KanexPro™

3G SDI 4X1 Switcher

SW-SDI4X1

Content

1 INTRODUCTION

1.1 Product Description

The KanexPro SDI switcher is a 4 input, one output switcher designed to switch four SDI, HD-SDI or 3G-SDI sources to one SDI monitor or display output. For optimum performance the SDI switcher can be controlled using RS-232 to switch the inputs. The 4X1 switcher includes re-clocking technology, which drives the signal at longer distances and supports SDI, HD-SDI and 3G-SDI signals. It supports multi-stage cascading for adding more SDI components and switchers.

Ideally used with SDI based HDCCTV surveillance systems, rental & staging facilities, post-production, TV studio, digital cinema, or other A/V applications where you need to switch and split from an SDI camera or other device equipped with 3G/HD/SD-SDI outputs to one SDI-compliant display or video processor.

1.2 Features

- Get the highest quality 3G-SDI Switching
- Supports multiple video resolutions
- SDI 480i, 525i, 625i
- HD: 720p 24, 25,30,50 & 60 Hz.
- HD: 1080i 50 & 60 Hz.
- HD: 1080p 24, 25,30, 50 & 60 Hz.
- Memory function recalls last input after restart
- Supports multiple Color Space: RGB or YCbCr 4:4:4 sampling
- Support for YCbCr: 4:2:2 or 4:2:0 sampling
- Data rates up to 2.97 Gbps
- Supports 8 bit, 10 bit & 12 bit color depth
- 3G Mode (1080p/60) length support - up to 80m
- SDI Input cable length support - up to 300m
- HD mode length up to: 130m
- Input / Output equalizer function
- Automatically switches between SD, HD and 3G-SDI standards
- Compact in size, perfect for mobile broadcasting units and users
- Small rack mount ears included
- Compatible with HDcctv 1.0, HD-SDI (ST-292), 3G-SDI (ST-424) and SD-SDI (ST-259)[1]

Note:

 RG6 or RG59 cable is required for SDI transmission; we recommend a 75-ohm high quality coaxial cable. For supported distances at high resolutions over RG6, please check our Specs tab..

2 SPECIFICATION

Signal Input/ Output	
Input Connector	4xSDI BNC Male
Output Connector	1xSDI BNC Male
Support line length (**Cable is RG6**)	
Input 3G(1080P 60HZ) Mode	Up to 328 Feet (100m)
Output 3G(1080P 60HZ) Mode	Up to 295 Feet (90m)
Input HD(720P 60HZ)Mode	Up to 722 Feet (220m)
Output HD(720P 60HZ)Mode	Up to 590 Feet (180m)
Input SD(480i)Mode	Up to 1050 Feet (320m)
Output SD(480i)Mode	Up to 918 Feet (280m)
Mechanical	
Size(L-W-H)	6.37 x 3.34 x 1.0 inches
Weight (Net)	(net): 0.83 lbs. (380 grams)
Warranty	
Limited Warranty	1 Year (Parts & Labor)
Environmental	
Operating Temperature	0 °C to +70°C
Operating Humidity	10% to 85 % RH (no condensation)
Storage Temperature	-10°C to +80°C
Storage Humidity	5% to 90 % RH (no condensation)

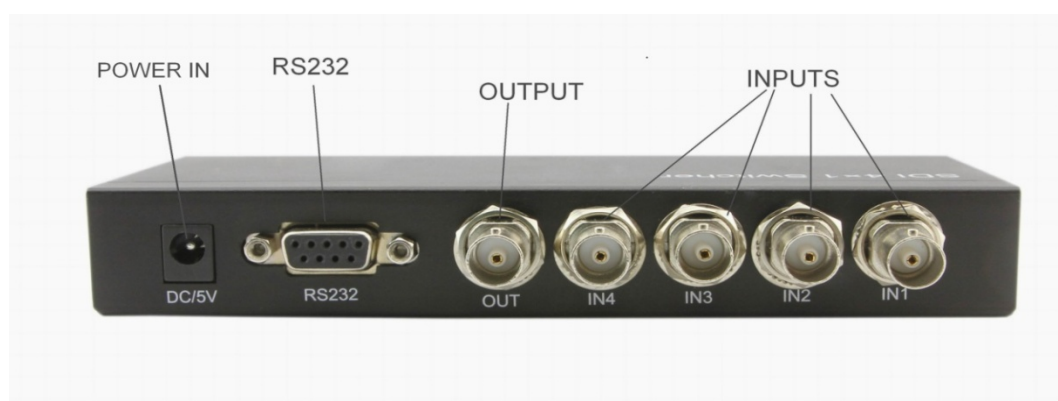| Power Requirement	
External Power Supply	5V DC@ 2A
Power consumption (Max)	3W
Regulatory Approvals	
Converter Unit	FCC, CE, UL
Power Supply	UL, CE, FCC
Accessories Adapter	
User Manual	English version

Note: Specifications are subject to change without notice.

3 PACKAGE CONTENT

Before using this unit, please check the packaging and make sure the following items are contained in the shipping carton:

- 1XMain unit
- 1XPower adapter 5V@2A
- 1XUser's Manual

4. PANEL DESCRIPTION

Power in, DC 5V/2A adapter available;
RS232 interface, connect to computer system;
Four SDI inputs connect to SDI source, such as SDI Camera;
One SDI output connects to SDI monitor or other SDI Device.

5 CONNECTIONS AND OPERATION

5.1 Connections and Operation

(1) Connect the product to appropriate power；
(2) Connect SDI signal to the "SDI in" through 75Ω coaxial cable with
    high-quality（RG59 cable or equivalent as well）；
(3) Connect the unit to the next SDI monitor or other SDI devises through the
    75Ω coaxial cable.
(4) Operate the SDI signal to start the show.

5.2 Functional Operation-RS232

Connect the PC's RS232 interface to the RS232 on the back of the main unit;
user can select the input source by entering the command through the "DOS"
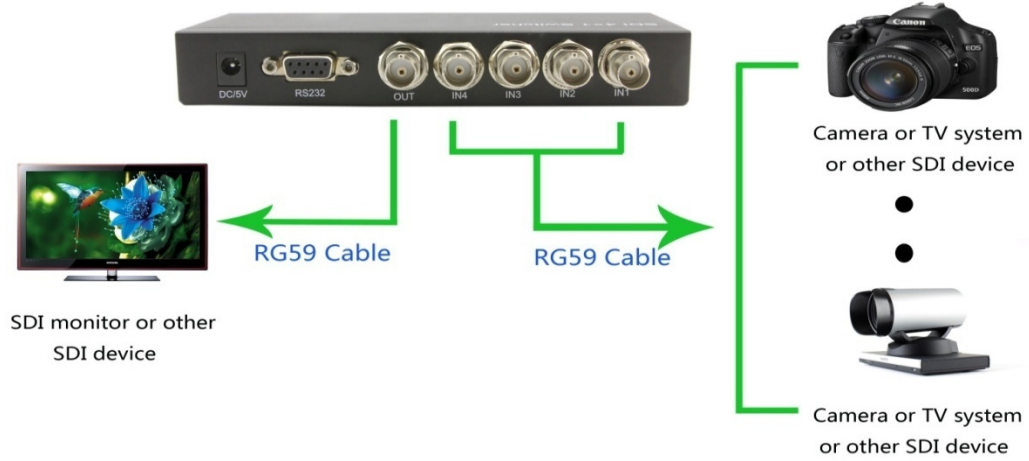or "hyper terminal" on the PC.

Under the "DOS" operating system:
1, You need to check the computer serial port number, such as the COMx.
2, Input "MODE COMx:9600,N,8 ,1", + Enter.
3, Input "TYPE CON>COMx"， + Enter.
4, Input the "Input port No" of the switcher as the serial number of DOS
system, such as "1"、"2"、"3"、"4" + Enter.
5, Select the corresponding serial number which need to start, then you
can realize the switching function.

Under the "Hyper terminal" operating system:
1, Start the "hyper terminal" software. (Menu→Procedure→Communication
→hyper terminal, + Enter)
2, Input the name as your preference New Connection show interface, +
Enter.
3, Select the correct serial port number, + Enter.
4, BPS set to 9600, DFC select "no". + Enter
5, Input the "Input port No" of the switcher as the serial No of DOS system,
such as "1"、"2"、"3"、"4" + Enter.
6, Select the corresponding serial number that needs to start, then you can
realize the switching function. (Hyper terminal is the software comes with the
computer system, if no, you can download it through the Internet.)

5.3 Connection Diagram

6 WARRANTY

KanexPro TM warrants that (a) its products (the "Product") will perform greatly in agreement with the accompanying written materials for a period of 12 months from the date of receipt (1 year) and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 1 year.

B. CUSTOMER REMEDIES

KanexPro's entire liability and Customer's exclusive remedy shall be, at KanexPro option, either return of the price paid for the product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to KanexPro with a copy of customers' receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period of 1 year, whichever is longer.

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