



SP-HD-8A

HDMI Video splitter

1 input × 8 outputs

Allows display of HDMI A/V signals on up to 8 HDTV Displays

**CUSTOMER
SUPPORT
INFORMATION**

Order toll-free in the U.S. 800-959-6439
FREE technical support, Call **714-641-6607** or fax **714-641-6698**
Address: **Hall Research**, 1163 Warner Ave. Tustin, CA 92780
Web site: www.hallresearch.com E-mail: info@hallresearch.com

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FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been designed to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are intended to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



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1. Introduction

1.1 General

Thank you for purchasing the SP-HD-8A, 8-channel HDMI Video Splitter from Hall Research.

This device splits DVI or HDMI audio/video source for display on eight identical outputs. It supports HDTV resolutions to 1080p, is HDCP compliant, and is fully compatible with HDMI 1.4 deep color and 3-D formats.

It can drive each buffered output more than 12 meters (40 feet) on quality HDMI cables.

The device is a high-performance unit that digitally splits and buffers the input signal for a 100% perfect image and sound reproduction on all outputs.

1.2 Features

- Splits an HDMI source to 8 outputs without loss
- HDMI1.3, HDCP 1.1, and DVI1.0 Compliant.
- Supports HDMI 1.4 deep-color (upto 12 bits per color) and 3D formats
- Supports PC & HDTV resolutions, VGA to UXGA and HD from 480p to 1080p
- LED indicators for power, source signal, and 8 output connections
- 1 RU compact size, includes rack mount ears
- High bit-rate digital audio - Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio
- Can be cascaded up to 3 levels
- Each of the buffered outputs can run up to 12 meters (40 feet) at 1080i/1080p
- Plug and play installation – takes minutes to setup
- Bandwidth of 6.75 Gbps (Giga bits / second) for sharp digital image
- Supports xvYCC Color Space (IEEC 61966-2-4)
- Supports CEC Bypass
- Intelligent EDID Pass-through

2. Package Contents

- One SP-HD-8A HDMI Splitter unit
- One Power Supply
Input: 100 – 240V AC @ 50/60Hz,
Output: +5V DC, 6A. (current used by unit is approx 3A max)



- One pair of Mounting Brackets



- One User Manual

Note: HDMI Cables are not supplied with this unit. Please order those separately

3. Controls, Functions and Indicators



Figure – 1 Front Panel

Input Power Indicator

The unit does not have an on-off button. The power indicator is illuminated when power is applied to the unit.

HDMI Source Indicator

Source LED will illuminate when HDMI source signal is connected to the HDMI input port.

HDMI Output Indicator 1- 8

When the HDMI display is connected to the output ports, the corresponding LED will illuminate.



Rear Panel

HDMI Video Input and Outputs #1 and #8

All video connectors are located on the rear panel. You must have at least one display connected to one of the outputs.

DC Input Power Jack

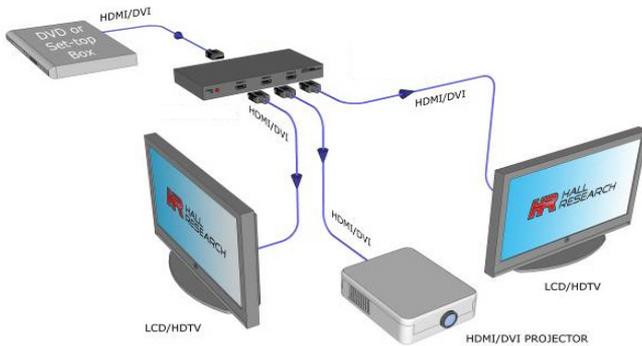
Plug the included power supply to this jack. The LED on the front panel will illuminate indicating power has been applied.

NEVER SUBSTITUTE ANY OTHER POWER SUPPLY AS THIS CAN DESTROY THE UNIT.



Use only regulated 5v DC supply (center positive) as supplied with the unit.

4. Connection Block Diagram



Connection Block Diagram

5. EDID Handling

After power-up, the unit scans the outputs and looks for connected display (sink) in ascending order (1 through 8). The EDID from the first discovered sink is recorded in internal memory and is passed on to the input source.

6. Cascading (daisy-chaining) to expand # of outputs

You can use any output to connect the splitter to another SP-HD-8A to expand the # of outputs. This can be done to a maximum of three (3) levels deep.

7. Contacting Hall Research and Shipping/Packaging

7.1 Contacting Hall Research

If you determine that your HDMI video splitter is malfunctioning, do not attempt to repair the unit; instead, contact Hall Research Technical Support at 714-641-6607.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description.

7.2 Shipping and Packaging

If you need to transport or ship your unit:

- Package it carefully. We recommend that you use the original container.
- Before you ship the units back to Hall Research for repair or return, contact us to get a Return Authorization (RMA) number.

8. Specifications

Video

Standards	HDMI 1.3, HDCP1.1 and DV11.0 (HDMI 1.4 for 3D and Deep-Color)
Input Port	1x HDMI Female Locking Connector (Type A)
Output Port Connectors	8x HDMI Female Locking Connector (Type A)
Video Resolutions	Locking HDMI Output resolution is same as input resolution. PC Resolutions : VGA - SVGA - XGA - SXGA - UXGA (1600x1200) Component Resolutions : 480i - 480p - 720p - 1080i - 1080p
Bandwidth	6.75 Gbps total (or 2.25Gbps per color, or 225 MHz TMDS clock)

Audio

Supported Formats	All HDMI Embedded Audio including LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio (32-192kHz sample rate)
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General

Power Supply	100 VAC to 240 VAC, 50-60 Hz, external; +5 V DC, Center-Positive Max Power Consumption = 15 watts with all outputs plugged in
Temperature/humidity	Storage: -40 to +185 °F (-40 to +85°C) / 10% to 90%, non-condensing Operating: +32 to +122 °F (0 to +40 °C) / 10% to 90%, non-condensing
Mounting	End plates have L bracket with hole for surface mounting
Enclosure type	Metal (Steel ends and Aluminum extrusion)
Dimensions	1.7" H x 17.125" W x 4.75" D (43.18mm H x 434.97mm W x 120.65mm D)
Product weight	Product - 1.1 lb (0.49kg) Shipping - 2.2 lbs (0.99 kg)
Safety	CE
EMI/EMC	CE, FCC Class A
MTBF	90,000 hours (Calculated Estimate)
Warranty	2 years parts and labor

Specifications are subject to change without notice



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