



8K Signal



Native 4K Resolution



High Dynamic Range



SDI SFP+

## 32" 8K HDR MONITOR

KUM-3120Q is a 32" 8K HDR monitor. Equipped with 4x12G-SDI input and 4x12G-SDI loop out, built-in HDMI 2.0 interface, supports upto 8192x4320 60P signal. Support HLG-to SDR monitoring and HDR & SDR side by side comparison, suitable for most demanded 4K and 8K workflows.



12G-SDI



BT.2020



Waveform



VectorScope



Focus Assist



Audio Meter



False Color



Zebra

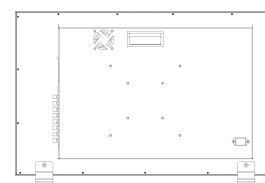


TSL UMD



GPI

## Main Body



## Specifications

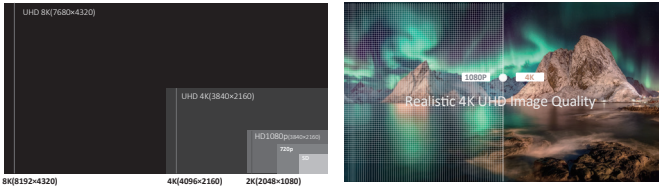
- 3840x2160 4K resolution, 10Bit LCD panel
- Support 8K SDI signal 8192x4320 resolution
- 12 Bit Video Processing, image no delay
- 4 x 12G-SDI inputs and outputs (6G/3G/HD/SD-SDI auto detect)
- 4K 12G-SDI single link signal, up to 4096 x 2160 60p
- 4K 12G-SDI quad link signal, up to 8192x4320 60p
- 4K/8K signal: 2 Sample Interleave (2SI), Square Division (SQD)
- 1 x HDMI 2.0 input, 1 x SDI SFP+ module optical input cage
- 4K Mode, Quad-Split Mode, FHD single picture mode
- 4 x SDI/HDMI Quad-View: mixed inputs & frequency rates
- Free Quad-View (boarder control/window adjustment)
- Payload ID display
- Color Space & EOTF Curves Auto Setting, matching(REC709/REC2020)
- Color Space (REC709/EBU/DCI-P3 D65/DCI-P3/REC2020/Bypass)
- HDR: PQ (ST2084), HLG (1.0, 1.1, 1.2, 1.3, 1.4, 1.5)
- Sony Camera Log Curves: Slog, Slog2, Slog3
- Canon Camera Log Curves: Clog, Clog2, Clog3
- ARRI Camera Log Curves: LogC
- Panasonic Camera Log Curves: Vlog, Vlog (softroll)
- Gamma (2.0, 2.2, 2.4, 2.6), HDR Area Display
- 4K HDR Waveform, Vector Scope, Marker/Box Control Function
- 3D LUT Color calibration with ColourSpace & CalMAN
- 3rd-party 3D LUT files import(USER1/USER2)
- S1-S8 Eight Selectable Scene Settings
- Picture Flip, Focus Assist, False Color, Zebra
- SDR and HDR comparison, Darkness Check
- Full Scan, Over Scan, Blue/Mono Only
- 16ch Embedded Audio Level Meters
- Dynamic and Static UMD/IMD Display (TSL3.1/4.0/5.0)
- 608/708 CC Closed Caption
- Key Lock, Video Freeze
- Firmware upgrade/LUT file import via USB/Ethernet
- GPI (selectable/markable windows)
- Aluminum Alloy Casing, Built-in Speaker

LCD Panel	
Model No.	KUM-3120Q
Backlight	LED
Size	31.5"
Resolution	3840 × 2160
Aspect Ratio	16 : 9
Viewing Angle	178°(H) / 178°(V)
Color Depth	1.07B
Brightness	400cd/m <sup>2</sup>
Contrast Ratio	2000:1
Input	
1 x SDI SFP+	SDI SFP+ input cage
1 × HDMI 2.0	HDMI 2.0 Signal
4 x BNC	12G-SDI 1/2/3/4 signal inputs <i>(Auto-detected and compatible to 6G/3G/HD/SD-SDI)</i>
Output	
4 x BNC	12G-SDI 1/2/3/4 signal outputs <i>(Auto-detected and compatible to 6G/3G/HD/SD-SDI)</i>
Audio In & Out	
SDI/HDMI Audio In	16 Channels SDI 2 Channels HDMI embedded audio
Audio Meter Display	Vertical Horizontal audio level meter display
Audio Headset Output	3.5mm headset jack
Built-in Speaker	2.5W×2
General	
Input Voltage	AC 100-240V 50/60Hz
Power Consumption	70 W
VESA Installation	VESA MIS-D (200×200mm)
Accessory	Power Cord /Desktop stand

※ Specifications may be changed without prior notice.

**8K Signal, Native 4K Resolution**

Supporting 8192x4320 8K signal, including 4320p 23.98, 24, 25, 29.97, 30, 50, 59.94 and 60p. With advance image processing, 8K HDR monitor restores a real world for eyes.



**Motion-Adaptive Interlace to Progressive**

Realizing quick response of the fast moving image, avoids dizzy, saw tooth and other problems, ensures clearer and smoother image, well-satisfied high-end demanding workflows such as live sports, camera shaking and rolling subtitles etc.

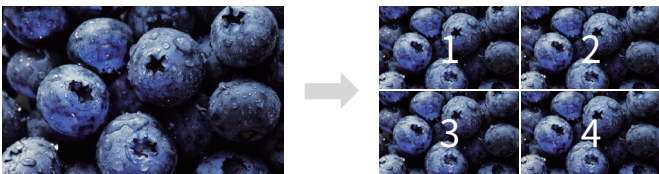


**HDR Waveform, HDR Area Display**

HDR reference white is 203nits. The part that exceeds the reference white level (203nits) considered as the HDR highlight part, and the HDR highlight ratio should not exceed 20% of the entire image. HDR waveform, HDR area display can make the HDR info more intuitively displayed, which is more convenient for users.



**2SI and SQD 4K signal**



4K 2 Sample Interleave (2SI) : Pixel based segmentation



4K Square Division (SQD) : Quadrant based segmentation

**High Dynamic Range(HDR)**

Konvison KUM 4K, 8K and KVM-6X series support HDR display. Adjustable HDR modes include PQ(ST2084), HLG with Rec 2020 color gamut. It reproduces a greater dynamic range of luminosity and provides extremely high level picture quality.



**EOTF Curve Conversions**

Konvison KUM 4K, 8K and KVM-6X series supports a variety of EOTF curve conversion applicable to the broadcast industry and digital film standard. A preset of lots of camera logs and gamma curve selections, so as to realize the perfect combination with the camera system.



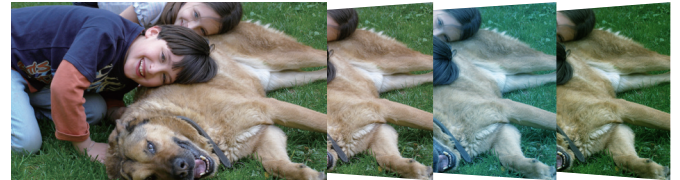
**3D LUT Color Calibration**

Compatible with ColourSpace and Calman calibration software, Konvison monitors apply K10-A probe(professional level) to achieve a precise color. Monitor's also workable with universal colorimeters including CA210, CA310, CS200, CR100, CR250, X-Rite i1 Display.



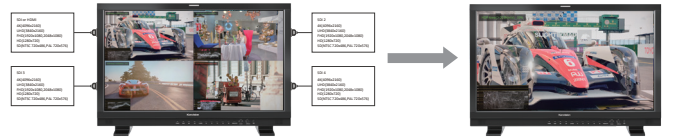
**3D LUT files import**

With the LUT loading function, users can load 2 different 3D LUT files with different color types according to their own needs, making DIT, post production and grading work simpler and more intuitive, optimizing the work flow and improving work efficiency.



**Quad View Mode**

Quad View Mode support mixed inputs & frequency rates. Each window can change to single picture mode with shortcut button or GPI. Each windows can select different color space and HDR waveform.



**4K HDR Waveform (Alarm), Vectors**

4K HDR Waveform. SDI and HDMI support Waveform, Vectorscope, Histogram. When luminance reaches or exceeds the preset value, the over exposure areas will be red marked (Waveform Alarm).



**Darkness Check**

Increasing the brightness and contrast ratio in the dark areas, Darkness Check function can show more shadow details of the input signal. Darkness Check can be used for double checking the shadow detail of the dark areas to avoid any missing information.



**4K BOX Control**

The BOX Control function can flexibly set the height and width of the marker frame on the monitor, and can be adjusted up, down, left and right. Users can flexibly adjust according to the frame ratio, which brings great convenience to program production.



**Zebra**

Display the overexposed areas(too bright) of the image with zebra stripes, aids the camera operator to control the luminance, in order to avoid overexposure. This feature is very effective for proper exposure.

