



Operating room monitor

Medical-grade 4K UHD monitor

EJ-ML432Z



Perfection in detail



Crystal-clear image reproduction



Moist disinfection



Energy-efficient

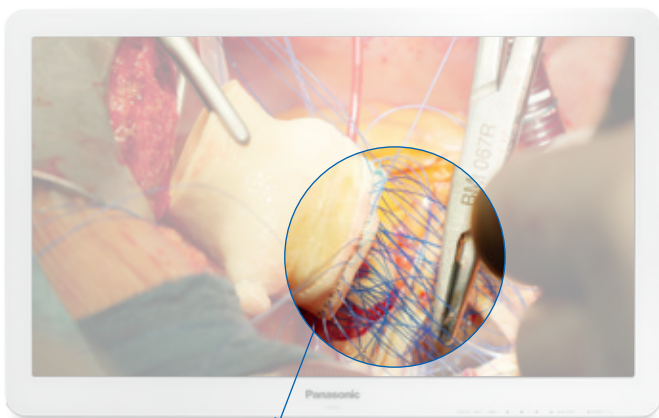
*Actual resolution 3.840×2.160p

Crystal clear images for sophisticated surgery

LOOK INTO THE FUTURE WITH 4K ULTRA HD. It goes without saying that medicine benefits from technological advances in the structuring and reproduction of images. The new 4K UHD operating room monitor is one such advance. Its ultra-high resolution allows you to see more detail. Increased image quality gives minimally invasive procedures a greater chance of success – and that benefits patients and surgeons.

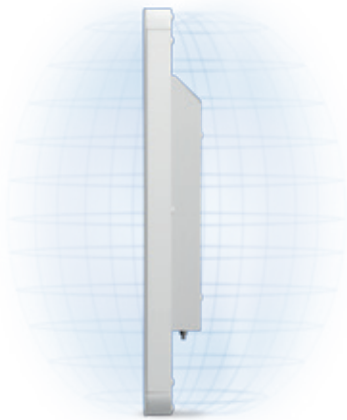


Ultra-sharp image reproduction: due to quadruple pixels



The benefits for you: Enhance your clinical outcome

- Ultimate detail through IPS technology and LED backlighting
- Fourfold pixels of HD resolution
- Dual Display mode (two sources displayed in parallel). The size of the displayed image can be changed. Both images can be aligned independently using picture-out-of-picture mode.
- An extended colour scale reaching almost full Adobe RGB spectrum.
- Defined areas of the image can be enlarged on the operating room monitor. A zoom function enlarges excerpts of the UHD image.
- Can be upscaled to 4K UHD even if only a Full HD signal is transmitted
- The displayed image can be horizontally rotated and mirrored.
- Programmable buttons allow quick selection of functions and modes
- Ten user profiles for preconfiguring action of the required image/function settings
- IPX5 protection: the monitor's surfaces can be moist disinfected and the monitor is safe against dripping water
- Low energy consumption through 'Power Save Mode' (backlighting switches off after 30 seconds without video signal)
- It can be controlled remotely via an RS-232C or GPI port.



*Perfect temperature conditions in the operating room:
Resulting from low thermal output of the monitor*

- Low thermal output and high energy efficiency help to keep operating room temperatures constant
- Multiple UHD inputs
- Front panel protection supports panel lifetime
- Cable cover included with the EJ-ML432Z
- Medically approved for operating rooms (MDD Class 1, EN 60601-1, EN 60601-1-2)

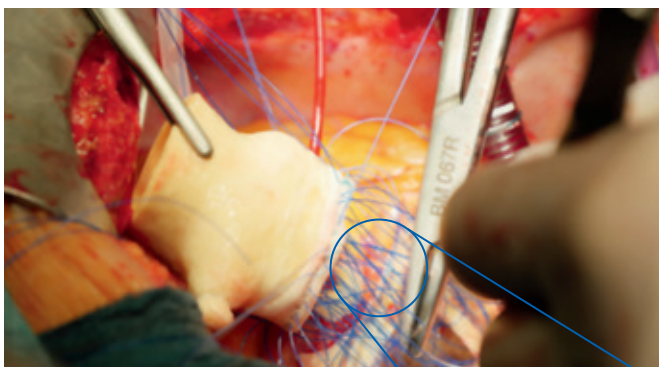
Optional accessories

- Smooth height-adjusting, tilting and pivoting monitor stand
- Power adaptor extension cable (in 10 m)

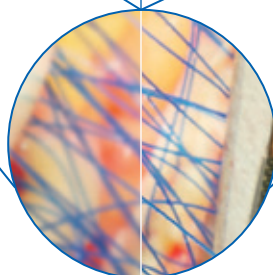
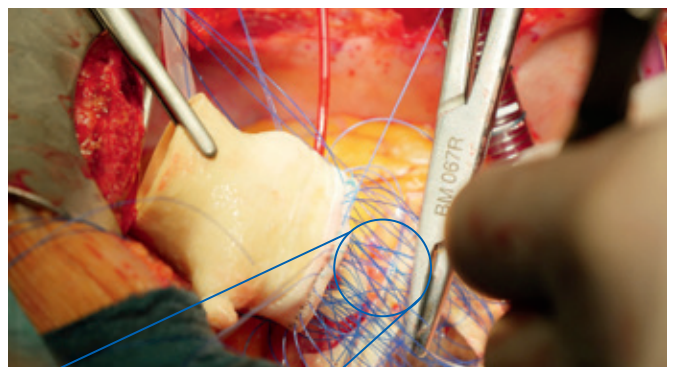
Details matter

PRECISION IN THE OPERATING ROOM THANKS TO ULTRA-HIGH RESOLUTION. The better your operating room monitor, the clearer your view. That is why there is no way around Panasonic's 4K UHD monitors. Their new technology combines ultra-high resolution with deep contrast, maximum brightness and an extended colour spectrum. Operating room images are unusually sharp, clear and detailed. The new EJ-ML432Z delivers a previously unknown depth of sharpness, allowing it to achieve images that reveal the very finest of structures, assisting entire surgical teams in their difficult work.

Full HD Monitor



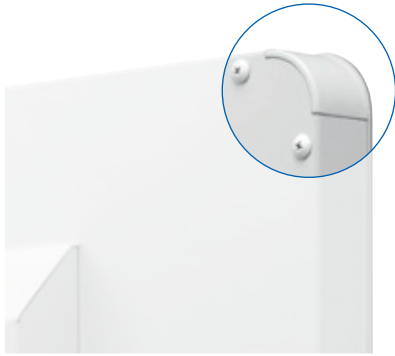
4K UHD Monitor



Don't miss a single detail: Panasonic's 4K UHD image quality depicts even millimetre-thin threads with remarkable clarity.

Optimal design for use in operating rooms

Range of application:
The bezel is narrow and light and has rounded corners to enhance safety in the operating.



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



Compact:
The AC adaptor is light and can be easily installed anywhere.



Bezel with rounded corners

Panasonic pays detailed attention to safety when it manufactures its operating room monitors. One example of this is the rounded shape of the bezel. These operating room monitors save space with their optional bases and slim design.

Hygienic design

The operating room monitor complies with the IPX5 standard at the front, which means its full-cover front screen even guards against spray, dust and – above all – contamination through bacteria and viruses. The monitor can thus be cleaned quickly and easily. The back panel was designed without ventilation openings and with a useful cable cover, allowing it to be kept clinically clean with very little effort.

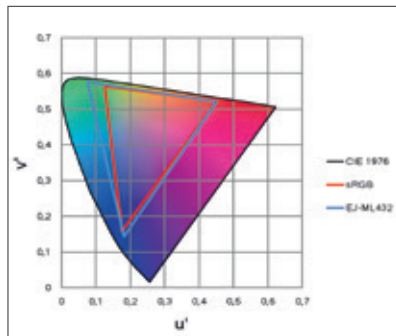
Compact AC adaptor

A compact AC adaptor makes installation easier, especially in ceiling supply units and cart housings.

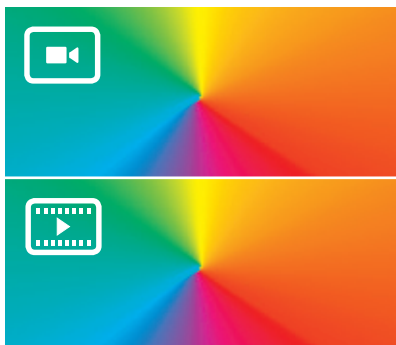
Forty years of Healthcare experience

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

Colour gamut: realistic colour reproduction featuring intensive, multi-facetted reds



Consistent reproduction: for faithful, absolutely exact images.



Quickly and clinically clean: the operating room monitor can be moist disinfected and easily wiped with a cloth.



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



Broad colour range and precise colour reproduction

The EJ-ML432Z achieves a colour scale that covers almost the entire Adobe RGB colour space. This means it reproduces many more colours than a standard monitor. Its colour-intensive images can be viewed on the monitor in the same quality from almost any angle, producing ideal conditions for keeping an eye on things from anywhere in the operating room.



Consistent image reproduction

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



IPX5 standard for moist disinfection

Panasonic's operating room monitors comply with the IPX5 standard, which means they are protected against dripping water, 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 fulfils the demands of hospitals and achieves perfect results even under enormous time pressure.



Energy-efficient

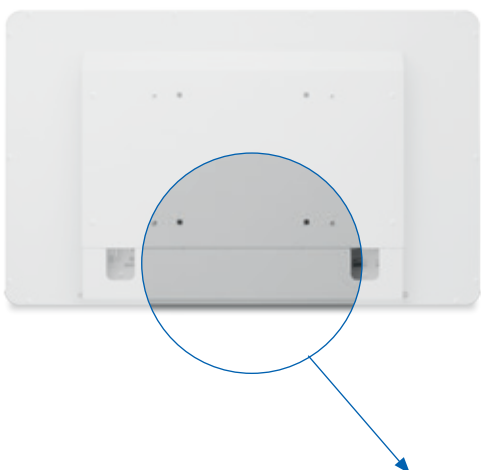
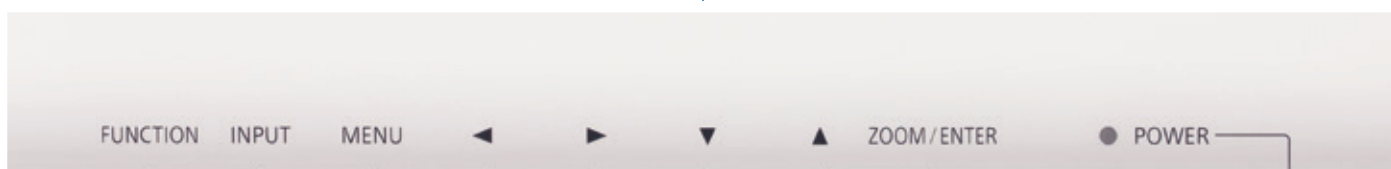
High performance coupled with low energy consumption – that is what Panasonic aims for when designing its operating room monitors. Low power consumption of around 115 W is achieved by features such as the new 'Power Save Mode' – the monitor switches to standby after 30 seconds of no video signal. Furthermore, Panasonic's operating room monitors reduce thermal output to a minimum. This allows temperatures in operating rooms to remain calculable and constant – without putting any extra burden on the air-conditioning systems.

Operation, connections and service



Clear operating panel for intuitive operation

A clearly organised operating panel with programmable function buttons for quick access to the saved functions. Pre-settings 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 Equipotential bonding | ⑨ SDI 3 output (BNC) |
| ② DC output (DC OUT) | ⑩ SDI 4 input (BNC) |
| ③ DC input (DC IN) | ⑪ SDI 4 output (BNC) |
| ④ SDI 1 input (BNC) | ⑫ DVI-D input (DVI-D) |
| ⑤ SDI 1 output (BNC) | ⑬ DVI-D output (DVI-D) |
| ⑥ SDI 2 input (BNC) | ⑭ Display Port input |
| ⑦ SDI 2 output (BNC) | ⑮ GPI input |
| ⑧ SDI 3 input (BNC) | ⑯ RS-232C port |



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 a comprehensive service. If necessary, the company will provide immediate repairs and replacement equipment.

Specifications

General Information

EJ-ML432Z

Power consumption	DC 24V, 115W
Dimensions (W×H×D)	766 mm×475 mm×69 mm
Weight	12,7 kg
Front bezel color	white
Mounting standard	Vesa 200

Imaging specs

Panel	LCD IPS Panel
Image size (diagonal)	31,5 Zoll (80 cm)
Resolution	UHD, 3.840×2.160
Aspect ratio	16:9
Luminance	350 cd/m ²
Contrast ratio	1.000:1
Viewing angle (hor./vert.)	176°/176° (CR>10)
Backlight	LED

Inputs

DisplayPort input	1 (MST/ HDCP conform)
SDI input	4 3G/HD/ BNC type
DVI-D	1 (HDCP conform)

Outputs

SDI output	4 3G/HD/ BNC type
DVI-D	1
DC	5V 1A

Remote Control

RS-232C	1 D-sub 9 Pin
GPI	1 D-sub 9 Pin

Power adapter

Dimensions (W×H×D)	200 mm×37 mm×80 mm (2,5 m length)
Weight	approx. 0,9 kg
Extension cable	10 m

Languages

Operation menu	English, French, German, Italian, Japanese, Spanish
Manual	English (printed), French, German, Italian, Spanish (CD)

Features

Zoom	switchable between normal display and zoom
Dual display	available in POP mode
Rotation/ Flipping	180° Rotation/Horizontal flipping
Efficiency	Power safe mode
Hygiene	IPX5 standard: front
Standards	MDD Class1 (Europe) EN 60601-1 EN 60601-1-2 ANSI/AAMI ES 60601-1 CAN/CSA-C22.2 NO 60601-1

