

48Gbps 8K 2x8 HDMI Matrix Splitter with Downscaling & Audio De-Embedding

HDCP 2.3, HDR → SDR, Optical + Analog Audio, RS-232/IR/API, EDID DIP

MPN: SP-HDMI2X8-8K



APPROVED OVERVIEW

Route two HDMI 2.1 sources to eight displays at up to 8K@60Hz with per-output downscaling, HDR → SDR conversion, and dual audio de-embedding. The SP-HDMI2X8-8K eliminates multi-box chaining by combining 2-source switching with 8 independently scaled outputs. Each output downscapes 8K → 4K/2K and converts HDR → SDR automatically, enabling mixed-resolution display fleets without external scalers.

48Gbps, HDMI 2.1, HDCP 2.3. HDR10/HDR10+/Dolby Vision/HLG, ALLM, VRR. Audio: Dolby Atmos, DTS-HD MA via HDMI; optical S/PDIF (5.1CH) + balanced/unbalanced analog (PCM 2CH, 99dB S/N). 16-preset EDID DIP + 33-preset API. RS-232 + IR + USB-C. Built-in signal generator. Metal 320 × 100 × 21.5 mm, 810 g, 9.6W.

1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators deploying 2-source, 8-display mixed-resolution environments with audio.

THE CHALLENGE

Routing two 8K sources to eight displays at different resolutions with audio breakout — without chaining multiple boxes.

THE KANEXPRO ADVANTAGE

2x8 matrix + per-output downscaling + HDR → SDR + optical/analog audio + RS-232/API in one box.

2 PRODUCT POSITIONING

The all-in-one 8K 2x8 matrix that replaces a switcher + DA + scaler + audio extractor in a single 1U half-rack enclosure.

3 APPLICATIONS

Corporate AV

Two presenter sources to eight conference displays across a campus. RS-232/API integration with Crestron or Extron.

Digital Signage

Two content feeds to eight mixed-resolution screens. Per-output downscaling handles 8K flagships + 4K/1080p legacy.

Home Theater

Blu-ray + PS5 to eight TVs across rooms. HDR → SDR for legacy displays; 5.1CH optical to AVR.

Education

Two instructor sources to eight classroom screens. Signal generator verifies cables without a source.

Houses of Worship

Two camera feeds to eight sanctuary/lobby screens. Balanced analog audio to mixing console.

Broadcast & Production

Two playback feeds to eight QC monitors at mixed resolutions. API control for automation.

4 WHO THIS IS FOR

Corporate AV

Digital Signage

Home Theater

Education

Worship

Broadcast

Ideal User

AV integrator

Project Types

Corporate, signage, education, worship, broadcast

Typical Buyer

AV integrator / IT lead

5 KANEXPRO PRODUCT COMPARISON

The SP-HDMI2X8-8K is a 2-input matrix with per-output downscaling and audio.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
SP-HDMI2X8-8K	8K 2×8 matrix	48Gbps, downscale, HDR → SDR, audio, RS-232	This product
SP-HDMI2X4-8K	8K 2×4 matrix	Same features, 4 outputs	~\$160
SP-HD1X48K	8K 1×4 splitter	48Gbps, downscale, no switching, no audio	~\$120
SP-1X4A8K	8K 1×4 + audio	40Gbps, no switching, no downscale	~\$160

Choose SP-HDMI2X8-8K for 2-source matrix distribution with downscaling and audio.

6 FREQUENTLY ASKED QUESTIONS

Q: Per-output downscaling?

Yes. Auto, bypass, or force 1080p per output.

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