

### LMD-2435MD

24-inch Full HD 2D LCD medical monitor



#### Overview

# View high quality color video images from endoscopic/laparoscopic cameras and compatible medical imaging systems

Surgeons and clinical staff can view Full HD images on this entry-level LCD monitor that's designed for use in medical environments including operating rooms, surgical centers, clinics and consulting rooms.

The LMD-2435MD displays video and still images in 2D from surgical endoscopes, laparoscopic cameras and other compatible medical imaging systems.

Flexible operation is enhanced with a choice of picture modes, while an intuitive guided user interface assists with simple fingertip operation.

Designed for integration into today's OR environments, the monitor can be conveniently ceiling-mounted or on a modern medical cart. Analog and digital interfaces simplify connection with a wide range of HD and Standard Definition imaging sources.

#### Features

#### Clear, high resolution 24-inch Full HD images

With a resolution of 1920 x 1080, the 24-inch Full HD display is intended for viewing 2D color video images from surgical endoscopic/laparoscopic camera systems and other compatible medical imaging systems.

#### Ergonomic easy-grip design

The monitor's slim, compact, easy to hold design facilitates simple user adjustment of monitor position.

#### Smaller bezel, larger screen

The narrow bezel maximizes screen size of this compact, spacesaving monitor.

#### Easy, intuitive operation

Operation is simplified by the monitor's intuitive, easy to use control panel. Colored LED backlighting highlights active control buttons, guiding the user and reducing the risk of inadvertent operation, especially in dark environments.

#### Easy clean edge-to-edge flush design

Flat surfaces simplify wiping off liquids and gels from the LCD panel and control buttons, supporting more effective cleanliness and disinfection.

#### Wide range of digital and analog signal inputs

The monitor is compatible with a wide range of digital and analog signal input formats, in HD and Standard Definition.

#### **Choice of display formats**

A variety of display formats including Rotation Image, Side-by-Side, Picture-in-Picture (PIP) and Picture-out-Picture (POP) can be selected quickly and easily from the menu.

#### **Input naming function**

For convenient reference, each input can be conveniently renamed as required, such as Endoscope/Laparoscope/US/Recorder/Printer/PACS/C-

arm/Room camera/Microscope/Vital data/Surgical camera

#### **Recall custom settings**

Three custom buttons allow storage and instant recall of a wide range of assignable picture settings.

#### Resists moisture and water

The monitor offers IPX1 protection (when used in vertical position only) against ingress of water to simplify cleaning and disinfection.

#### Flexible AC powering options

Installation is even more flexible with a choice of direct AC in or AC adapter powering options (AC adapter AC-120MD sold separately)

#### **Energy saving features**

Reduce energy consumption with backlight limiting function and Sleep mode when no input is received.

#### **Installation friendly cabling**

All signal connectors face downwards, allowing easy and organized cable connection to other equipment in the OR.

#### **Control lock**

Inhibits inadvertent operation of control buttons and menu functions

#### Compliance with medical standards

This product is distributed to the U.S. 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	a-Si TFT Active Matrix LCD
Picture Size (Diagonal)	604.7mm
Effective Picture Size (H x V)	527.0 x 296.5 mm 20 3/4 × 11 3/4 inches
Pixel pitch	0.2745 x 0.2745 mm
Resolution (H x V)	1920 x 1080 pixels (Full HD)
Aspect	16:09
Pixel Efficiency	0.9999
Backlight	LED
Panel Technology	LCD with IPS
Luminance (Panel Specification)	300 cd/m2 (typical)
Contrast Ratio	1000:1
Colors	Approx.16.7 million 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

#### Input

Composite Input	BNC (x1)
Y/C Input	Mini-DIN 4-pin (x1) Y: 1.0 Vp-p (75 Ω) C: 0.286 Vp-p (75 Ω, NTSC burst) 0.3 Vp-p (75 Ω, PAL burst)
	RGB: Via HD-15 connector (D-sub 15-pin)* 0.7 Vp-p (75 Ω) (when Sync On Green, 0.3 Vp-p sync) * Needs SMF-405 sold separately
RGB, Component Input	Component: Via HD-15 connector (D-sub 15-pin)* Y: $1.0 \text{ Vp-p}$ ( $75 \Omega$ ) (including $0.3 \text{ Vp-p}$ sync) Pb: $0.7 \text{ Vp-p}$ ( $75 \Omega$ ), Pr: $0.7 \text{ Vp-p}$ ( $75 \Omega$ ) * Needs SMF-405 sold separately
DVI-D Input	DVI-D (x1) TMDS single link
SDI Input	BNC (x1) HD/SD-SDI
HD15 Input	D-sub 15-pin (x1) RGB: 0.7 Vp-p (75 Ω) H/V Sync: Total level (polarity free)

	Plug & Play function : corresponds to DDC2B
External Sync Input	Via HD-15 connector (D-sub 15-pin) * * Needs SMF-405 sold separately 0.3 Vp-p to 4.0 Vp-p (75 Ω)
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), 24 V DC (output impedance 0.05 ohms or less)
Output	
DVI-D Output	DVI-D (x1)
DC 5 V Output	(x1), up to 2.0 A
General	
Power Requirements	AC Input: 100-240V, 50-60Hz, 0.6A DC Input: 24 V, 2.2A (Supplied from AC adapter) AC adapter (Sony, AC-120MD): Optional

Power Consumption	Approx. 57 W (max.)
Operating Temperature	0°C to 35°C 32°F to 95°F
Operating Humidity	30% to 85% (no condensation)
Storage/Transport Temperature	-20°C to +60°C -4°F to +140°F
Storage/Transport Humidity	20% to 90%
Operating/Storage/Transport Pressure	700 hPa to 1060 hPa
Dimensions (W x H x D) *1	572 x 376 x 78 mm / 22 5/8 x 14 7/8 x 3 1/8 inches 572 x 481 x 319 mm / 22 5/8 x 19 x 12 5/8 inches (with SU-600MD optional stand)
Mass	Approx. 6.7 kg Approx. 14 lb 12 oz
Mounting	100 x 100 mm VESA
Supplied Accessories	AC plug holder (2) Before Using This Unit (1) CD-ROM (1) Service Contact List (1)
	SU-600MD Monitor stand



Optional Accessories

SMF-405

AC-120MD AC Adaptor

#### Notes

\*1

The values for dimensions are approximate.

# Related products



#### **NUCLeUS**

The smart digital imaging platform for medical environments

### Gallery

