Konvision

KXM-5510M-IP25G
55 INCH 4K HDR
ST2110 IP MONITOR

Mini-LED

Mini LED

2304 Zone Local Dimming

1500 nits

1,000,000:1 Contrast

≥80% BT.2020

ST 2110

SFP 28

12G SDI

4K UHD

HDR HLG&PQ
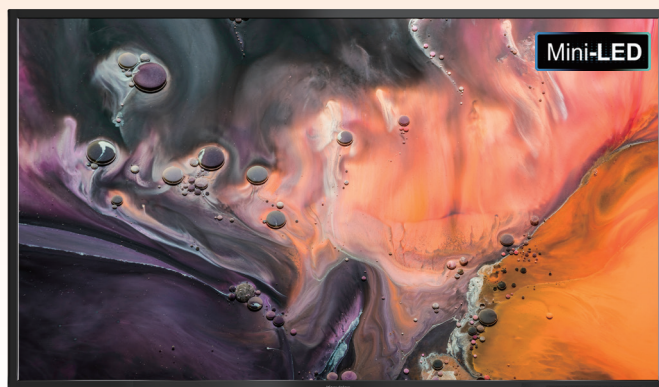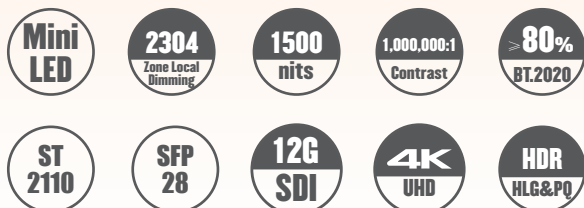
INTRODUCTION

KXM-5510M-IP25G is an 55" 4K HDR IP monitor that supports uncompressed signals based on ST2110 and converts 4K UHD 12G-SDI signals from IP in a number of format signals, built-in ST2110 IP SFP28 optical fiber cage. It gives user the freedom to work with a range of IP systems and 4K UHD media for a seamless end-to-end production and signal transformation workflow.

HIGHLIGHTS

- 178°(H/V) full viewing angle IPS LCD panel with 3840×2160 4K resolution
- Mini-LED backlight with 2304-zone local dimming
- 1500nits brightness, 1,000,000:1 contrast, ≥80% BT.2020 coverage
- 12-bit video processing with zero-latency display
- Full SMPTE ST 2110 compliance including NMOS discovery/register system
- Genlock synchronization with BB or Tri-level reference signals
- 2×SFP28 fiber interfaces for ST2110 IP stream input
- 1×ST2110 IP to 12G-SDI conversion output (SDI1)
- 2×12G-SDI & 2×3G-SDI input/loop-out, supporting 4K single/quad-link
- 4×3G-SDI quad-link (SQD/2SI) up to 4K60p
- 1×HDMI 2.0 input
- 3D LUT calibration compatible with ColourSpace/Calman
- Color spaces: Rec.709/EBU/DCI-P3/DCI-P3 D65/Rec.2020
- Gamma options: 2.0/2.2/2.4/2.6
- HDR support: HLG (1.03/1.11/1.16/1.20/1.27/1.33), ST2084 PQ/(softroll)
- VPID reading & Payload ID recognition for auto color space/EOTF matching
- Multiple camera color space/EOTF conversions to standard color space
- USB/Ethernet for custom 3D LUT loading and firmware updates
- Quad-view mode for mixed SDI/HDMI/SFP28 signals with variable resolutions/frame rates
- Independent color space/EOTF settings per window in quad-view mode
- Instant single-view switch from any window in quad-view mode
- 4K HDR to 2K SDR down-conversion with custom 3D LUT output
- HDR area display, HDR/SDR ratio graph and pixel measurement
- Waveform, Vector, Histogram, CIE Chromaticity Diagram, CIE Color Volume
- Mirror, Rotation, Zoom, Freeze, Full Scan, Overscan, H/V delay
- False Color, Zebra, Focus Assist, Blue/Mono Only, Darkness Check, Highlight Check
- Aspect ratio, Center Marker, Safe Area, Markers with BOX control
- Audio Level Meter, Audio Phase, 5.1/7.1 Surround Phase
- Each SDI support 16ch embedded audio meters & 2-channel outputs
- Supports 4.1-channel audio
- VITC1/2, LTC timecode; static/dynamic UMD/IMD; tri-color Tally
- 5 scene presets, 5 customizable shortcut keys
- GPI remote control for Tally/assist functions/scene preset
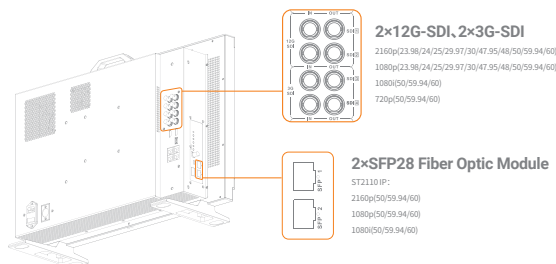- Aluminum alloy casing, dual power inputs with speakers/headphone jack

SPECIFICATION

Panel	
Model No.	KXM-5510M-IP25G
Backlight	Full Array 2304 Local Dimming Zones Backlight
Size	55"
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
Input	
2×SFP28	ST2110 IP data stream input interfaces
4×BNC	12G/6G/3G/HD/SD-SDI（SDI1/SDI2）3G/HD/SD-SDI（SDI3/SDI4）
1×BNC	Gen lockable with BB or Tri-level external
1×HDMI	HDMI 2.0
Output	
4×BNC	12G/6G/3G/HD/SD-SDI (×2, SDI1/SDI2) 3G/HD/SD-SDI (×2, SDI3/SDI4) ST2110 IP to 12G-SDI SDI1 signal outputs
Remote Interface	
1×RJ45	10/100M Ethernet Input Interface
1×RJ45	10/1000M Ethernet Input Interface
1×RJ45	GPI Input Interface
2×RJ45	RS422 Input and Loop Out Interface
Audio In & Out	
Audio In	16-Channels SDI & 2-Channel outputs
Audio Out	3.5mm Headset Jack, 2×3.0W Speakers Support 4.1-Channel Audio
Audio Meter Display	Vertical/horizontal, transparent/opaque display
General	
Input Voltage	AC 100-240V 50/60Hz
Power	≤500W
Installation	VESA MIS-D (200×200mm/400×400mm)
Net Weight	32.5kg
Accessory	Power Cord /Desktop Stand

*Specifications may be changed without prior notice.

▪ 4K monitoring, IP decoding output

2-CH SFP28 fiber optic module interface ST2110 IP data stream input, and support ST2110 IP data stream to 12G-SDI output, while featuring 2-CH 12G-SDI, 2-CH 3G-SDI, 1-CH HDMI input, 4×3G-SDI quad-link input supports SQD and 2SI formats.

2×12G-SDI、2×3G-SDI
2160p(23.98/24/25/29.97/30/47.95/48/50/59.94/60)
1080p(23.98/24/25/29.97/30/47.95/48/50/59.94/60)
1080i(50/59.94/60)
720p(50/59.94/60)

2×SFP28 Fiber Optic Module
ST2110 IP:
2160p(50/59.94/60)
1080p(50/59.94/60)
1080i(50/59.94/60)

▪ Uncompressed SMPTE-2110 Transmission

Compliance with the SMPTE-2110 standard (ST2110-10/20/30/40) realizes IP-based 4K UHD SDI conversion and processing, PTP clock synchronization, and uncompressed audio and video transmission to ensure data integrity and synchronization.

▪ NMOS Protocol, Efficient Connection

Supports the NMOS IS-04 discovery and registration mechanism,as well as the NMOS IS-05 device connection and remotecontrol mechanism.Implement signal source reception and assignment functions in the IP network matrix for efficient collaboration. Simultaneously supporting ST2022-7, providing seamless protection switching to ensure safe broadcasting.

▪ 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 Gamma. It also supports VPID reading display and Payload ID recognition, automatically matching color space and EOTF.

- Color Spaces: Rec.709/EBU/DCI-P3/DCI-P3 D65/Rec.2020
- HDR EOTF: HLG (1.03/1.11/1.16/1.20/1.27/1.33) 、ST2084 PQ/(softroll)
- Gamma: 2.0/2.2/2.4/2.6

▪ Camera Log Color Pipeline

Built-in various mainstream Camera Log Color Pipeline enable the conversion of camera color space and EOTF to standard color space and EOTF.

Color Space Conversion

Log Original

Camera Log:
- Arri Wide Gamut 3/LogC3
- Arri Wide Gamut 4/LogC4
- Canon Cinema Gamut/Canon Log2/3
- DJI D-Gamut/D-Log
- Panasonic V-Gamut/V-Log
- Sony S-Gamut/S-Log2
- Sony S-Gamut3/S-Gamut3.Cine/S-Log3

▪ 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.

BT.2020 HDR 4K 3840×2160
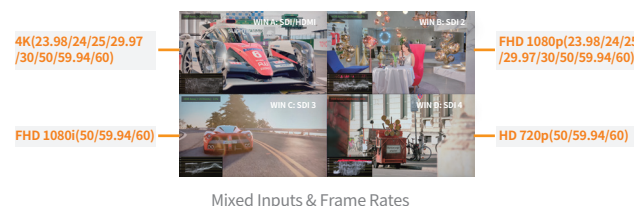**BT.709 SDR** HD 1920×1080
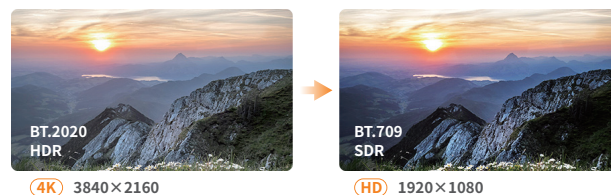
▪ Customizable 3D LUT Import & Output

Users can load and save 8 custom 3D LUTs via USB port/network port. Custom LUTs can also be set to output with the video display, effectively simplifying the color grading process for DIT and post-production work.

▪ Quad-View：Mixed Inputs & Frame Rates

The Quad view mode supports the simultaneous input of four different signal sources, allowing for mixed resolution and frame rate 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.

4K(23.98/24/25/29.97/30/50/59.94/60)   WIN A: SDI/HDMI   WIN B: SDI 2   FHD 1080p(23.98/24/25/29.97/30/50/59.94/60)

FHD 1080i(50/59.94/60)   WIN C: SDI 3   WIN B: SDI 4   HD 720p(50/59.94/60)

Mixed Inputs & Frame Rates

▪ HDR Area Display

Calculate and displays the percentage of HDR reference white (＞203 nits) and HDR-mapped white (＞260 nits) in the overall image. If exceeding the reference values, a warning will be issued.

▪ Professional Image Analysis Tools

Pixel Measurement
Measures the color information of 32 pixels

Focus Assist
Outlines the focus area using a peak focus algorithm

False Color
Applies brightness coloring to regions of the image based on various standards

Waveform
Provides brightness information at different regions

Histogram
Reflects the overall brightness levels of the image

Vectorscope
Displays detailed color distribution and differences within the image

Zebra
Use zebra to mark areas where exposure exceeds the preset value

Aspect Ratio
Offers various standard markers for size and safety area selections

Box Frame
Allows custom adjustment of box brame size and position