



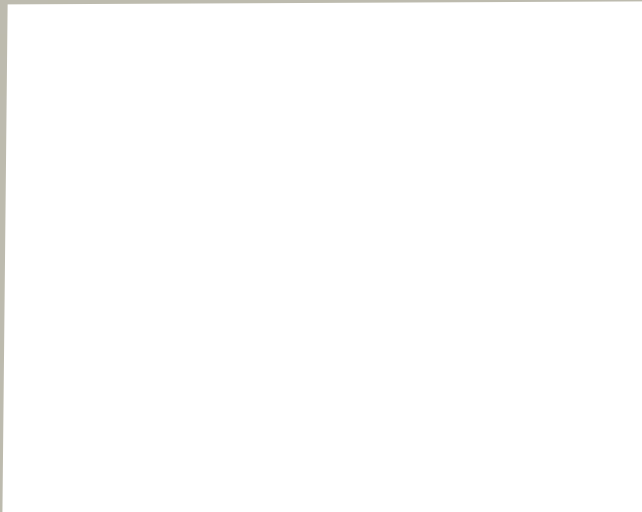
The medical monitor for demanding surgeons.

LMD-1950MD





The LMD-1950MD Medical Monitor: It's giving surgeons a whole new outlook.



Sony's LMD-1950MD LCD monitor is giving surgeons a whole new outlook on medical grade monitors. The newest addition to Sony's line, the LMD-1950MD LCD model is a 19-inch* medical grade monitor optimized for surgical operation room environments. Incorporating a high contrast, high clarity SXGA (1280 x 1024) panel, the monitor delivers extremely high levels of brightness, contrast, and color depth. By adopting a newly designed 10-bit digital video signal processor, the monitor reproduces lifelike images with accurate color reproduction and consistent grayscale – whether the image is static or moving. With its O.R.-friendly features such as 20 different picture settings in memory and IZZITON™ tally light, and its high-resolution image reproduction, the LMD-1950MD monitor helps surgeons set their sights high.

**viewable area, measured diagonally*

The LMD-1950MD Medical Monitor

Arm Mountable

IZZITON™ Feature

Sealed Back Panel

Higher Resolution Picture

3 Year Warranty
with Backlight

Easy Upgrade to HD

DC Powered

Touch Panel



Sealed for safety and armed for the O.R.



The LMD-1950MD monitor is completely sealed with a steel chassis that was designed with

no air vents to prevent any harmful matter from entering and becoming trapped, which could lead to potential contamination and safety issues. Equipped with a 24-volt DC power supply and complying with VESA standards, the monitor can be easily mounted on a surgical equipment arm, rack, cart or wall.

Superb resolution.



The LMD-1950MD monitor achieves a high horizontal resolution exceeding 700 TV lines, provid-

ing extremely precise and detailed images that are essential during endoscopic procedures. An extremely bright LCD panel with a 5:4 aspect ratio results in a high contrast image, and a multi-layer AR-coated protection layer helps resist scratching and reduce reflection.

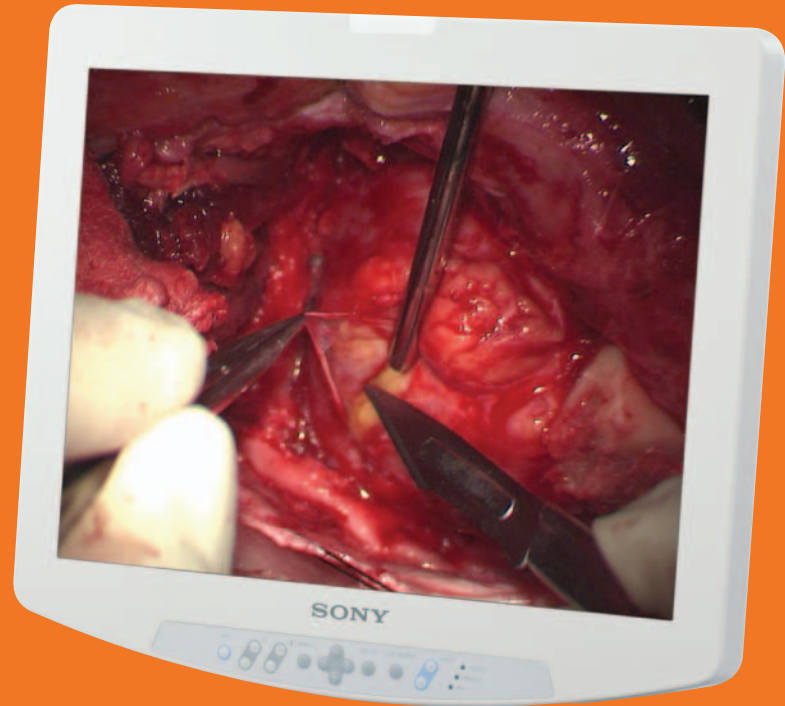
A definitive path to high definition.



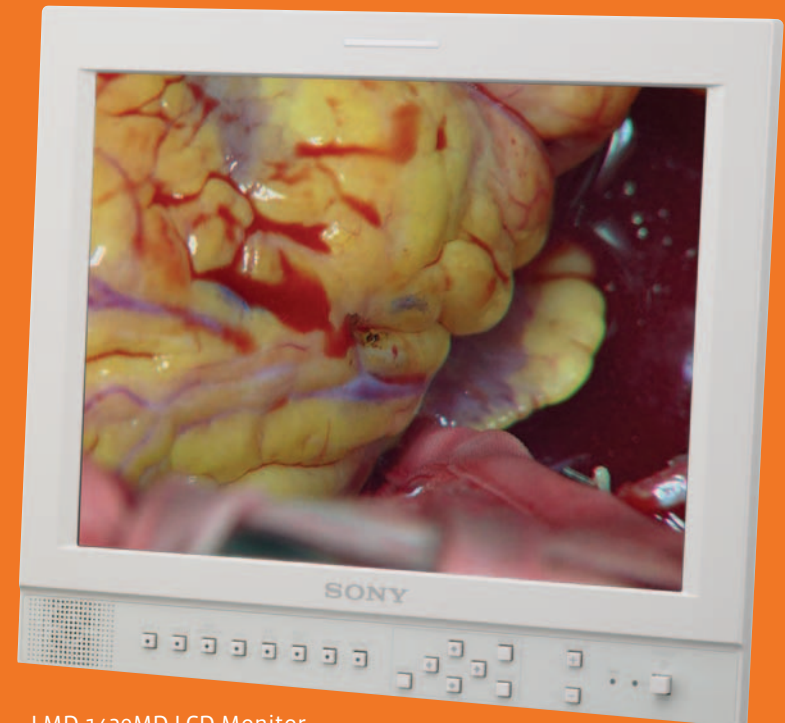
The LMD-1950MD monitor can accept a variety of signals ranging from SD to HD video, analog

VGA to SXGA, as well as DVI-D input. Future-ready expansion slots are built-in for easy migration to high definition. When processing HD signals, a Native Scan mode can be enabled that performs pixel-to-pixel mapping without scaling to provide native HD images. The center of the image is displayed, which is the most critical during surgical procedures.

Sony's full line of major



LMD-2140MD LCD Monitor



LMD-1420MD LCD Monitor

medical monitors for the O.R.

LMD-2140MD LCD Monitor

The LMD-2140MD medical-grade 21-inch* LCD monitor is ideal for video endoscopy cart installations.

The LMD-2140MD achieves exceptional picture reproduction by incorporating a superb-quality XGA (1024 x 768) LCD panel that provides an extremely high level of brightness, contrast and color depth. This intensely bright LCD panel has a 4:3 aspect ratio and a scratch-resistant, multi-layer AR-coated protection layer. Like the LMD-1950MD model, the LMD-2140MD model also features sophisticated I/P conversion incorporating Sony's original X-Algorithm technology that allows natural reproduction of video images, which is often difficult to achieve on typical LCD monitors. In addition, this monitor provides the same intuitive menu structure as well as the versatility for inputs and 20 user memory functions as the LMD-1950MD model.

All these features plus a compact and lightweight design and optional VESA mounting on a cart, wall or ceiling make the LMD-2140MD monitor the exact view every operating room needs.

LMD-1420MD LCD Monitor

The LMD-1420MD medical-grade 14-inch* LCD monitor is designed for medical applications as a secondary monitor or for office usage.** This display includes many of the sophisticated features available with our other monitors, such as the IZZITON tally light, a scratch-resistant, AR-coated protection layer on the panel, and a variety of input capabilities including composite, YC, RGB, component, SDI and audio.

Like the other models, the LMD-1420MD achieves exceptional picture reproduction by incorporating a (640 x 480) 4:3 aspect ratio LCD panel that provides an extremely high level of brightness, contrast and color depth. The 1420MD model also incorporates Sony's X-Algorithm processing to smooth out the video and also includes a line doubler feature, resulting in superb picture quality.

Its many convenient features, space-saving design, and built-in stand and audio speaker make it perfect 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.*

To discover how Sony's full line of medical monitors can set your sights higher, contact your authorized Sony reseller or go to: www.sony.com/medical



LMD-1950MD

The Operating Room



LMD-2140MD

The System Cart



LMD-1420MD

The Doctor's Office

	LMD-1950MD	LMD-2140MD	LMD-1420MD
Picture Performance			
LCD Panel: Type	a-Si TFT Active Matrix with AR coated protection panel	a-Si TFT Active Matrix with AR coated protection panel	a-Si TFT Active Matrix with AR coated protection panel
Resolution (H xV)	1280 x 1024 (SXGA)	1024 X 768 (XGA)	640 x 480 (VGA)
Picture Size (H xW)	Approx 376 x 301 mm (14 7/8 x 11 7/8 inches)	Approx 430 x 322 mm (17 x 12 3/4 inches)	283 x 212 x 354 mm (11.25 x 8 3/8 inches)
Diagonal	Approx 482 mm (19 inches)	Approx 537 mm (21 1/4 inches)	Approx 354 mm (14 inches)
Aspect ratio	5:4	4:3	4:3
Display Colors	16,770,000	16,770,000	16,200,000
Viewing angle (U/D/L/R)	89°/89°/89°/89°	85°/85°/85°/85°	85°/85°/85°/85°
Contrast ratio	600:1	400:1	400:1
Response time	14MS gray-gray (average)	30ms	30ms
Signal Processing	Full 10 Bit	8 bit	8 bit
Video Resolution TVL	750 lines	500 lines	400 lines
Input/Output	S-Video/C-video/DVI-D/RGB component/SDI/HDSI	S-Video/C-video/DVI-D/RGB component/SDI/HDSI	S-Video/C-video/VGA/RGB component
Input: Composite	BNC (x1) 1.0 Vp-p ±3db sync negative	BNC (x1) 1.0 Vp-p ±3db sync negative	BNC (x1) 1.0 Vp-p ±3db sync negative
Y/C	4pin Mini DIN (x) Y: 1.0V p-p ±3dB sync negative C: 0.286 Vp-p ±3dB (NTSC)/0.3 Vp-p ±3dB(PAL)	4pin Mini DIN (x) Y: 1.0Vp-p ±3dB sync negative C: 0.286Vp-p ±3dB (NTSC)/0.3Vp-p ±3dB(PAL)	4pin Mini DIN (x) Y: 1.0 Vp-p ±3dB sync negative C: 0.286 Vp-p ±3dB (NTSC)/0.3 Vp-p ±3dB(PAL)
Component RGB	BNC (x3)	BNC (x3)	BNC (x3)
Component	Y: 1.0 Vp-p ±3dB/Pb. Pr. 0.7 Vp-p ±3dB	Y: 1.0 Vp-p ±3dB/Pb. Pr. 0.7 Vp-p ±3dB	Y: 1.0 Vp-p ±3dB/Pb. Pr. 0.7 Vp-p ±3dB
RGB	G: 0.7 Vp-p ±3dB, sync on G 0.3 Vp-p/ B: 0.7 Vp-p ±3dB/R: 0.7 Vp-p ±3dB*	G: 0.7 Vp-p ±3dB, sync on G 0.3 Vp-p/ B: 0.7 Vp-p ±3dB/R: 0.7 Vp-p ±3dB*	G: 0.7 Vp-p ±3dB, sync on G 0.3 Vp-p/ B: 0.7 Vp-p ±3dB/R: 0.7 Vp-p ±3dB*
Ext. Sync	BNC (x1)/0.3-4 Vp-p ± bipolarity ternary or negative/polarity binary	BNC (x1)/0.3-4 Vp-p ± bipolarity ternary or negative/polarity binary	BNC (x1)/0.3-4 Vp-p ± bipolarity ternary or negative/polarity binary
Computer: DVI-D	TMDS (single link)	TMDS (single link)	N/A
Analog RGB	HD Dsub 15 pin (Female)/0.7 Vo-p75 Ω sync positive (R,G,B)	HD Dsub 15 pin (Female)/0.7 Vo-p75 Ω sync positive (R,G,B)	N/A
Remote Parallel	Modular 8 pin (assignable)	Modular 8 pin (assignable)	Modular 8 pin (assignable)
Serial Port	RS-232C (Serial Remote) D-Sub 9 pin	RS-232C (Serial Remote) D-Sub 9 pin	N/A
Output: Composite	BNC (x1), loop-through, automatic, 75 Ω termination	BNC (x1), loop-through, automatic, 75 Ω termination	BNC (x1), loop-through, automatic, 75 Ω termination
Y/C	4pin Mini DIN (x1), loop-through, automatic, 75 Ω termination	4pin Mini DIN (x1), loop-through, automatic, 75 Ω termination	4pin Mini DIN (x1), loop-through, automatic, 75 Ω termination
Component/RGB	BNC (x3), loop-through, automatic, 75 Ω termination	BNC (x3), loop-through, automatic, 75 Ω termination	BNC (x3), loop-through, automatic, 75 Ω termination
Ext. Sync	BNC (x1), loop-through, automatic, 75 Ω termination	BNC (x1), loop-through, automatic, 75 Ω termination	BNC (x1), loop-through, automatic, 75 Ω termination
Audio Input	NO	NO	RCA Pin (1) -5dBu 47 kilohms or higher
Audio Output	NO	NO	RCA Pin (1) Loop-through
General			
Weight	20.9 LBS	21.6 LBS	14.9 LBS
Power	DC In 24V, 2.8A. (Supplied from AC Adaptor) AC IN AC100-240V, 50/60Hz, 0.9A-0.4A	AC 100-240V ±10% 50/60Hz Standard: Approx 92W (without input adaptor installed)	AC on panel AC 100-240V, 50/60Hz, 1.2A-0.6A
Power consumption	Maximum: Approx 66W (with 2 BKM229 installed) 59W (without adaptor installed)	Maximum: Approx 100W (with 2x BKM255DV) 92W (without adaptor installed)	Maximum: Approx 51W
Dimensions (wxhxd)mm/inches	442 x 403 x 118 mm (17.4 x 15.8 x 4.6 inches)	505 x 444 x 119 mm (19.8 x 17.4 x 4.6 inches)	343 x 354 x 264 mm (13.5 x 13.9 x 10.4 inches)
Operating Temperature	0-40° C, 32-104° F	0-40° C, 32-104° F	0-40° C, 32-104° F
Operating Humidity	30 to 85% (no condensation)	30 to 85% (no condensation)	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	UL60601-1, CSA C22.2 No. 601-1, FCC-A, IC-A, CE (MDD)-B, C-Tick, CCC, KTL, RPC, VCCI-A, JEITA, PSE	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) Operating Instructions (1) CD-ROM (1) Warranty Card (1) Using the CD-ROM Manual (1) Interface Manual for Programmers (1) Quick Reference Guide (1) When you first use this monitor (1) Sales Companies Guide (1)	AC Power Cord (1) Ac Plug Holder (2) Operating Instructions (1) CD-ROM (1) Warranty Card (1) Using the CD-ROM Manual (1) Interface Manual for Programmers (1) Quick Reference Guide (1) When you first use this monitor (1) Sales Companies Guide (1)	AC Power Cord (1) Ac Plug Holder (2) Operating Instructions (1) CD-ROM (1) Warranty Card (1) Using the CD-ROM Manual (1) Interface Manual for Programmers (1) Quick Reference Guide (1) When you first use this monitor (1) Sales Companies Guide (1)
Optional Accessories			
BKM-227/229X	NTSC/PAL Input Adaptor/ Analog Component Adaptor	NTSC/PAL Input Adaptor/ Analog Component Adaptor	N/A
BKM220D	SDI 4:2:2 Input Adaptor	SDI 4:2:2 Input Adaptor	This monitor uses BKM-320D
BKM-243HS	HD SDI & SDI Input Adaptor	HD SDI & SDI Input Adaptor	N/A
SU-560	Optional Stand	Optional Stand	Built in stand

*When G channel is sync negative, the internal sync can be used 0.3 Vp-p

Sony Electronics Inc.
1 Sony Drive, Park Ridge, NJ 07656
www.sony.com/medical

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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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LMD Monitors