

4K60 1×4 HDMI Splitter with Optical + Analog Audio Extraction

Break Audio Out to a Legacy Amp or DSP - S/PDIF Dolby/DTS Bitstream, PCM 2.0 on 3.5mm, 18Gbps 4:4:4 Pass-Through



Feeds one 4K60 4:4:4 HDMI source to four displays while handing a clean audio feed off to a legacy amp or DSP — without a separate de-embedder in the rack. Housed in a black metal enclosure and powered by an external 5V/1A supply, this 1×4 distribution amplifier passes the full 18Gbps of HDMI 2.0b to all four outputs with HDCP 2.2 and 1.4 compliance. It is the right choice for boardrooms, signage clusters, lecture halls and media rooms where deterministic EDID, an onboard downscaler and audio breakout matter more than 8K bandwidth or KVM.

Dial-selectable EDID COPY and AUTO modes give integrators a deterministic handshake across mixed displays instead of the lowest-common-denominator guess of a basic splitter, and a single global 4K to 1080P downscale switch drives older 1080p screens and projectors from the same 4K source. Audio de-embeds to two destinations at once: optical S/PDIF carrying LPCM, Dolby 5.1, Dolby TrueHD, DD+ and DTS bitstream for a surround processor, and analog L/R (PCM 2.0) on a 3.5mm jack for a stereo amp or ceiling-audio zone. That combination — full 18Gbps distribution, deterministic EDID, onboard downscaling and dual audio de-embed in one metal chassis — is what sets it apart from disposable prosumer splitters.

Surge Protection Recommended — This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

TABLE OF CONTENTS

1. Features	1
2. Package Contents	2
3. Specifications	2
4. Introduction	3
5. Panel descriptions	3
Front panel	3
Rear panel	4
6. Application Example	5
7. Troubleshooting	5
8. Installation FAQ	6
9. Integration FAQ	6

1. Features

- ✓ HDCP 2.2 and HDCP 1.4 compliant.
- ✓ Supports HDMI resolution up to 4K2K@50/60Hz (4:4:4), per HDMI 2.0b.
- ✓ Passes the full 18Gbps of video bandwidth to all four HDMI outputs.
- ✓ Extracts digital and analog audio from the HDMI source.
- ✓ Output bypass and 4K to 1080P downscaler, selected by a panel dial switch; the downscale switch is global to all four outputs.
- ✓ EDID set to COPY or AUTO mode via a panel dial switch. In COPY mode the unit copies OUT 1's EDID to all outputs, cascading to OUT 2, then OUT 3, then OUT 4 if no capable EDID is detected. In AUTO mode it compares OUT 1 through OUT 4 and outputs the best shared resolution.
- ✓ Analog audio output: PCM 2.0 on a 3.5mm stereo mini-jack.
- ✓ Optical S/PDIF output supports LPCM 2.0/2.1CH, Dolby 5.1, Dolby TrueHD, Dolby DD+, DTS 5.1, DTS-ES 6, DTS-HDMA 5.1 and DTS HD-HRA 5.1.
- ✓ Metal enclosure with an external 5V/1A power supply.

2. Package Contents

- ✓ 1× 1×4 HDMI 2.0 Splitter
- ✓ 1× 5V/1A Power Adapter

3. Specifications

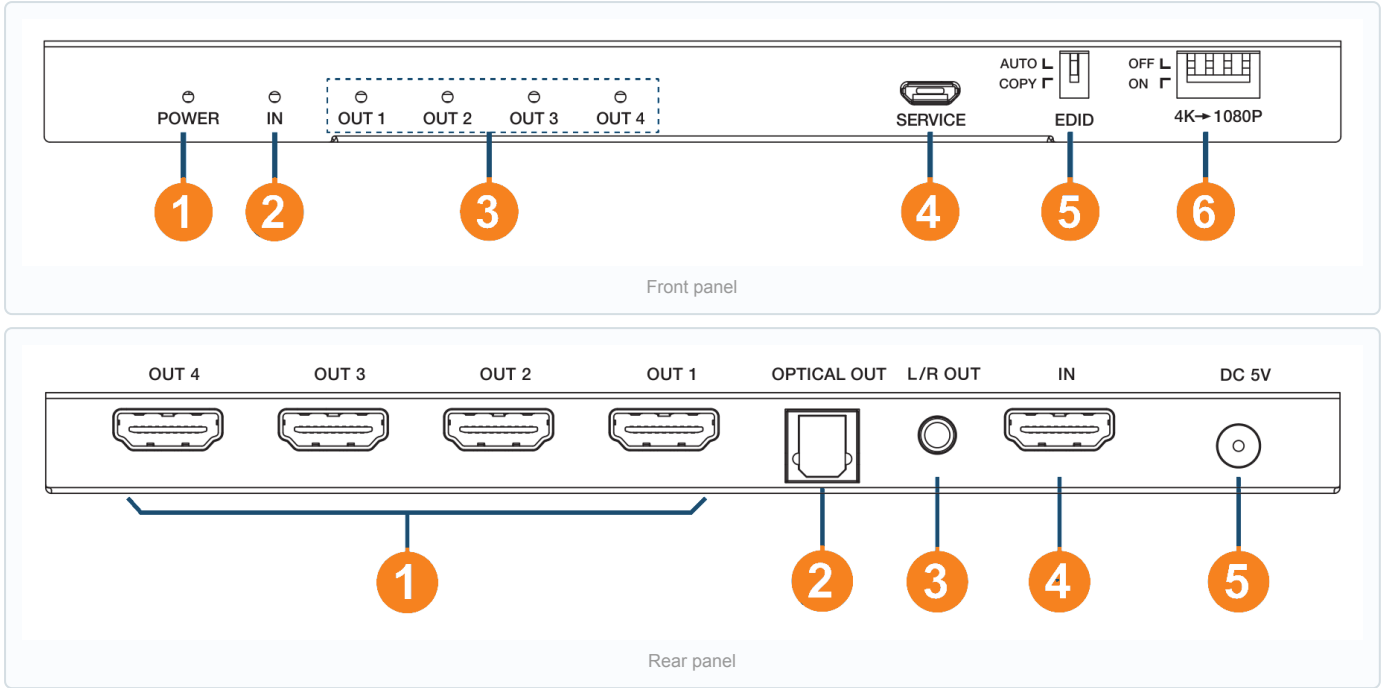
VIDEO		
	HDMI Compliance	HDMI 2.0b
	HDCP Compliance	HDCP 2.2 and HDCP 1.4
	Video Resolution	720p50/60Hz, 1080p50/60Hz, 4K2K 24Hz, 4K2K 30Hz, 4K2K@50/60Hz (4:4:4)
	Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
	Color Depth	4K60Hz: 8-bit; 1080p: 12-bit
	Video Bandwidth	18Gbps
	Scaling	Bypass, or 4K to 1080P downscale (global to all four outputs)
	EDID Modes	COPY, AUTO (panel dial switch)
AUDIO		
	HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
	Analog (L/R) Audio	PCM 2.0
	Optical (S/PDIF) Audio	LPCM 2.0/2.1CH, Dolby 5.1, Dolby TrueHD, Dolby DD+, DTS 5.1, DTS-ES 6, DTS-HDMA 5.1, DTS HD-HRA 5.1
CONNECTIONS		
	Input	1× HDMI Type A (19-pin female)
	Outputs	4× HDMI Type A (19-pin female); 1× analog L/R (3.5mm stereo mini-jack); 1× optical S/PDIF
POWER		
	Power Supply	Input: AC 100–240V, 50/60Hz; Output: DC 5V/1A
	Power Consumption	3.5W
PHYSICAL		
	Dimensions (W × D × H)	7.09 × 2.44 × 0.55 in (180 × 62 × 14 mm)
	Weight (net)	0.50 lbs (227 g)
	Housing	Metal enclosure
	Color	Black
ENVIRONMENTAL		
	Operating Temperature	32°F to 104°F (0°C to 40°C)
	Storage Temperature	-4°F to 140°F (-20°C to 60°C)
	Relative Humidity	20–90% RH (non-condensing)
	ESD Protection	IEC 61000-4-2: ±8kV (air-gap discharge), ±4kV (contact discharge)
CERTIFICATIONS		
	Certifications	CE, FCC, RoHS



4. Introduction

The 1×4 HDMI 2.0 splitter routes a single HDMI source simultaneously to four HDMI displays. It supports resolution up to 4K2K@60Hz (4:4:4) and HDCP 2.2, and it extracts audio from the HDMI source to both optical and analog outputs. EDID can be set to COPY or AUTO mode, and one panel switch either passes the signal through unchanged or downscales it from 4K to 1080P on all four outputs.

5. Panel descriptions



FRONT PANEL

Silk-screen labels: POWER · IN · OUT 1 · OUT 2 · OUT 3 · OUT 4 · EDID (AUTO/COPY) · 4K/1080P (OFF/ON) · SERVICE

No.	Name	Description
1	POWER LED	Blue LED; lights when the unit is connected to power.
2	HDMI INPUT LED	Blue LED; lights when the HDMI IN port is connected to an active HDMI source device by cable.
3	HDMI OUTPUT LED	Blue LEDs; each lights when its HDMI OUT port is connected to an active display device by cable.
4	SERVICE port	Used for firmware updates (manufacturer use only).
5	EDID	Selects the EDID mode. In AUTO, the unit compares the EDID of the displays on HDMI OUT 1–4 and sends the best EDID to the source, which then serves all outputs. In COPY, the unit copies the HDMI OUT 1 EDID to the source; if no capable EDID is found on OUT 1 it uses OUT 2, then OUT 3, and so on (priority OUT 1 to OUT 4), and the source then serves all outputs.

continued

No.	Name	Description
6	Dial switch (4K→1080P)	Sets scaling. Set it to OFF to pass the signal through unchanged (bypass). Set it to ON to downscale a 4K input to 1080P on all four outputs together.

REAR PANEL

Silk-screen labels: DC 5V · IN · L/R OUT · OPTICAL OUT · OUT 1 · OUT 2 · OUT 3 · OUT 4

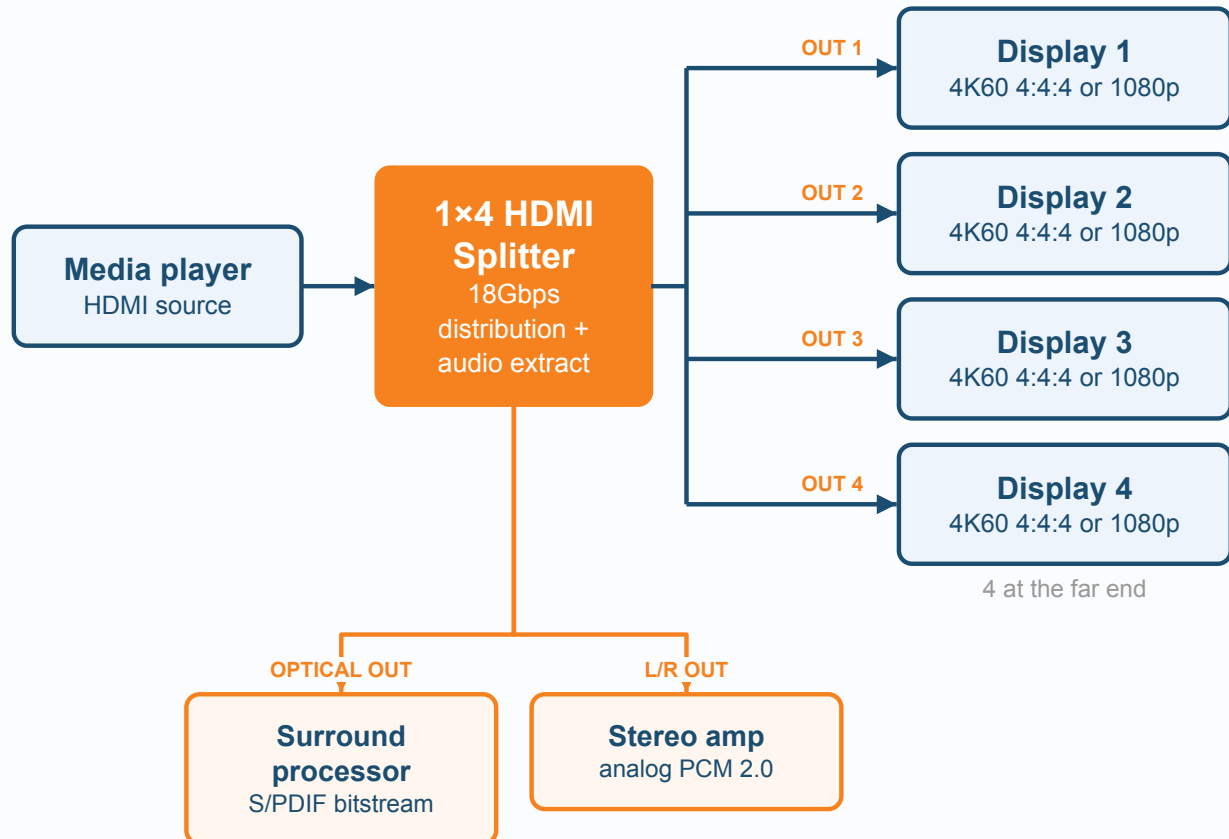
No.	Name	Description
1	OUT (1~4)	Connect to your HDMI display devices, such as TVs or monitors.
2	OPTICAL OUT	Optical (S/PDIF) audio output; carries the audio extracted from the HDMI IN port.
3	L/R OUT	Analog audio output; carries the audio extracted from the HDMI IN port.
4	IN	Connect to your HDMI source device, such as a Blu-ray/DVD player or games console.
5	DC 5V	Connect the supplied 5V/1A DC power adapter here and plug the adapter into an AC outlet.



6. Application Example

TYPICAL SETUP

4K60 1×4 HDMI Splitter with Optical + Analog Audio Extraction



How it works: Dial-selectable EDID COPY and AUTO modes give integrators a deterministic handshake across mixed displays instead of the lowest-common-denominator guess of a basic splitter, and a single global 4K to 1080P downscale switch drives older 1080p screens and projectors from the same 4K source. Audio de-embeds to two destinations at once: optical S/PDIF carrying LPCM, Dolby 5.1, Dolby TrueHD, DD+ and DTS bitstream for a surround processor, and analog L/R (PCM 2.0) on a 3.5mm jack for a stereo amp or ceiling-audio zone. That combination — full 18Gbps distribution, deterministic EDID, onboard downscaling and dual audio de-embed in one metal chassis — is what sets it apart from disposable prosumer splitters.

7. Troubleshooting

Q: The SP-HDMI1X4A-18G shows no signs of life. What should I check?

A: Check the POWER LED on the front panel; it lights only when the unit has power. If it is dark, confirm the 5V/1A DC adapter is connected to the DC 5V jack and plugged into a live AC outlet.



Q: No picture reaches one of the displays on the SP-HDMI1X4A-18G. How do I isolate it?

A: Look at that port's HDMI OUTPUT LED, which lights when the OUT port is connected by cable to an active display; if it is off, check the cable and the display at that end. Then confirm the HDMI INPUT LED is lit, which shows the source is connected and active on the IN port.

Q: None of the displays on the SP-HDMI1X4A-18G get a signal. Where do I start?

A: Check the HDMI INPUT LED first; it lights only when the IN port is connected by cable to an active HDMI source, so if it is dark, verify the source cable and that the source is powered. Then check that each OUT port's HDMI OUTPUT LED is lit for the displays you expect to see.

Q: A display connected to the SP-HDMI1X4A-18G shows the wrong resolution. What can I try?

A: Check the 4K/1080P dial: with it OFF the input passes through unchanged, and with it ON a 4K input is downscaled to 1080p on all four outputs together. If the resolution served to the displays is still wrong, switch the EDID dial between AUTO, which sends the best EDID from OUT 1 through OUT 4, and COPY, which uses the OUT 1 display's EDID.

Q: There is no audio from the amplifier or speakers connected to the SP-HDMI1X4A-18G. What should I confirm?

A: Both the optical S/PDIF output and the analog L/R output carry audio extracted from the HDMI IN port, so first confirm the HDMI INPUT LED is lit and the source is active. Then check that the amplifier is on the optical output and the speakers on the 3.5mm L/R output, and that the source's audio format is one the chosen output supports.

Need help? — For additional support, contact KanexPro technical support at support@kanexpro.com or 888.975.1368, or scan the QR code below for the product page.

8. Installation FAQ

Q: What connects to each port on the SP-HDMI1X4A-18G?

A: The HDMI source, such as a Blu-ray/DVD player or games console, connects to the IN port, and your four displays connect to OUT 1 through OUT 4. The optical S/PDIF output and the 3.5mm analog L/R output each carry the audio extracted from the HDMI input.

Q: How is the SP-HDMI1X4A-18G powered?

A: Connect the supplied 5V/1A DC adapter to the DC 5V jack and plug the adapter into an AC outlet rated 100-240V, 50/60Hz. The POWER LED lights when the unit has power.

Q: How do I set EDID during installation of the SP-HDMI1X4A-18G?

A: Use the front-panel EDID dial switch. In AUTO the unit compares the EDID of the displays on OUT 1 through OUT 4 and sends the best EDID to the source; in COPY it copies the OUT 1 display's EDID to the source, falling back to OUT 2, then OUT 3, then OUT 4 if OUT 1 has no capable EDID.

Q: How do I make the SP-HDMI1X4A-18G downscale 4K to 1080p for my displays?

A: Set the front-panel 4K/1080P dial switch to ON to downscale a 4K input to 1080p on all four outputs at once; set it to OFF to pass the signal through unchanged. The setting is global and applies to all four outputs together.

9. Integration FAQ

Q: Does the SP-HDMI1X4A-18G need a control system or network to run?

A: No. It is configured entirely by two front-panel dial switches, one for EDID mode and one for 4K-to-1080p scaling, with no external control connection required.

Q: Can the SP-HDMI1X4A-18G feed displays and a separate audio system at the same time?

A: Yes. A typical setup drives up to four UHD TVs from the HDMI outputs while the optical output feeds an amplifier and the analog L/R output feeds a pair of 2.0 speakers, all from the single source.

Q: What source devices does the SP-HDMI1X4A-18G pair with?

A: It takes a single HDMI source such as a Blu-ray/DVD player or a games console on its IN port and routes it simultaneously to four HDMI displays.

Q: What is the SERVICE port on the SP-HDMI1X4A-18G for?

A: The SERVICE port is used for firmware updates and is intended for manufacturer use only.

