



# User Manual



**8x8 3G SDI HD/SD-SDI Matrix Switcher**

**H-8x8SDI-SW**

## A Note from Thor Broadcast about this Manual

### **Intended Audience**

This user manual has been written to help people who have to use, integrate and to install the product. Some chapters require some prerequisite knowledge in electronics and especially in broadcast technologies and standards.

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**The Thor 8x8 SDI Switcher** is a 1RU easy to use, compact chassis that can enable you to easily use multiple SDI sources and output them in any arrangement you need. It includes multi format technology so it can auto detect multiple video format sources of SD/HD/3G-SDI (level A & B) and DVB-ASI signals at the same time and route the multiple video destinations in NTSC and PAL SD, 720,1080 at any frame rate.

**Easy to use and setup;** multiple options to manage the unit so you can use the switcher via the front panel, PC Software, and USB Keyboard. Includes mini 2" LCD view window to watch the current program you're queued in on.

**Redundant Power** means you will never to worry about the switcher going down during critical no fail applications.

**Compact Design** in a 1RU format please just a few inches wide means that you'll never have to worry about fitting it into your current rack. Amazing for small environments in production, mobile trucks, and theatrical AV.

**The compact SDI routing switcher** has 8 inputs and 8 outputs, supports standard 3G/HD/SD SDI rates, automatic bypass of non-standard rates between 270Mbit/s and 3Gbit/s, and passes all SDI embedded audio/ancillary data. It can conveniently controlled by front panel button, keyboard via USB and PC software via LAN/RS-232.

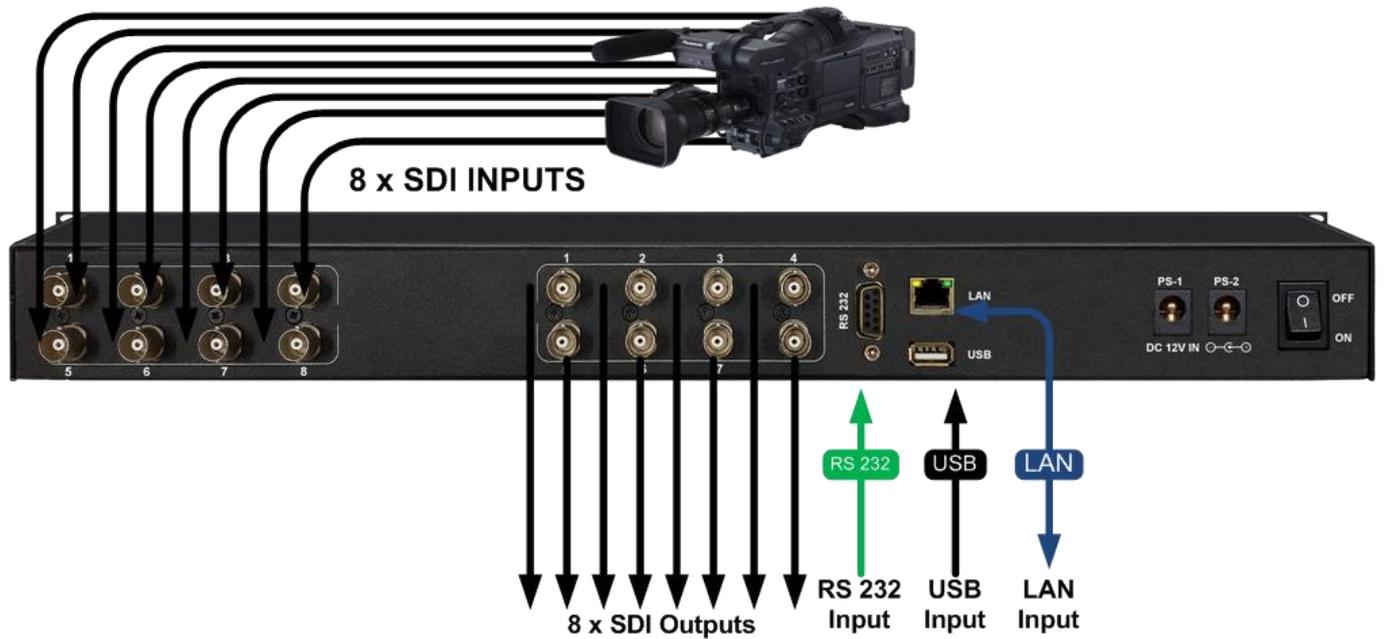
## Features :

- 8-3G-SDI inputs, 8x3G - SDI outputs
- SDI input signal auto detection & equalization
- Level A and level B signal supported
- Pass all ancillary data and embedded audio
- DVB-ASI interface compatible
- Free PC software for control: LAN, RS-232
- Front panel buttons control & USB keyboard
- Redundant power design

## Connections

SDI Video Input	8xSD/HD/3G-SDI(75Ω BNC)
SDI Video Output	8xSD/HD/3G-SDI(75Ω BNC)
Control	Front panel button, USB keyboard, PC software via LAN/RS-232
Updates and Configuration	LAN(RJ45)
SDI Video Input	8xSD/HD/3G-SDI(75Ω BNC)
SDI Video Output	8xSD/HD/3G-SDI(75Ω BNC)

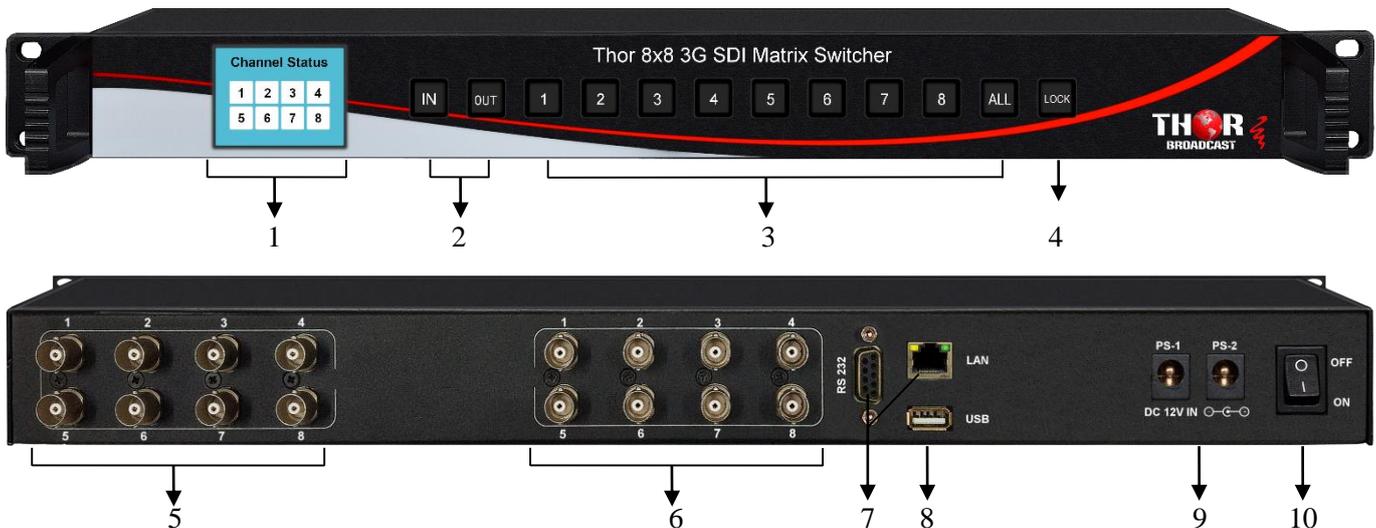
## 8x8 3G SDI Matrix Switcher



## Standards

<b>SDI Format Support</b>	(2K) 2048x1080p 30/29.97/25/24/23.98 (2K) 2048x1080PsF 30/29.97/25/24/23.98 (HD) 1920x1080p 60/59.94/50/30/29.97/25/24/23.98 (HD) 1920x1080PsF 30/29.97/25/24/23.98 (HD) 1920x1080i 60/59.94/50 (HD) 1280x720p 60/59.94/50 (HD) 1280x720p 30/29.97/25/24/23.98 (SD) 625i 50 (SD) 525i 59.94
<b>SDI Auto Switching</b>	Automatically detects SD, HD and 3G-SDI
<b>SDI Compliance</b>	SMPTE 372M, SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M, DVB-ASI
<b>SDI Color Space and Precision</b>	RGB 4:4:4 10bit/12bit YUV 4:2:2 10bit/12bit YUV 4:4:4 10bit/12bit XYZ 4:4:4 12bit

## Controls



①	<b>2.2 inch LCD display</b>	Show channel switching status
②	<b>IN/OUT buttons</b>	Select the input or output channel
③	<b>Channel buttons</b>	input or output channel from 1 to 8 and all channel
④	<b>Lock button</b>	Lock or unlock, press the button to Lock or unlock front panel buttons
⑤	<b>Inputs</b>	SDI inputs 1-8
⑥	<b>Outputs</b>	SDI outputs 1-8
⑦	<b>Control port</b>	PC software via LAN/RS-232
⑧	<b>USB port</b>	Connect by USB keyboard to control
⑨	<b>Power</b>	Dual power connectors PS-1 & PS-2, for power redundancy
⑩	<b>Power switch</b>	To turn on or off the device

## Front Panel Control

- Switching an input to an output.  
e.g. press buttons “IN, 1, OUT, 2” to switch input 1 signal to output 2.
- Switching an input to multiple outputs.  
e.g. press buttons “IN, 1, OUT, 2, 4, 5” to switch input 1 signal to output 2, 4, 5.
- Switching an input to all outputs.  
e.g. press buttons “1, ALL” to switch input 1 signal to all outputs.

## USB Keyboard Control (“I” = “IN”, “O” = “OUT”, “A” = “ALL”)

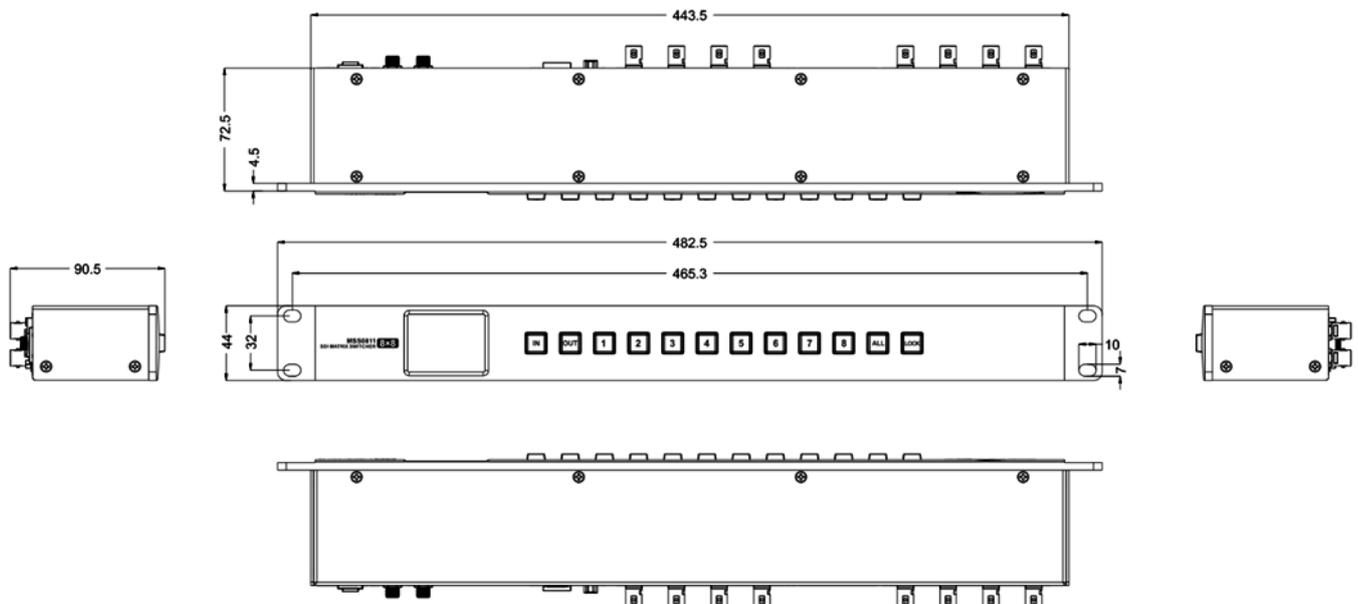
- Switching an input to an output.  
e.g. press keys “I, 1, O, 2” to switch input 1 signal to output 2.
- Switching an input to all outputs.  
e.g. press keys “1, A” to switch input 1 signal to all outputs.
- Switching the device return to the default status “One to One” press the key “C”.  
“One to One” means return to default status, “Input 1 to Output 1, Input 2 to Output 2, ..., Input 8 to Output 8”.

## Power

Power Supply	PS-1, PS-2, power redundancy
Voltage Range	DC 6-24V
Power Consumption	7W

## Physical Specification

Dimension	Standard 19" 1 rack unit
Net Weight	1.1kg
Gross Weight	1.7kg



## Environmental Specifications

Operating Temperature	-20°C~60°C
Storage Temperature	-30°C~70°C
Relative Humidity	0%~90% non-condensing

## Packing List

H-8x8SDI-SW	1 PC
User's Manual	1 PC
DC 12V 2A Power Adapter x2	1 PC

**For Further Tech Support**  
**1(800)521-THOR (8467) Ext 2**  
**[support@thorfiber.com](mailto:support@thorfiber.com)**