LMD-X3200MD

32-inch 4K 2D LCD medical monitor

Overview

High-performance, easy to use multifunctional 32-inch 4K medical grade monitor

The LMD-X3200MD 32-inch medical grade monitor displays very high quality 4K Ultra HD 2D color images with a resolution of 3840 x 2160 pixels. Thin, light and suitable for boom arm mounting, the monitor features a large 32-inch panel that provides an image wider than the 31-inch LMD-X310MD within the same chassis width.

The monitor's advanced LCD panel and signal processing technology support highly consistent, accurate reproduction of a wide color gamut. When receiving Hybrid Log-Gamma signals from a compatible imaging system, selecting the right setting allows the monitor to display HDR images.

Easy to use with generous signal connection options, the widescreen (16:9) monitor features a flat, hygiene-friendly design that's optimized for use in medical environments. Please note that this equipment is not intended for diagnostic use.

Features

Superb 4K Ultra HD picture quality
The LMD-X3200MD displays extremely high-quality 4K Ultra HD images with a resolution of 3840 x 2160 pixels (16:9 screen

aspect ratio).

Wide color gamut

The monitor's advanced LCD panel and signal processing technology support highly consistent, accurate reproduction of a wide color gamut. This complies with ITU-R Recommendation BT.2020 that represents a significantly wider gamut than the BT.709 color space, allowing better color reproduction and more realistic visualization.

High Dynamic Range (HDR) Gamma support

HDR technology support allows the LMD-X3200MD to accurately reproduce images with a wider range of brightness levels, greater contrast and rich colors. When receiving HLG (Hybrid Log-Gamma) signals from a compatible imaging system, selecting HLG in monitor gamma setting mode allows the monitor to display HDR images.

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

Sony's newly enhanced A.I.M.E. technology images by adjusting the color, contrast, and visibility of the dark area for more comfortable viewing. You can set each parameter directly via the button on the front panel and identify its status easily with the icon shown on the display during A.I.M.E. ON.
• Structure Enhancement improves recognition of the object's outline, allowing structures to be seen more clearly with increased sharpness.
• Color Enhancement allows tonal differences to be manipulated for greater visibility.
• Shadow Enhancement mode improves visibility of fine detail in dark image areas. Enhancement parameters can be adjusted directly via buttons on the monitor's front panel.

Clone output

This feature allows the user to clone the exact image on display

on the monitor—with various display settings switched on such as A.I.M.E. or picture-in-picture—on to a secondary display via the monitors output in real time. This allows OR staff and students to view the same content that's being viewed by the surgeon on a bigger display. This cloned image can also be recorded via a recorder connected to the monitor. Resolution of the clone output can be selected as 4K or down-converted to HD as required.

V Full mode

Along with the standard variety of display modes that come with our monitors—side-by-side, picture-in-picture (PIP) and picture-out-picture (POP)—the LMD-X3200MD comes with the newly added V Full mode, that allows users to change the aspect ratio of POP images to 16:9. As a result, the usually smaller POP images can be enlarged and displayed full screen. The user can enlarge both of the POP images or just one of them depending on the requirement.

Anti-reflection panel

The LMD-X3200MD is designed to minimize reflected glare in brightly lit operating rooms, including distracting reflections from surgical lights. The display's scratch resistant anti-reflection panel structure reduces light dispersion to ensure clear, high-contrast images under a wide range of illumination conditions.

More flexible, user-friendly cabling

All cable connectors on the monitor's redesigned rear face downward for easier, more tidy cable hook-ups. Installation is simplified with three cable access points. A small cable cover is useful when the LMD-X3200MD is attached to a monitor arm. A medium-sized cable cover specifically for the 12G-SDI input/output connector is useful for providing a through-out connection to a second monitor without removing the large cover that protects all the other connectors.

Auto input

When Auto Input Select Mode is enabled, if the main input signal is accidentally interrupted the monitor automatically switches to the second port to minimize interruption.

Various IN/OUT connectors including 12G-SDI

The LMD-X3200MD offers a wide range of connectors such as 12G-SDI, 3G-SDI, Display Port, HDMI and DVI to meet a wide variety of user needs.

Hands-free remote control via footswitch

When connected to the FS-24 footswitch (optional accessory sold separately) surgeons can take advantage of hands-free operation of menu functions such as switching A.I.M.E. on/off, A/B port input, PIP/POP and flip pattern. This means fewer interruptions and less movement within the OR.

Dual AC/DC powering options for flexible integration

The choice of direct AC power in, or DC in via optional AC power adaptor (AC-300MD AC adaptor is sold separately) makes installation easy in different environments.

Backlit intuitive control panel for easy navigation

LED backlighting only highlights active control buttons on the front panel to guide the user, especially in dark environments. Custom buttons can be assigned to commonly used functions.

Flat surface design for easy cleaning

An edge-to-edge flush front surface allows liquids and gels to be easily wiped off the LCD panel and control buttons. The rear of the monitor features flush cable covers and a smaller ventilation hole area to simplify thorough cleaning.

VESA mounting

The VESA-mounting standard (3 15/16 x 3 15/16 in) simplifies integration into a variety of medical environments.

Compliance with medical standards

This product is distributed to the US and EU as a medical device and satisfies product safety standards (e.g. IEC 60601-1). For more details, please contact your nearest Sony sales office or an authorized dealer.

Specifications

Picture Performance	
Panel	TFT Active Matrix LCD
Picture Size (Diagonal)	800.757 mm (31.53 inches)
Effective Picture Size (H x V)	697.92 x 392.58 mm (27.48 x 15.46 inches)
Pixel pitch	0.182 x 0.182 mm (0.007 x 0.007 inches)
Resolution (H x V)	3,840 x 2,160 pixels
Aspect	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) HDCP2.3 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) 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)

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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	0 °C to 35 °C (32 °F to 95 °F)
Operating Humidity	30% to 85% (no condensation allowed)
Storage/Transport Temperature	–20 °C to +60 °C (–4 °F to +140 °F)
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)	753.9 x 476.3 x 79.2 mm (29.68 x 18.75 x 3.12 inches) 753.9 x 533.3 x 319 mm (29.68 x 21 x 12.56 inches) (with optional SU-600MD stand)
Mass	Approx. 11.8 kg (26 lb 1 oz) (without optional SU-600MD stand)
Mounting	100 x 100 mm VESA
	AC power cord (1) Plug holder for the supplied AC power cord (2) Before Using This Unit (1)

Supplied Accessories	CD-ROM (including the Instructions for Use) (1) Service Contact List (1) Screws for the VESA mount, M4 x 12 mm (4)
*	This product is distributed to EU and US as a medical device and satisfies product safety standards (e.g. IEC 60601-1).

Gallery