

CSDI-14

3G-SDI 1 by 4 Splitter

Operation Manual



CSDI-14

• **Disclaimers**

The information in this manual has been carefully checked and is believed to be accurate. Cypress Technology assumes no responsibility for any infringements of patents or other rights of third parties which may result from its use.

Cypress Technology assumes no responsibility for any inaccuracies that may be contained in this document. Cypress also makes no commitment to update or to keep current the information contained in this document.

Cypress Technology reserves the right to make improvements to this document and/or product at any time and without notice.

• **Copyright Notice**

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or any of its part translated into any language or computer file, in any form or by any means - electronic, mechanical, magnetic, optical, chemical, manual, or otherwise - without express written permission and consent from Cypress Technology.

© Copyright 2011 by Cypress Technology.

All Rights Reserved.

Version 1.0 March 2011

• **Trademark Acknowledgments**

All products or service names mentioned in this document may be trademarks of the companies with which they are associated.

• **Safety Precautions**

Please read all instructions before attempting to unpack or 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 module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

• **Revision History**

Version No	Date	Summary of Change
VR0	20110408	Preliminary Release

Table of Contents

1. Introduction	1
2. Applications	1
3. Package Contents	1
4. System Requirements	1
5. Features	1
6. Specifications	2
7. Operation Controls and Functions	3
7.1 Front Panel	3
7.2 Rear Panel	3
8. Connection and Installation	4
9. Acronyms	5

1. Introduction

The 3G-SDI 1 by 4 Splitter allows SD-SDI, HD-SDI and 3G-SDI signals to be shown on SDI display while ensuring high bit rates of 2.970 Gbit/s to give you fast signal transmission without signal loss. For professionals this means that it is now easier to Splitter a 3G-SDI signals up to four SDI signal outputs.

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

Input connects with SDI sources and output connects with SDI displays, all input/output with SDI cables.

5. Features

- One 3G-SDI input sources can split 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 the Equalized and re-clocked transmission
- Supports signal input and output distance of up to 300M for SD signals, 200M for HD signals and 100M for 3G signals.

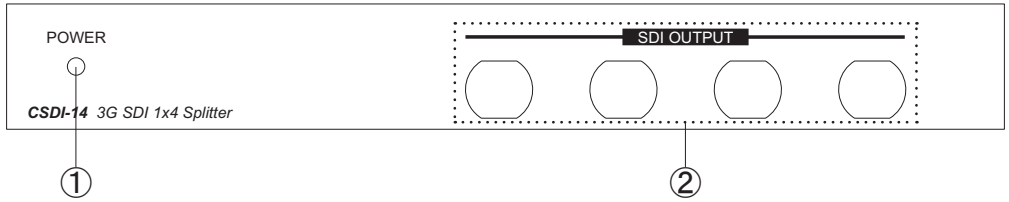
Note: Cable tested with Belden 1694A. Operating distances may vary if used with another type of cable.

6. Specifications

SMPTE Standard	425M Level A & B, 424M, 292M, 259M-C
SDI Transmition Rates	2.970 Gbit/s and 2.970/1.001 Gbit/s
Input/Output Ports	1/4 BNC (SD-SDI/HD-SDI/3G-SDI)
Support Timing	SD-SDI: 480i / 576i HD-SDI: 720p@50/60, 1080i@50/60, 1080p@24/25 3G-SDI: 1080p@50/60
Power Supply	5V DC/ 2.6A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
SDI Cable Distance	3G-SDI up to 100M (BELDEN 1694A) HD-SDI up to 200M (BELDEN 1694A) SD-SDI up to 300M (BELDEN 1694A)
Dimension (mm)	200 (W) x 138 (D) x 30 (H)
Weight (g)	900
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 (W)	5W

7. Operation Controls and Functions

7.1 Front Panel



- ① Power LED: This green LED will illuminate when the device is connected with power supply.
- ② SDI OUTPUT: These slots are to connect to the SDI displays with an SDI cables for displaying images. Or it can be connect with another SDI converter/extender to extend the signal.

7.2 Rear Panel



- ① SDI INPUT: This slot is to connect to the SDI source equipment such as video camcorder or SDI player.
- ② DC 5V: Plug the 5V DC power supply into the unit and connect the adaptor to AC wall outlet. Green LED will illuminate when the power is connected.

8. Connection and Installation





Acronyms

Acronym	Complete Term
3G	Bandwidth 2.97Gbit/s \approx 3G
BNC	Bayonet Neill-Concelman
SDI	Serial Digital Interface



CYPRESS TECHNOLOGY CO., LTD.
Home page: <http://www.cypress.com.tw>