

# 8x8 VGA/Component/S-Video/Composite Matrix with Audio & Ethernet Control





P/N: AV-GM08G3-S1



The AV-GM08G3-S1 8x8 VGA/Component/Composite Matrix with Audio & Ethernet Control has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, AV-GM08G3-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 away the objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter, 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.

This AV-GM08G3-S1 receives and amplifies up to 8 VGA inputs, perfectly switches the desired input to the VGA equipped monitor or receiver. This matrix enables the broadcast of multiple computers' audio and video outputs to multiple displays. Any one of the inputs can be broadcasted to any or all of the outputs without introducing noticeable video quality distortion. The matrix supports VGA video bandwidth up to 400MHz and also supports YPbPr component, S-Video, and Composite signals. The re-transmitted video and audio quality is guaranteed! AV-GM08G3-S1 offers the most convenient and cost effective means for swift switch of high quality PC graphics and HDTV videos with crystal clear audio in the market. With equipped audio matrix, AV-GM08G3-S1 is ready to be as YPbPr matrix with stereo audio and ideally for boardroom, showroom, and exhibition. Through IR remote, RS-232, Ethernet or front panel push button, the control of AV-GM08G3-S1 becomes versatile and easier.

## Features

- Power-fail protection, allows switcher to restore previous settings
- RS-232 communication control input, allows to control switcher via included advanced control software or third party control system
- Breakaway audio with volume control
- IR remote control
- Ethernet accessible
- Front panel button control
- Inputs: 8 x VGA female15-pin HD, 8 x 1/8" (3.5mm) mini audio
- Outputs: 8 x VGA female 15-pin HD, 8 x 1/8" (3.5mm) mini audio
- Connectors: 15-pin HD (could be used for PC resolutions up to WUXGA 1920x1200 or HDTV up to 1080p)
- Compatible formats: RGB, YPbPr or RGBHV
- 1RU Rack mountable



*k Appropriate adapters are necessary for video inputs, such as component, composite and S-Video.* 

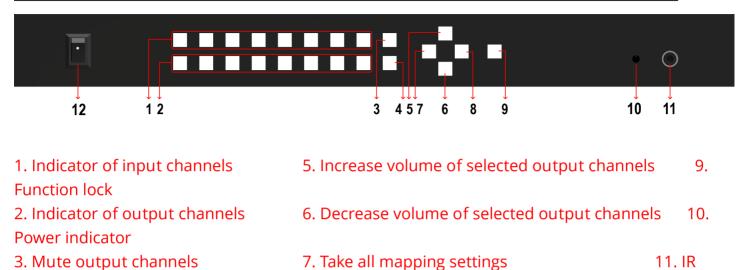
## Specifications & Package Contents

Model N	lame	AV-GM08G3-S1					
Techn	ical						
Role of usage	5	8x8 true matrix switcher					
Supported		VCA / Component / Swides / Composite					
input/output		VGA / Component / S-video / Composite <b>*</b>					
Video bandw	vidth	300MHz					
Video suppo	rt	1080p60, WUXGA [1920x1200@60] & UXGA [1600x1200@60] or					
Transmissior	<u>,                                     </u>	even higher HD [720p/1080i] – 65m [210ft]					
		Analog stereo					
Audio suppo	ΓL						
loout		8x VGA [component/s-video/composite through adapters]					
Input		8x 3.5mm analog stereo audio 1x RS-232/1x Ethernet					
Output		8x VGA [component/s-video/composite through adapters]					
	0 K	8x 3.5mm analog stereo audio					
VGA connect		HD-15 [15-pin D-sub female]					
RS-232 conn		DE-9 [9-pin D-sub female]					
3.5mm conn		Earphone jack for analog stereo audio For Ethernet control					
RJ-45 connec							
Input selection		Ethernet / IR remote / push button / RS-232 control					
IR remote co		Electro-optical characteristics: $\tau$ = 25° / Carrier frequency: 38kHz					
Mechar	nical						
Case		Metal enclosure					
Dimensions	Model	1U – 440 x 96 x 44mm [1'5" x 3.8" x 1.7"]					
$[L \times W \times H]$	Package	490*225*70mm					
	Carton	510 x 380 x 252mm					
Weight	Model	890g [2.0 lbs]					
	Package	2.1kg					
Fixedness		1U rack-mount with ears					
Power supply	y	Internal AC 100-240V					
Power consu	mption	13 Watts [max]					
Operation		0~40°C [32~104°F]					
temperature							
Storage temp	perature	-20~60°C [-4~140°F]					
Relative hum	idity	20~90% RH [no condensation]					
		1x AV-GM08G3-S1					
Package C	ontente	1x IR remote					
Package Co	ontents	1x AC Power Cord					
		1x User Manual					



\* Component and composite input/output can be done by using the optional accessory VGA-to-Component adapter to connect to the VGA socket. However, for S-Video input/output, please find a VGA-to-S-video adapter available in the market to fulfill vou need.

## Front Panel



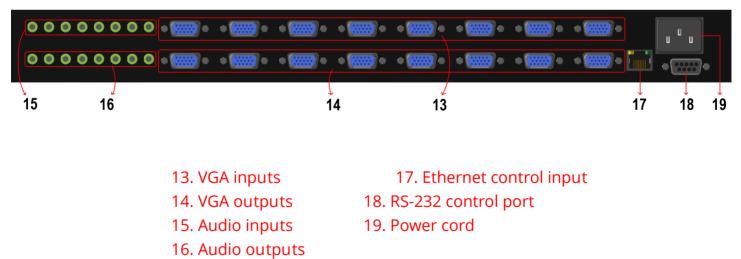
8. Clear untaken settings 12. Power

## **Rear Panel**

4. Select all output channels

receiver

switch



## Channel Control

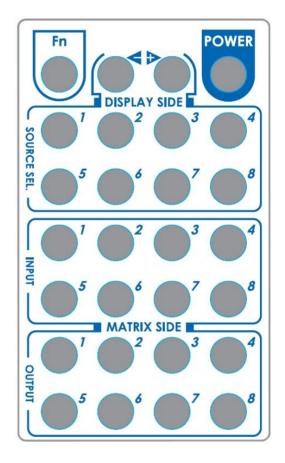
AV-GM08G3-S1 provides several ways for user to easily setup channel mapping, the user can control from front panel, IR remoter, or a connected PC. The setting operation is very simple, select one input channel and then you could choose one or multiple output channels for display. Users are allowed to set multiple channel mappings at one time. For example, select input channel 1 with output channel 2, 3, 4; select input channel 3 with output channel 8; select Mute(button NO.3) and choose output channel 5, 6. After channel mappings are done, press Taken button(button NO.7) to apply. The unselected channels will remain previous mapping settings.

Volume control is also very simple; select one or multiple desired output channels, and then press volume up(button NO.5) or volume down(button NO.6) to adjust the selected output channels volume. AV-GM08G3-S1 also provides default volume set. Hold volume up(button NO.5) for 2~3 seconds to set the output channels default volume, or hold volume down(button NO.6) for 2~3 seconds to set the output channels audio mute.

Please push one of the INPUT buttons to choose which VGA input source you are going to setup. After that, you can have multiple outputs playing the same content from the selected **INPUT 1** — **INPUT 8** by pushing the corresponding OUTPUT buttons. The setting will be effective in a couple of seconds.

Source Sel 1	Input channel #1 to all output channels
Source Sel 2	Input channel #2 to all output channels
Source Sel 3	Input channel #3 to all output channels
Source Sel 4	Input channel #4 to all output channels
Source Sel 5	Input channel #5 to all output channels
Source Sel 6	Input channel #6 to all output channels
Source Sel 7	Input channel #7 to all output channels
Source Sel 8	Input channel #8 to all output channels
INPUT 1	Input channel #1
INPUT 2	Input channel #2
INPUT 3	Input channel #3
INPUT 4	Input channel #4
INPUT 5	Input channel #5
INPUT 6	Input channel #6
INPUT 7	Input channel #7
INPUT 8	Input channel #8
OUTPUT 1	Output channel #1
OUTPUT 2	Output channel #2
OUTPUT 3	Output channel #3
OUTPUT 4	Output channel #4
OUTPUT 5	Output channel #5

## **INPUT & OUTPUT MAPPING**



OUTPUT 7	Output channel #7
OUTPUT 8	Output channel #8

## Software Control via the RS-232

- Matrix (	Control Panel										X
Setting	CO Scan	C Linkage	Ø Open	Close	Mapping -	Fast Select					
VGA in	put source	selection	area				V	GA output	port se	ection are	a
0	input 1							- output 1	inpu	t 1 👻	]
0	input 2							- output 2	2 inpu	t 1 👻	]
0	input 3							- output 3	} inpu	t 1 💌	]
0	input 4							- output 4	1 inpu	t 1 👻	
0	input 5					$\sim$		• output !	; inpu	t 1 👻	]
0	input 6					$\sim$		• output (	; inpu	t 1 👻	]
0	input 7							output 7	r inpu	t 1 👻	]
0	input 8							output 8	} inpu	t 1 💌	]
									COM 1	ID: 255	Ι,
									01.1		

Software Control Menu

#### **Status indicator**

## 1. Setting button:

Click **Get** button to read back device ID.

Click Set button to write device ID.

Click **Rename** button to open the String Table.

Setting	
Get Device ID	Get
Set Device ID	Set
GUI String Table	
ок	Cancel

## <u>Example</u>

Rename the Input1 to "Main PC", Input2 to "Sub PC," input3 to "PC-3," ... etc., and rename output1 to "Conf. RM1," output2 to

String Table				
String Table	: Modify	-Output Por	t Modify	Save String Table
Inputi :	input 1	Output1 :	output 1	Set Default
Input2 :	input 2	Output2 :	output 2	
Input3 :	input 3	Output3 :	output 3	
Input4 :	input 4	Output4 :	output 4	
Input5 :	input 5	Output5 :	output 5	
Input6 :	input 6	Output6 :	output 6	
Input7 :	input 7	Output7:	output 7	
Input8 :	input 8	Output8 :	output 8	

"Main monitor," output3 to "Lobby," output4 to "Main projector," ... etc.

## 2. Scan button:

#### Serial Port Scan:

Click **Scan** button, the machine will scan the all com port and show them.

Select the RS232 serial port connected to the machine. And set device ID 255 is for all device.

Only the same device id or 255 can get the command you sent.

Click **OK**. Get the new status from the machine you select.

Select	
Port Number:	COM 8
Device ID:	ID 255 (Super) 🗸
Scan Device ID	Scan

## 3. Linkage button:

Click Linkage button to read back all status.

## 4. Open/Close button:

Click this button to close or open COM port.

## 5. Mapping button:

🛥 Matrix Control Panel					
Setting Scan	Linkage Open	Close Mapping	• Fast Select		
input 1	]		Output All Output ut 1 - Output	output 1	input 1 💌
input 2		Select inp Select inp	ut 2 - Output ut 3 - Output ut 4 - Output	output 2	input 1 💌
input 3	]	Select inp Select inp	ut 5 - Output ut 6 - Output ut 7 - Output	output 3	input 1 💌
input 4	]		ut 8 - Output	output 4	input 1 💌
input 6	]			output 6	input 1
input 7	]			output 7	input 1 👻
input 8	]			output 8	input 1 💌
					COM 1 ID: 255 -:
					00111 10.200

### Select All Output:

Select "set all output", then select the source on main menu. You can quickly set all output to the same source.

### Unselect All Output:

Release output selection.

### Select Input1~8 - Output:

Select Input channel then select the output port.

## <u>Example</u>

Select input source 1. Then select output port 1 and 2. The video and audio will be sent to port 1 and 2.

Select All Outpu	it
Unselect All Out	put
Select Input 1 -	Output
Select Input 2 -	Output
Select Input 3 -	Output
Select Input 4 -	Output
Select Input 5 -	Output
Select Input 6 -	Output
Select Input 7 -	Output
Select Input 8 -	Output

#### 6. Fast Select button:

🔤 Matrix Co	ntrol Panel									
Setting	CO Scan	2 Linkage	Ø Open	Close	Mapping -	Fast Select				
						Input Num - Output Num input 1 - All Output			1	
	input 1					input 2 - All Output input 3 - All Output		output 1	input 1	~
	input 2					input 4 - All Output input 5 - All Output		output 2	input 1	*
	input 3					input 6 - All Output input 7 - All Output		output 3	input 1	*
	input 4				$\sim$	input 8 - All Output		output 4	input 1	*
	input 5						[	output 5	input 1	*
	input 6					$\sim$	[	output 6	input 1	~
	input 7							output 7	input 1	*
	input 8							output 8	input 1	*
								C	OM 1 ID:	255

Click Fast select button for quick setting Input one → Output Port one Input two →Output Port two

From Fast Select pull down menu: Select Input Num-Output Num Input source #1 ➡ Output port #1 Input source #2 ➡ Output port #2

.....

Select Input - All Output Send the same source to all output

....

Input M	Num - Output Num
Input 1	1 - All Output
Input 2	2 - All Output
Input 3	3 - All Output
Input 4	4 - All Output
Input 5	5 - All Output
Input 6	5 - All Output
Input 7	7 - All Output
Input 8	8 - All Output

## 7. Output Port:

Pull down menu and select which source to be sent to this output port.

📟 Matrix Cor	ntrol Panel								
Setting	CO Scan	C Linkage	Ø Open	Close	Mapping -	Fast Select			
0	input 1						output 1	input 1 input 1	~
0	input 2						 output 2	input 2 input 3 input 4	
	input 3						output 3	input 5 input 6 input 7	
	input 4						output 4	input 8	
	input 5						output 5	input 1	~
	input 6 input 7						output 6 output 7	input 1	▼
	input 8						output 8	input 1	~
							<u> </u>		
							C	COM 1 II	D: 255

## One by one setting

On main menu screen

First select input source. Then select the output ports which you want to send the video and audio from this source. When you select the input source, the source will change to gray. When you select the output port one by one, the selected output port will change to gray.

Input 6 Input 1 Input 2 Input 3 Input 4 Input 5 Input 6 Input 7 Input 8

The linking line will change to yellow.

### Group setting

First select output ports one by one. Then select the input source. The selected output ports change the setting at the same time.

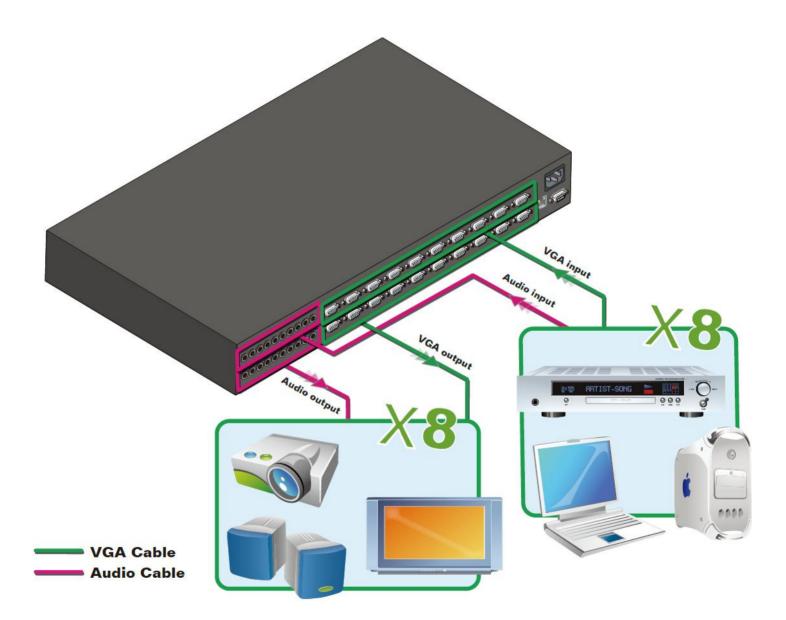
## Hardware Installation

1. Connect VGA enable equipments to the output of AV-GM08G3-S1.

2. Connect the VGA input sources to the inputs of AV-GM08G3-S1.

3. Plug power adapter cable into 5V DC power jack.

4. Use IR Remote, Ethernet, RS-232 serial commands, or front panel push button to switch between inputs.



## Limited Warranty

The SELLER warrants the **AV-GM08G3-S1 8x8 VGA/Component/Composite Matrix with Audio & Ethernet 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-GM08G3-S1 features and specifications is subject to change without further notice.

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