



PRO-3GSDI14

3G-SDI 1 to 4 Distribution Amplifier

OPERATION MANUAL



• **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 |
|-------------------|-----------------|----------------------------|
| RDV1 | 20110315 | Preliminary Release |

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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 selected as the source and 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.

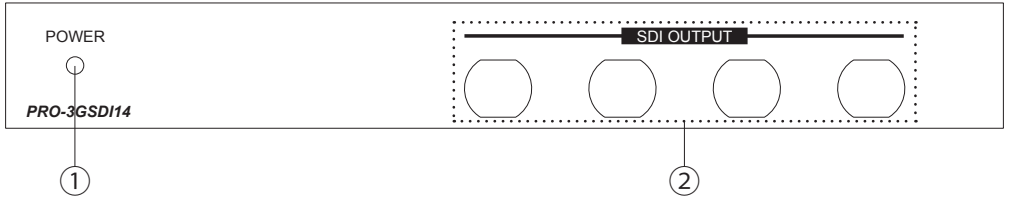
Note: Cable tested with Belden 1694A. Operating distances may vary if used with another type of cable.

6. Specifications

| | |
|------------------------|--|
| SMPTE Standard | 425M Level A & B, 424M, 292M, 259M-C |
| SDI Transmission 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@24/50/60 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 |