LMD-2435MD

24-inch Full HD 2D LCD medical monitor



Overview

View high quality colour 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 centres, 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. Analogue 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 colour 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 maximises screen size of this compact, space-saving monitor.

Easy, intuitive operation

Operation is simplified by the monitor's intuitive, easy to use control panel. Coloured 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 analogue signal inputs

The monitor is compatible with a wide range of digital and analogue 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 re-named as required, such as Endoscope/Laparoscope/US/Recorder/Printer/PACS/Carm/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 organised 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 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 | 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, Component Input | 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 |
| | Component: Via HD-15 connector (D-sub 15-pin)* Y: 1.0 Vp-p (75 Ω) (including 0.3 Vp-p sync) Pb: 0.7 Vp-p (75 Ω), Pr: 0.7 Vp-p (75 Ω) * 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) |
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DVI-D Output

DC 5 V Output (x1), up to 2.0 A

DVI-D (x1)

| General | |
|----------------------------------|---|
| Power Requirements | AC Input: 100-240V, 50-60Hz, 0.6A DC Input: 24 V, 2.2A (Supplied from AC adaptor) AC adaptor (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) |
| Optional Accessories | SU-600MD Monitor stand SMF-405 AC-120MD AC Adaptor |
| Notes | |

| NOTES | |
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| *1 | The values for dimensions are approximate. |

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