

# USER MANUAL

## AVG-UDA4 V2

Distribution Amplifier  
4K HDMI 1x4

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Version: UDA4\_V2\_2017V1.0



The AVG-UDA4 V2 is a 4K HDMI splitter with the ability to transmit an HDMI or DVI source to 4 displays simultaneously. Compliant with HDMI2.0 & HDCP2.2, the AVG-UDA4 V2 provides comprehensive resolution capacities up to 4K, 1080P & 3D.

### Features

- 4 simultaneous HDMI outputs
- HDMI2.0 & HDCP2.2 compliant, and backwards compatible with previous versions
- Transmits 4Kx2K HDMI up to 10m
- Max. Resolution 4Kx2K@60Hz 4:4:4
- High bandwidth: 18Gbps
- HDCP compliant
- Auto-identify input resolution
- Supports EDID management, automatically adopts the resolution of the first connected display
- Intuitive indicator for connection status & input HDCP compliance status
- Easy to update firmware

**PLEASE READ THIS PRODUCT MANUAL CAREFULLY  
BEFORE USING THIS PRODUCT.**

This manual is only for operation instruction only, and not to be used in a maintenance capacity. The functions described in this version are current as at May 2017. Any changes of functions and operational parameters will be updated in future manual versions. Please refer to your dealer for the latest product details.

Version 1.0 18/5/17

## SAFETY OPERATION GUIDE



In order to guarantee the reliable operation of the equipment and safety of the user, please abide by the following procedures in installation, use and maintenance:

1. The system must be earthed properly. Please do not use two blade plugs and ensure the AC power supply ranges from 100v to 240v and from 50Hz to 60Hz.
2. Do not install the switcher in an environment where it will be exposed to extreme hot or cold temperatures.
3. This unit will generate heat during operation, please ensure that you allow adequate ventilation to ensure reliable operation.
4. Please disconnect the unit from mains power if it will be left unused for a long time.
5. Please **DO NOT** try to open the casing of the equipment, **DO NOT** attempt to repair the unit. Opening the unit will void the warranty. There are high voltage components in the unit and attempting to repair the unit could result in serious injury.
6. Do not allow the unit to come into contact with any liquid as that could result in personal injury and product failure.

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### 1. Introduction

#### 1.1. Introduction to the AVG-UDA4 V2

The AVG-UDA4 V2 is a 4K HDMI splitter with the ability to transmit an HDMI or DVI source to 4 displays simultaneously. Compliant with HDMI2.0 & HDCP2.2, the AVG-UDA4 V2 provides comprehensive resolution capacities up to 4K and 1080p 3D. It's capable of automatically recognising the resolution and the HDCP compliant status of the input signal. The Input signal is equalised for reliable transmission with its EDID Management.

The AVG-UDA4 V2 can be easily updated via its USB port.

#### 1.2. Features

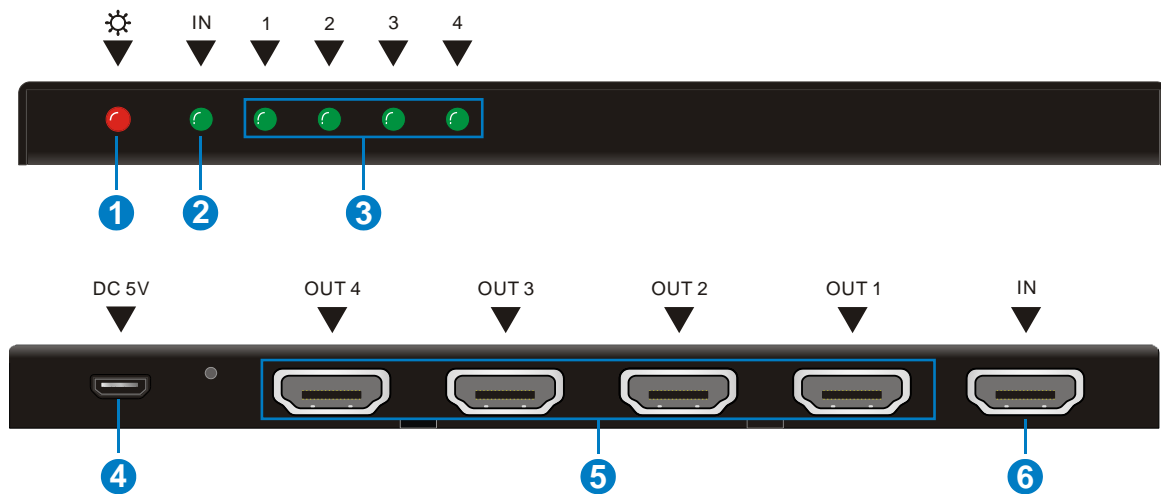
- 1 HDMI Input and 4 simultaneous HDMI outputs
- Hot plugging supported
- HDMI2.0 & HDCP2.2 compliant, and backwards compatible with previous versions
- Transmits 4Kx2K HDMI up to 10m
- Max. Resolution 4Kx2K@60Hz 4:4:4
- High bandwidth: 18Gbps
- HDCP compliant
- Auto-identify input resolution
- Supports EDID management, automatically adopts the resolution of the first connected display
- Intuitive indicator for connection status & input HDCP compliance status
- Convenient online firmware update

#### 2. What's in the Box

- 1 x AVG-UDA4 V2
- 2 x Mounting ears (separate from AVG-UDA4 V2)
- 4 x Screws
- 4 x Rubber Feet
- 1 x Power Adapter (DC 5V 2A)
- 1 x User Manual

**Note:** Please confirm if the product and all accessories are all included, if not, please contact your dealer.

### 3. Product Appearance



No.	Name	Description
①	Power indicator	Illuminates red once powered on
②	Input HDCP compliant Indicator	Indicates the HDCP compliant status of the input signal <ul style="list-style-type: none"> <li>▪ Illuminates green when the input signal has HDCP</li> <li>▪ Blinks green when the input signal does not have HDCP</li> <li>▪ OFF: No HDMI traffic (no picture) or abnormal connection</li> </ul>
③	Output signal Indicators	Illuminates green when there is HDMI output, corresponds with HDMI OUTPUT 1~2 separately
④	Micro USB	Plug a DC 5V power supply for power. Or use a U-disk for firmware updating.
⑤	OUT1 to OUT4	HDMI output ports, connect to your HDMI displays.
⑥	IN	HDMI input port, connect your HDMI or DVI source here.

**Note:**

- a) Pictures shown in this manual are for reference only, models may vary slightly.
- b) The Output HDCP compliant status depends on the input signal. When the input signal is with HDCP, then output signal is with HDCP and vice versa.
- c) HDMI signal contains both HDMI video signal and embedded audio signal (PCM, Dolby Digital, DTS, DTS-HD), while the DVI signal contains only a video signal.
- d) The AVG-UDA4 V2 can switch input signal formats according to the displays.  
For example, when the input signal is HDMI and the display can only support a DVI signal, the AVG-UDA4 V2 will change the signal to the DVI format.
- e) EDID Management: automatically manages the output signal (e.g. output resolution) to fit all displays.

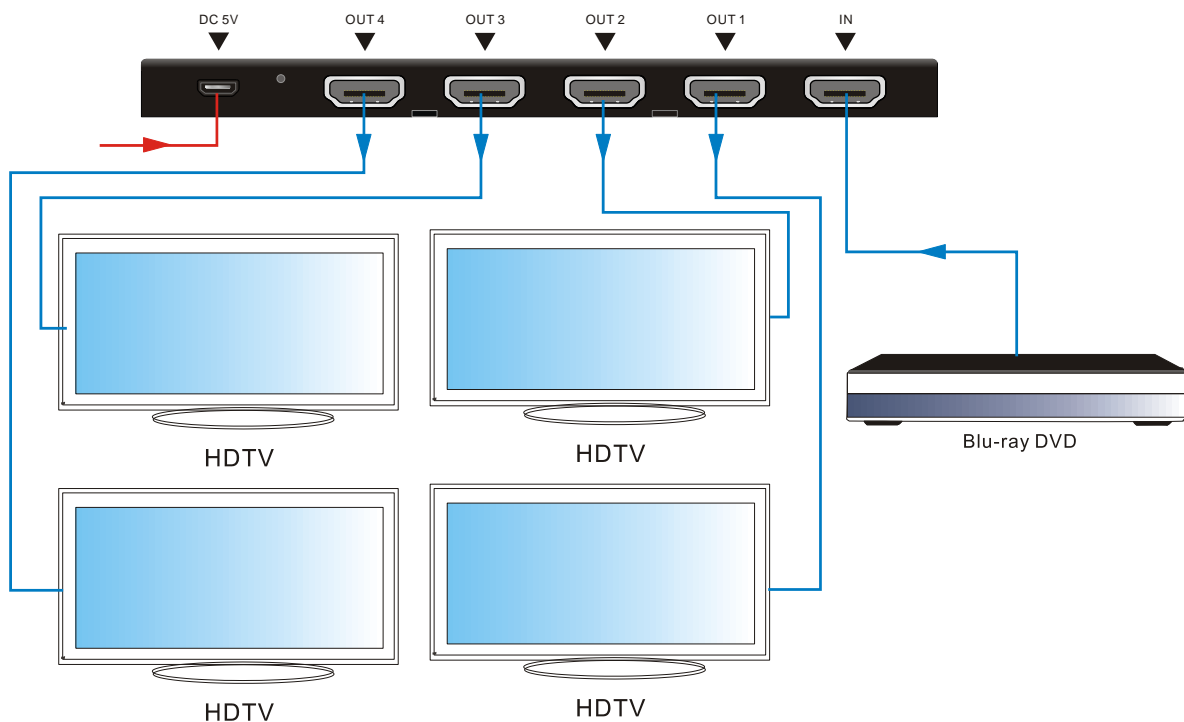
## 4. System Connection

### 4.1 Usage Precautions

1. System should be installed in a clean environment with temperature and humidity maintained to within equipment specification.
2. All of the power switches, plugs, sockets and power cords should be insulated and safe.
3. All devices should be connected before power on.

### 4.2. Connection Diagram

The following diagram illustrates typical input and output connections that can be utilised with the AVG-UDA4 V2.



### 4.3 Connection Procedure

- Step 1.** Connect an HDMI/ DVI source device (e.g. Blu-ray DVD) to the **HDMI INPUT** socket of AVG-UDA4 V2 with a HDMI cable.
- Step 2.** Connect the HDMI displays to **HDMI OUTPUT** sockets of AVG-UDA2 V2 with HDMI cables.
- Step 3.** Plug a DC 5V power adapter to the power port of AVG-UDA4 V2.

**Note:** All the ports support hot-plug. It's important to know that hot plugging a display may result in splash screen at the output ends.



### 4.4 EDID Management

The AVG-UDA4 V2 features 1 HDMI input port and 2 HDMI output ports. It also features built-in EDID management.

1. When all output ports are connected to the displays, the source device will acquire the EDID data from the display connected to the output 1 port. At this point, if you disconnect the output 1 display and want the source device to gain the EDID from output 2, the AVG-UDA4 V2 will need to be restarted.
2. All connected displays should be compatible, for example: when output 1 connects with a 1080p display, the AVG-UDA4 V2 will select 1080p as output resolution and distribute 1080p signal to the displays connected to outputs 1~2. If the display connected to output 2 doesn't support a 1080p signal, there will be no output on the display.

### 4.5 Application

Robust performance for signal transmission makes the AVG-UDA4 V2 ideal in the custom installation industry, IT computer space, signal monitoring, big screen displays, conference systems, television broadcast, education, banking and security institutions etc.

## 5. Specification

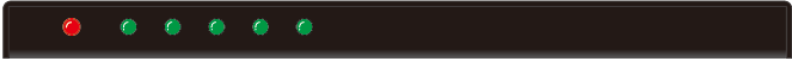
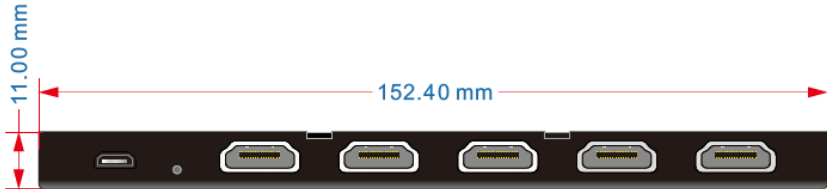
<b>Video Input</b>	
Input	1 HDMI
Input Connector	1 female type A HDMI 2.0
<b>Video Output</b>	
Output	4 HDMI
Output Connector	4 female type A HDMI 2.0
<b>Video General</b>	
Max data rate	18 Gbit/s
Max Resolution	4Kx2K@60Hz 4:4:4
HDCP	Compliant with HDCP2.2 and is backwards compatible with HDCP1.4
EDID	In-built EDID management
<b>General</b>	
Temperature	0 ~ 55°C
Reference Humidity	10% ~ 90%
Power Consumption	6.5 W (Max)
Power Supply	Input: 100V – 240V AC Output: DC 5V 2A
Weight	140g
Dimensions (W*H*D)	152 x 11 x 70mm

**5.1. Supported Input Video Formats**

<b>Input Resolution</b>	<b>HDMI</b>	<b>DVI</b>
720 x 480@60Hz	☑	☑
720 x 480I@30Hz	☑	☑
720 x 576@50Hz	☑	☑
720 x 576I@25Hz	☑	☑
1280 x 720@50Hz	☑	☑
1280 x 720@60Hz	☑	☑
1920 x 1080@25Hz	☑	☑
1920 x 1080@50Hz	☑	☑
1920 x 1080@60Hz	☑	☑
1920 x 1080I@25Hz	☑	☑
1920 x 1080I@30Hz	☑	☑
3840 x 2160@25Hz	☑	
3840 x 2160@30Hz	☑	
3840 x 2160@60Hz	☑	
1080P 3D@60Hz	☑	

**Note:** The AVG-UDA4 V2 supports 4K and 3D HDMI signals, please use good quality HDMI cables compliant with HDMI2.0 for reliable operation when connecting 4K or 3D sources.

### 6. Panel Drawing



## 7. Troubleshooting & Maintenance

Problems	Causes	Solutions
Color loss or no video signal output	The Connection of the cabling may be incorrect or faulty	Check whether the cables are connected correctly and in working condition.
	Failed or loose connection	Make sure the connection is secure
No Video output when switching	No signal at the input / output end	Check with oscilloscope or multimeter if there is any signal at the input/ output end.
	Failed or loose connection	Make sure the connection is good
	The display doesn't support the input resolution.	Switch to another input source or enable the display to learn the EDID data of the input.
	Failed or loose power connection	Check whether the cables are connected correctly
Power Indicator remains off when powered on	Faulty HDMI Cable	Change for another HDMI cable which is in good working condition.
EDID management does not work normally There is a blank screen on the display when switching	The display does not support the resolution of the video source.	Switch again.
		Manage the EDID data manually to make the resolution of the video source automatically compliant with the output resolution.
	Wrong connection	Check to ensure the connection between the control device and the unit
Static becomes stronger when connecting the video connectors	Poor grounding or the device has a previous fault	Check the grounding and make sure it is connected securely