



## HDMI 1.4 1x2 HDMI Splitter



P/N: AV-GM05K3-S1



## Safety and Notice

The **AV-GM05K3-S1 HDMI 1.4 1x2 HDMI Splitter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **AV-GM05K3-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.



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# INTRODUCTION

The **AV-GM05K3-S1 HDMI 1.4 1x2 HDMI Splitter** provides the most cost effective and advanced HDMI splitter solution on the market, by which the high definition video and high quality audio can be transmitted to 8 different locations without losing quality. **AV-GM05K3-S1** supports all 3D formats of HDMI 1.4 and also the true 4K 2K video! In addition to high standard videos, **AV-GM05K3-S1** also supports ARC and HDMI 1.4 Ethernet!

With built-in RS-232 firmware update mechanism, the compatibility among countless HDMI sources and receivers can be further guaranteed. With the upmost 16 bit deep color video and high definition audio support, AV-GM05K3-S1 is suitable for high quality HDMI 1.4 broadcasting, digital signage and education applications!

## FEATURES

- Supports HDMI Deep Color & 3D / DVI 1.0 compliant
- HDCP 1.3 compliant
- Wide frequency range: 25MHz~340MHz
- Video bandwidth: 10.2Gbps
- Supports ARC on output 2
- Supports HDMI 1.4 Ethernet on output 2
- Resolution up to 4k 2K 297MHz video
- Automatic EDID learning
- Supports xvYCC, x.v.Color & Deep Color
- RS-232 firmware update for expanding compatibility
- Supports Dolby Digital, DTS-HD and Dolby TrueHD audio
- Easy installation



1. Automatic EDID learning will detect all the connected HDMI equipped monitors and analyze all the content of EDID. The EDID with minimal resolution support will be the reference EDID for incoming HDMI source players.
2. The Ethernet and ARC function can **NOT** be used at the same time.

## PACKAGE CONTENTS

- 1x AV-GM05K3-S1
- 1x DC 5V 4A in-line with C7 power cord
- 1x User Manual

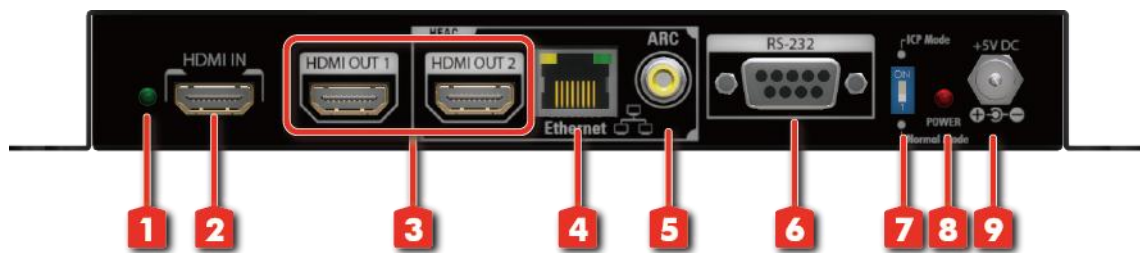
# SPECIFICATIONS

Model Name	AV-GM05K3-S1	
<b>Technical</b>		
Role of usage	1x2 Distribution Amplifier (Splitter)	
HDMI compliance	HDMI 1.4	
DVI compliance	DVI 1.0	
HDCP compliance	HDCP 1.3	
Video bandwidth	Single-link 340MHz [10.2Gbps]	
Video support	Up to 4K 2K 297MHz	
Audio support	DTS-HD Master Audio, Dolby TrueHD Dolby Digital, DTS, DVD-Audio, LPCM, SACD, MPCM	
ESD protection	[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±2kV	
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]	
Firmware update	Feasible via RS-232 port	
ARC	Yes	
HDMI 1.4 Ethernet	Yes	
Input	1x HDMI [7.1ch audio & video]	
Output	2x HDMI [7.1ch audio & video] + ARC + Ethernet	
HDMI connector	Type A [19-pin female]	
<b>Mechanical</b>		
Housing	Metal enclosure	
Dimensions [L x W x H]	Model	187 x 87 x 25mm [7.4" x 3.4" x 1"]
	Package	264 x 170 x 77mm [10.4" x 6.7" x 2.8"]
	Carton	420 x 358 x 291mm [1'5" x 1'2" x 11.5"]
Weight	Model	463g [16.3 oz]
	Package	946g [1.0 lbs]
Fixedness	1RU rack-mounting case with ears	
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

### Rear Panel



1. **Signal LED:** Signal LED indicator
2. **HDMI IN:** Connect to a HDMI input source
3. **HDMI OUT1~2:** Two distributed HDMI outputs to HDMI displays
4. **Ethernet:** HDMI Ethernet Channel(HEC) of HDMI OUT2
5. **SPDIF OUT:** Audio Return Channel(ARC) of HDMI OUT2
6. **RS232:** For technical support only [firmware update]
7. **Dip Switch:** Switch between normal operation mode or firmware update mode(switch ON)
8. **Power LED:** Lights on when power is on
9. **+5V DC:** Connect to the +5VDC 4A power supply unit

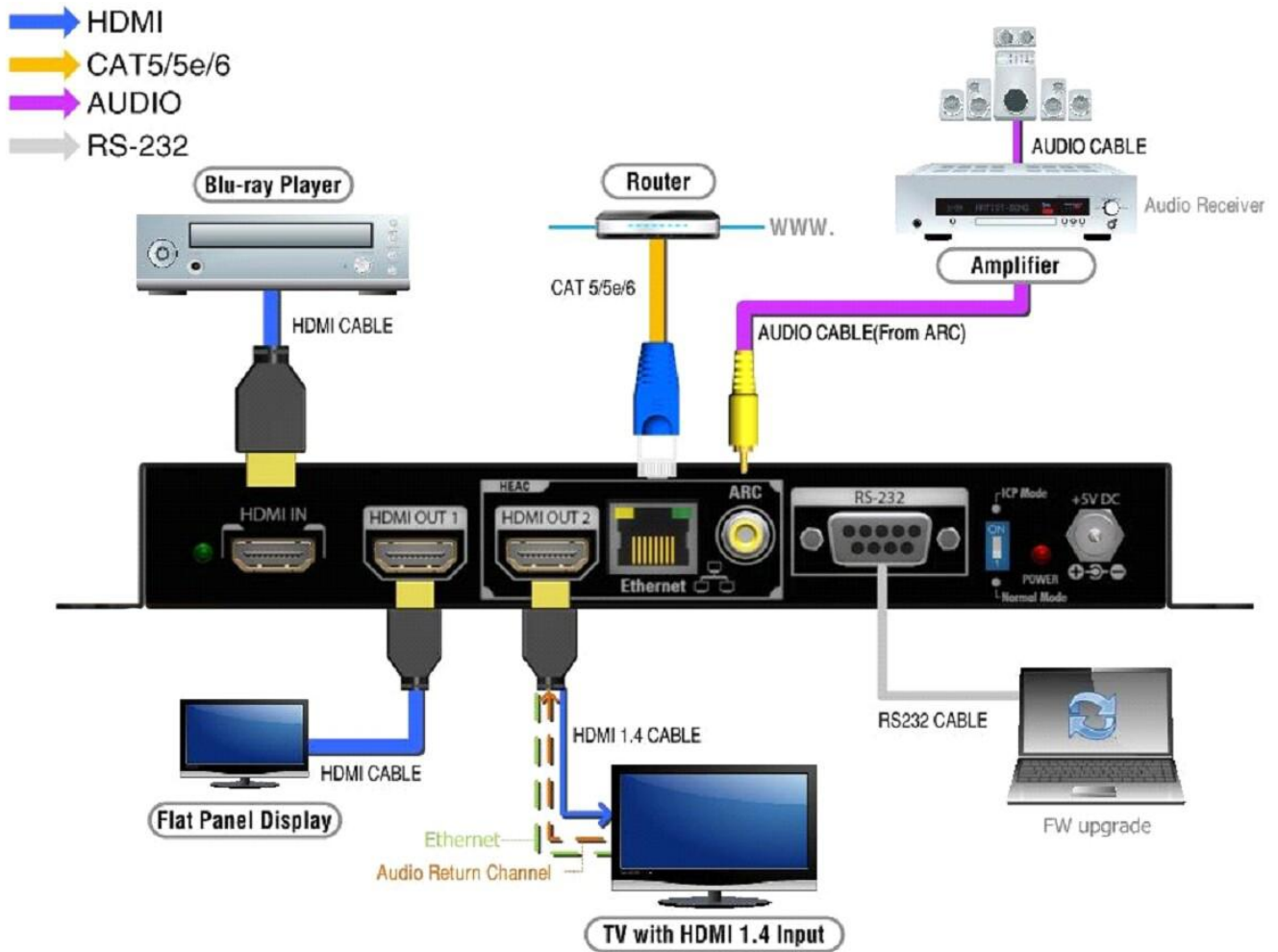
## HARDWARE INSTALLATION

### Broadcasts HDMI signal to 2 HDMI displays!

1. Switch off all devices, including monitors.
2. Connect to the receivers (Connect **HDMI OUT2** to a **HDMI 1.4 TV** is recommended).
3. Connect Ethernet to an Ethernet Hub/AP (If HDMI OUT2 is connected to a HDMI 1.4 TV).

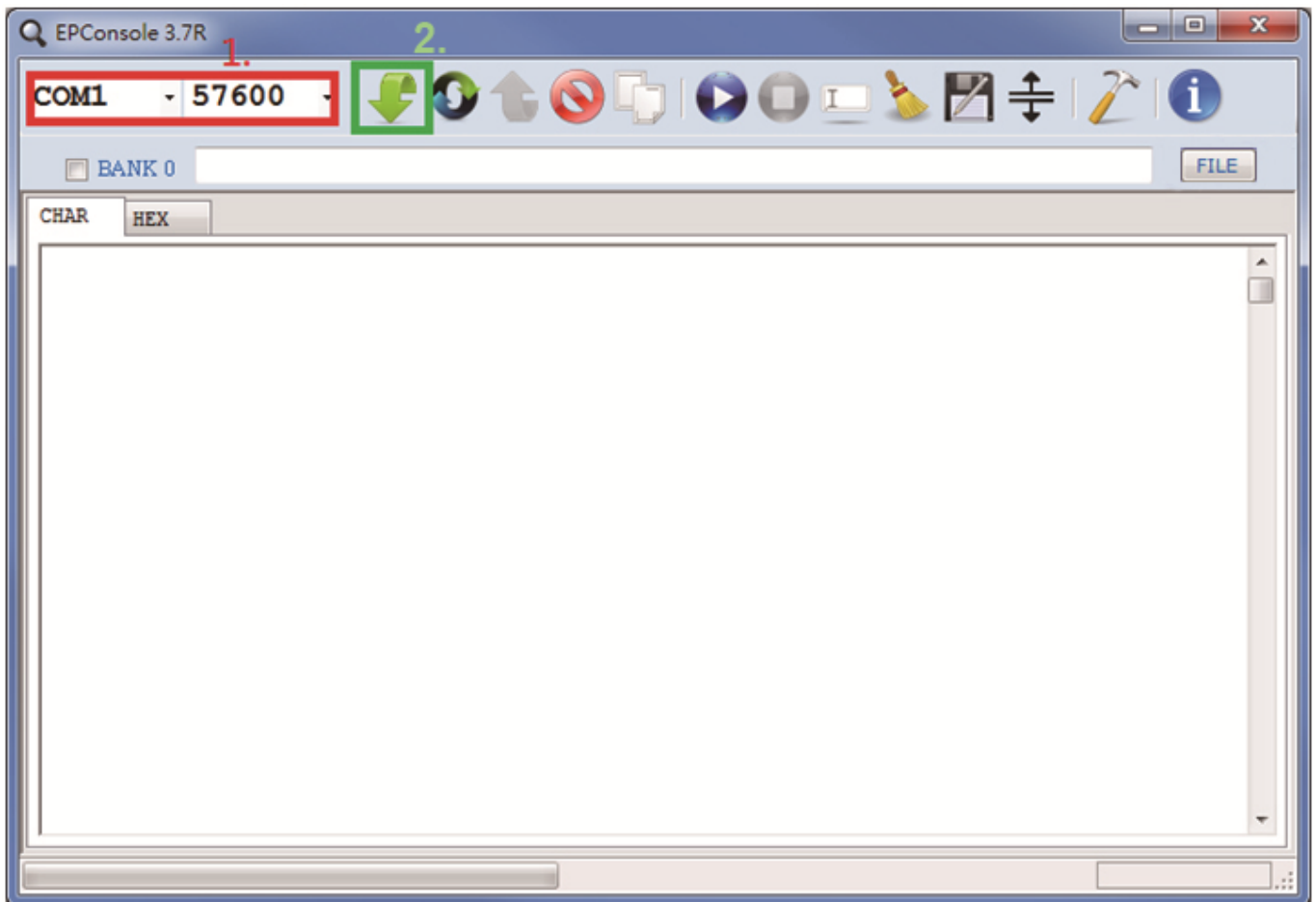
4. Connect ARC to an AMP (If HDMI OUT2 is connected to a HDMI 1.4 TV).
5. Connect an HDMI source (such as a Blu-ray Disc player) to the HDMI In.
6. Plug in 5V DC power supply.
7. Power on the HDMI monitors.
8. Power on the HDMI source.

## CONNECTION DIAGRAM



# NOTICE

1. While connecting a new monitor to the splitter, experiencing a short period of time without display might be expected. The splitter will do Automatic EDID learning which analyzes the newly connected monitor to see if the EDID for the HDMI input is necessary to update!
2. For firmware update through RS232, users MUST turn the power off, set the dip switch to "ON", and then connect an RS232 cable between PC and device. Open the firmware update software, set the correct com port and baud rate (57600 is recommended), click the "File" button to direct to the firmware HEX or BIN file, power on the device and press "Program MCU" symbol to firmware update. Once update process is done, please power off the device and set the dip switch back to "1".



# WARRANTY

The SELLER warrants the **AV-GM05K3-S1 HDMI 1.4 1x2 HDMI Splitter** 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-GM05K3-S1** features and specifications is subject to change without further notice.

## Support

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