

SONY®

LCD Monitor

LMD-2020
LMD-1420
LMD-2010
LMD-1410



LMD-2020 (The monitor stand is supplied.)

LUMA
Sony Professional LCD Monitor

A new range of LUMA Series monitors optimized for SD signal monitoring.

Sony expands its product line of LUMA™ Series LCD monitors with the introduction of four new models – the 20-inch*¹ LMD-2020 and LMD-2010, and the 14-inch*² LMD-1420 and LMD-1410. Combining years of professional monitor expertise together with the use of extremely high-grade LCDs, these monitors offer the performance to replace conventional CRT monitors – equivalent to the quality you have come to expect of Sony's PVM-L2 and PVM-L1 line of monitors.

What makes these LCD monitors so unique is their superb picture performance in reproducing SD video images. This has been achieved by the use of specially selected VGA resolution (640 x 480 pixel) LCD panels – the natural choice to minimize the effect of converting the input signal's line count to match the LCD's vertical pixel count,

a process required in all LCD monitors purposed for video monitoring. Combined with their rich and stable color, the result is much sharper and more natural image reproduction.

In addition to their many professional features, these monitors are equipped with all types of interlace SD inputs – from analog composite and Y/C (S-video) to analog component and RGB. The LMD-2020 and LMD-1420 add the further capability to accept digital SD-SDI*³ input.

Designed to meet the critical requirements of professional video monitoring, these new LUMA Series LCD monitors are the ideal choice for a smooth migration into the LCD world.

*¹ 20-inch viewable area measured diagonally.

*² 14-inch viewable area measured diagonally.

*³ The optional BKM-320D is required.

Main Features

High Picture Quality

Precise Reproduction of Interlace SD Images

The new LUMA Series LCD monitors incorporate VGA-type LCD panels with 640 x 480 pixel resolution, for precise reproduction of interlace SD video images.

To display an interlace signal on a progressive LCD monitor, it must first be converted to a progressive signal using I/P conversion. In this process, the absent lines of the interlace field are interpolated using data from the previous field, or data from adjacent lines within the same field. A second process, called 'scaling', is then executed to match the input signal's line count to the vertical resolution of the LCD display. However, since scaling involves duplication or removal of scanning lines, it can have a large effect on picture quality in image areas where I/P conversion is difficult to achieve.

To minimize this effect, the LMD-2020, LMD-1420, LMD-2010, and LMD-1410 use specially selected VGA (640 x 480 pixels) LCDs, which allow moderate scaling for the reproduction of 525 and 625 interlace signals. The result is precise image reproduction for any type of picture content.

Excellent Brightness and Contrast

The new LUMA monitors incorporate extremely bright, high-contrast 4:3 aspect ratio LCD panels, which are coated with robust protection layers. The LMD-2020 and LMD-1420 in particular incorporate multi-layer AR (Anti-Reflection) coated protection panels for further robustness.

Faithful Color Reproduction

The LCDs used in the new LUMA monitors provide pure color characteristics that are optimized for video monitoring.

Input Versatility

The LMD-2020, LMD-1420, LMD-2010, and LMD-1410 come equipped with a full range of analog SD inputs including analog composite for NTSC and PAL, Y/C, and 525i or 625i component and RGB. The LMD-2020 and LMD-1420 add SD-SDI input capability by the use of the optional BKM-320D input adaptor.

Wide Viewing Angle of 170 degrees

Convenient Installation

The LMD-2020, LMD-1420, LMD-2010, and LMD-1410 offer a high level of installation convenience. Compared to their PVM monitor equivalents, they are approximately 40% slimmer, 30-50% lighter, and consume 20% less power.

Mounting Flexibility

The VESA® – compatible mounting holes (100 pitch spacings) are available for arm installations. EIA 19-inch standard rack mounting is also possible.

Operational Convenience

The LMD-2020, LMD-1420, LMD-2010, and LMD-1410 monitors provide the convenient features for which Sony professional monitors are renowned.

	LMD-2020 LMD-1420	LMD-2010 LMD-1410
4:3 Marker and Safety Area Marker	●	—
Color temperature/gamma selection	●	●
Blue-only mode	●	—
Three-color tally	●	—
Protected controls	●	●
Monaural audio monitoring	●	●
Switchable aspect ratio to 16:9	●	●
4:3 Zoom	●	—
External Sync	●	—
Parallel Control	●	●
SDI*4 Input	●	—
19-inch EIA Standard Rack Mounting	●*5	●*5
VESA (100 x 100 spacing) Mounting	●	●

*4 The optional BKM-320D is required.

*5 The optional mounting bracket, MB-527, is required for the LMD-2020 and LMD-2010. The MB-526 is required for the LMD-1420 and LMD-1410.

LMD-2020 LMD-1420 LMD-2020/LMD-1420 Connector Panel*6

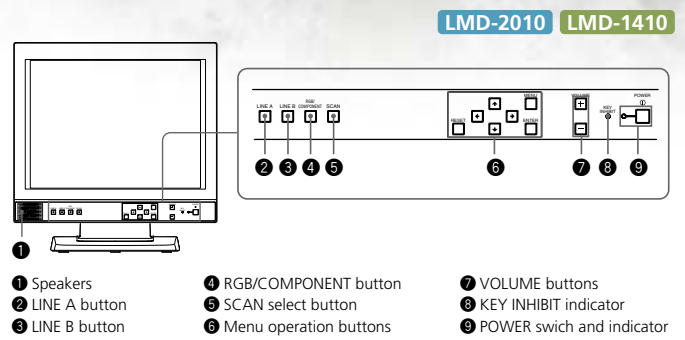
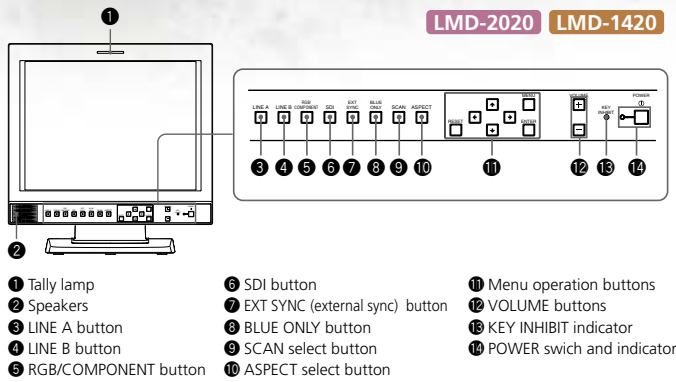


LMD-2010 LMD-1410 LMD-2010/LMD-1410 Connector Panel*6

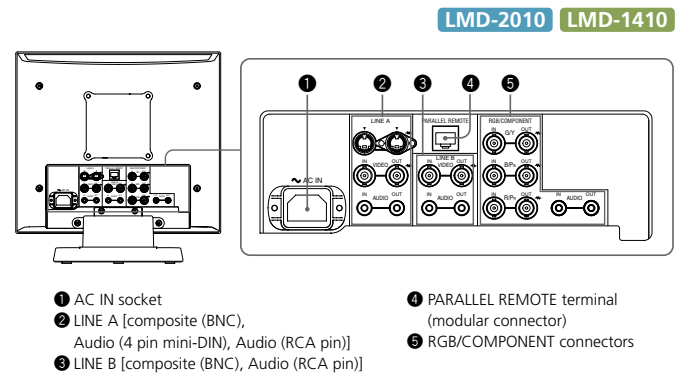
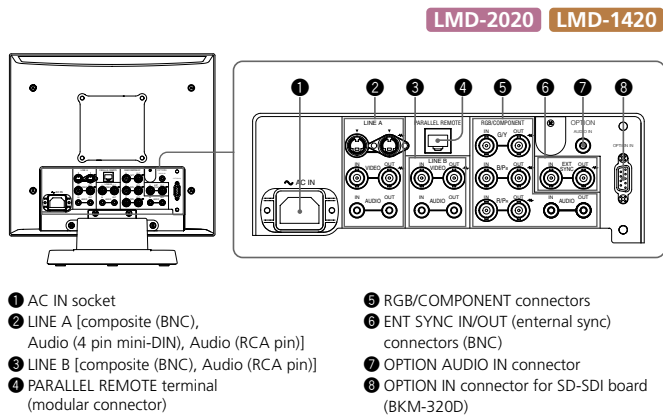


*6 The supplied monitor stand is detachable.

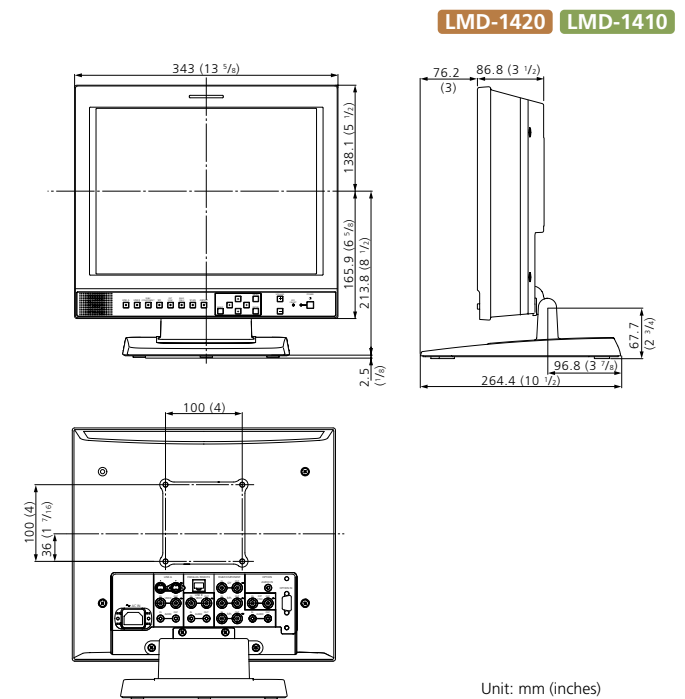
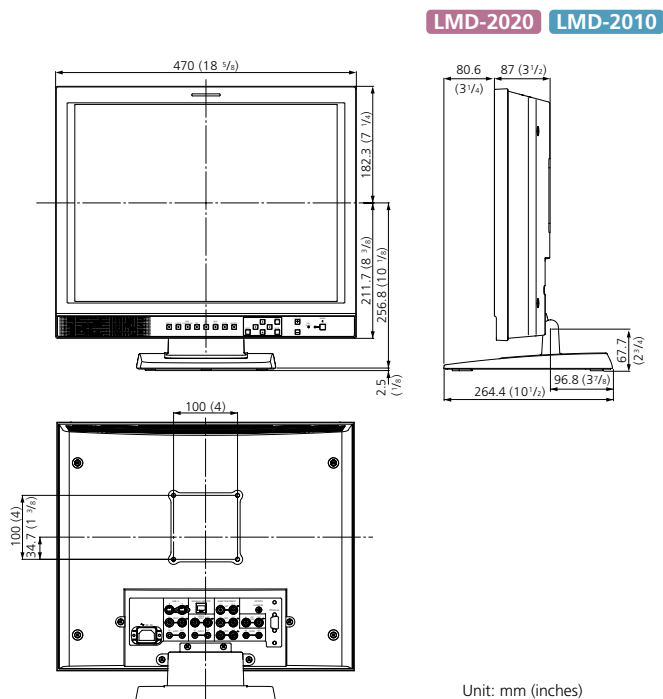
Front Panel



Connector Panel



Dimensions



Unit: mm (inches)

Unit: mm (inches)

Specifications

Model Name		LMD-2020	LMD-1420	LMD-2010	LMD-1410
Picture Performance					
LCD Panel	Type	A-Si TFT Active Matrix LCD with an AR-coated protection panel			A-Si TFT Active Matrix LCD
	Resolution	640 x 480 dots			
	Pixel efficiency	99.99%			
	Dot pitch	0.213(H) x 0.638(V) mm	0.443(H) x 0.443(V) mm	0.213(H) x 0.638(V) mm	0.443(H) x 0.443(V) mm
	Picture Size (H x W)	Approx. 408 x 306 mm (Approx. 16 1/8 x 12 1/8 inches)	Approx. 283 x 212 mm (Approx. 11 1/4 x 8 3/8 inches)	Approx. 408 x 306 mm (Approx. 16 1/8 x 12 1/8 inches)	Approx. 283 x 212 mm (Approx. 11 1/4 x 8 3/8 inches)
		(Diagonal)	510 mm (20.1 inch)	354 mm (14 inch)	510 mm (20.1 inch)
	Aspect	4:3			
	Colors	Approx. 16,700,000 colors		Approx. 16,200,000 colors	
	Viewing Angle	85°/85°/85°/85° (U/D/L/R, contrast >10:1 typical)			
	Input				
Line A	Composite	BNC X 1, 1.0Vp-p±3dB, 75 Ω termination, Sync 0.3 Vp-p negative			
	Y/C	DIN 4 pin x 1, Y: 1.0Vp-p±3dB, 75 Ω termination, C: 0.286Vp-p±3dB (NTSC), 0.3Vp-p±3dB (PAL), 75 Ω termination, Sync 0.3 Vp-p negative			
Audio in		RCA pin x 1, -5dBu 47 kΩ or higher			
		RCA pin x 1, -5dBu 47 kΩ or higher			
Line B	Composite	BNC X 1, 1.0Vp-p±3dB, 75 Ω termination, Sync 0.3 Vp-p negative			
	Y/C	DIN 4 pin x 1, Y: 1.0Vp-p±3dB, 75 Ω termination, C: 0.286Vp-p±3dB (NTSC), 0.3Vp-p±3dB (PAL), 75 Ω termination, Sync 0.3 Vp-p negative			
Audio in		RCA pin x 1, -5dBu 47 kΩ or higher			
		RCA pin x 1, -5dBu 47 kΩ or higher			
RGB/Component	RGB/Component	BNC X 3, 0.7Vp-p±3dB, 75 Ω termination, Sync on Green 0.3Vp-p, negative			
	Audio in	RCA pin x 1, -5dBu 47 kΩ or higher			
Option	SD-SDI	D-sub 9-pin x 1			—
	Audio in	RCA pin x 1, -5dBu 47 kΩ or higher			—
External Sync		BNC X 1			—
Remote	Parallel remote	Moduler 8-pin (Assignable)			—
	Audio in	Controlled through parallel remote (Moduler 8-pin)			—
Output					
Line A	Composite	BNC X 1, Loop-through, with 75 Ω automatic termination			
	Y/C	DIN 4 pin x 1, Loop-through, with 75 Ω automatic termination			
	Audio in	RCA pin x 1, Loop-through			
Line B	Composite	BNC X 1, Loop-through, with 75 Ω automatic termination			
	Y/C	DIN 4 pin x 1, Loop-through, with 75 Ω automatic termination			
	Audio in	RCA pin x 1, Loop-through			
RGB/Component	RGB/Component	BNC X 3, Loop-through, with 75 Ω automatic termination			
	Y/C	DIN 4 pin x 1, Loop-through, with 75 Ω automatic termination			
	Audio in	RCA pin x 1, Loop-through			
External Sync		BNC X 1, Loop-through, with 75 Ω automatic termination			—
Speaker power		0.5 W (monaural)			
General					
Power Consumption		Approx. 87 W	Approx. 51 W	Approx. 84 W	Approx. 48 W
Power requirement		AC100 to 240 V, 50/60 Hz			
Operating Temperature		0 to 35 °C			
Operating Humidity		30 to 85% (No condensation)			
Storage & Transport Temperature		-10 to 40 °C			
Storage & Transport Humidity		0 to 90%			
Operating/Storage/Trans. Pressure		700 to 1060 hPa			
Dimensions (W x H x D)					
Dimension with stand		Approx. 470 x 441 x 264 mm (Approx. 18 5/8 x 17 3/8 x 10 1/2 inches)	Approx. 343 x 354 x 264 mm (Approx. 13 5/8 x 14 x 10 1/2 inches)	Approx. 470 x 441 x 264 mm (Approx. 18 5/8 x 17 3/8 x 10 1/2 inches)	Approx. 343 x 354 x 264 mm (Approx. 13 5/8 x 14 x 10 1/2 inches)
		Approx. 470 x 394 x 87 mm (Approx. 18 5/8 x 15 5/8 x 3 1/2 inches)	Approx. 343 x 304 x 87 mm (Approx. 13 5/8 x 12 x 3 1/2 inches)	Approx. 470 x 394 x 87 mm (Approx. 18 5/8 x 15 5/8 x 3 1/2 inches)	Approx. 343 x 304 x 87 mm (Approx. 13 5/8 x 12 x 3 1/2 inches)
Dimension without stand		Approx. 470 x 394 x 87 mm (Approx. 18 5/8 x 15 5/8 x 3 1/2 inches)	Approx. 343 x 304 x 87 mm (Approx. 13 5/8 x 12 x 3 1/2 inches)	Approx. 470 x 394 x 87 mm (Approx. 18 5/8 x 15 5/8 x 3 1/2 inches)	Approx. 343 x 304 x 87 mm (Approx. 13 5/8 x 12 x 3 1/2 inches)
		Approx. 470 x 394 x 87 mm (Approx. 18 5/8 x 15 5/8 x 3 1/2 inches)	Approx. 343 x 304 x 87 mm (Approx. 13 5/8 x 12 x 3 1/2 inches)	Approx. 470 x 394 x 87 mm (Approx. 18 5/8 x 15 5/8 x 3 1/2 inches)	Approx. 343 x 304 x 87 mm (Approx. 13 5/8 x 12 x 3 1/2 inches)
Mass					
Panel & Stand		Approx. 9.2 kg (Approx. 20 lb 5 oz)	Approx. 6.8 kg (Approx. 14 lb 16 oz)	Approx. 8.7 Kg (Approx. 19 lb 3 oz)	Approx. 6.5 Kg (Approx. 14 lb 5 oz)
Panel only		Approx. 7.5 kg (Approx. 16 lb 9 oz)	Approx. 5.1 kg (Approx. 11 lb 4 oz)	Approx. 7.0 Kg (Approx. 15 lb 7 oz)	Approx. 4.8 Kg (Approx. 10 lb 9 oz)

Optional Accessories



BKM-320D
SD-SDI Input Adaptor

LMD-1420 LMD-2020



MB-527
Mounting Bracket for 20-inch monitor

LMD-2020 LMD-2010



MB-526
Mounting Bracket for 14-inch monitor

LMD-1420 LMD-1410

Distributed by

©2005 Sony Corporation. All rights reserved.
 Reproduction in whole or in part without permission is prohibited.
 Features and specifications are subject to change without notice.
 All non-metric weights and measurements are approximate.
 Images on monitors are simulated.
 Sony and LUMA are trademarks of Sony Corporation.
 VESA is a trademark of the Video Electronics Standards Association.