24.1" | Graphics-Monitor

ColorEdge® CG247X

CG247X

Your advantages

5 YEARS WARRANTY

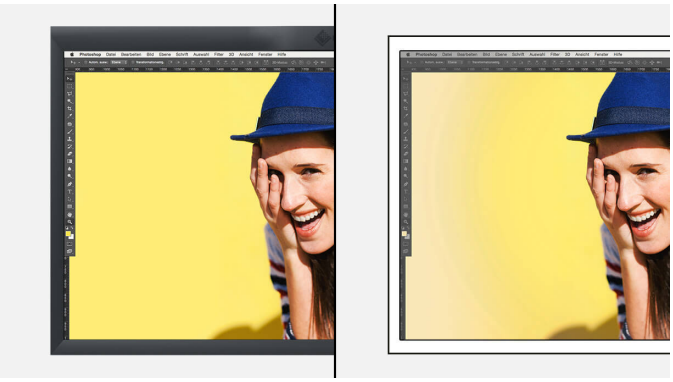
The ColorEdge CG247X guarantees uncompromising image quality developed specifically to meet the needs of professional users working in the pre-printing, video post-production, and photography industries. It displays colors with incredible precision. The CG247X features a 16-bit look-up-table (LUT), the 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 color 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 colors precisely and reliably.

- Wide gamut LCD with LED technology, contrast 1500:1, brightness 400 cd/sq m
- High-performance color range with 99% AdobeRGB color 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 color purity
- Color precision with 16 bit look-up table and up to 10 bit color rendering
- Temperature-controlled correction of color drift and brightness
- DisplayPort, DVI-D, and HDMI inputs
- ColorNavigator software and monitor hood included

Features

Excellent image quality for sharp images

The screen has an impressive contrast ratio of 1500:1 and a brightness of 350 cd/m2. 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.



EIZO monitor | Conventional monitor

EIZO monitor | Conventional monitor

Exact color reproduction ex works

Brightness levels in relation to the image signal vary from module to module in LCDs and therefore the color mixture of red, green, and blue also varies. This can be exactly determined and controlled only with the aid of specific measuring devices. Therefore, EIZO configures the CG247X and its colors and tone curves with a widespread network of grid points and in each primary color. This results in a consistent color temperature over the entire gray scale.

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 color space reproduces 99% of the Adobe RGB color 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 color space. The EIZO monitor also offers great benefits when printing: It covers almost the entire CMYK color 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

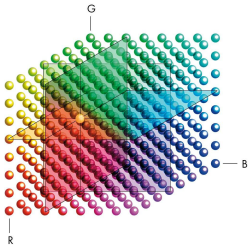
Constant tone value over the entire screen

Digital Uniformity Equalizer (DUE) controls all tone values over the entire monitor, pixel by pixel. The effect: color 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 color temperature and brightness. You will enjoy consistently even luminance distribution and perfect color purity. A real plus when touching-up images.

Features

Precise color rendering thanks to high-resolution 3D look-up table

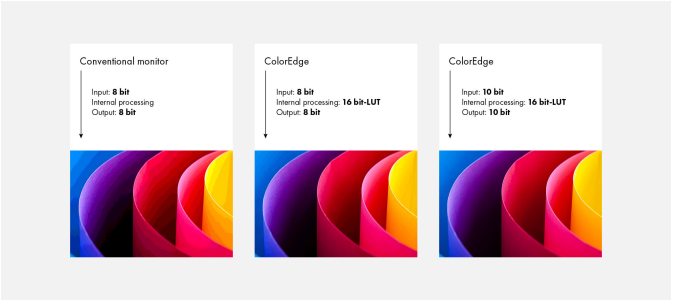
The 3D LUT provides for the most precise tone value allocation possible and extremely exact color tone rendering, which is shown amongst other things in the gray scale. Brightness levels in relation to the image signal vary from module to module in LCDs and the color mixture (addition) of red, green, 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 colors and tone value curve in the factory. This results in a consistent color temperature over the entire gray scale. The result: The color 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 colors 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 color in the monitor (mixture of red, green, and blue). This is a key factor for displaying neutral gray tones correctly.

10 bit color depth: a billion colors in the finest grades

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

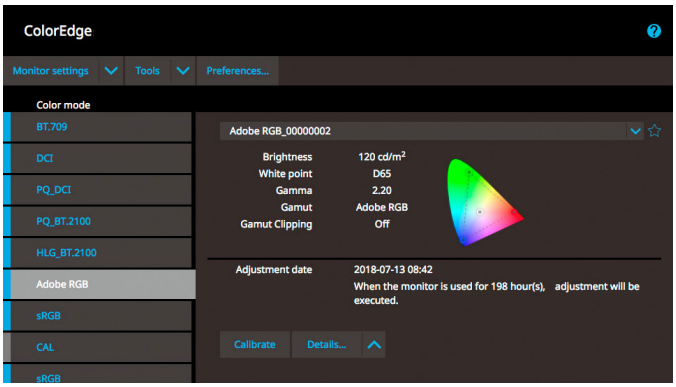


8 bit and 10 bit display

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

Exact and fast hardware calibration

Calibration becomes quick, easy, and color 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.

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 color mode changes

Sample display

You can access color 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

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, color-proof monitor.

Fogra cert
Softproof Monitor | 30462

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.

Features

For film production: 3D LUT profiles

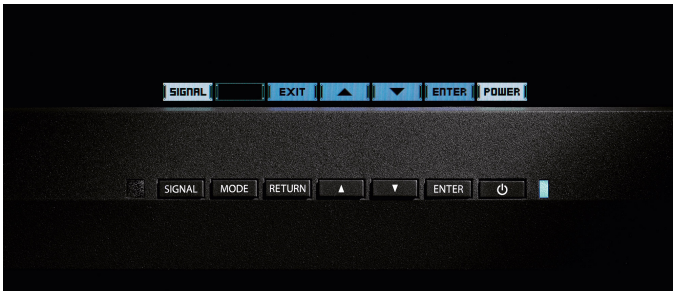
Film emulation with 3D LUT ColorNavigator and ColorNavigator NX can use 3D LUT files from the color grading of films to generate data for emulation on the monitor. This film emulation is available for up to five color modes of the monitor and is suited to simulating the coloring of films.

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 color.

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.



Perfect anti-reflection coating

The IPS panel has optimal anti-reflection coating. Glare from the spread of the reflected light is minimized. This also protects your eyes from excess strain. In addition, this means the monitor provides a wide viewing angle without annoying reflections. This is particularly advantageous when several people are sitting in front of the screen.

Flicker-free working

The monitor is flicker-free at every brightness setting. This is implemented using the hybrid technology developed by EIZO to control the backlight. This combines the benefits of the otherwise standard PWM (pulse width modulation) and DC (direct current) control. 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.

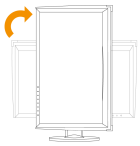
Ergonomic and stable: the adjustable base

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.

128 mm

Tilt up 30°, tilt down 0°n]]]°

172°



Rotation 90° clockwise

Features

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.

Color and brightness warranty

The monitor has a color 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 color temperature of between 5,000 and 6,500 K.

Specification

General

Item no.	CG247X
Case colors	Black
Solutions	Photography, design & media
Product line	ColorEdge
EAN	4995047049043

Display

Screen size [in inches]	24.1
Screen size [in cm]	61
Format	16:10
Viewable image size (width x height)	518 x 324
Ideal and recommended resolution	1920 x 1200
Pixel Pitch Horizontal [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 colors or grayscale	1.07 billion colors (display port, 10 Bit), 1.07 billion colors (HDMI, 10 Bit), 16.7 million colors (display port, 8 Bit), 16.7 million colors (HDMI, 8 Bit), 16.7 million colors (DVI, 8 Bit)
Max. color space	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 [gray/gray alternation]	10 ms
Max. refresh rate [in hertz]	60
Backlight	LED

Features

Hardware calibration of brightness, white point, and gamma correction	✓
Integrated sensor for self-calibration	✓
Scheduler function for self-calibration	✓
Color palette / look-up table	278 trillion color tones / 16 Bit 3D-LUT
Temperature color drift correction	✓
Brightness drift correction	✓
Digital Uniformity Equalizer	✓
No flickering thanks to hybrid controls	✓
True Black	✓
Safe Area Marker (HDMI)	✓
I/P conversion (HDMI)	✓
Signal range amplifier (HDMI)	✓
Noise suppression (HDMI)	✓
RBG and CMYK color space emulation	✓
Color Blindness Simulation	✓
HDCP Decoder	✓
Gamut Clipping	✓
Preset color/grayscale modes	Adobe RGB, sRGB, Rec. 709, EBU, SMPTE-C, DCI, Calibration, 1x free mode for user selection
OSD language	de, en, fr, es, it, se, ja, zh
Adjustment options	Brightness, Contrast, Gamma, Color saturation, Color temperature, Gammut clipping, FineContrast, Colour tone, Signal input, Resolution, OSD language, Interpolation, DUE priority, Off Timer
Button Guide	✓
Signal inputs	DisplayPort, DVI-D, HDMI
Video Signal	DisplayPort, DVI (TMDS), HDMI (YUV, RGB)
Input Signal Identification	✓
USB hub	2 Up-/ 2 Down-Stream, Rev. 2.0

Electric data

Power consumption (typical) [in watt]	22.00
Maximum Power Consumption [in watt]	60
Power Save Mode [in watt]	0.70
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
Power Management	DVI-DMPM, DisplayPort Version 1.1a
Integrated power unit	✓

Dimensions & Weights

Dimensions [mm]	575 x 417-545 x 246
Weight [in kilograms]	9
Weight Without Stand [in kilograms]	6
Swivel (right/left)	172 °
Incline forward/backward	30 °
Pivot	✓
Height Adjustment Range [mm]	128
Hole Spacing	VESA standard 100 x 100 mm

Certification & Standards

Certification	CE, TÜV/GS, TÜV/Ergonomics, CB, cTÜVus, FCC-B, ICAN ICES-003-B, VCCI-B, RoHS, WEEE, GOST-R, C-Tick, ISO 9241-307 Pixel fault class 1**

Software & Accessories

Accompanying software and other accessories are available for download or on a CD	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 2.0 cable, Quick guide, EIZO LCD Utility Disk (incl. PDF manual), Calibration certificate, EIZO ScreenCleaner, Light protection cover, Warranty card, ICC color profile
Accessory	HH200HS-K (HDMI (High Definition Multimedia Interface) cable to transfer digital video and audio signals.), 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*

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.

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