

LMD-B240

24-inch cost-effective,
lightweight basic grade Full HD
LCD monitor for versatile use



Overview

Lightweight and slim Full HD (1920 x 1080) LMD-B Series monitor with an excellent cost-performance ratio and unique SDI and HDMI sync-free side by side configurations

The LMD-B240 23.8-inch LMD-B Series lightweight and compact LCD monitor offers Full HD resolution. The LMD-B Series offers convenient features, functions and the same user-interface design and operability as PVM-A Series OLED and LMD-A Series Premium LCD picture monitors. This consistency between the PVM-A, LMD-A and LMD-B Series makes it easy for users to work with all three monitors and integrate them in the same work environment. The LMD-B240 offers unique SDI and HDMI sync-free side by side configurations, whereby HD, SD, different frame rates, interlace, PsF and progressive pictures can be displayed on the same monitor. The LMD-B Series monitors are a cost-effective and versatile solution for a wide range of professional applications, including DC operation and wall-mounting. The monitor features a user reset function and includes stereo front-mounted speakers and an audio muting function. In addition, the LMD-B240 includes a natural ventilation system meaning no audio disruption from an internal cooling fan, making the monitor highly suitable for video shooting and critical audio operations.

Unique SDI and HDMI sync-free side by side configurations

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23.8-inch screen size and Full HD resolution

The LMD- 23.8-inch LCD panel is ideal for a wide variety of applications, from a desk-top use to wall-mounting, arm-mounting and outfield shooting. The monitor can be rack-mounted with a MB-L22 rack mount bracket and is supplied with a LMD-A Series type stand. The Full HD (1920 x 1080) resolution is approximately 200% higher resolution than Wide-XGA (1366 x 768 or 1280 x 768), giving you sharp focus for pixel-by-pixel checking of a Full HD video with no scaling.

Stylish lightweight and slim body

The monitor has a robust and stylish sharp-edges chassis. Lighter weight and lower power consumption saves you money as well as space and weight in digital galleries. The monitor is also ideal for stand-alone applications such as basic non-linear editing, audio control room, simple video monitoring or video shooting.

Simple all-in-one design style with front stereo speakers and natural ventilation system

The LMD-B240 inherits its all-in-one design style from the PVM-A and LMD-A series. It has the mandatory interfaces such as SDI, HDMI and composite video with stereo analogue audio. You can monitor the embedded audio signals of an SDI signal on the audio level meters of the screen. 2W+2W front stereo speakers are more powerful than a monaural speaker or a rear speaker system and you can get a good stereophonic effect from them. It can be powered by both AC and DC with no AC adaptor. Its natural ventilation system ensures there are no distracting cooling fan noise.

Easy operation in a group of Sony PVM/LMD monitors

With the same operability as the PVM-A and LMD-A Series, you can easily go back and forth when using monitors from the different ranges in one system. You can easily select the best monitor for a function, according to your feature, quality and budget requirements.

Selected essential functions for basic video operations

LMD-B240 offers vital functions, including markers, WFM/vector, audio level meters, timecode display, camera focus function, side by side, Flip H/V and on-screen tally. The user reset function makes it easy to return the monitor to the default setting very quickly. This is very useful if a user is not familiar with the monitor settings. The LMD-B240 can be also operated in one of 7 languages (Chinese, English, French, Germany, Italian, Japanese and Spanish).

Features

Unique SDI and HDMI sync-free side by side configurations

The LMD-B240 offers unique SDI and HDMI sync-free side by side configurations, whereby HD, SD, different frame rates, interlace, PsF and progressive pictures can be displayed on the same monitor. The signal processing of this feature is close to its low latency of a single screen. Focus assist and camera metadata can work with the main picture when using this function.

Lightweight and compact with lower power consumption

The LMD-B240 has a low 6.5kg mass (with stand), 6.4kg (monitor only) and 41W (maximum) power consumption.

Optimised low-latency I/P conversion

The I/P conversion system delivers automatically optimised

signal processing according to input signals with low-latency (less than 0.5 field). This system helps users to edit and monitor for a live production.

Video input versatility

The LMD-B240 monitor is equipped with built-in standard input interfaces: HD/SD-SDI (x2), HDMI (HDCP) input (x1) and composite (x1).

Computer input versatility

Multiple computer signals can be received via an HDMI/DVI interface; the resolution range is from 640 x 480 to 1680 x 1050 pixels.

Waveform monitor, vector scope and audio level meter display

An input signal's waveform and vector scope with an SDI-embedded 2-channel audio level meter can be displayed on screen. The waveform of a specified line can also be displayed. In conjunction with the Picture & Picture function, the waveform monitor and vector scope display can monitor two camera signals. In addition, an audio level meter can display the embedded audio signal from the SDI or HDMI input. It can display on screen the ch1 to ch8 or ch9 to ch16.

Front stereo speakers

2W+2W front stereo speakers are more powerful than a monaural speaker or a rear speaker system and you can get a good stereophonic effect from them. You can select audio sources from either embedded audio or analogue audio.

User-friendly operability and user interface

This monitor has an intuitive and appropriate user interface for a video production. You can easily choose an input and a function by a single click. The rotary encoder knob makes it easy to select an item and enter it. The lighted control panel has a good readability in dark. This user interface including OSD menu layout

is carefully designed for a time critical operation as either a single unit or multiple units, using a variety of Sony professional monitors in one system.

Consistent design with PVM/LMD-A Series monitors

LMD-B240 monitor offers the same functions and operability as PVM-A and LMD-A Series monitors and shares a consistent front control panel design. This means that these types of monitor can be operated and controlled in the same way.

User reset, key inhibit and function key configuration short-cuts

When multiple users share the same monitor, you need to reset it in a quick operation. User reset function quickly returns the unit to the default settings. Key inhibit protects the required settings of it from any inadvertent operations. For improving speed of the function key configuration, the user can take a short-cut to the settings menu screen by simply holding down one of the Function keys.

Camera focus function

The LMD-B240 monitor can control the aperture level of a video signal, and display images on the screen with sharpened edges to help camera focus operation. Further to this, the sharpened edges can be displayed in user-selectable colours (white, red, green, blue, and yellow) for more precise focusing.

Time code function

LTC and VITC time code can be displayed at the top or bottom of the picture.

On-screen tally

The monitor is equipped with a three-colours red, green and yellow on-screen tally function. The position of the tally display can be changed to either the upper or lower section of the screen.

Flip functions

The Flip function turns the reversed image to a normal view, horizontally or vertically.

DC low power indicator

DC power supply is available in the range of 12V to 17V. The power indicator blinks when the DC power supply is low.

Wall-mount capability and LMD-A type stand

The LMD-B240 is supplied with a LMD-A type stand. It can also be rack mounted with the MB-L22 rack mount bracket.

Natural ventilation system

There is no cooling fan inside, making the monitor suitable for video shooting and critical audio operations.

Specifications

Picture Performance

Panel	a-Si TFT Active Matrix LCD
Picture Size (Diagonal)	604.7 mm (23 7/8 inches)
Effective Picture Size (H x V)	527.04 × 296.46 mm 20 3/4 x 11 3/4 inches
Resolution (H x V)	1920 x 1080 pixels (Full HD)
Aspect	16:9
Pixel Efficiency	99.99%
Colours	Approx. 16.7 million colours
Viewing Angle (Panel)	89°/89°/89°/89° (typical)

Specification) (up/down/left/right contrast > 10:1)

Normal Scan 0% scan

Input

Composite Input BNC (x1), 1 V_{p-p} ±3dB, sync negative

SDI Input BNC (x2)

HDMI Input HDMI (x1) (HDCP correspondence)

Audio Input Stereo mini jack (x1), -5 dBu 47 kΩ or higher

Parallel Remote RJ-45 Modular connector 8-pin (x1) (Pin-assignable)

DC Input XLR-type 4-pin (male) (x1), DC 12 V to 17 V (output impedance 0.05 Ω or less)

Output

Composite Output BNC (x1), Loop-through, with 75 Ω automatic terminal function

BNC (x1)*, output signal amplitude: 800 mV_{p-p} ±10%,

SDI Output	output impedance: 75 Ω unbalanced *Output from SDI 1 only.
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Audio Monitor Output	Stereo mini jack (x1)
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Speaker (Built-in)	2.0 W+2.0W (Stereo)
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Headphone Output	Stereo mini jack (x1)
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General

Power Requirements	AC: 100-240V,0.5-0.3A,50/60Hz DC: 12-17V,3.2-2.0A
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Power Consumption	Approx. 41W (max.) Approx. 29W (average power consumption in the default status)
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Inrush Current	(1) Maximum possible inrush current at initial switch-on (Voltage changes caused by manual switching): TBA A peak, TBA A r.m.s. (240V AC) (2) Inrush current after a mains interruption of five seconds (Voltage changes
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	caused at zero-crossing): TBA A peak, TBA A r.m.s. (240V AC)
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
Dimensions (W x H x D) *1	563.0 x 375.3 x 69.0 mm (without monitor feet) 563.0 x 397.6 x 165.0 (with monitor feet) 22 1/4 x 14 7/8 x 2 3/4 inches (without monitor feet) 22 1/4 x 15 3/4 x 6 1/2 inches (with monitor feet)

Mass	Approx. 6.5 kg (14lb 5oz) Approx. 6.4 kg (14lb) (When the monitor stand is removed)
Accessories supplied	AC power cord (1) AC plug holder (1) Before Using This Unit (1)

Notes

*1

The values for dimensions are approximate.

Related products



HXR-NX100

1.0-type Exmor R™ CMOS Sensor NXCAM camcorder with maximum 48x zoom lens and 3 independent manual lens rings recording XAVC S, AVCHD and DV



HXR-NX3

Three 1/2.8-inch Exmor CMOS sensors Full HD AVCHD camcorder with 35mm full-frame format equivalent Sony G lens and 40x zoom with Clear Image Zoom



HXR-NX5R

Three 1/2.8-inch Exmor CMOS sensors Full HD AVCHD / XAVC S camcorder with 40x zoom with Clear Image Zoom and built-in wireless functionality.



PXW-Z150

Compact handy camcorder delivers broadcast quality 4K and Full-HD



NEX-



PXW-FS7



PXW-FS5



PXW-

EA50H

NXCAM Large Format Sensor camcorder with E-mount lens system



4K Super 35mm Exmor CMOS sensor XDCAM camera with α Mount lens system, 4K/2K RAW and XAVC recording options



Grab and Shoot with handheld Super 35



FS7M2

4K Super 35mm Exmor CMOS sensor XDCAM camera with Variable ND Filter, E-Mount (Lever Lock), 4K/2K RAW and XAVC recording



PXW-X400

Three 2/3-inch type Exmor CMOS sensors XDCAM weight-balanced advanced shoulder camcorder with HLG option, improved network connectivity and low power consumption



PXW-X500

Three 2/3-inch type PowerHAD FX Full HD CCD sensors XDCAM camcorder with multi-format recordings including XAVC



PDW-680

Three 2/3-inch type Exmor CMOS sensors XDCAM HD shoulder camcorder recording full HD / SD

PDW-850

Three 2/3-inch PowerHAD FX CCD sensors XDCAM HD422 ultimate Professional Disc camcorder with best picture quality and easy-to-share and archive media

HXC-FB80

Three 2/3-inch Exmor™ CMOS sensor HD colour studio camera

PXW-Z450

4K HDR 2/3-type CMOS sensor shoulder camcorder with advanced network features, low power consumption and optimised weight balance

Gallery

