

EX-G066A

HDMI to HD/SD-SDI Converter

User Manual





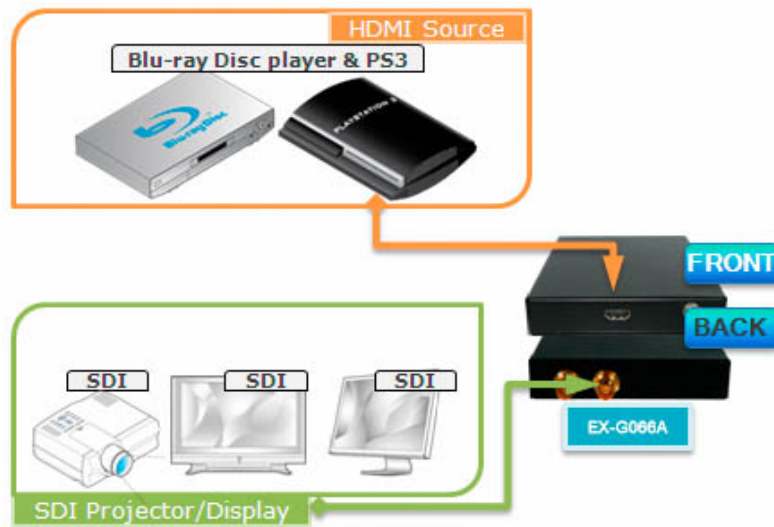
Safety and Notice

The **EX-G066A HDMI to HD/SD-SDI Converter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **EX-G066A** 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.

Introduction

The EX-G066A provides a professional way to convert HDMI to HD/SD SDI in real time. The conversion between SDI and HDMI is pure digital and guarantees no loss transformation for both audio and video. Plus, with up to 8 channels audio support, 7.1 channel or 5.1 channel audio becomes available. The EX-G066A also provides 2 low jitter SDI outputs for daisy chain or multiple monitors. With the use of EX-G066A, the most popular uncompressed video interface in the consumer world is readily available for professional SDI equipments!



Features

- Supported high-definition (HD) formats:
1080i @50/59.94/60Hz, 1035i @50/59.94/60Hz, 720p @50/59.94/60Hz
- Supported standard-definition (SD) formats: NTSC @59.94Hz, PAL @50Hz
- Auto HD/SD-SDI detection
- Two SDI compliant outputs
- External DIP Switch Configuration

Specifications & Package Contents

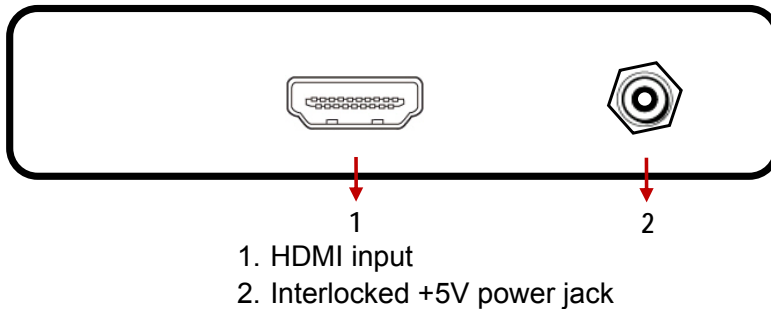
Model Name		EX-G066A
Technical		
SDI standards		SD-SDI & HD-SDI
Auto HD/SD-SDI detection		Yes
Video bandwidth		[1.485Gpbs & 1.485/1.001Gpbs]
Video support		[HD] – 720p @50/59.94/60Hz, 1035i @50/59.94/60Hz, 1080i @50/59.94/60Hz, 1080p @24/30Hz [SD] – NTSC @59.94Hz, PAL @50Hz
Input signal		[SD-SDI] SMPTE 259M [HD-SDI] SMPTE 292M, 296M
Output signal		SDI
Output impedance		75Ω
Synchronization mode		Internal synchronization or external synchronization
Eye pattern characteristics		Extra low alignment jitter 0.05UI at HD
Cable equalization		[HD-SDI] up to 150m (500ft) [SD-SDI] up to 300m (1000ft)
Audio support		Yes
PCB stack-up		4-layer board [impedance control — differential 100Ω; single 50Ω]
Input		1x HDMI
Output		2x BNC [SDI]
BNC connector		75Ω inter-locked socket
HDMI connector		Type A [19-pin female]
DIP switch		4-pin [video format / audio format / audio group / reserved]
Mechanical		
Housing		Metal case
Dimensions (L x W x H)	Model	160 x 110 x 25mm [6.3"x4.3"x1"]
	Package	270 x 175 x 80mm [10.6"x6.9"x3.2"]
	Carton	450 x 370 x 300mm [1'5.7"x1'2.6"x11.8"]
Weight	Model	420g [15oz]
	Package	1030g [2.3 lbs]
Fixedness		Inter-locked power supply
Power supply		5V 4A DC
Power consumption		3 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]
Package Contents		1x EX-G066A 1x 5V power adapter 1x User Manual

Supported Resolutions

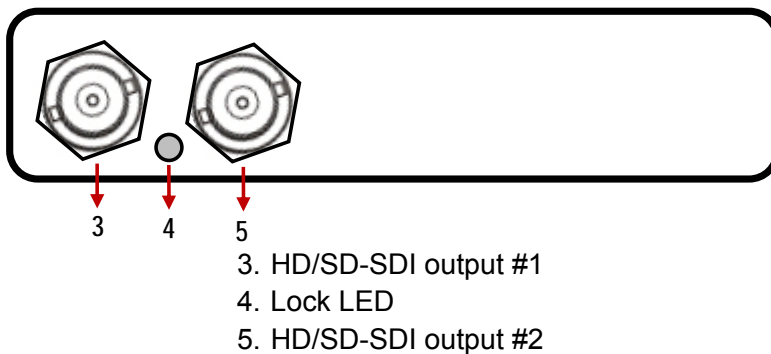
HD OUTPUT	
525p @ 59.94Hz	SMPTE 293M, ITU-BT.1358
625p @ 50Hz	ITU-BT.1358
720p @ 50Hz	SMPTE 296M -3
720p @ 60 / 59.94Hz	SMPTE 296M -1, -2
1080i @ 25Hz	SMPTE 274M -6
1080i @ 30 / 29.97Hz	SMPTE 274M -4, -5
1080p @ 24 / 23.98Hz	SMPTE 274M -10, -11
1080p @ 25Hz	SMPTE 274M -9
1080p @ 30 / 29.97Hz	SMPTE 274M -7, -8
SD OUTPUT	
NTSC	
PAL B,D,G,H,I	

Panel Descriptions

Front Panel



Rear Panel



Bottom Panel

A 4-pin DIP switch is used for user interface, and users can access this switch from the bottom of the unit.

Pin #	1	2	3	4
OFF (↑)	Used for SMPTE 352M	3G Level A	Audio group 1&2	Default EDID
ON (↓)		3G Level B	Audio group 3&4	Update EDID

Notice

1. EX-G066A mainly embeds the audio channels in audio group 1&2 or 3&4. Please adjust DIP switch pin 3 for setup.
2. EX-G068A supports only audio sample frequency 48kHz.
3. While stereo audio is chosen, only the first pair of HDMI audio will be placed into CH 1 & 2 of Group 1 or 3, dependent upon pin 3.
4. In order to keep the compatibility of HDMI to most monitors, EX-G066A features EDID learning ability. The operation is shown in the EDID learning section.

EDID Learning

1. Turn off EX-G066A and set the pin 4 of DIP switch of EX-G066A to OFF.
2. Connect the TV monitor thru HDMI port to EX-G066A, and then turn on EX-G066A.
3. The LED of EX-G066A will dim and light again, which indicates the EDID learning process is finished.
4. Connect EX-G066A to the HDMI source through a HDMI cable and enjoy the experience.

Limited Warranty

The SELLER warrants the **EX-G066A HDMI to HD/SD-SDI Converter** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year 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 EX-G066A features and specifications is subject to change without further notice.