

HDMI-Video-PC to HDMI Switcher - **ID# 693**



Operation Manual

Introduction

HDMI-Video-PC to HDMI Switcher which is designed to convert analog and digital signals to HDMI 1.3 output. Includes HDMI, PC, Composite, Component, and S-Video Input options, and outputs to your connected display via HDMI. The unit supports a wide range of input resolutions and will output content up to high definition 1080p (output resolution limited by the connected TV/Monitor specifications - please note input resolution = output resolution).

Inputs available include 2 x Composite Video, 2 x S Video, 2 x Component Video, 3 x HDMI, and 1 x PC. This allows you to connect up to 10 devices simultaneously, allowing you to easily switch between input devices for display on your connected TV/Monitor. Users can switch between inputs using the front panel of the unit, or by using the included remote. The wide range of inputs available means that the unit is suitable for use with many devices including DVD Players, Game consoles (eg: XBox360), Set top boxes, Blu-Ray Players, PC etc.

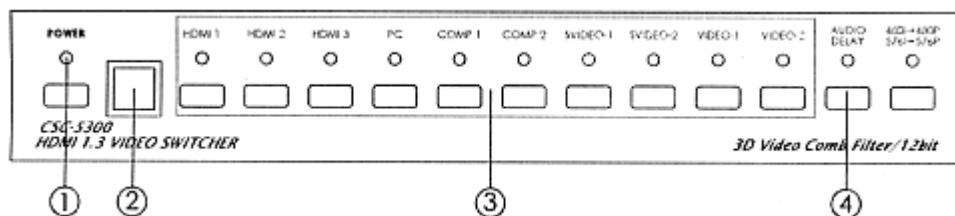
The HDMI-Video-PC to HDMI Switcher also has a selectable audio delay function (150 milliseconds) which can be used to sync audio to the video signal when needed (Not functional when input is via HDMI). The unit also has a feature which allows you to instantly switch from 480i/576i to 480p/576p when applicable.

Features

1. HDMI 1.3, HDCP1.1 and DVI1.0 compliant Receiver.
2. Deep Color video up to 12bit, 1080p@(24/60)Hz.
3. Supports analog/digital video/audio input and HDMI v1.3 output.
4. HDCP keysets allows each HDMI input to work independently when connecting to a HDMI display.
5. Supports a wide range of PC and HDTV resolutions from VGA to SXGA@60Hz and 480i to 1080p.
6. Support 3D comb filter.
7. Support 3D noise reduction (DNR).
8. Support format converter from 480i/576i to 480p/576p, simply press the front panel or remote control.
9. Support audio delay for 150ms, this feature will not functional when HDMI input.
10. Support IR remote control.
11. Support RS-232 control.

Operating Functions and Controls

Front Panel

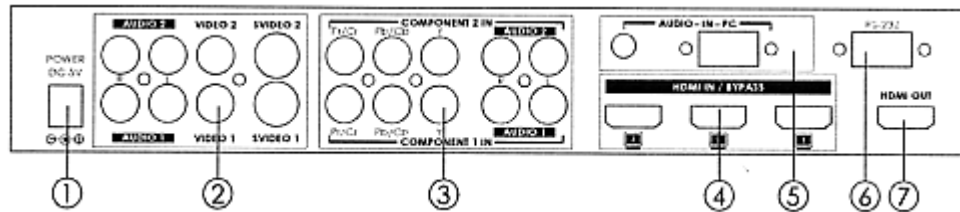


- 1. Power switch and power LED indicator:** Press the switch to power on the unit and the power LED will illuminate.
- 2. IR sensor.**

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.

Rear Panel



1. Power: Plug the 5V DC power supply into this unit and connect the adapter 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/Audio 1 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.

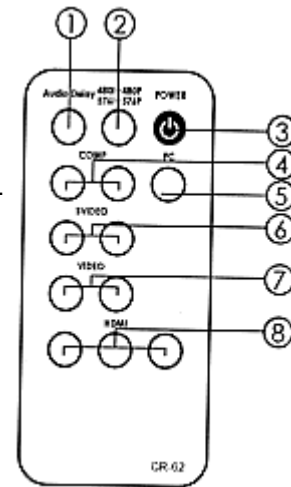
5. PC input: Connect PC/audio input port to the PC/audio output port of your source equipment such as Notebook or PC.

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.

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.



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

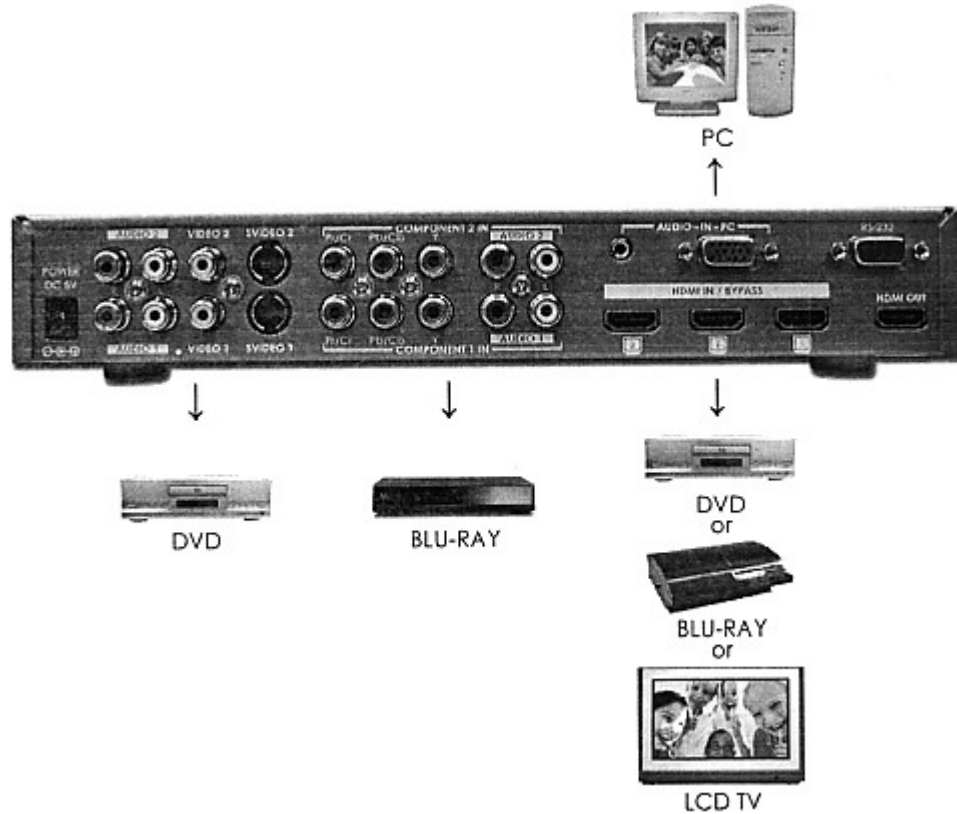
RS-232 transmission format:

(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

Installation



Specifications

- Frequency bandwidth:** 2.25Gbps (single link)
- **Input:**
 - 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:**
 - 1 x RS-232
 - 1 x HDMI female port (signal link)
 - **Power:** 5VDC/2.6A (US/EU standards, CE/FCC/UL certified)
 - **Dimension:** 280(W) x 147(D) x 44(H)
 - **Weight:** 1380g
 - **Chassis Material:** Metal
 - **Silk Skin Color:** Grey
 - **Operating Temperature:** Operating from 0°C – 40°C

Input Signal Specifications

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

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