

### 27" Graphics-Monitor ColorEdge CG279X



# CG279X

### Your advantages

The CG279X is ideal for professionals working in video postproduction and pre-printing. It covers up to 98% of the DCI-P3 colour space and up to 99% of the Adobe RGB colour space. The 27" ColorEdge pro-monitor also features a 16-bit 3D lookup-table for precisely controlling colour reproduction. An integrated sensor for hardware calibration ensures precise and automatic adjustment of brightness, white balance and hue curve. Once set up, the CG279X only has to be profiled once a year. The automatic self-calibration with a built-in calibration sensor delivers consistent colours in the meantime. It is possible to work with non-colour-critical applications without interruption while the recalibration is taking place. The integrated Digital Uniformity Equaliser (DUE) guarantees perfect brightness and colour purity on the entire display. The validation function can be used to measure and verify the precision of the monitor at any time. The CG279X is equipped with a USB Type C port, an HDMI port, a DisplayPort and a DVI-D port, as well as four USB downstream ports. The new housing design with narrow bezels is particularly elegant.

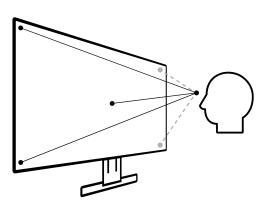


- Wide gamut LCD with LED technology, contrast: 1300:1, brightness: 350 cd/m<sup>2</sup>
- Wide gamut covering 99% of the Adobe RGB colour space and 98% of the DCI-P3 colour space
- Integrated sensor and fully automatic self-calibration
- Colour precision ensured via 16-bit look-up-table and up to 10-bit colour reproduction
- Digital Uniformity Equaliser for perfect luminance distribution and colour purity
- Temperature-controlled adjustment of colour drift and brightness
- 3D LUT for exact hardware adjustment of brightness, white balance and gamma
- USB Type C, DisplayPort, DVI-D and HDMI inputs, four USB outputs
- Broadcast and film preset: BT.2020, BT.709, DCI, PQ\_DCI, PQ\_BT.2100, HLG\_BT.2100



#### Excellent image quality for sharp images

The screen convinced with a resolution of 2560 x 1440, an impressive contrast ratio of 1300:1 and a brightness of 350 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.



#### HDR-Gamma-Support

In terms of the HLG and PQ tone curves, the CG279X meets the relevant standards for the display and processing of content in HDR (High Dynamic Range). The optimised gamma curves enable the content to closely resemble natural, human colour perception. Production and post-production professionals can count on a reliable representation with HDR tone curves for editing and colour grading.

#### 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 CG279X 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 covers 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.



Adobe RGB



sRGB

#### 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.





ColorEdge monitor

Conventional monitor

#### 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 colors 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 CG279X monitor.

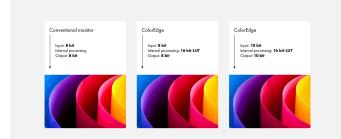


The 3D look-up table also has the following benefits when working with films: Thanks to the ColorNavigation software included, you can emulate the colors of film material. This means you can see how the image will look when it is played. The 3D LUT also improves the additive mixture of colour in the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



#### 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 gray-scales are visible.



#### 8 bit and 10 bit display

#### Gamut presets for film and video production

Presets for the gamuts DCI P3, Rec. 709 and Rec. 2020 are precisely calibrated in the factory and ensure you work with the correct gamma values. Colour modes for PQ



(DCI and Rec. 2100) and HLG (Rec. 2100) for the display of HDR content are also preset as factory defaults. Colour modes on the monitor can be easily changed at the touch of a key, and recalibrated when necessary using ColorNavigator.

#### 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.

#### 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.

| Uneven colors in other monitors   |                       |  |
|---|-----------------------|--|
| $\overbrace{}$  | • <b>•</b>            |  |
|   |                       |  |
| Cold environment<br>Short period of use   |                       | Worm environment<br>Long period of use |
| Stable colors with ColorEdge  |                       |  |
| $ \qquad \qquad$ | $\longleftrightarrow$ |  |
|   |                       |  |
| Cold environment<br>Short period of use   |                       | Warm environment<br>Long period of use |

#### 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 CG279X 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.



#### Professional hardware calibration

Good image processing is only possible on well-calibrated monitors. The usual software calibration takes a long time and reguires the user to have a certain level of technical expertise. The CG279X is supplied with ColorNavigator hardware calibration software. With ColorNavigator, you can perform calibration guickly, 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 CG279X can also be smoothly integrated into an existing system.

Learn more about ColorNavigator

#### 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.

#### 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.

#### One monitor, many ports

It doesn't get simpler than this: Most end devices, such as PCs, laptops or cameras, can be connected directly to the monitor, thanks to its wide range of interfaces.

The existing USB-C interface can be used for regular upstream data transfers as well as to transmit DisplayPort video signals and audio signals. This means a computer with a USB-C port can be easily connected with just the one cable. A USB-B interface is also available as another upstream port. On the USB downstream side, the CG279X has two USB Type B and two USB Type A ports.

The CG279X supports a wide range of video formats via a DisplayPort, DVI-D and HDMI input. As a result, the monitor can be integrated into PC-based workflows and be used with HDMI feeds.

#### Suitable for softproofing

The EIZO CG279X fulfills strict softproof requirements based on the draft ISO/ CD 12646 standard. Fogra

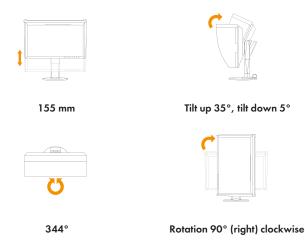


Forschungsgesellschaft Druck e.V. came to that conclusion in the course of testing the monitor. The CG279X was therefore awarded the Fogra "FograCert Softproof Monitor" seal of quality. You will therefore be working on a tested, colour-proof monitor.



#### Ergonomic and stable: the adjustable base

The CG279X 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.



#### 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

From the date of purchase, the monitor is covered by a colour and brightness guarantee for up to 10,000 hours of monitor usage time. EIZO guarantees a brightness of 120 cd/sqm and a white balance of 5000 K to 6500 K.



#### 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.





# Specification

| General                                 |  |   |  |  |
|---|--|---|--|--|
| ltem no.                                | CG279X   | Hardware calibration of brightness,   | ✓  |  |
| Case colors                             | Black  | white point, and gamma correction   |  |  |
| Solutions                               | Photography, design & media  | Integrated sensor for self-calibration  |  |  |
| Product line                            | ColorEdge  | Scheduler function for self-calibration   |  |  |
| EAN                                     | 4995047053606  | Color palette / look-up table   | 278 trillion colour tones / 16 Bit 2x 3D-LUT   |  |
|   |  | HDR Gamma   | HLG, PQ curve  |  |
| Display                                 |  | Temperature colour drift correction   | ✓  |  |
| Screen size [in inches]                 | 27   | Brightness drift correction   | $\checkmark$   |  |
| Screen size [in cm]                     | 68.4   | Digital Uniformity Equalizer  | $\checkmark$   |  |
| Format                                  | 16:9   | No flickering   | ✓  |  |
| Viewable image size (width x height)    | 597 x 336  | True Black  | <ul> <li>Image: A second s</li></ul> |  |
| Ideal and recommended resolution        | 2560 x 1440  | 3D LUT film emulation (10 bit log)  | ✓  |  |
| Pixel Pitch Horizontal [ mm ]           | 0.23 x 0.23  | Safe Area Marker (HDMI)   | ✓  |  |
| Resolution Supported                    | 2560 x 1440, 1920 x 1200, 1600 x 1200, 1680 x  | I/P conversion (HDMI)   | $\checkmark$   |  |
| kesolonon supponed                      | 1050, 1280 x 1024, 1024 x 768, 800 x 600, 720  | Signal range amplifier (HDMI)   | ✓  |  |
|   | x 400, 640 x 480, 480i (@ 60 Hz), 480p (@ 60 Hz),  | Noise suppression (HDMI)  |  |  |
|   | 1080i (@ 60 Hz), 720p (@ 60 Hz), 1080p (@ 60 Hz),<br>576i (@ 50 Hz), 576p (@ 50 Hz), 1080i (@ 50 Hz),  | RBG and CMYK colour space emula-  | ✓  |  |
|   | 720p (@ 50 Hz), 1080p (@ 50 Hz), 1080p (@ 30/25/   | tion  |  |  |
|   | 24 Hz), 2560 x 1440 (@ 30 Hz)  | Colour Blindness Simulation   | ✓  |  |
| Panel technology                        | IPS (Wide Gamut)   | HDCP Decoder  | ✓  |  |
| Max. viewing angle horizontal           | 178 °  | Gamut Clipping  | ✓  |  |
| Max. viewing angle vertical             | 178 °  | Preset colour/greyscale modes   | BT.2020, BT.709, DCI, PQ DCI, PQ BT.2100, HLG  |  |
| Number of colors or grayscale           | 1.07 billion colors (USB Type-C), 1.07 billion colors  | ., ., .,  | BT.2100, Adobe RGB, sRGB, Calibration, 1x free mode  |  |
| 0,                                      | (display port, 10 Bit), 1.07 billion colors (HDMI, 10 Bit),  |   | for user selection   |  |
|   | 16.7 million colors (display port, 8 Bit), 16.7 million colors<br>(HDMI, 8 Bit), 16.7 million colors (DVI, 8 Bit)  | OSD language  | de, en, fr, es, it, se, ja, zh   |  |
| M                                       | AdobeRGB (>99%), ISO Coated V2 (99%), sRGB (100%),   | Adjustment options  | Brightness, Colour temperature, Gamma, Colour gamut,   |  |
| Max. colour space                       | AdoberGB (>99%), ISO Codied V2 (99%), skGB (100%),<br>Rec709 (100%), EBU (100%), SMPTE-C (100%), DCI<br>P3 (>98%)  |   | Colour saturation, Clipping, Gain, HLG system gamma,<br>Picture expansion, Signal colour system, Signal range,<br>HDMI settings (noise reduction, film recognition), Signal  |  |
| Max. brightness (typical) [in cd/m²]    | 350  |   | format, Power save, Alignment, OSD information, Usage  |  |
| Recommended brightness [in cd/m²]       | 120  |   | time, Indicator, Signal input, Key lock, Safe Area Marker,<br>Safe Area Size, Aspect Marker, Aspect Settings, Border   |  |
| Max. dark room contrast (typical)       | 1300:1   |   | colour, XYZ Format, REC709 gamut warning, Media  |  |
| Typical response time [grey/grey        | 13 ms  |   | Emulation, DUE priority, Luminance Warning, Custom key   |  |
| alternation]                            |  |   | Reset  |  |
| Max. refresh rate [ in hertz ]          | 60   | Button Guide  | ✓  |  |
| Backlight                               | LED  | Signal inputs   | USB Type-C (DisplayPort Alt Mode, HDCP 1.3), Display-<br>Port (HDCP 1.3), HDMI (Deep Colour, HDCP 1.4), DVI-E<br>(HDCP 1.4)  |  |
| Electric data                           |  | USB Тур-С   | ✓  |  |
| Power consumption (typical) [ in watt ] | 32   | Video Signal  | DisplayPort, HDMI (YUV, RGB), DVI dual link (TMDS)   |  |
| Maximum Power Consumption [ in          | 111  | Frequency   | HDMI: 15-78 kHz/23-61 Hz Display Port: 26-89 kHz/<br>23-61 Hz  |  |
| watt ]                                  |  | Input Signal Identification   | ✓  |  |
| Power Save Mode [ in watt ]             | 1  | USB hub   | 1 Up-Stream USB-C (15W Power delivery) / 1 Up-Stream   |  |
| Power Consumption Off [ in watt ]       | 0  |   | USB-B / 2 Down-Stream USB-A, Rev. 3.1 Gen 1 / 2  |  |
| Energy-efficiency class                 | В  |   | Down-Stream USB-A, Rev. 2.0  |  |
| Annual Energy Consumption [ in kWh      |  |   |  |  |
| ]                                       | 01   | Software & Accessories  |  |  |
| Power Supply                            | AC 100-120 V / 200-240 V, 50/60 Hz   | Accompanying software and other   | ColorNavigator, ColorNavigator Network (upon request   |  |
| Power Management                        | DisplayPort Version 1.2a   | accessories are available for   | Quick Color Match  |  |
| Integrated power unit                   | ✓  | download or on a CD   |  |  |
|   |  | Additional Supply   | Power cord, USB, and signal cable (USB Type-C), Signal<br>cable DisplayPort - DisplayPort, Quick guide, Calibration<br>certificate, Light protection cover   |  |
| Dimensions & Weights                    |  | Association   | EIZO ScreenCleaner (for the best possible clean without  |  |
| Dimensions [ mm ]                       | 638 x 416-571 x 264  | Accessory   | scratching the monitor), HH200HS-K (HDMI (High   |  |
| Weight [ in kilograms ]                 | 10.3   |   | Definition Multimedia Interface) cable to transfer digital   |  |
| Swivel (right/left)                     | 344 °  |   | video and audio signals.)  |  |
| Incline forward/backward                | 5 ° / 35 °   |   |  |  |
| Pivot                                   | $\checkmark$   | Warranty  |  |  |
| Height Adjustment Range [ mm ]          | 155  | Warranty and service  | 5 years including on-site replacement service*   |  |
| Hole Spacing                            | VESA standard 100 x 100 mm   | ,   |  |  |
| Certification & Standards               |  | Terms   |  |  |
|   |  |   | nodule is five years from the date of purchase or 30,000   |  |
| Certification                           | Softproof-Monitor FograCert, CE, TÜV/GS, TÜV/<br>Ergonomics, CB, cTÜVus, FCC-B, CAN ICES-3 (B), VCCI-<br>B, TÜV/S, RCM, EAC, RoHS, WEEE, PSE, TÜV/Colour<br>Accuracy (Quick Stability), ISO 9241-307 Pixel fault class | *) 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.**) Zero pixel error guarantee for completely I sub-pixels (partial pixels ISO 9241-307). Valid: six months from the purchase date. |  |  |

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