eCinema

Black

by popular demand™

DPX-2310

Reference Master Monitor

DPX-2310

The New Reference Standard

Introducing the eCinema DPX-2310 - the world's first and only reference standard CRT replacement.

The DPX-2310 features a true 10-bit LCD panel, our revolutionary Dark Pixel Technology™, our precise TruGamut™ LED backlight system, and our exclusive PureStream™ image processor. Combined, these technologies enable the DPX-2310 to fully reproduce and exceed the image quality of the industry's best reference CRTs. The new DPX-2310 can unequivocally be acknowledged as the new reference standard for critical color monitoring.

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Since the introduction of the first LCD monitors for professional use, one serious limitation of LCD display technology has stood firmly in the way of adopting LCDs for most serious color-critical monitoring – BLACK LEVEL. Since the demise of the CRT, no acceptable technology has emerged to address the contrast ratio inadequacies of professional LCD displays - until now.

For the past five years eCinema has been developing a revolutionary technology to break through the black-level barrier – and it's finally ready for prime-time. eCinema Systems' innovative Dark Pixel Technology™ enables a contrast ratio of 15,000:1 for an extended deep black range previously unseen on any LCD display. You really have to see it to believe it.

Running the TruGamut™

Color gamut is most easily defined as a representation of the boundaries of reproducible color within a specified color space. The color space of HDTV is defined by ITU Rec. 709. At best, reference CRTs can produce slightly below 90% of Rec. 709 gamut due to the limitations of the phosphors used to create red, green and blue light.

Since LCDs produce color by filtering light emitted from a backlight source, their gamut is actually a function of the backlight array. eCinema's DPX-2310 utilizes our proprietary TruGamut™ wide-spectrum LED backlight system to achieve a full 98% of Rec. 709 gamut for the most accurate colorimetry available from a color video display.

The Real 10-bit Advtantage

The human eye can perceive about 450 luminance steps between the lightest and darkest values of a given color. 8-bit LCD panels can only reproduce 256 of those steps, which results in visual banding between gradient colors. 10-bit video streams can carry 4 times as much data and reproduce 64 times more color shades than 8-bit streams.

The result is 1024 color steps for each red, green and blue channel that combine to produce over 1 billion individual color shades. This produces more precise color detail with perceptibly smoother transitions between colors, eliminating color banding and other artifacts. With a full 10-bit display driver, the eCinema DPX-2310 can, without illusion or trickery, accurately reproduce over 1-billion colors on screen at the pixel level for the most accurate color image display possible from an LCD.

PureStream™ Image Processing: No Bits Left Behind

Full resolution 10-bit color at the pixel is only possible if the video signal remains undiminished during processing. To ensure image integrity throughout the signal path, the DPX-2310 utilizes eCinema's exclusive PureStream™ Image Processor to maintain a truly lossless internal signal processing architecture from input to screen.

PureStream™ eliminates image degradation and data loss by preserving the full bandwidth of the processed signal, thus ensuring the original input signal is uncompromised throughout the entire data processing path, resulting in pristine, accurate detail and color reproduction.

iSIM Mode: A Bright IDEA

While CRTs are no longer the standard for color viewing, many are still in use throughout the world. As such, reference LCD monitors need to be able to reproduce the characteristics of a CRT when mastering video that may be viewed on older televisions. eCinema's iSIM Mode uses high-rate 120hz scanning in combination with our proprietary Interlaced Display Emulation Algorithm (IDEA).

Unlike black-frame insertion methods, eCinema's iSIM Mode produces an accurate reproduction of the on-screen physical characteristics of interlaced video with a minimal loss of luminance. The feature is standard on the DPX-2310.

DPX-2310 Specifications

Display:	22.5" 10-bit 120Hz LCD
Backlight:	TruGamut™ LED Array
Contrast:	15,000:1 (simultaneous and sequential)
Response:	12ms
Viewing Angle:	176 degrees
Inputs:	4 HDSDI - 4:2:2, 4:4:4 and 3G
Output:	2 HDSDI reclocked
Standards:	1920 x 1080 @ 23.976PsF, 24.000PsF, 25.000PsF, 29.970PsF, 30.000PsF 1920 x 1080 @ 50.000i, 59.940i, 60.000i 1920 x 1080 @ 23.976P, 24.000P, 25.000P, 29.970P, 30.000P 1280 x 720 @ 23.976P, 25.000P, 29.970P, 30.000P, 50.000P, 59.940P, 60.000P SD 525 (NTSC) SD 625 (PAL)
Power:	Monitor, 110/220 @ 60HZ
Compliance:	FCC, CE, CB

Designed and Manufactured in the USA

*subject to change without notice

Accessories

SLS-01:	CCFL-based monitor surround light system
SP-50:	Spectrally accurate neutral gray surround paint (one gallon)
EECP-DPX:	eCinema Extended Care Plan for DPX-2310

eCinema
25026 Anza Drive Valencia, California 91355
Phone: (661) 294-7444 • Fax: (661) 294-7446
www.ecinemasystems.com

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