24.1" | Graphics-Monitor

ColorEdge® CG2420

CG2420

Your advantages

5 JAHRE GARANTIE

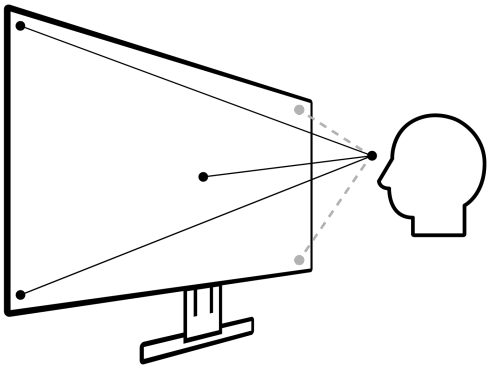
The EIZO CG2420 impresses by operating on a simple principle: It shows things as they are. This is done by the EIZO microprocessor, which was specifically developed for precise colour reproduction and calibration. The excellent electronics of the CG2420 make optimum use of the wide gamut LCD's potential. The device covers 99% of the Adobe RGB gamut. The ColorEdge screen displays the finest textures and colour nuances and differentiates them from one another. The screen's integrated calibration sensor is perfectly calibrated to the screen and ensures that it displays the right hues. Scheduling makes it possible to carry out fully automatic calibration overnight or during the weekend. This way, the CG2420 is always 'freshly' calibrated and continually displays the desired colors – just as they are.

- Wide gamut LCD with LED technology, contrast 1,500:1, brightness 400 cd/m²
- 99% Adobe RGB and 98% DCI-P3 colour range
- Integrated measurement device and fully automatic self-calibration
- Precise hardware calibration of brightness, white balance, and gamma
- Digital Uniformity Equaliser for perfect luminance distribution and colour purity
- Colour precision with 16-bit look-up-table and up to 10-bit colour reproduction
- Temperature-controlled adjustment of colour drift and brightness
- DisplayPort, DVI-D, and HDMI ports
- ColorNavigator calibration software and light protection shields included in delivery

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.



EIZO microchip for optimised colour reproduction

The CG2420 has a high-quality microchip (ASIC, Application-Specific Integrated Circuit), which EIZO has developed specifically for the special requirements of colour-proof work. Thanks to their own algorithm, EIZO ASICs ensure a precise, uniform, and constant colour display.

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

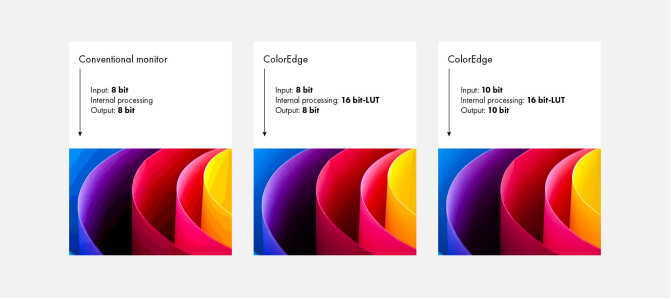
Constant tone value over the entire screen

Digital Uniformity Equaliser (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.

Features

10 bit colour depth: a billion colors 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 colors at your fingertips simultaneously. That is 64 times more colors than with an 8 bit display. The colour gradations are finer and the colour differences between adjacent colors 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

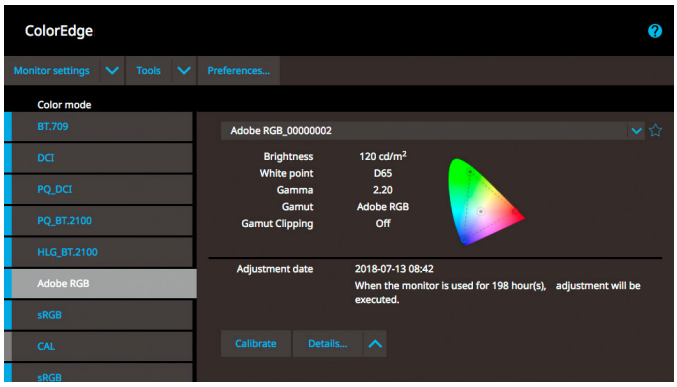
Exact and fast hardware calibration

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

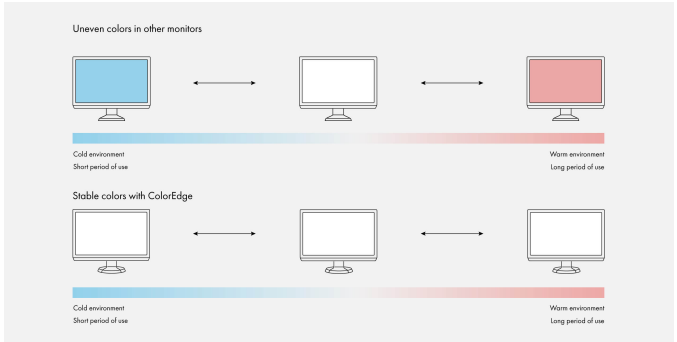
Good image processing is only possible on well-calibrated monitors. The usual software calibration takes a long time and requires the user to have a certain level of technical expertise. The CG2420 is supplied with ColorNavigator hardware calibration software. With ColorNavigator, you can perform calibration 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 CG2420 can also be smoothly integrated into an existing system.

More about ColorNavigator



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 warm-up time until brightness, colour, and tone values have completely stabilized is just seven minutes. That is a quarter of the time normally required.



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 CG2420 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.

True Black: Colour depth for plastic images

With its high contrast ratio, the CG2420 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 CG2420 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 CG2420 was therefore awarded the Fogra "FograCert Softproof Monitor" seal of quality. You will therefore be working on a tested, colour-proof monitor.

Fogra cert
Softproof Monitor | 30255

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.

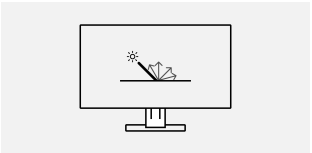
The HDMI signals support refresh rates of 60, 50, 30, 25, and 24 Hz. the monitor also supports I/P conversion.

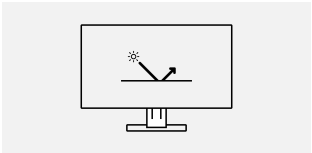
Quick operation – even in dark rooms

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-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.





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.

Features

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

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.

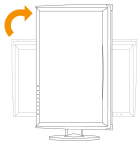
Ergonomic and stable: the adjustable base

The CG2420 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.

155 mm

Tilt up 35°, tilt down 5°

344°



Rotation 90° 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.	CG2420
Case colors	Black
Solutions	Photography, design & media
Product line	ColorEdge
EAN	4995047048084

Display

Screen size [in inches]	24.1
Screen size [in cm]	61.1
Format	16:10
Viewable image size (width x height)	518.4 x 324
Ideal and recommended resolution	1920 x 1200
Pixel Pitch Horizontal [mm]	0.27 x 0.27
Resolution Supported	1920 x 1200, 480i (@ 60 Hz), 480p (@ 60 Hz), 1080i (@ 60 Hz), 720p (@ 60 Hz), 1080p (@ 60 Hz), 1200p (@ 60 Hz), 576i (@ 50 Hz), 576p (@ 50 Hz), 1080i (@ 50 Hz), 720p (@ 50 Hz), 1080p (@ 50 Hz), 1080p (@ 30/25/24 Hz), 1200p (@ 50 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. colour space	AdobeRGB (>99%), DCI P3 (>98%), sRGB (100%), ISO Coated V2 (99%), Rec709 (100 %), EBU (100 %), SMPTE-C (100 %)
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

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 colour tones / 16 Bit
Temperature colour drift correction	✓
Brightness drift correction	✓
Digital Uniformity Equalizer	✓
True Black	✓
Safe Area Marker (HDMI)	✓
I/P conversion (HDMI)	✓
Signal range amplifier (HDMI)	✓
Noise suppression (HDMI)	✓
Colour Blindness Simulation	✓
HDCP Decoder	✓
Gamut Clipping	✓
Preset colour/greyscale modes	Adobe RGB, sRGB, Paper, Calibration, 1x free mode for user selection
OSD language	de, en, fr, es, it, se, ja, zh
Adjustment options	Brightness, Contrast, Gamma, Colour saturation, Gain, 6 Colors, Image size, Input Colour Format, Input Range, Signal Detection, Menu Rotation, Noise Reduction, Colour temperature, Gammut clipping, Colour Mode, Colour tone, Signal input, OSD language, DUE priority
Button Guide	✓
Signal inputs	DisplayPort (HDCP 1.3), HDMI (Deep Colour, HDCP 1.4), DVI-D (HDCP 1.4)
Video Signal	DisplayPort, DVI (TMDS), HDMI (YUV, RGB)
Input Signal Identification	✓
USB hub	1 Up-/ 3 Down-Stream, Rev. 3.0

Electric data

Power consumption (typical) [in watt]	20
Maximum Power Consumption [in watt]	79
Power Save Mode [in watt]	0.6
Power Consumption Off [in watt]	0
Energy-efficiency class	A
Annual Energy Consumption [in kWh]	33
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]	554 x 396-551 x 245
Weight [in kilograms]	7.8
Swivel (right/left)	344 °
Incline forward/backward	5 ° / 35 °
Pivot	✓
Height Adjustment Range [mm]	155
Hole Spacing	VESA standard 100 x 100 mm

Certification & Standards

Certification	CE, TÜV/GS, TÜV/Ergonomics, CB, cTÜVus, FCC-B, CAN ICES-3 (B), VCCI-B, C-Tick, RoHS, WEEE, GOST-R, 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 DisplayPort, Signal cable HDMI, USB 3.0 cable, Quick guide, EIZO LCD Utility Disk (incl. PDF manual), Calibra-tion certificate, EIZO ScreenCleaner, Light protection cover, ICC colour profile
Accessory	EIZO ScreenCleaner (for the best possible clean without scratching the monitor), HH200HS-K (HDMI (High Definition Multimedia Interface) cable to transfer digital video and audio signals.)

Warranty

Warranty and service	5 years including on-site replacement service*

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.