

## Specification

| Model Name            | VSP-4KH-1H2H  | VSP-4KH-1H4H                                      |
|-----------------------|---|---|
| Input Connector       | HDMI Female x 1   | HDMI Female x 1                                   |
| Output Connector      | HDMI Female x 2   | HDMI Female x 4                                   |
| Max. Video Resolution | 4K@60Hz (4:4:4)   |   |
| LED Indicators        | Status LED x 1 (Multi-Colour)<br>Video Output x 2   | Status LED x 1 (Multi-Colour)<br>Video Output x 4 |
| Max. Frequency        | 600 MHz   |   |
| EDID Copy Button      | x1  |   |
| Function Slide Switch | x 1<br>1. EDID Copy & Auto EDID Learning<br>2. Auto EDID Mixing<br>3. 4K, 3G, HDCP 1.4 / HDCP 2.2<br>4. 4K, 6G, HDCP 1.4 / HDCP 2.2 |   |
| Mini-USB Port         | x 1 (for Firmware Update)   |   |
| Enclosure             | Metal   |   |
| Power Supply          | DC 12V  |   |
| Operating Environment | 0 ~ 40°C, Humidity < 80%  |   |
| Storage Temperature   | -20 ~ 60°C  |   |
| H x W x D (mm)        | 20 x 156 x 25   |   |
| Weight (g)            | 250   | 305   |

### Limited Warranty

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## Installation

- Prior to installation, ensure that all devices that will be connected to this system are powered off.
- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise.

1 pc of HDMI cable is required to connect from a video source to the Video Splitter Input port. Multiple monitors or TVs should be connected to the Video Splitter's output ports. Turn on your video source only after you've made all the connections.

### NOTE:

- The splitter unit is HDCP compliant and required to use HDCP-compliant display when it is connecting to the HDCP video source.
- Each output port on the Unit is required to apply the same connection pattern whenever a DVI-to-HDMI (or HDMI-to-DVI) adapter is used for HDMI (or DVI) signal conversion between the Unit and the HDMI (or DVI) display. Mix of HDMI and DVI output connections may cause signal degradation.
- Please use high quality HDMI cable, otherwise the supported resolution and video quality may be limited.

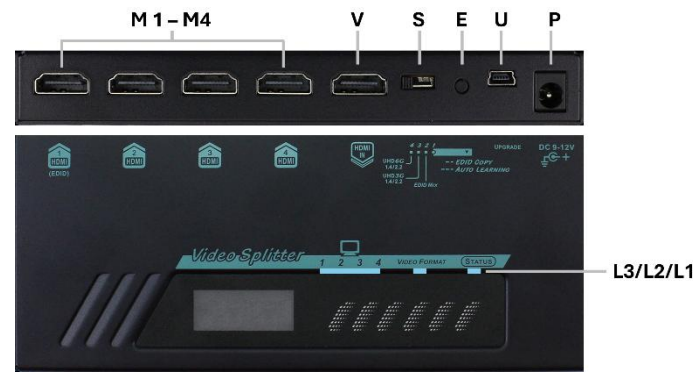
### LED Indicator (L1)

| Power LED             | Status               |
|-----------------------|----------------------|
| Steady Green          | Power On             |
| Steady Blue           | Non HDCP Source Link |
| Steady Purple         | HDCP 1.4 Source Link |
| Purple goes off twice | HDCP 2.2 Source Link |
| Steady Green          | Display Link         |
| Green goes off        | Display Unlink       |

## Operation

The quality of the output signal depends on the quality of video source, cable and display device. Low quality cables degrade output signal causing elevated noise levels. Please use Premium 4K@60Hz cable and make sure the display device is capable of handling the resolution and refresh rate selected. Interference from nearby electrical devices can have an adverse effect on signal quality as well.

## Product Description



(Illustration showing VSP-4KH-1H4H 4-Port Model)

| Label    | Functions        |   |
|----------|------------------|---|
| V        | HDMI Input Port  | Connects to an HDMI Source  |
| M1-M4    | HDMI Output Port | Connects to an HDMI Display   |
| L1/L2/L3 | LED Indicator    | Status / Mode/ Video Output LED   |
| P        | Power Supply     | Apply power from power supplier to the unit   |
| S        | HDCP Switch      | Setup HDCP version and max. resolution  |
| U        | Mini USB Port    | Firmware upgrade  |
| E        | EDID Copy Button | Hot plug monitor, Copy the monitor's EDID, Auto Learning EDID from (M1) or Factory Default setup (See EDID Configuration) |

Remark: EDID Copy & Auto Learning EDID function can only be executed via HDMI output port **M1**

\*The unit does not have HDMI Screw-Lock.

## Resolution / HDCP Setting Switch



| Mode | Function                  | HDCP       |
|------|---------------------------|------------|
| 1    | EDID Copy & Auto Learning | N/A        |
| 2    | Auto Mixing Mode          | 1.4 or 2.2 |
| 3    | 4K 3G UHD Mode            | 1.4 or 2.2 |
| 4    | 4K 6G UHD Mode            | 1.4 or 2.2 |

- EDID Function Mode:** Execute Hot Plug, EDID Copy, Auto Learn EDID, Factory Default Setup Function
- Auto Mixing Mode:** Automatically perform the minimum resolution among all connected displays
- 4K 3G UHD Mode:** Duplicate 4K@30Hz HDMI signal to multiple HDCP 1.4 or HDCP 2.2 display
- 4K 6G UHD Mode:** Duplicate 4K@60Hz HDMI signal to multiple HDCP 1.4 or HDCP 2.2 display

### Mode LED Definition (L2)

| LED                       | Mode 1          | Mode 2      | Mode 3           | Mode 4           |
|---------------------------|-----------------|-------------|------------------|------------------|
| Flashes Green once        | None Action     | Auto Mixing | 4K 3G / HDCP 1.4 | 4K 6G / HDCP 1.4 |
| Flashes Green twice       | EDID Copy       | Auto Mixing | 4K 3G / HDCP 2.2 | 4K 6G / HDCP 2.2 |
| Flashes Green three times | Auto Learn EDID | None Action | None Action      | None Action      |

## EDID Configuration

In some cases, users may suffer from display problems due to incorrect EDID communication between the display monitor and the PC graphics card or insufficient EDID data programmed by display manufactures. The Unit provides many ways of EDID reading that allows it to read the necessary EDID information from the attached video display and then always provides it to the attached video source. If no new EDID information is available from a display, a default profile in the Unit is automatically provided instead.

To efficiently achieve EDID communication when the video source is booting up, users are required to implement the EDID Configuration on the Unit before the operations. Functions describe as below:

## Features

- Easy and affordable way to duplicate a single video input to multiple HDMI outputs.
- EDID copy function for high-definition display.
- Enable Learn EDID automatically for multimedia/home theatre system integration.
- Cascaded operation for increased signal outputs.
- Crisp, clear video images.
- Supports HDCP 1.4/HDCP 2.2 and is Blu-ray ready for high-definition display.
- Supports HDMI display resolutions up to 4K UHD (3840 x 2160@60Hz), 4K UHD (3840 x 2160@30Hz), WUXGA (1920 x 1200), Full HD 1080p (1920 x 1080), and other popular resolutions.
- Unique 4K, 3G/6G, HDCP 1.4/HDCP 2.2 video format setup function.
- LED indicators for signal activity monitoring.
- Accurate and reliable reproduction of digital video signals without attenuation or distortion.
- Installs in seconds.

## Package Contents

- 1 x Video Splitter
- 1 x Power Adapter Set
- 1 x User Manual
- 1 x Foot Pad Set

# User Manual

## 4K@60Hz HDMI 2.0 Video Splitter with EDID Management



VSP-4KH-1H4H



VSP-4KH-1H2H



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- The final specification is based on the actual product.
- Features and functions may be added or changed after the manual was written. Please visit our website to download the latest version of manual for reference.

RXN-VSP-R01.2



## Push Button Overview

Use "EDID COPY" button to accomplish the purpose below:

- Press the button and release it immediately to execute hot plug function
- Press the button and hold around 3 - 6 sec. to execute EDID Copy function
- Press the button and hold around 6 - 12 sec. to enter auto learning EDID mode
- Press the button and hold above 12 sec. to reset the state to Factory Default

For more information, please see each section.

### EDID Copy

- Connect the monitor (EDID compliant) to the HDMI Output Port (**M1**) on the Unit and power on the monitor.
  - Press the button "EDID COPY" and hold 3 - 6 seconds and release it RIGHT AFTER the Mode LED (**L2**) flashes green twice.
  - The Power LED (**L1**) returns to blue indicating EDID copy is completed.
- Remark: If the Power LED (**L1**) flashes Red, means EDID Copy or Auto Learn EDID not successful, the relevant EDID will keep last set up.

### Auto Learn EDID

- Connect the monitor (EDID compliant) to the Video Output Port (**M1**) on the Unit and power on the monitor.
- Press the button "EDID COPY" and hold 6 - 12 seconds and release it RIGHT AFTER the Power LED (**L1**) flashes green, red and green three times.
- The power LED (**L1**) returns to blue indicating auto learn EDID is completed.

### Hot Plug

- Connect the monitor (EDID compliant) to the Video Output Port (**M1**) on the Unit and power on the monitor.
- Press the button "EDID COPY" and release the button RIGHT AFTER.
- The power LED (**L1**) returns to blue indicating hot plug is completed.

## Factory Default Setting

To avoid confusion about which EDID information has been copied, this function allows you to reset the state to the factory default by following these instructions:

- Press and hold the button "EDID COPY" more than 12 seconds and release the button RIGHT AFTER the LED (**L1**) flashes white.
- The LED (**L1**) returns to blue indicating Factory Default is completed.

## Troubleshooting

| Symptom                        | Possible Cause   | Solution  |
|--------------------------------|--|---|
| Video does not display         | Wrong installation process   | The video splitter requires at least one monitor connection before powering on the source device.                                   |
| Erratic behaviour              | Splitter may not receive enough power  | Please check the power adapter attached to the splitter if it matches the system specifications, and if it is functioning properly. |
| Not receiving picture or sound | The signal source may require the display device that is HDCP compliant.                             | Check if the display monitor is HDCP compliant. HDCP prevents the transfer of digital content to unauthorized HDMI devices.         |
|                                | The display monitor is added to the unit by hot-plug, but the video source may not support hot-plug. | Check if the video source supports hot-plug. If it doesn't, shut down the source device and reboot it again.                        |
|                                | The attached devices are not well connected.   | Check if you have connected your components correctly   |