



EIZO CG223W

22" Color Graphic monitor

A reliable device for the field of digital photography and picture processing. With EIZO's high performance technology, the CG223W monitor displays colours exactly how the camera caught them. We can also witness even highly saturated shades of green and azure, for the monitor covers 95% of the AdobeRGB colour area. Apart from two DVI-I inputs, the modern Display Port interface, supporting 10bit colour resolutions, is also available. Thanks to 1 billion colours, the monitor is capable of reproducing even the finest colour deviations. This is ideal for both the prediction of print results and retouching. Advantages: no more time-consuming and expensive corrections

- u Wide Gamut LCD, Contrast 950:1, brightness 270 cd/m²
- u 16bit colour processing, 3D Look-Up-Table and up to 10bit colour display
- u Digital Uniformity Equalizer for perfect brightness distribution and colour unity
- u Colour and brightness variation correction with temperature
- u Automatic hardware calibration for brightness, white pixel and Gamma
- u Display Port and DVI-I inputs for digital and analogue connection



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Main features

Precise colour reproduction The CG223W processes picture signals with an accuracy of 1/65 000 with the help of the 16-Bit-Color-Processing system. All colours and fine paint will be preserved, particularly for dark colour tones. Together with 10bit colour depth, available thanks to the Display Port interface, the picture is reproduced accurately just as original. This reliable and accurate reproduction limits the number of corrections and therefore shortens precious production time.

Consistent tone curve and colour temperature The brightness level for the given picture signal and red, green and blue colour addition differs for each produced LCD module. This can be determined and adjusted only with the help of special measuring devices. During the production process, EIZO therefore sets the colours and tone curve of each CG223W monitor in 343 support points for each basic colour component. Thanks to this, a consistent colour temperature is achieved throughout the entire grey scale. Colour deviations, on average, reach only 0.34 Δe. The colour presentation for different CG223W monitors is exactly the same, accurate and reliable.

Precise calibration The monitor is equipped with a 3D LUT (Look-Up-Table) for white balancing and hardware calibration. Software ColorNavigator, supplied with CG223W, accesses this LUT directly during the calibration process. The user can arbitrarily define the colour temperature, brightness, black level and tone curve during this process. Calibration utilizes data from factory settings and therefore reaches superb precision and speed.

Exceptional picture quality First class picture quality and sharp text contours is achieved thanks to its high resolution of 1680 x 1050 pixels, 950:1 contrast ratio and maximum brightness of 270 cd/m².

Wide Gamut

The colour area of the CG223W monitor contains significantly more colours than common LCD monitors. Pictures and graphics seem more alive and distinct. The monitor displays very deep colours, which are not otherwise visible. The CG223W will be appreciated primarily by users who demand colour variety and distinction.

Digital Uniformity Equalizer (DUE)

This system manages colour uniformity and the even brightness distribution throughout the entire screen area. A special chip automatically corrects unevenness. Result: The same colour tone appears the same throughout the entire display.

Stable and cost-effective The Off Timer and PowerManager functions are among useful bonuses. Providing the user is not using the computer, it saves energy in a manner, very considerate to the environment. Especially useful: it reduces the ageing process of the LCD backlight and brightness distribution. Brightness intensity and homogeneity will be preserved longer.

Colour variation correction

The colour reproduction on LCD modules changes with temperature and in the summer, for example, can reach more than 5 Δe at 30° C. The module, which was just switched on, can deviate by up to Δe, until it warms up. Colour variation correction acts against this effect and looks after the reliable colour reproduction.

Overdrive

CG223W processes motion pictures using a precalculated overdrive, in order to display fast video sequences without interfering shadows.

Display Port and DVI-I inputs One Display Port and two DVI-I inputs enable the connection of digital and analog signals. Switching is either automatic or manual.

Suitable for Softproof EIZO CG223W meets strict requirements on the viewing angle and homogeneity. Fogra Forschungsgesellschaft Druck e.V. came to this result in terms of their testing of the monitor for the purpose of Fogra-Cert Softproofing System[®] certification.

Standards



Technical specifications

Panel size	55.8 cm (24 inches), 16:10 format
Models (colour versions)	CG223W-BK (black)
Viewable image size	474 mm (width) x 296 mm (height)
Viewable image size - diagonal	558 mm
Ideal and recommended resolution	1680 x 1050 pixels
Pixel pitch	0.282 mm x 0.282 mm
Display colours	1 billion (30 bit) Display Port 16.7 million (24 bit) DVI
Colour management (palette)	12bit 3D Look-Up-Table cca. approx. 68 billion colour shades
Max. colour area	95% AdobeRGB
Max. brightness	270 cd/m ²
Maximum contrast ratio	950:1
Max. Viewing angle	Horizontal: 178°; Vertical: 178°
LCD technology	S-PVA
Typical response time, medium tone	6 ms
Typical response time, medium tone	6/6 ms, black-white transition
Main features	Hardware calibration for brightness, white pixel and Gamma Wide Gamut 12bit 3D Look-Up-Table (36bit R+B+G) 16bit Color Processing Digital Uniformity Equalizer Colour variation correction with temperature Overdrive Colour area emulation (sRGB, Cal, Rec709, EBU, SMPTE, DCI, Custom) Colour Universal Design (colour blind simulation) HDCP decoder USB V2.0, Powered Hub,
Adjustment functions	Brightness, Contrast, Gamma from 1 to 2.6 at 0.1 increments Colour saturation for RGB/CMY, Colour temperature 4 000 to 10 000K, Clock, Phase, Picture position, Resolution, Off Timer, OSD language (De, UK, Fr, Se, Es, It),
Resolution	1680 x 1050 full screen 1:1, 1280 x 1024, 1024 x 768, 800 x 600, 720 x 400, 640 x 480, enlarged to full screen or 1:1
Horizontal frequency	24 - 82 kHz (Digital: 31 - 65 kHz)
Vertical frequency	47.5 - 86 kHz (Digital: 47.5 - 61 kHz)
Video bandwidth	150 MHz (Digital: 120 MHz)
Picture signals	Display Port, DVI (TMDS), RGB Analog
Input connectors	Display Port, 2 DVI-I inputs
Plug & Play	VESA DDC CI
Power Management	VESA DPMS, DVI-DMPM
Power consumption	max.* 85 W, typical 39 W, <=0,7 W Power save mode.
Dimensions (WxHxD)	511 mm x (348 mm to 522) x 241 mm, 511 mm x 333 x 85 mm (without stand)
Net weight	9.6 kg, 6.6 kg (without stand)
Rotation / Tilt	35°/35° right/left, 40° backwards
Height adjustability	82 mm
Standards	CE, TÜV GS, TÜV Ergonomics, ISO 13406-2, TCO03, Energy Star
USB-Hub	1 upstream, 2 downstream, Rev. 2.0
Accessories	Package includes: manual in German, English and French, ColorNavigator, network adapter, USB cable, signal cable for Display Port and DVI-D, light diaphragm

Optional: measuring device, for example,

* at maximum brightness, both signal inputs and USB hub running

** The warranty period for the LCD module is five years after the date of purchase or 30 000 hours of operation, which ever comes first. The warranty applies to common wearing of the backlight, which is operated at the recommended maximum brightness 120 cd/m², with the white pixel value between 5 000 K and 6 500 K. EIZO guarantees this brightness 3 years after purchasing or 10 000 hours of operation, which ever comes first.