

KXM-3210M-IP25G

32 INCH 4K HDR ST2110 IP25G MONITOR



INTRODUCTION

The KXM-3210M-IP25G features redundant 2×25GbE SMPTE-2110 IP interfaces for direct integration into IP-based broadcast systems. Equipped with 2×12G-SDI inputs & loop-outs for connecting professional equipment, it converts ST2110 IP streams to 12G-SDI output. The 3840×2160 4K Mini-LED panel delivers 1,500nits high brightness, 1,000,000:1 contrast ratio, ≥80% BT.2020 color gamut, and HDR HLG & PQ support, making it ideal for high-quality video content production and transmission.

SPECIFICATION

Panel	
Model No.	KXM-3210M-IP25G
Backlight	QD Mini-LED Full Array 2304 Zone Local-Dimming Backlight
Size	31.5"
Resolution	3840×2160
Aspect Ratio	16:9
Viewing Angle	178°(H) / 178°(V)
Brightness	1500cd/m ²
Contrast Ratio	1,000,000:1
Color Depth	10bit (8bit+FRC) 1.07B
Input	
2× SFP28	ST2110 IP stream input interfaces (×2)
4×BNC	12G/6G/3G/HD/SD-SDI (SDI1/SDI2) 3G/HD/SD-SDI (SDI3/SDI4)
1× BNC	Genlock input, Black Burst or Tri-level sync (×1)
1×HDMI	HDMI 2.0
Output	
4×BNC	12G/6G/3G/HD/SD-SDI (SDI1/SDI2; SDI1 supports ST2110 IP to 12G-SDI conversion output) 3G/HD/SD-SDI (SDI3/SDI4)
1×HDMI	HDMI 2.0
Remote Interface	
1×RJ45	10/100M Ethernet Input Interface
1×RJ45	10/1000M Ethernet Input Interface for IP network management (NMOS)
1×RJ45	GPI Input Interface
2×RJ45	RS422 Input and Loop Out Interface
Audio In & Out	
Audio In	16-ch embedded audio via SDI, 8-ch via HDMI
Audio Out	3.5mm Headphone Jack, 2×3.0W Speakers
Audio Meter Display	Vertical/ transparent/opaque display
General	
Input Voltage	AC 100-240V 50/60Hz
Power	≤200W
Installation	VESA MIS-D (100×100mm) / (200×200mm)
Net Weight	≈12.1kg
Accessory	Power Cord

*Specifications may be changed without prior notice.

HIGHLIGHTS

>>> Advanced Display & Color Management

- Color spaces: Rec.709/EBU/DCI-P3/DCI-P3 D65/Rec.2020/Bypass
- Data level: Auto/Limited (64–940) / Extended (64–1019)/Full (0–1023)/ SMPTE Full(4–1019)
- EOTF options: Bypass/2.0/2.2/2.4/2.6/2.4(HDR)
- HDR standards: ST2084PQ/ST2084 PQ(softroll), HLG(1.03/1.11/1.16/1.20/1.27/1.33)
- VPID(Video Payload ID)recognition for color space/EOTF auto matching
- Multiple camera color space and OETF convert to standard color space and EOTF display
- Auto-adaptive 4K/HD signal display
- Adaptive dynamic backlight control with adjustable levels for enhanced brightness gradation

>>> ST2110IP25G

- Uncompressed 25G ST2110 IP stream ultra-low latency transmission
- 2 × SFP28 fiber interfaces for ST2110 IP stream input
- 1 × ST2110 IP decoding to 12G-SDI output
- Supports SMPTE ST2110-10/20/30/40 protocols and SFP28 25G
- SMPTE ST2022-7 redundancy recovery; supports IGMP V2.0/V3.0
- Supports NMOS IS-04 and IS-05 protocols
- Built-in 4K UHD frame synchronizer with horizontal/vertical phase adjustment
- Supports BB/Tri-level external Genlock reference
- Compatible with SMPTE ST2059 PTP grandmaster clock and internal ST2110 encapsulation sync
- Supports multiple IP configuration presets, with web-based backend for saving presets
- Web-based remote control GUI with customizable configuration save, recall, and reset

>>> Input & Output

- Supports 4:4:4 12-bit video signal processing
- 2×12G-SDI inputs & loop-outs (4K single/quad-link)
- 2×3G-SDI inputs & loop-outs
- Quad-link (SQD/2SI) supports 4096×2160 60p
- 12G-SDI single-link 4K SDI supports 4096×2160 60p
- 1×HDMI 2.0 input & loop-out, supports SDI/SFP28 conversion output
- Supports 4K UHD to 2K HD down-conversion via SDI 2 output
- Supports HDR to SDR down-conversion output via SDI

>>> 3D LUT

- 3D LUT calibration compatible with ColourSpace/Calman
- Supports multiple custom 3D LUTs loading and output via SDI

>>> Multi-View Monitoring

- Supports various display modes: 4K / Quad-View / HD Single-View
- Quad-view mode for simultaneous display of SDI/HDMI/SFP28 signals
- Independent color space, EOTF, and backlight brightness settings per window in quad-view mode
- Instant single-view switch from any window in quad-view mode

>>> Monitoring Tools

- HDR area display, HDR/SDR ratio graph and pixel measurement
- Adjustable opacity and waveform position
- Supports horizontal mirror and freeze frame
- HDR Waveform, Vector, Histogram, CIE Chromaticity Diagram, CIE Color Volume, RGB 3D Cube Graph
- False Color, Zebra, Focus Assist, Darkness & Highlight Check
- Aspect ratio, Center Marker, Safe Area, Markers with BOX control

>>> Audio Processing & Broadcast Ancillary Features

- Audio Level Meter, Audio Phase, 5.1/7.1 Surround Phase
- 16-ch embedded audio via SDI, 8-ch via HDMI
- Fast audio source switching in quad-view mode
- Supports 4.1-channel audio
- VITC1/2, LTC timecode; static/dynamic UMD/IMD
- Supports 608/708 Closed Captioning (CC)
- GPI remote control for Tally/assist functions/scene preset

>>> Mechanical Design & Operation

- Multiple scene presets; user-defined presets import/export via USB
- Key lock function; 3 LED indicator modes (Off / Preset Scene Active / Dual-Color)
- Aluminum alloy chassis, built-in speakers, headphone jack, volume control, and mute settings
- USB/Ethernet for 3D LUT loading and firmware updates

FEATURES

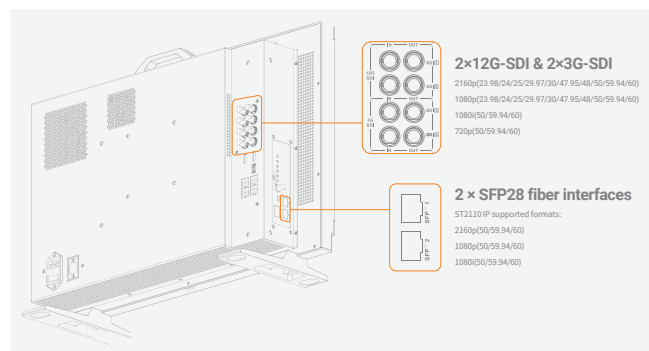
31.5" 4K Panel with Mini-LED Full Array Local Dimming Technology

The KXM-3210M features a 31.5-inch 4K (3840×2160) 10-bit (8-bit + FRC) LCD panel, supporting 178° H/V viewing angles. It adopts Mini-LED full array backlight technology, with 2304 zones precisely controlled by advanced algorithms for uniform backlight performance. It supports independent brightness control across quad-split screens, simultaneously displaying 1000nits HDR and 100nits SDR images, ideal for mixed-source monitoring and ensuring accurate image reproduction across different brightness standards.



SFP28/SDI/HDMI Interfaces for 4K Monitoring and IP Decoding Output

2× SFP28 fiber interfaces for SMPTE ST2110 IP stream input, with ST2110 IP to 12G-SDI conversion output; also equipped with 2×12G-SDI and 1×HDMI inputs & loop-outs; quad-link (SQD/2SI) supports 4096×2160 60p.



SMPTE-2110 IP Network Lossless Transmission, Plug-and-Play

Supports SMPTE-2110 standards (ST2110-10/20/30/40) for IP-based 4K UHD SDI conversion and processing. Synchronizes with PTP grandmaster clock; uncompressed audio/video transmission ensures data integrity and synchronization.

Supports NMOS Interoperability for Efficient Collaborative Operation

Supports NMOS IS-04 discovery and registration, and NMOS IS-05 device connection and remote control, enabling signal source reception and assignment within IP network matrices for efficient collaboration. Supports SMPTE ST2022-7 for seamless protection switching, ensuring reliable broadcast.

Multiple HDR/Color Spaces Available

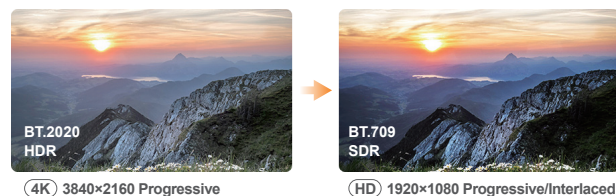
Supports high dynamic range (HDR) monitoring, providing standard HDR EOTF (Electro-Optical Transfer Function) with built-in various standard color spaces and EOTFs. It also supports VPID reading display and Payload ID recognition, automatically matching color space and EOTF.

Customizable 3D LUT Import & Output

Users can load and save multiple custom 3D LUTs via USB port/network port. Custom LUTs can also be processed with the video output, effectively simplifying the color grading process for DIT and post-production work.

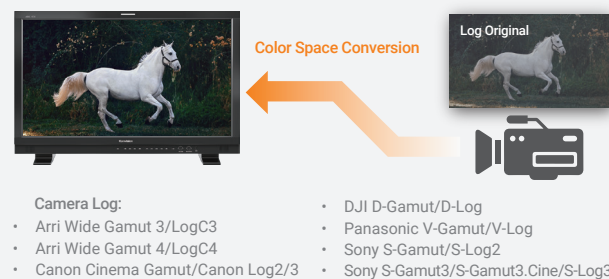
4K HDR-HD SDR Down-Conversion

Single-link SDI can realize 4K-HD down-conversion and HDR-SDR conversion. Support NBCU LUTs, CMG LUTs production standards, to meet the 4K HDR and HD SDR high-quality production needs.



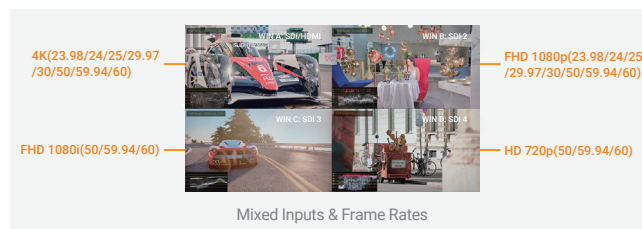
Camera Gammas to Standard Gamuts Conversion

Built-in various mainstream camera gamma curves enable the conversion of camera color space and OETF to standard color space and EOTF display.



Quad-View: Mixed Inputs & Frame Rates

The Quad view mode supports the simultaneous input of four different signal sources, allowing for mixed resolutions and frame rates signals to be displayed together via SDI/HDMI/SFP+. Each split window can independently set Color Space and EOTF, as well as display HDR waveforms separately. This enables centralized monitoring of the entire system in a limited space, with the ability to quickly switch to a single view from any window.



Professional Image Analysis Tools

