

LMD-1751W

Professional LCD Monitor

SONY
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The monitor stand is optional.

Inheriting the vital functions and performance of Sony's highly acclaimed LMD Series professional monitors, the LMD-1751W is the latest enhancement to this series, an outstanding new high-grade LCD video monitor.

The LMD-1751W is a 17-inch (431 mm)^{*1} multi-format, rack-mountable HD video monitor, incorporating a wide viewing angle LCD panel, high-purity colour filters, sophisticated 10-bit signal processing, and Sony's unique ChromaTRU^{*2} colour matching technology. With these qualities, the LMD-1751W delivers precise images and accurate colour reproduction for professional video monitoring. Added to this, a newly supported white balance calibration function^{*3} allows quick and simple monitor adjustment and matching.

Another advantage of the LMD-1751W is its 3G-SDI interface. Using an optional 3G-SDI input adaptor, the BKM-250TG, Y/Cb/Cr 4:2:2, 1080/50P, and 1080/60P signals are accepted with a single cable.

With the strength of Sony's video expertise, the LMD-1751W is sure to meet a wide variety of picture monitoring applications from broadcast and post-production to event production and mobile truck installations, in both AC and DC operating environments.

^{*1} Viewable area measured diagonally.

^{*2} ChromaTRU technology offers accurate gamma and stable white balance.

^{*3} This function works with the combination of a PC and a commercially available calibration tool (X-Rite i1).

FEATURES

Superb Picture Performance

High Purity Colour Filters

The LMD-1751W uses precisely manufactured RGB colour filters, allowing the reproduction of Colours with stunning depth and saturation to create highly natural images.

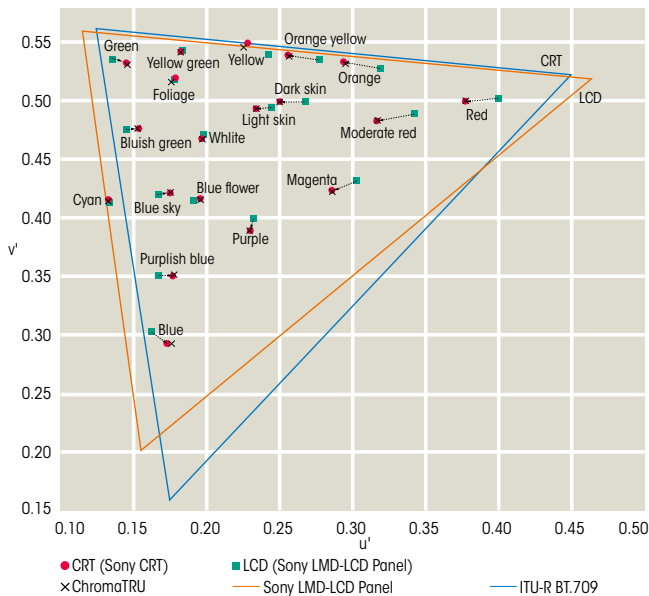
Accurate Gamma and Stable White Balance - ChromaTRU™ Colour Processing

For an extra level of colour-reproduction accuracy, every LCD panel used in the LMD-1751W 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. The LMD-1751W solves 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 grayscale levels. The result of these precise calibrations is excellent colour reproduction reminiscent of Sony's CRT displays.

CIE Colour Coordinates



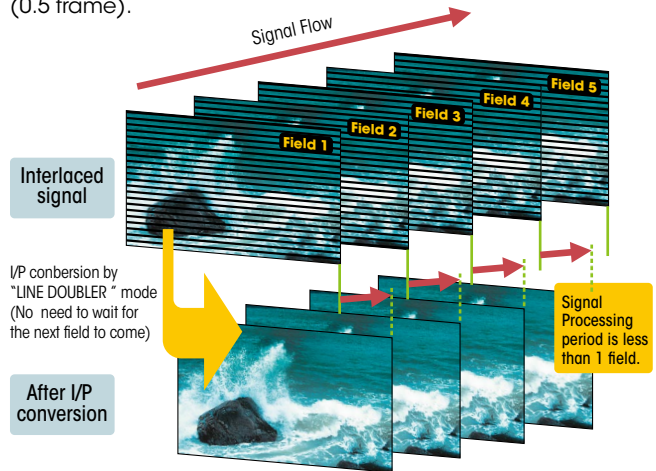
Sophisticated I/P Conversion

The LMD-1751W uses a motion-adaptive I/P-conversion process to achieve conversion results that are optimized to the picture content - whether the image is static or dynamic. Highly accurate I/P conversion is provided regardless of signal resolution including both HD and SD inputs.

Picture Delay Minimum Mode

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" under "IP MODE", the signal processing (I/P conversion) period is less than one field (0.5 frame).



Extremely Wide Viewing Angle

The LMD-1751W offers stable images when viewed from various angles. It delivers wide viewing 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.

White Balance Calibration Function

High-grade LMD 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.

The LMD-1751W employs a software-based white balance calibration function, which is called AutoWhiteBalance. Combined with a commercially available calibration tool*, this function enables simple adjustment of the monitor's white balance.

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



The LMD-1751W with a PC and X-Rite Eye-one(i1).

In addition, the LMD-2451W can be upgraded to support white balance calibration.

Input Versatility

Multi-format Signal Support – Up to 3G-SDI Input

The LMD-1751W accepts almost any SD or HD video format, both analog and digital: NTSC and PAL, component 480/60i and 575/50i, progressive 480/60P and 576/50P, and high-definition 1080/60i, 1080/50i, 720/60P, 1080/24P, 1080/25P, 1080/30P, 1080/24PsF, and 1080/25PsF. It also accepts 1080/50P and 1080/60P formats from a 3G-SDI input. In addition to the standard interfaces that cover composite, Y/C, RGB, and component, there are two optional input slots. Input connector configuration can be easily modified by installing optional input adaptors into these slots. Analog and digital computer signals via the standard HD-15 and DVI-D*1 interfaces are also supported.

*1 Both 1080/50P and 1080/60P signals are accepted. The images are down-converted for display on the LMD-1751W.



Convenient Installation

Mounting Flexibility

Mountable in a 19-inch EIA Standard Rack

The LMD-1751W (7U high) can be rack mounted using an optional MB-530 Mounting Bracket. Complying with VESA standards, LMD-1751W monitors can be easily mounted on walls and ceilings.



The LMD-1751W with an optional MB-530 Mounting Bracket



The LMD-1751W with an optional stand, SU-561.

External Remote Control Function

The LMD-1751W has 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 (10BASE-T/100BASE-TX) connection and controlled remotely on the network. The user can control individual monitors or monitor groups simply by entering the monitor ID or group ID number. They can also execute the same operation on all connected monitors, or put all connected monitors into the same setup and adjustment state.

Power-saving Mode

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

Other Features

- Wave Form Monitor and Audio Level Meter*1 windows
- Picture-by-Picture mode
- H/V Delay function
- ACC Off
- DC operation (12V)
- Setup Level for Analog Component and NTSC signals
- Sub Control on Contrast, Chroma, Phase, and Brightness
- Blue-only mode
- Monochrome mode
- Auto Chroma/Phase setup
- DVI-D input
- DDC-2B
- Colour temperature
- Scan mode selection
- Smart APA
- Stereo audio monitoring
- Protected controls
- Closed-caption decoder with an optional BKM-244CC
- Advanced marker setting

*1 Only embedded audio is supported.

SPECIFICATIONS

Picture Performance		
Type	a-Si TFT Active Matrix LCD	
Resolution (pixels)	1280 x 768	
Picture Size (H x W) (Viewable area) (Diagonal)	Approx. 369.6 x 221.8 mm (Approx. 14 5/8 x 8 3/4 inches) Approx. 431.1 mm (17 inches)	
Aspect	15:9	
Colours	Approx 16,770,000 colours	
Viewing Angle	85°/85°/85°/85° (typical) (up/down/left/right contrast>10:1)	
Input		
Standard	Composite	BNC (x1), 1.0 Vp-p ±3dB sync negative
	Y/C	Mini DIN 4-pin (x1) Y: 1.0 Vp-p ± 3dB sync negative, C: 0.286 Vp-p ± 3dB (NTSC burst signal level), 0.3 Vp-p ± 3dB (PAL burst signal level)
	RGB, Component	BNC (x3) RGB : 0.7 Vp-p ± 3dB (Sync On Green, 0.3 Vp-p sync negative) Component : 0.7 Vp-p ± 3dB (75% chrominance standard colour bar signal)
	External Sync	BNC (x1) 0.3 to 4.0 Vp-p ± bipolarity ternary or negative polarity binary
	Audio	Phono jack (x2) (L, R) -5 dBu 47 kilo ohms or higher
	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 and composite sync) Plug & Play function : corresponds to DDC-2B
	DVI-D	TMDS single link
	Parallel remote	Modular connector 8-pin (x1) (pin assignment at users' allocation)
	Serial remote (LAN)	D-sub 9-pin (RS-232C) (x1), RJ-45 modular connector (ETHERNET) (x1) (10BASE-T/100BASE-TX)
	DC in	XLR type 4-pin (x1) DC 12 V (output impedance 0.05 ohms or less)
Optional	Option input slot	2 slots (for HD-SDI, SDI capability and extra analog I/O's)
Output		
Standard	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 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 W + 1 W (stereo)
General		
Power Requirement	AC 100 V to 240 V 50/60 Hz 0.8A to 0.4 A, DC 12 V, 5.7 A	
Power Consumptio	Maximum Approx. 77 W (with 2 x BKM-229X)	
Operating Temperature	0°C to 35°C (32°F to 95°F)	
Recommended Operation Temperature	20°C to 30°C (68°F to 86°F)	
Operating Humidity	30% to 85% (No condensation)	
Storage & Transport Temperature	-20°C to +60°C (-4°F to +140°F)	
Storage & Transport Humidity	0% to 90%	
Operating/Storage/Trans. Pressure	700 hPa to 1060 hPa	
Dimensions (W x H x D)	without stand 439.5 x 284 x 105.0 mm (17 3/8 x 11 1/4 x 4 1/4 inches) with optional stand 439.5 x 385.7 x 269.9 mm (12 5/8 x 14 3/8 x 10 3/4 inches)	
Display Stand (W x H x D)	SU-561 (Option) 320.0 x 364.0 x 269.9 mm (12 5/8 x 14 3/8 x 10 3/4 inches)	
Mass	without stand and board Approx. 6.3 kg (13 lb 14 oz) with optional stand and boards Approx. 8.8 kg (19 lb 6 oz) with BKM-229X (x2)	
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



BKM-244CC
HD/SD-SDI Closed
Caption Adaptor



BKM-243HS
HD/SD-SDI Input Adaptor



BKM-229X
Analog Component
Adaptor



BKM-227W
NTSC/PAL Input Adaptor



BKM-220D
SD-SDI 4:2:2 Input Adaptor

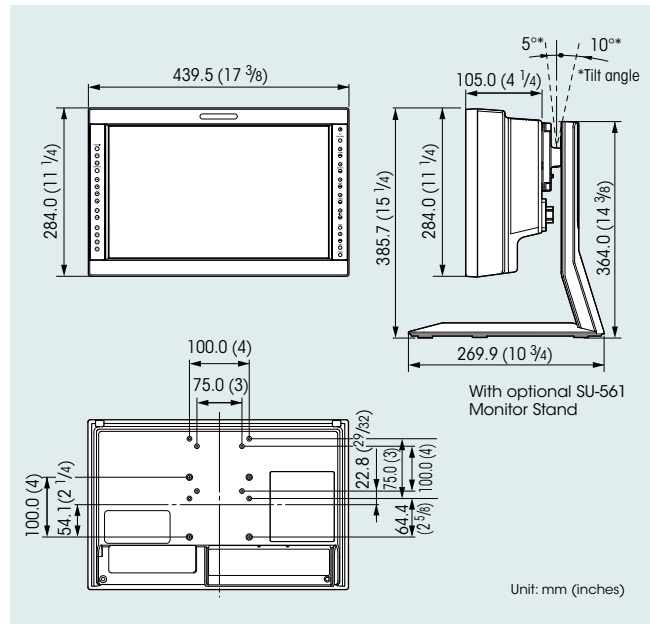


MB-530
Mounting Bracket



SU-561
Monitor Stand

DIMENSIONS



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