18Gbps HDMI 4x1 Switcher with ARC/eARC Function

User Manual

VER 1.1

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.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Table of Contents

1. Introduction

This 18Gbps HDMI 4x1 Switcher can switch any four HDMI sources to one HDMI display. It supports video resolution up to 4K2K@60Hz RGB/YCbCr 4:4:4. It supports ARC/eARC function (only for the "INPUT 1(eARC)" port), 10bit HDR and CEC function. It also supports advanced EDID management (AUTO/2.0CH/5.1CH/7.1CH selectable). Flexible control via front panel buttons and IR remote control.

2. Features

☆ HDMI 2.0b, HDCP 2.2 / 1.x and DVI 1.0 compliant
☆ Video resolution up to 4K2K@60Hz RGB/YCbCr 4:4:4
☆ Support 18Gbps video bandwidth
☆ Support 3D, HDR, HDR10, HDR10+, Dolby Vision pass-through
☆ Supported audio formats: LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
☆ Support auto/manual switching mode for input source
☆ Support ARC/eARC function
☆ Support advanced EDID management (AUTO/2.0CH/5.1CH/7.1CH selectable)
☆ Flexible control via front panel buttons or IR remote control
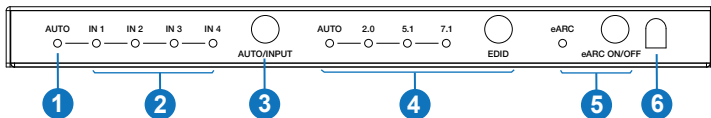
3. Package Contents

① 1 × 18Gbps HDMI 4x1 Switcher
② 1 × 5V/1A Power Adapter (USA Standard)
③ 1 × IR Remote
④ 1 × User Manual

4. Specifications

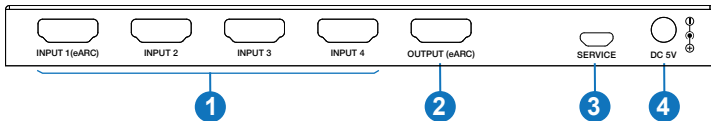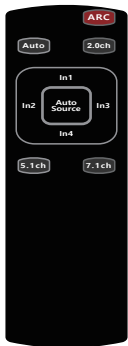| Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2 / 1.x
Video Bandwidth	18 Gbps
Video Resolution	4Kx2K@24/30Hz, 4K2K@60Hz
Color Space	RGB 4:4:4, YCbCr 4:4:4 / 4:2:2 / 4:2:0
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz) 8-bit (4K2K@60Hz YUV4:4:4) 8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2 / 4:2:0)
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
HDR	Support HDR, HDR 10, HDR 10+ and Dolby vision
ESD Protection	Human-body Model: ±8kV (Air-gap discharge), ±4kV (Contact discharge)
Connection	
Input	4×HDMI IN [Type A 19-pin female]
Output	1×HDMI OUT [Type A 19-pin female]
Control	1×SERVICE [Micro USB port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	182mm(W) × 84mm(D) × 15.5mm(H)
Weight	370g
Power Supply	Input: AC100~240V 50/60Hz Output: DC 5V/1A
Power Consumption	2W (Max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

5. Operation Controls and Functions

5.1 Front Panel

No.	Name	Function Description
1	AUTO LED	When the auto switching mode for input source is enabled, the AUTO LED is on.
2	IN 1/2/3/4 LED	When the INPUT 1/2/3/4 port is connected to source signal, the corresponding IN 1/2/3/4 LED is on.
3	AUTO/INPUT button	Press this button to switch auto/manual switching mode for input source. When you press and hold this button for 2 seconds, the device switches to the auto switching mode, and the AUTO LED is on. Press and hold this button for 2 seconds again, the device switches to the manual switching mode, then you can tap this button 1/2/3/4 times to select the input source for the INPUT 1/2/3/4 port, and the corresponding IN 1/2/3/4 LED will be on. **Note:** In auto switching mode, the device can detect signal source automatically. When one or several input ports are connected to source devices, the output port will output the signal from the last connected input source.
4	EDID button and status LED	Press the button to select EDID mode: AUTO/2.0/5.1/7.1 (AUTO means using TV EDID), and the corresponding LED will be on.
5	eARC button and LED	Press the button to turn on/off ARC/eARC function. The eARC LED will be on when you turn on the ARC/eARC function.
6	IR	IR receiver window. It only receives IR remote signal from this product.

5.2 Rear Panel

No.	Name	Function Description
1	INPUT 1/2/3/4 port	HDMI input ports, connect to HDMI source device such as DVD, PS4 or Set-top Box with HDMI cable. **Note:** When the ARC/eARC function is turned off, connect the "INPUT 1(eARC)" port to HDMI source device to work as a signal input port; When the ARC/eARC function is turned on, connect the "INPUT 1 (eARC)" port to a Soundbar or amplifier to output the audio signal extracted from "INPUT 2/3/4" port or "OUTPUT(eARC)" port. Please refer to "7. Application Example" for details.
2	OUTPUT(eARC)	HDMI output port, connect to HDMI display device such as HDTV or Projector with HDMI cable.
3	SERVICE	Firmware update port.
4	DC 5V	DC 5V power input port.

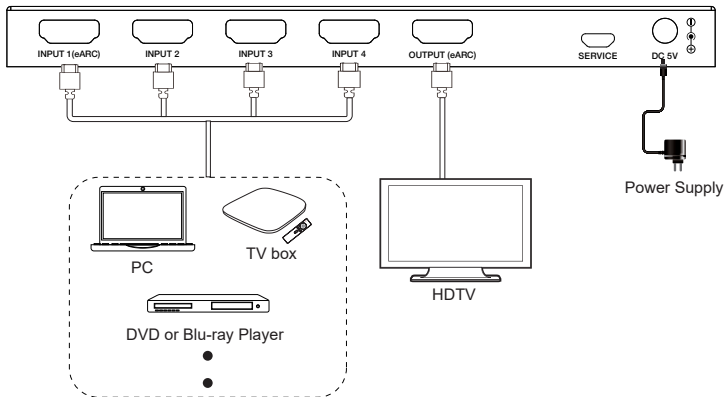# 6. IR Remote

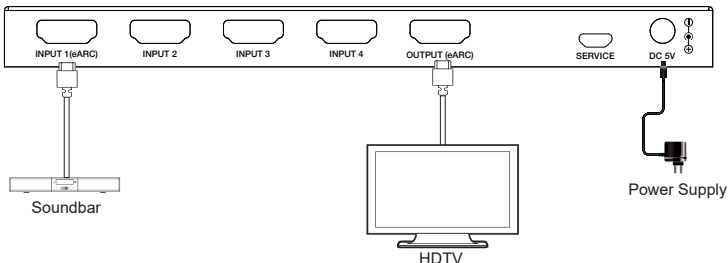|	
ARC	Press this button to turn on/off ARC/eARC function. When ARC/eARC function is turned on, the eARC LED on the front panel will be on.
Auto 2.0ch 5.1ch 7.1ch	Press these buttons to select different EDID settings, and the corresponding LED on the front panel will be on.
Auto Source	Press this button to select auto switching or manual switching mode.
In1 In2 In3 In4	In manual switching mode, press these buttons to select the input port.

7. Application Example

Situation 1

When the ARC/eARC function is turned off, the connection diagram is as following.

Power Supply

PC

TV box

DVD or Blu-ray Player

HDTV

Situation 2

When the ARC/eARC function is turned on, select the input port 1 by pressing the "AUTO/INPUT" button on the front panel or the In1 button on the IR remote, then connect the "INPUT 1(eARC)" port to a Soundbar to output the audio signal returned from the "OUTPUT(eARC)" port, as shown in the figure below. (For example, when user watches TV APP, the Switcher will pass-through TV eARC/ARC to the Soundbar.)
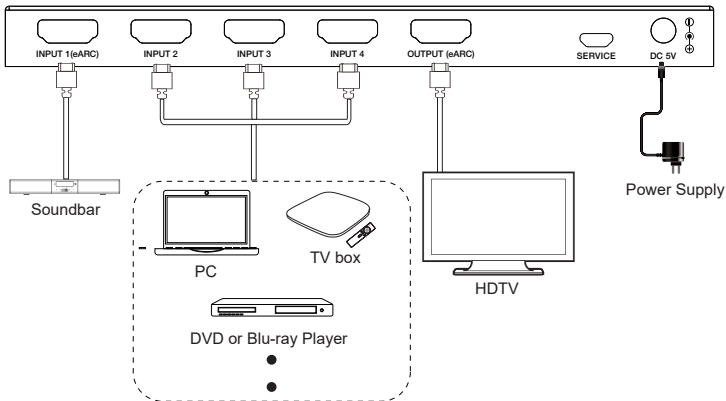
Note: If the HDTV supports ARC/eARC function, the Soundbar will receive the audio signal returned from the HDTV, and then emit the sound; otherwise it will not emit sound.

Power Supply

Soundbar

HDTV

Situation 3

When the ARC/eARC function is turned on, select the input port 2/3/4 by pressing the "AUTO/INPUT" button on the front panel or the In2/3/4 button on the IR remote, then connect the "INPUT 1(eARC)" port to a Soundbar to output the audio signal extracted from "INPUTS 2/3/4" port, as shown below.

Note: Whether the HDTV supports ARC/eARC function or not, the Soundbar will receive the audio signal extracted from "INPUTS 2/3/4" port, and then emit the sound.

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