

# 27" Graphics-Monitor ColorEdge CG2700X



# CG2700X

# Your advantages

The ColorEdge CG2700X combines absolute precision with the extremely fine 4K UHD resolution of 3840 x 2160 pixels. It ensures a constant image display at the highest level and offers numerous connections including USB-C and LAN. This makes the CG2700X the ultimate universal monitor for creative professionals with the highest demands. Whether used in photography, video post-production or pre-press, the integrated sensor ensures that the monitor image always matches the displayed file. The maximum brightness of the high-resolution 4K display of 500 cd/m<sup>2</sup>, the True Black panel with a contrast of 1450:1 and the pre-installed HDR gamma curves make the monitor the ideal monitor also for the post-production of 4K films. Photographers will also appreciate the extremely high detail resolution of 164 ppi. Thanks to the USB-C port, the CG2700X offers a very convenient connection to mobile high-performance computers. Image and data signals are transmitted with just a single cable - at the same time, the laptop can be charged with up to 94 watts. The integrated USB hub, HDMI and DisplayPort connections as well as the included light protection cover round off the lavish features of the CG2700X.







- 27-inch wide gamut LCD with 3840 x 2160 pixels (4K UHD)
- ✓ Wide colour gamut with 99% AdobeRGB and 98% DCI-P3 colour space coverage
- Integrated sensor for fully automatic self-calibration
- 500 cd/m² maximum brightness, contrast 1450:1 thanks to True Black technology
- √ 10-bit display, 16-bit 3D look-up table
- Digital Uniformity Equalizer for perfect luminance distribution and colour purity
- ✓ HDR targets for HDR-HLG and HDR-PQ-EOTF
- USB-C (DisplayPort signal and up to 94 Watt Power Delivery), DisplayPort and HDMI inputs
- Q RJ-45 LAN port, USB hub with four USB downstream ports, two of which are USB 3.1 and two USB 2.0



#### **4K UHD resolution**

Thanks to the resolution of  $3840 \times 2160$  (4K UHD), the CG2700X has an enormous pixel density of 164 ppi. Visible monitor pixels are guaranteed to be a thing of the past and even the monitor display gives a very meaningful impression of the subsequent print resolution. The IPS panel has a maximum brightness of  $500 \text{ cd/m}^2$  and achieves a contrast ratio of 1450:1. Films can be assessed, edited and graded with the CG2700X in full 4K UHD resolution. The LCD module allows a viewing angle of 178 degrees. This keeps colour tones and contrasts stable in the user's viewing cone.

#### Wide gamut colour space for saturated colours

To be able to use the entire colour spectrum of modern cameras, you need a monitor with the largest possible colour space. Only then is it possible to visually assess and edit the saturated hues contained in the file. That is why the IPS panel of the ColorEdge CG2700X covers, for example, the wide AdobeRGB photo gamut as well as the CMYK print gamut ISO-Coated V2 to more than 99 %. This means that the full colour spectrum of modern cameras is represented unaltered and without gaps. And a precise simulation of the print result in the softproof view is also guaranteed.



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

The LUT (look-up-table) on the CG2700X employs internal calculations with 16 bits for an extremely high colour depth and outputs the signals with up to 10 bits. This provides billions of hues for calculating the precise monitor display, effectively preventing display errors caused by the monitor such as banding or clipping, which can result in tonal breaks in gradients or unne-

cessary colours in greyscale. Even fine nuances and structures in dark or highly saturated areas of the image can be displayed in a differentiated and detailed manner.





10 bit (LUT: 16 bit)

8 bit (LUT: 8 bit)

#### 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.



# 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



#### 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.

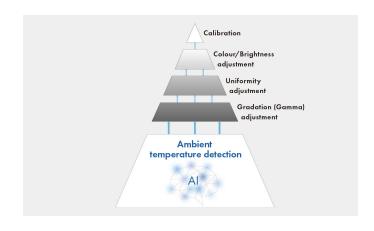
The CG2700X is equipped with the latest sensor technology, allowing it to be recalibrated on the fly. So you can continue working with applications that are not colour-critical while the monitor calibrates. The sensor only takes up a small amount of space on the screen during calibration and therefore does not interfere. Calibration can also take place completely automatically at definable times, even if the computer is switched off or not connected to the monitor at all.



#### Stable display thanks to industry-leading AI

To ensure gradations, colour, brightness and other characteristics are always accurately displayed even when the ambient temperature changes, the ColorEdge CG2700X is equipped with a temperature sensor. It accurately measures the monitor's internal temperature, while an AI (artificial intelligence)-assisted correction algorithm\* distinguishes between different temperature change patterns and calculates a precise adjustment in real time.

\* Patent pending



#### Stable colour reproduction in just three minutes

It takes a traditional monitor a minimum of 30 minutes for the brightness, chromaticity and tone values to stabilise, whereas the ColorEdge CG2700X only needs three minutes. It means that users know they can reliably trust the colours of the monitor within a short time after switching in on.

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

Every ColorEdge CG2700X 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.





#### EIZO software for fast calibration and printing

Each monitor ages and changes its display properties. This is why graphics monitors, which require an absolutely constant image display over the entire service life, must be regularly calibrated and adjusted. With the free calibration software Color-Navigator from EIZO, the ColorEdge CG2700X can be adjusted within 90 seconds (measured with a MacBook Pro and EX4), easily and without any losses. This is to ensure that the same image still looks the same on the monitor five years from now.

#### More information on the EIZO ColorNavigator

For users who want to calibrate several monitors in the company, EIZO offers the ColorNavigator Network tool. This allows for the quality management of many ColorEdge monitors to be carried out centrally. Among other things, an administrator can deliver calibration targets to the users and trigger the automatic calibration of ColorEdge monitors of the CG series. With the help of a secure cloud server offered by EIZO, it is possible to administer this central quality management across numerous locations or even continents.

#### More information about the ColorNavigator Network



Exemplary illustration. Colour Mode selection varies by model.

#### EIZO microchip for optimised colour reproduction

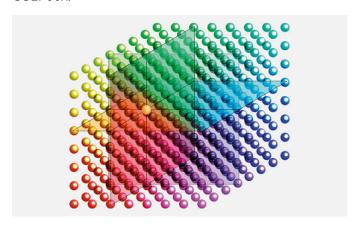
The CG2700X has a high-quality microchip (ASIC, Application-Specific Integrated Circuit), which EIZO developed especially for the special requirements involved in work demanding high colour accuracy. This microchip is the brain of a ColorEdge as it guarantees the precise, uniform and constant image display that is the hallmark of EIZO.



#### Precise colour reproduction thanks to high-resolution 3D LUT

The 3D LUT ensures the most precise tonal value allocation and extremely accurate colour tone reproduction, which can be seen, among other things, in the grey wedge. In LCDs, the brightness levels vary from module to module in relation to the image signal and the colour mixing (addition) of red, green and blue. This can only be accurately recorded and controlled with the help of particularly precise measuring devices.

Ex works, EIZO therefore adjusts every monitor in the CG series and its colour and tone curve. This ensures a consistent colour temperature across the entire grey scale. The result: colour reproduction is the same, precise and reliable for every single CG2700X.



#### **HDR Gamma**

The ColorEdge CG2700X supports the two gamma curves for HDR video: the HLG (Hybrid Log-Gamma) curve and the PQ (Perceptual Quantization) curve. Up to the maximum brightness of 500 cd/m², thus the CG2700X ensures a meaningful impression of the processed HDR material, so that a HDR reference monitor like the ColorEdge CG3146 is often only required in the final production step.



#### Gamut pre-sets for film and video production

Pre-sets for the DCI-P3, BT.709 and BT.2020 colour spaces are precisely calibrated ex works and ensure working with correct gamma values. In addition, colour modes for PQ (DCI and BT.2100) and HLG (BT.2100) for displaying HDR content are also pre-set at the factory. The brightness setting for each pre-set can be conveniently adjusted and recalibrated thanks to the integrated calibration sensor. HDR Mode of Windows and MAC OSX is directly supported. This provides an easy way using typical HDR video application displaying the right tone curve at the matching monitor setting.



#### Safe in sight thanks to the Safe Area Marker

Ideal for subtitles and critical images: Thanks to the Safe Area Marker, you know which area of the scene is displayed in a different aspect ratio. You can therefore see immediately whether subtitles, texts or important picture elements are in the visible area. You can adjust the marker colour, size and aspect ratio so that the marker is clearly visible in every image.



#### **Automatic colour settings**

The ColorEdge CG2700X offers Sync Signal functionality, which adjusts monitor settings such as signal range and colour format

to the video signal, offering consistent colour settings during the entire production process.

#### **Luminance** warning

The brightness warning can be used to mark areas that exceed a certain brightness (300, 500, 1000 or 4000 cd/m²) when using the PQ mode. These areas are marked optionally in yellow or magenta.



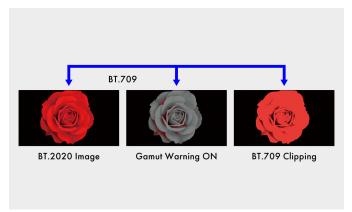


Brightness warning

Without brightness warning

#### Gamut warning

The Gamut warning operates in two modes: Rec. 2020 image content that can't be displayed in the Rec. 709 gamut is displayed in greyscale. Alternatively, clipping mode is simulated in Rec. 709 to show how Rec. 2020 material would look on HDTV devices.



#### "Nearest Neighbor" interpolation setting

The ColorEdge CG2700X offers the Nearest Neighbour interpolation setting as an option for image scaling and resampling. With this upscaling, Nearest Neighbour copies neighbouring pixels while maintaining colour fidelity. If Nearest Neighbour is disabled, colour tones are interpolated between neighbouring pixels, providing smoother transitions. Users can select the interpolation method best suited to the project for different resolutions.



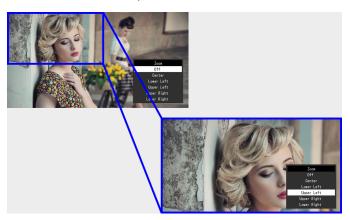
#### Ideal for video and film production: HDMI

Films are normally recorded at 24 fps. They therefore appear unnatural with the conventional monitor rendering of 60 Hz. The monitor supports an image frequency of 24 and 60 Hz. 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. The monitor also features I/P conversion.

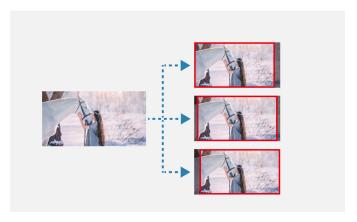
#### 4K Zoom

Users can quickly and easily make selections directly in the monitor menu to zoom in on various areas of the monitor image so as to assess details and sharpness.



#### DCI 4K cropping

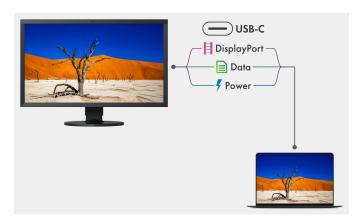
The DCI 4K cropping function allows users to display a DCI 4K ( $4096 \times 2160$ ) signal and crop content outside the limits of the panel's native 4K UHD ( $3840 \times 2160$ ) resolution. Users can choose between three options that determine which part of the image is displayed.



#### State-of-the-art connectivity with USB-C

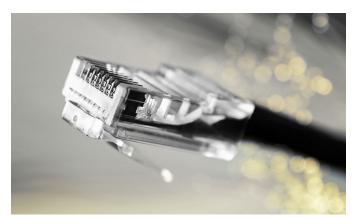
Image signal, USB data transfer as well as power supply with up to 94 W Watts, all this and more can be realised with a single USB-C cable. This makes the ColorEdge CG2700X the central dock of the graphic workflow. Peripheral devices such as a mouse, keyboard or printer can be connected directly to the USB-A ports. Mobile devices such as laptops or tablets can even be charged via the USB-C cable with up to 94 W Watts via the USB-C cable. In this way, a laptop and CG2700X can be turned into a fully-fledged desktop workstation with a quick flick of the wrist.

#### Read more about USB-C in EIZO Monitor know-how.



#### LAN port to ensure a stable network connection

The monitor has a dedicated LAN port to ensure a wired network connection. Laptops and PCs require only one USB cable to be connected to the CG2700X to gain network access via the monitor. This is particularly advantageous for laptops that do not have a LAN connection and allows for fast and stable data transfer, which is required for video conferences, for example. As a network device the monitor has its own MAC address.





#### Monitor ports

The CG2700X supports a wide range of video formats via USB-C, HDMI and DisplayPort interfaces. This means that the monitor can not only be integrated into PC-based workflows but can also be used with HDMI feeders.



#### 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 CG2700X 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.

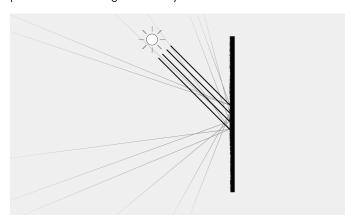
# Work without screen flicker – your eyes will thank you for it

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.

#### Modern antireflection technology

Nothing is more distracting than dazzling reflections on the monitor. That is why all EIZO monitors use modern antireflection

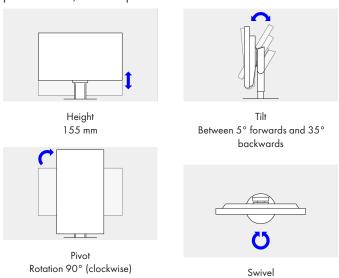
technology. This does not just protect your eyes from excessive strain, but also saves you from having to assume uncomfortable positions while sitting in front of your monitor.



#### 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 CG2700X can also be rotated into the portrait format, which is a great advantage for tethered shoots of people in the portrait mode, for example.



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#### Monitor hood: protection against reflections and glare

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.



#### Socially responsible production

The CG2700X 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.

# Learn more about responsible corporate behaviour at EIZO here.



#### **Environmentally and climate friendly**

Each CG2700X 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.



#### Sustainable and durable

The CG2700X 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 CG2700X 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 CG2700X has a colour and brightness guarantee for five years from the date of purchase for 10000 operating hours at a maximum brightness of 120 cd/ $m^2$  and a colour temperature between 5000 and 6500 K.





# Specification

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Case color	Black
Areas of application	Photography, Video, Graphics
Product line	ColorEdge
EAN	4995047063643
D: 1	
Display	
Screen size [in inches]	27
Screen size [in cm]	68.4
Format	16:9
Viewable image size (width x height)	596 x 335
Ideal and recommended resolution	3840 x 2160 (4K UHD)
Pixel pitch [mm]	0.155 x 0.155
Pixel density [in ppi]	164
Resolution supported	3840 x 2160 (4K UHD), 2560 x 1440, 1920 x 1200, 1920 x 1080 [Full HD], 4861 [@ 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]
Panel technology	IPS (Wide Gamut)
Max. viewing angle horizontal	178 °
Max. viewing angle vertical	178 °
Number of colours or greyscale	1.07 billion colours (USB-C), 1.07 billion colours (Display- Port, 10 Bit), 1.07 billion colours (HDMI, 10 Bit), 16.7 mil- lion colours (USB-C, 8 Bit), 16.7 million colours (Display- Port, 8 Bit), 16.7 million colours (HDMI, 8 Bit)
Colour palette/look-up table	278 trillion colour tones / 16 Bit
Max. colour space (typical)	AdobeRGB (>99%), DCI P3 (>98%), sRGB (100%), Rec709 (100 %), EBU (100 %), SMPTE-C (100 %)
HDR Gamma	HLG, PQ curve
Max. brightness (typical) [in cd/m²]	500
Recommended brightness [in cd/m²]	120
Max. dark room contrast (typical)	1450:1
Response time grey-grey alternation (typical) [in ms]	13
Max. refresh rate [in hertz]	60
Backlight	LED
Ports	
Signal inputs	USB-C (DisplayPort Alt Mode, HDCP 1.3/2.3), Display- Port (HDCP 1.3), HDMI (Deep Colour, HDCP 1.4/2.3)
USB specification	USB 3.1 Gen 1
USB upstream ports	1 x type C (DisplayPort Alt Mode, 94 W max.), 1 x type B
USB downstream ports	4 x type A (2 x USB 3.1 Gen 1, 2 x USB 2.0)
Network connection	RJ-45 (LAN pass through)
LAN standards	IEEE802.3ab (1000BASE-T)
Video signal	DisplayPort (RGB, YCbCr), HDMI (RGB, YCbCr)

CG2700X

# Electric data

Frequency	USB Type-C, DisplayPort: 26 - 137 kHz / 23 - 61 Hz; HDMI: 15 - 135 kHz / 23 - 61 Hz
Power consumption (typical) [in watt]	34
Maximum Power Consumption [in watt]	225
Power Save Mode [in watt]	0.5
Power consumption off [in watt]	0
Energy efficiency class	G
Energy consumption/1000h [in kWh]	36
Power supply	AC 100-240V, 50/60Hz

#### Certification & standards

Certification

CE, CB, UKCA, TÜV/GS, TÜV/Ergonomics (including ISO 9241-307)\*\*, TÜV/Colour Accuracy (Quick Stability), cTÜVus, TÜV/S, EAC, PSE, FCC-B, CAN ICES-3 (B), RCM, VCCI-B, CCC, RoHS, China RoHS, WEEE

#### Features & control

USB-C docking	✓
LAN/RJ-45	✓
KVM switch	✓
Hardware calibration	✓ with an integrated or separate measurement sensor
Integrated sensor for self-calibration	✓
Scheduler function for self-calibration	✓
Preset colour/greyscale modes	additional memory spaces through calibration, BT.2020, BT.709, DCI-P3, DCI-P3 PQ, BT.2100 HLG, AdobeRGB, sRGB, 1x additional memory space, Sync Signal
Temperature colour drift correction	✓
Brightness drift correction	✓
Digital Uniformity Equalizer (homogeneity correction)	✓
No flickering	✓
True Black	✓
Safe Area Marker	✓
I/P conversion	✓
Signal range amplifier (HDMI)	✓
Noise suppression (HDMI)	✓
HDCP Decoder	✓
Gamut warning	✓
Luminance warning	✓
Gamut Clipping	✓
Input signal identification	✓
OSD language	de, en, es, fr, it, ja, zh, se
Adjustment options	Brightness, Contrast, Gamma, Colour saturation, Colour saturation, 6 Colours, Input Colour Format, Input Range, Signal Detection, Menu Rotation, Noise Reduction, Colour temperature/White point, Colour Mode, Colour tone, Signal input, OSD language, DUE priority, Custom key, DCI 4K cropping
Button Guide	✓
Integrated power unit	✓

### Dimensions & weights

Dimensions [mm]	638 x 416-571 x 245
Weight [in kilograms]	9.8
Housing dimension details	Dimension drawing (PDF)
Swivel	344 °
Incline forward/backward	5 ° / 35 °
Pivot	✓ 90° (clockwise)
Height adjustment range [mm]	155
Hole spacing	VESA standard 100 x 100 mm

#### Software & accessories

Accompanying software and other accessories are available for download	ColorNavigator, ColorNavigator Network (upon request)
Additional supply	Power cord, Signal cable USB-C – USB-C (5 A), Signal cable HDMI - HDMI, USB/signal cable (USB-A - USB-B), Quick guide, Calibration certificate, Light protection cover
Accessories	PP200-K (DisplayPort cable, 200 cm), CP200-BK (USB- C to DisplayPort cable, 200 cm), EX4 (Colorimeter for ColorEdge monitor calibration)

#### Warranty

#### Terms

\*) The warranty period for the LCD module is five years from the date of purchase or 30,000 operating hours, whichever comes first. For a period of five years or 10,000 operating hours, whichever comes first, a brightness of at least 120 cd/sqm at a colour temperature of 5000 K to 6500 K is guaranteed.\*\*)

Zero pixel error guarantee for completely lit sub-pixels (partial pixels ISO 9241-307). Valid: six months from the purchase date.