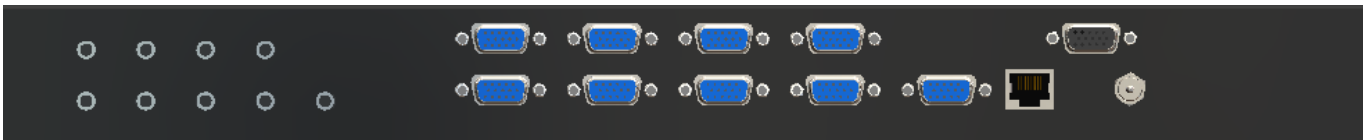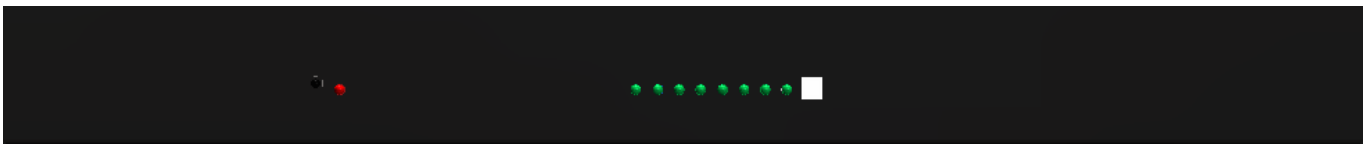# 8x1 VGA/Component/S-Video/Composite Switch with Audio & Ethernet Control

⚠️ Safety and Notice

The **AV-GM09V3-S1E** 8x1 VGA/Component/S-Video/Composite Switch 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, the **AV-GM09V3-S1E** 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.

TABLE OF CONTENTS

INTRODUCTION

The **AV-GM09V3-S1E** 8x1 VGA/Component/S-Video/Composite Switch with Audio & Ethernet Control receives and amplifies up to 8 VGA inputs, perfectly switches the desired input to the VGA equipped monitor or receiver. The switch supports VGA video up to 350MHz. The re-transmitted video quality is guaranteed and the longest transmission is up to 65m (210ft). Therefore, AV-GM09V3-S1E 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 switch, AV-GM09V3-S1E is ready to be as a switch with stereo audio and ideally for boardroom, showroom, and exhibition. The control of AV-GM09V3-S1E is versatile and easier through the IR remote control, the push button on front panel, Ethernet control, or the RS-232 control on rear panel.

FEATURES

- VGA/component/S-video/composite switch with 350MHz bandwidth
- Up to 8 graphics/video inputs
- LED indication
- Ethernet accessible
- Automatic detection of the VGA/component input
- Amplified video output with transmission length up to 65m (210-ft)
- Multiple control by IR remote, push button, Ethernet, and RS-232 control
- 1U rack mountable

PACKAGE CONTENTS

- 1x AV-GM09V3-S1E
- 1x DC 5V 4A in-line with C7 power cord
- 1x IR Remote control
- 1x Rack-mounting ear set
- 1x Installation software CD
- 1x User Manual

SPECIFICATIONS

| Model Name	AV-GM09V3-S1E
Technical	
Role of usage	8x1 switch
Supported input/output	VGA / Component / S-video / Composite*
Video bandwidth	350MHz
Video support	1080p60, WUXGA [1920x1200@60] & UXGA [1600x1200@60] or even higher
Transmission	UXGA [1600x1200] – 65m [210ft]
Audio support	Analog stereo
Input	8x VGA [component/s-video/composite through adapters] 8x 3.5mm analog stereo audio 1x RS-232
Output	1x VGA [component / s-video / composite through adapters] 1x 3.5mm analog stereo audio
VGA connector	HD-15 [15-pin D-sub female]
RS-232 connector	DE-9 [9-pin D-sub female]
3.5mm connector	Earphone jack for analog stereo audio
RJ-45 connector	WE/SS 8P8C
Input selection	IR remote / push button / RS-232 control / Ethernet
IR remote control	Electro-optical characteristics: 𝜃 = 25° / Carrier frequency: 36-40kHz
Mechanical	
Dimensions [L x W x H]	Model	1RU – 440 x 66 x 44mm [1'5.3" x 2.6" x 1.7"]
	Package	510 x 230 x 70mm [1'8" x 9.1" x 2.8"]
	Carton	510 x 410 x 252mm [1'8" x 1'4" x 10"]
Weight	Model	1100g [2.4 lbs]
	Package	1890g [4. 2lbs]
Fixedness	1RU rack-mount with ears
Power supply	5V 4A DC
Power consumption	13 Watt [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

Front Panel
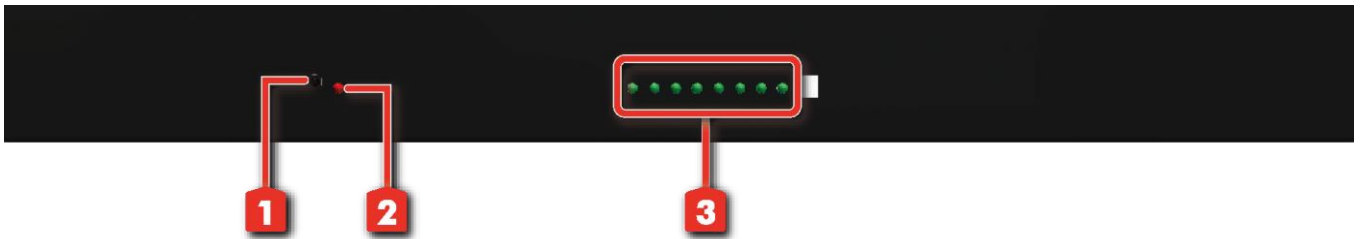
1. Infrared sensor

2. LED indicator for power

3. LED indicator for VGA input #1 ~ #8

Rear Panel
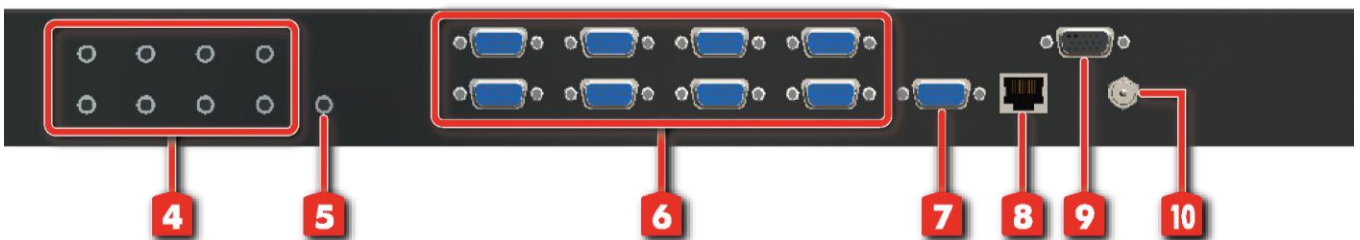
4. 3.5mm audio socket for audio source #1 ~ #8

5. 3.5mm audio socket for selected audio output

6. VGA input source #1 ~ #8

7. Selected VGA output

8. Etherent Control

9. RS-232 control port

10. 5V DC power jack

CHANNEL CONTROL

IR remote cotrol

Key	Code	Function
POWER	0x03	Turn on/off AV-GM09V3-S1E
⊕▶	0x02	Switch from the selected input to the next input channel
◀	0x01	Switch from the selected input back to the prior input channel
1	0x04	Select **INPUT 1** to be the input source
2	0x05	Select **INPUT 2** to be the input source
3	0x06	Select **INPUT 3** to be the input source
4	0x07	Select **INPUT 4** to be the input source
5	0x08	Select **INPUT 5** to be the input source
6	0x09	Select **INPUT 6** to be the input source
7	0x0a	Select **INPUT 7** to be the input source
8	0x1b	Select **INPUT 8** to be the input source
9	0x1f	Reserved
⏎	0x0c	Turn on/off **AUTO DETECT** which allows the input source can be automatically changed once the selected input is disconnected
F1	0x0d	Reserved
F2	0x0e	Reserved
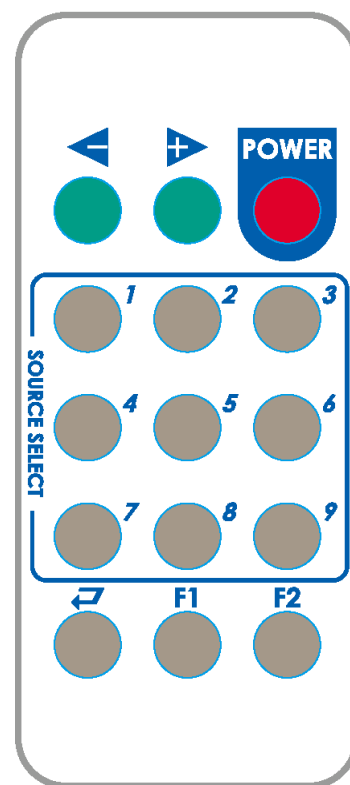
> AUTO DETECT function is used for checking input signal existed or not. Enable this function will make the output port switching to the next available input in sequential order when the currently selected input signal is lost. Disable this function will make the AV-GM09V3-S1E stay at the currently selected input even if the input signal is lost.

Software Control via the RS-232 or Ethernet port
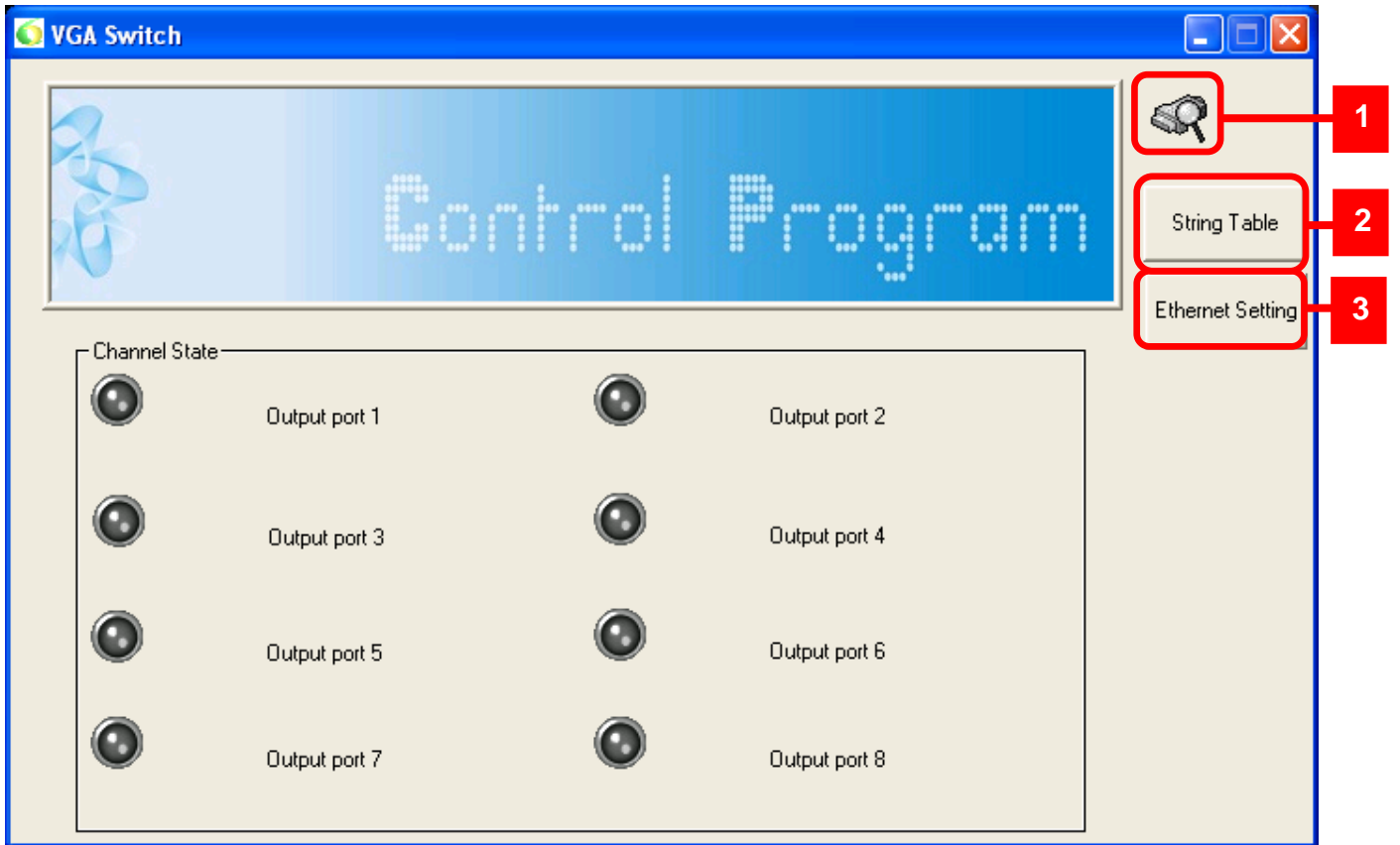
1 Scan Device

Automatically scan the COM port connected to AV-GM09V3-S1E

2 String table

Freely setting the name of the inputs
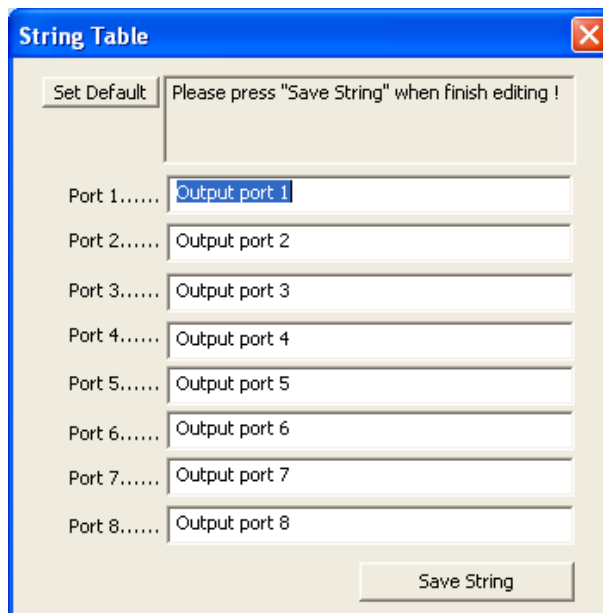
Ethernet Setting

<u>Ethernet</u>

Users have to define Ethernet properties through RS-232 for the matrix. All the parameters for Ethernet have to be saved into the Switcher by clicking on "**Write To Device**" button.

<u>Communication</u>

Users can choose the control interface between Switcher and PC host.
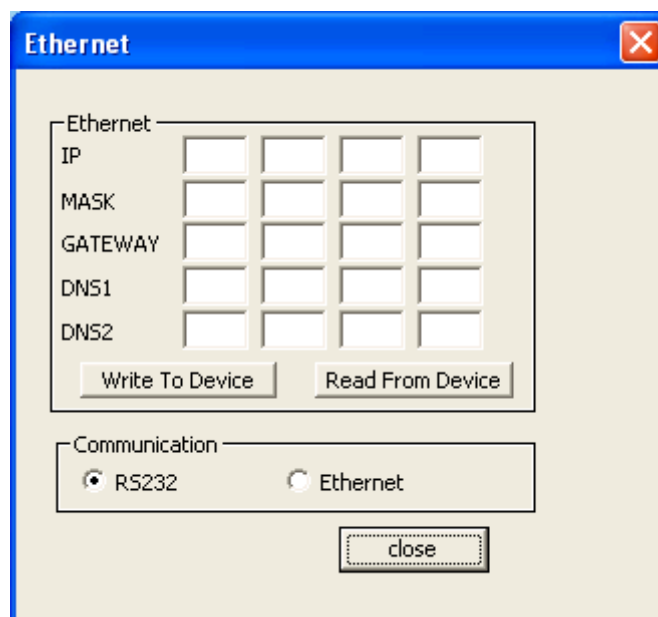
1. Please notice that Ethernet control has a higher priority than RS-232. If RS-232 and Ethernet controls come from 2 different hosts, commands may coincide and in this case, commands from Ethernet will be effective immediately no matter whether commands from RS-232 are accurately sent and executed!

2. Initial or any change to Ethernet settings, users MUST power cycle VGA matrix in order to get the network settings effective!

HARDWARE INSTALLATION

1. Connect VGA/component/s-video/composite display/projector to the output of AV-GM09V3-S1E.

2. Connect the VGA/component/s-video/composite source devices to the inputs of AV-GM09V3-S1E.

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

4. Use IR remote or push button on the front panel to switch between inputs, or connect a computer through RS-232 port to switch the VGA/component/s-video/composite input sources.

CONNECTION DIAGRAM
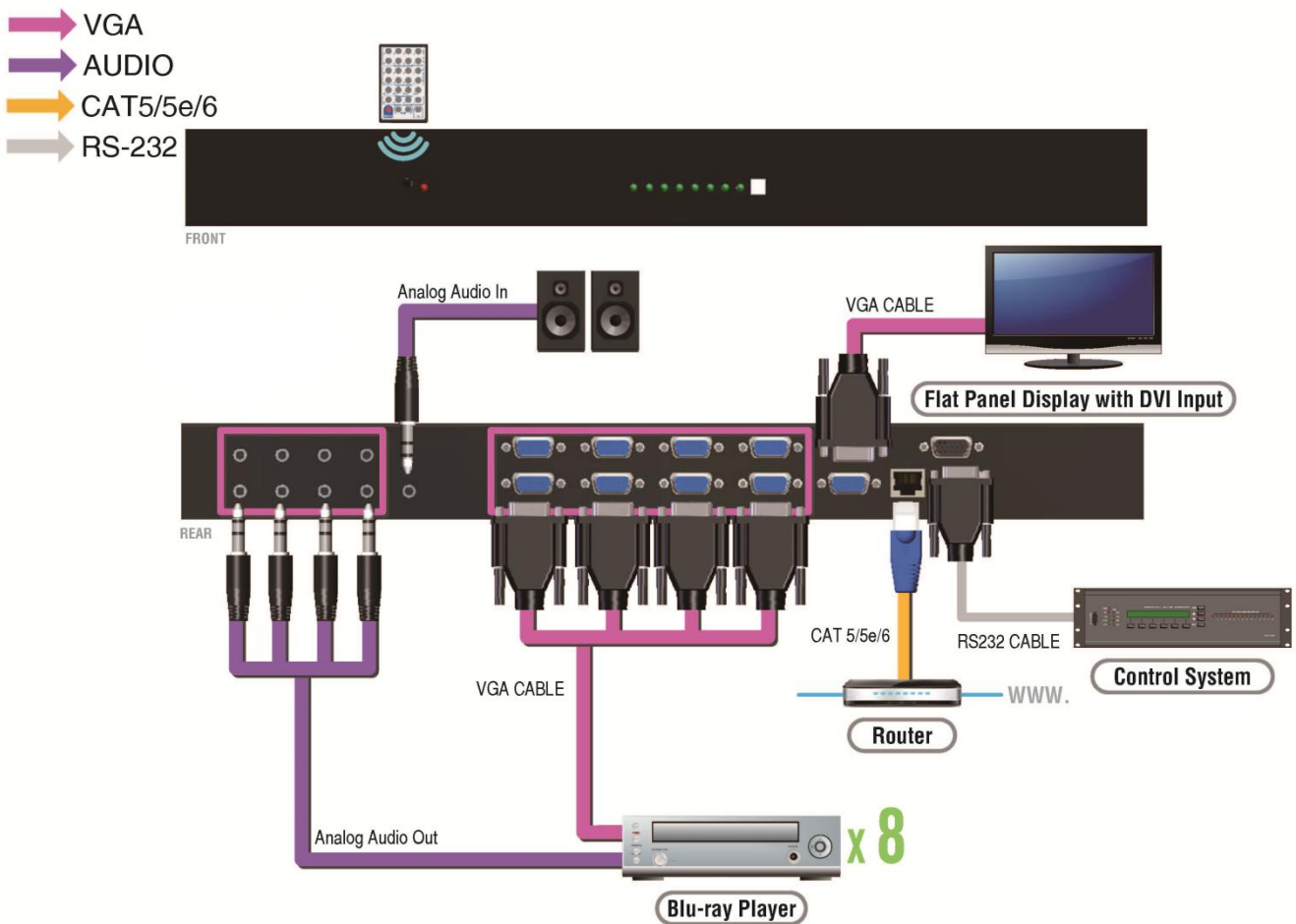
PIN DEFINITION

VGA
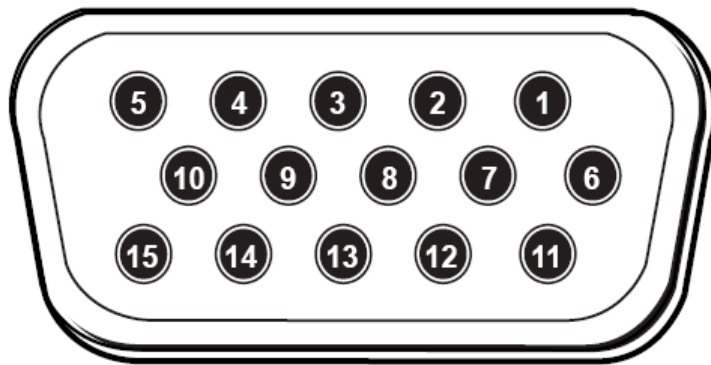
Pin 1	Pr / Red	Pin 6	Ground	Pin 11	Ground
Pin 2	Y / Green / Composite	Pin 7	Ground	Pin 12	Reserved
Pin 3	Pb / Blue	Pin 8	Ground	Pin 13	Horizontal sync.
Pin 4	Ground	Pin 9	+5V DC	Pin 14	Vertical sync.
Pin 5	Ground	Pin 10	Ground	Pin 15	Reserved

S-Video
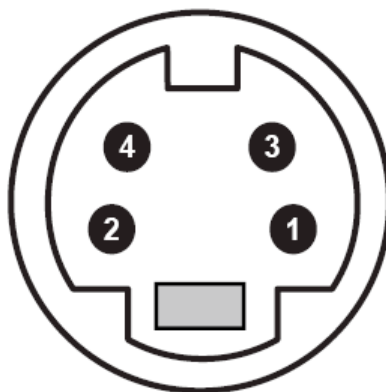
Pin 1	Ground (Y)
Pin 2	Ground (C)
Pin 3	Y – Intensity (luminance)
Pin 4	C – Color (Chrominance)

WARRANTY

The SELLER warrants the **AV-GM09V3-S1E** 8x1 VGA/Component/S-Video/Composite Switch with Audio & Ethernet Control 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-GM09V3-S1E features and specifications is subject to change without further notice.**

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

April, 2018