



Comprehensive[®]
Connectivity Company

CSW-HD40118G

4K@60 HDMI Switcher 4×1



User manual

V1.1

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

I. Introduction

This is a high performance HDMI 4x1 switcher that supports HDTV formats up to 4Kx2K@60Hz and all HDMI 3D TV formats. It can extract HDMI stream audio to separate digital and analog audio output. This product supports HDCP repeater/CEC/ARC functions. Select any of the inputs by front panel button or IR Remote. The corresponding indicator LED on the front panel will be illuminated.

II. Features

- Compliant with HDMI 2.0a, DVI 1.0 standards
- HDCP 2.2 and HDCP 1.4 compliant

- Video formats up to 4Kx2K@60 and all HDMI 3D video formats
- Support PCM, Dolby TrueHD, DTS-HD Master Audio up to 7.1CH
- Digital and analog audio output
- Support smart EDID management (Auto/2CH/5.1CH/7.1CH selectable)
- Support input port auto switching or manual switching mode
- Audio Return Channel (ARC) supports

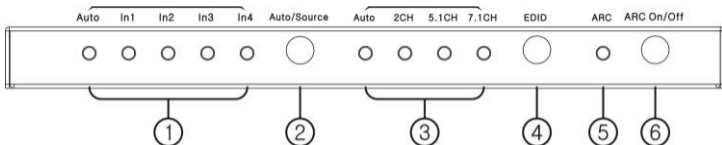
III. Package

- 1 x HDMI 4x1 Switcher
- 1 x 5V/1A Power Adapter
- 1 x 38KHz IR Rx cable
- 1 x Optical convert header (for SPDIF audio output)
- 1 x HDMI 4x1 IR Remote
- 1 x Operation Manual

IV. Specifications

Frequency Bandwidth	18Gbps
Input Ports	4 HDMI Female ports, 1 IR Receive port and 1 RS232 port
Output port	1 HDMI Female port and 1 L/R & Optical port
HDMI Audio Output	PCM2.1/5.1/7.1CH,Dolby 5.1, DTS5.1, Dolby-TrueHD, DTS-HD
ESD Protection	Human Body Model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Dimensions (mm)	180 (D) x 85 (W) x 11.6 (H)
Weight (g)	300
Power Consumption	Max 2.5W
Operating Temperature	$0^{\circ}\text{C} \sim 40^{\circ}\text{C}$ / $32^{\circ}\text{F} \sim 104^{\circ}\text{F}$
Storage Temperature	$-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ / $-4^{\circ}\text{F} \sim 140^{\circ}\text{F}$

V. Switcher Operation controls and Functions



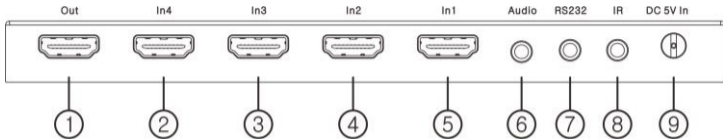
Front Panel:

- ① Input indicator LED - corresponding port LED will light when port is selected.
- ② Auto or manual select button:

Press this button >2 seconds to select auto switching or manual switching mode.

Under manual switching mode, short press this button to select input port.
- ③ EDID status LED (Auto means using TV EDID).
- ④ EDID select button (Press this button to select EDID mode Auto/2.1CH/5.1CH/7.1CH)
- ⑤ ARC status LED (this LED will be illuminated if ARC is enabled successfully)

⑥ ARC function on/off button



Rear Panel:

- ① HDMI output port, connect to HDTV or monitor via HDMI cable
- ②③④⑤ HDMI input ports, connect with DVD, PS4 or other source unit
- ⑥ Audio output (including L/R analog and optical audio out)
- ⑦ RS232 port ⑧ IR receiver port ⑨ DC 5V input port

VI. IR Remote



ARC: Press this button to enable or disable ARC function. ARC LED on front panel will be illuminated if ARC function is enabled successfully.

Auto/2.1ch/5.1ch/7.1ch: Press to select different EDID settings. corresponding LED on front panel will be illuminated.

Auto Source: Press this button to select auto switching / manual switching mode.

In1/In2/In3/In4: Under manual switching mode, press this button to select the input port.

VII. Application Example



80 Little Falls Road, Fairfield, NJ 07004 | Phone: 800.526.0242 | Fax: 201.814.0510 | www.ComprehensiveCo.com

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RS232 Protocol and Commands

Baudrate:	19200
Data Width:	8 bit
Parity:	None
Stop:	1 bit

Output 1

Input 1 A5 5B 02 03 01 00 01 00 00 00 00 00 F9
 Input 2 A5 5B 02 03 02 00 01 00 00 00 00 00 F8
 Input 3 A5 5B 02 03 03 00 01 00 00 00 00 00 F7
 Input 4 A5 5B 02 03 04 00 01 00 00 00 00 00 F6

Audio Switch

Audio Auto A5 5B 03 02 01 00 01 00 00 00 00 00 F9
 Stereo Audio2.0 A5 5B 03 02 02 00 01 00 00 00 00 00 F8
 Dolby/DTS 5.1 A5 5B 03 02 03 00 01 00 00 00 00 00 F7
 HD Audio 7.1 A5 5B 03 02 04 00 01 00 00 00 00 00 F6

Query Audio

Audio Auto A5 5B 01 0C 01 00 01 00 00 00 00 00 F1
 Audio 2.0 A5 5B 01 0C 01 00 02 00 00 00 00 00 F0
 Audio 5.1 A5 5B 01 0C 01 00 03 00 00 00 00 00 EF
 Audio 7.1 A5 5B 01 0C 01 00 04 00 00 00 00 00 EE

Auto Switch

ON A5 5B 02 05 0F 00 00 00 00 00 00 00 EA
 OFF A5 5B 02 05 00 00 00 00 00 00 00 00 09

Query Auto

Auto ON A5 5B 01 0D 00 00 00 00 00 00 00 00 F2
 Auto OFF A5 5B 01 0D 0F 00 00 00 00 00 00 00 E3

ARC

ON A5 5B 10 01 0F 00 01 00 00 00 00 00 DF
 OFF A5 5B 10 01 00 00 01 00 00 00 00 00 FE

Query ARC

ARC ON A5 5B 10 02 0F 00 01 00 00 00 00 00 DE
 ARC OFF A5 5B 10 02 00 00 01 00 00 00 00 00 FD

Device Information Query (e.g:No Devices Connected)

HDMI IN1 A5 5B 01 04 01 00 00 00 00 00 00 00 FA
 HDMI IN2 A5 5B 01 04 02 00 00 00 00 00 00 00 00 F9
 HDMI IN3 A5 5B 01 04 03 00 00 00 00 00 00 00 00 F8
 HDMI IN4 A5 5B 01 04 04 00 00 00 00 00 00 00 00 F7
 HDMI OUT A5 5B 01 05 01 00 00 00 00 00 00 00 00 F9

