

24.1" Graphics-Monitor ColorEdge CG247X



CG247X

Your advantages

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The ColorEdge CG247X guarantees uncompromising image quality developed specifically to meet the needs of professional users working in the pre-printing, video post-production, and photography industries. It displays colours with incredible precision. The CG247X features a 16-bit look-up-table (LUT), the wide gamut IPS panel, and a built-in calibration sensor, making it the ideal tool for everyone who requires excellent image quality. The outstanding monitor covers 99 percent of the Adobe RGB gamut, delivers even brightness and colour purity, and features an integrated calibration measurement device. The measurement device automatically positions itself for calibration and is concealed in the bezel until the next measurement. Every measurement device is precisely calibrated to the specific CG247X. Scheduling makes it possible to carry out fully automatic calibration overnight or during the weekend. This way, the CG247X continuously displays the desired colours precisely and reliably.

- Wide gamut LCD with LED technology, contrast 1500:1, brightness 400 cd/sq m
- High-performance colour range with 99% AdobeRGB colour space coverage
- Integrated measuring device and fully-automatic selfcalibration
- 3D LUTs for exact hardware calibration of brightness, white point, and gamma
- Digital Uniformity Equalizer (DUE) for perfect luminance distribution and colour purity
- Ocolour precision with 16 bit look-up table and up to 10 bit colour rendering
- Temperature-controlled correction of colour drift and brightness
- DisplayPort, DVI-D, and HDMI inputs
- ColorNavigator software and monitor hood included



Suitable for softproofing

The EIZO CG247X fulfills strict softproof requirements based on the ISO/CD 12646 standard. Fogra Forschungsgesellschaft Druck e.V. came to that conclusion in the course of testing the monitor. The CG247X was therefore awarded the Fogra "FograCert Softproof Monitor" seal of quality. You will therefore be working on a tested, colour-proof monitor.



Outstandingly sharp image quality

The screen has an impressive top resolution (1920 x 1200), a very good contrast ratio of 1500:1 and a brightness of 400 cd/m². For example, you can edit graphics and images down to the pixel. As an added benefit, text contours are clear and precise. The LCD panel with the IPS (Wide Gamut) panel allows for a viewing angle of 178 degrees. Ensuring that hue and contrast remain stable for the viewer.



Wide gamut – vivid colours in line with industry standards

The wide-gamut monitor reliably reproduces 98% of the DCI P3 standard used in digital cinema and also supports the Rec. 2020 standard.

The CG247X also covers 99% of the Adobe RGB gamut. When images recorded in RAW format are converted to AdobeRGB, the monitor reproduces these with absolute colour fidelity. The EIZO monitor also offers great advantages for printing: It cov-

ers almost the entire CMYK gamut (ISO coated and U.S. Web Coated, for example). You see the later print result on screen and save yourself the proof stage.



Integrated sensor for self-calibration

An integrated calibration sensor ensures you achieve maximum colour accuracy. The sensor is perfectly aligned to the monitor, takes environmental influences such as light into account, and correlates the centre of the image with the edge of the image. This ensures an even result over the whole monitor.

The sensor is located in the bezel and is only extended when performing measurements. This means that no external calibration device is necessary, and the colour fidelity of the monitor is optimal at all times.

The CG247X is equipped with the latest sensor technology that enables recalibration during normal operation, allowing you to continue working with non-colour-critical applications while the monitor is calibrating. During calibration, the sensor only takes up a small area of the screen and does not present an obstacle. Calibration can also be performed fully automatically at definable times.





True Black: Colour depth for plastic images

Dark tones often appear faint or washed-out on LCD screens. True Black improves the contrast ratio and dark tones appear deeper – particularly when looking at the monitor from the side.



EIZO software for fast calibration and printing

Good image processing is only possible on well-calibrated monitors. The usual software calibration takes a long time and requires the user to have a certain level of technical expertise. The CG247X is supplied with ColorNavigator hardware calibration software. With ColorNavigator, you can perform calibration quickly, easily, and with excellent colour precision: During calibration, the software directly accesses and saves to the lookup-table in the monitor hardware. You determine the relevant components such as white balance, gamma, brightness, and tone value curve according to your requirements. Calibration then runs automatically based on the default set during production and is therefore unique in terms of precision and speed. This also means that calibration can be performed by users in just a few steps, with no need for in-depth technical knowledge. Because the calibration takes place via the monitor hardware, it is performed without loss and independently of the computer and graphics board. The CG247X can also be smoothly integrated into an existing system.

More information on the EIZO ColorNavigator

The free Quick Color Match software helps users, even without in-depth expertise in colour management, to see on the monitor how their images will look when printed on their Canon or Epson

inkjet printer at home. In this way, the images can be optimised for the special properties of the selected photo paper even before printing, which helps users avoid expensive misprints.

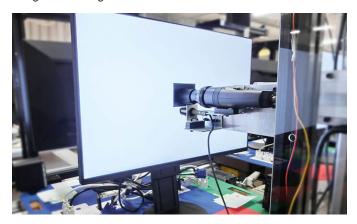
More information on Quick Color Match



Colour Mode selection varies by model.

Ready to use right out of the box – perfect settings right from the factory

Every ColorEdge CG247X is individually measured and optimally configured in the factory, enabling it to be used immediately after it has been unboxed. To this end, the gamma curves for the red, green and blue channels are closely checked and corrected, if necessary. This unique EIZO factory calibration enables the user to start using the monitor with the preset gamut range right out of the box. This painstaking calibration at the factory ensures that the user can quickly recalibrate the monitor if needed using ColorNavigator.





Smooth and fluid transitions and gradients thanks to 16-bit LUT and 10-bit mode

Thanks to the 10 bit colour display based on a 16 bit LUT, you can utilize a huge colour spectrum. This is made possible by the rapid DisplayPort and HDMI connections in combination with the frame rate control. A billion colours at your fingertips simultaneously. That is 64 times more colours than with an 8 bit display. The colour gradations are finer and the colour differences between adjacent colours are smaller. The enhanced greyscale range is equally important for post-production. With the 10 bit greyscale range activated, between 6% and 14% more gray-scales are visible.





10 bit (LUT: 16 bit)

8 bit (no LUT)

Digital Uniformity Equalizer – perfect rendering across the entire screen

Each individual monitor panel is precisely measured over the entire surface at the EIZO factory. Any inhomogeneities in brightness and unnecessary colour are detected and removed. This process (Digital Uniformity Equalizer) guarantees that identical colours always look the same over the entire service life of the monitor, no matter where they are displayed. Only in this way is precise image processing and retouching possible.





With DUE

Without DUE

Stable brightness, no colour deviation

The alpha and omega for exact image editing: constant brightness and colour temperature. Patented electronics balance out brightness fluctuations that may arise due to extended periods of use and increased environmental and operating temperature. Thanks to a built-in thermometer, colour deviations caused by

fluctuations in room temperature are eliminated and automatically reduced. The colour rendering remains absolutely constant over a long period of use, right from the start: because the warmup time until brightness, colour, and tone values have completely stabilized is just three minutes.

EIZO microchip for optimised colour reproduction

The CG247X has a high-quality microchip (ASIC, Application-Specific Integrated Circuit), which EIZO developed especially for the special requirements involved in work demanding high colour accuracy. This microchip is the brain of a ColorEdge as it guarantees the precise, uniform and constant image display that is the hallmark of EIZO.



Safely in sight thanks to the safe area marker

Ideal for captions and critical images: Thanks to the safe area marker, you will know which area of the screen is displayed on another output device. You will therefore see immediately whether subtitles, text, or other important image elements are in the visible area. So that the marker can be clearly seen in all images, you can change the marker colour.

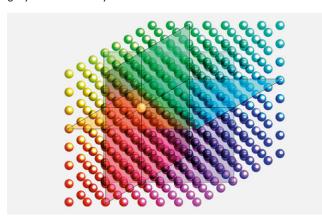




Precise colour rendering thanks to high-resolution 3D lookup table

The 3D LUT provides for the most precise tone value allocation possible and extremely exact colour tone rendering, which is shown amongst other things in the grey scale. Brightness levels in relation to the image signal vary from module to module in LCDs and the colour mixture (addition) of red, green, and blue also varies. This can be exactly determined and controlled only with the aid of specific measuring devices. EIZO therefore configures all of its monitors in the CG series and its colours and tone value curve in the factory. This results in a consistent colour temperature over the entire grey scale. The result: The colour reproduction is equal, precise, and reliable across each individual CG247X monitor.

The 3D look-up table also has the following benefits when working with films: Thanks to the ColorNavigation software included, you can emulate the colours of film material. This means you can see how the image will look when it is played. The 3D LUT also improves the additive mixture of colour in the monitor (mixture of red, green, and blue). This is a key factor for displaying neutral grey tones correctly.



Ideal for video and film production: HDMI

Films are normally recorded at 24 fps. They therefore appear unnatural with the conventional monitor rendering of 60 fps. The monitor supports an image frequency of 24 fps. This means that you can view and edit your film material as it was taken.

HDMI signals with refresh rates of 60, 50, 30, 25 and 24 Hz are supported, ensuring you can view and edit your film material in the same format in which it was recorded. The monitor also features I/P conversion.

Monitor ports

It doesn't get easier than this: You can connect most of your devices, such as PC, laptop or cameras directly to the monitor

because the monitor has a number of different ports. That makes your daily work easier.

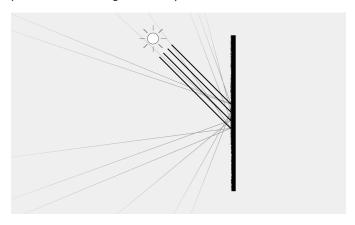


KVM switch: two PCs, one user

It's never been easier to operate two PCs with a single mouse and keyboard. With two USB upstream ports (USB-C and USB-B), the ColorEdge CG247X has a built-in KVM (Keyboard Video Mouse) switch. The monitor automatically links the mouse and keyboard to the currently active source computer. This means, for example, that a desktop PC and a laptop or a work and home PC can be operated on the same combination of monitor, mouse and keyboard. Switching is then done conveniently with the sensor key on the front of the monitor. This ensures uninterrupted work and a tidy workspace.

Modern antireflection technology

Nothing is more distracting than dazzling reflections on the monitor. That is why all EIZO monitors use modern antireflection technology. This does not just protect your eyes from excessive strain, but also saves you from having to assume uncomfortable positions while sitting in front of your monitor.





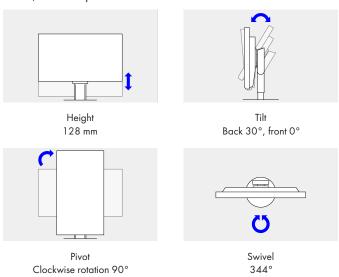
Work without screen flicker – your eyes will thank you for it

Many monitors flicker imperceptibly. This flickering is not consciously perceived, but it causes the eyes to tire more quickly. That is why EIZO attaches great importance to flicker-free monitors. This is great for users, as their eyes will not tire as quickly, allowing them to work in front of the screen for longer periods of time without fatigue.

Stand – ergonomic and stable

Our screens offer continuous height adjustment. Depending on the model, they can even be lowered to the base plate of the stand. This guarantees the best possible ergonomics, regardless of whether the user is sitting or standing in front of the screen. You can also swivel, rotate and tilt the monitor base to the position that is most comfortable for your posture.

The CG247X can also be rotated into the portrait format, which is a great advantage for tethered shoots of people in the portrait mode, for example.



Protection against glare thanks to the monitor hood

The monitor hood reduces reflection and brightness on the screen and helps protect your eyes. It is easy to attach and re-

duces the amount of light that hits the screen from above and from the sides.



Socially responsible production

The CG247X is produced in a socially responsible way. It is free of child labour and forced labour. Suppliers along the supply chain have been carefully selected and they have also committed themselves to produce in a socially responsible way. This applies in particular to conflict minerals. We present a detailed report about our social responsibility annually and voluntarily.

Read more about our corporate social responsibility





Environmentally and climate friendly

Each CG247X is manufactured in our own factory, which implements an environmental management system in accordance with ISO 14001. This includes measures to reduce waste, wastewater and emissions, resource and energy consumption, as well as to encourage environmentally conscious behaviour among employees. We publicly report on these measures on an annual basis as a main component of our CSR report.



Sustainable and durable

The CG247X is designed for a long service life that takes into account the entire lifecycle and impact on the environment. It is generally well above the five-year guarantee. Spare parts are available up to five years after the end of production. The monitor's long service life and the ability to repair it save resources and the climate. When designing the CG247X we paid attention to reducing resource consumption by using high-quality components and materials and being meticulous in production.



A five-year warranty and long service life

Superior material, careful workmanship and meticulous final inspection ensure such extraordinary longevity, making it possible for us to offer a five-year warranty.*

* in Belgium: including on-site replacement service



Guaranteed brightness and colour reproduction

The CG247X has a colour and brightness warranty from the purchase date for a maximum of 10000 hours of operation at a maximum brightness of $120cd/m^2$ and a colour temperature of between 5000 and 6500 K.





Specification

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Item no.	CG247X
Case color	Black
Areas of application	Photography, Video, Graphics
Product line	ColorEdge
EAN	4995047049043
Display	
Screen size [in inches]	24.1
Screen size [in cm]	61.1
Format	16:10
Viewable image size (width x height)	518 x 324
Ideal and recommended resolution	1920 x 1200
Pixel pitch [mm]	0.27 x 0.27
Resolution supported	1920 x 1200, 1600 x 1200, 1680 x 1050, 1280 x 1024, 1024 x 768, 800 x 600, 720 x 400, 640 x 480, 480 i (@ 60 Hz), 480p (@ 60 Hz), 1080i (@ 60 Hz), 720p (@ 60 Hz), 1080p (@ 50 Hz), 576i (@ 50 Hz), 576p (@ 50 Hz), 1080i (@ 50 Hz), 720p (@ 50 Hz), 1080p (@ 50 Hz)
Panel technology	IPS (Wide Gamut)
Max. viewing angle horizontal	178 °
Max. viewing angle vertical	178 °
Number of colours or greyscale	1.07 billion colours (display port, 10 Bit), 1.07 billion colours (HDMI, 10 Bit), 16.7 million colours (display port, 8 Bit), 1.6.7 million colours (HDMI, 8 Bit), 16.7 million colours (DVI, 8 Bit)
Colour palette/look-up table	278 trillion colour tones / 16 Bit 3D-LUT
Max. colour space (typical)	AdobeRGB (>99%), ISO Coated V2 (100 %), sRGB (100%), Rec709 (100 %), EBU (100 %), SMPTE-C (100 %), DCI P3 (>98%)
Max. brightness (typical) [in cd/m²]	400
Recommended brightness [in cd/m²]	120
Max. dark room contrast (typical)	1500:1
Typical response time [grey/grey alternation]	10 ms
Max. refresh rate [in hertz]	60
Backlight	LED

Features & control	
Hardware calibration of brightness, white point and Gamma/EOTF	✓ with integrated or separate measurement sensor
Integrated sensor for self-calibration	✓
Scheduler function for self-calibration	✓
Preset colour/greyscale modes	Adobe RGB, sRGB, Rec. 709, EBU, SMPTE-C, DCI, Calibration, 1x free mode for user selection
Temperature colour drift correction	✓
Brightness drift correction	✓
Digital Uniformity Equalizer	✓
No flickering	✓
True Black	✓
Safe Area Marker (HDMI)	✓
I/P conversion (HDMI)	✓
Signal range amplifier (HDMI)	✓
Noise suppression (HDMI)	✓
RGB and CMYK colour space emulation	✓
Colour blindness simulation	✓
HDCP Decoder	✓
Gamut Clipping	✓
Input signal identification	✓
KVM switch	✓
OSD language	de, en, fr, es, it, se, ja, zh
Adjustment options	Brightness, Contrast, Gamma, Colour saturation, Colour temperature, Gammut clipping, Colour Mode, Colour tone, Signal input, Resolution, OSD language, Interpolation, DUE priority, Off Timer
Button Guide	✓

Ports

Signal inputs	DisplayPort (HDCP 1.3), HDMI (HDCP 1.4), DVI-D (HDCP 1.4)
USB specification	USB 2.0
USB upstream ports	2 x type B
USB downstream ports	2 x type A
Video signal	DisplayPort, DVI (TMDS), HDMI (YUV, RGB)

Electric data

Power consumption (typical) [in watt]	22
Maximum Power Consumption [in watt]	60
Power Save Mode [in watt]	0.7
Power consumption off [in watt]	0
Energieeffizienzklasse	F
Energy consumption/1000h [in kWh]	23
Power supply	AC 100-120 V / 200-240 V, 50/60 Hz

Dimensions & weights

Dimensions [mm]	575 x 417-545 x 246
Weight [in kilograms]	8.9
Weight without stand [in kilograms]	6.2
Housing dimension details	Dimension drawing (PDF)
Swivel	344 °
Incline forward/backward	0°/30°
Pivot	√ 90°
Height adjustment range [mm]	128
Hole spacing	VESA standard 100 x 100 mm

Certification & standards

Certification	CE, CB, TÜV/GS, TÜV/Ergonomics (including ISO 9241-
	307), TÜV/Colour Accuracy (Quick Stability), FograCert
	Softproofing System (class A), cTÜVus, TÜV/S, EAC, PSE,
	FCC-B, CAN ICES-3 (B), RCM, VCCI-B, CCC, RoHS,
	CI: D. LIC MEET

Software & accessories

	Accompanying software and other accessories are available for download	ColorNavigator, ColorNavigator NX (as a download), ColorNavigator Network (upon request)
	Additional supply	Power cord, Signal cable DVI-D - DVI-D, Signal cable Mini DisplayPort - DisplayPort, USB cable, Quick guide, Calibration certificate, EIZO ScreenCleaner, Light protec- tion cover
	Accessories	HH200PR-K (HDMI (High Definition Multimedia Interface) cable), RadiLight for ColorEdge (Comfort light for ColorEdge screens – perfect for working with Creative Suite applications and at dimly lit image processing workstations), EIZO ScreenCleaner (for the best possible clean without scratching the monitor)
	Recommended graphics card	RadiLight for ColorEdge
	Warranty	
	Warranty and service	5 years warranty*

*) The length of the warranty for the LCD module is five years from the date of purchase or 30,000 operating hours, depending on which happens sooner. In addition, the warranty includes the normal wear and tear of the backlight if it is operated at a recommended brightness of 120 cd/sq m and a white point of 5,000 K to 6,500 K. EIZO guarantees this brightness for a term of 3 years from the date of purchase or for 10,000 operating hours, depending on which happens sooner.**) Zero pixel error guarantee for completely lit sub-pixels (partial pixels ISO 9241-307). Valid: six months from the purchase date.

Integrated power unit