

# USB 3.0 3G-SDI Capture Device with Audio in



P/N: AV-GM0AN3-S1



The AV-GM0AN3-S1 USB 3.0 3G-SDI Capture Device with Audio in has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the AV-GM0AN3-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	1
FEATURES	1
PACKAGE CONTENTS	1
SPECIFICATIONS	2
PANEL DESCRIPTION	3
CONNECTION DIAGRAM	4
USB PIN DEFINITION	5
LIMITED WARRANTY	6

### **INTRODUCTION**

The AV-GM0AN3-S1 USB 3.0 3G-SDI Capture Device with Audio in provides a professional way to capture 3G/HD/SD-SDI signals. It adopts USB 3.0 interface, which can realize high-speed transmission. Users can capture 3G/HD/SD-SDI signals by this capture device. Besides, AV-GM0AN3-S1 can capture and display original uncompressed 3G/HD/SD-SDI with more realistic color rendition. AV-GM0AN3-S1 also uses large volume image buffer technology which effectively avoids the video tearing. The high sampling rate and high sampling accuracy assure images with high sharpness, rich details, and less color edges.

## **FEATURES**

- SDI video and audio streams over USB 3.0
- Supports UVC1.0
- Supports video resolution up to 1080p 60Hz
- Supports SDI loop through
- Supports stereo line in
- Auto-detection on video format to ensure plug-play operations
- Recording Video Format: H.264 (Software Compression)
- Works on multiple operation system platforms (Windows 7/8.1/10, Mac and Linux OS)
- Compatible with most 3<sup>rd</sup> party software such as OBS Studio and AMCap
- Supports USB 3.0 (MJPG/YUY2) and USB 2.0 (MJPG)
- Low Lattency
- System Requirements (Recommanded)
  - Windows® 7(SP1) / Windows 8.1 / Windows 10
  - PC: Intel® CoreTM i5-4440 3.10GHz + NVIDIA® GeForce® GTX 660 or higher
  - Laptop: Intel® Core i7-4810MQ + NVIDIA GeForce GTX 870M or higher
  - 4GB RAM or higher



- 1. Video quality is apparently related to the capability of computer and software setting.
- 2. Please use the included USB 3.0 cable in the box to protect the device and avoid further compatible issues.

## **PACKAGE CONTENTS**

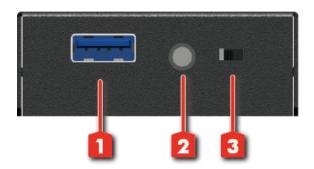
- 1x AV-GM0AN3-S1
- 1x USB 3.0 A to A Cable (host to device)
- 1x User Manual

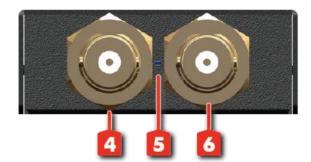
# SPECIFICATIONS

Model Name		AV-GM0AN3-S1			
Technical					
Role of usage		Video Capture Device			
SDI standards		SD-SDI, HD-SDI & 3G-SDI			
Input Video b	andwidth	2.970 Gbit/s, 2.970/1.001 Gbit/s			
Output Video bandwidth		Up to 350MBps (USB 3.0)			
Video support		Up to 1080p60			
Audio Input		SDI Embedded Audio 3.5mm Analog Stereo Audio			
Audio Format		2CH 16bit PCM			
Recording Mo	ode	Software Compression			
Recording Video Format		YUY2 (USB3.0), MJPG (USB2.0/3.0)			
ESD protection		Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge]			
PCB stack-up		6-layer board [impedance control — differential 100 $\Omega$ ; single 50 $\Omega$ ]			
Firmware up	date	Feasible via USB Port			
Input		1x SDI + 1x 3.5mm stereo			
Output		1x USB + 1x SDI loop through			
BNC connector		3G 75Ω inter-locked socket			
USB connector		USB 3.0 Type A (SuperSpeed USB)			
Software compatibility (not complete list)		OBS Studio (Windows, Linux), AMCap (Windows), Potplayer (Windows), VLC (OS X, Linux), XSplit Boardcast (Windows), Skype (Windows, OS X), Zoom (Windows), Hangout (Windows), TeamViewer (Windows)			
OS Support		Windows 7 /8.1 /10, Mac and Linux OS			
Mechanical		AV-GM0AN3-S1			
Housing		Metal enclosure			
	Model				
Dimensions [L x D x H]	Package				
	Carton				
	Model				
Weight	Package				
Fixedness		Wall-mounting case with screws			
Power supply		Via USB			
Power consumption		3 Watts [max]			
Operation temperature		0~40°C [32~104°F]			
Storage temperature		-20~60°C [-4~140°F]			
Relative hum	idity	20~90% RH [no condensation]			

## PANEL DESCRIPTION

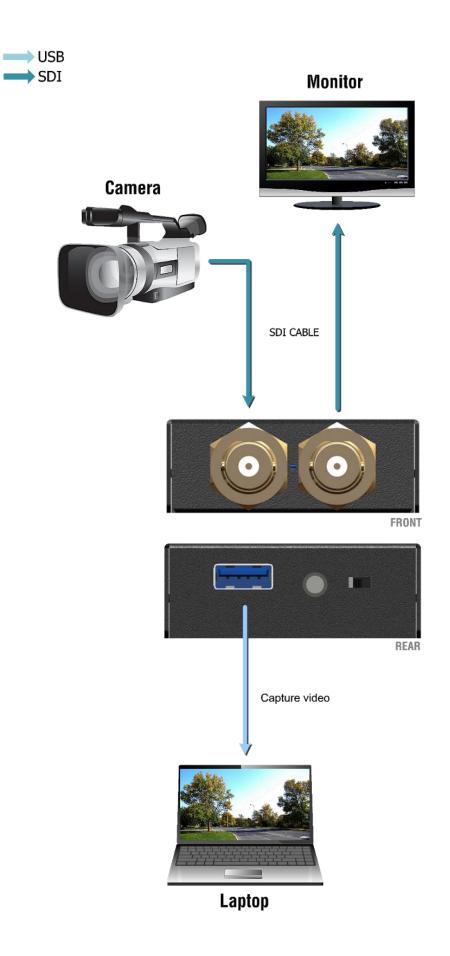
### Front/Rear Panel





- 1. USB OUT: Connect to a USB host (PC, NB, MAC...)
- 2. Line IN: Connect to analog stereo audio source
- 3. Slide Switch: Select the audio source from SDI embedded audio or analog stereo audio [Left] Analog Stereo Audio [Right] SDI Embedded Audio
- 4. SDI IN: Connect to a 3G/HD/SD-SDI source
- 5. LED: Signal LED indicator
- **6. SDI LOOPOUT:** Connect to a 3G/HD/SD-SDI display

# **CONNECTION DIAGRAM**



# **USB PIN DEFINITION**



	P1		P2
VBUS	1	<b></b>	1
D-	2	<b></b>	2
D+	3	<b></b>	3
GND	4	<b></b>	4
SSRX-	5	<b></b>	5
SSRX+	6	<b></b>	6
GND	7	<b></b>	7
SSTX-	8	<b>←</b>	8
SSRX+	9	<b></b>	9
Shield	SHELL	<b>←</b>	SHELL

## **LIMITED WARRANTY**

The SELLER warrants the **AV-GM0AN3-S1 USB 3.0 3G-SDI Capture Device with Audio in** 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-GM0AN3-S1 features and specifications is subject to change without further notice.

Support

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