

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 |

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|-------------------------------------|---|
| 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

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|-----------------|--|
| 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) |

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| 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 Ω 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 |

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| Serial Remote (LAN) | (x1) (Ethernet, 10BASE-T/100BASE-TX) |
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| DC Input | XLR-type 4-pin (male) (x1), 12V DC (output impedance 0.05 Ω or less) |
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Output

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| Composite Output | BNC (x1), Loop-through, with 75 Ω automatic terminal function |
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| Y/C Output | Mini DIN 4-pin (x1), Loop-through, with 75 Ω automatic terminal function |
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|-----------------------|--|
| RGB, Component Output | BNC (x3), Loop-through, with 75 Ω automatic terminal function |
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|----------------------|--|
| External Sync Output | BNC (x1), Loop-through, with 75 Ω automatic terminal function |
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| Audio Monitor Output | Phono jack (x2) |
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| Speaker (Built-in) Output | 1.0 W + 1.0 W (stereo) |
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General

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

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|-----------------------------|--|
| Dimensions (W x H x D) [*1] | 439.5 x 385.7 x 269.9 mm (with SU-561 optional stand) 17 3/8 x 11 1/4 x 4 1/4 inches 17 3/8 x 15 1/4 x 10 3/4 inches (with SU-561 optional stand) |
| Mass (with options) | Approx. 8.8 kg (when SU-561 and 2x BKM-229X installed) Approx. 19 lb 6 oz (when SU-561 and 2x BKM-229X installed) |
| Mass | Approx. 6.3 kg (when no monitor stand and no input adaptor installed) Approx. 13 lb 14 oz (when no monitor stand and no input adaptor installed) |
| 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-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 for additional information. No Hg

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

Gallery



