Media Center Switcher (HDMI/DVI/VGA/Composite/ Component Input & HDMI Output)

P/N: AV-GM09S3-S1

Safety and Notice

The **AV-GM09S3-S1** Media Center Switcher has been tested for conformance to safety regulations and requirements, and has been certified for international use. However like all electronic equipments, the AV-GM09S3-S1 should be used with care. Please read and follow 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-GM09S3-S1** Media Center Switcher offers the highest compatibility among composite, component, DVI, VGA, HDMI and S-Video to CVBS, VGA (Optional) & HDMI in the market. This unique device supports analog and digital conversion and scaling. With the embedded advanced de-interlacer, interlaced video inputs, such as component, composite and S-Video, can be further improved. AV-GM09S3-S1 supports the insertion of stereo analog audio and S/PDIF inputs into HDMI output. With this advanced feature, users can combine asynchronous video and audio sources into the state-of-art HDMI compliant A/V signal for further long range lossless transmission and high standard A/V experience!

AV-GM09S3-S1 is designed to ease the conversion among the available video formats to the common VGA, CVBS and even HDMI with affordable cost. With AV-GM09S3-S1, the bothersome video format issues will not become a bottleneck in your applications and the handy audio support can make the input video and audio become HDMI ready. With IR remote control and push buttons, AV-GM09S3-S1 offers a very easy way to convert, switch, and adjust videos at your convenience.

FEATURES

- Supports IR remote control
- Software control through RS-232 control port
- Supports OSD control interface
- Input Video bandwith HDMI: 225MHz; DVI/ VGA: 165MHz; Component: 74.25MHz
- S/PDIF & Stereo input supported
- Deinterlacer supported
- Supports nosie reduction and video enhancement features (only for HDMI output)
- Over / under scanning adjustable (only for HDMI output)
- Video H/V mirror supported (only for HDMI output)
- Active video area adjustment supported
- RS232 firmware upgradable for expanding compatibility
- Output scale up to 4K2K supported
- 8-CH audio down-mix to 2-CH
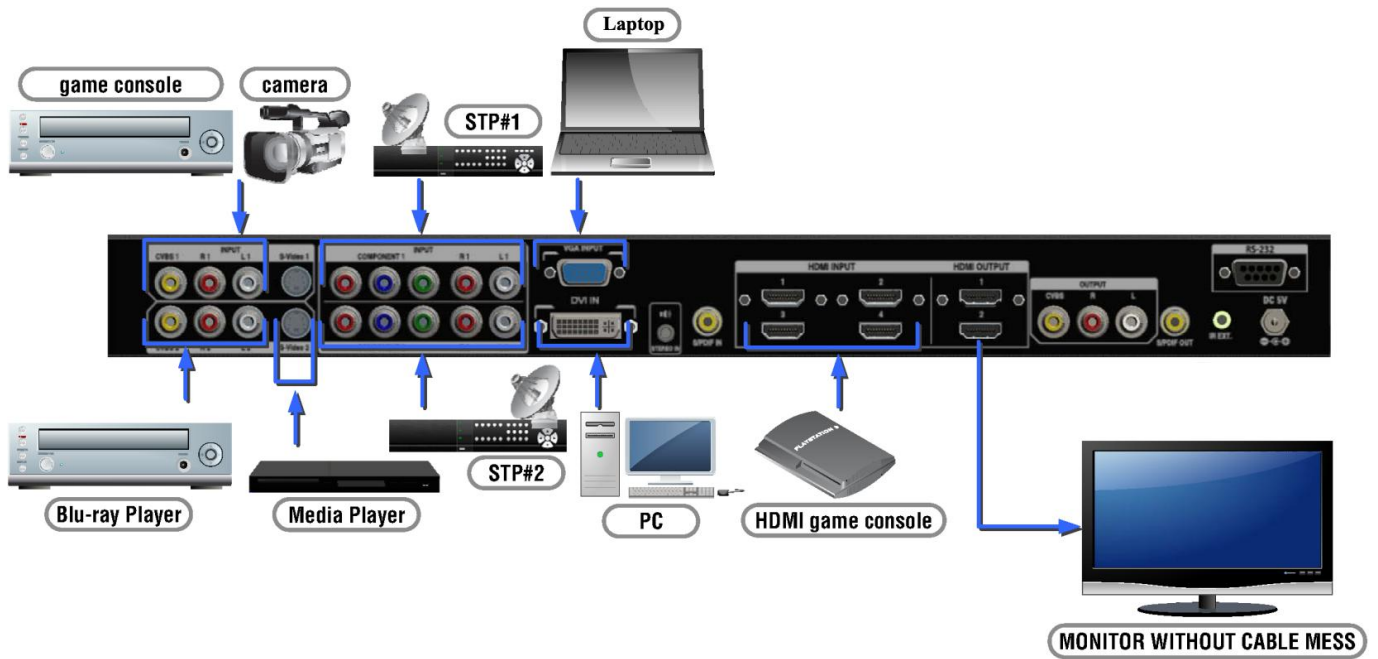- Multiple video format supported

PACKAGE CONTENTS

- 1x Case AV-GM09S3-S1 and 1x 5V/2A
- 1x IR receiver
- 1x IR remote 28key
- 1x Installation software CD
- 1x User Manual

SPECIFICATIONS

Model Name		AV-GM09S3-S1
Technical		
Role of usage		Video Switcher
Input Video bandwidth		HDMI:225 MHz DVI/VGA:165 MHz Component: 74.25MHz
Output Video bandwidth		297MHz
Audio support		HDMI: bypass to HDMI output/ SPDIF output/ stereo output SPDIF: bypass to HDMI output or SPDIF output Stereo: bypass to HDMI output or stereo output
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 RS232 Port
CEC Channel		ByPass
Input TMDS signal		1.2 Volts [peak-to-peak]
Input DDC signal		5 Volts [peak-to-peak, TTL]
Input		2xYPbPr&L-R + 2xS-Video + 2xCVBS&L-R + 1x VGA + 1xDVI + 1xStereo + 1xSPDIF + 4xHDMI
Output		2x HDMI + 1xVGA(Optional) + 1xCVBS + 2xRCA
YPbPr		3xRCA(Video) + 2xRCA(Audio) [female]
S-Video		9 pin S-Video [female]
CVBS		1xRCA(Video) + 2xRCA(Audio) [female]
VGA connector		HD-15 [15-pin D-sub female]
HDMI connector		HDMI [19-pin female]
RS-232 connector		9-Pin D-sub female
Mechanical		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	440 x 116 x 42mm [17.3" x 4.5" x 1.6"]
	Package	494 x 225 x 70mm [1'6" x 8.9" x 2.8"]
	Carton	510 x 380 x 252mm [1'7" x 1'2" x 10"]
Weight	Model	1641g [57.9oz]
	Package	2.4kg [5.4 lbs]
Power supply		5V 2A DC
Power consumption		10W

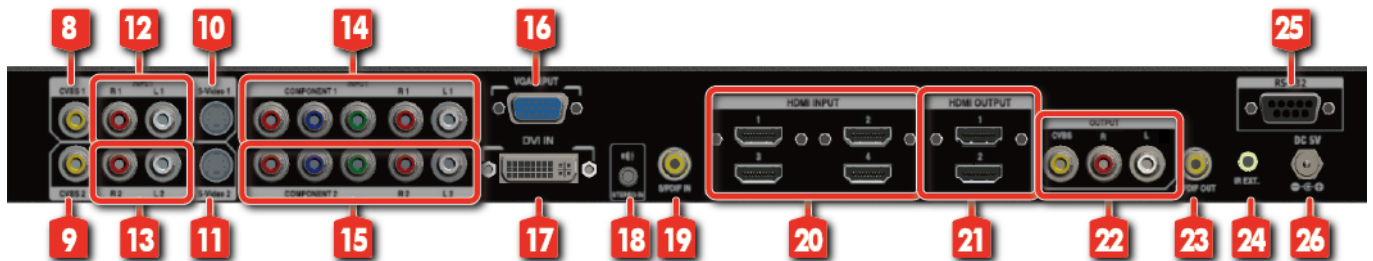| Operation temperature	0~40°C [32~104°F]
Storage temperature	-20~60°C [-4~140°F]
Relative humidity	20~90% RH [no condensation]

CONNECTION DIAGRAM
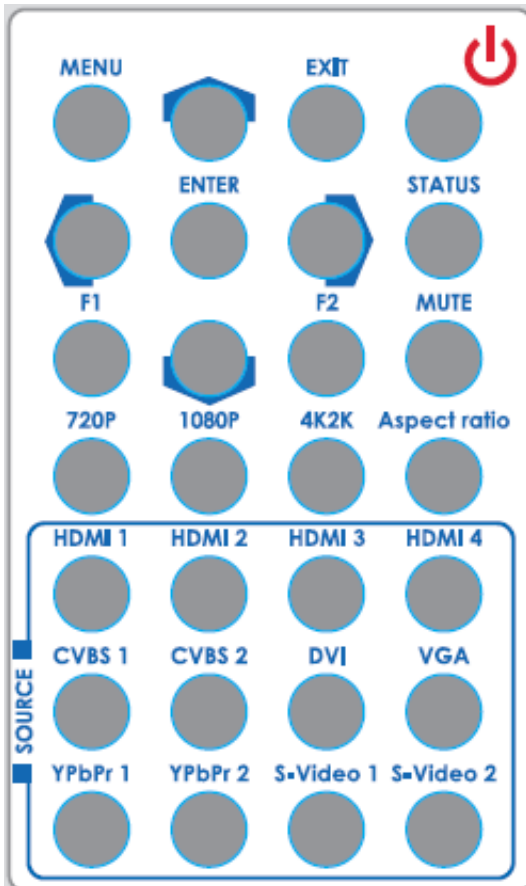
PANEL DESCRIPTIONS

Front Panel

1. OSD Control Panel
2. Input Source Fast Switching
3. Output Status
4. Selected Source Indicator
5. Signal Indicator
6. Power Indicator
7. IR Sensor

Rear Panel

8. CVBS1 Source
9. CVBS2 Source
10. S-Video1 Source
11. S-Video2 Source
12. Analog Audio1 Source (for CVBS1/S-Video1 Source)
13. Analog Audio2 Source (for CVBS2/S-Video2 Source)
14. YPbPr1 Source with Analog Audio
15. YPbPr2 Source with Analog Audio
16. VGA Source
17. DVI Source
18. Stereo Audio Source (for VGA/DVI Source)
19. S/PDIF Audio Source (for VGA/DVI Source)
20. HDMI1~4 Source
21. HDMI1&2 Output
22. CVBS Output with Analog Audio
23. S/PDIF Output
24. IR Extension
25. RS232 Control Port
26. +5V Power

IR Remote Control

Button	Function
⏻	Power On/Off the device
EXIT	Exit Menu
MENU	Menu on
STATUS	Source and resolution information
ENTER	Enter key
MUTE	Turn off the output's audio
(up)	Up Key
(right)	Right Key
(left)	Left Key
(down)	Down key
Aspect ratio	Aspect ratio change
4K2K	Select 4K2K output resolution
1080p	Select 1080p60 output resolution
720p	Select 720p60 output resolution
HDMI 1	Select HDMI 1 source
HDMI 2	Select HDMI 2 source
HDMI 3	Select HDMI 3 source
HDMI 4	Select HDMI 4 source
CVBS 1	Select CVBS 1 source
CVBS 2	Select CVBS 2 source
DVI	Select DVI source
VGA	Select VGA source
YPbPr 1	Select YPbPr 1 source

	YPbPr 2	Select YPbPr 2 source
	S-Video	Select S-Video 1 source
	S-Video	Select S-Video 2 source

OSD MENU

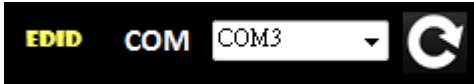|	Contrast	0~255 of Contrast Level
1. Image	Brightness	0~255 of Brightness Level
	Saturation	0~255 of Saturation Level
	Hue	0~255 of Hue Level
	B/W Extension	Off
		On
	Color Tone	Off
		Skin
		Green
	Edge Enhance	Typ
		Mid
		Max
		Off
	Sharpness	0~127 of Sharpness Level
2. Adjustment	Under/Over Scan	-50%~50% of Scan Level
	Aspect Ratio	16:9
		4:3
	H-Mirror	Off
		On
	V-Mirror	Off
		On
	H-Shift	-100~100 of H-Shift Level
	V-Shift	-50~50 of V-Shift Level
3. System	Input Res. Info	
	Input Select	
	Audio Source*	S/PDIF
		Stereo
	VGA Color Swap**	Off
		On
	Output Resolu.	
	Output Mode	
	HDMI Port EDID	
	F/W Version	
	Factory Reset	

*Only available in VGA or DVI mode.

**Only available in VGA mode. Some VGA source might have Color Swap issue, please use this function to adjust.

SOFTWARE PROCEDURE

Software Interface:

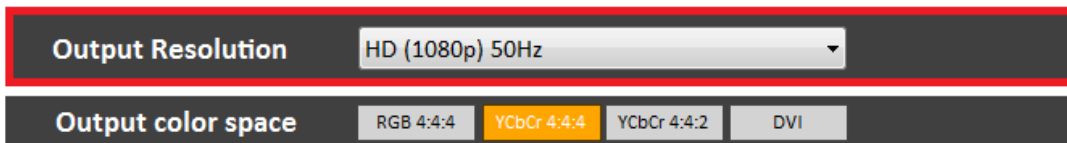1. Select Com port.

   Enter to find com port。

2. Select Source.
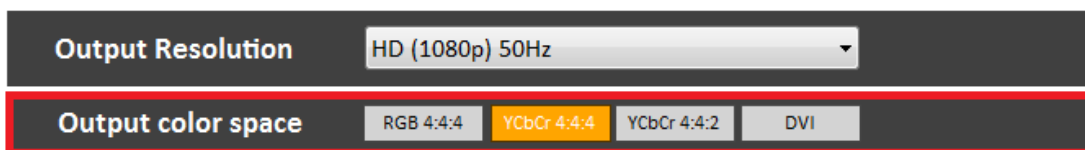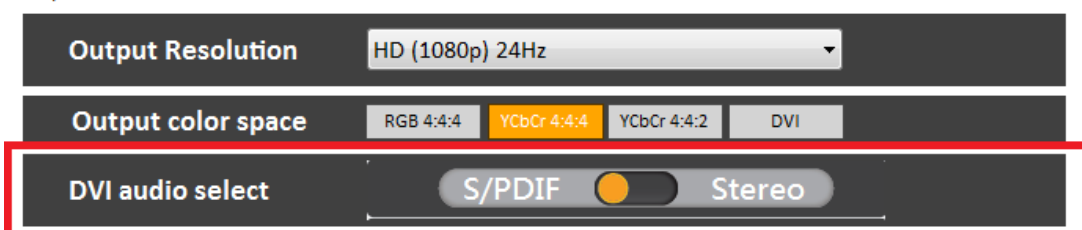

3. Setup Output Resolution.

4. Setup Output color space.

5. If Source is DVI, it shows DVI audio selection.
   In selection you can choose S/PDIF or Stereo.
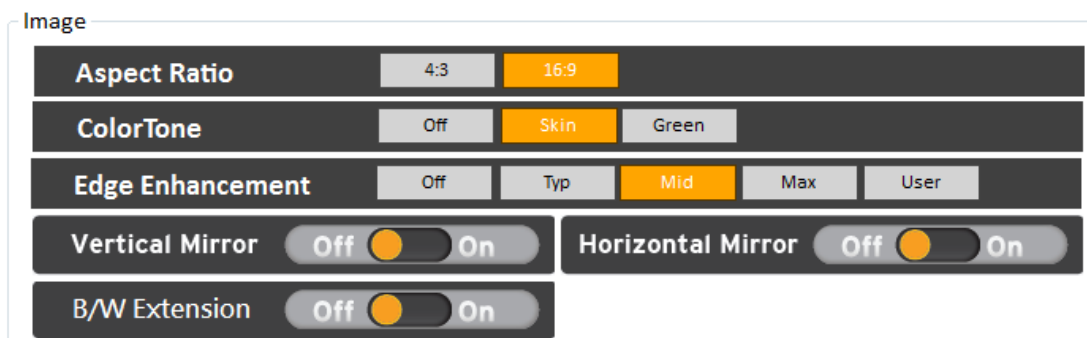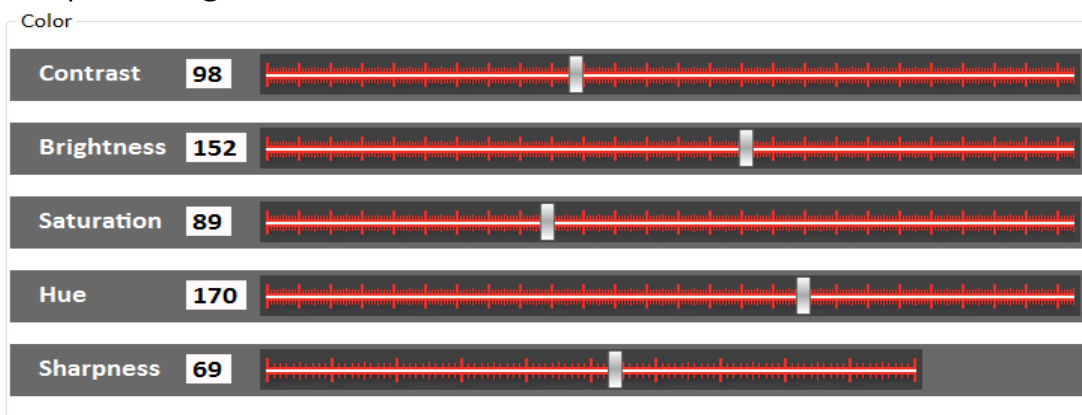

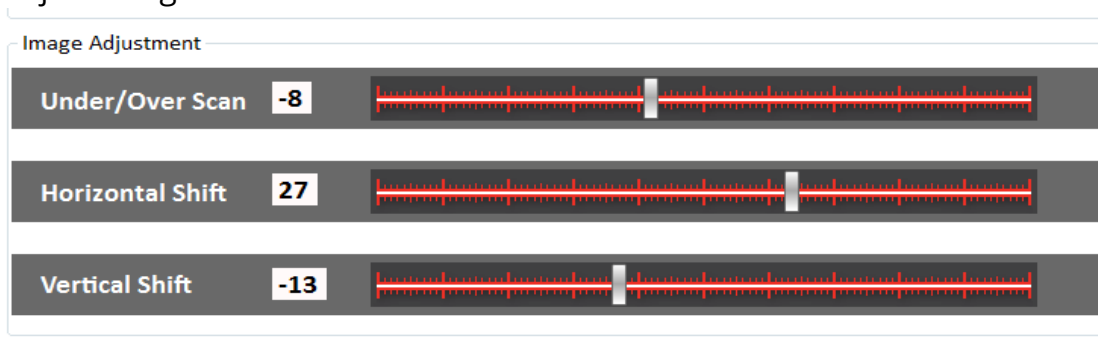6. If Source is VGA, it might have color swap issue, please use the VGA color swap function to adjust.

Output Resolution	SD(480i) 60Hz ▾			
Output color space	RGB 4:4:4	YCbCr 4:4:4	YCbCr 4:4:2	DVI
VGA color swap	Off ⬤ On			

7. Setup Aspect Ratio、ColorTone...

Image

Aspect Ratio	4:3	16:9		
ColorTone	Off	Skin	Green	
Edge Enhancement	Off	Typ	Mid	Max	User

Vertical Mirror	Off ⬤ On	Horizontal Mirror	Off ⬤ On

B/W Extension	Off ⬤ On

8. Setup Color figure

Color

Contrast	98
Brightness	152
Saturation	89
Hue	170
Sharpness	69

9. Adjust Image.

Image Adjustment

Under/Over Scan	-8
Horizontal Shift	27
Vertical Shift	-13

WARRANTY

The SELLER warrants the **AV-GM09S3-S1 Media Center Switcher** 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 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 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-GM09S3-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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