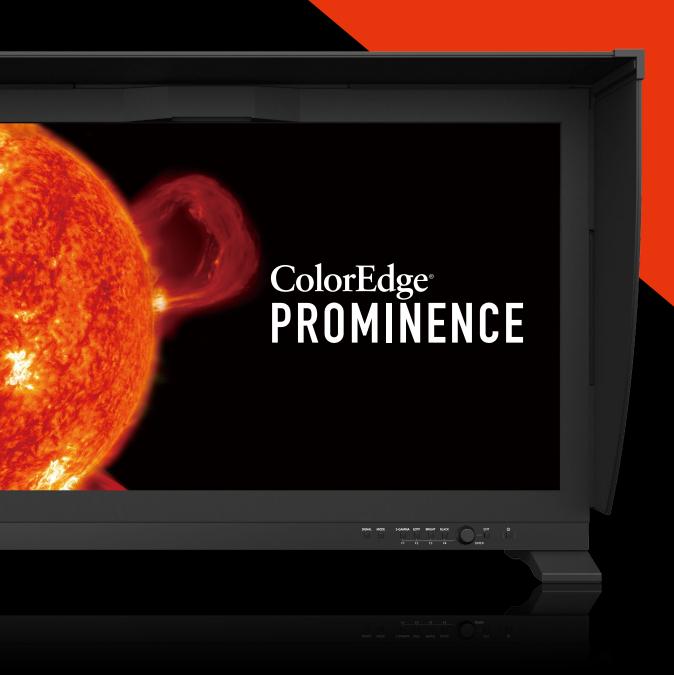


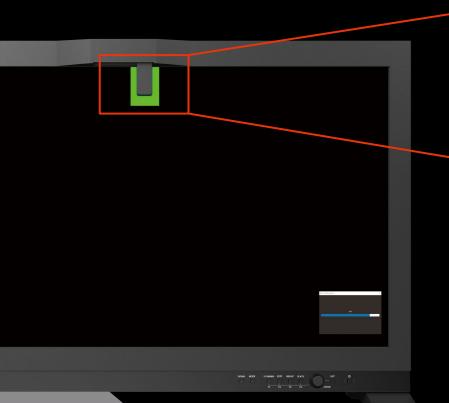
# ColorEdge PROMINENCE CG3146

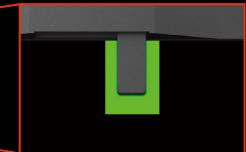
# HDR

High Dynamic Range



# World's First True HDR Reference Monitor with a Built-In Calibration Sensor





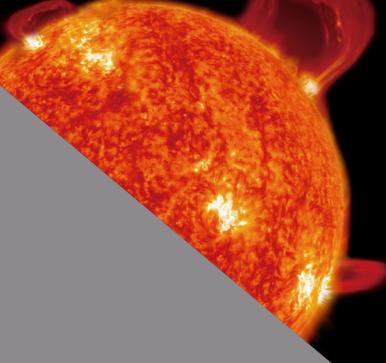
# **Hardware Calibration**

The ColorEdge PROMINENCE CG3146 is the first HDR reference monitor in the world to be equipped with a built-in sensor which calibrates the monitor to stay color accurate. This eliminates the need for a third-party calibration device and streamlines color management so you can stay more focused on the creative process. Calibration information is saved directly to the monitor, so you do not need to recalibrate if connecting to more than one PC.

# Color Management

EIZO's proprietary ColorNavigator 7 calibration and quality control software is also supported to make calibration simple, with predictable results.







High Dynamic Range

# True HDR

This HDR (High Dynamic Range) monitor approximates the human perception of color and light, accurately displaying both very bright and very dark areas without sacrificing the integrity of either. It achieves 1000 cd/m² high brightness (typical) and 1,000,000:1 contrast ratio for accurately displaying light and dark scenes.



ColorEdge PROMINENCE

Conventional SDR Monitor

# EIZO HDR Technology

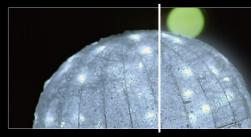
ColorEdge PROMINENCE monitors are the first LCD monitors to overcome the severe drawbacks of other HDR technologies, so they can be used reliably for post production work.



ColorEdge PROMINENCE

HDR Monitor

Auto Brightness Limiter (ABL) equipped in other HDR OLED monitors limits the monitor's ability to display lighter scenes with tones over a specific range. This causes those light areas to appear dimmer and the color duller as a result.



ColorEdge PROMINENCE

HDR Monitor with Local Dimming

Local dimming in other HDR monitors uses an area control backlight system which adjusts the brightness in sections of the screen. However, when an object on the screen falls outside of the area that is adjusted, a "halo" effect appears, making it impossible to achieve full color accuracy in smaller details.

ColorEdge PROMINENCE CG3146 achieves a true HDR visual experience without ABL or Local Dimming to ensure consistently accurate color and brightness in every pixel.

# Gamma Curves

The ColorEdge PROMINENCE CG3146 supports hybrid log-gamma (HLG) and the perceptual quantization (PQ) curve for HDR video.

2

# The Ideal Monitor for HDR Video Creation



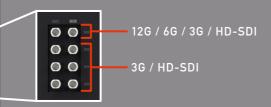
> EIZO

## DCI 4K Resolution

DCI-4K ( $4096 \times 2160$ ) is more than four times that of full HD ( $1920 \times 1080$ ), making this monitor ideal for creating, editing, and referencing with 2D and 3D CGI, VFX, compositing, and color grading.

# **SDI** Connectivity

The monitor is equipped with a Single-Link 12G/6G/3G/HD-SDI and Dual- or Quad-Link 3G\*/HD-SDI connections for seamless transmission of 4K video data. It also has an HDMI and DisplayPort input for flexible connection to a range of video devices. \*2 sample interleave supported.



# **VPID** Support

With VPID (Video Payload ID) for SDI, the monitor's settings are automatically adjusted to the correct color parameters for consistency during production.

# Video Compatibilities

The monitor supports various video formats including HDMI compatible with 10-bit 4:2:2 at 50/60p. DisplayPort supports up to 10-bit 4:4:4 at 50/60p.

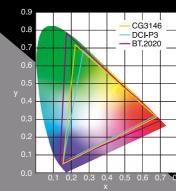


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# Stable and Accurate Display

# Wide Color Gamut

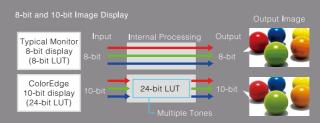
The wide gamut reproduces 99% of the DCI-P3 standard for faithful reproduction of color.



# 10-Bit Simultaneous Display

10-bit simultaneous display\* from a 24-bit look-up-table (LUT) allows the monitor to display more than one billion colors simultaneously for smooth color gradations and reduced Delta-E between two adjacent colors.

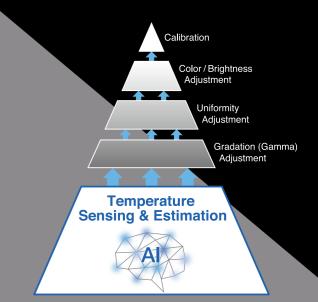
 $^*A$  graphics board and software which support 10-bit output are necessary for 10-bit display.



# Stable Display Using Industry-First Al

A temperature sensor accurately measures the temperature inside the monitor, as well as estimates the temperature of the surrounding environment as the monitor adjusts in real-time so gradations, color, brightness, and other characteristics continue to be displayed accurately. Furthermore, EIZO uses AI (artificial intelligence)\* in the estimation algorithm so it can distinguish between various temperature changing patterns to calculate even more accurate correction.

\*Patent pending.



# 3D LUT for Accurate Color

The monitor's 3D LUT adjusts colors individually on an RGB cubic table. This also improves the monitor's additive color mixture, which is key to displaying neutral gray tones.

# Commitment to Quality

- 5-Year manufacturer's warranty
- · Brightness and color warranty up to 10,000 hours
- · Zero bright pixels 6 months from purchase date

  See www.eizoglobal.com for details.

# Uniformity Across the Screen

ColorEdge monitors are equipped with EIZO's patented digital uniformity equalizer (DUE) technology which corrects deviations in every tone across the screen to ensure stable display.

Screen Uniformity and Color Temperature Changes

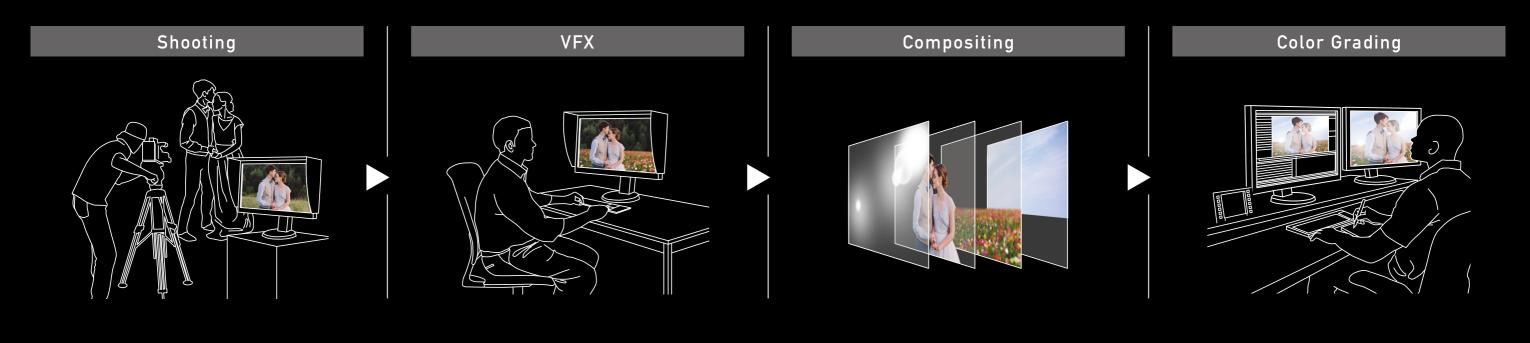




mage is for illustrative purposes only. Actual results will vary depending on model and environment.

# HDR Video Workflow

In addition to the ColorEdge PROMINENCE CG3146 HDR reference monitor, EIZO offers HLG and PQ curves with many of its CG Series monitors. The optimized gamma curves render images to appear more true to how the human eye perceives the real world compared to SDR. These products will support the HDR workflow from shooting to color grading.



|                          | Shooting                                 | Shooting      | Shooting      | Shooting              |
|--------------------------|--|---------------|---------------|-----------------------|
|                          | VFX                                      | VFX           | VFX           | VFX                   |
|                          | Compositing                              | Compositing   | Compositing   | Compositing           |
|                          | Color Grading                            | Color Grading | Color Grading | Color Grading         |
|                          |  |               |               |                       |
|                          | CG247X HDR                               | CG279X HDR    | CG319X HDR 4K | CG3146 HDR 4K         |
|                          | Color Management Monitors with HDR Gamma |               |               | HDR Reference Monitor |
| Size                     | 24.1"                                    | 27"           | 31.1"         | 31.1"                 |
| A Native Resolution      | 1920 × 1200                              | 2560 × 1440   | 4096 × 2160   | 4096 × 2160           |
| ★ Brightness (typical)   | 400 cd/m²                                | 350 cd/m²     | 350 cd/m²     | 1000 cd/m²            |
| Contrast Ratio (typical) | 1500:1                                   | 1300:1        | 1500:1        | 1,000,000:1           |
| Color Gamut (typical)    | DCI-P3: 98%                              | DCI-P3: 98%   | DCI-P3: 98%   | DCI-P3: 99%           |

### **Specifications**

| Specifications   |  |   |  |  |  |
|--|--|---|--|--|--|
|  | Туре   | IPS   |  |  |  |
|  | Backlight                                    | Wide-Gamut LED  |  |  |  |
|  | Size   | 31.1" / 78.9 cm   |  |  |  |
|  | Native Resolution                            | 4096 x 2160 (17:9 aspect ratio)   |  |  |  |
|  | Viewable Image Size (H x V)                  | 698 x 368.1 mm  |  |  |  |
|  | Pixel Pitch                                  | 0.170 x 0.170 mm  |  |  |  |
|  | Pixel Density                                | 149 ppi   |  |  |  |
| Panel  | Grayscale Tones                              | SDI, DisplayPort, HDMI: 1,024 tones (palette of 65 thousand)  |  |  |  |
|  | Display Colors                               | SDI, DisplayPort, HDMI: 1.07 billion (24-bit palette)   |  |  |  |
|  | Viewing Angles (H / V, typical)              | 178°, 178°  |  |  |  |
|  | Brightness (typical)                         | 1000 cd/m <sup>2</sup>  |  |  |  |
|  | Contrast Ratio (typical)                     | 1,000,000:1   |  |  |  |
|  | HDR Gamma                                    | HLG, PQ Curve   |  |  |  |
|  | Response Time (typical)                      | 10 ms (gray-to-gray)  |  |  |  |
|  | Color Gamut (typical)                        | DCI-P3: 99%   |  |  |  |
|  | Input Terminals                              | BNC (12G/6G/3G/HD-SDI), BNC (3G/HD-SDI) x 3,<br>DisplayPort (HDCP 1.3), HDMI (Deep Color, HDCP 2.2 / 1.4) |  |  |  |
| Video Signals  | Output Terminals                             | BNC (12G/6G/3G/HD-SDI, through-out (active)),<br>BNC (3G/HD-SDI, through-out (active)) x 3                |  |  |  |
|  | Digital Scanning Frequency (H / V)           | DisplayPort: 25 - 137 kHz, 23 -61 Hz<br>HDMl: 15 - 135 kHz, 23 - 61 Hz                                    |  |  |  |
| USB  | Upstream                                     | USB 3.1 Gen 1: Type-B   |  |  |  |
| USB  | Downstream                                   | USB 3.1 Gen 1: Type-A x 3 (Battery Charging 10.5 W max. x 1)  |  |  |  |
|  | Power Requirements                           | AC 100 - 240 V, 50 / 60 Hz  |  |  |  |
|  | Typical Power Consumption                    | 290 W   |  |  |  |
| Power  | Maximum Power Consumption                    | 485 W   |  |  |  |
|  | Power Save Mode                              | 1.2 W or less   |  |  |  |
|  | Standby Mode                                 | 1.2 W or less   |  |  |  |
|  | Brightness Stabilization                     | Yes   |  |  |  |
| Features & Functions                                     | Digital Uniformity Equalizer                 | Yes   |  |  |  |
|  | Preset Modes                                 | BT.2020, BT.709, DCI, PQ_BT.2100, PQ_BT.709, PQ_DCI,<br>HLG_BT.2100, Calibration, Sync Signal             |  |  |  |
| Built-In Calibration Sensor                              |  | Yes   |  |  |  |
|  | Dimensions (Landscape, W x H x D)            | 757 x 488 x 208 mm  |  |  |  |
|  | Dimensions (Landscape with Hood, W x H x D)  | 778 x 498.5 x 327 mm  |  |  |  |
| Physical Specifications                                  | Net Weight                                   | 26.9 kg   |  |  |  |
|  | Net Weight (With Hood)                       | 27.8 kg   |  |  |  |
|  | Hole Spacing (VESA Standard)                 | 200 x 200 mm  |  |  |  |
| Environmental Requirements                               | Operating Temperature                        | 0 - 30 °C   |  |  |  |
| Environmentar nequirements                               | Operating Humidity (R.H., non condensing)    | 20 - 80%  |  |  |  |
| Supplied Accessories<br>(May vary by country. Please cor | ntact EIZO for the latest information.)      | DisplayPort (2 m), HDMI (2 m)   |  |  |  |
| Certifications & Standards (Pleas                        | se contact EIZO for the latest information.) | CB, CE, TUV/GS, cTUVus, FCC-B, CAN ICES-3 (B), TUV/S, PSE, VCCI-B, RCM, EAC, ROHS, WEEE, TUV/Ergonomics   |  |  |  |
| Warranty   |  | Five Years <sup>2</sup>   |  |  |  |



<sup>&</sup>lt;sup>2</sup> Usage time is limited to 30,000 hours (10,000 for the LCD panel).

# HDR

# High Dynamic Range

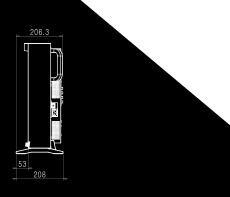
### **EIZ** Corporation

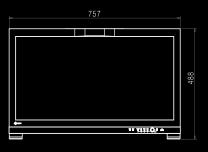
153 Shimokashiwano, Hakusan, Ishikawa 924-8566 Japan Phone +81-76-277-6794 Fax +81-76-277-6793 www.eizoglobal.com

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<sup>&</sup>lt;sup>3</sup> A brightness level of 800 cd/m<sup>2</sup> or more and a color temperature of 6500K are warranted.

<sup>&</sup>lt;sup>4</sup> Free from bright sub-pixels for 6 months from the date of purchase.

With current LCD technology, a panel may contain a limited number of missing or flickering pixels.