HDMI 2.0 7"LCD Monitor

Safety and Notice

The **AV-GM09E3-S1** HDMI 2.0 7" LCD Monitor has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments,**AV-GM09E3-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.

TABLE OF CONTENTS

INTRODUCTION

The **AV-GM09E3-S1** HDMI 2.0 7" LCD Monitor is an advanced HDMI monitor with multi-format support. Not only receiving HDMI 2.0 signal, AV-GM09E3-S1 also can bypass HDMI input to HDMI output. This device only have four buttons and 7" panel to make the device compact and portable. By the four buttons on the side, user can easily control, adjust and calibrate panel via OSD. In addition, the embedded four set of EDID make the panel as much compatible as possible.

FEATURES

- HDMI 2.0 compliant
- Supports 4K2K@60 4:4:4 8bits
- HDCP 2.2 and 1.4 compliant
- Wide frequency range: 25MHz~600MHz
- Video bandwidth: 18Gbps
- Supports xvYCC, x.v.Color & Deep Color
- Built-in advanced scaler to scale up and down the input to fit on screen
- RS-232 Firmware upgradable to guarantee the functionality revised.
- Supports one up to 4K2K@60 4:4:4 8bits loop-out
- Push button for control and calibrate
- 4 sets of built-in EDID

PACKAGE CONTENTS

- 1x AV-GM09E3-S1
- 1x DC 12V 2A
- 1x User Manual

SPECIFICATIONS

Model Name		AV-GM09E3-S1
Technical		
LCD size & resolution		7" & 800x480
LCD color depth		16 bit RGB
HDCP compliance		HDCP 2.2 & HDCP 1.4
Composite bandwidth		Single-link 600MHz [18Gbps]
Video support		4K2K@60 (4:4:4 8bits)
HDMI bypass		Yes
Input		1 x HDMI
Output		1x HDMI [Loopout]
ESD protection		Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]
PCB stack-up		6-layer board [impedance control — differential 100Ω; single 50Ω]
HDMI connector		HDMI type A
RS-232 connector		DE-9 [9-pin D-sub female]
Mechanical		
Housing		Metal enclosure
Dimensions [L x W x H]	Model	173 x 108 x 28mm [6.8" x 4.3" x 1.1"]
	Package	264 x 170 x 77mm [10.3" x 6.7" x 3"]
	Carton	430 x 358 x 291mm [1'4" x 1'2" x 11.5"]
Weight	Model	474g [16.7oz]
	Package	926g [2lbs]
Fixedness		Wall-mounting case with screws
Power supply		12V 2A DC
Power consumption		6.5 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
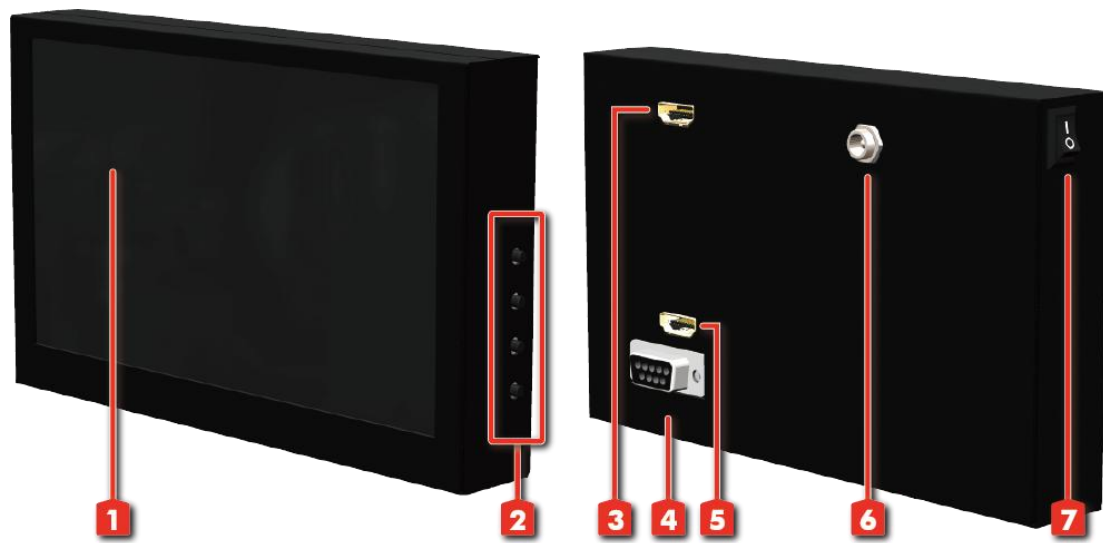
1. **7" LCD Monitor**
2. **PUSH BUTTON**
   [First]: Menu Button
   [Second]: Up Button
   [Third]: Down Button
   [Fourth]: Enter Button
3. **INPUT:** HDMI input
4. **RS-232:** Reserved in the usage of technical support from factory
5. **OUTPUT:** HDMI output
6. **+12V DC:** 12V DC power jack
7. **Power Switch:** Power ON/OFF switch

CONNECTION DIAGRAM

HDMI

HDMI CABLE

Blu-ray Player
PLAY ▶

HDMI CABLE

Flat Panel Display
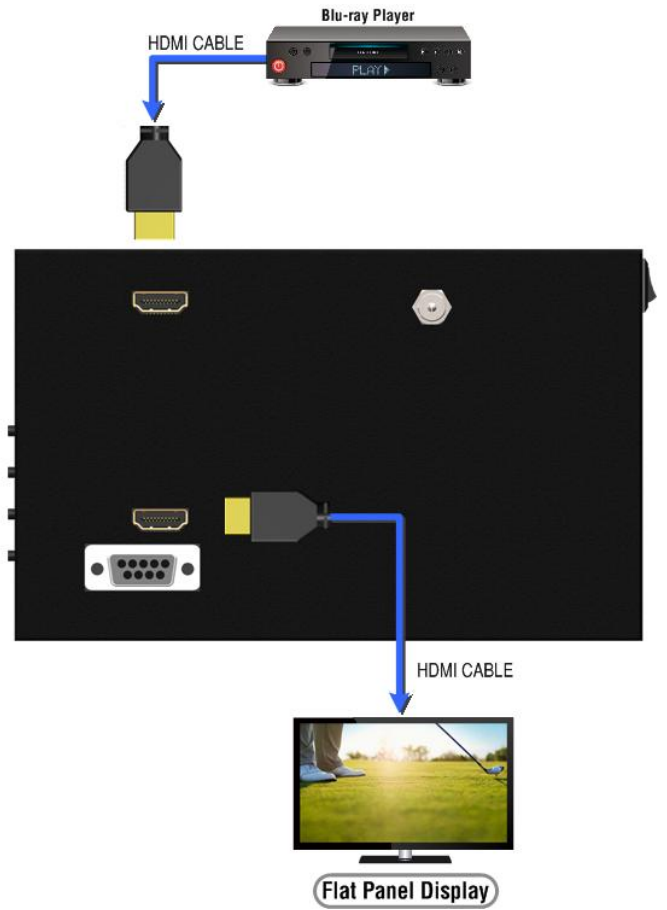
SUPPORT RESOLUTION

TV Resolution

Resolution	Color Depth			
	8 bit	10 bit	12 bit	16 bit
480i@60Hz	V			
480p@60Hz	V	V	V	V
576i@50Hz	V			
576p@50Hz	V	V	V	V
720p@25Hz	V	V	V	V
720p@29.97Hz	V	V	V	V
720p@30Hz	V	V	V	V
720p@50Hz	V	V	V	V
720p@59.94Hz	V	V	V	V
720p@60Hz	V	V	V	V
1080i@50Hz	V			
1080i@59.94Hz	V			
1080i@60Hz	V			
1080p@23.976Hz	V	V	V	V
1080p@24Hz	V	V	V	V
1080p@25Hz	V	V	V	V
1080p@29.97Hz	V	V	V	V
1080p@30Hz	V	V	V	V
1080p@50Hz	V	V	V	V
1080p@59.94Hz	V	V	V	V
1080p@60Hz	V	V	V	V
4K2K@23.976Hz (RGB)	V	V	V	V
4K2K@23.976Hz (YUV 4:2:2)	V	V	V	V
4K2K@23.976Hz (YUV 4:4:4)	V	V	V	V
4K2K@24Hz (RGB)	V	V	V	V
4K2K@24Hz (YUV 4:2:2)	V	V	V	V
4K2K@24Hz (YUV 4:4:4)	V	V	V	V
4K2K@25Hz (RGB)	V	V	V	V
4K2K@25Hz (YUV 4:2:2)	V	V	V	V
4K2K@25Hz (YUV 4:4:4)	V	V	V	V
4K2K@29.97Hz (RGB)	V	V	V	V
4K2K@29.97Hz (YUV 4:2:2)	V	V	V	V
4K2K@29.97Hz (YUV 4:4:4)	V	V	V	V
4K2K@30Hz (RGB)	V	V	V	V
4K2K@30Hz (YUV 4:2:2)	V	V	V	V
4K2K@30Hz (YUV 4:4:4)	V	V	V	V
4K2K@50Hz (RGB)	V	V	V	V
4K2K@50Hz (YUV 4:2:0)	V		V	V
4K2K@50Hz (YUV 4:2:2)	V			
4K2K@50Hz (YUV 4:4:4)	V	V	V	V

4K2K@59.94Hz (RGB)	V	V	V	V
4K2K@59.94Hz (YUV 4:2:0)	V	V	V	V
4K2K@59.94Hz (YUV 4:2:2)	V			
4K2K@59.94Hz (YUV 4:4:4)	V	V	V	V

TV Resolution

Resolution	Color Depth			
	8 bit	10 bit	12 bit	16 bit
4K2K@60Hz (RGB)	V	V	V	V
4K2K@60Hz (YUV 4:2:0)	V	V	V	V
4K2K@60Hz (YUV 4:2:2)	V			
4K2K@60Hz (YUV 4:4:4)	V	V	V	V

PC Resolution

Resolution	Color Depth			
	8 bit	10 bit	12 bit	16 bit
640x480@60Hz	V	V	V	V
640x480@75Hz	V	V	V	V
800x600@60Hz	V	V	V	V
800x600@75Hz	V	V	V	V
1360x768@60Hz	V	V	V	V
1366x768@60Hz	V	V	V	V
1024x768@60Hz	V	V	V	V
1024x768@75Hz	V	V	V	V
1400x1050@60Hz	V	V	V	V
1280x1024@60Hz	V	V	V	V
1280x1024@75Hz	V	V	V	V
1600x1200@60Hz	V	V	V	V
1440x900 75Hz	V	V	V	V
1680x1050@60Hz	V	V	V	V
1680x1050@60HzRB	V	V	V	V
1920x1080@60HzRB	V	V	V	V
1920x1200@60HzRB	V	V	V	V

DVI Resolution

Resolution	Color Depth			
	8 bit	10 bit	12 bit	16 bit
480p@60Hz	V			
576p@60Hz	V			
720p@25Hz	V			
720p@29.97Hz	V			
720p@30Hz	V			
720p@50Hz	V			
720p@59.94Hz	V			
720p@60Hz	V			
1080i@50Hz	V			
1080i@59.94Hz	V			
1080i@60Hz	V			
1080p@23.976Hz	V			
1080p@24Hz	V			
1080p@25Hz	V			
1080p@29.97Hz	V			

1080p@30Hz	V			
1080p@50Hz	V			
1080p@59.94Hz	V			

DVI Resolution

Resolution	Color Depth			
	8 bit	10 bit	12 bit	16 bit
1080p@60Hz	V			
4K2K@23.976Hz	V			
4K2K@24Hz	V			
4K2K@25Hz	V			
4K2K@29.97Hz	V			
4K2K@30Hz	V			
4K2K@50Hz	V			
4K2K@59.94Hz	V			
4K2K@60Hz	V			
4096@23.976Hz	V			
4096@24Hz	V			
4096@25Hz	V			
4096@29.97Hz	V			
4096@30Hz	V			
4096@50Hz	V			
4096@59.94Hz	V			
4096@60Hz	V			

OSD MENU

Menu	Items	Remark
1. Information	Input Res. Info	Read format information from source
	Data Rate	
	Color Space	
	Deep Color	
	HDCP Status	
2. Image	Contrast	0~255 of Contrast Level
	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
3. System	F/W Version	
	Factory Reset	
	EDID Setting	
4. Exit		

LIMITED WARRANTY

The SELLER warrants the **AV-GM09E3-S1** HDMI 2.0 7" LCD Monitor 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-GM09E3-S1 features and specifications is subject to change without further notice.**

April, 2018