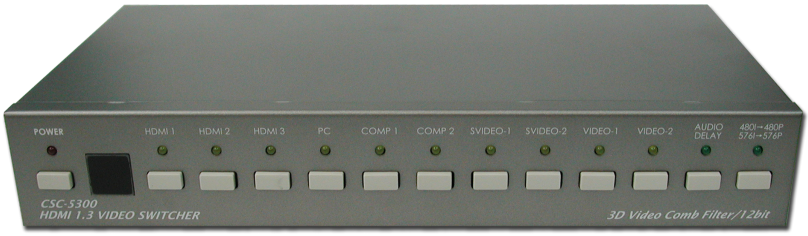
CSC-5300

PC/Video/HD to HDMI 1.3 Switcher Operation Manual

Operation Manual



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1. Introduction

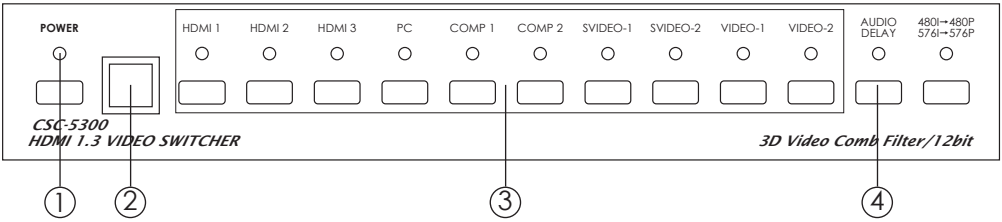
This is a high quality Video converter box to convert Analog and digital signals to HDMI v1.3 output. The product is compatible to HDMI v1.3 specifications, a cutting-age technology which defines to transfer Deep Color (10-bit and 12-bit) video. Simply select from the front panel or remote control to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

2. Features

- HDMI 1.3, HDCP1.1 and DVI1.0 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:



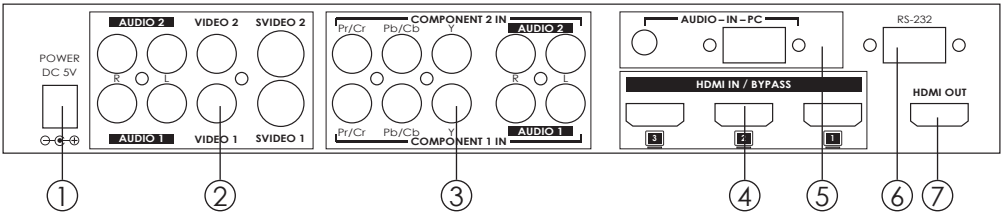
① Power switch and power LED indicator: Press the switch to power on the unit and the power LED will illuminate.

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.

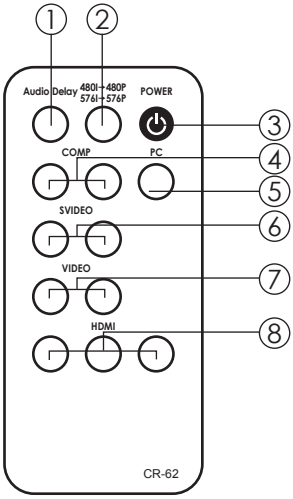
④ HDMI inputs: Connect each of the input ports to the HDMI or DVI output ports of your source equipment such as DVD player or set-top-box.

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 for PC input.
6. S-Video1/2: 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 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 Commend

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
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	1920x1080	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 576p	720x480	60Hz
720p	720x576	60Hz
1080i/540p	1280x720	50, 60Hz
	1920x1080	50, 60Hz

Note: Output resolution limit on the TV/Monitor's specifications.