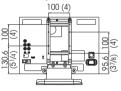
Front with optional SU-562



Side with optional SU-562



Rear with optional SU-562



MOptional Accessories



SU-561 Monitor Stand



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



MB-534 Mounting bracket (for LMD-1541W only)

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