SONY

LMD-2050W

20-inch Widescreen Multi-format LCD Monitor

Overview

The new LMD-2050W is an elegant 20-inch widescreen LCD monitor designed for demanding broadcast and professional applications. LCD displays are increasingly replacing CRT monitors in the professional arena due to their increased operational flexibility and lower overall ownership cost.

Redefining high performance in the mid-market sector, the new model incorporates an enhanced resolution 1680x1050 WSXGA+ LCD panel, displaying high brightness and contrast images together with a superior viewing angle of 178 degrees. The LMD-2050W offers highly accurate and consistent colour reproduction through its unique Sony ChromaTRU technology. This allows assured picture quality decisions as well as facilitating close colour matching for tiling applications.

Responding to user preferences, the previously separate signal processing unit has been integrated into the monitor body whilst retaining the previous generation's convenience of light weight, minimal depth and outstanding installation flexibility. A stand is now supplied as part of the package.

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

Further enhancements include a DVI-D input, enabling a third-party manufacturer's multi-image processor to be connected, an LCD backlight control and an Ethernet remote control function ideal for monitor walls. It also sports a new on-screen audio level meter and video waveform display plus a picture-in-picture mode for greater user flexibility.

Entirely at home in broadcast, OB, production, post-production and corporate environments, the LMD-2050W 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)
- GRAPHIC DESIGN

Superb High Resolution Display

1680x1050 LCD panel delivers outstandingly sharp high brightness and contrast pictures

Perfect for Group Viewing

An ultra-wide viewing angle of 178 degrees makes this no problem at all

Outstanding greyscale and colour transitions provide lifelike picture quality

Thanks to full digital 10-bit processing.

Colour Quality Decisions can be made with Confidence

Innovative Sony ChromaTRU technology ensures consistent and repeatable colour to ITU-709, SMPTE 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.

Productivity Boost

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

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 signal acceptance plus optional decoder boards will ensure that the LMD-2050W remains current.

Indoor or Outdoor Operation

Can be powered by AC or DC supply.

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 purity adjustments necessary. No susceptibility to magnetic fields.

Reduced Operator Fatigue

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

Lower Total Ownership Cost 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

New High Resolution 1680x1050 WSXGA+ LCD Panel

Delivers outstandingly crisp, high brightness and high contrast images

Accurate and Repeatable Colour Reproduction

ChromaTRU technology ensures close CRT 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.

New 178 Degree Viewing Angle

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

New 10-bit Picture Processing

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

Colour Temperature/Gamma Selection

High/low colour temperature or user presets can be selected.

Multi-Format Signal Support

Includes NTSC, PAL, component, RGB, Y/C, 480/60i, 575/50i, 480/60p, 576/50p, 1080/50i, 1080/60i, 720/50p, 720/60p, 1080/24psf, 1080/25psf, 1080/24p, 1080/25p, 1080/30p and PC signals from VGA to WSXGA+.

Signal Interface Options

The monitor can accept up to two optional video boards for additional video analogue or digital inputs (HD/SD SDI). Note that the new LMD-2050W is compatible with current decoder boards.

New Picture-In-Picture mode

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

New Audio Level Meter and Video Waveform Monitor

On-screen displays enhance operational functionality.

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.

Video Markers

Wide range available for TV and movie makers.

Three Colour Tally

The tally lamp can be lit via a parallel or serial remote connector and status identified by three colours: red, green or amber.

Remote Control Options

Three connection methods are available - serial RS232C, parallel

8-pin and a new serial RJ45 Ethernet link. The parallel connection allows up to 30 functions to be remotely controlled.

Centralised Monitor-Wall Control
Via the new serial RJ45 Ethernet connector

Stereo Audio Monitoring
The LMD-2050W 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
Simple table, wall or ceiling mounting

Can be 19" Rack Mounted
With optional MB-529 fixing kit.

Specifications

Picture Performance	
Type	A-Si TFT Active Matrix LCD
Resolution	1680 x1050 pixels (WSXGA+)
Picture Size (H x W) (Viewable area)	Approx. 433.5 x 272.9 mm (Approx. 17 1/8 x 10 3/4 inches)

(Diagonal)	Approx. 511.1 mm (20 1/8 inches)
Aspect	16:10
colours	Approx 16,777,216 colours (8bits)
Viewing Angle	89°/89°/89°/89° (typical) (up/down/left/right contrast>10:1)

Input	
Composite	BNC x 1, 1.0 VP-p ±3dB sync negative
Y/C	4pin Mini DIN x 1 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 x 3 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 x 1 0.3 to 4.0 Vp-p ± bipolarity ternary or negative polarity binary

Audio	RCA pin x 2 (L, R) -5 dBu 47 k ohms or higher
HD15	D-sub 15 pin x 1 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	TMDS signal link
Parallel remote	Modular connector 8 pin x 1 (pin assignment at users' allocation)
Serial remote (LAN)	D-sub 9-pin (RS232C) x 1 RJ-45 modular connector (ETHERNET) x 1 (10BASE-T/100BASE-TX)
DC in	XLR type 4pin x 1 DC24V (output impedance 0.005 ohms or less)
Optional	Option input slot, 2 slots (for HD-SDI, SDI capability and extra analogue I/O's)

Output

	BNC x 1, 1.0 VP-p ±3dB sync

Composite	negative
Y/C	4pin Mini DIN x 1 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 x 3 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)

General

Storage & Transport Humidity	0 to 90 %
Operating/Storage/Trans. Pressure	700 to 1060 hPa
Dimensions (W x H x D)	Dimension 518.5 x 468.4 x 269.9 mm (20 1/2 x 18 1/2 x 10 3/4 inch) Dimension without stand 518.5 x 328.7 x 104.7 mm (20 1/2 x 13 x 4 1/8 inch)
	320.0 x 361.5 x 269.9 mm (12 5/8

Display Stand (W x H x D)	x 14 1/4 x 10 3/4 inches)
Mass	With two option boards Approx. 10.5 kg (23 lb 2 oz) with BKM-229X x 2 Without option boards Approx. 10.1 kg (22 lb 4 oz)
Power Requirement	AC100V to 240V 50/60Hz 0.4A to 0.8A, DC24V 3.3A
Power Consumption	Maximum Approx. 95 W (with 2 x BKM-229X)
Operating Temperature	0 to 35 °C (recommended operation temperature 20 to 30 °C)
Operating Humidity	30 to 85% (No condensation)
Storage & Transport Temperature	-20 to 60 °C

Supplied Accessories

AC power cord

Table stand

Notes

| 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. |

Gallery