



LMD-2341W / LMD-1541W

Professional LCD Monitor

Not all LCD screens are created equal. Consumer televisions are designed to conceal the picture's flaws, not to reveal them. PC monitors are designed primarily for still images. Professional video applications deserve monitors purpose-built to display moving pictures with total honesty. That's why Sony created high-grade LUMA® Series monitors.

The LMD-2341W and LMD-1541W are the latest additions to the series, featuring 23-inch (584.2 mm) and 15.3-inch (388.6 mm) screens (viewable area, measured diagonally). These monitors combine the proven performance of the LUMA series with several added refinements.

- Exclusive ChromaTRU™ technology so every monitor on the control room wall can have the same, consistent color.
- White Balance Calibration for even more refined color matching and stability. You can take advantage with a PC and calibration tool like the X-Rite i1.
- 3G-SDI capability built in, along with a full range of inputs: SDI (3G/HD/SD-SDI) (two inputs/one output), analog composite, and HDMI™ input.
- Ultra-thin aluminum bezel for easier mounting in monitor walls, studios and OB vans.
- In-monitor display (IMD) to identify sources, supporting the TSL system protocol.
- High brightness, wide viewing angle and high resolution: 1920 x 1080 pixels for the LMD-2341W; 1280 x 768 for the LMD-1541W.

Slim Bezel: Ideal for Monitor Walls

Slim bezels of robust aluminum and compact chassis make these monitors perfect for monitor walls in studio control rooms and OB vans.



LMD-2341W

LMD-1541W

Efficient Controls

Operation is easy with a rotary switch and seven assignable buttons. LED indicators for the buttons enable error-free operation, even in dark environments. The LEDs can be switched off for minimum distraction and the supplied control panel cover of the LMD-2341W simplifies its appearance on a monitor wall.



Control panel with LEDs



The LMD-2341W with control panel cover

In-monitor Display (IMD)

These monitors support the TSL UMD protocol for on screen display of two tally lamps plus dynamic text information received via Ethernet. The monitors can display up to 16 Unicode characters, including Roman letters, numbers, symbolic codes and Japanese letters. Both the text color and the tally lamp color are separately selectable either in preset white, red, green, blue, yellow, cyan, magenta, amber, or in a custom color.

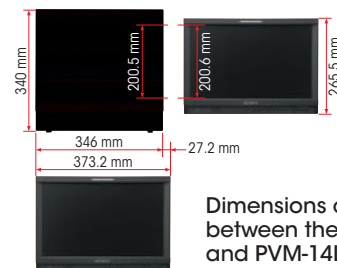


In-monitor display (IMD)

Simulated image

Ideal CRT Replacement

The LMD-1541W is close to a drop-in replacement for Sony's most popular 14-inch CRT monitor, the PVM-14L2. The LMD-1541W is 74.5 mm lower and only 27.2 mm wider, with almost identical viewable area height.



Dimensions comparison between the LMD-1541W and PVM-14L2

NLE and Office Viewing

The monitors serve editing and office viewing with optional stands. The SU-561 stand serves both monitors, while the SU-562 serves the LMD-1541W only.



LMD-2341W with SU-561 *



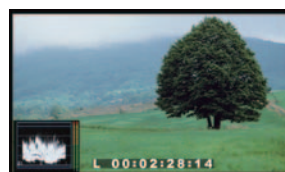
LMD-1541W with SU-562 *

Simulated images

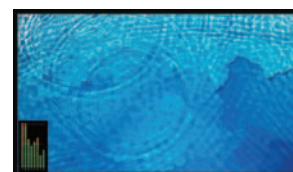
* Monitor stands are optional

Waveform Monitor, Audio Level Meter and Time Code Display

On-screen displays include video waveform plus two channel audio-level meter. For SDI sources, there's a choice of LTC or VITC time code and the option to display an eight-channel level meter for SDI-embedded audio.



Waveform monitor, two channel audio level meter, and time code display



Eight-channel audio level meter

Simulated images

Remote Control Options

Control up to 32 monitors and up to four control units via Ethernet connection. You can remotely select inputs and outputs, and adjust a wide range of settings. You're free to adjust individual monitors, groups of monitors or all connected monitors simultaneously. The monitors also support selected functions of the BKM-16R remote control unit for BVM-L/PVM-L Series. Supported functions include Power On/Off and Input Select.

ChromaTRU Consistency, AWB Calibration



LCD panels tend to vary from unit to unit, a serious concern in professional environments. Sony solves the issue with ChromaTRU™ color processing, which operates at 10-bit precision. First Color Space Conversion electrically converts the native LCD primaries to their CRT equivalents. Then White Balance Calibration emulates the color and gamma of CRT monitors, achieving broadcast standards (SMPTE-C, EBU, and ITU-R BT.709). Sony even calibrates RGB gamma for each and every LCD panel along 208 points. Sony stores this calibration data in the monitor's memory for meticulous White Balance from corner to corner. As a result, you'll enjoy consistent color and steady color temperature across the grayscale—approaching the performance of Sony BVM-L and PVM-L evaluation monitors.



8-bit (256-levels) image



10-bit (1024-levels) image

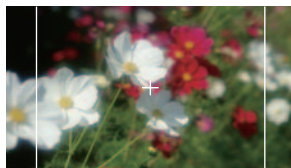
Simulated images

To keep calibration up to spec, Sony provides Auto White Balance Calibration, which works in combination with a PC and calibration tools like the X-Rite i1Pro series.



Advanced Marker Settings

For framing reference, the monitors can display a center marker, aspect markers, and safety zone markers.



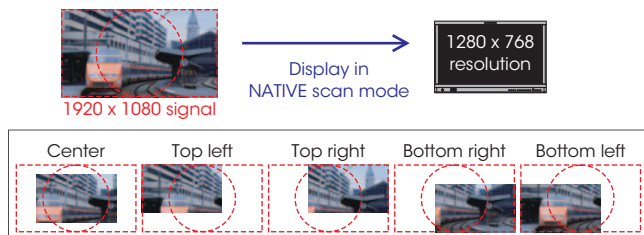
4:3 aspect marker



16:9 aspect marker

Scan Mode Selection

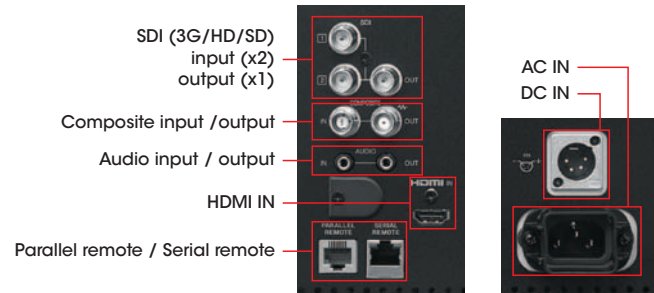
You can select Normal, 5% Over scan, Full scan, and Native scan modes, depending on the signal format. You can also switch the aspect ratio between 16:9 and 4:3 according to the input signal. And when a 1080i or 1080p signal is input, the LMD-1541W Native Scan image can be shifted in five patterns: center, top-left, top-right, bottom-right, and bottom-left.



LMD-1541W Native Scan

Input Versatility

The LMD-2341W and LMD-1541W are equipped with built-in interfaces including 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)	○	○	—	○
480/60 (NTSC)*3	○	○	—	○
576/50p	—	—	—	○
480/60p*3	—	—	—	○
640 x 480/60p*3	—	—	—	○
1080/24PsF*1*3	—	○	—	—
1080/25PsF*2	—	○	—	—
1080/24p*3	—	○	—	○
1080/25p	—	○	—	○
1080/30p*3	—	○	—	○
1080/50i	—	○	—	○
1080/60i*3	—	○	—	○
720/50p	—	○	—	○*4
720/60p*3	—	○	—	○*4
1080/50p*5	—	—	○	○*4
1080/60p*3*5	—	—	○	○*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	60
1280 x 768	68.250	47.4	
1280 x 1024	108.000	64.0	
1360 x 768	85.500	47.7	
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
- I/P mode selection
- H/V Delay
- DC operation
 - LMD-2341W: 24 V
 - LMD-1541W: 12 V
- Blue Only mode
- Auto chroma/phase setup
- Power-saving mode

Specifications

	LMD-2341W	LMD-1541W
Picture Performance		
Type	a-Si TFT Active Matrix LCD	
Resolution	1920 x 1080 pixels (Full HD)	1280 x 768 pixels (WXGA)
Effective picture size (H x W) (diagonal)	20 1/8 x 11 3/8 inches (509.1 x 286.4 mm) 23 inches (584.2 mm)	13 1/4 x 8 inches (334.1 x 200.5 mm) 15 3/8 inches (388.6 mm)
Aspect	16:9	15:9
Colors	Approx. 16.7 million colors	
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)	DC 12 V (output impedance 0.05 ohms or less)
Output		
Composite	BNC (x1), Loop-through, with 75 ohms automatic termination	
SDI	BNC (x1), Output signal amplitude: 800 mVp-p ±10% Output impedance: 75 ohms unbalanced	
Audio monitor out	Stereo mini 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, 0.8 A to 0.4 A, DC 24 V 2.4 A	AC 100 V to 240 V, 50/60 Hz, 0.8 A to 0.4 A, DC 12 V 3.4 A
Power consumption	Maximum approx. 70 W	Maximum approx. 50 W
Operating temperature	32°F to 95°F (0°C to 35°C), Recommended: 68°F to 86°F (20°C to 30°C)	
Operating humidity	30% to 85% (no condensation)	
Storage and transport temperature	-4°F to +140°F (-20°C to +60°C)	
Storage and transport humidity	0% to 90%	
Operating, storage and transport pressure	700 hPa to 1060 hPa	
Dimensions (W x H x D) (without stand)	21 3/4 x 14 x 4 inches (549.5 x 352.5 x 100.3 mm)	14 3/4 x 10 1/2 x 2 7/8 inches (373.2 x 265.5 x 70.4 mm)
Dimensions (W x H x D) (with optional stand SU-561)	21 3/4 x 18 1/2 x 10 3/4 inches (549.5 x 467.4 x 269.9 mm)	14 3/4 x 16 3/4 x 10 3/4 inches (373.2 x 423.9 x 269.9 mm)
Dimensions (with optional stand SU-562)	—	14 3/4 x 12 5/8 x 10 1/2 inches (373.2 x 319 x 264.5 mm)
Weight (without stand)	20 lb 4.5 oz (9.2 kg)	11 lb 4.2 oz (5.1 kg)
Weight (with optional stand SU-561)	24 lb 15 oz (11.3 kg)	15 lb 14 oz (7.2 kg)
Weight (with optional stand SU-562)	—	14 lb 16 oz (6.8 kg)
Accessories supplied	AC power cord (x1), AC plug holder (x1), Control panel cover (including 3 screws) (x1), Operating Instructions (x1), CD-ROM (x1), Using the CD-ROM Manual (x1), Warranty book (x1)	AC power cord (x1), AC plug holder (x1), Operating Instructions (x1), CD-ROM (x1), Using the CD-ROM Manual (x1), Warranty book (x1)

Optional Accessories



SU-561
Monitor Stand



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



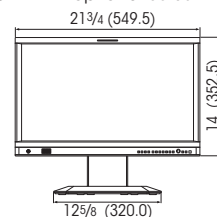
MB-534
Mounting bracket
(for LMD-1541W only)

Dimensions

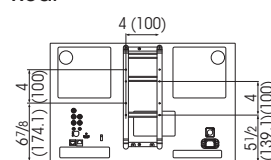
Unit: inches (mm)

LMD-2341W

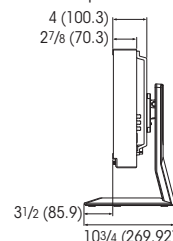
Front with optional SU-561



Rear

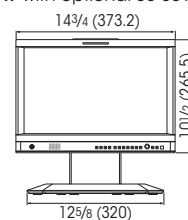


Side with optional SU-561

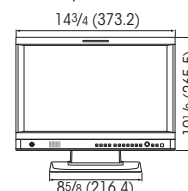


LMD-1541W

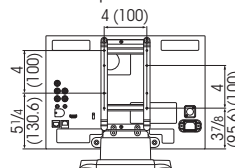
Front with optional SU-561



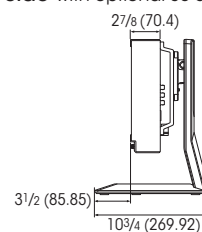
Front with optional SU-562



Rear with optional SU-562



Side with optional SU-561



Side with optional SU-562

