

CSC-5300

PC/Video/HD to HDMI 1.3 Switcher Operation Manual

Operation Manual



CSC-5300

TABLE OF CONTENTS

1. Introduction	1
2. Features	1
3. Operation Controls and Functions	2
3.1 Front Panel	2
3.2 Rear Panel	2
4. Remote Control	3
5. RS-232 Remote Control Protocol	3
5.1 RS-232 transmission format.....	4
6. Connection and Installation	5
7. Specifications	5
Input Signal Specifications.....	6
Output Signal Specifications.....	6

1. Introduction

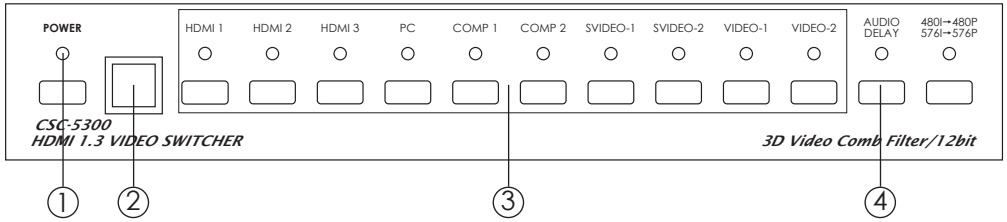
This is a high quality Video converter box to convert Analog and digital signals to HDMI v1.3 output. The product is compatible to HDMI v1.3 specifications, a cutting edge technology which defines to transfer Deep Color (10-bit and 12-bit) video. Simply select from the front panel or remote control to choose the input sources.

2. Features

- HDMI 1.3, HDCP1.1 and DVII.0 compliant Receiver.
- Deep Color video up to 12bit, 1080p@(24/60)Hz.
- Supports analog/digital video/audio input and HDMI v1.3 output.
- HDCP keysets allows each HDMI input to work independently when connecting to a HDMI display.
- Supports a wide range of PC and HDTV resolutions from VGA to SXGA@60Hz and 480i to 1080p.
- Support 3D comb filter.
- Support 3D noise reduction (DNR).
- Support format converter from 480i/576i to 480p/576p, simply press the front panel or remote control.
- Support audio delay for 150ms, this feature will not functional when HDMI input.
- Support IR remote control.
- Support RS-232 control.

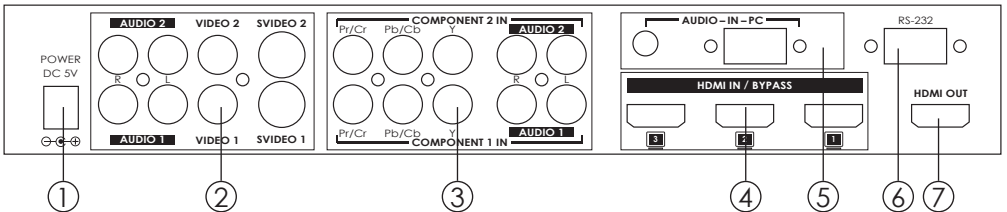
3. Operation Controls and Functions

3.1 Front Panel:



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

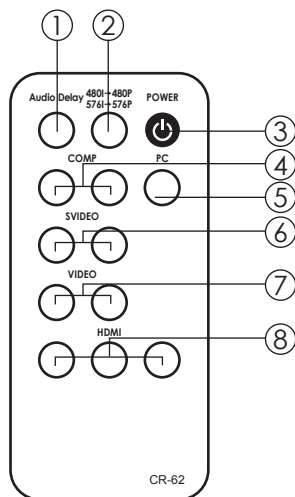
3.2 Rear Panel:



- ① Power: Plug the 5V DC power supply into this unit and connect the adaptor to AC wall 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 component ports to the component and R/L output ports of your source equipments such as DVD player or set-top-box. The Component1/ Component Audio1 and Component2/Component Audio2 are individual loops for source equipments.
- ④ HDMI inputs: Connect each of the input ports to the HDMI or DVI output ports of your source equipment such as DVD player or set-top-box.
- ⑤ PC input: Connect PC/audio input port to the PC/audio output port of your source equipment such as Notebook or PC.
- ⑥ RS232: 9-pin D-Sub connector for connecting to your PC or other control console for remote control.
- 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 to select PC input.
6. S-Video 1/2: Press to select S-Video 1 or 2 inputs.
7. Video 1/2: 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 remote controller 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
Output port	1 x RS-232 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
Silk Skin Color	Gray
Operating Temperature	Operating from 0°C ~ 40°C

Input Signal Specifications

PC Resolution		Vert Rate
VGA	640x480	60/72/75/85Hz
SVGA	800x600	56/60/72/75/85Hz
XGA	1024x768	60/70/75/85Hz
SXGA	1280x1024	60Hz
HDTV Resolutions		Vert Rate
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

PC Resolution		Vert Rate
VGA	640x480	60/72/75/85Hz
SVGA	800x600	56/60/72/75/85Hz
XGA	1024x768	60/70/75/85Hz
SXGA	1280x1024	60Hz
HDTV Resolutions		Vert Rate
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 on the TV/Monitor's specifications.



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