

# 4K HDMI® Splitters

with EDID and Scaling



**4K HDMI® Splitters  
with EDID and Scaling**

**Part Numbers:**

**EVSP12SC 1x2**

**EVSP14SC 1x4**

**EVSP18SC 1x8**

**EVOLUTION**  
BY  **VANCO**  
ADVANCING DIGITAL CONNECTIVITY

**www.vanco1.com • 800.626.6445**

## DEAR CUSTOMER

Thank you for purchasing this product.  
For optimum performance and safety, please  
read these instructions carefully before connecting, operating or  
adjusting this product. Please keep this manual for future reference.

This product is 100% inspected and tested in the United States to verify  
HDMI performance parameters.

## WARNING

1. Do not expose this unit to water, moisture, or excessive humidity.
2. Do not install or place this unit in a built-in cabinet, or other confined space without adequate ventilation.
3. To prevent risk of electrical shock or fire hazard, due to overheating do not obstruct unit's ventilation openings.
4. Do not install near any source of heat, including other units that may produce heat.
5. Do not place unit near flames.
6. Only clean unit with a dry cloth.
7. Unplug unit during lightening storms or when not used for an extended period of time. A surge protector is strongly recommended.
8. Protect the power cord from being walked on or pinched, particularly at the plugs.
9. Use unit only with accessories specified by the manufacturer.
10. Refer all servicing to qualified personnel.

## CAUTION

HDMI is a very complex technology requiring continuous authentication of the signal and the same video resolution and audio settings on all electronic equipment in the system. When there are multiple sources and displays, the video resolution and audio setting on all connected units must be adjusted to correspond with that of the display having the lowest video and audio capability.

# INTRODUCTION

The Evolution by Vanco EVSP12SC, EVSP14SC and EVSP18SC HDMI splitters with 4K, 4:4:4, and HDR pass-through, splits one source signal to multiple displays. These splitters are also able to downscale to 1080p, allowing 4K resolution to be maintained on other outputs. Also features EDID management, with different modes to ensure compatibility with source and display combinations. Supports LPCM 7.1CH, Dolby TrueHD, and DTS-HD Master Audio for advanced audio setups. Take any 4K source and split the signal to multiple displays, while being able to connect both 4K and 1080p displays simultaneously, to ensure the highest quality possible resolution. A great solution for applications with a mix of 4K and 1080p displays!

## 4K HDMI® 1x2 Splitter with EDID and Scaling

### Part # EVSP12SC

- Transmits audio and video from a single source to 2 HDMI outputs up to 4K2K (2160p) Ultra High Definition resolution without any loss of quality or resolution
- Supports 4K and 1080p resolutions simultaneously; downscales to 1080p for lower resolution displays while maintaining 4K on other outputs
- Supports up to 4K@60Hz with 8 bit YCBCR and 4:4:4 color sampling
- Supports up to 4K@60Hz with 10 bit YCBCR, 4:2:0 color sampling and HDR
- HDCP 2.2 and 1.4 compliant
- Wide frequency range: 25MHz~600MHz
- High bandwidth:18Gbps
- Features EDID management
- Micro-USB firmware update for expanding compatibility
- Dimensions: 3.75" W x 2.25" H x 1.6" D

## PACKAGE CONTENTS

- EVSP12SC 4K HDMI 1x2 Splitter
- DC 5V Power Supply
- Product Manual

## 4K HDMI® 1x4 Splitter with EDID and Scaling

Part # EVSP14SC

- Transmits audio and video from a single source to 4 displays up to 4K (2160p) Ultra High Definition resolution without any loss of quality or resolution
- Supports 4K and 1080p resolutions simultaneously; downscales to 1080p for lower resolution displays while maintaining 4K on other outputs
- Supports up to 4K@60Hz with 8 bit YCBCR and 4:4:4 color sampling
- Supports up to 4K@60Hz with 10 bit YCBCR, 4:2:0 color sampling and HDR
- HDCP 2.2 and 1.4 compliant
- Wide frequency range: 25MHz~600MHz
- High bandwidth: 18Gbps
- Features EDID management
- Micro-USB firmware update for expanding compatibility
- Dimensions: 4.43" W x 3.43" H x 1.6" D

## PACKAGE CONTENTS

- EVSP14SC 4K HDMI 1x4 Splitter
- DC 5V Power Supply
- Product Manual

# 4K HDMI® 1x8 Splitter with EDID and Scaling

Part # EVSP18SC

- Transmits audio and video from a single source to 8 HDMI outputs up to 4K2K (2160p) Ultra High Definition resolution without any loss of quality or resolution
- Supports 4K and 1080p resolutions simultaneously; downscales to 1080p for lower resolution displays while maintaining 4K on other outputs
- Supports up to 4K@60Hz with 8 bit color, and 4:4:4 color sampling
- Supports up to 4K@60Hz with 10 bit color, and 4:2:0 color sampling and HDR
- HDCP 2.2 and 1.4 compliant
- Wide frequency range: 25MHz~600MHz
- High bandwidth:18Gbps
- Features EDID management
- Micro-USB firmware update for expanding compatibility
- Dimensions: 9.1" W x 2.7" H x .9" D

## PACKAGE CONTENTS

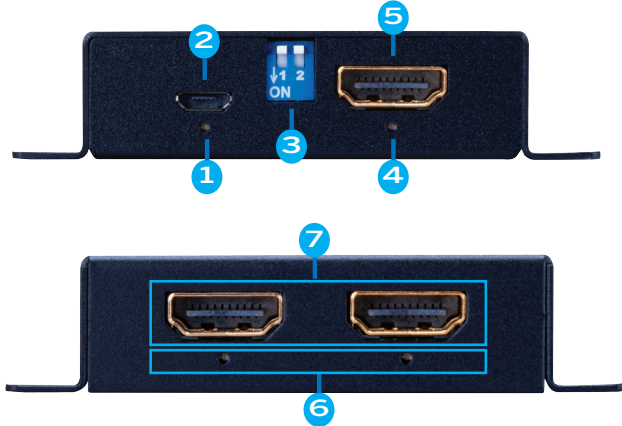
- EVSP18SC 4K HDMI 1x8 Splitter
- DC 5V Power Supply
- Product Manual

## SPECIFICATIONS









|                               |   |
|-------------------------------|---|
| HDMI Compliance .....         | HDMI 2.0a   |
| HDCP Compliance.....          | HDCP 2.2/1.4  |
| Video Bandwidth .....         | 600MHz/18Gbps   |
| Video Support .....           | HDR 4K@60Hz (4:2:0 10 bits)/ 4k@60Hz (4:4:4 8 bits)   |
| Audio Support .....           | DTS-HD Master Audio, Dolby TrueHD Dolby Digital, DTS, LPCM                                    |
| ESD Protection .....          | Human Body model: ±15kV (air-gap discharge) ±8 kV (contact discharge)                         |
| Firmware Update .....         | Feasible via Micro-USB port   |
| Input Ports.....              | 1 × HDMI (Female type)  |
| Output Ports .....            | 2, 4 or 8 × HDMI (Female type)  |
| HDMI Connector .....          | Type A (19-pin female)  |
| Dip Switch .....              | EDID Mode Selection   |
| Dimensions .....              | 1x2: 3.75" W x 2.25" H x 1.6"D; 1x4: 4.43" W x 3.43" H x 1.6" D; 1x8: 9.1" W x 2.7" H x .9" D |
| Weight .....                  | 1x2: 0.2 lbs; 1x4: 0.3 lbs; 1x8: 1 lbs  |
| Chassis Material.....         | Metal   |
| Mounting .....                | Wall-Mounting Case  |
| Power Supply .....            | 5V 1A DC  |
| Power Consumption (Max) ..... | 3 Watts (maximum)   |
| 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)   |

# PANEL DESCRIPTIONS

## EVSP12SC



1. Power LED: Illuminates when the splitter is connected to power
2. Micro-USB Port: Connect the included 5V DC power supply to power the unit
3. EDID MODE: Default EDID mode has been tested for compatibility with most source and display combinations, however to manually adjust EDID, see below for DIP Switch adjustments

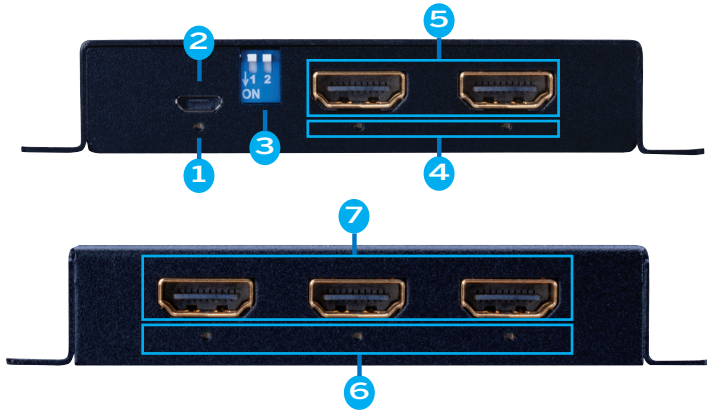
| <i>Dip Switch Position</i>  |  | <i>Description</i>  |
|---|--|---|
| Off    | Off   | Ultra HD (4K@60) - 8/10/12bit 3D HDR video & 7.1 ch audio |
| On    | Off  | Ultra HD (4K@60) - 8/10/12bit 3D HDR video & 2 ch audio   |
| Off  | On  | Ultra HD (1080p@60) - 12bit 3D video & 7.1 ch audio       |
| On   | On  | Learning EDID from output 1                               |

NOTE: The default settings on the DIP Switch is "OFF" for both switches. OFF is in the "Up" position, while ON is in the "Down" position

4. Input Signal LED: Illuminates when the source is connected and powered on
5. HDMI IN: Connect a source such as a Set Top Box, Game Console, media player, NVR/DVR, etc.
6. Output Signal LED: Illuminates when a display is connected and powered on
7. HDMI OUT 1-2: Connect HDMI displays to each output

NOTE: Automatic EDID learning will detect all the connected HDMI displays and will analyze the content. The maximum resolution support will automatically be chosen unless manually adjusted as shown above in the EDID table; Connect the lowest resolution display to output 1

## PANEL DESCRIPTIONS EVSP14SC



1. Power LED: Illuminates when the splitter is connected to power
2. Micro-USB Port: Connect the included 5V DC power supply to power the unit
3. EDID MODE: Default EDID mode has been tested for compatibility with most source and display combinations, however to manually adjust EDID, see below for DIP Switch adjustments

| <i>Dip Switch Position</i> |          | <i>Description</i>  |
|----------------------------|----------|---|
| Off<br>↑                   | Off<br>↑ | Ultra HD (4K@60) - 8/10/12bit 3D HDR video & 7.1 ch audio |
| On<br>↓                    | Off<br>↑ | Ultra HD (4K@60) - 8/10/12bit 3D HDR video & 2 ch audio   |
| Off<br>↑                   | On<br>↓  | Ultra HD (1080p@60) - 12bit 3D video & 7.1 ch audio       |
| On<br>↓                    | On<br>↓  | Learning EDID from output 1                               |

NOTE: The default settings on the DIP Switch is "OFF" for both switches. OFF is in the "Up" position, while ON is in the "Down" position

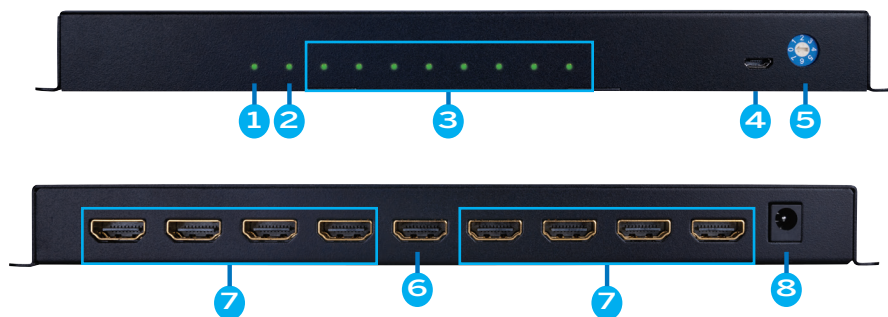
4. Input Signal LED: Illuminates when the source is connected and powered on; Output Signal LED: Illuminates when a display is connected and powered on
5. HDMI IN: Connect a source such as a Set Top Box, Game Console, media player, NVR/DVR, etc.; HDMI OUT: Connect HDMI display to the output (remaining outputs are on the opposite side of the unit)
6. Output Signal LED: Illuminates when a display is connected and powered on
7. HDMI OUT 1-3: Connect HDMI displays to each output

NOTE: Automatic EDID learning will detect all the connected HDMI displays and will analyze the content. The maximum resolution support will automatically be chosen unless manually adjusted as shown above in the EDID table; Connect the lowest resolution display to output 1



# PANEL DESCRIPTIONS

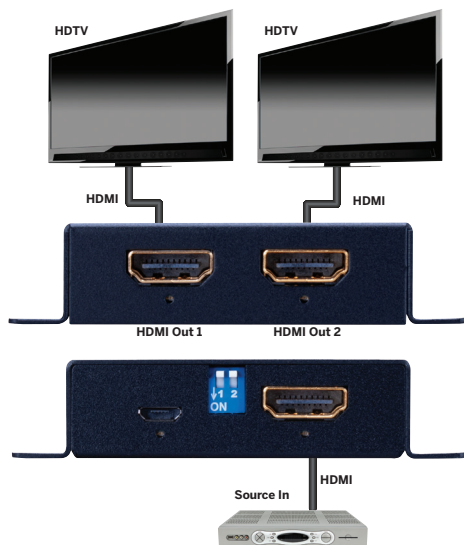
## EVSP18SC



1. Power LED: Illuminates when the splitter is connected to power
2. Input Signal LED: Illuminates when the source is connected and powered on
3. Output Signal LED: Illuminates when a display is connected and powered on
4. Micro-USB Port: Connect for any available firmware updates (check the product page on [www.vanco1.com](http://www.vanco1.com) under the "downloads" tab)
5. EDID MODE: Default EDID mode has been tested for compatibility with most source and display combinations, however to manually adjust EDID, see below for EDID settings (turn arrow to select EDID setting with a small flathead screwdriver)
  - 0: Ultra HD(4K2K@60) – 8/10/12bit 3D HDR video & 7.1ch audio
  - 1: Ultra HD(4K2K@60) – 8/10/12bit 3D HDR video & 2ch audio
  - 2: Ultra HD(4K2K@30)(4K2K@60 420) – 8/10/12bit 3D HDR video & 7.1ch audio
  - 3: Ultra HD(4K2K@30)(4K2K@60 420) – 8/10/12bit 3D HDR video & 2ch audio
  - 4: Full HD(1080p@60) – 12bit 3D video & 7.1ch audio
  - 5: Full HD(1080p@60) – 8bit 2D video & 2ch audio
  - 6: Learning EDID from output 1
  - 7: Auto EDID analysis learning mode
6. HDMI IN: Connect a source such as a Set Top Box, Game Console, media player, NVR/DVR, etc.
7. HDMI OUT 1-8: Connect HDMI displays to each output
8. Power: Connect the included 5V DC power supply to power the unit

## CONNECT AND OPERATE

### EVSP12SC

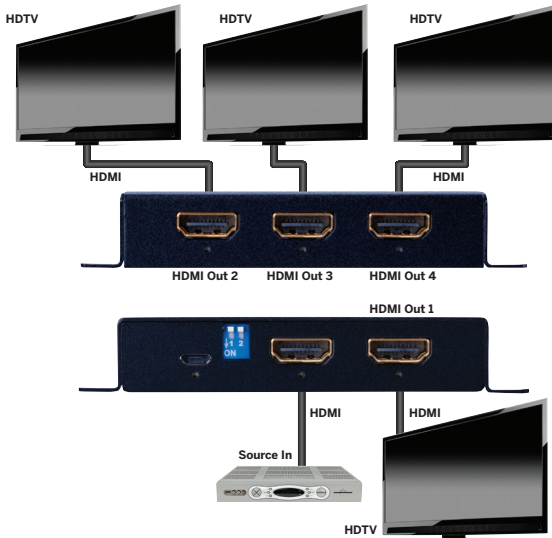


1. Ensure all components including splitter, displays, and source are turned off.
2. Connect the displays to the splitter, with the lowest resolution display connected to output 1
3. Connect a source such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI input
4. Plug in 5V DC power supply to power the splitter, then power on the displays, followed by the source

NOTE: If using a mix of 4K and 1080p displays, verify resolution on each display by pressing "info" on display remote(s). The splitter will automatically downscale for 1080p displays, as long as lowest resolution display is connected to Output 1.

NOTE: If intending to pass HDR, activate HDR on the display's settings. De-activate HDR if not intending to pass HDR.

## EVSP14SC

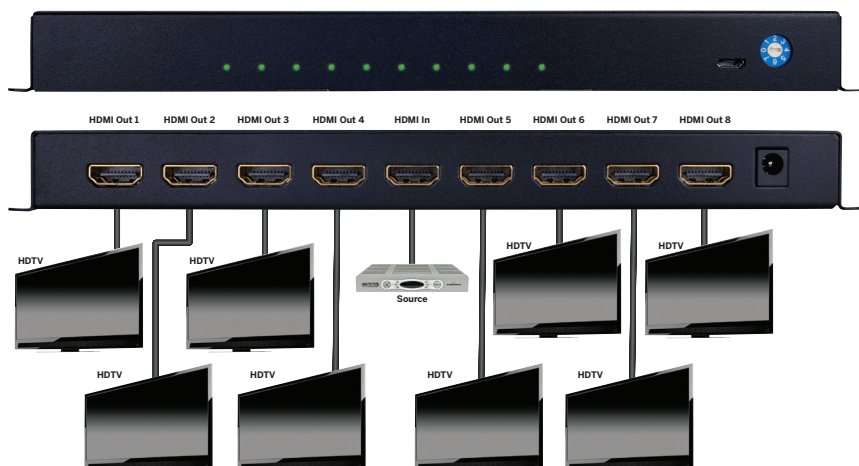


1. Ensure all components including splitter, displays, and source are turned off.
2. Connect the displays to the splitter, with the lowest resolution display connected to output 1
3. Connect a source such as a Blu-Ray Player, game console, AV Receiver, Cable or Satellite Receiver, etc. to the HDMI input
4. Plug in 5V DC power supply to power the splitter, then power on the displays, followed by the source

NOTE: If using a mix of 4K and 1080p displays, verify resolution on each display by pressing "info" on display remote(s). The splitter will automatically downscale for 1080p displays, as long as lowest resolution display is connected to Output 1.

NOTE: If intending to pass HDR, activate HDR on the display's settings. De-activate HDR if not intending to pass HDR.

## EVSP18SC



1. Ensure all components including splitter, displays, and source are turned off
2. Connect the displays to the splitter, with the lowest resolution display connected to output 1
3. Connect a source such as a Blu-Ray Player, game console, A/V Receiver, Cable or Satellite Receiver, etc. to the HDMI input
4. Plug in 5V DC power supply to power the splitter, then power on the displays, followed by the source

NOTE: If using a mix of 4K and 1080p displays, verify resolution on each display by pressing "info" on display remote(s). The splitter will automatically downscale for 1080p displays, as long as lowest resolution display is connected to Output 1

NOTE: If intending to pass HDR, activate HDR on the display's settings. De-activate HDR if not intending to pass HDR

# FIRMWARE UPDATE

A Firmware update can be done when necessary and available through the Micro-USB port. Any available firmware updates will be posted within the "Downloads tab" of this product on [www.vanco1.com](http://www.vanco1.com).

1. Save the firmware file (.bin) & software in the same folder from the product page on the Vanco website
2. Connect the Micro-USB cable to connect the splitter to a Windows based PC
3. Open firmware update software and then device will start to update firmware automatically
4. After update process is completed, the software will display a "Success" message, and then will automatically close the Firmware Update prompt
5. Power cycle the splitter

## SAFETY AND NOTICE

These splitters have been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, these splitters should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit
- Do not attempt to service this unit yourself, except where explained in this manual
- Provide proper ventilation and air circulation and do not use near water
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface
- Use only the power adapter and power cords and connection cables designed for this unit
- Do not use liquid or aerosol cleaners to clean this unit
- Always unplug the power to the device before cleaning

## LIMITED WARRANTY

With the exceptions noted in the next paragraph, Vanco warrants to the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in Vanco's opinion, prove defective within this warranty period, Vanco, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of Vanco. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into Vanco products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to Vanco. A surge protector, power conditioner unit, or an uninterruptible power supply must be installed in the electrical circuit to protect against power surges.

If repairs are needed during the warranty period the purchaser will be required to provide a sales receipt/sales invoice or other acceptable proof of purchase to the seller of this equipment. The seller will then contact Vanco regarding warranty repair or replacement.

## TECHNICAL SUPPORT

In case of problems, please contact Vanco Technical Support by dialing 1-800-626-6445. You can also email technical support issues to [techsupport@vanco1.com](mailto:techsupport@vanco1.com).

When calling, please have the Model Number, Serial Number (affixed to the bottom of the unit) and Invoice available for reference during the call.

Please read this Instruction Manual prior to calling or installing this unit, since it will familiarize you with the capabilities of this product and its proper installation.

All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theater applications.

For additional information, such as helpful installation videos, etc. please visit [www.vanco1.com](http://www.vanco1.com)

## LIABILITY STATEMENT

Every effort has been made to ensure that this product is free of defects. The manufacturer of this product cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user and installer of the hardware to check that it is suitable for their requirements and that it is installed correctly. All rights are reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

Manufacturer reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.



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