



# Operating room monitor

## Medical-grade Full-HD 3D monitors

EJ-MDA26E AND EJ-MDA32E2



Perfection in depth



Fadeless in 3D



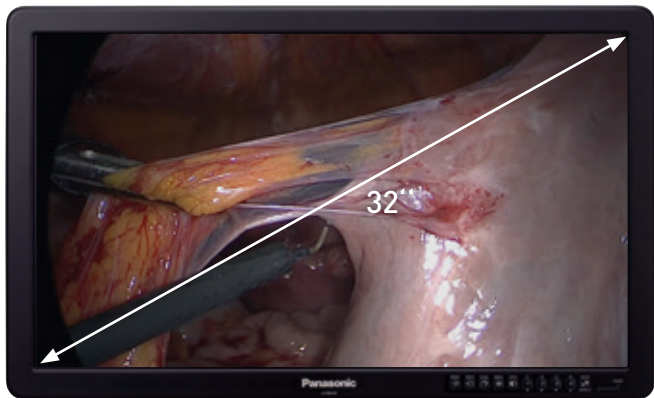
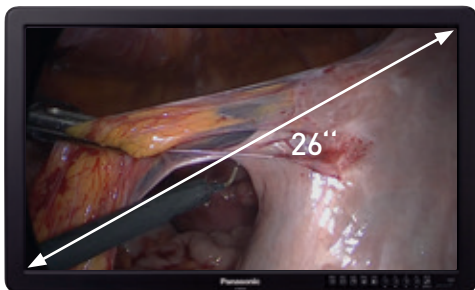
Moist-disinfection



Energy efficient

# Dimension-strong 3D images for the future of surgery

**A NEW DIMENSION IN SURGERY** – Panasonic's medical-grade 3D monitors are the excellent assistants for 3D endoscopic and microscopic procedures in your operating room. Their innovative 3D technology reproduces structures remarkably vivid, with a fabulous depth of field and in the truest colours possible – no matter at which angle. Reds are perfectly realistic so that inflamed tissue can be recognized easily.



*Ob 26" or 32" – Panasonic medical-grade 3D monitors are essential assistants in the OR.*

- Ultimate true colours through IPS technology and LED backlighting
- Xpol® filter enables stereographic images when combined with 3D polarisation glasses\*<sup>2</sup>
- Compatible 3D input format: Top/Bottom, Side by Side, Line by Line, Simul
- Triple Display Mode enables you to view the relevant operating information on a single monitor, thanks to three autonomous screens\*<sup>1</sup>
- Dual Display Mode (two sources displayed in parallel) and autonomous image orientation. The size of the displayed image can be adjusted – choose between PIP and POP mode.\*<sup>2</sup>
- Colour temperature can be adjusted to suit the application and user.
- Switch between 3D/2D possible by using a function button/command
- Panel coating reduces reflections and guarantees ultra-high contrast
- The displayed image can be horizontally rotated and mirrored
- Separate buttons allow quick selection of functions and modes
- Ten user profiles for preconfiguring action of the required image/function settings
- IPX2 protection: the monitor surfaces can be moist-disinfected and the monitor is safe against spray
- Low energy consumption through new 'Power Save Mode' (the monitor switches to standby after 30 seconds without video signal)\*<sup>2</sup>
- It can be controlled remotely via an RS-232C or GPI port



*Perfect temperature conditions in the operating room: the panel does not radiate much heat.*

- Low thermal output helps to keep operating room temperatures constant
- Multiple HD inputs and outputs
- Front panel protection supports panel lifetime
- 3D polarisation glasses (3 units) with anti-fog coating
- Cable cover included with the EJ-MDA32E2
- Medically approved for operating rooms (MDD Class 1, EN 60601-1, EN 60601-1-2)

#### Optional accessories

- Smooth height adjusting, tilting and pivoting monitor stand
- Power adaptor extension cable (10 m)
- Cable cover optional with the EJ-MDA26E
- 3D polarisation glasses without anti-fog optionally available

\*1 Available with EJ-MDA26E \*2 Available with EJ-MDA32E2

## The future belongs to 3D surgery

**PRECISION IN THE OPERATING ROOM THANKS TO ULTRA-HIGH DEPTH OF FIELD.** Due to spatial display of the operating field and the enhanced perception of the image depth, anatomical structures and operating instruments appear more clearly in proportion to each other than using 2D technology. This allows surgeons to coordinate their hands and eyes better and operate with supreme accuracy.



Two-dimensional endoscopic surgery requires a lot of experience when it comes to things like stitching up internal wounds. But if the surgeon is moving in three dimensions, then these sophisticated medical procedures become safer and quicker.

*An extra dimension means seeing more, navigating better and operating more precisely.*

# Optimum design for use in operating rooms

## Flexible to use:

A special panel coating reduces reflections and guarantees ultra-high contrast, even when using in bright conditions.



## Clinical cleanliness:

The entire surface can be cleaned quickly using a moist cloth and disinfectant.



Picture shows the EJ-MDA32E2

## Compact:

The AC adaptor can easily be installed anywhere



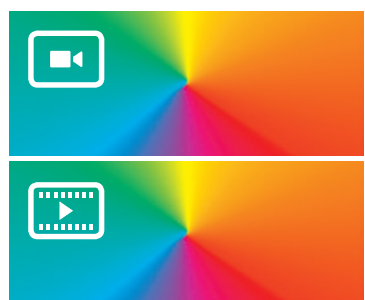
## Clear View:

When the glasses get dirty they can be cleaned and disinfected easily and efficiently. To do so, use a cloth moistened with ethanol.



## Consistent image reproduction:

For true, high-precision images.



## Nicely framed

The black bezel guarantees to display excellent images. Panasonic supplies all of its 3D monitors with black bezels to give additional emphasis to fadeless, flicker-free brilliant pictures.

## Hygienic design

The back panel is designed without ventilation openings, so it protects the unit against moisture ingress when you have to disinfect it using alcohol. A cable cover enables connections to be hidden away safely and tidily.

## Compact AC adaptor

A compact AC adaptor makes installation easier, especially in ceiling mounted arms and cart housings.

## Anti-fog for a clear view

The insides of Panasonic's unique 3D polarisation glasses have an anti-fog coating. Glasses without such a coating can steam up due to the breath in combination with surgical masks and operating room caps. Panasonic's new type of anti-fog coating helps surgeons at every crucial moment.

## Consistent image reproduction

Panasonic ensures an exact and detailed reproduction of image data, precisely as sent to the monitor by the camera or processor.



# Forty years of healthcare experience

**FADELESS, HYGIENIC, EFFICIENT** – Surgical teams in operating rooms depend upon the most advanced technologies. Imaging applications have developed to an essential aid. This is where Panasonic Healthcare comes in, with more than 40 years of experience in medical technology, and continuous development of operating room monitors.

*New precision:  
Safely identify the  
smallest colour  
graduations.*



*Quick and clinically  
clean:  
The operating room  
monitor can be  
moist-disinfected and  
easily wiped down  
with a cloth*



*Reduced thermal output:  
The recommended  
temperature in German  
operating rooms is a  
constant 22–26° Celsius.*



## Fadeless in 3D

The EJ-MDA26E and EJ-MDA32E2 medical-grade monitors are equipped with IPS technology. Using this modern system, images on the monitor can be viewed in the same quality from a wide angle. Panasonic's trend-setting 3D monitors are the excellent surgical assistants and their LCD IPS displays and LED backlighting produce high resolution with deep contrasts, maximum brightness and fadeless reproduction. Panasonic 3D monitors display medical procedures brilliantly and with a natural-looking 3D effect in every format (SIMUL, Side by Side, Line by Line and Top/Bottom).



## IPX2 standard for moist disinfection

Panasonic operating room monitors fulfil the IPX2 standard, which means they are protected against water droplets, dust and, above all, contamination through bacteria and viruses. This makes our operating room monitors quick and easy to clean: their surfaces can be moist-disinfected and remain clinically clean with very little effort. Panasonic's operating room equipment therefore fulfill the demands of hospitals and achieves perfect results under enormous time pressure.

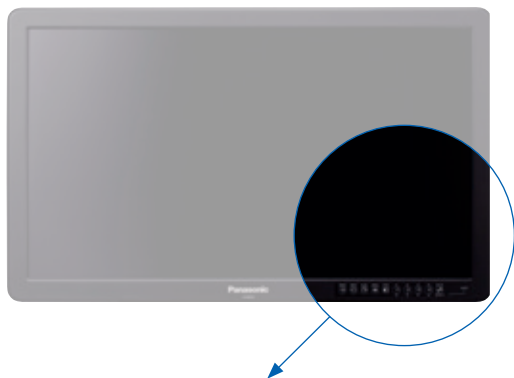


## Energy efficient

High performance coupled with low energy consumption is the idea behind the design of Panasonic's operating room monitors. Low power consumption of 72 W is achieved by features such as the new 'Power Save Mode' – the monitor switches to standby after 30 seconds without video signal. Panasonic's operating room monitors also reduce heat output to a minimum. This allows temperatures in the OR to remain calculable and constant – without putting any extra burden on air-conditioning systems.

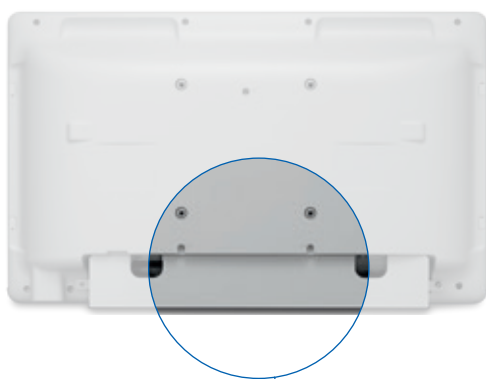
\*Power-Save-Mode available with EJ-MDA32E2.

# Operation, connections and service



## Clear operating panel for intuitive operation

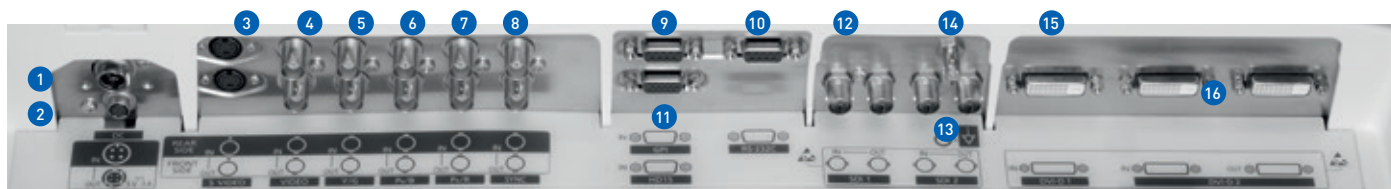
A clearly organised operating panel with four programmable buttons for quick access to saved settings. A function button for toggling quickly between 3D and 2D view is also available. All of the buttons can be operated even when wearing surgical gloves.



## Connections and ports

With up to 16 different inputs and outputs, the display is compatible with every conventional system, allowing flexible usage.

- |                        |                                     |
|------------------------|-------------------------------------|
| 1 DC in                | 10 RS-232 in (D-Sub 9 Pin)          |
| 2 DC out 5V 1A         | 11 HD15 in (Mini D-Sub 15 Pin)      |
| 3 S-Video in/out       | 12 SDI 1 in/out (BNC)               |
| 4 Video in/out (BNC)   | 13 SDI 2 in/out (BNC)               |
| 5 Y/G in/out (BNC)     | 14 Earthing / equipotential bonding |
| 6 Pb/B in/out (BNC)    | 15 DVI-D 1 in (HDCP-compliant)      |
| 7 Pr/R in/out (BNC)    | 16 DVI-D 2 in/out                   |
| 8 SYNC in/out (BNC)    |                                     |
| 9 GPI in (D-Sub 9 Pin) |                                     |



Picture shows the EJ-MDA32E2

**Customer service** Panasonic operating room monitors are renowned for their superior durability. Despite this, Panasonic believes in the medical philosophy of 'being prepared for the case' and provides its customers with comprehensive service. If necessary, the company will provide immediate repairs and replacement equipment.

# Specifications

General Information	EJ-MDA26E	EJ-MDA32E2
Power consumption	DC 24V, 72W	DC 24V, 72W
Dimensions (W×H×D)	643 mm × 396 mm × 87 mm	776 mm × 473 mm × 114 mm
Weight	7,1 kg	14,3 kg
Bezel colour	Front: black/back: white	Front: black/back: white
Mounting standard	Vesa 100	Vesa 200
Imaging specs		
Panel	LCD IPS Panel	LCD IPS Panel
Image size (diagonal)	26 Inch (66 cm)	31,5 Inch (80 cm)
Resolution	Full HD, 1.920 × 1.080	Full HD, 1.920 × 1.080
Aspect ratio	16:9	16:9
Luminance	350 cd/m <sup>2</sup> (typ.)	400 cd/m <sup>2</sup> (typ.)
Contrast ratio	1.000:1 (typ.)	1.200:1 (typ.)
Viewing angle (hor./vert.)	[2D-Mode] V: 178° H: 178°; [3D-Mode] V: 25° (typ.) H: 178°	
Backlight	LED	LED
Inputs		
SDI input	2 HD/SD BNC type	2 3G/HD/SD BNC type
DVI-D	2 DVI-D (DVI 1 HDCP conform)	2 DVI-D (DVI 1 HDCP conform)
HD15	1 (Mini D-Sub 15 pol)	1 (Mini D-Sub 15 pol)
S-Video/Video	1 Mini DIN/1 BNC type	1 Mini DIN/1 BNC type
RGB/YP <sub>B</sub> /YP <sub>R</sub>	1 BNC type	1 BNC type
SYNC	1 BNC type	1 BNC type
Outputs		
SDI output	2 HD/SD BNC type	2 3G/HD/SD BNC type
DVI-D	1	1
S-Video/Video	1 Mini DIN/1 BNC type	1 Mini DIN/1 BNC type
RGB/YP <sub>B</sub> /YP <sub>R</sub>	1 BNC type	1 BNC type
SYNC	1 BNC type	1 BNC type
DC	5V 1A	5V 1A
Remote Control		
RS-232C	1 D-sub 9 Pin	1 D-sub 9 Pin
GPI	1 D-sub 9 Pin	1 D-sub 9 Pin
Power adapter		
Dimensions (W×H×D)	160 mm × 37 mm × 64 mm	160 mm × 37 mm × 64 mm
Weight	Approx. 0,7 kg	Approx. 0,7 kg
Extension cable	10 m	10 m
Languages		
Operation menu	English, French, German, Italian, Japanese, Spanish and Russian	
Manual	English, Russian (printed), English, French, German, Italian, Spanish (CD)	
Features		
Multi Display	Triple Display	Dual Display
Dual Display	Available in PIP und POP	Available in PIP und POP
3D Format	SIMUL, Top/Bottom, Side by Side, Line by Line	SIMUL, Top/Bottom, Side by Side, Line by Line
Efficiency	–	Power Save Mode
Hygiene	IPX2 Standard: moist disinfection	IPX2 Standard: moist disinfection
Standards	FDA Class1 (USA) CMDR Class1 (Canada) MDD Class1 (Europe) EN 60601-1 EN 60601-1-2 CE (MDD)	FDA Class1 (USA) CMDR Class1 (Canada) MDD Class1 (Europe) EN 60601-1 EN 60601-1-2 CE (MDD)

