



4x1 HDMI Switch with IR & RS-232 Control



P/N: AV-GM09P3-S1



Safety and Notice

The **AV-GM09P3-S1 4x1 HDMI Switch with IR & RS-232 Control** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **AV-GM09P3-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-GM09P3-S1** provides easy switching among 4 HDMI sources to your high definition display including HDMI equipped or DVI enabled monitors. Full digital and high quality video/audio from any of these 4 sources can perfectly be transmitted to the connected high definition monitor via IR remote control or front panel button. With HDCP support, up to four HDMI/DVI sources such as PS3, DVD players, camcorders, or set-top boxes can seamlessly & simultaneously connected to this AV-GM09P3-S1.

The AV-GM09P3-S1 has 4 input HDMI definition receptacle connectors and 1 output HDMI definition receptacle connector. Users simply connect all the HDMI/DVI sources to the inputs of AV-GM09P3-S1, and then connect HDMI/DVI equipped display system on the output port. Via IR remote control or front panel button, users can select which source they would like to be displayed. Auto-scan function provides quick surf on the connected sources sequentially and auto-detection function makes the device automatically switch to the first working source among 4 channels at power on. Extra superior equalization functions on input ports and pre-emphasis on output ports provide users the most adaptive way to improve the transmission distance.

FEATURES

- Supports HDMI Deep Color & 3D
- Fully HDCP compliant
- Handy front panel button to switch any four HDMI/DVI sources
- Supports 480p, 720p, 1080i, 1080p, and VESA resolutions
- Front panel LED indicators
- Equalization on input ports and pre-emphasis on output port
- Easy installation

PACKAGE CONTENTS

- 1x AV-GM09P3-S1
- 1x IR controller

- 1x 5V 0.85A power adapter
- 1x IR receiver
- 1x User Manual

SPECIFICATIONS

Model Name		AV-GM09P3-S1
Technical		
Role of usage		4x1 switch
HDMI compliance		HDMI Deep Color & 3D Support
HDCP compliance		Yes
Video bandwidth		6.75 Gbps
Video support		480p, 720p, 1080i, 1080p, and VESA resolutions
Transmission		up to 15m/50ft at 1080p
Audio support		Surround sound (up to 7.1ch) or stereo digital audio
Input TMDs signal		1.2 volts (peak-to-peak)
Input DDC signal		5 volts (peak-to-peak)
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		4x HDMI / 1x RS-232 / 1x IR Receiver
Output		1x HDMI
IR remote control		Electro-optical characteristics: $\theta = 25^\circ$ / Carrier frequency: 38kHz
HDMI connector		Type A [19-pin female]
RS-232 connector		DE-9 [9-pin D-sub female]
Mechanical		
Dimensions [L x W x H]	Model	128 x 52 x 26mm [5" x 2" x 1"]
	Package	175 x 270 x 80mm [6.9" x 10.4" x 3.1"]
	Carton	370 x 450 x 300mm [1.3" x 1.6" x 1"]
Weight	Model	202g [7.1oz]
	Package	517g [1.14 lbs]
Fixedness		Wall-mounting case
Power supply		5V 0.85A DC
Power consumption		2 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

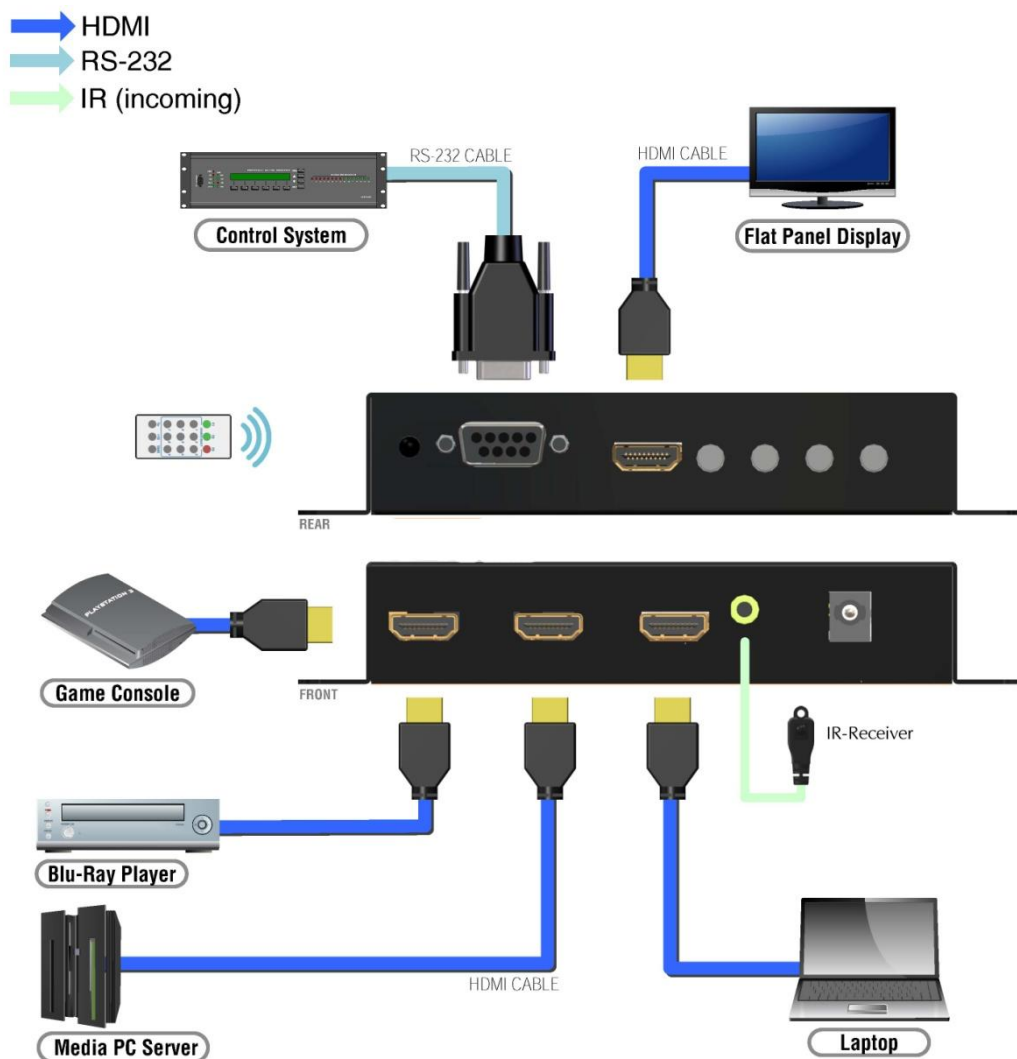


1. IR Sensor
2. Serial channel control
3. HDMI OUT
4. channel push button and indicator LED
5. HDMI Input 1~4
6. IR Receiver
7. +5V DC



HARDWARE INSTALLATION

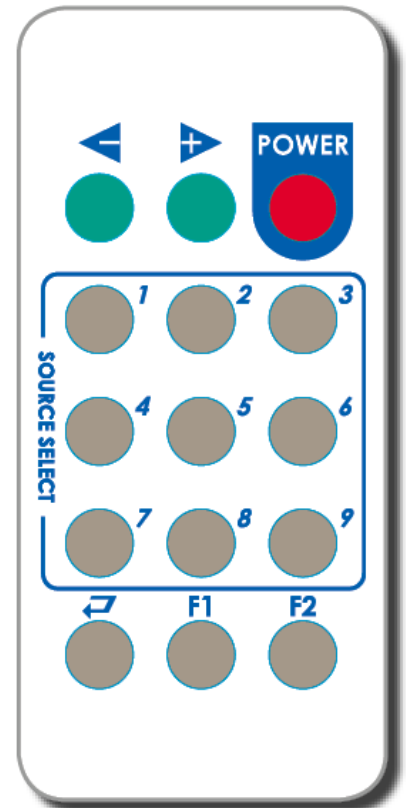
1. There is no power switch on the device. Power is automatically turned on when the power cord is plugged into a wall outlet.
2. Connect your HDMI/DVI sources to the input ports of AV-GM09P3-S1.
3. Connect your HDMI/DVI enabled receiver (monitors etc.) into the output port of AV-GM09P3-S1.
4. Power up AV-GM09P3-S1.
5. Select the input you want to be displayed on the connected monitor with IR remote control or push button on the front panel.
6. If long cable transmission (>15m/50ft) is considered, HDMI extender is needed.

CONNECTION DIAGRAM



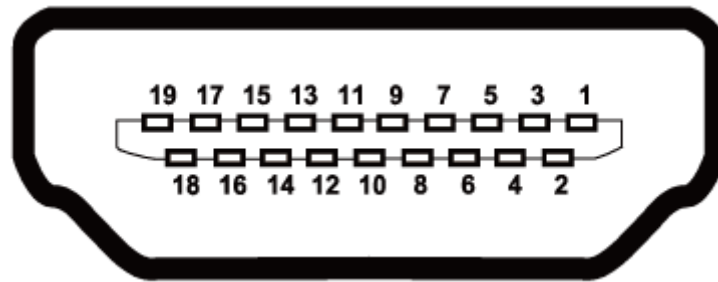
IR REMOTE CONTROL

Function Key	Function Description
POWER	Reserved
	Reserved
	Reserved
SOURCE SELECT 1	Select HDMI INPUT 1 to be the input source
SOURCE SELECT 2	Select HDMI INPUT 2 to be the input source
SOURCE SELECT 3	Select HDMI INPUT 3 to be the input source
SOURCE SELECT 4	Select HDMI INPUT 4 to be the input source



HDMI PIN DEFINITION

HDMI



Type A (Receptacle) HDMI

Pin 1	TMDS Data2+	Pin 11	TMDS Clock Shield
Pin 2	TMDS Data2 Shield	Pin 12	TMDS Clock-
Pin 3	TMDS Data2-	Pin 13	NC
Pin 4	TMDS Data1+	Pin 14	Reserved (N.C. on device)
Pin 5	TMDS Data1 Shield	Pin 15	SCL
Pin 6	TMDS Data1-	Pin 16	SDA
Pin 7	TMDS Data0+	Pin 17	DDC/CEC Ground

Pin 8	TMDS Data0 Shield	Pin 18	+5V Power
Pin 9	TMDS Data0-	Pin 19	Hot Plug Detect
Pin 10	TMDS Clock+		

WARRANTY

The SELLER warrants the **AV-GM09P3-S1 4x1 HDMI Switch with IR & RS-232 Control** to be 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 surges.

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 are limited to a 30 day warranty and cable 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-GM09P3-S1 features and specifications is subject to change without further notice.**

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