SONY

Give your O.R. a 4K makeover.

4K Ultra HD 32-inch* LCD Medical Monitor

LMD-X3200MD

*Viewable area, measured diagonally.

sony.com/medical

High Performance with O.R. Integration-Friendly Design

The LMD-X3200MD offers exceptional 4K Ultra HD video quality combined with an O.R. integration-friendly design at a value price. The 32-inch* (16:9) monitor provides amazing clarity and detail with a wide color gamut to produce sharp, natural 4K images.

With High Dynamic Range (HDR) technology and built-in image enhancement, these monitors deliver dramatic contrast with more realistic peaks of brightness, more accurate shadow detail, and deeper blacks, resulting in unparalleled image quality. Multiple inputs including 12G-SDI, HDMI, and Display-Port single-cable 4K inputs meet a variety of needs—perfect for O.R. Integration. View images from surgical endoscopes, laparoscopic cameras, and other compatible medical imaging systems in stunning, vivid 4K detail.

Stunning Picture Quality

4K Ultra HD Resolution

The 32-inch* (3840 x 2160) monitor displays 4K images with four times the detail of Full-HD.
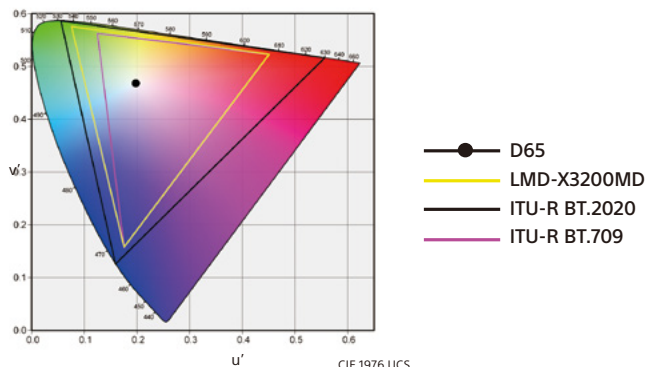
*Viewable area, measured diagonally.

HD/SD to 4K Upscaling

Produces a sharp, natural 4K image, even when HD/SD images are upscaled to 4K.

Wide Color Gamut

The LCD panel and signal processing technology provide a wide color gamut, which complies with ITU-R Recommendation BT.2020.

- D65
- LMD-X3200MD
- ITU-R BT.2020
- ITU-R BT.709

CIE 1976 UCS

High Dynamic Range (HDR) with Gamma Support

HDR technology produces images with a wide range of brightness levels, dramatic contrasts, and rich colors. To support HDR, the monitor offers HLG (Hybrid Log-Gamma) technology, which can be activated by selecting "HLG" in the monitor's "gamma setting mode" when receiving HLG signals from an HDR-compatible imaging system.

Anti-Reflection LCD Panel

The monitor's LCD panel features anti-reflection technology that greatly reduces glare in brightly lit O.R.'s by controlling the light reflection and minimizing its dispersement, allowing clear high contrast images to be displayed.

Advanced Features

Advanced Image Multiple Enhancer Technology (A.I.M.E.™)

Sony's unique A.I.M.E. technology enhances displayed images by adjusting the color, contrast, and visibility of dark areas. Various selectable enhancement modes and levels can be easily set via the front panel button. The status of A.I.M.E. ON/OFF is conveniently displayed in the upper left hand corner.

Selectable Modes

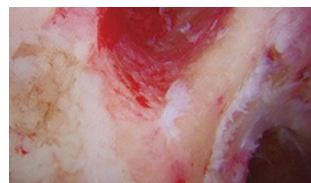**Structure Enhancement (Six Levels)**

- Improves recognition of the object's outline
- Objects can be seen more clearly with increased sharpness

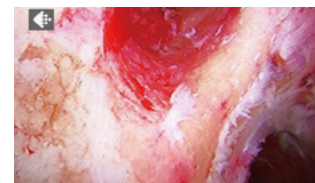**Color Enhancements (Eight Levels)**

- Manipulate color tone differences to see objects more clearly

Shadow Enhancement (Six Levels)

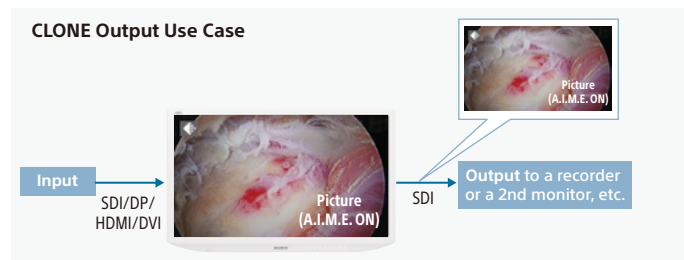- Improves visibility in dark areas to see more details
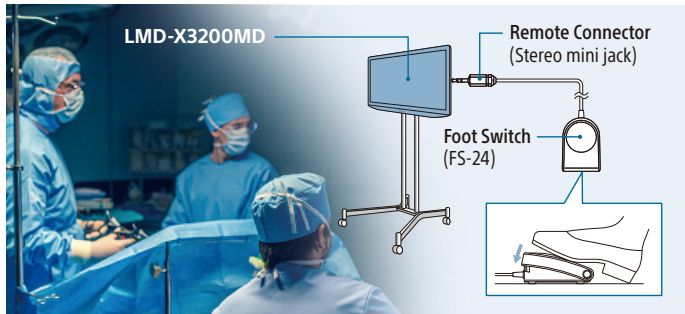
A.I.M.E. OFF   A.I.M.E. ON

CLONE Output

The clone-output connector enables you to output the same image as the displayed image, such as A.I.M.E., picture-in-picture images, and more. This allows you to easily record the same content as you are viewing; this is particularly useful in educational applications. Unlike through-out, the same video images from the main monitor can be displayed on the second monitor.

CLONE Output Use Case

Input → SDI/DP/HDMI/DVI → Picture (A.I.M.E. ON) → SDI → Output to a recorder or a 2nd monitor, etc.

Picture (A.I.M.E. ON)

Simple Remote Control via Stereo Mini

Using the optional FS-24 foot switch via the stereo mini jack allows you to switch the most frequently used menus — A.I.M.E. ON/OFF, Port A/B input select, PIP/POP, and flip patterns — even if you're away from the monitor control panel.
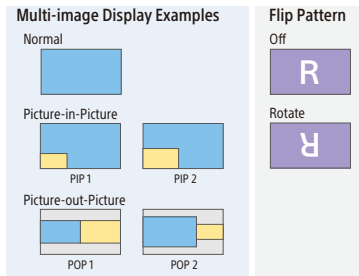
LMD-X3200MD

Remote Connector
(Stereo mini jack)

Foot Switch
(FS-24)

Auto Input Select Mode

If the main input signal is accidentally interrupted, the monitor's input will switch automatically to the second port.
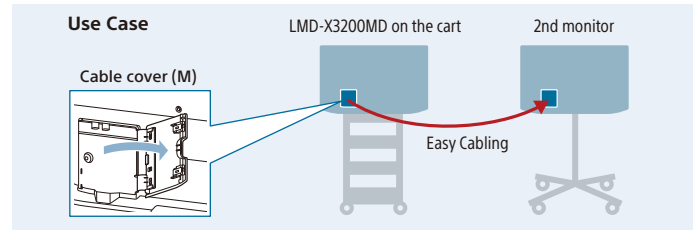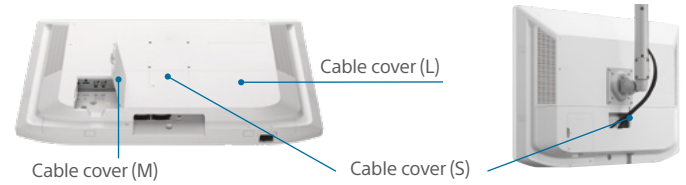
Variety of Display Modes

The LMD-X3200MD can display images from multiple sources quickly and easily from the menu in a variety of display modes — side-by-side, picture-in-picture (PIP), picture-out-picture (POP), and flip.

Multi-image Display Examples

Normal

Picture-in-Picture

PIP 1   PIP 2

Picture-out-Picture

POP 1   POP 2

Flip Pattern

Off

R

Rotate

Я

Easy to Install and Use

Installation-Friendly Cabling

VESA mounting enables flexible installation on stands, carts, walls or boom arms.

Cable cover (L)

Cable cover (M)   Cable cover (S)

Use Case   LMD-X3200MD on the cart   2nd monitor

Cable cover (M)

Easy Cabling

Ergonomic Design for Better Cleaning

The compact, ergonomic design and edge-to-edge flush front surface of the LMD-X3200MD allows for easy adjustment of the monitor position. The flat surface allows the O.R. team to easily spot and wipe down liquids and gels from the LCD panel, rear cover, and control buttons.
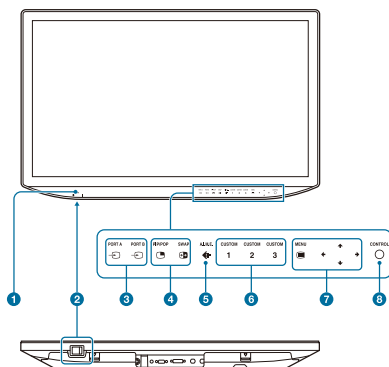
Flexible Installation

To suit different installation environments, the LMD-X3200MD monitor accepts two types of power supply: AC input and DC input using AC adaptor.**

** The AC-300MD AC adaptor is sold separately.

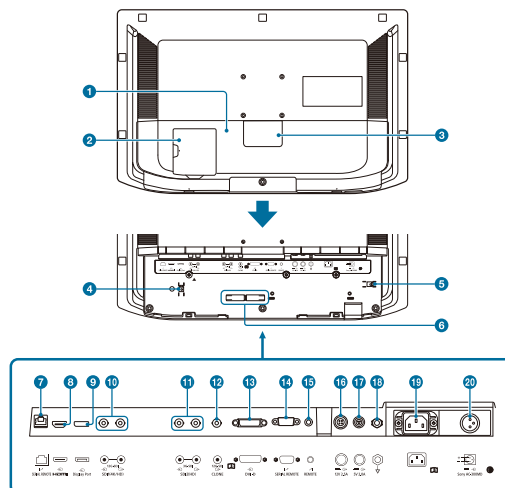# User-Friendly Control Panel and Wide Range of Connectors

Various I/O connections are available to meet a wide variety of O.R. integration needs. Operation is simplified by the user-friendly control panel and LED backlighting highlights only active control buttons to guide the user.

Front Panel

Rear/Bottom Panel

1 Power indicator
2 (On/ Standby) switch
3 Input select buttons
4 Multi-image display setting buttons
5 A.I.M.E. button
6 CUSTOM buttons
7 OSD menu operation buttons
8 CONTROL button

1 Cable cover (L)
2 Cable cover (M)
3 Cable cover (S)
4 HDMI cable holder
5 AC power cord holder
6 Cable holder
7 SERIAL REMOTE connector (RJ-45)
8 HDMI input connector
9 Display-Port input connector
0 12G-SDI input/output connector (BNC type) SDI1(4K/HD)
qa 3G-SDI input/output connector (BNC type) SDI2(HD)
qs CLONE output connector (BNC type)
qd DVI-D input connector
qf SERIAL REMOTE connector (RS-232C) (Dsub 9-pin, female)
qg REMOTE connector (Stereo mini jack)
qh 12V 2.5A (DC output) connector
qj 5V 2.0A (DC output) connector
qk Equipotential terminal
ql AC input connector
w; DC input connector

Specifications

LMD-X3200MD

Picture Performance

Panel	TFT Active Matrix LCD
Picture Size (Diagonal)	31 ⅝ inches (800.757 mm)
Effective Picture Size (H x V)	27 ½ × 15 ½ inches (697.92 × 392.58 mm)
Pixel Pitch	0.007 x 0.007 inches (0.182 x 0.182 mm)
Resolution (H x V)	3,840 x 2,160 pixels
Aspect Ratio	16:9
Pixel Efficiency	99.99%
Backlight	LED
Panel Technology	LCD with IPS
Luminance (Panel Specification)	500 cd/m² (typical)
Contrast Ratio	1000:1
Colors	Approx. 1.07 billion colors
Viewing Angle (Panel Specification)	89°/89°/89°/89° (typical) (up/down/left/right, contrast > 10:1)
Gamma	1.8, 2.0, 2.2, 2.4, 2.6, DICOM, HLG

Input

HDMI Input	HDMI connector (x1); HDMI 2.0b, HDCP2.2 correspondence
DVI-D Input	DVI-D connector (x1); TMDS single link, HDCP1.4 correspondence
SDI Input	3G-SDI input connector BNC type (x1); 12G-SDI input connector BNC type (x1)
Display-Port	Display-Port connector (x1); 1.2, SST, HDCP1.3 correspondence
Serial Remote (LAN)	D-sub 9-pin (RS-232C) (x1); RJ-45 modular connector (ETHERNET) (x1)
Remote	Stereo mini jack (x1)
AC Input	AC input connector (x1); 100 V to 240 V, 50/60 Hz
DC Input	DC input connector (x1); DC 26 V

Output

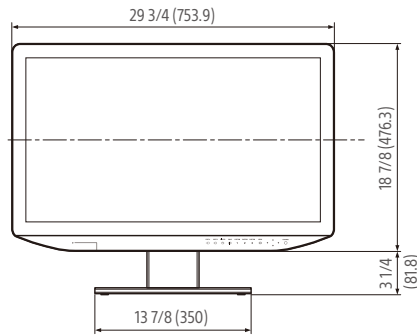|	
SDI Output	3G-SDI output connector BNC type (x1) 12G-SDI output connector BNC type (x1)
CLONE Output	CLONE output connector BNC type (x1)
DC 5 V Output	Round-type 3-pin female (x1), up to 2 A
DC 12 V Output	Round-type 4-pin female (x1), up to 2.5 A

General

Power Requirements	AC IN: 100 V - 240 V, 50/60 Hz, 1.7 A - 0.8 A
	DC IN: 26 V, 5.8 A (Supplied from AC adaptor)
Power Consumption	Approx. 163 W (max.)
Operating Temperature	32 °F to 95 °F (0 °C to 35 °C)
Operating Humidity	30% to 85% (no condensation allowed)
Storage/Transport Temperature	−4 °F to +140 °F (−20 °C to +60 °C)
Storage/Transport Humidity	20% to 90% (no condensation allowed)
Operating/Storage/Transport Pressure	700 hPa to 1,060 hPa
Dimensions (W x H x D) *	29 ¾ x 18 ⅞ x 3 ⅛ inches (753.9 x 476.3 x 79.2 mm)
	26 ¾ x 21 x 12 ⅝ inches (753.9 x 533.3 x 319 mm) (with optional SU-600MD stand)
Weight	26 lb 1 oz (11.8 kg) (Approx.) (without optional SU-600MD stand)
Mounting	3.937 inches x 3.973 inches (100 x 100 mm) VESA
Supplied Accessories	AC power cord (1)
	Plug holder for the supplied AC power cord (2)
	Before Using This Unit (1)
	CD-ROM (including the Instructions for Use) (1)
	Service Contact List (1)
	Screws for the VESA mount, M4 x 0.472 inches (4)

* This product is distributed to EU and US as a medical device and satisfied product safety standards (e.g. IEC 60601-1).
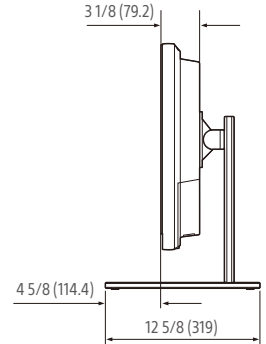
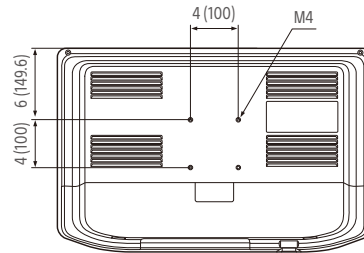# Dimensions

FRONT
When an optional stand SU-600MD is attached

29 3/4 (753.9)
18 7/8 (476.3)
3 1/4 (81.8)
13 7/8 (350)

SIDE
When an optional stand SU-600MD is attached

3 1/8 (79.2)
4 5/8 (114.4)
12 5/8 (319)

REAR (VESA MOUNT INSTRUCTION)

4 (100)
M4
6 (149.6)
4 (100)

Unit: inches (mm)

Optional Accessories

AC-300MD
AC Adaptor

SU-600MD
Monitor Stand

FS-24
Foot Switch

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.