

# CSC-5300

## PC/Video/HD to HDMI 1.3 Switcher Operation Manual

**Operation Manual**



**CSC-5300**



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## **1. Introduction**

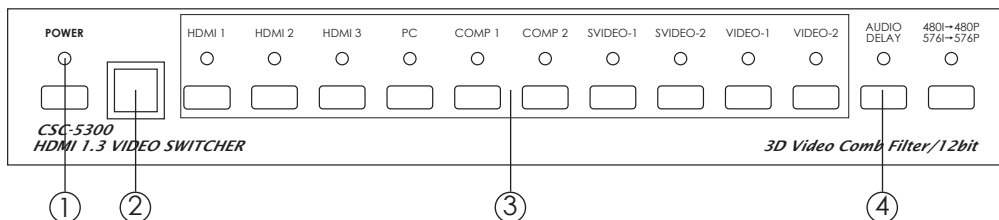
Looking for a way to watch all of your Analog/Digital devices on an HDMI display without having to constantly switch devices? Well this powerful PC/Video/HD to HDMI 1.3 Switcher gives you the ability to convert your Analog and digital signals to HDMI v1.3 output. The product is compatible to HDMI v1.3 specifications, which is a cutting edge technology that defines the transfer of Deep Color (10-bit and 12-bit) video. Using the front panel or the remote control select the desired input source and sit back and relax as your media is effortlessly displayed, then switch to another source just easily. This HDMI switcher is the smart way to handle your multiple A/V sources.

## **2. Features**

- HDMI 1.3, HDCP1.1 and DVI1.0 compliant.
- Deep Color video up to 12bit, 1080p (24/60)Hz.
- Supports analog/digital video/audio input and HDMI v1.3 output.
- Supports a wide range of PC and HDTV resolutions from VGA to SXGA@60Hz and 480i to 1080p.
- Supports 3D comb filter and 3D noise reduction (DNR).
- Simply press a button on the front panel or remote control to convert from 480i/576i to 480p/576p.
- Has an audio delay for 150ms, this feature will not function when under HDMI input.
- Support IR remote control and RS-232 control.

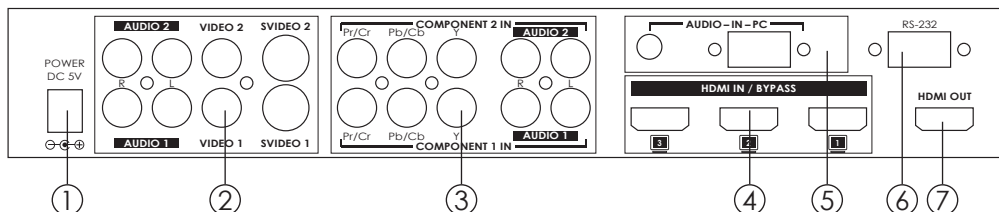
### 3. Operation Controls and Functions

#### 3.1 Front Panel:



- ① Power button and power LED indicator: Press the button to turn the unit on and the power LED will switch on.
- ② IR sensor.
- ③ Input source selection: Press the input button to switch to your desired input source, the LED will turn on to indicate which input source is selected.
- ④ Audio delay: Press to delay audio sources for 150ms, the LED will switch on when power is on.

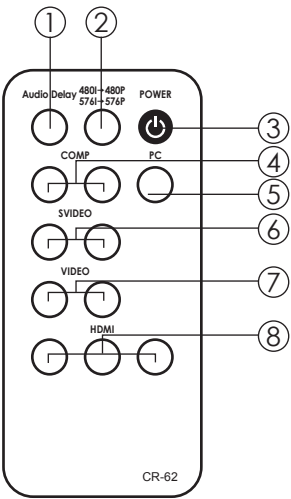
#### 3.2 Rear Panel:



- ① Power: Plug the 5V DC power supply into this unit and connect the adaptor to an AC outlet.
- ② CV/SV inputs: Connect each of the input ports to the CV/SV and R/L output ports of your source equipments such as DVD player or set-top-box. The CV1/SV1/Audio1 and CV2/SV2/Audio2 are individual loops for source equipments.
- ③ Component inputs: Connect each of the input ports to the component and R/L output ports of your source equipments such as DVD/Blu-Ray player or set-top-box. The mponent1/Component Audio1 and Component2/Component Audio2 are individual loops for source equipments.
- ④ HDMI inputs: Connect each of the input ports to the HDMI/DVI output ports of your source equipment such as DVD/Blu-Ray player or set-top-box.
- ⑤ PC input: Connect the PC/audio input port to the PC/audio output port of your source equipment such as Laptop or PC.
- ⑥ RS232: 9-pin D-Sub connector for connecting to your PC or other control console for remote control of the switcher.
- ⑦ HDMI output: Connect the output port to the HDMI display.

4. Remote Control

- 1. Audio Delay: Press to delay audio output for 150ms.
- 2. Format selection: To switch between Interlace and Progressive format.
- 3. Power: Press the button to turn on/off the unit.
- 4. Component 1/2: Press to select Composite 1 or 2 inputs.
- 5. PC: Press for PC input.
- 6. S-Video 1/2: Press to select S-Video 1 or 2 inputs.
- 7. Video1/2: Press to select Video 1 or 2 inputs.
- 8. HDMI 1/2/3: Press to select HDMI 1, 2 or 3 inputs.



5. RS-232 Remote Control Protocol

\* The connection between this unit and the remote control with **RS-232 modem cable**.

Pins definition of modem cable

System		Remote Controller	
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

\* RS-232 transmission format:  
Baud Rate : 9600 bps  
Data Bit : 8 bits  
Parity : None  
Stop Bit : 1 bit

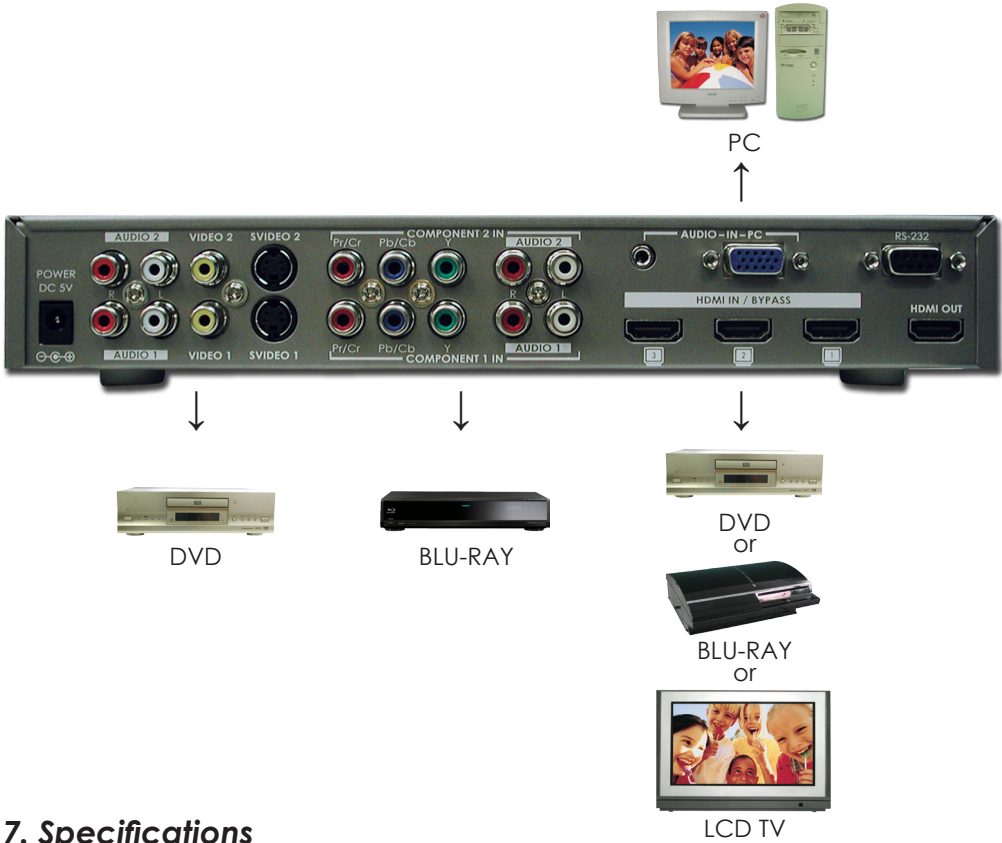
## 5.1 RS-232 transmission format:

### (a) Set Command

Command Code	Response	Description
S POWER 0	> POWER OFF	POWER OFF
S POWER 1	> POWER ON	POWER ON
S SOURCE 0	> SOURCE HDMI1	HDMI1 INPUT
S SOURCE 1	> SOURCE HDMI2	HDMI2 INPUT
S SOURCE 2	> SOURCE HDMI3	HDMI3 INPUT
S SOURCE 3	> SOURCE PC	PC INPUT
S SOURCE 4	> SOURCE COMP1	COMPONENT1 INPUT
S SOURCE 5	> SOURCE COMP2	COMPONENT2 INPUT
S SOURCE 6	> SOURCE SV1	SV1 INPUT
S SOURCE 7	> SOURCE SV2	SV2 INPUT
S SOURCE 8	> SOURCE CV1	CV1 INPUT
S SOURCE 9	> SOURCE CV2	CV2 INPUT
S AUDIODELAY 0	> AUDIODELAY OFF	OFF : NO DELAY
S AUDIODELAY 1	> AUDIODELAY ON	ON : DELAY 150ms
S SD_ITOP 0	> 480i/576i TO 480p/576p OFF	OFF : NO 480i/576i TO 480p/576p
S SD_ITOP 1	> 480i/576i TO 480p/576p ON	ON : 480i/576i TO 480p/576p
S RESET 1	> RESET ON	RESET ACTION

Command Code	Response	Description
R POWER	> POWER ON~OFF	SHOW POWER STATUS
R SOURCE	> SOURCE HDMI~CV	SHOW SOURCE STATUS
R AUDIODELAY	> AUDIODELAY OFF~ON	SHOW AUDIO DELAY STATUS
R SD_ITOP	> 480i/576i TO 480p/576p OFF~ON	SHOW 480i/576i TO 480p/576p STATUS
R FW_VER	> FIRMWARE VERSION : Vx.xx	SHOW FIRMWARE VERSION

6. Connection and Installation



7. Specifications

Frequency Bandwidth	2.25Gbps (single link)
Input Ports	3 x HDMI female ports (Type A connector) 1 x PC with audio jack 2 x Y/Pb/Pr with R/L 2 x CV/SV with R/L 1 x RS-232
Output Port	1 x HDMI female port (signal link)
Power Supply	5VDC/2.6A (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	280(W) x 147(D) x 44(H)
Weight(g)	1380
Chassis Material	Metal
Silkscreen Color	Gray
Operating Temperature	0°C ~ 40°C

### **Input Signal Specifications**

<b>PC Resolution</b>		<b>Vert Rate</b>
VGA	640x480	60/72/75/85Hz
SVGA	800x600	56/60/72/75/85Hz
XGA	1024x768	60/70/75/85Hz
SXGA	1280x1024	60/75Hz
UXGA	1600x1200	60 Hz
WUXGA	1920x1200	60 Hz
<b>HDTV Resolutions</b>		<b>Vert Rate</b>
480p	720x480	60Hz
480i	720x480	60Hz
576p	720x576	50Hz
576i	720x576	50Hz
720p	1280x720	50, 60Hz
1080i	1920x1080i	50, 60Hz
1080p	1920x1080p	50, 60Hz

### **Output Signal Specifications**

<b>PC Resolution</b>		<b>Vert Rate</b>
VGA	640x480	60/72/75/85Hz
SVGA	800x600	56/60/72/75/85Hz
XGA	1024x768	60/70/75/85Hz
SXGA	1280x1024	60Hz
UXGA	1600x1200	60Hz
WUXGA	1920x1200	60Hz
<b>HDTV Resolutions</b>		<b>Vert Rate</b>
480p	720x480	60Hz
480i	720x480	60Hz
576p	720x576	50Hz
576i	720x576	50Hz
720p	1280x720	50, 60Hz
1080i	1920x1080i	50, 60Hz
1080p	1920x1080p	50, 60Hz

**Note:** Output resolution limit depends on the TV/Monitor/Displays specifications.







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