

LMD-B170

LCD Picture Monitors



17-inch cost-effective, lightweight Full HD Basic grade LCD monitor for versatile use

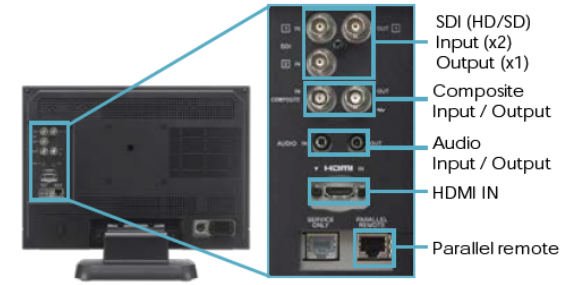
Main Features

- Industry standard 17" screen size and Full HD resolution
- Lightweight and compact with lower power consumption
- Simple all-in-one design style
- Front stereo speakers and Natural ventilation system
- Optimised low-latency I/P conversion
- Video input / Computer input versatility
- Waveform monitor, vector scope and audio level meter display
- User-friendly operability and user interface consistent with PVM/LMD-A Series monitors.
- Camera focus function
- Time code function
- On-screen tally
- User reset, Key inhibit, User Short-cut to function key configuration
- Side by side function
- Flip function
- AC/DC operation with DC Low Power indicator
- Wall-mount capability

Picture Performance	
Panel	a-Si TFT Active Matrix LCD
Picture size (diagonal)	438.2 mm (17 3/8 inches)
Effective picture size (H x V)	381.9 x 214.8 mm (15 1/8 x 8 1/2 inches)
Resolution (H x V)	1920 x 1080 pixels (Full HD)
Aspect	16:9
Colors	Approx. 16.7 million colors
Viewing angle (Panel specification)	80°/60°/80°/80° (typical) (up/down/left/right contrast > 10:1)
Input	
Composite input	BNC (x1), 1.0 Vp-p ±3 dB, 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 17V (output impedance 0.05 Ω or less)
Output	
Composite output	BNC (x1), loop-through, with 75 Ω automatic terminal function
SDI output	BNC (x1)*1 Output signal amplitude: 800 mVp-p ±10% Output impedance: 75 Ω unbalanced
Audio monitor output	Stereo mini jack (x1)
Speaker (built-in) output	2.0 W + 2.0 W (Stereo)
Headphones output	Stereo mini jack (x1)
General	
Power requirements	AC 100 V to 240 V, 0.4 A to 0.3 A, 50/60 Hz DC 12 V to 17 V, 2.7 A to 1.9 A
Power consumption	Approx. 38 W (max.) Approx. 28 W (average power consumption in the default status)
Operating temperature	0°C to 35°C (32°F to 95°F) Recommended: 20°C to 30°C (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)*2	423.2 x 303.8 x 68.0 mm (16 3/4 x 12 x 2 3/4 inches) (without monitor feet) 423.2 x 346.5 x 264.4 mm (16 3/4 x 13 3/4 x 10 1/2 inches) (with monitor feet)
Mass	4.1 kg (9 lb 0.6 oz) (without monitor feet) 5.9 kg (13 lb 0.1 oz) (with monitor feet)
Supplied accessories	AC power cord (1), AC plug holder (1), Before Using This Unit (1), CD-ROM (1)

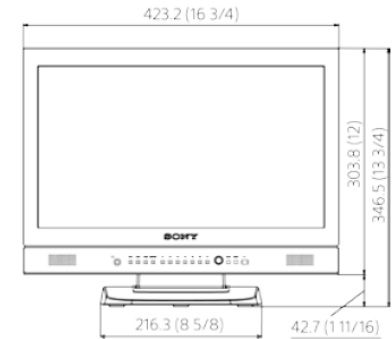
*1 Output from SDI 1 only.

*2 The values for mass and dimensions are approximate.

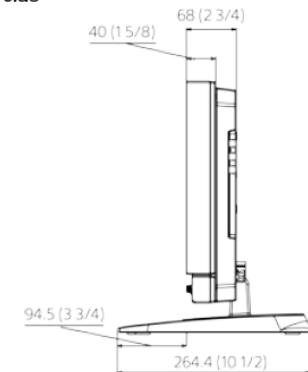


Dimensions

Front



Side



Unit: mm (inches)

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Industry standard 17" screen size and Full HD resolution

Industry standard 17" screen is a most user-friendly size to be suitable from a desk-top use to a wall-mounting use, an arm-mounting use and an outfield shooting. The Full HD(1920x1080) resolution is approximately 200% higher resolution than Wide-XGA(1366x768 or 1280x768). FHD is today's minimum requirement for a video production and versatile monitoring purposes of many industries to get a sharp focus and make a pixel to pixel check of a Full HD video with no scaling. The LMD-B170 satisfies both requirements with an excellent cost-performance ratio.



Lightweight and compact with lower power consumption

The LMD-B170 monitor incorporate a lightweight, compact body. The LMD-B170 inherits their all-in-one design style from the PVM/LMD-A series. It has the mandatory interfaces such as SDI, HDMI and composite video with stereo analog audio. You can monitor both embedded audio signals of SDI signal and analog audio signals on the audio level meters of the screen. And also, it has the supplied stand with the tilt function and a wall mounting function for desktop editing, office viewing, etc.



Front stereo speakers and Natural ventilation system



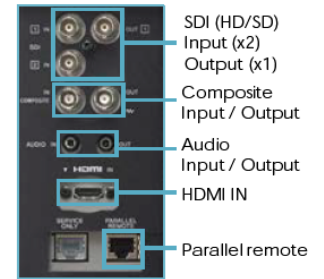
2W+2W front stereo speakers are more powerful than a monaural speaker or a rear speaker system and you can get a good stereophonic effect from them. You can select audio sources from either embedded audio or analog audio. There is no cooling fan inside and it is suitable for a video shooting and critical audio operation.

Optimized Low-latency I/P Conversion

The I/P conversion system delivers automatically optimized 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 / Computer input versatility

The LMD-B170 monitor is equipped with built-in standard input interfaces: HD/SD-SDI (x2), HDMI (HDCP) input (x1) and composite (x1). Multiple computer signals can be received via an HDMI/DVI* interface; the resolution range is from 640 x 480 to 1680 x 1050 pixels. *HDMI-DVI conversion cable required.



User-friendly Operability and User Interface

A rotary-type switch and seven function-assignable buttons allow users quick and intuitive operation. Operation buttons with LED indicators enable error-free operation, even in dark environments.* The LMD-B170 monitor offer the same functions and operability as PVM-A/ LMD-A Series. This means that both types of monitor can be operated and controlled in the same way. *LED lights can be switched on/off.



Front control panel: Consistent design between the PVM-A and LMD-A Series.

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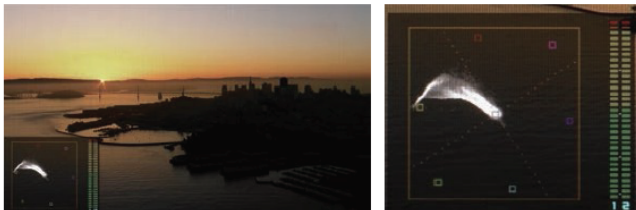
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Waveform monitor, vector scope and audio level meter display

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.



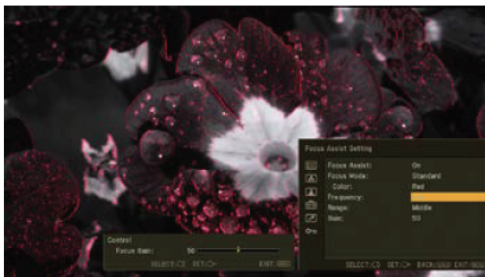
Waveform monitor



Vector scope

Camera Focus Function

The LMD-B170 monitor can control the aperture level of a video signal, and display images on screen with sharpened edges to help camera focus operation. Further to this, the sharpened edges can be displayed in user-selectable colors (white, red, green, blue, and yellow) for more precise focusing.



Camera focus image

Time code

Tally information can be displayed on screen.



Time code and waveform monitor



Time code, on-screen tally, and 93% area marker

On-screen Tally

The on-screen tally can display in three colors. The position of the tally display can be changed to either the upper or lower section of the screen.



On-screen tally (upper)



On-screen tally (lower)

User reset, Key inhibit, User Short-cut to function key configuration

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.

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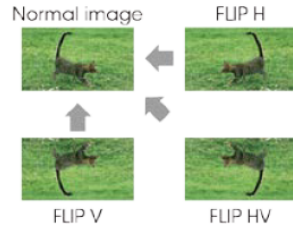
Side-by-side

The two picture images* are downsampled using a digital filter and displayed side-by-side. This feature is convenient when making white balance adjustments or determining shooting angles between two cameras. You can use this with the waveform monitor or vector. You can use this with the waveform monitor or vector. *Two signals must be synchronized.



Flip Function

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



Wall-mount capability

There are also wall-mount 100 mm pitch holes on each monitor's rear panel. Built-in AC circuit allows it to install more easily and flexibly.

DVI Input Signals*

System	HDMI/DVI		
	Resolution	Dot clock (MHz)	fH (kHz)
640 × 480	25.175	31.5	60
1280 × 768	68.25	47.4	
1280 × 1024	108.000	64.0	
1360 × 768	85.500	47.7	
1440 × 900	88.750	55.5	
1680 × 1050	119.000	64.7	

* A DVI-HDMI conversion cable is required.
The sides of the displayed picture may be hidden depending on the input signal.

Signal Formats

System	Signal standard				
	Analog composite	SDI			HDMI
		SD/HD	Dual link	3G	
575/50i (PAL)	O	O	-	-	O
480/60i (NTSC)*1	O	O	-	-	O
576/50p	-	-	-	-	O
480/60p*1	-	-	-	-	O
640 x 480/60p*1	-	-	-	-	O
1920 x 1080/24PsF*1*2	-	O	-	-	-
1920 x 1080/25PsF*2	-	O	-	-	-
1920 x 1080/30PsF*1*2	-	O	-	-	-
1920 x 1080/24p*1	-	O	-	-	O
1920 x 1080/25p	-	O	-	-	O
1920 x 1080/30p*1	-	O	-	-	O
1920 x 1080/50i	-	O	-	-	O
1920 x 1080/60i*1	-	O	-	-	O
1920 x 1080/50p	-	-	-	-	O
1920 x 1080/60p*1	-	-	-	-	O
1280 x 720/24p*1	-	O	-	-	-
1280 x 720/25p	-	O	-	-	-
1280 x 720/30p*1	-	O	-	-	-
1280 x 720/50p	-	O	-	-	O
1280 x 720/60p*1	-	O	-	-	O
2048 x 1080/24PsF	-	O	-	-	-
2048 x 1080/25PsF	-	-	-	-	-
2048 x 1080/30PsF	-	-	-	-	-
2048 x 1080/24p	-	-	-	-	-
2048 x 1080/25p	-	-	-	-	-
2048 x 1080/30p	-	-	-	-	-
2048 x 1080/48p	-	-	-	-	-
2048 x 1080/50p	-	-	-	-	-
2048 x 1080/60p	-	-	-	-	-

*1 Compatible with 1/1.001 frame rates.
*2 LMD-B170: 1080/25PsF, 30PsF are displayed as 1080/25PsF, 30PsF on the screen if the Payload ID is added to the video signal, or displayed as 1080/50i, 60i if the ID is not added.

