

# 4x4 3G-SDI Switcher & Splitter - ID# 898



**Operation Manual**

## Introduction

The 3G-SDI 4 by 4 Switcher 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 switch four 3G-SDI signals and split it up to four SDI signal outputs.

## Features

- Four 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
- Control by RS-232, IR Remote and on panel buttons
- 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.

## Applications

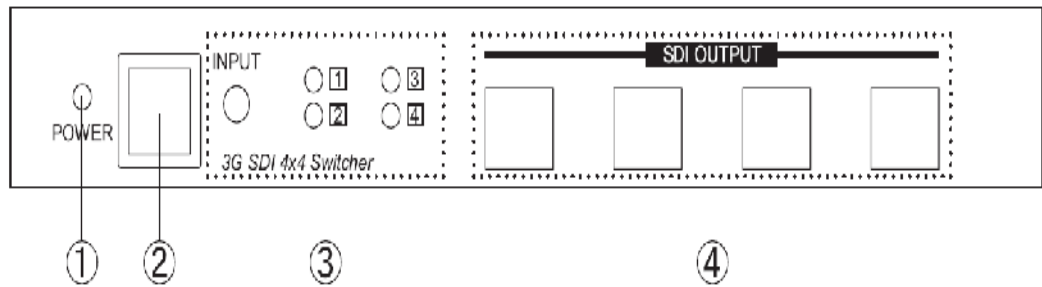
- Video broadcasting display
- Professional video program display
- Film studios program monitoring
- Video program switching display

## System Requirements

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

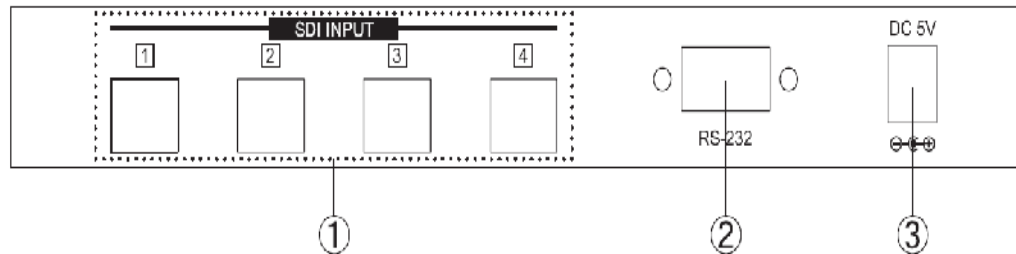
## Operation Controls and Functions

### Front Panel



- ① **Power LED:** This green LED will illuminate when the device is connected with power supply.
- ② **IR receiver:** This IR window receives IR signal from the remote control included in the package.
- ③ **3G-SDI Input select/Indicator 1~4:** Press the input button sequentially to switch to your desired SDI input source, the LED will illuminate to indicate which input source is selected.
- ④ **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.

### Rear Panel



- ① **SDI INPUT:** These slots are to connect to the SDI source equipments such as video camcorder or SDI player.
- ② **RS-232:** Connect with D-Sub 9pin cable from the PC/NB for RS-232 control.
- ③ **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.

## RS-232 Protocols

### Pin Assignment

Pins definition of modem cable

			<b>Remote Controller</b>	
PIN	Definition		PIN	Definition
1	NC		1	NC
2	TxD		2	RxD
3	RxD	→	3	TxD
4	NC		4	NC
5	GND		5	GND
6	NC		6	NC
7	NC	←	7	NC
8	NC		8	NC
9	NC		9	NC

Baud Rate: 19200bps

Data bit: 8 bits

Parity: None

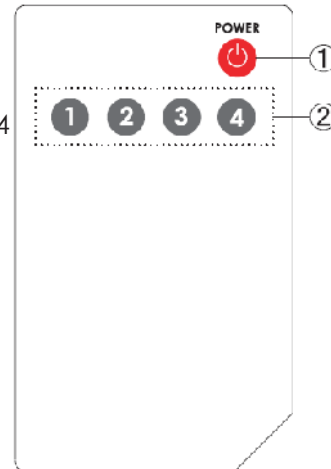
Stop bit: 1 bit

### Commands

Command	Action
PC	Enter into /exit PC Command
power00	Power OFF
power01	Power ON
input01	Input selction 1
input02	Input selection 2
input03	Input selection3
input04	Input selection4

## Remote Control

- ① **Power:** Press the button to turn on/off the unit.
- ② **Direct input selector:** Press 1, 2, 3 or 4 to select the desired input source.



## Specifications

<b>SMPTE Standard</b>	425M Level A & B, 424M, 292M, 259M-C
<b>SDI Transmission Rates</b>	2.970 Gbit/s and 2.970/1.001 Gbit/s
<b>Input/Output Ports</b>	4/4 BNC (SD-SDI/HD-SDI/3G-SDI)
<b>Support Timing</b>	SD-SDI: 480i / 576i HD-SDI: 720p@50/60, 1080i@50/60, 1080p@24/50/60 3G-SDI: 1080p@50/60
<b>Power Supply</b>	5V DC/ 2.6A (US/EU standards, CE/FCC/UL certified)
<b>ESD Protection</b>	Human body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
<b>SDI Cable Distance</b>	3G-SDI up to 100M (BELDEN 1694A) HD-SDI up to 200M (BELDEN 1694A) SD-SDI up to 300M (BELDEN 1694A)
<b>Dimension (mm)</b>	200 (W) x 138 (D) x 30 (H)
<b>Weight (g)</b>	900
<b>Chassis Material</b>	Metal
<b>Silkscreen Color</b>	Black
<b>Operating Temperature</b>	0°C ~ 40°C / 32°F ~ 104°F
<b>Storage Temperature</b>	-20°C ~ 60°C / -4°F ~ 140°F
<b>Relative Humidity</b>	20 ~ 90% RH (Non-condensing)
<b>Power Consumption (W)</b>	5W

# Connection and Installation

