

## LMD-1751W

17-inch high grade LCD monitor



### Overview

#### **Ideal for demanding broadcast**

This 17-inch widescreen LCD monitor redefines high performance in the mid-market sector. It incorporates a 1280x768 WXGA LCD panel, displaying high brightness and contrast images with a superior viewing angle. Highly accurate and consistent colour reproduction is assured due to unique Sony ChromaTRU technology, enabling confident picture quality decisions as well as facilitating close colour matching for tiling applications.

Fully digital 10-bit processing adds to the already impressive array of specifications, delivering smooth and colour transitions.

Future-proof flexibility is built-in due to its modular design. An optional 3G SDI input interface supports 1080p content, while a DVI-D input is also available enabling a third-party manufacturer's multi-image processor to be connected. An Ethernet connector is also available to control monitors remotely in a wall configuration.

Entirely at home in broadcast, OB, production, post-production and corporate environments, the LMD-1751W accepts a wide variety of PC and analogue video formats and optional decoder boards are available for standard and high definition digital video display.

## **Suitable for a Wide Range of Applications**

Ideal for BROADCAST (studio, office viewing, control room etc.), PRODUCTION (OB, monitor wall, VTR control, audio monitoring etc.), POST-PRODUCTION (mid-range multi-format editing consoles), CORPORATE (high-end multi-format use) and GRAPHIC DESIGN

## **Superb High Definition Display**

1280x768 LCD panel delivers outstandingly sharp high brightness and contrast pictures

## **Perfect for Group Viewing**

An ultra-wide viewing angle of 178 degrees makes group viewing easy.

## **Outstanding greyscale and colour transitions provide lifelike picture quality.**

Thanks to fully digital 10-bit processing.

## **Colour Quality Decisions can be made with Confidence**

Innovative Sony ChromaTRU technology ensure consistent and repeatable colour to ITU-709, SMPTE-C and EBU standards and from monitor to monitor.

## **Consistently Optimal Picture Performance**

Less 'drift' than CRT displays, with no convergence, geometry or linearity issues, and no susceptibility to magnetic fields.

## **Ideal for 'Tiling' Applications**

Consistent and repeatable chroma and greyscale performance ensures close matching between monitors.

Lighting function keys contribute to an elegant design ideally suited for display wall.

## **Productivity Boost**

With new picture-in-picture and on-screen Video waveform and audio level meter.

## **Exceptionally Versatile**

Equally suited to AV or IT-based applications due to a broad range of inputs and multi-format signal capabilities.

## **Future Proof**

Multi-format and HD capability plus optional decoder boards will ensure that the LMD-1751W remains current.

## **Indoor or Outdoor Operation**

Can be powered by AC or DC power supplies.

## **Easier to Install and Accommodate than CRT**

Space saving / lightweight / low heat output - and ideal for OB or mobile applications

## **Air Conditioning Requirements lower than with CRT**

LCD monitors generate less heat.

## **Low Maintenance**

No routine convergence, geometry or linearity adjustments necessary. No susceptibility to magnetic fields.

## **Reduced Operator Fatigue**

Flicker-free picture is more comfortable to view and reduces eye-strain.

## **Lower Total Cost of Ownership than CRT**

- Simpler and cheaper to install, transport and store.
- Long operational life / high reliability.
- Low energy bills.
- Low maintenance cost.
- Reduced environmental disposal costs.

## Features

### **High resolution 1280x768 WXGA LCD Panel**

Delivers outstandingly crisp, high brightness and high contrast images

### **Extremely wide Viewing Angle**

Class-leading horizontal and vertical viewing angle - ideal for group viewing.

### **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.

### **Colour Temperature**

Colour temperatures of 9300k, 6500k, or a user preset value can be selected.

### **Accurate and Repeatable Colour Reproduction**

ChromaTRU technology ensures close CRT colour accuracy and gamma matching throughout the product's life and delivers consistent colour temperature across the entire greyscale range. Both control characteristics also assure extremely tight colour matching between different model samples.

Three settings are available to simulate EBU, SMPTE and ITU-709 colour reproduction.

### **10-bit Picture Processing**

Delivers smooth colour and greyscale transitions for high quality video production.

### **Sophisticated I/P Conversion**

The LMD-1751W monitor uses a motion-adaptive I/P-conversion process to achieve conversion results that are optimised to the picture content - whether it is static or dynamic. Highly accurate I/P conversion is provided regardless of signal resolution, for example, whether the input is HD or SD.

## **Multi-Format Signal Support - up to 3G SDI Input**

LMD-1751W can accept almost any SD or HD video format, both analogue and digital. Includes NTSC, PAL, component, RGB, Y/C, 480/60i, 575/50i, 480/60p, 576/50p, 1080/50i, 1080/60i, 1080/50p, 1080/60p, 720/50p, 720/60p, 1080/24psf, 1080/25psf, 1080/24p, 1080/25p, 1080/30p and PC signals from VGA to WXGA.

## **3G SDI Input**

The LMD-1751W has a 3G SDI input capability with the optional BKM-250TG plug-in adaptor. This 3G SDI adaptor is compliant with the SMPTE 425 standard, transmitting up to 4:2:2/10-bit 1080/50P or 1080/60P video data through a single SDI cable. This adaptor also accepts Dual-Link HD-SDI signals.

## **Computer Input Frequencies**

The LMD-1751W monitor is factory preset to accept 32 typical computer input signal frequencies.

## **Signal Interface Options**

The monitor can accept up to two optional video boards for additional video analogue or digital inputs (HD/SD/3G SDI). Note that the new LMD-1751W is compatible with current decoder boards.

## **Quad Split functionality**

Harris QS-100HD board has been designed to fit inside the LMD-1751W for space saving. It provides ultimate quad images with many functions associated.

## **Video Waveform and Audio Level Meter**

A combined video waveform and Audio Level Meter is available on the On-screen display of the monitor.

## **Picture-In-Picture mode**

Side by side or Picture-in-Picture (PiP) mode allows users to check two images on the same screen. Combination of video

and computer images side by side is also available.

### **Selectable Scan Size and Aspect Ratio**

Over-scan and Normal-scan as well as full scan is available, and aspect ratio can be switched between 16:9 and 4:3.

### **Multiple-Language On-Screen Display**

English, French, Spanish, German, Italian, Japanese and Chinese.

### **Advanced Video Markers**

The LMD-1751W monitor can display various area markers, including a centre marker, aspect markers, and a safety zone marker. These flexible marker controls, together with the choice of many different aspect markers, make the LMD-1751W monitor extremely convenient display devices for a variety of shooting scenarios - from standard video acquisition to digital cinematography.

### **Three Colour Tally**

The LMD-1751W comes 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.

### **Selectable Scan Size for Video Input and Aspect Ratio**

The scan size can be selected between 5% over scan and 0% scan modes. The aspect ratio can be switched between 16:9 and 4:3 according to the input signal.

### **Smart APA (Auto Pixel Alignment) for Computer Input**

The image size can be automatically adjusted to its optimal setting with the one-touch APA key

### **Remote Control Options**

Three connection methods are available -, parallel 8-pin, serial

RJ45 Ethernet and serial RS232C links. The parallel connection allows up to 38 functions to be remotely controlled.

### **Centralised Monitor-Wall Control**

Via the serial RJ45 Ethernet connector using the BKM-16R control unit.

### **Stereo Audio Monitoring**

The LMD-1751W is equipped with stereo speakers. Up to 16 embedded digital audio channels can be decoded and routed to the speakers. Analogue audio inputs are also catered for.

### **Smart Function Key Lighting**

The key lighting contributes to the elegant design and enhances user functionality. And to increase flexibility, the lighting can be switched off to eliminate any visual disturbance when multiple displays are employed for tiling purposes.

### **Protected Controls**

A key-inhibit switch prevents inadvertent operation from the control panel.

### **VESA Mounting Standard**

Table, wall or ceiling mounting

### **New features with BKM-250TG adaptor**

The BKM-250TG is not only provided 3G SDI inputs. It also allows displaying on the LCD screen the TC, VITC and a separate eight channels Audio Level Meter

## Specifications

### Picture Performance

Panel	a-Si TFT Active Matrix LCD
-------	----------------------------

	431.1 mm
--	----------

Picture Size (Diagonal)	17 inches
Effective Picture Size (H x V)	369.6 x 221.8 mm 14 5/8 x 8 3/4 inches
Resolution (H x V)	1280 x 768 pixels (WXGA)
Aspect	15:9
Pixel Efficiency	0.9999
Backlight	CCFL
Colors	Approx.16.7 million colors
Viewing Angle (Panel Specification)	89°/89°/89°/89° (typical) (up/down/left/right contrast 10:1)
Normal Scan	0% scan
Over Scan	5% over scan

## Input

Composite Input	BNC (x1), 1 Vp-p $\pm$ 3dB sync negative
Y/C Input	Mini DIN 4-pin (x1) Y: 1 Vp-p $\pm$ 3dB sync negative C: 0.286 Vp-p $\pm$ 3dB (NTSC burst signal level), 0.3 Vp-p $\pm$ 3dB (PAL burst signal level)



RGB, Component Input	BNC (x3) RGB: 0.7 Vp-p $\pm$ 3dB (Sync On Green, 0.3 Vp-p sync negative) Component: 0.7 Vp-p $\pm$ 3dB
DVI-D Input	DVI-D (x1) TMDS single link
HD15 Input	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 Input	Phono jack (x2) -5 dBu 47 k $\Omega$ or higher
External Sync Input	BNC (x1) 0.3 to 4.0 Vp-p $\pm$ bipolarity ternary or negative polarity binary
Option Port	Two (2) ports 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

Serial Remote (LAN)	(x1) (Ethernet, 10BASE-T/100BASE-TX)
---------------------	--------------------------------------

DC Input	XLR-type 4-pin (male) (x1), 12V DC (output impedance 0.05 $\Omega$ or less)
----------	---

## Output

Composite Output	BNC (x1), Loop-through, with 75 $\Omega$ automatic terminal function
------------------	--

Y/C Output	Mini DIN 4-pin (x1), Loop-through, with 75 $\Omega$ automatic terminal function
------------	---

RGB, Component Output	BNC (x3), Loop-through, with 75 $\Omega$ automatic terminal function
-----------------------	--

External Sync Output	BNC (x1), Loop-through, with 75 $\Omega$ automatic terminal function
----------------------	--

Audio Monitor Output	Phono jack (x2)
----------------------	-----------------

Speaker (Built-in) Output	1.0 W + 1.0 W (stereo)
---------------------------	------------------------

## General

Power Requirements	100 V to 240 V AC, 0.8 A to 0.4 A, 50/60 Hz 12 V DC, 5.7 A
--------------------	---

Power Consumption	Approx. 77 W (max.) (with 2 x BKM-229X)
Inrush Current	(1) Power ON, current probe method: 17 A (100 V), 26 A (240 V) (2) Hot switching inrush current, measured in accordance with European standard EN55103-1: 38A (230 V)
Operating Temperature	0°C to 35°C (Recommended: 20°C to 30°C) (32°F to 95°F (Recommended: 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/Transport Pressure	700 hPa to 1060 hPa
	439.5 x 284.0 x 105.0 mm

Dimensions (W x H x D) [*1]	<p>439.5 x 385.7 x 269.9 mm (with SU-561 optional stand)</p> <p>17 3/8 x 11 1/4 x 4 1/4 inches</p> <p>17 3/8 x 15 1/4 x 10 3/4 inches (with SU-561 optional stand)</p>
Mass (with options)	<p>Approx. 8.8 kg (when SU-561 and 2x BKM-229X installed)</p> <p>Approx. 19 lb 6 oz (when SU-561 and 2x BKM-229X installed)</p>
Mass	<p>Approx. 6.3 kg (when no monitor stand and no input adaptor installed)</p> <p>Approx. 13 lb 14 oz (when no monitor stand and no input adaptor installed)</p>
Supplied Accessories	<p>AC power cord (1)</p> <p>AC plug holder (1)</p> <p>Operating Instructions (1)</p> <p>CD-ROM (1)</p> <p>Using the CD-ROM Manual (1)</p>

## Optional Accessories

- BKM-220D SDI 4:2:2 Input Adaptor
- BKM-243HS HD/D1-SDI Input Adaptor
- BKM-227W NTSC/PAL Input Adaptor
- BKM-229X Analog Component Input Adaptor
- BKM-244CC HD/SD-SDI Closed Caption Adaptor
- BKM-250TG 3G/HD/SD-SDI Input Adaptor
- MB-530 Mounting Bracket
- SU-561 Monitor Stand

## Notes

Note [\*1] The values for dimensions are approximate.

Environmental notice for customers in the USA

Lamp in this product contains mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or see [www.sony.com/mercury](http://www.sony.com/mercury) for additional information. No Hg

(mercury) contained due to  
change LED backlight from Serial  
Number 3200001.

---

## Gallery



