

geratech[®]



EGE-CN-3SDI-DVIAUD

3G-SDI to DVI Video
Converter with Audio



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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
VS1	25/11/11	First release
VR2	12/03/12	Add Support Timings
VS3	11/07/12	SDI standards updated
VR4	09/08/12	Type Error

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1. INTRODUCTION

The SDI to DVI Converter allows SD, HD and 3G-SDI signals to be shown on DVI display. This means that it is now easier for professionals to distribute and extend their SDI signal while giving the ability to display work on DVI display. Additionally, the built-in stereo Audio Out will allow the user to enjoy perfectly synchronized video and audio.

2. APPLICATIONS

- Smart Home/Luxury House
- Smart building or any Smart AV Installation System
- Converting a 3G SDI camera signal to DVI signal

3. PACKAGE CONTENTS

- 3G SDI to DVI Converter
- 5 V/2.6 A DC power adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

Input SDI source equipment with SDI cable and output DVI monitor with DVI cable.

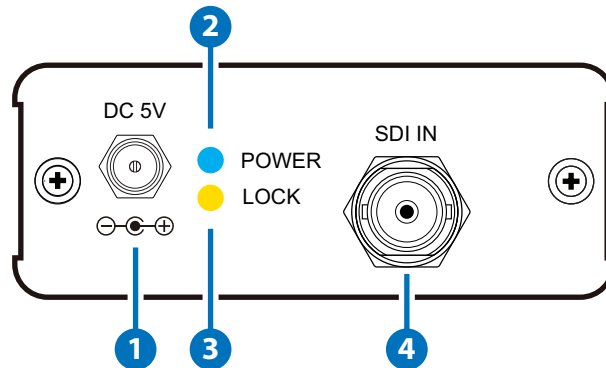
5. FEATURES

- Shows SDI source on DVI display
- Auto-detects SD-SDI, HD-SDI and 3G-SDI input signals
- SDI interface operates at bitrates of 2.970 Gbit/s, 2.970/1.001 Gbit/s, 1.485 Gbit/s, 1.485/1.001 Gbit/s and 270 Mb/s
- Converts SDI signal to DVI:
 1. SD-SDI (SMPTE 259M-C) to 480i/576i
 2. HD-SDI (SMPTE 292M) to 720p@50/59.94/60, 1080i@50/59.94/60
 3. 3G-SDI (SMPTE 424M/425M-AB) to 1080p@23.98/24/25/29.97/30/50/59.94/60, 1080PsF@23.98/24/25/29.97/30
- Supports SDI input modes:
 1. SD-SDI (SMPTE 259M-C, at bitrates of 270 Mbit/s)
 2. HD-SDI (SMPTE 292M, at bitrates of 1.485 Gbit/s and 1.485/1.001 Gbit/s)
 3. 3G-SDI (SMPTE 424M/425M-AB, at bitrates of 2.970 Gbit/s and 2.970/1.001 Gbit/s)
- Supports SDI input distance up to 100 meters (3G-SDI), 200 meters (HD-SDI), or 300 meters (SD-SDI)

Note: Tested with Belden 1694A Cable. Operating distances may vary if used with cables of different specifications.

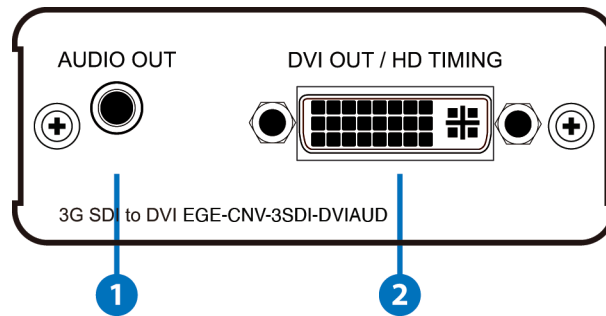
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



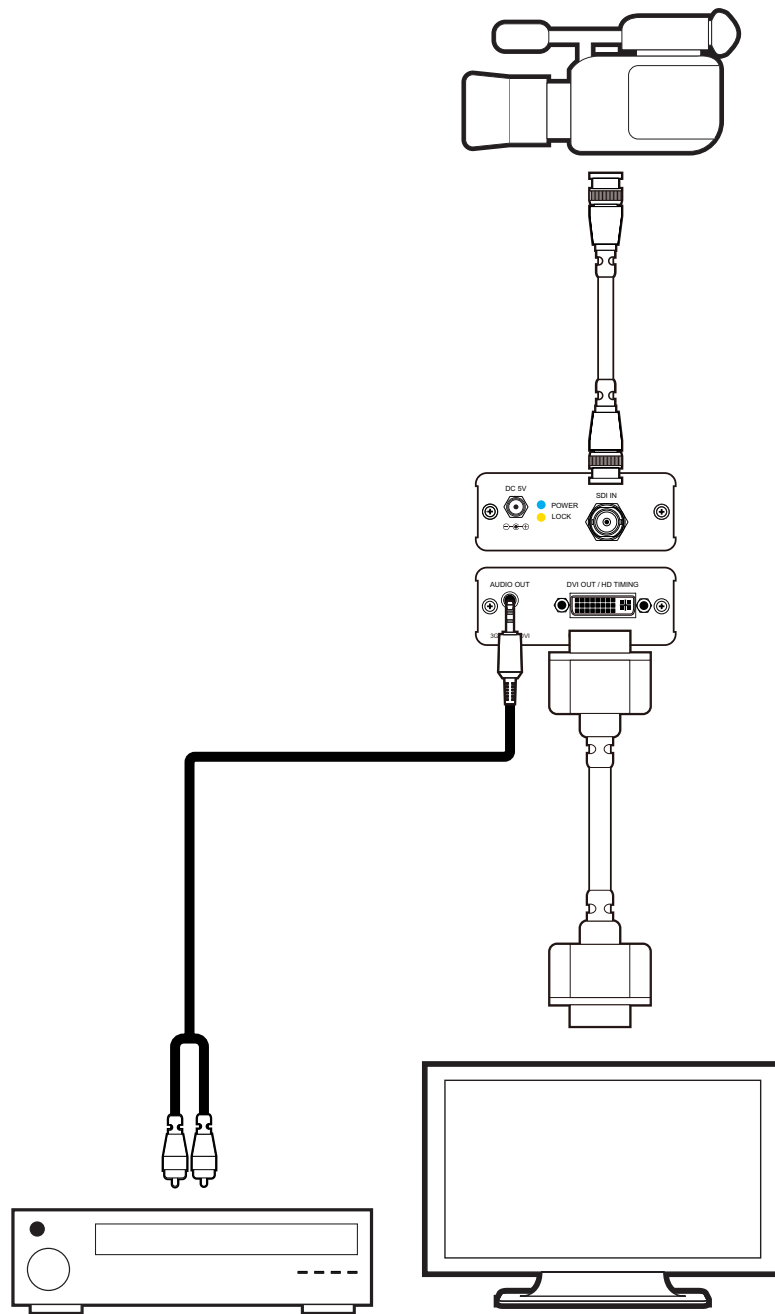
- 1 DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC wall outlet.
- 2 POWER LED:** The blue LED will illuminate when the device is connected to the power supply.
- 3 LOCK LED:** This yellow LED will illuminate when both input SDI source and output DVI display has sent and received the signal.
- 4 SDI IN:** This slot is where you connect the SDI source equipment for sending the signal to the display screen.

6.2 Rear Panel



- 1 AUDIO OUT (3.5 mm jack):** Connects to a TV or amplifier with audio input (stereo only).
Note: Multichannel sound will be down-mixed to stereo only for output from the unit's audio output.
- 2 DVI OUT / HD TIMING:** Connects to a TV or monitor with DVI input.
Note: The DVI equipped display must be able to support HD resolutions and timings to be compatible.

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

SDI Transmission Rates	2.970 Gbps, 2.970/1.001 Gbps, 1.485 Gbps, 1.485/1.001 Gbps, & 270 Mbps
Video Bandwidth	225 MHz/6.75 Gbps
Input	1× BNC (SD/HD/3G-SDI)
Output	1× DVI, 1× 3.5 mm Phone Jack
SDI Timing Support	SD-SDI: SMPTE 259M-C, 270 Mbit/s HD-SDI: SMPTE 292M, 1.485 & 1.485/1.001 Gbit/s 3G-SDI: SMPTE 424M/425M-AB, 2.970 & 2.970/1.001 Gbit/s
DVI Timing Support	480i, 576i, 720p@50/59.94/60 1080i@50/59.94/60 1080p@23.98/24/25/29.97/30/50/59.94/60
ESD Protection	Human-body Model: ± 8 kV (air-gap discharge) ±4 kV (contact discharge)
Power Supply	5 V DC/ 2.6A (US/EU standards, CE/FCC/UL certified)
SDI Cable Distance	3G/HD/3G-SDI up to 100/200/300 meters with BELDEN 1694A Cable
Dimensions	78.5 mm (W)×124 mm (D)×30 mm (H)
Weight	194 g
Chassis Material	Aluminum
Silkscreen Colour	Silver
Operating Temperature	0 °C~40 °C/32 °F~104 °F
Storage Temperature	-20 °C~60 °C / -4 °F~140 °F
Relative Humidity	20~90% RH (non-condensing)
Power Consumption	4W

9. ACRONYMS

ACRONYM	COMPLETE TERM
3G	Bandwidth 2.97Gbps ≈ 3G
SDI	Serial Digital Interface



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