

1×8 HDMI Splitter with Independent 4K to 1080p Downscaling

Drive Eight Mixed-Resolution Displays From One 4K60 Source Without Collapsing to the Weakest Screen - 18Gbps 4:4:4, HDCP 2.2, EDID COPY/AUTO

MPN: SP-HDMI1X8-18G



Drives eight mixed-resolution HDMI displays from a single 4K60 source without collapsing the whole array to the weakest screen. The SP-HDMI1X8-18G is a 1×8 HDMI 2.0 distribution splitter that passes the full 18Gbps 4:4:4 signal to all eight outputs and independently downscales 4K to 1080p on any port that needs it, so new 4K panels and legacy 1080p screens run natively off one feed. It ships in a black metal enclosure with an external 12V locking power supply and draws just 6.4W, making it the right choice for signage, hospitality, and corporate distribution where reliable mixed-resolution delivery and install-grade build matter more than 8K bandwidth or matrix switching.

A COPY/AUTO EDID dial resolves the mixed-wall problem at the source: COPY reads the display on HDMI OUT 1 and lets each output serve its connected screen, while AUTO reports the best common EDID so every display accepts the signal. Full HDR10, HDR10+, Dolby Vision, and HLG pass-through keeps signage color and small type clean, and CEC on HDMI OUT 1 lets the anchor display power-sequence with the source. Its strongest differentiator is genuine per-output 4K-to-1080p downscaling with full-chroma 18Gbps HDR pass-through in a metal chassis with a locking multinational supply — the pro-install combination that commodity USB-powered splitters skip and premium distribution amplifiers charge several times more to match.

1 PRODUCT OVERVIEW

DESIGNED FOR

Built for fixed-install racks and equipment closets that feed a single 4K60 source to eight screens at once: retail and QSR signage banks, sports-bar and hospitality TV walls, corporate boardroom overflow and lobby displays, house-of-worship and education confidence and overflow monitors, and command-center or fitness floors running many screens continuously. It is a one-in, eight-out distribution device for the integrator building or refreshing a rack, not a switcher.

THE CHALLENGE

Distributing one 4K60 4:4:4 HDR source to eight displays exposes two failures in cheap splitters. When the screens are a mix of resolutions, the whole array collapses to the lowest common display, so a single 1080p panel blanks or downgrades every output. And full-chroma HDR signals are frequently throttled to 4:2:0 or 8-bit, which shows up on signage and menu boards as banding and soft text. Either fault means a field service call and a wall that looks wrong to customers.

THE KANEXPRO ADVANTAGE

- Per-output downscaling serves native 4K to the 4K panels and 1080p to the legacy screens from the same source, so one 1080p display no longer drags the whole wall down.
- Full 18Gbps 4:4:4 pass-through carries HDR10, HDR10+, Dolby Vision, and HLG intact to all eight outputs, keeping signage color and small type clean.
- The COPY/AUTO EDID dial sets the whole array in one move: COPY follows the 4K display on OUT 1 and lets each output downscale for its own screen, AUTO sends one format every screen accepts.
- A black metal enclosure and 12V locking multinational power supply, drawing 6.4W, are engineered for permanent 24/7 rack duty rather than USB-powered desktop use.

2 PRODUCT POSITIONING

The 4K60 18Gbps 1×8 HDMI distribution splitter for AV integrators who need to drive eight mixed-resolution displays from one HDR source — without collapsing every output to the weakest screen or stepping up to a distribution amplifier that costs several times more.



Retail video wall / signage bank

A single 4K60 media player drives eight displays showing one synchronized image across a storefront or concourse. Full 18Gbps 4:4:4 pass-through keeps small type and brand color clean, and EDID management holds the array stable when a screen is swapped, so a field replacement does not blank the wall.



Sports bar and hospitality TV bank

One satellite or streaming feed distributed to eight screens of mixed vintage — some 4K, some legacy 1080p. Per-output downscaling serves native 4K to the new panels and 1080p to the old ones from the same source, so the venue is not forced to replace every set at once or accept a whole-wall downgrade.



QSR menu boards

Three-to-eight menu displays fed from one player behind the counter. HDR and 4:4:4 pass-through keep pricing text and product photography sharp, and CEC on OUT 1 lets the anchor board follow the player's power schedule for open/close.



Corporate boardroom and overflow

A presentation source mirrored to the main room display plus lobby and overflow monitors down the hall. the COPY/AUTO EDID dial prevents a lower-resolution overflow screen from renegotiating the primary display down, and the metal chassis with 12V locking supply survives permanent rack installation.



Education and house of worship

A camera or presentation feed sent to stage-confidence monitors and overflow-room displays that rarely share one resolution. Independent per-output scaling lets a 1080p confidence monitor and 4K overflow displays run off one splitter without EDID conflict, and HLG/HDR10 pass-through preserves live-camera grading.



Command center / fitness floor

One content source to a grid of eight monitors running continuously. Metal enclosure, 6.4W draw, and the multinational locking PSU suit a 24/7 rack, while per-output downscaling accommodates a mix of display specs across a large floor without per-screen source hardware.

4 WHO THIS IS FOR

Retail and QSR signage

Hospitality/sports venues

Corporate AV

Education

House of worship

Fitness

Transit

Ideal User

commercial AV integrator / systems engineer specifying rack signal-distribution, plus custom-install (CEDIA) dealers building multi-display residential and light-commercial jobs. Secondary: signage installers and IT/AV generalists standardizing on a reliable 1×8.

Project Types

retail and QSR signage, hospitality/sports venues, corporate AV, education, house of worship, fitness, transit.

Typical Buyer

the integrator's lead engineer or purchasing lead specs the part; on larger jobs a consultant writes it into the BOM. Price sensitivity is moderate — reliability and channel availability outweigh a small price gap because a field failure costs a truck roll.

5 KANEXPRO PRODUCT COMPARISON

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
SP-1X8SL18G	Earlier 1×8 model	1x8 HDMI 2.0 Splitter with Downscaling	Discontinued 1×8 HDMI 2.0 with downscaling; SP-HDMI1X8-18G is its current-generation replacement.
SP-HDMI1X4-18G	Four matching screens		The same 4K60 18Gbps class with four outputs and no downscaling.
SP-HD1X48K	8K 1×4	8K 1×4 HDMI 2.1 Splitter with Auto Downscaling	HDMI 2.1 at 48Gbps with auto downscaling, for 8K or 4K120 sources on up to four screens.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
SP-HDMI2X8-8K	Two sources, eight screens	48Gbps 8K 2x8 HDMI Matrix Splitter with Independent Downscaling & Audio De-embedding	An 8K 2x8 matrix, for when a second source has to reach the same eight displays.

6 FREQUENTLY ASKED QUESTIONS

Q: My current splitter blanks every screen when one display is only 1080p. Does this fix that?

Yes. In COPY mode each of the eight outputs downscales on its own, so the 4K60 displays keep native 4K while a 1080p screen gets a 1080p feed from the same source. In AUTO mode the splitter compares all eight displays and sends one format they all accept, so every output runs 1080p when a 1080p display is connected.

Q: Does it pass HDR and full 4:4:4 color?

Yes. It passes the full 18Gbps HDMI 2.0 signal at 4K60 4:4:4, 8, 10 or 12-bit, with HDR10, HDR10+, Dolby Vision and HLG, to all outputs.

Q: Is this 8K or HDMI 2.1?

No. It is HDMI 2.0 at 18Gbps, built for 4K60 to eight displays. For 8K or HDMI 2.1 sources, look at the SP-HD1X48K (8K 1x4) or the SP-HDMI2X8-8K (8K 2x8 matrix).

Q: Consumer 1x8 splitters look similar for less money. What am I paying for?

Build and support for permanent installs: a metal enclosure, a 12V multinational locking power supply instead of a USB adapter, per-output downscaling, HDCP 2.2, and KanexPro technical support through pro distribution.

Q: Will the displays follow the source's power state?

CEC is supported on HDMI OUT 1, so the display on that output can follow the source when it powers on and off.

Q: What is in the box, and where is the manual?

The 1x8 splitter and a 12V/1A multinational locking power supply. Documentation is digital: scan the QR code on the box for the full guide.

Q: How do I handle a mix of 4K and 1080p displays?

Set the EDID dial to COPY with a 4K display on OUT 1: the source sends 4K, the 4K screens show it natively and each 1080p screen gets its own downscaled 1080p feed. AUTO is the safe choice when you want every screen on one common format.