

SY-HDS12-18G

User Manual

18G HDMI® Splitter

1x2 HDMI splitter with downscaling per output

Thank you for purchasing this product

This HDMI splitter is designed with professional AV installers in mind. The many extensive features assist in system integration, validation and maintenance.

Installation precautions

This HDMI splitter has special circuitry to protect it against moderate surges and static discharges. However, to ensure reliable operation and long service life, it is important to take the necessary precautions against any such spikes, surges and static discharges.

Place the units away from heat sources and allow adequate ventilation.

As much as possible cables should be routed away from any noisy sources and avoiding long runs in close proximity to AC mains cables.



The terms 'HDMI' and 'HDMI High-Definition Multimedia Interface', and the HDMI logo are trademarks or registered trademarks of HDMI LLC in the United States and other countries.

The SY-HDS12-18G HDMI splitter supports HDMI resolutions up to full 4K60 4:4:4 (18Gbps). HDR 10, HDR 12 formats are supported.

Features

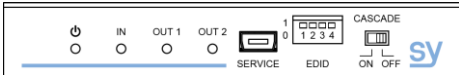
- All HDMI resolutions up to 4K60 4:4:4 – 18Gbps
- Auto Downscaling per each output (4K → 1080p)
- EDID and HDCP management (Cascade, auto HDCP2.2 → 1.4)
- Supports HDR 10, HDR 12
- Supports LPCM, Dolby TrueHD, and Dolby DTS-HD Master Audio up to 7.1 channels.
- Can directly drive AOC cables on each output

Packing List

- Main unit – SY-HDS12-18G
- User Manual
- Power Supply (5V 1A)

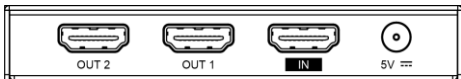
Connectors and Controls

Front



Name	Description
Power LED	Lit when the splitter is powered
IN LED	Indicates the presence of the input HDMI signal
OUT LEDs	Indicates the presence of the output HDMI signal
Service	For firmware upgrade only
EDID	4-way switch for setting the desired EDID
CASCADE	See Additional Options section below

Rear



Name	Description
OUT 1/2	HDMI outputs to the display devices
IN	HDMI input from the HDMI source device
5V	5V PSU input

Using the SY-HDS12-18G

- Connect the HDMI source device to the HDMI IN
- Connect the HDMI display devices to the HDMI OUT connectors
- Connect the PSU and power up

Additional Options

Cascade Mode Switch

ON – Cascade mode enabled

OFF – Cascade mode disabled

Note: When Cascade Mode is OFF, each output independently down-converts the input HDCP from HDCP 2.2 to HDCP 1.4, based on the capability of the display device.

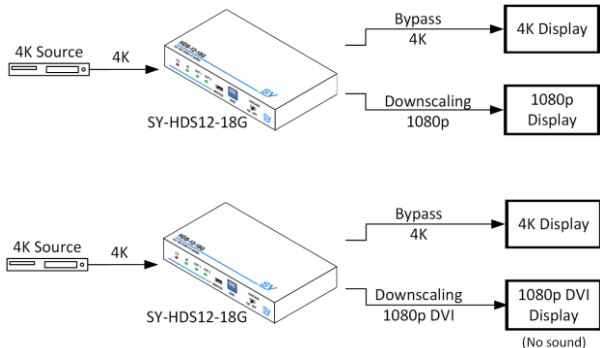
EDID Settings

In this table **0** means the respective switch is in the Down position, and **1** means the respective switch is in the Up position.

S1	S2	S3	S4	EDID Setting
1	1	1	1	4K60 444 Stereo audio 2.0ch
1	1	1	0	4K60 444 Dolby/DTS 5.1ch
1	1	0	1	4K60 444 HD Audio 7.1ch
1	1	0	0	4K30 444 Stereo audio 2.0ch
1	0	1	1	4K30 444 Dolby/DTS 5.1ch
1	0	1	0	4K30 444 HD Audio 7.1ch
1	0	0	1	4K24 444 HDR Stereo audio 2.0ch
1	0	0	0	4K24 444 HDR Dolby/DTS 5.1ch
0	1	1	1	4K24 444 HD Audio 7.1ch
0	1	1	0	1080p60 HDR Stereo audio 2.0ch
0	1	0	1	1080p60 HDR Dolby/DTS 5.1ch
0	1	0	0	1080p60 HDR HD Audio 7.1ch
0	0	1	1	1080p60 Stereo audio 2.0ch
0	0	1	0	1080p60 Dolby/DTS 5.1ch
0	0	0	1	1080p60 HD Audio 7.1ch
0	0	0	0	EDID bypass from OUT 1

Auto Downscaling

If the input resolution is greater than what the connected display device can show, it will be automatically down-scale to a resolution compatible with that display device.



Each output can independently Auto-downscale from 4K to 1080p, depending on the capability of the display device. This ensures optimal use of mixed capability displays.

Note: The SY-HDS12-18G is designed to accept AOC cables as well as HDMI cables.

Specifications

HDMI Resolutions	All resolutions up to 4K60 4:4:4 (18Gbps)
HDMI Standard	HDMI 2.0
HDCP Compliance	Up to HDCP 2.2
HDR	HDR10, HDR12
Audio	PCM 2.0ch, LPCM, Dolby TrueHD, DTS-HD Master Audio up to 7.1ch
Power	1.8 W
PSU	5V 1A
Operating Temperature	0°C to 40°C (32°F to 104°F)
Operating Humidity	20~90% RH (non-condensing)
Dimensions (WxHxD)	100 x 16 x 55 mm
Weight	165 g

Safety Instructions

To ensure reliable operation of this product as well as protecting the safety of any person using or handling these devices while powered, please observe the following instructions.

1. **ONLY USE** the power supply provided. If an alternate supply is required, check the voltage, polarity and that it has sufficient power to supply the device it is connected to.
2. **DO NOT** operate this product outside the specified temperature and humidity range given in the above specifications.
3. Ensure there is adequate ventilation as this product generates heat while operating.

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4. Repair of this product should only be carried out by qualified professionals as this product contains sensitive devices that may be damaged by any mistreatment.
 5. Only use this product indoors and in a dry environment. **DO NOT** allow any liquids or harmful chemicals to come into contact with this product.

After Sales Service

1. Should you experience any problems while using this product, firstly refer to your local dealer before contacting SY Technical Support.
2. When contacting SY Technical Support, please provide the following information:
 - Full Product Name and Model Number
 - Product Serial Number
 - Details of the fault and any conditions under which the fault occurs.
3. This product has a two year standard warranty beginning from the date of purchase as stated on the sales invoice. For full details please refer to our Terms and Conditions.
4. The SY Product warranty is automatically void under any of the following conditions:
 - The product is already outside of its warranty period
 - Damage to the product due to incorrect usage or storage
 - Damage caused by unauthorised repairs
 - Damage caused by mistreatment of the product

Please direct any questions or problems you may have to your local dealer before contacting SY Electronics.