



# 2x4 HDMI Splitter with EDID Manager



## Safety and Notice

The AV-GM06K3-S1 2x4 HDMI Splitter with EDID Manager has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the AV-GM06K3-S1 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.



### **TABLE OF CONTENTS**

INTRODUCTION.....	1
FEATURES.....	1
PACKAGE CONTENTS .....	1
SPECIFICATIONS .....	2
PANEL DESCRIPTIONS.....	3
SWITCH SETTING .....	4
EDID LEARNING .....	5
HDMI PIN DEFINITION.....	5
HARDWARE INSTALLATION.....	6
CONNECTION DIAGRAM .....	<b>Error! Bookmark not defined.</b> 5
WARRANTY .....	7

# INTRODUCTION

The **AV-GM06K3-S1 2x4 HDMI Splitter with EDID Manager** allows you to distribute one of the two HDMI/DVI video sources up to 8 separate HDTV displays including one remotely cascade output via Cat-5/5e cost effective cable. This splitter offers the most flexible solution by which the high definition video and high quality audio can be transmitted to different local locations through HDMI cables and also to the next stage over a long distance without degrading the quality. The cascade ability allows pure digital video and audio broadcast station by station and therefore make extending HDMI compliant video and audio anywhere feasible.

## FEATURES

- State-of-the-art Silicon Image (founder of HDMI) chipset embedded for upmost compatibility and reliability
- Support HDMI Deep Color & 3D
- HDCP compliant
- HDMI video distribution to up to 4 displays and cascade to another AV-GM06K3-S1
- Acts as a 2x1 HDMI switch plus a 1x4 HDMI splitter
- Regenerates the HDMI signal
- Supports default HDMI EDID and has the ability to learn the EDID of displays
- Input up to 15m (50ft) using HDMI cables
- Outputs up to 15m (50ft) using HDMI cables
- Pure unaltered uncompressed 7.1ch digital HDMI over LAN cable transmission
- Allows cascading
- Perfectly integrated with other HDMI over Cat.X series products



The length depends on the characteristics and quality of the cables. Higher resolutions and longer transmission distances require low skew cables (<25ns/100m) for best performance.

## PACKAGE CONTENTS

- 1x AV-GM06K3-S1
- 1x DC 5V 4A in-line with C7 power cord
- 1x User Manual

# SPECIFICATIONS

Model Name	AV-GM06K3-S1	
Technical		
Role of usage	2x4 Distribution Amplifier Transmitter [TX]	
HDMI compliance	HDMI Deep Color & 3D	
HDCP compliance	Yes	
Video bandwidth	Single-link 225MHz [6.75Gbps]	
Video support	480i / 480p / 720p / 1080i / 1080p60	
Transmission over UTP cable (24-bit)	Full HD (1080p) - up to 15m (130ft)	
Audio support	Surround sound (up to 7.1ch) or stereo digital audi	
Signal equalization	N/A	
Input TMDS signal	1.2 Volts [peak-to-peak]	
Input DDC signal	5 Volts [peak-to-peak, TTL]	
ESD protection	[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±8kV	
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]	
Input	2x HDMI	
Output	4x HDMI	
HDMI connector	Type A [19-pin female]	
RJ-45 connector	WE/SS 8P8C with 2 LED indicators	
Terminal block	5	
Mechanical		
Housing	Metal enclosure	
Dimensions [L x W x H]	Model	201 x 110 x 27mm [7.9" x 4.3" x 1"]
	Package	330 x 200 x 95mm [1'1" x 7.9" x 3.7"]
	Carton	495 x 440 x 380mm [1'7" x 1'5" x 1'3"]
Weight	Model	573g [1.3 lbs]
	Package	TBA
Fixedness	Wall-mount case	
Power supply	5V 4A DC	

Power consumption	10 Watts [max]
Operation temperature	0~40°C [32~104°F]
Storage temperature	-20~60°C [-4~140°F]
Relative humidity	20~90% RH [no condensation]

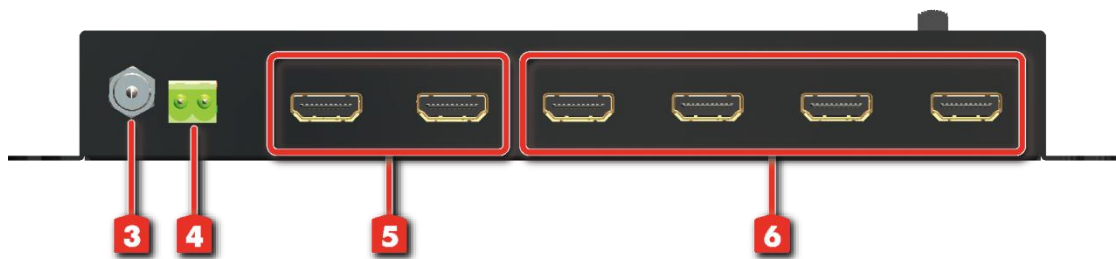
## PANEL DESCRIPTIONS

### Front Panel



1. **Power/Signal LED:** Red light means power indicator. Green light means signal detector.
2. **IN 1/IN 2 LED:** Red light means HDMI source1. Green light means HDMI source2.

### Rear Panel



3. **+5V DC:** Connect to 5V 4A DC interlocking power adapter
4. **Remote Control:** Control signal
5. **HDMI IN 1-2:** For connecting to video source
6. **HDMI OUT 1-4:** For connecting to display through HDMI cable or through Cat-5e cable

### Top Panel



**7.SW1:** EDID SOURCE — Default EDID / learning EDID

**8.SW2:** Full HD / HD Selection

**9.SW3:** Bitstream / 2 CH

**10.SW4:** 12 bit / 8 bit

**11.SW5:** INPUT 1 / INPUT 2

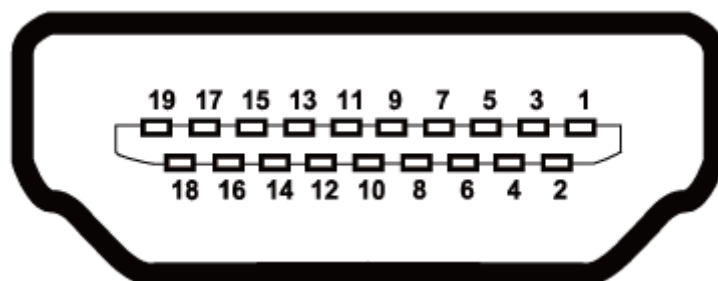
## SWITCH SETTING

SW5	HDMI 1.3	HDMI 1.2
SW4	EDID Multi Ch	EDID 2 Ch
SW3	EDID Full HD	EDID HD
SW2	EDID default	EDID use HDMI Out 4
SW1	Input1	Input2

## EDID LEARNING

1. Power up the AV-GM06K3-S1. Connect to **HDMI OUT 4** with the display you want the AV-GM06K3-S1 to learn its EDID.
2. The AV-GM06K3-S1 is only bound to learn the EDID from the display for the HDMI source device connected to **HDMI OUT 4**.
3. To learn the display's EDID for source device connected to **HDMI OUT 4**, Set **SW2** to Right Position. Power on and wait for about 5 seconds to complete the EDID learning process. You DON'T NEED to pull up the SW1 switch again unless you want to learn another display's EDID by pulling both DIP switch SW1 one more time.

## HDMI PIN DEFINITION



Type A (Receptacle) HDMI

Pin 1	TMDS Data2+	Pin 8	TMDS Data0 Shield	Pin 14	Reserved (N.C. on device)
Pin 2	TMDS Data2 Shield	Pin 9	TMDS Data0-	Pin 15	SCL

<b>Pin 3</b>	TMDS Data2-	<b>Pin 10</b>	TMDS Clock+	<b>Pin 16</b>	SDA
<b>Pin 4</b>	TMDS Data1+	<b>Pin 11</b>	TMDS Clock Shield	<b>Pin 17</b>	DDC/CEC Ground
<b>Pin 5</b>	TMDS Data1 Shield	<b>Pin 12</b>	TMDS Clock-	<b>Pin 18</b>	+5V Power
<b>Pin 6</b>	TMDS Data1-	<b>Pin 13</b>	NC	<b>Pin 19</b>	Hot Plug Detect
<b>Pin 7</b>	TMDS Data0+				

## HARDWARE INSTALLATION

1. Connect HDMI input to HDMI compliant sources (such as a Blu-ray Disc player)
2. Connect all HDMI outputs to the HDMI displays
3. Plug in 5V 4A DC power supply.
4. Power on the AV-GM06K3-S1
5. Power on the HDMI displays.
6. Power on the HDMI source(s).



# WARRANTY

The SELLER warrants the **AV-GM06K3-S1 2x4 HDMI Splitter with EDID Manager** free from defects in the material and workmanship for 3 years from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 3 years warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the **AV-GM06K3-S1** features and specifications is subject to change without further notice.

## Support

For more info or tech support  
<http://www.siig.com/support>