



CSDI-14

3G-SDI 1 by 4 Splitter



Operation Manual

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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.
- Please completely disconnect the power when the unit is not in use to avoid wasting electricity.

VERSION HISTORY

REV.	DATE	SUMMARY OF CHANGE
VR0	2011/04/08	Preliminary Release
VS1	2012/07/11	Updated format/diagrams/SDI standards
VS2	2012/07/13	First release
VR3	2012/08/09	Type Error

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1. INTRODUCTION

The 3G-SDI 1 by 4 Splitter allows SD-SDI, HD-SDI and 3G-SDI signals to be split from a single SDI source to up four simultaneous SDI outputs while ensuring high bit rates of 2.970 Gbit/s to give you high bandwidth signal transmission without signal loss over long distances.

2. APPLICATIONS

- Video broadcasting display
- Professional video program display
- Film studios program monitoring
- Video program switching display

3. PACKAGE CONTENTS

- 3G-SDI 1 by 4 Splitter
- 5V/2.6A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

SDI source input (such as broadcast video cameras or recording device) and SDI output displays (such as TVs or monitors)

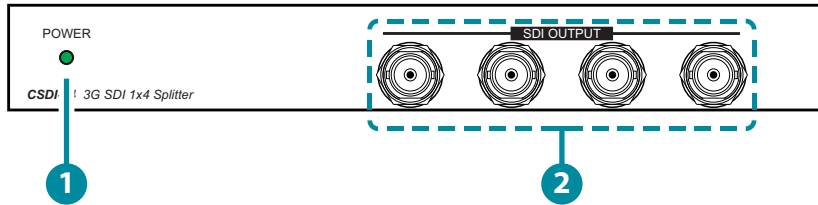
5. FEATURES

- Split one 3G-SDI input source to four 3G-SDI displays simultaneously
- Operation at 2.970Gb/s, 2.970/1.001Gb/s, 1.485Gb/s, 1.485/1.001Gb/s and 270Mb/s
- Supports SMPTE 425M (Level A and Level B), SMPTE 424M, SMPTE 292M, SMPTE 259M-C
- Provides equalized and re-clocked transmission
- Supports signal input and output distances of up to 300 m for SD signals, 200m for HD signals and 100 m for 3G signals.

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

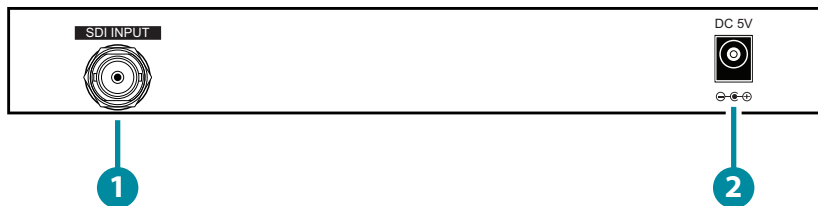
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



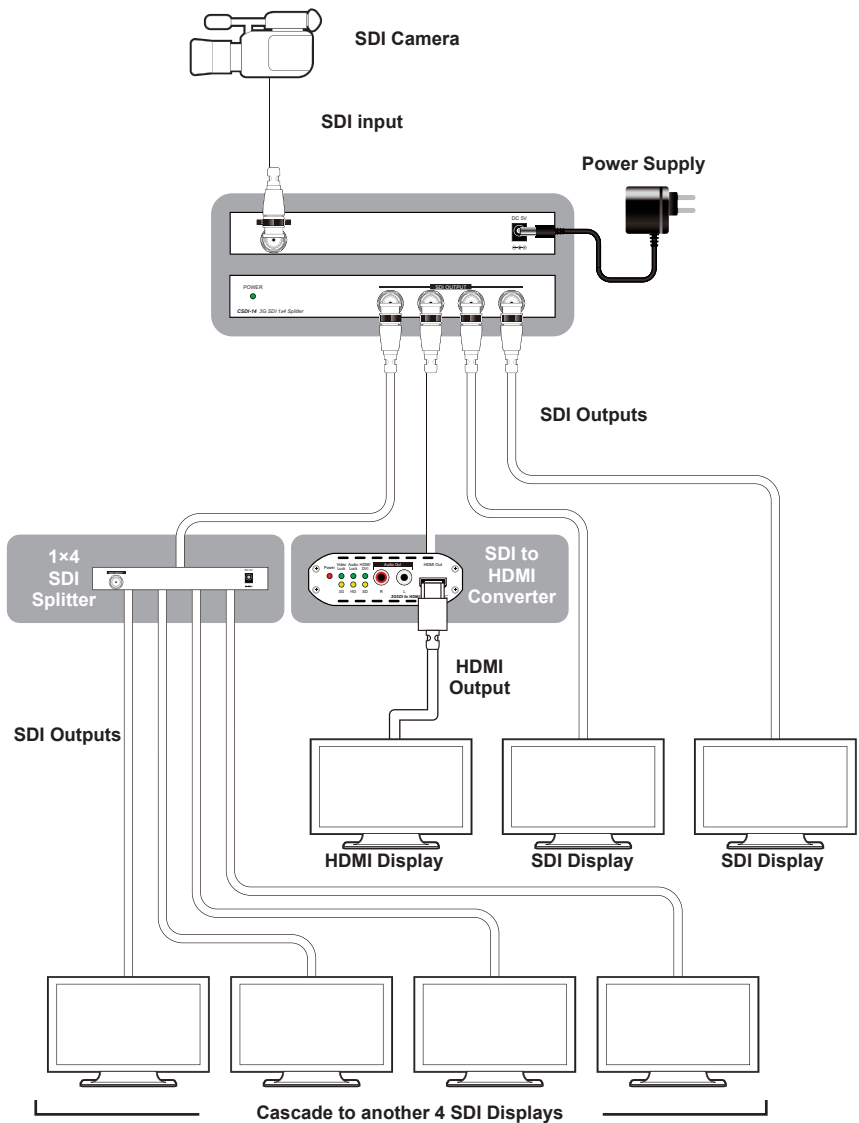
- ❶ **Power LED:** The LED will illuminate green when the device is connected to a power supply.
- ❷ **SDI OUTPUT:** Connect to up to four SDI TVs or monitors for simultaneous display or to another splitter to cascade the SDI signal to multiple displays or devices.

6.2 Rear Panel



- ❶ **SDI INPUT:** Connect to the SDI output of the SDI source device such as a video camcorder or SDI player. Accepts SD,HD or 3G SDI signals.
- ❷ **DC 5V:** Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet. The 'POWER' LED will illuminate green when the power is ON.

7. CONNECTION DIAGRAM



8. SPECIFICATIONS

SMPTE Standard	425M Level A & B, 424M, 292M, 259M-C
SDI Transmission Rates	2.970 Gbit/s and 2.970/1.001 Gbit/s
Input	1×BNC (SD/HD/3G-SDI)
Output	4×BNC (SD/HD/3G-SDI)
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
Power Supply	5 V DC/ 2.6 A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ±8 kV (air-gap discharge) ±4 kV (contact discharge)
SDI Cable Distance	3G-SDI up to 100 m (BELDEN 1694A) HD-SDI up to 200 m (BELDEN 1694A) SD-SDI up to 300 m (BELDEN 1694A)
Dimensions	200 mm (W)×138 mm(D) x 30 mm (H)
Weight	900 g
Chassis Material	Metal
Silkscreen Color	Black
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	5 W

9. ACRONYMS

ACRONYM	COMPLETE TERM
3G	Bandwidth 2.97Gbps \approx 3G
HDMI	High Definition Multimedia Interface
SDI	Serial Digital Interface



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