

SIMPLIFIED
MFG

SP12S



User Manual

VER 2.0

Thank you for purchasing this device

The Simplified MFG SP12S is designed to provide years of reliable service. At Simplified MFG, we want the experience with this device to be the best possible and are committed to helping achieve that experience.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment. Set top boxes (STB) that are connected to the outside world can introduce surges through the HDMI. Simplified MFG's HDSURGE is recommended for use with these STB devices (cable and satellite)

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1. Introduction

The SP12S is an 18Gbps HDMI2.0b splitter with scaling, EDID management, and audio breakout. It supports resolutions up to 4K2K@60Hz (4:4:4) and HDCP 2.2/1.4. The EDID can be copied (output 1) or mixed. Each output can be set to 1080p or to the EDID setting. Also, audio can be extracted via the optical SPDIF and/or the 3.5mm mini jack.

2. Features

- HDMI 2.0b, HDCP2.2/HDCP1.4 compliant.
- Supports HDMI 2.0b (18Gbps) up to 4K2K@50/60Hz (4:4:4)
- Audio can be extracted via the optical SPDIF and the 3.5mm mini jack
- Video signals can be spilt into four identical signals, or can be manipulated via the scaling switches
- The EDID shown to the source can be selected via the switch on the panel

In "copy" mode, Output 1 is shown to the source and the splitter treats both displays as the same as output 1

In "auto" mode, the splitter compares the two outputs and adjusts to the lowest common denominator

- Supports all HDMI audio formats including; LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD

3. Package Contents

- 1x HDMI 4K Ultra HD Scaling Splitter
- 1x 5V/1A Power Supply
- 1x User manual

4. Specifications

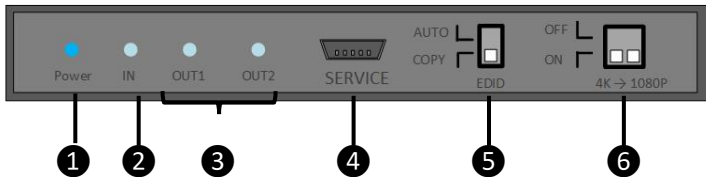
Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 and HDCP 1.4
Video Bandwidth	18Gbps

Video Resolutions	720P50/60Hz, 1080P50/60Hz, 4K2K24Hz, 4K2K30Hz, 4K2K@50/60Hz (4:4:4)
Color Depth	8, 10, or 12bit (depends on source setting)
Color Space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD & DTS-X
L/R Audio Formats	PCM 2.0
Optical Audio Formats	LPCM [2.0/2.1]CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS 5.1, DTS-ES 6, DTS-HDMA 5.1, DTS HD-HRA 5.1
ESD Protection	Human-body Model: $\pm 8\text{kV}$ (Air-gap discharge), $\pm 4\text{kV}$ (Contact discharge)
Connections	
Input ports	1×HDMI Type A [19-pin female]
Output ports	4×HDMI Type A [19-pin female] 1×L/R Audio out [3.5mm Stereo Mini-jack] 1×Optical out [S/PDIF]
Mechanical	
Housing	Metal Enclosure
Color	Black

Dimensions	120mm (4.75") [W] × 62mm (2.4") [D] × 14mm (.55") [H]
Weight	166g / 5.9 oz.
Power Supply	Input: AC100~240V 50/60Hz, Output: DC5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	2.8W (max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

5.Operation Controls and Functions

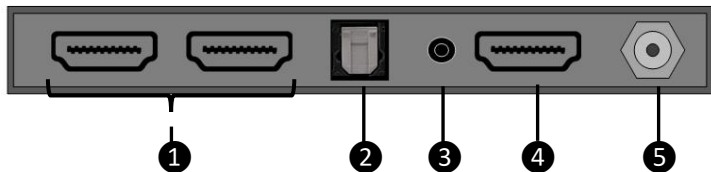
5.1 Front Panel



Number	Name	Function description
1	POWER LED	This blue LED will illuminate when the unit has connected power supply.

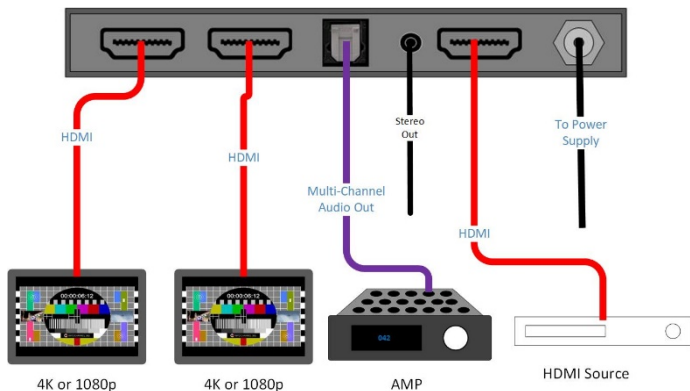
2	HDMI INPUT LED	This blue LED will illuminate when the HDMI IN has connected an active HDMI source device with a HDMI cable.
3	HDMI OUTPUT LED	These blue LEDs will illuminate when the HDMI OUT port has connected an active display device with a HDMI cable.
4	SERVICE PORT	Firmware update use. (Manufacturers use only.)
5	EDID	AUTO: Compares OUT 1 and OUT 2 displays EDID settings, then selects the lowest resolution of the two. The source will transmit the signal again to all outputs. COPY: Copies the HDMI OUT 1 port EDID setting. The source device will transmit again the signal to all outputs.
6	DIP switch (4K→1080p)	OFF: When the DIP switch is in 'OFF' position, signal input and output is bypass status. ON: When the DIP switch is in 'ON' position, the signal input will downscale(4k->1080P) output.

5.2 Rear Panel



Number	Name	Function description
1	HDMI OUTPUT	Connect to HDMI display device such as TV or monitor.
2	OPTICAL OUT	Optical audio output.
3	L/R OUT	Analog audio output.
4	HDMI IN	Connect to HDMI source device such as DVD player or PS4.
5	DC 5V	Plug the 5V/1A DC power supply into the unit and connected the adapter to an AC outlet.

6. Application Example



7. Warranty

Should you feel that this product does not function adequately due to defects in materials or workmanship, we (referred to as “the warrantor”) will, for the length of the period indicated below (starting from the original date of the purchase) either a) repair the product with new or refurbished parts. Or b) Replace the product with new or refurbished product. All Simplified MFG products are covered by a 3-year PARTS and LABOR warranty. During this period there will be no charge for unit repair, replacement of unit

components or replacement of the product if deemed necessary. The decision to repair or replace is made by the warrantor. The purchaser must mail in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferrable to subsequent owners, even during the warranty period. A purchase receipt or other proof of purchase date is required for the limited warranty service.

8. Contact

Sales and Tech Support

P. 833-HDMI-411 (833-436-4411)

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