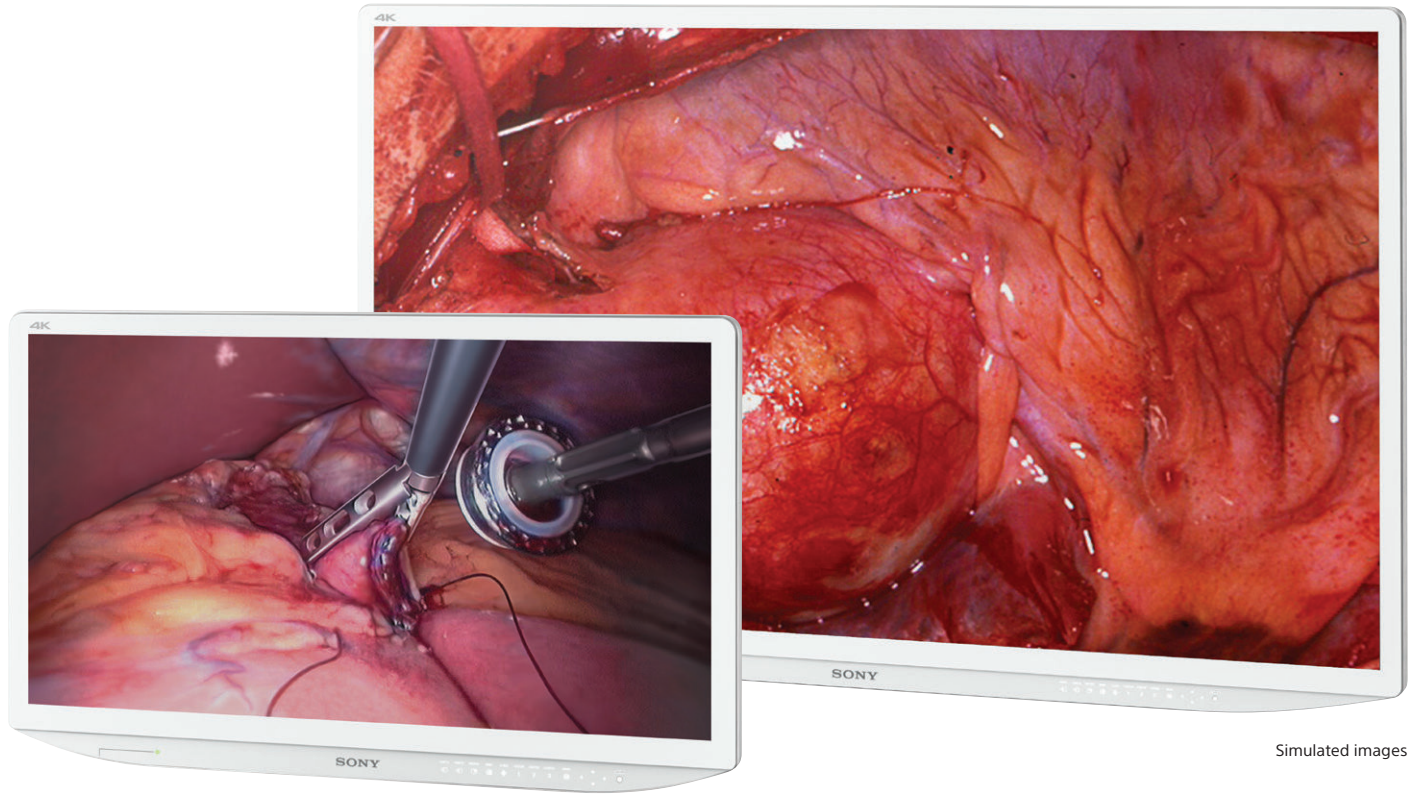


**SONY**



Simulated images

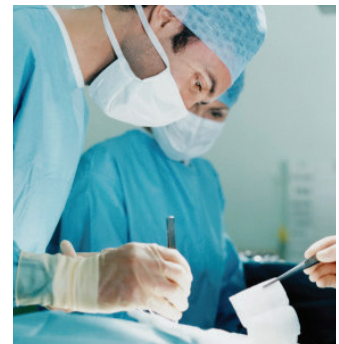
**LMD-X310MD**

**LMD-X550MD**

# Leading the way in 4K... now in the O.R.

Sony's 31-inch\* and 55-inch\* medical monitors.

Surgical vision just got 4x better.



# The 4K Era has arrived in the O.R.

Imagine seeing blood vessels, tissue and organs in detail never before possible with full HD. Imagine being able to see four full HD signals at one time, on one monitor during a procedure.

This is now a reality for medical professionals. Sony is bringing 4K resolution to the O.R., with two new medical monitors, the 31-inch\* (LMD-X310MD) and 55-inch\* (LMD-X550MD) models.

Sony 4K cameras are already shooting movies, TV shows, and sporting events; Sony 4K digital projectors are in movie theaters around the world and Sony 4K TVs are in homes changing the consumer viewing experience. Now that same technology is available for the health care industry.

4K delivers four times the resolution of HD for the true-to-life clarity that's critical for seeing various nuances of color and detail

so important in minimally invasive microsurgical procedures, general surgery, and medical education and training. 4K provides approximately 8 million pixels versus full HD at approximately 2 million. More pixels mean more information...more information means sharper pictures.

With 4K advanced display technology, you'll have incredible definition and high brightness with virtually no pixilation, even

when you zoom in for extreme close-ups. Whether displaying images from a surgical endoscopic camera system, or other medical imaging system, these 4K monitors feature a unique slender chassis, front bezel and robust OptiContrast panel™ that provides edge-to-edge screen protection while reducing glare and reflection. Both models offer Quad View picture display—so surgeons can see 4 full HD (1920 x 1080) images at the same time.

## Superb picture quality and extremely bright images.

With four times more resolution than high definition, 4K captures more details of an image and at a farther distance. The increased number of pixels captured means that objects displayed are more defined, compared to a high-definition image. The sharper, more detailed picture helps improve surgical vision, making it ideal for O.R.s in hospitals, surgical centers, clinics, and other medical environments.



Simulated images

With OptiContrast panel

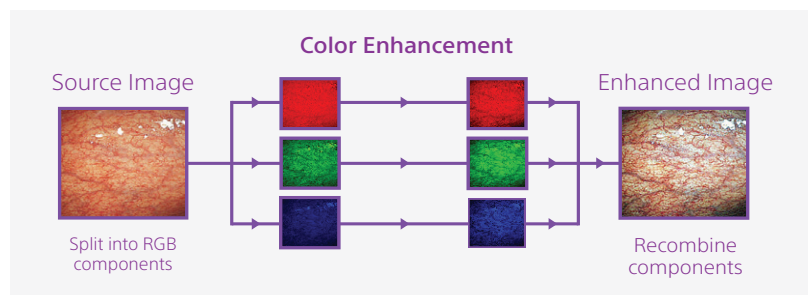
Without OptiContrast panel

## Sony's unique OptiContrast Panel.™

OptiContrast technology replaces the layer of air between the panel and the glass with a layer of resin specially formulated to match the refractive properties of the glass. The OptiContrast panel helps establish dark backgrounds for rich, vibrant, high-contrast images, even in brightly lit rooms. It also reduces glare and reflection and helps in the elimination of internal dew condensation.

## A.I.M.E™ technology.

Advanced Image Multiple Enhancer (A.I.M.E.) is a unique Sony technology that allows you to adjust the view to enhance structure and color for more comfortable viewing. FPGA improves visibility and features four contrast modes and eight color modes.



\*Viewable areas, measured diagonally.

A revolutionary new tool to see both the big picture and the small details in your O.R.



### Intuitive operation and easy set-up.

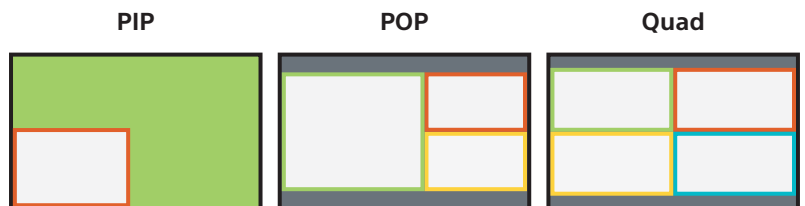
From its intuitively operable control panel with LED navigation to its simplicity of cleaning, the monitors can fit right into your O.R. system.

Set-up is easy. You can assign custom buttons (1-3) to commonly used functions.

### Variety of display modes.

Users can easily select different display modes—Mirror Image, Side-by-Side, Picture-in-Picture, and Picture-out-Picture.

And with the Quad View mode, you can see four images in full HD at one time.



55-inch model only

### Easy to clean and surgically compliant.

The monitors are compliant and certified for IEC 60601-1 and product safety standards in the U.S., Canada, and Europe.\*\* They are also easy to clean, dustproof, and water-resistant. The front panel has an IPX2, to protect against spraying liquids, and its flat surface allows you to easily wipe liquids and gels off the LCD panel and control buttons.



### Ergonomic design.

The thin, easy-to-hold, ergonomic design enables you to adjust the monitor to easily position it.



### Installation-friendly cabling.

All the connectors face downwards, allowing for easy and organized cable connection.



\*\*For more details on compliance issues, please contact your nearest Sony authorized dealer.

# Specifications

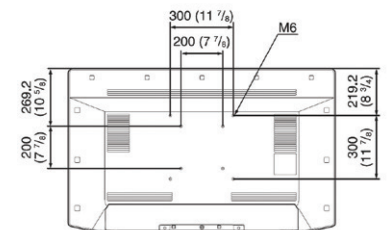
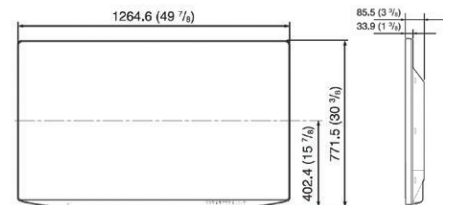
Picture Performance	LMDX-310MD	LMDX-550MD
Panel	a-Si TFT Active Matrix LCD	
Picture Size (Diagonal)	31.125 in. (789.06 mm)	54.75 in. (1387.8 mm)
Effective Picture Size (H x V)	27.5 x 14.5 in. (698.0 x 368.1 mm)	47.625 x 26.875 in. (1209.6 x 680.4 mm)
Pixel pitch	0.1704 x 0.1704 mm	0.315 x 0.315 mm
Resolution (H x V)	4096 x 2160 pixels	3840 x 2160 pixels
Aspect	17:9	16:9
Pixel Efficiency	0.9999	
Backlight	LED	
Panel Technology	LCD with IPS	
Luminance (Panel Specification)	800 cd/m <sup>2</sup> (typical)	538 cd/m <sup>2</sup> (typical)
Contrast Ratio	1450 : 1	1400 : 1
Colors	Approx. 1.073 billion colors	
Viewing Angle (Panel Specification)	89°/89°/89°/89° (typical)	
Gamma	1.8, 2.0, 2.2, 2.4, 2.6, DICOM, Highlight	
DVI-D Input	DVI-D (x1) (HDCP correspondence), TMDS single link	
SDI Input	BNC (x5)	
HD15 Input	3GIHD/SD-SDI	
Serial Remote (LAN)	D-sub 9-pin (RS-232C) (x1), RJ-45 (x1) (Ethernet, 10BASE-T/100BASE-TX)	
DC Input	XLR-type 3-pin (male) (x1), 26 V DC (output impedance 0.005Ω or less)	-
DVI-D Output	DVI-D (x1) when HDCP disabling	
SDI Output	BNC (x5)	
5V DC Output	5 V Output (x1), 8 W 12 V Output (x1), 20 W max	
Power Requirements (LCD monitor)	DC Input: 26 V, 6.9 A AC Adaptor (AC-300MD): 245 (W) x 150 (L) x 58 (H) mm AC IN: 100 V-240 V, 50/60 Hz, 2.0A- 0.8 A	AC IN: 100 V-240 V, 50/60 Hz, 3.2 A- 1.3 A
Operating Temperature	32°F to 95°F (0°C to 35°C) (Recommended: 68°F to 86°F (20°C to 30°C))	
Operating Humidity	30% to 85% (no condensation)	
Storage/Transport Temperature	-4°F to +140°F (-20°C to +60°C)	
Storage/Transport Humidity	0% to 90%	
Operating/Storage/Transport Pressure	700 hPa to 1060 hPa	
Dimensions (W x H x D)	29.75 x 18 x 2.75 in. (753.8 x 456.4 x 69.3 mm) (Slimmest depth 28mm)	49.875 x 30.375 x 3.375 in. (1264.6 x 771.5 x 85.5 mm) (Slimmest depth 33.9 mm)
Mass (Approx.)	26.875lb (12.2 kg)	77.162lb (35.0 kg)
Supplied Accessories	AC adaptor: AC-300MD(x1), AC power cord (x1), Instructions for Use (CD-ROM) (x1), Abridged edition of Instructions for Use (x1), AC power plug holder (x2), Instructions for Use of the AC adaptor (x1), Service Contact List (x1)	AC power cord (x1), Instructions for Use (CD-ROM) (x1), Abridged edition of Instructions for Use (x1), AC power plug holder (x2), Service Contact List (x1)

Certification and Standards
Safety
US/CA: UL 60601-1, CAN/CSA-C22.2 No. 60601-1, EU: EN 60601-1
EMC
US/CA: FCC Part 15 Class A, ICES-003 Class A, EU: EN 60601-1-2
AU: EN 55011 Class B, J: VCCI Class A
CB Certification
IEC 60601-1, IEC 60065

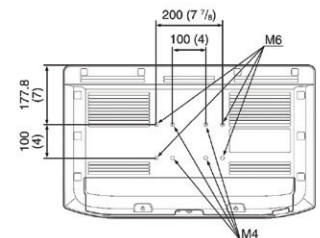
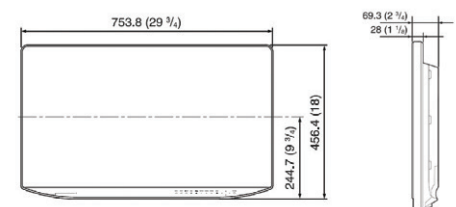
Regulatory Compliances
FD&C Act (FDA)
Class II Medical Device
MDD (EC)
Class I Medical Device

For more details on compliance issues, please contact your nearest Sony office or an authorized dealer.

## LMD-X550MD



## LMD-X310MD



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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.