24.1" | Graphics-Monitor

ColorEdge® CG247X

CG247X

Your advantages

5 YEARS WARRANTY

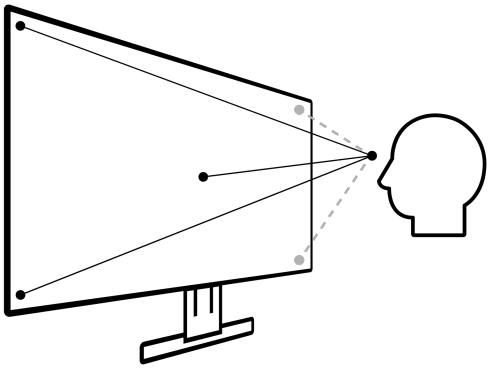
The ColorEdge CG247X guarantees uncompromising image quality developed specifically to meet the needs of professional users working in the pre-printing, video post-production, and photography industries. It displays colours with incredible precision. The CG247X features a 16-bit look-up-table (LUT), 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 self-calibration
- 3D LUTs for exact hardware calibration of brightness, white point, and gamma
- Digital Uniformity Equalizer (DUE) for perfect luminance distribution and colour purity
- Colour 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

Features

Excellent image quality for sharp images

The screen convinced with a resolution of 1920 x 1200, an impressive contrast ratio of 1500:1 and a brightness of 400 cd/m2. So you are able to edit graphics and images pixel accuracy. And: the textures are clear and pricsely. The LCD panel with IPS (Wide Gamut) technology enables a viewing angle of 178 degrees, ensuring that hues and contrast remain stable for the viewer.



Exact colour reproduction – factory calibration

With LCD panels, the image display can vary from module to module. That is why each ColorEdge monitor is precisely measured and calibrated in the factory. The gamma curves for the red, green and blue channels are tested according to strict parameters and corrected if necessary. This unique EIZO factory calibration enables the user to start using the monitor with the preset gamut right out of the box. In addition, the factory calibration allows the user to quickly recalibrate the monitor if needed using ColorNavigator.

Wide gamut – ideal for RAW images and prints

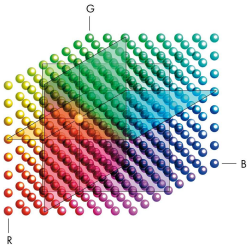
Those working with RAW or Adobe RGB images should look no further than our wide gamut monitor: the wide colour space reproduces 99% of the Adobe RGB colour spaces. If pictures taken in RAW format are converted to Adobe RGB, the monitor will display them absolutely correctly. For example, you can see a shining blue sky or lush green forests that are true to nature – unlike monitors with sRGB colour space. The EIZO monitor also offers great benefits when printing: It covers almost the entire CMYK colour space (for example ISO Coated and U.S. Web Coated). You can already see on the screen how your subsequent print result will look, saving yourself proofs.

Adobe RGB

sRGB

Precise colour rendering thanks to high-resolution 3D look-up 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.

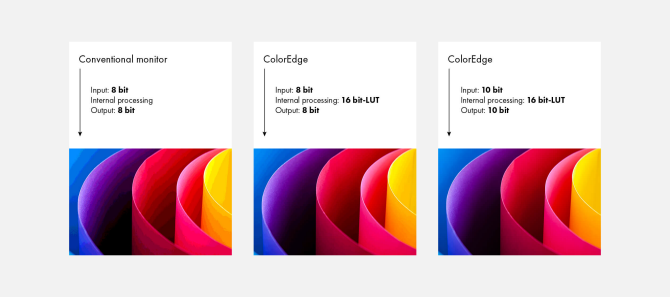
Features

Constant tone value over the entire screen

Digital Uniformity Equalizer (DUE) controls all tone values over the entire monitor, pixel by pixel. The effect: colour tones appear identical at each point on the screen, without the brightness fluctuations you experience in conventional LCDs. The DUE function also balances out the effects of fluctuations in ambient temperature on the colour temperature and brightness. You will enjoy consistently even luminance distribution and perfect colour purity. A real plus when touching-up images.

10 bit colour depth: a billion colours in the finest grades

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 grayscales are visible.



8 bit and 10 bit display

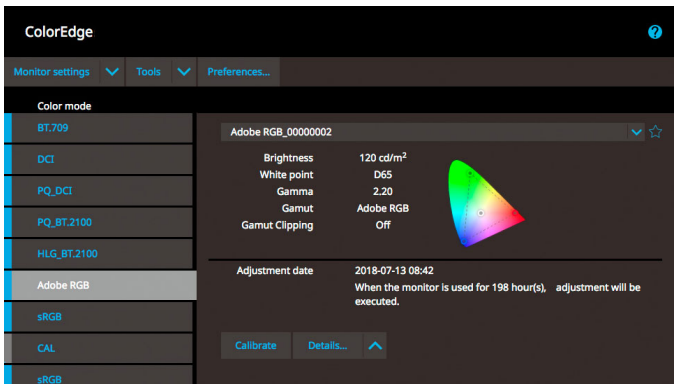
Exact and fast hardware calibration

Calibration becomes quick, easy, and colour accurate with the ColorNavigator software: Calibration is accessed and stored directly on the look-up table in the monitor's hardware during calibration. You determine the corresponding components such as white point, gamma, brightness, and tone curve according to your needs. The calibration is then fully automatic and based on the factory adjustment and is therefore unique in terms of precision and speed.

Professional hardware calibration

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 look-up-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 about ColorNavigator



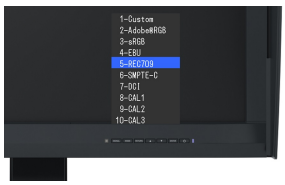
Features

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.

It does not get any simpler than this: You can use the ColorNavigator software or the on-screen menu to determine when you want monitor calibration to take place automatically. For example, you can schedule calibration to take place during your lunch break or overnight, with no PC connection required.

Lightning-fast colour mode changes



You can access colour modes from the monitor's memory at the click of a button. Standards such as sRGB, Rec709, EBU, SMPTE-C, and DCI are preconfigured at the factory. There are also settings that you can calibrate yourself. Switching between modes takes mere seconds, and does not involve any delays caused by renewed calibration.

True Black: Colour depth for plastic images

With its high contrast ratio, the CG247X clearly reproduces deep black tones that can often appear pale or washed out on a typical LCD monitor due to the backlighting. This happens in particular when the monitor is viewed from the side in weakly lit rooms. The CG series is therefore equipped with a retardation film, which enables this depth of black tones even at a larger viewing angle.

ColorEdge monitor

Conventional monitor

Suitable for softproofing

Fogra cert
Softproof Monitor | 30462

The EIZO CG247X fulfills strict softproof requirements based on the draft 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.

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.

The HDMI signals support refresh rates of 60, 50, 30, 25, and 24 Hz. the monitor also supports I/P conversion.

For film production: 3D LUT profiles

Film emulation with 3D LUT ColorNavigator and ColorNavigator NX can use 3D LUT files from the colour grading of films to generate data for emulation on the monitor. This film emulation is available for up to five colour modes of the monitor and is suited to simulating the coloring of films.

Quick operation – even in dark rooms

Operation is easy and clear. The Button Guide, an overview function on the monitor, will show you the respective function keys above the control panel. The backlight keys mean that the monitor can even be used in dark environments. This is particularly helpful in dark post-production studios.

Features

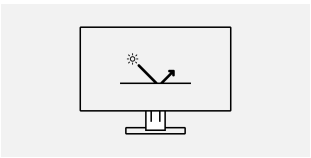
Safely in sight thanks to the safe area marker

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.

Perfect anti-glare coating

The IPS panel has optimal anti-glare coating. It diffuses the reflected light to minimise glare, protecting your eyes from strain. In addition, the monitor provides for a wide viewing angle without any distracting reflections. This is particularly advantageous when multiple people are seated in front of the same monitor.

EIZO monitor: anti-glare coating



Conventional monitor: undesirable reflections

Flicker-free working

The monitor is flicker-free at every brightness setting. The benefit: Your eyes do not get tired as quickly. You can work on the screen for an extended period.

One monitor, many ports

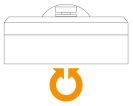
It doesn't get easier than this: You can connect most of your devices, such as PC, laptop or cameras directly to the monitor because the monitor hasa number of different ports. That makes your daily work easier.

Ergonomic and stable: the adjustable base

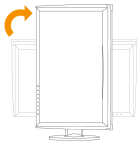
The CG247X has a flexible base to adjust the height, tilt, and rotation and supports both portrait and landscape use. The monitor can be tailored to the user's needs. For example, he can set a sitting position that is ergonomic for him (e.g. lowered to the bottom) or a position to show clients and colleagues something on the screen.

Height
128 mm

Tilt
Tilt up 30°, tilt down 0°



Swivel
344°



Rotation
Rotation 90° (rechts) clockwise

Five-year warranty

In addition to the high demands placed on production and materials, EIZO also places the emphasis on quality assurance in all areas.

Colour and brightness warranty

The monitor has a colour and brightness warranty from the purchase date for a maximum of 10,000 hours of operation at a maximum brightness of 120cd/sq m and a colour temperature of between 5,000 and 6,500 K.

Specification

General

Item no.	CG247X
Case colors	Black
Areas of application	Photography, design & media
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, 480i (@ 60 Hz), 480p (@ 60 Hz), 1080i (@ 60 Hz), 720p (@ 60 Hz), 1080p (@ 60 Hz), 576i (@ 50 Hz), 576p (@ 50 Hz), 1080i (@ 50 Hz), 720p (@ 50 Hz), 1080p (@ 50 Hz), 1080p (@ 30/25/24 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), 16.7 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	✓ mit integriertem oder separatem Messgerät
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	✓
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	✓
Integrated power unit	✓

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

Frequency	HDMI: 15-78 kHz/23,75-61 Hz; Display Port: 26-78 kHz/23,75-63 Hz; DVI-D: 26-78 kHz/23,75-63 Hz
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
Energy-efficiency class	A
Annual energy consumption [in kWh]	34
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
Swivel	344 °
Incline forward/backward	0 ° / 30 °
Pivot	✓ 90° (rechts)
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, China RoHS, WEEE

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 protection 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*

Terms

*) 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.