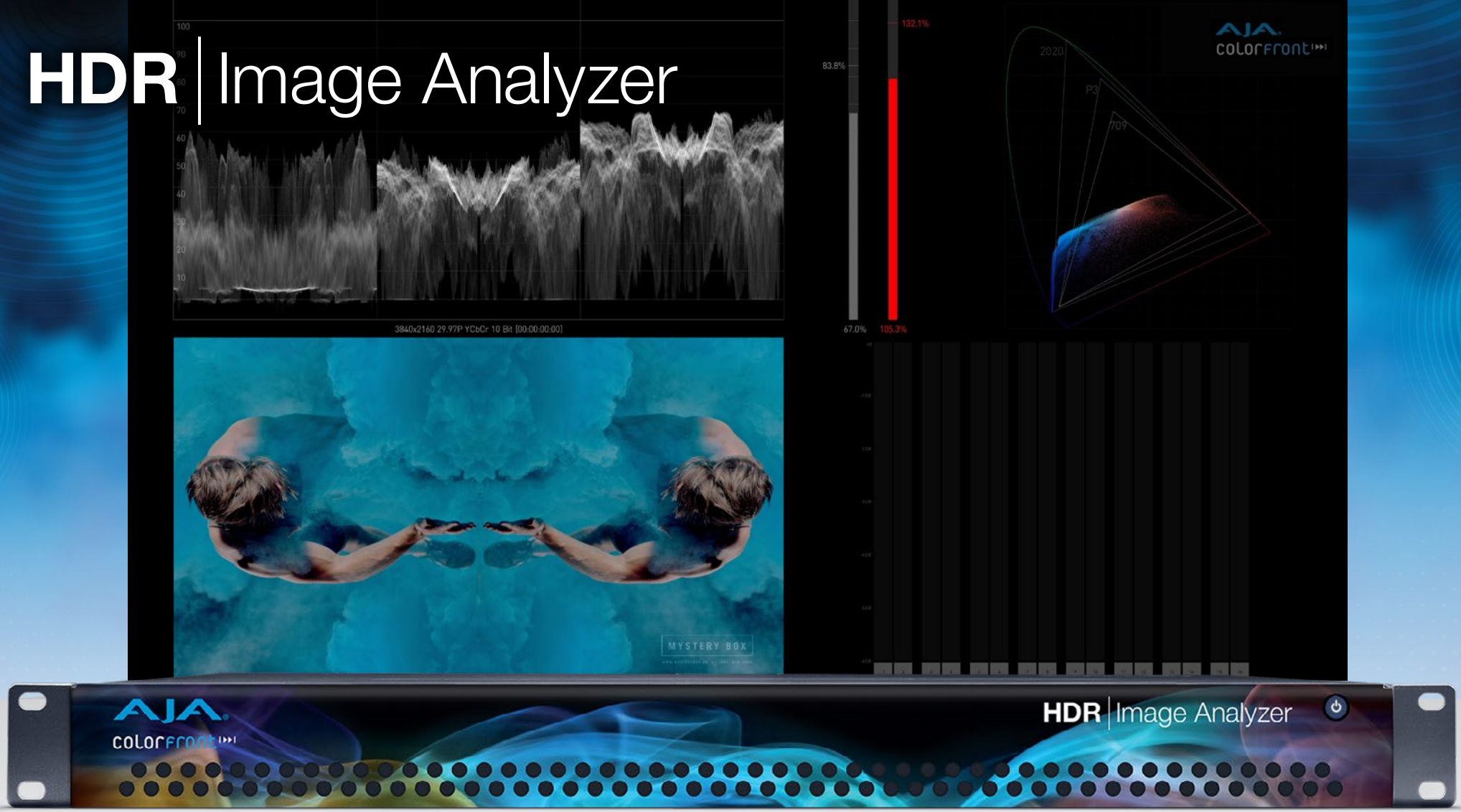
HDR | Image Analyzer

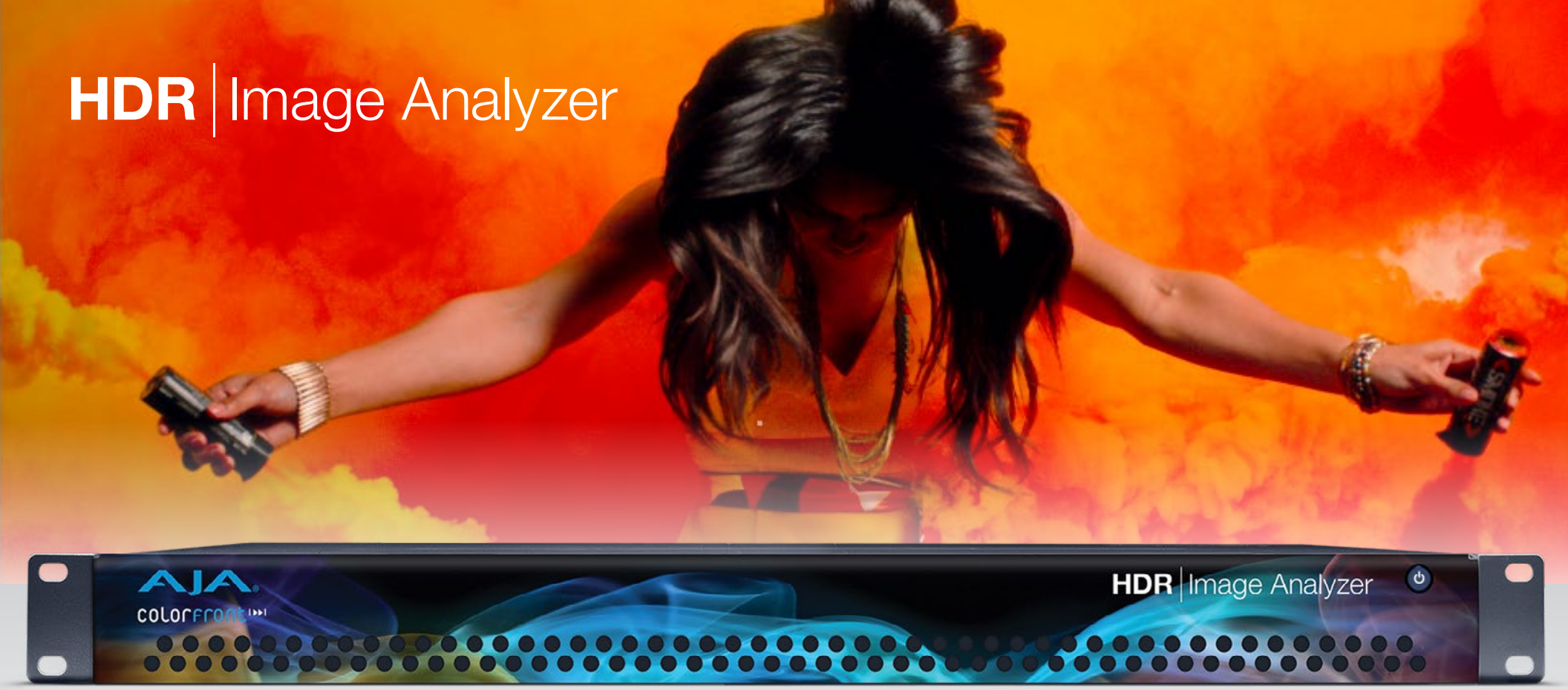


Waveform, Histogram and Vectorscope Monitoring for HDR

HDR | colorfront

AJA VIDEO SYSTEMS

HDR | Image Analyzer



$15,995 US MSRP*

Find a Reseller

HDR Image Analyzer delivers a comprehensive array of tools for the effective analysis of the latest HDR standards – including HLG (Hybrid Log-Gamma), PQ (Perceptual Quantizer) and Rec.2020 – on 4K/UltraHD content input from 4x 3G-SDI streams in a convenient 1RU device.

Waveform, Histogram and Vectorscope Monitoring for HDR

1RU Appliance for Real Time Monitoring and Analysis

HDR Image Analyzer is a real time HDR monitoring and analysis appliance in a rugged 1RU form factor powered by Colorfront-developed software. HDR Image Analyzer supports the monitoring and analysis of 4K/UltraHD/2K/HD HDR and WCG content for broadcast and OTT production, post-production, quality control (QC) and mastering.
HDR Image Analyzer takes in 4K sources across 4x 3G-SDI inputs and loops the video out over 4x 3G-SDI spigots to continue the video chain to wherever desired, allowing analysis at any point required in your workflow.

Included in AJA's HDR Image Analyzer's toolsets are waveform, histogram and vectorscope monitoring, plus a host of essential image analysis features including nit light level meter, out of gamut false color mode, error logging, pixel picker, screen capture, line mode, and audio phase metering. HDR Image Analyzer also includes support for the most prevalent camera color spaces including ARRI®, Canon®, Panasonic®, RED® and Sony®.

** Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.*

HDR | Image Analyzer

Colorful Tools for HDR Production, Post, QC and Analysis

Modern cameras are inherently HDR capable with their wide dynamic range available from the sensor on, and for live events, recording and broadcasts, it's crucial to monitor their dynamic range and gamut outputs being employed for HDR delivery.

With support for both leading cameras on input and SDR, HLG and PQ monitoring from a range of sources, HDR Image Analyzer takes the pain out of HDR monitoring with a wide range of analysis tools and automatic error logging with timecode stamping for sharing with your team, to ensure you successfully produce materials within the range of your desired final results.

HDR

Broad Input

LOG, HDR formats and SDR

High Dynamic Range (HDR) and Wide Color Gamut (WGC) arrive in a range of forms, look to AJA 's HDR Image Analyzer to cover them all:

Camera Support:

- ARRI
- Canon
- Panasonic
- RED
- Sony

Dynamic Range Inputs:

- SDR (REC 709)
- PQ (ST 2084)
- HLG

Color Gamuts:

- BT.2020
- BT.709

3G-SDI Support:

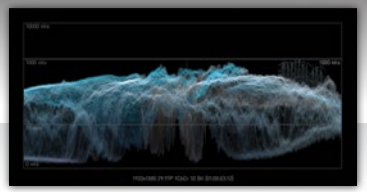
- 4x 3G-SDI up to 4K/UltraHD 60p
- SDI Auto Signal Detection

Flexible Monitoring and Analysis

1RU Device for Rackmounting Anywhere

HDR Image Analyzer has been specifically developed to serve a range of environments with a convenient 1RU form factor with 4x 3G-SDI for up to 4K/UltraHD 60p input and pass-through.

- Live Production
- DIT Pipelines
- Broadcast Monitoring
- Postproduction
- QC Needs in a Range of Environments
- Final HDR Mastering



Key Features

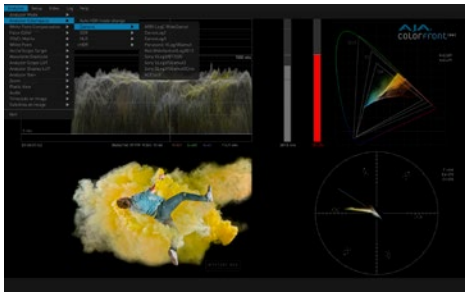
Monitor, Analyzer, Log the Results

The AJA HDR Image Analyzer features a high quality, ultra precise UltraHD user interface for native resolution picture display, critical for close analysis of your video materials, making the most of the tools you need:

- Waveform
- Histogram
- Vectorscope
- Color Gamut
- Nit Light Level
- File Based Error Logging with Timecode
- Data Analyzer with Advanced Pixel Picker
- Advanced, Out of Gamut and Out of Brightness Detection with Error Tolerance

HDR | Image Analyzer

Interface and Tools

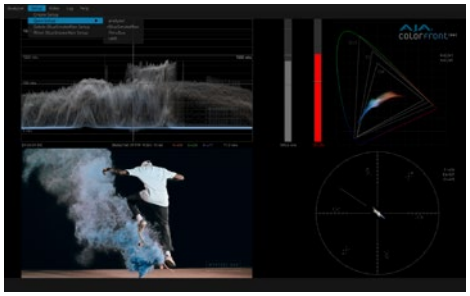


Camera Log Inputs

HDR Image Analyzer provides direct input for a range of Camera LOG inputs, allowing direct connections from the world's leading camera manufacturers and immediate analysis of production feeds.

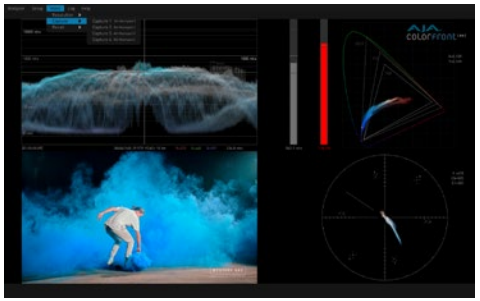
Video Resolution

Address your video resolution setup needs with quick access from the Video - Resolution menu, with easy access for RGB, YCbCR and Quad split vs 2SI configurations.



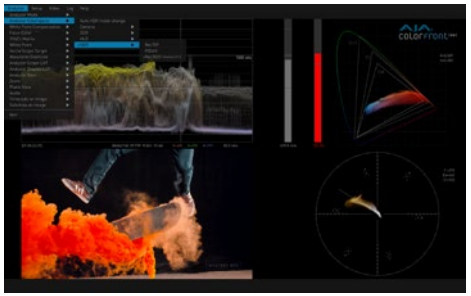
Choose Setups

Setups can be saved and recalled for quick configuration when moving between projects and tool configurations.



Scene Capture

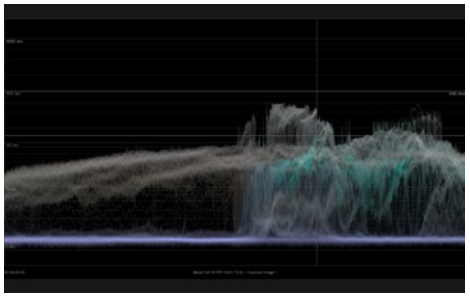
Scenes can be captured for quick recall and saving to be shared with others for a great visual representation of any issues that need to be addressed.



Color Space

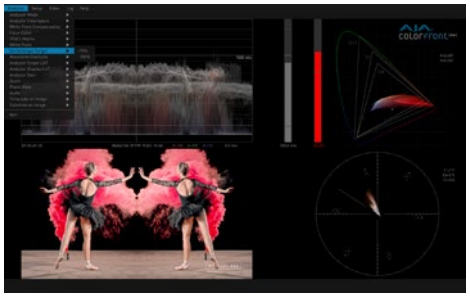
Several different color spaces can be utilized for analysis including 709, P3, XYZ and 2020 as well as camera native color spaces.

HDR Image Analyzer also offers an Auto HDR mode change for automatic HDR color space triggering when possible.



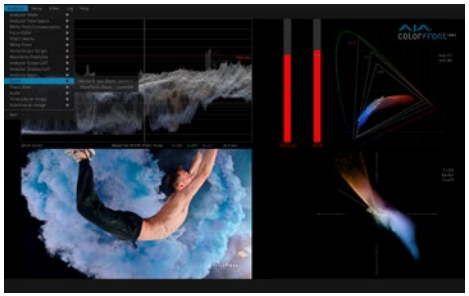
Waveform Lumi Color

HDR Image Analyzer offers a range of views for waveform representations including Waveform Lumi Color. Waveform Lumi Color offers a gorgeous combination of both luminance and colors in the project's color space.



Vectorscope

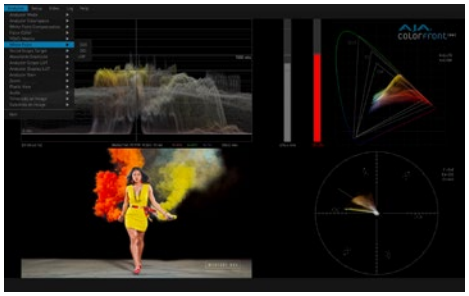
Vectorscope displays the color saturation of each pixel in the video frame, with the middle of the circle indicating a lower saturation level, and the edge of the circle indicating a higher saturation level.



Vectorscope Targeting

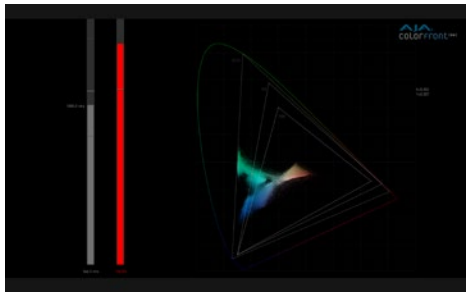
The vectorscope additionally offers a zoom feature and a skin tone line, whose value can be manually set as desired, especially useful for ensuring consistent skin tone results for sequence work and camera matching.

Interface and Tools



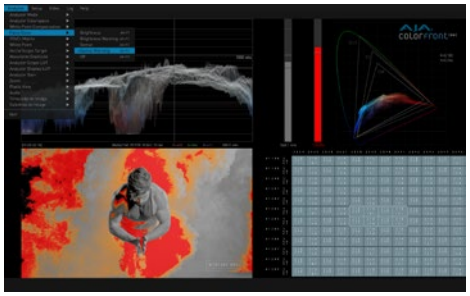
Whitepoint

HDR Image Analyzer allows you to set a white point relevant for the project at hand. Choose between DCI, D65 or simply turn off.



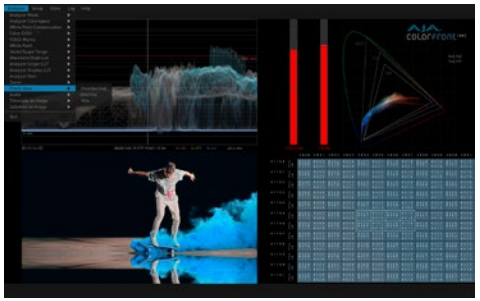
CIE XY Gamut View

In HDR mode the CIE XY Gamut View can be used to check the encoded colors, and whether they are within the valid limit of color range. This is relevant when working in the Rec.2020 color space where the actual pixels are supposed to be limited to the P3 color gamut.



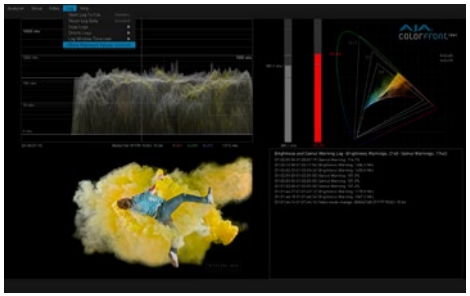
False Color – Gamut Warning

Out of Gamut False Color mode provides a clear visual representation of areas of your image that may present a problem. The results can be saved automatically within your logged files for QC needs.



Pixel Picker

Precision is key and HDR Image Analyzer make it simple. Glide your mouse across your footage and use the Pixel Picker to give you a read out of the exact pixels Nit level, Hex or Decimal code values.

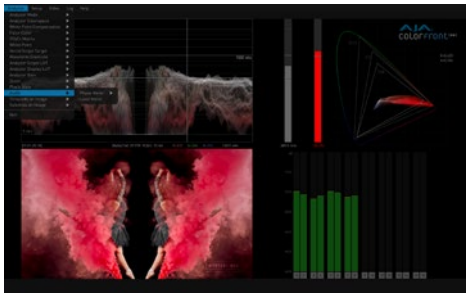


Logs

HDR Image Analyzer can detect P3 Gamut violations and brightness violations in HDR events and logs them with time stamps in a log file and on screen. Log files can then be collected for sharing with your team as necessary.

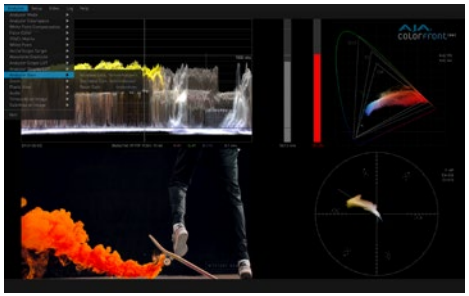
Timecode

Timecode may be overlayed on screen to assist with quickly identifying any areas of concern at particular moments in a sequence or shot.



Audio Metering

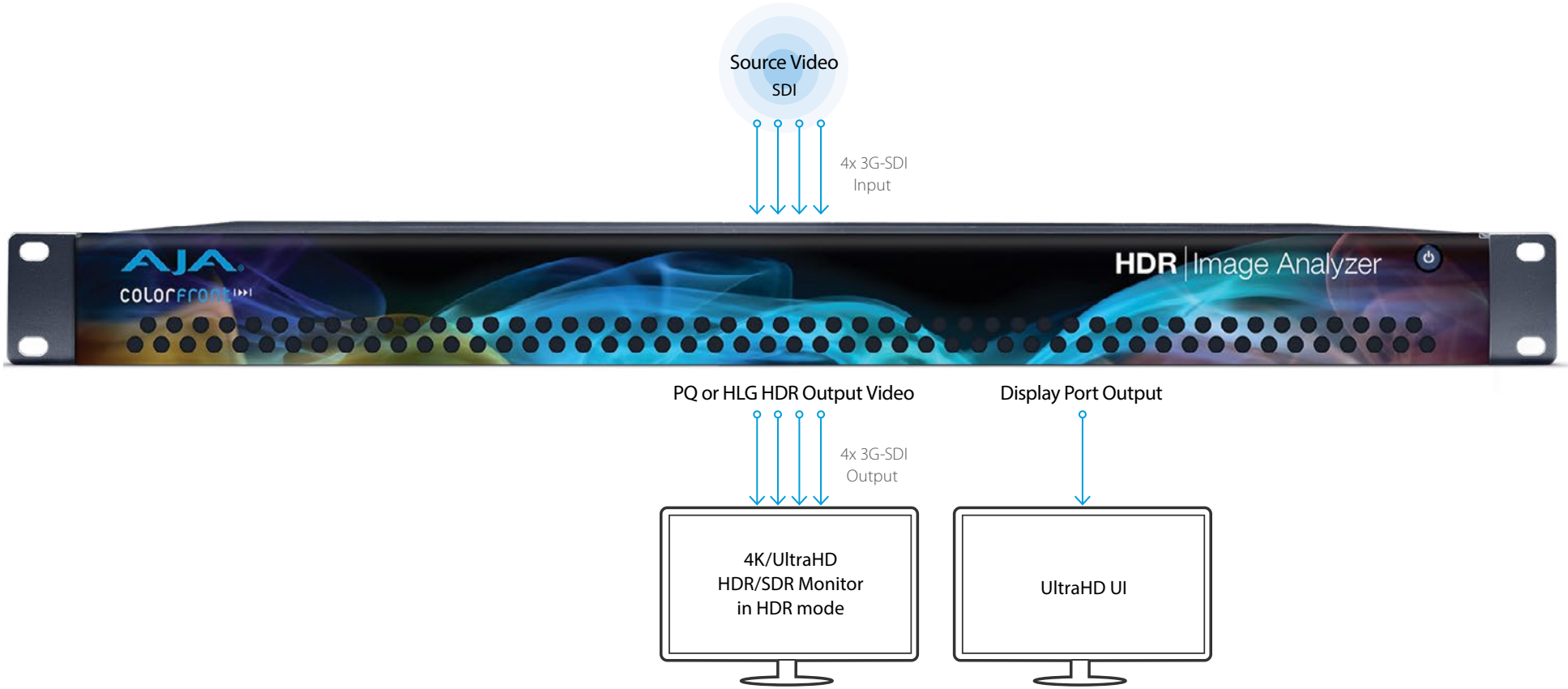
An audio level meter is included for up to 16-channels of metered monitoring and display of peak DB levels. An audio phase meter can also be configured to display either 2-Ch (stereo) or 8-Ch (surround) audio. Audio Level Warnings may be set to generate notes into your logs.



Analyzer Gain

Analyzer Gain allows you to increase or decrease the gain put out to your display simplifying your ability to monitor critical items with dark footage in particular.

HDR | Image Analyzer Workflow



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Tech Specs

Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30, 48 A/B, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 1080i 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50 A/B, 59.94 A/B, 60 A/B
- (HD) 720p 50, 50.94, 60

Video Input Digital

- 4x 3G-SDI BNC

Video Output Digital

- 4x 3G-SDI BNC

Audio Input Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Audio Output Digital

- 16-Channel 24-bit SDI embedded, 48 kHz synchronous

Computer Monitor Output

- Display Port Output:
  - Up to UltraHD 60p

Reference Input

- Signal: Analog video sync (Blackburst or Tri-Level)

Size: (w x d x h)

- 1RU form factor
- 17.2" x 16.9" x 1.7" (436.88 x 429.26 x 43.18 mm)

Weight

- 28 lb (12.7kg) in box
- 18 lb (8.2kg) server only

Power

- 250W typical, 350W Maximum.

Environment

- Safe Operating Temperature: 10 to 35 C (50 to 104 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 8-90% noncondensing
- Nonoperating Relative Humidity: 5-95% noncondensing

Click here For full product specifications visit www.aja.com/products/hdr-image-analyzer#techspecs

Three Year Warranty

AJA Video warrants that the HDR Image Analyzer will be free from defects in materials and workmanship for a period of three years from the date of purchase.

About AJA Video Systems, Inc.

Since 1993, AJA Video has been a leading manufacturer of video interface and conversion solutions, bringing high quality, cost effective digital video products to the professional, broadcast and postproduction markets. AJA products are designed and manufactured at our facilities in Grass Valley, California, and sold through an extensive sales channel of resellers and systems integrators around the world. For further information, please see our website at **www.aja.com**

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