

48Gbps 4×1 HDMI/USB-C Auto Switcher

8K@60Hz • EDID Management • HDCP 2.3



The KanexPro SW-4X1HDUSBC is an ultrathin 48Gbps 4×1 auto switcher with three HDMI 2.1 inputs, one native USB-C input (DP 1.4), and one HDMI output. It supports resolutions up to 8K@60Hz 4:2:0 (HDMI) and 8K@30Hz 4:2:2 (USB-C), with 4K@120Hz 4:4:4 pass-through for gaming. HDR10, HDR10+, Dolby Vision, and HLG are fully supported alongside HDMI 2.1 protocols including VRR, ALLM, QMS, QFT, and SBTM. Built-in EDID is configurable via a 3-pin DIP switch, and auto input switching ensures seamless source selection.

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	1
3. Specifications	2
4. Operation Controls	3
4.1 Front Panel	3
4.2 Rear Panel	3
5. Application Example	4
6. Troubleshooting	4

FEATURES

- ✓ HDMI 2.1, HDCP 2.3, and DP 1.4 compliant
- ✓ HDMI video bandwidth up to 48Gbps FRL and 18Gbps TMDS
- ✓ HDMI resolution up to 8K@60Hz 4:2:0 12-bit, 8K@30Hz 4:4:4, 4K@120Hz 4:4:4 12-bit
- ✓ USB-C video bandwidth up to 32Gbps; resolution up to 8K@30Hz 4:2:2 10-bit, 4K@120Hz 4:2:2 10-bit
- ✓ HDR10, HDR10+, Dolby Vision, and HLG pass-through
- ✓ HDMI 2.1 protocols: VRR, ALLM, QMS, QFT, SBTM supported
- ✓ LPCM 7.1CH, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio, DTS:X audio pass-through
- ✓ 3× HDMI + 1× USB-C inputs routed to 1× HDMI output
- ✓ Auto input switching and manual input switching via front panel or IR remote
- ✓ CEC control from TV at output to source at input
- ✓ Advanced EDID management via 3-pin DIP switch

PACKAGE CONTENTS

1× 48Gbps 4×1 Switcher • 1× IR Remote • 1× 5V/1A Power Supply • 1× User Manual



Specifications

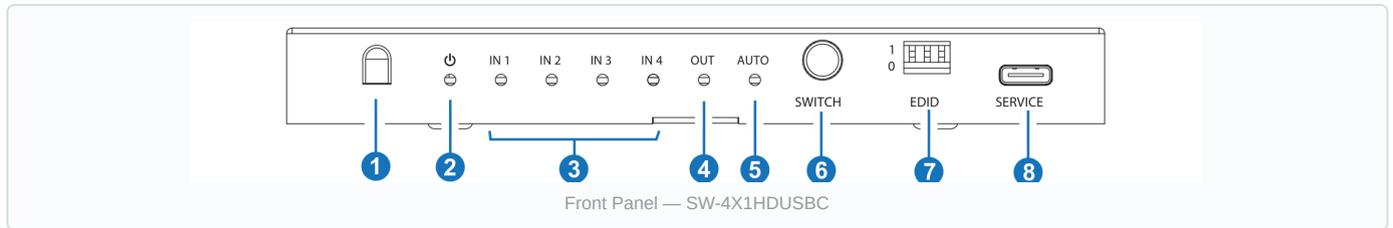
TECHNICAL	
HDMI Compliance	HDMI 2.1
HDCP Compliance	HDCP 2.3
DP Compliance	DP 1.4
HDMI Video Bandwidth	Up to 48Gbps FRL and 18Gbps TMDS
USB-C Video Bandwidth	Up to 32Gbps
HDMI Video Resolution	Up to 8K@60Hz 4:2:0 12-bit, 4K@120Hz 4:4:4 12-bit 8K@30Hz 4:4:4, as specified in HDMI 2.1
USB-C Video Resolution	Up to 8K@30Hz 4:2:2 10-bit, 4K@120Hz 4:2:2 10-bit
Color Depth	8-bit, 10-bit, 12-bit
Color Space	RGB 4:4:4, YCbCr 4:4:4 / 4:2:2 / 4:2:0
HDR Formats	HDR10, HDR10+, Dolby Vision, HLG
HDMI 2.1 Protocols	VRR, ALLM, QMS, QFT, SBTM
HDMI Audio	LPCM, Dolby Digital/Plus/EX, Dolby TrueHD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
ESD Protection	IEC 61000-4-2: ±8kV (air-gap) & ±4kV (contact)
CONNECTION	
Input	3× HDMI Type A [19-pin female] 1× USB Type C [24-pin female]
Output	1× HDMI Type A [19-pin female]
Control	1× SERVICE [USB Type C, firmware update] 1× IR Receive Window
MECHANICAL	
Housing	Metal Enclosure, Black
Dimensions	145mm (W) × 68mm (D) × 18mm (H)
Weight	258g
Power Supply	AC 100–240V 50/60Hz → DC 5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	2.25W (Max)
Operating Temp	32–104°F / 0–40°C
Storage Temp	–4–140°F / –20–60°C
Humidity	20–90% RH (non-condensing)
RECOMMENDED HDMI CABLE	
8K	Up to 6.6 ft / 2m (Ultra HDMI 2.1)
4K60	Up to 26 ft / 8m
4K24	Up to 39 ft / 12m
1080p	Up to 49 ft / 15m

The use of "Premium High Speed HDMI" or "Ultra High Speed HDMI" cable is highly recommended.



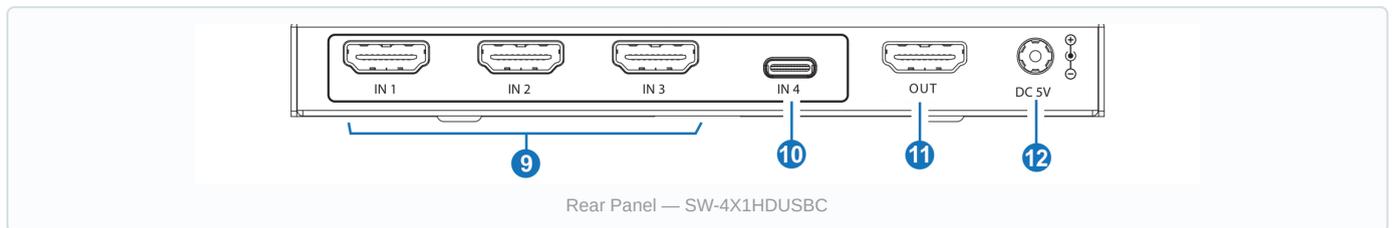
Operation Controls

FRONT PANEL



No.	Name	Function Description
1	IR Window	IR signal receiving window for the included remote control.
2	Power LED	Red LED is on when the device is powered on.
3	IN 1/2/3/4 LED	Green LED indicates the currently selected input channel.
4	OUT LED	Green LED is on when a TV or display is connected to the HDMI output.
5	AUTO LED	Green LED indicates auto input switching mode is enabled.
6	SWITCH Button	Short press: switch to the next input port. Long press (3 sec): disable/enable auto switching.
7	EDID DIP Switch	3-pin DIP switch for EDID configuration. 8 modes from Copy OUT (default) to fixed resolutions with various audio formats (PCM/DTS/Dolby).
8	SERVICE	USB Type C port for MCU firmware update.

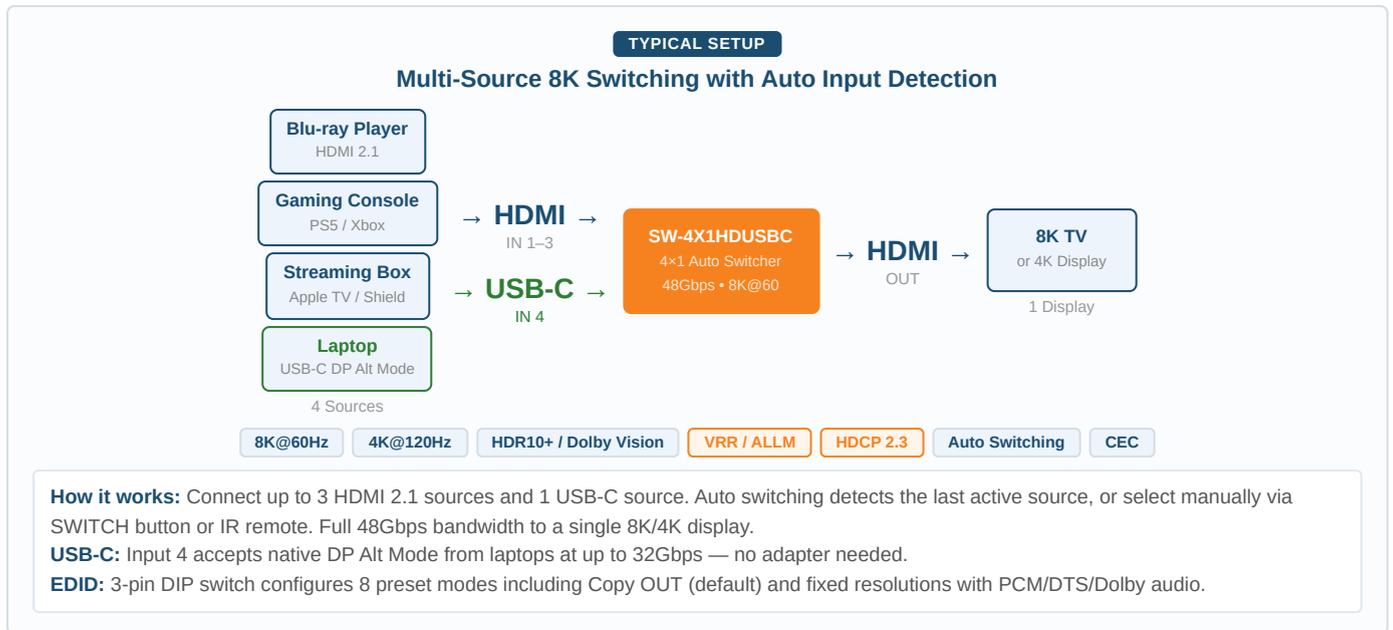
REAR PANEL



No.	Name	Function Description
9	IN 1/2/3	HDMI signal input ports. Connect to HDMI source devices such as DVD, Blu-ray, PS5, or PC.
10	IN 4	USB-C signal input port. Connect to a USB-C source device (DP Alt Mode).
11	OUT	HDMI signal output port. Connect to an HDMI display device such as TV or monitor.
12	DC 5V	DC 5V/1A power adapter input.



Application Example



TROUBLESHOOTING

Q: No video on the display after connecting a source?

A: Verify Ultra High Speed HDMI cables (max 2m for 8K). Check source is powered on. Try a different EDID DIP switch setting. Ensure correct input is selected.

Q: USB-C source not detected?

A: Confirm USB-C source supports DP Alt Mode video output. Not all USB-C ports output video. Use a certified USB-C cable that supports DP Alt Mode.

Q: Auto switching not working?

A: Ensure AUTO LED is green (enabled). Long press SWITCH for 3 seconds to re-enable. Auto switching detects the last connected/powered source.

Q: HDR content appears washed out?

A: Set EDID DIP switch to Copy OUT (default, all OFF) to pass through display's native EDID. Ensure HDR is enabled in source device settings.

