

## 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.

## Features

### **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.

### **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)<br>(Viewable area) | Approx. 433.5 x 272.9 mm<br>(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)<br>(up/down/left/right contrast>10:1) |

## Input

|                |  |
|----------------|--|
| Composite      | BNC x 1, 1.0 Vp-p $\pm$ 3dB sync negative  |
| Y/C            | 4pin Mini DIN x 1<br>Y: 1.0 Vp-p $\pm$ 3dB sync negative<br>C: 0.286 Vp-p $\pm$ 3dB (NTSC burst signal level), 0.3 Vp-p $\pm$ 3dB (PAL burst signal level) |
| RGB, Component | BNC x 3<br>RGB : 0.7 Vp-p $\pm$ 3dB (Sync On Green, 0.3 Vp-p sync negative)<br>Component : 0.7 Vp-p $\pm$ 3dB (75% chrominance standard colour bar signal) |
| External Sync  | BNC x 1<br>0.3 to 4.0 Vp-p $\pm$ 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<br>R/G/B: 0.7 Vp-p sync positive (Sync On Green, 0.3 Vp-p sync negative)<br>Sync : Total level (polarity free, H/V separate and composite sync)<br>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<br>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  $\pm$ 3dB sync



|                |  |
|----------------|--|
| Composite      | negative   |
| Y/C            | 4pin Mini DIN x 1<br>Y: 1.0 Vp-p $\pm$ 3dB sync negative<br>C: 0.286 Vp-p $\pm$ 3dB (NTSC burst signal level), 0.3 Vp-p $\pm$ 3dB (PAL burst signal level) |
| RGB, Component | BNC x 3<br>RGB : 0.7 Vp-p $\pm$ 3dB (Sync On Green, 0.3 Vp-p sync negative)<br>Component : 0.7 Vp-p $\pm$ 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](http://www.sony.com/mercury) for additional information.

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## Gallery

