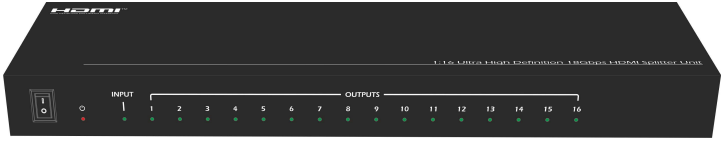
ADERTECH

CL-U4H-116



18Gbps UHD 1:16 HDMI Splitter

User Manual Version 1.1

Thank you for purchasing this product

We have done everything possible to ensure that our equipment pleases our consumers. When solving any problems in the operation and connection ADERTECH equipment, it is best to contact authorized companies and specialists who work with our equipment. Our equipment is intended for professional use, so you have professional skills in using such equipment. ADERTECH is a manufacturer of a wide range of multimedia solutions.

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..... 1
2. Features..... 1
3. Package Contents..... 1
4. Specifications..... 2
5. Operation Controls and Functions..... 3
6. EDID Mode..... 4
7. Application Example..... 5

1. Introduction

The 18Gbps 1:16 HDMI Splitter can distribute 1 HDMI source signal to 16 HDMI display devices synchronously. Supported video resolution is up to 4K2K@50/60Hz 4:4:4. The product supports advanced EDID management. It also supports HDR, HDR10, HDR10+, HLG and Dolby vision function. This product is widely used in multimedia conference halls, TV teaching, large-screen display projects and other places.

2. Features

- ☆ HDMI 2.0b, HDCP 2.2 / 1.x and DVI 1.0 compliant
- ☆ Support 18Gbps video bandwidth
- ☆ Support video resolution up to 4K2K@50/60Hz 4:4:4
- ☆ Support digital audio format: DTS-HD/Dolby-true-HD/LPCM 7.1/DTS/ Dolby-AC3/DSD
- ☆ Support HDR, HDR10, HDR10+, HLG and Dolby vision
- ☆ Advanced EDID management
- ☆ Compact design for easy and flexible installation

3. Package Contents

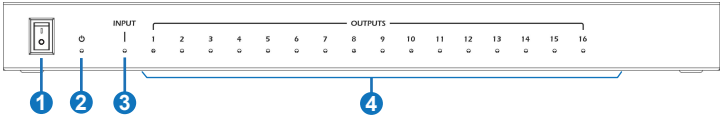
- 1× 18Gbps 1:16 HDMI Splitter
- 1× 12V/2.5A DC Locking Power Adapter
- 1× User Manual

4. Specifications

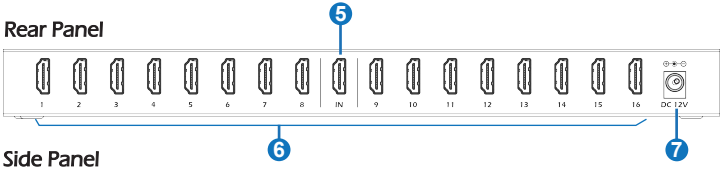
Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2/1.x
Video Bandwidth	594MHz/18Gbps
Video Resolution	Up to 4k2k@50/60Hz 4:4:4
Color Depth	8-bit,10-bit,12-bit(1080p@60Hz) 8-bit (4K2K@60Hz YUV4:4:4) 8-bit,10-bit,12-bit(4K2K@60Hz YCbCr 4:2:2/4:2:0)
Color Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2/4:2:0
HDR	Support HDR, HDR10, HDR10+, HLG, Dolby vision
HDMI Audio Formats	PCM2.0/5.1/7.1CH, Dolby 5.1, DTS5.1, Dolby-TrueHD, DTS-HD
ESD Protection	Human body model—±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input	1×HDMI Type A (19-pin female)
Output	16×HDMI Type A (19-pin female)
Control	1×SERVICE (Micro USB, Update port) 1x DIAL switch [5-pin]
Mechanical	
Housing	Metal Enclosure
Silkscreen Color	Black
Dimensions	300mm (W) × 100mm (D) × 28mm (H)
Weight	900g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 12V/2.5A (US/EU standards, CE/FCC/UL certified)
Power Consumption	12W
Operation 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

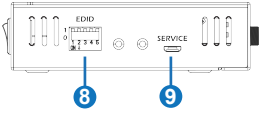
Front Panel



Rear Panel



Side Panel



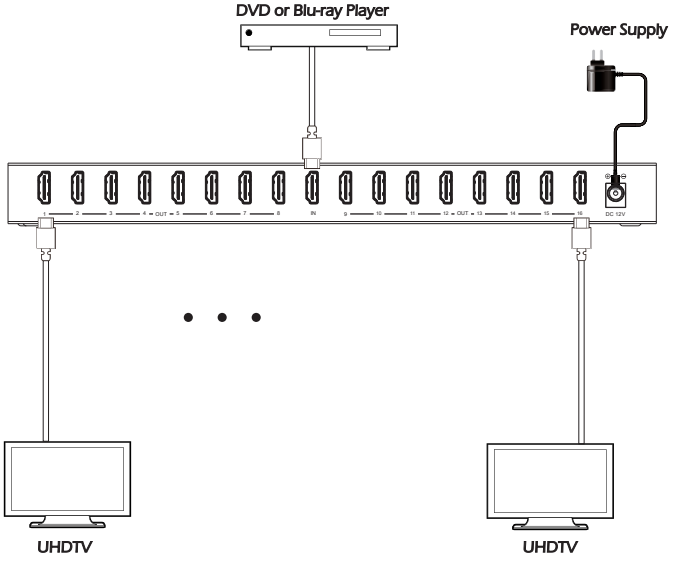
No.	Name	Function Description
1	POWER switch	Press this switch to power on/off the device.
2	POWER LED	When the device is powered on, the power LED will be on.
3	INPUT LED	When the HDMI IN port connects an active source device, the green LED will be on.
4	OUTPUT LEDs (1~16)	When the HDMI OUT port connects an active display device, the corresponding green OUT LED will be on.
5	HDMI IN port	HDMI input port, connect to HDMI source device such as PC or DVD with an HDMI cable.
6	HDMI OUT port (1~16)	HDMI output port, connect to the HDMI display device such as TV or Monitor with an HDMI cable.
7	DC 12V	Plug the DC 12V power supply into the unit and connect the adaptor to an AC outlet.
8	EDID DIP Switch	Used to set EDID mode. Please refer to Section "6. EDID Mode" for details.
9	SERVICE port	Firmware update port.

6. EDID Mode

The defined EDID setting list of the product is shown as below:

EDID Mode	EDID Description
11111	1080P, Stereo Audio 2.0
11110	1080P, Dolby/DTS 5.1
11101	1080P, HD Audio 7.1
11100	1080I, Stereo Audio 2.0
11011	1080I, Dolby/DTS 5.1
11010	1080I, HD Audio 7.1
11001	1080P 3D, Stereo Audio 2.0
11000	1080P 3D, Dolby/DTS 5.1
10111	1080P 3D, HD Audio 7.1
10110	4K2K30Hz_444, Stereo Audio 2.0
10101	4K2K30Hz_444, Dolby/DTS 5.1
10100	4K2K30Hz_444, HD Audio 7.1
10011	4K2K60Hz_420, Stereo Audio 2.0
10010	4K2K60Hz_420, Dolby/DTS 5.1
10001	4K2K60Hz_420, HD Audio 7.1
10000	4K2K60Hz_444, Stereo Audio 2.0
01111	4K2K60Hz_444, Dolby/DTS 5.1
01110	4K2K60Hz_444, HD Audio 7.1
01101	4K2K60Hz_444, Stereo Audio 2.0 HDR
01100	4K2K60Hz_444, Dolby/DTS 5.1 HDR
01011	4K2K60Hz_444, HD Audio 7.1HDR
01010	Copy Output 1 EDID Data Block
01001	1080P, Stereo Audio 2.0
01000	1080P, Stereo Audio 2.0
00111	1080P, Stereo Audio 2.0
00110	1080P, Stereo Audio 2.0
00101	1080P, Stereo Audio 2.0
00100	1080P, Stereo Audio 2.0
00011	1080P, Stereo Audio 2.0
00010	1080P, Stereo Audio 2.0
00001	1080P, Stereo Audio 2.0
00000	PC control mode

7. Application Example



All trademarks are the property of their respective owners. ADERTECH is not responsible for any errors that may appear in this document publication. Product, pricing and feature information contained herein is subject to change without notice.
© 2023 ADERTECH Co Ltd.
The ADERTECH logo and associated visual identity are trademarks or registered trademarks of ADERTECH and/or its affiliates.