

HDMI 4x1 Seamless Switcher with Quad-view support



P/N: AV-GM09O3-S1



The **AV-GM09O3-S1 HDMI 4x1 Seamless Switcher with Quad-view support** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **AV-GM09O3-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-GM09O3-S1 HDMI 4x1 Seamless Switcher with Quad-view support** provides the most flexible and cost effective solution in the market to route high definition video source from one of the four HDMI sources to the remote display in real time. This solution can be utilized in digital signage, conference room presentation systems or other similar applications. In addition,

With 1080p output resolution, users can display the resulted mixed video with improved presentation quality. In the meantime, the unit can be controlled thru the IR remote control, front panel button, software control or cloud control to provide the most flexible control way to fit into any applications.

FEATURES

- 4x HDMI inputs and 1x HDMI output
- Input resolution support from 640x480 to 1920x1200, interlaced or progressive
- Output resolution supports up to 1920x1080
- Supports seamless switching
- Supports HDCP 1.4
- Firmware upgradable for support of new features and technology enhancements
- Supports IR remote control
- The output display is forced to have a layout
- This switcher can control by RS-232, push button, IR remote control and cloud control*

*Cloud support is thru an encrypted communication to provide the best private protection when using AV-GM09O3-S1

PACKAGE CONTENTS

- 1x AV-GM09O3-S1
- 1x DC 12V 5A
- 1x Installation software CD
- 1x User Manual
- 1x IR Remote control (28 keys)
- 1x IR Receiving cable

SPECIFICATIONS

Model Name		AV-GM09O3-S1	
Technical			
Role of usage	<u>)</u>	Seamless Switcher	
HDCP compli	ance	HDCP 1.4	
Video bandw	idth	6.75Gbps	
Input Video S	Support	Up to 1920x1200@60	
Output Video	Support	720p60, 1080i60, 1080p60	
Audio suppo	rt	Bypass	
Control		Software / Front Panel / IR Remote Control / Cloud Control	
Input TMDS s	signal	1.2 Volts [peak to peak]	
ESD protectio	on	Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]	
Input		4x HDMI + 1x RS-232 + 1x Ethernet	
Output		1x HDMI + 1x 3.5mm(Stereo)	
HDMI connec	tor	Type A [19-pin female]	
RJ-45 connec	tor	WE/SS 8P8C with 2 LED indicator	
RS-232 conne	ector	DE-9 [9-pin D-sub female]	
Mechanical			
Housing		Metal enclosure	
	Model	312 x 143 x 27mm [1' x 5.6" x 1"]	
Dimensions [L x W x H]	Package	376 x 240 x 112mm [1'2" x 9.4" x 4.4"]	
[]	Carton	590 x 510 x 405mm [1'9" x 1'7" x 1'3"]	
Woight	Model	808g [4.6oz]	
Weight Package		1385g [3lbs]	
Power supply		12V 5A DC	
Power consumption		10 W	
Operation te	mperature	0~40°C [32~104°F]	
Storage temp	perature	-20~60°C [-4~140°F]	
Relative hum	idity	20~90% RH [no condensation]	

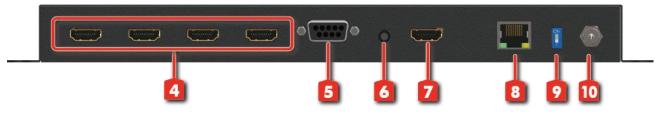
PANEL DESCRIPTIONS

Front Panel



- Input Selection Button: Input 1~4 source selection (from the left to the right is input 1, input 2, input 3, input 4). If you press the input 1 button about 5 seconds, the output layout will change to Quad-view mode (.....).
- 2. IR SENSOR: IR sensor for receiving the IR commands from IR remote
- 3. IR Receiver: 3.5mm socket for plugging in the extension cable of IR receiver

Rear Panel

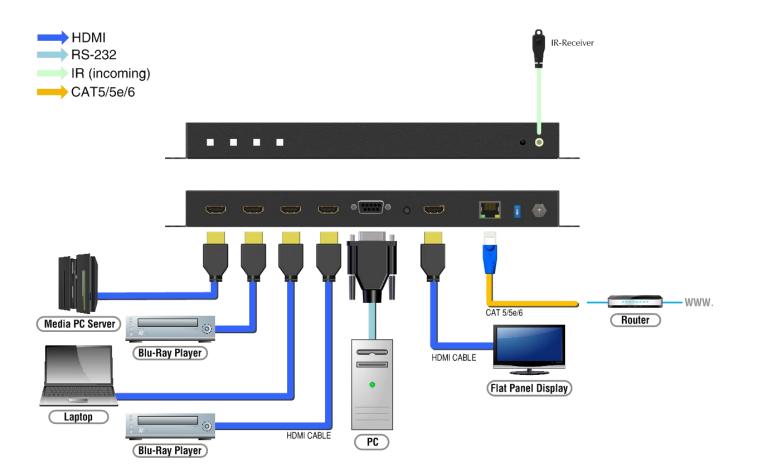


- 4. Input 1-4: HDMI inputs (from the left to the right is input 4, input 3, input 2, input 1)
- 5. RS-232: RS-232 control port
- 6. Stereo Audio Out: Connect to analog stereo audio speaker
- 7. Output: HDMI output
- 8. Ethernet: Ethernet control port
- 9. Factory Reset: Switch the pin to do factory default reset
- 10. +12V DC: 12V DC power jack



For Quad-view mode, Upper left is Input 1; Rright upper is Input 2; Lower left is Input 3; Right lower is Input 4.

CONNECTION DIAGRAM



OPERATION APPROACH

Method A: IR Remote Control

			POWER	Button	Function
				Power	Power on/off the device
Input 1	Input 2	Input 3	Input 4	Input 1	Select HDMI input 1 to be the input source
	Seamless	Fade	Dissolve	Input 2	Select HDMI input 2 to be the input source
				Input 3	Select HDMI input 3 to be the input source
	1080p	720p	1080i	Input 4	Select HDMI input 4 to be the input source
				Seamless	Seamless switching effect
				Fade	Fade switching effect
				Dissolve	Dissolve switching effect
				1080p	Select 1080p@60 output resolution
				720p	Select 720p@60 output resolution
				1080i	Select 1080i@60 output resolution
					Change the output layout to 田

Method B: Software Control through RS-232 port

1. System Requirement

- (1) OS information : MS Win XP/7/8/10
- (2) Baud rates: 115200
- (3) Software size: 7MB
- (4) Minimum RAM requirement: 256MB

2. Control interface

Switch4x1			3	
Source1	Source2	Source3	Source4	QuadView
			Q	 Seamless Fade
				○ Dissolve 1080 p @ 60 ▼

1	Mapping	3	Port Setting
2	System		

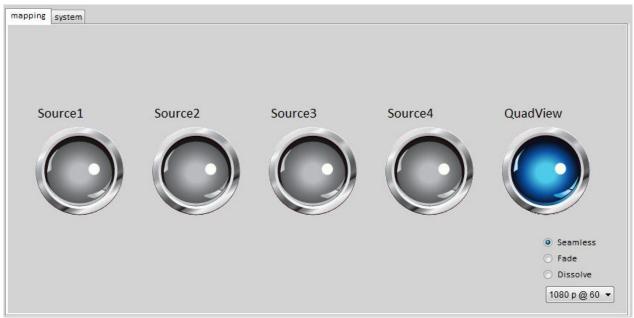
When clicking on the software control program, the following dialog will pop-up (under Microsoft Windows 7, please run as administrator).

- RS-232 serial Mode: Use RS-232 to connect the port on device and computer. Select correct COM port and click the Connect button.
- Ethernet Mode: Enter the IP address of the device and click the Connect button.

Port Setting	
Please check port selection correctly, and push"Connect"	Connect
Port Selection: RS232	
Serial COM Port Port Number:	
Ethernet TCP/IP Client Port: IP Address: 192.168.1.10	

(1) Mapping

You can assign arbitrary video source here and we provides three switching effects for user select. You also can set the output resolution.



(2) System

mapping	system		
			System
			Factory Reset
			Factory Reset
	Network Setting:	IP Setting	Firmware Version
	Association Code :	Read	FirmwareUpdate
	Reset Cloud :	Apply	
			Main Board

Network Setting

User can use the Ethernet to control the switcher. Firstly, user should click on the "IP Setting" button to setup network set. Next, users can setup the Ethernet for the unit as below example shows. After the step of IP setting, please click the "Apply" button.

🛃 Form IP Setting	
Information	
IP Address:	192.168. 1 .10
Mask:	255.255.255.0
Gateway:	192.168.1.1
Primary DNS:	0.0.0.0
Second DNS:	0.0.0.0
	Apply

Association Code

To get an "association code". The device can use this code to pair with cloud server for you can do cloud control.

- Reset Cloud
 Reset the cloud server
- Factory Reset
 - Click Factory Reset button to do factory default reset.
 - The process of default reset will take about 25 seconds.
- Firmware VersionGet the firmware version information.
- Firmware Update

Firmware update device

• Please select the correct COM port or click "Scan" button to connect device.



• Click "update" button to do firmware update.

SW5004DE Ver1.6	X				
Please follow the steps to update the device.					
Update Setting	Please push the "Update" button to execute the process. And if you want update other				
Firmware Update	firmwares, please push the "" button to select.				
OSD Font Update	1. Update the correct firmware version.				
	Device Version:				
	Update Version Ver 1.6				
	2. The device is executed Factory Reset.				
	3. The ethernet setting and testing.				
	Update				

 If you want to change OSD font, please click "OSD Font Update" and "update" button to change it.

	0 0			
SW5004DE Ver1.6	×			
Please follow the steps to update the device.				
Update Setting	Please push "Update " button to write OSD font data.			
Firmware Update				
OSD Font Update	<pre>! " #\$ %&' () * +, / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ABCDEFGHIJKLMNO PQRSTUVWXYZ[\]^_ abcdefghijkImno pqrstuvwxyz{ }~ Update</pre>			

(3) Port Setting

The function can reconnect this device. You can click with button to update the control connection. A "Port Setting" window will pop up for you to select

the approach to connect this device.

Port Setting	X
Please check port selection correctly, and push"Connect"	Connect
Port Selection: RS232	
Serial COM Port	
Port Number:	
Ethernet TCP/IP Client Port: IP Address: 192.168.1.10	

Method C: Cloud Control (Eagleyes) through Ethernet port

Create Account

The first time to use the Eagleyes service, please create a new account.

1. Access Eagleyes (<u>http://www.eagleyes.io</u>) and click "Create new account".

Account	
Enter your account	
Password	
Enter your password	
Login	
Create new account	Forgot password

2. The Registration page will pop up and please fill in your email and password information to create your private account.

Creat new account	×
Enter an available email as account	
example@gmail	
Please enter your password	
1234XXX	
Please enter your password again	
please enter your password again	
	Cancel Apply

Add Device to Eagleyes

1. Firstly, please make sure the device is connected to the Ethernet. Then please executing the software with device to get the association code (Note: the status of software is connected).

🖳 Switch4x1		
mapping system		
	System Factory Reset	
Network Setting:	IP Setting Firmware Version	
Association Code :	FirmwareUpdate	
Reset Cloud :	Apply Main Board	

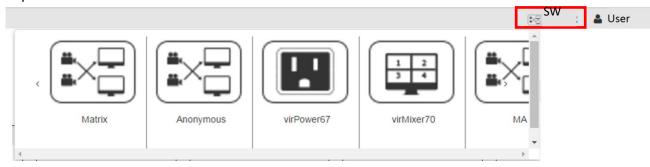
2. Access Eagleyes (<u>http://www.eagleyes.io</u>), and then log in your account on the right top corner. Click **Add device** to add the device which you just got its association code.



3. Enter the Installer Email for online support in the future, and the Association Code for pairing with your device.

Add new device	×
Installer Email	
Association Code	
	Close Apply

4. After adding the device, the list of device related to your account will show on the right top corner. You can click the button to switch device for control.



WARRANTY

The SELLER warrants the **AV-GM09O3-S1 HDMI 4x1 Seamless Switcher with Quad-view support** 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-GM09O3-S1 features and specifications is subject to change without further notice.

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

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