SONY

LMD-2451MT

24-inch Full HD 3D LCD medical monitor

Overview

3D high definition medical monitor with advanced Sony 3D technology

The LMD-2451MT combines Sony 3D professional technology with an advanced 24-inch LCD panel to display clear 3D pictures.

Surgeons can also view images from multiple monitors whilst wearing light, comfortable polarized glasses.

Practical features include a user memory function and chroma phase control, while ChromaTRU technology contributes to optimised image quality.

This equipment is intended for use by qualified medical professionals only.

Features

Pioneering 3D quality

The LMD-2451MT uses advanced panel micro polarizer filter technology to deliver clear, smooth, consistent pictures that are viewed with passive glasses.

Multiple 3D formats

The versatile LMD-2451MT accepts various sources of 3D signal, such as 3D on 3G, dual stream left and right, field sequential and side-by-side HD-SDI, as well as DVI-D line interleave (line by line)

mode. The display can accept almost any signal ranging from SD to HD video, as well as PC signals via its DVI-D or HD15 connectors.

Sony unique colour matching technology ChromaTRU

The LMD-2451MT helps to ensure more accurate colour consistency by means of a series of calibrations. The panel is individually calibrated so that RGB co-ordinates are consistent. A further calibration helps maintain white balance at a uniform colour temperature throughout all grayscale levels.

High brightness and contrast through super-wide WUXGA

The display utilises a wide WUXGA (1920x1200) LCD panel that offers high brightness and contrast.

Natural gradation and accurate colour reproduction

In order to ensure images have a smooth, natural gradation, the LMD-2451MT uses an advanced 10-bit digital video signal processor.

Gamma curve selection

The LMD-2451MT offers users the choice of DICOM or CRT 2.2. as sometimes, the accuracy of images does require a different gamma curve.

Multiple display modes

A choice of different display modes includes picture-out-picture, side-by-side split screen, zooming, and viewing live video all help to view images simultaneously.

Mirror image

The surgeon’s assistant can view a mirror image of the surgeon’s own display, in order to assist with more convenient manoeuvering of the camera.

Protected controls

In such a sensitive environment, it is vital to prevent inadvertent operation from the control panel. The LMD-2451MT's key-inhibit function helps to remove this risk.

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	
Type	a-Si TFT Active Matrix LCD with an AR-coated protection panel
Resolution	1920 x 1200 pixels (WUXGA)
Effective picture size (H x W)	518.4 x 324.0 mm (20 1/2 x 12 7/8 inches)
Effective picture size (diagonal)	613.2 mm (24 1/4 inches)
Aspect	16:10
Colors	Approx. 16.7 million colors (8-bit)
2D Viewing angle	89°/89°/89°/89° (typical) (up/down/left/right contrast >10:1)
	50° at a viewing distance more

3D Viewing angle	than 300 mm, crosstalk less than 7% (typical)

Input	
Composite	BNC (x1), 1.0 Vp-p ±3dB sync negative
Y/C	Mini DIN 4-pin (x1)
	Y: 1.0 Vp-p ±3dB sync negative,
	C: 0.286 Vp-p ±3dB (NTSC burst signal level),
	0.3 Vp-p ±3dB (PAL burst signal level)
RGB, Component	BNC (x3)
	RGB : 0.7 Vp-p ±3dB (sync on green, 0.3 Vp-p sync negative)
	Component : 0.7 Vp-p ±3dB (75% chrominance standard color bar signal)
DVI-D	DVI-D (x1)
	TMDS single link
HD15	D-sub 15-pin (x1),

	RGB: 0.7 Vp-p sync positive (sync on green, 0.3 Vp-p sync negative)
	Sync : Total level (polarity free, H/V separate sync)
	Plug & Play function : corresponds to DDC2B
External sync	BNC (x1)
	0.3 Vp-p to 4.0 Vp-p ±bipolarity ternary or negative polarity binary
Option slot	2 slots
Parallel remote	Modular connector 8-pin (x1) (pin-assignable)
Serial remote	D-sub 9-pin (RS-232C) (x1), RJ-45 modular connector (Ethernet) (x1) (10BASE-T/100BASE-TX)
DC in	DC 5V / 24V (output impedance 0.05 ohms or less)

Output	
Composite	BNC (x1), loop-through, with 75 ohms automatic termination
	Mini DIN 4-pin (x1) loop-through,

Y/C	with 75 ohms automatic termination
RGB, Component	BNC (x3), loop-through, with 75 ohms automatic termination
External sync	BNC (x1), loop-through, with 75 ohms automatic termination

General

Power requirements	DC IN: 24 V 5.0 A, 5 V 0.030 A (supplied from AC adapter)
	AC adapter (Sony, AC110MD)
	AC IN: 100 V to 240 V, 50/60 Hz, 1.53 A to 0.58 A
	DC OUT: 24 V 5.0 A, 5 V 0.060 A
Power consumption	Maximum: approx. 136 W (with 2 x BKM-229X)
Operating temperature	0°C to 35°C (32°F to 95°F)
Recommended	20°C to 30°C (68°F to 86°F)
Operating humidity	30% to 85% (no condensation)
Storage and transport	-20°C to +60°C (-4°F to +140°F)

temperature	
Storage and transport humidity	0% to 90% (no condensation)
Operating, storage, and transport pressure	700 hPa to 1060 hPa
Dimensions (W x H x D)	602.4 x 386.2 x 110 mm (23 3/4 x 15 1/4 x 4 3/8 inches) (including projections)
Mass	8.7 kg (19 lb 3 oz) (with 2 x BKM-229X) AC adapter (AC110MD) 1.2 kg (2 lb 10 oz)

Supplied Accessories

	AC Adaptor (AC-110MD) (1)
	AC power cord (1)
	AC plug holder (2)
	3D Eye Shield Kit (CFV-E30SK) (1) • Frame (1) • 3D shield (3)
	Instructions for Use of the 3D Eye Shield Kit (1)
	L/R labels (1)

Before Using This Unit (1)
CD-ROM (including the Instructions for Use) (1)
Service Contact List (1)
Information for Customers in Europe (1)

Related products

BKM-250TGM

3G/HD/SD-SDI Input Adaptor

BKM-256DD

Medical grade option board for medical monitors

BKM-30G

Lightweight circular micro polarizer 3D glasses

BKM-31G

Lightweight circular micro polarizer 3D glasses (clip-on)

SU-560

Stand specifically designed for medical monitors, working with LMD-1951MD, LMD-2451MD and PVM-2551MD

MCC-3000MT

3D Full HD Medical Video Camera

Gallery