# HD.PC.Video to HDMI Converter

## Operation Manual



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#### 1. Introduction

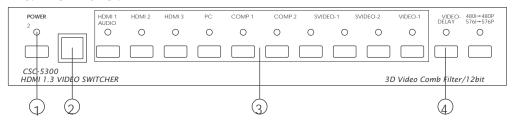
The HD.PC. Video to HDMI Converter is a high quality Video converter box to convert Analog and digital signals to HDMI v1.3 output. The product is compatible to HDMI v1.3 specifications, a cutting edge technology which defines to transfer Deep Color (10-bit and 12-bit) video. Simply select from the front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

#### 2. Features

- HDMI 1.3, HDCP1.1 and 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@75Hz and 480i to 1080p. Excepted Component output, the output resolution up to 1080i.
- 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.

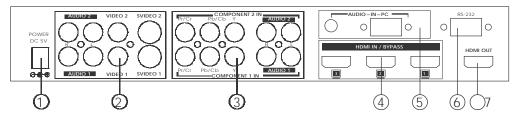
#### 3. Operation Controls and Functions

#### 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.

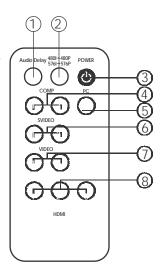
#### 3.2 Rear Panel:



- 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 equipment.
- 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 system and remote controller with **RS-232 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:

<b>Command Code</b>	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 RESET 1	> RESET ON	reset action

<b>Command Code</b>	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 FW_VER	> FIRMWARE VERSION : Vx.xx	SHOW FIRMWARE VERSION

#### 6. Connection and Installation



#### 7. Specifications

Frequency bandwidth

2.25Gbps (single link)

LCD TV

3 x HDMI female ports (Type A connector) Input ports

> 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 1 x HDMI female port (signal link) Output port

5VDC/2.6A (US/EU standards, CE/FCC/UL certified) Power Supply

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 ~ 48°C



AlTech International www.aitech.com

HD.PC.Video to HDMI Converter AITech P/N: 07-033-003-12