

SONY



Sony's visionary line  
of medical monitors.  
The clear choice for today's O.R.



LMD-2450MD 24" High Definition Medical Monitor



## The LMD-2450MD 24" Full HD Medical Monitor:

The high-definition, widescreen monitor with extraordinary image quality.

For over twenty years, Sony has been a trusted and reliable resource for the medical industry. From Sony recording devices to printers to CRT monitors that dominated medical environments for many years, Sony has proven itself as an industry leader. Sony continues that heritage by bringing high-definition technology to the surgical suite with the LMD-2450MD 24" full HD medical monitor.

Sony's LMD-2450MD monitor is a widescreen (16:10 ratio), high-definition, 24-inch\* medical grade monitor optimized for surgical operating rooms. With Sony's advanced image processing technology, the LMD-2450MD reproduces incredibly accurate, high-definition images and a wider surgical viewing field. Incorporating a superb quality, WUXGA (1920 x 1200) panel, the monitor delivers extremely high levels of brightness and high-contrast images, with four times the resolution of standard-definition monitors.

# The LMD-2450MD 24" LCD HD Monitor

## Set your sights higher.



The LMD-2450MD HD monitor accepts almost any analog and digital SD or HD video signal, allowing doctors to view images from multiple sources, and the advanced Sony ChromaTRU™ color processing technology provides consistent color images across multiple monitors. By adopting an advanced, 10-bit digital video signal processor, the monitor reproduces precise, lifelike images with smooth and natural gradation. Additional O.R. friendly features such as the touch-activated backlit controls make the LMD-2450MD monitor the ideal choice for today's HD operating rooms.

## Operational convenience.

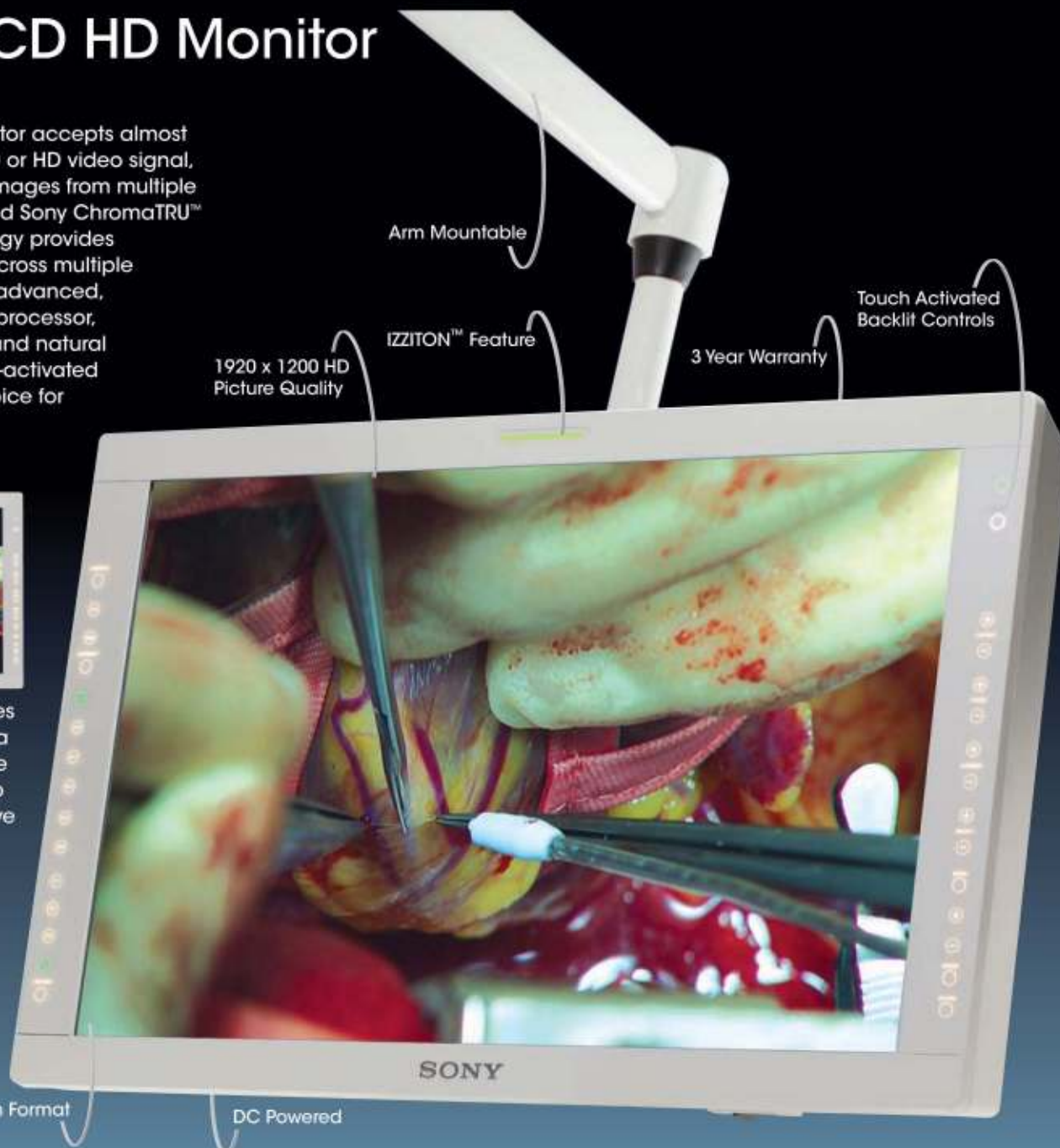


The LMD-2450MD monitor incorporates multiple display modes such as Picture-in-Picture and Picture-and-Picture (including a side-by-side split screen). These flexible display modes can be used for special applications, such as viewing both live video and captured images simultaneously for more comprehensive coverage of the surgical procedure.

## Armed for the O.R.

For ultimate flexibility, this monitor is VESA™ compliant and can be arm-mounted, wall-mounted or mounted on a surgical cart or stand. Backed by a robust three year warranty, the LMD-2450MD provides the durability required for demanding O.R. applications.

\* Viewable area, measured diagonally.



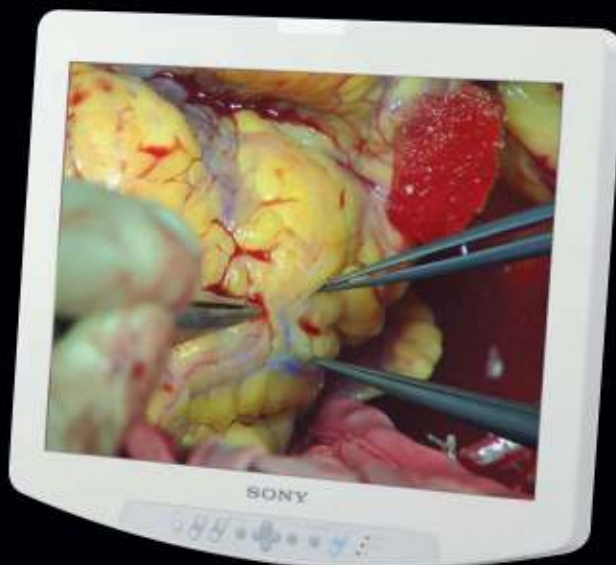


### LMD-1950MD 19" LCD Monitor

The LMD-1950MD medical-grade 19-inch\* LCD monitor is designed for the operating room.

Incorporating a high contrast, high clarity SXGA (1280 x 1024) panel, this model delivers extremely high levels of brightness, contrast, and color depth that are so critical to non-invasive procedures. The monitor's 10-bit digital video signal processor reproduces lifelike images with accurate color reproduction and consistent grayscale – whether the image is static or moving. Additional features like multiple memory settings and Sony's IZZITON™ tally light provide even more convenience and usability.

The LMD-1950MD accepts a variety of signals ranging from SD to HD video, analog VGA to SXGA, as well as DVI-D. Expansion slots are built-in for easy migration to high-definition sources, which is ideal when converting a surgical suite to HD technology.



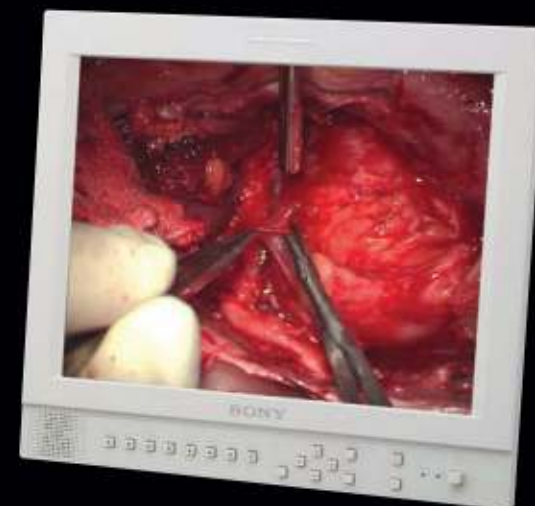
### LMD-2140MD 21" LCD Monitor

The LMD-2140MD medical-grade 21-inch\* LCD monitor is ideal for surgical cart integration.

The LMD-2140MD achieves exceptional picture reproduction by incorporating a superb-quality (1024 x 768) LCD panel that provides a very high level of brightness, contrast and color depth. The intensely bright LCD panel has a 4:3 aspect ratio and offers sophisticated I/P conversion incorporating Sony's original X-Algorithm technology that allows natural reproduction of video images.

All these features, plus a compact and lightweight design and VESA-compliant mounting options, make the LMD-2140MD monitor the exact view every operating room needs.

All Sony surgical monitors deliver outstanding image quality and offer a broad variety of input capabilities. Additionally, all models offer a scratch-resistant AR-coated protection layer and the IZZITON™ tally light feature that enables surgeons to easily identify when images are being captured or recorded.



### LMD-1420MD 14" LCD Monitor

The LMD-1420MD medical-grade 14-inch\* LCD monitor is designed for medical applications as a secondary monitor or for office usage\*\*.

The LMD-1420MD achieves outstanding picture reproduction by incorporating a (640 x 480) 4:3 aspect ratio LCD panel that provides a high level of brightness, contrast and color depth. Its many convenient features, space-saving design, and built-in stand and audio speaker make it ideal for second source applications in the operating room or for review of medical images in an office or conference room.

\* Viewable area, measured diagonally

\*\* Note: Due to the time required for signal processing and the response time of the LCD panel, the LMD-1420MD displays images with a slight delay.



## Sony's full line of medical grade monitors for the O.R.



**LMD-2450MD**  
24" widescreen HD (1920 X 1200)



**LMD-1950MD**  
19" SXGA (1280 X 1024)



**LMD-2140MD**  
21" XGA (1024 X 768)



**LMD-1420MD**  
14" VGA (640 X 480)

To discover how Sony's full line of medical monitors can set your sights higher, contact your surgical camera supplier or authorized Sony reseller or visit our website.

 [click: sony.com/medical](http://sony.com/medical)

	LMD-2450MD	LMD-1950MD	LMD-2140MD	LMD-1420MD
Picture Performance				
LCD Panel: Type	$\alpha$ -Si TFT Active Matrix with AR coated protection panel			
Resolution (H x V)	1920 X 1200 ( WUXGA)	1280 x 1024 (SXGA)	1024 X 768 (XGA)	640 x 480 (VGA)
Picture Size (W x H)	Approx 20 1/2 x 12 7/8 inches (518.4 x 324 mm)	Approx 14 7/8 x 11 7/8 inches (376 x 301 mm)	Approx 17 x 12 3/4 inches (430 x 322 mm)	Approx 11 1/4 x 8 3/8 inches (283 x 212 mm )
Diagonal	Approx 24 1/4 inches (613.2 mm)	Approx 19 inches (482 mm)	Approx 21 1/4 inches (537 mm)	Approx 14 inches (354 mm)
Aspect Ratio	16:10	5:4	4:3	4:3
Display Colors	16,770,000		16,200,000	
Viewing Angle (U/D/L/R)	89°/89°/89°/89° typical contrast > 10:1		85°/85°/85°/85° typical contrast > 10:1	
Wide Viewing Angle	178°		170°	
Signal Processing	10 Bit		8 bit	
Video Resolution TVL	700 lines		500 lines	400 lines
Input/Output				
Input: Composite (VBS)	BNC (x1) [1.0 Vp-p $\pm$ 3dB, sync negative]			
Y/C	4pin Mini DIN (x1) [Y: 1.0 Vp-p $\pm$ 3dB, sync negative C: 0.286 Vp-p $\pm$ 3dB (NTSC), 0.3 Vp-p $\pm$ 3dB (PAL)]			
RGB/Component	BNC (x3) [RGB: 0.7 Vp-p $\pm$ 3dB, sync on G 0.3 Vp-p OR Component: Y 1.0 Vp-p $\pm$ 3dB, Pb./Pr. 0.7 Vp-p $\pm$ 3dB]			
Ext. Sync	BNC (x1) [0.3 to 4.0 Vp-p $\pm$ bipolarity ternary or negative polarity binary]			
Computer: DVI	DVI-D (x1), TMDS (single link)			N/A
Analog RGB	D-sub 15pin (x1) [R/G/B: 0.7 Vp-p, sync positive (Sync On Green, 0.3 Vp-p, sync negative) Sync:TTL level (polarity free, H/V separate sync)]			N/A
Output: Composite	BNC (x1), Loop-through, automatic 75 $\Omega$ termination			
Y/C	4-pin mini-DIN (x1), Loop-through, automatic 75 $\Omega$ termination			
Component/RGB	BNC (x3), Loop-through, automatic 75 $\Omega$ termination			
Ext. Sync	BNC (x1), Loop-through, automatic 75 $\Omega$ termination			
Audio Input	NO			RCA Pin (x3) -5dBu 47 kilohms or higher
Audio Output	NO			RCA Pin (x3) Loop-through
Remote Control: Parallel Remote	RJ-45 8-pin modular connector (assignable)			
Serial Remote	D-sub 9-pin (x1) Serial Remote RS-232C			N/A
Ethernet	RJ-45 8-pin modular connector (10BASE-T/100BASE-TX)	N/A		
General				
Weight (Approx)	18.7 LBS	21.3 LBS	21.6 LBS	15 LBS
Power	DC 24V [3.5A], 5VDC [0.030 A] (Supplied from AC Adaptor)	DC 24V [2.8A] (Supplied from AC Adaptor)	AC 100-240V $\pm$ 10% 50/60Hz	
AC Adaptor	100-240 VAC, 50/60 Hz, 1.2-0.6A	100-240 VAC, 50/60 Hz, 0.9A-0.4A	N/A	
Power consumption (Approx)	Maximum: 115 W (with x2 BKM-229X)	Maximum: 66W (with x2 BKM229)	Maximum: 100W (with x2 BKM255DV)	Maximum: 51W
Dimensions (Approx W x H x D)	23.7 x 15.2 x 4.3 inches (602 x 386 x 110 mm) (including projection parts)	17.4 x 15.8 x 4.6 inches (442 x 403 x 118 mm)	19.8 x 17.4 x 4.7 inches (505 x 444 x 119 mm)	13.5 x 13.9 x 10.4 inches (343 x 352 x 264 mm)
Operating Temperature	32 to 95° F (0 to 35° C), Recommended: 68 to 86° F (20 to 30° C)	32 to 104° F (0 to 40° C)		
Operating Humidity	30 to 85 % (no condensation)			
Compliance	UL60601-1, CSA C22.2 No. 601-1, FCC-A, IC-A, CE (MDD)-B, C-Tick, CCC, KTL, RPC, VCCI-A, JEITA, PSE			
Supplied Accessories				
	AC Power Cord (1), AC plug holder (2), Instructions for Use (1), CD-ROM (1), Using the CD-ROM manual (1), Quick Reference (1), When You First Use the Monitor (1), Sales Companies Guide (1), Warranty Card (1), AC Adaptor (1), DC Cable (1)		AC Power Cord (1), AC plug holder (2), Instructions for Use (1), CD-ROM (1), Using the CD-ROM manual (1), Quick Reference (1), When You First Use the Monitor (1), Sales Companies Guide (1), Warranty Card (1)	
Optional Accessories				
SDI 4:2:2 Input Adaptor	BKM-220D			BKM-320D
NTSC/PAL Input Adaptor	BKM-227			N/A
Analog Component Adaptor	BKM-229X			N/A
HD SDI & SDI Input Adaptor	BKM-243HS			N/A
Monitor Stand	SU-560			Stand built in

**SONY**

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CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician or other appropriately licensed medical professional.  
CAUTION: See product labeling for indications, contraindications, warnings, cautions, and directions for use.

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