

D8





Safety Instructions

Symbols used in user manuals and equipment indicate the possible harm to users or others and the risk of property damage. In order for you to use the equipment safely and correctly, the signs and their meanings are as follows. Please make sure to correctly understand these signs before reading the user manual.



The Federal Communications Commission's certification mark for electronic products EMC.



The product contains some metal components, please pay attention to environmental protection.



Adopted Directive 2002 / 95 / EC of the European Parliament and of the Council.



CE certification means that this product has reached the safety requirements stipulated by the EU directives, and users can use it with confidence.



This product is Class A, which may cause radio interference in living environment. In this case, users may need to take practical measures against interference.



Remind the user that the uninsulated dangerous voltage in the equipment may cause electric shock.



Warning: To avoid electric shock, please don't open the cover and put the useless parts in the case. Please contact qualified service personnel.

General information indication



Lists the contents that may lead to unsuccessful operation or setup and some related information that needs attention.

Warning

To ensure the reliable use of the equipment and personal safety, please observe the following items during installation, use and maintenance:

Precautions during installation

- Do not use this product in the following places: places with dust, lampblack, conductive dust, corrosive gas and combustible gas; Exposed to high temperature, condensation, wind and rain; There are occasions of vibration and impact. Electric shock, fire and misoperation can also lead to product damage and deterioration;
- During screw hole processing and wiring, do not make metal scraps and wire ends fall into the vent hole of the controller, which may cause fire, failure and misoperation;
- At the end of the product installation, it is necessary to ensure that there are no foreign objects on the ventilation surface, including dust-proof paper and other packaging items, otherwise it may lead to poor heat dissipation during operation, resulting in fire, failure and misoperation;
- Avoid wiring, plugging and unplugging cable plugs in the live state, otherwise it will easily lead to electric shock or circuit damage;
- And the installation and wiring must be firm and reliable, and poor contact may lead to misoperation;
- For applications with serious interference, shielded cables should be used for input or output cables of high-frequency signals to improve the anti-interference performance of the system.

Matters needing attention when wiring

- All external power supply must be cut off before installation, wiring and other operations can be carried out, otherwise electric shock or equipment damage may be caused;
- This product is grounded through the grounding wire of the power cord. To avoid electric shock, the grounding wire must be connected to the earth. Before connecting the input or output of this product, please be sure to properly ground this product.
- After the installation and wiring, remove the foreign matter immediately. Please cover the terminal cover plate of the product before electrifying to avoid electric shock.

Matters needing attention in maintenance

- Do not touch the terminal when it is energized, otherwise it may cause electric shock and misoperation;
- Please clean and tighten the terminals after turning off the power supply, which may cause electric shock when powered on;
- Please connect or remove the communication signal cable, cable connection or removal of expansion module or control unit after turning off the power supply, otherwise it may cause equipment damage and misoperation;
- Do not disassemble the equipment to avoid damaging the internal electrical components;
- Be sure to read this manual carefully and fully confirm the safety before changing, commissioning, starting and stopping the program.

Matters needing attention when scrapping products

- Electrolytic capacitors on circuit boards may explode when burned:
- Please collect and treat them separately, and do not put them into domestic garbage.
- Please treat it as industrial waste or according to local environmental protection regulations.



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1. Technical parameter



Specifications for the D8 are listed in the following table.

Parameter specification	
HDMI version	HDMI 2.0b
HDCP version	HDCP 2.2, HDCP 1.4
Video bandwidth	18Gbps
Video resolution	720P50/60Hz, 1080P50/60Hz, 4K2K24Hz, 4K2K30Hz, 4K2K@50/60Hz (4:4:4)
Color space	RGB, YCbCr 4:4:4, YCbCr 4:2:2
Color depth	8-bit (4K60Hz), 12-bit (1080P)
HDMI audio format	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Fiber-Optical audio format	LPCM 2.0/2.1CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS5.1, DTS-ES6, DTS-HDMA5.1, DTS HD-HBR 5.1
L/R audio format	PCM 2.0
Electrostatic protection	Mannequin: ± 8 kV (air discharge), ± 4 kV (contact discharge)
Shell	Metal shell
Color	Black
Size	180mm[L]×62mm[W]×14mm[H]
Weight	227g
Power supply	Input: AC 100~240V 50/60Hz Output: DC 5V/1A
Power consumption	3.5W
Operating temperature	0° C~40° C/32° F~104° F
Storage temperature	-20° C~60° C/-4° F~104° F
Relative humidity	20~90% RH (No condensation)
Input	1 x HDMI Type A [19-pin female]
Output	4 x HDMI Type A [19-pin female] 1 x L/R audio [3.5mm Stereo Mini-jack] 1 x Fiber-Optical audio [S/PDIF]



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2. Physical Description

2.1 Front Panel introduction

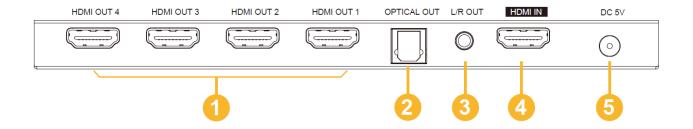


Connectors, Controls & Indicators

No.	Name	Functional description
1	Power Indicator	Power Indicator. Blue means power on.
2	IN	HDMI input signal indicator. Blue means there is a signal input from the HDMI IN port.
3	OUT 1- 4	HDMI output signal indicator. When there is signal output from HDMI OUT 1/2/3/4 ports, the corresponding blue indicator lights up.
4	SERVICE	Firmware upgrade port (available in production only).
5	EDID (COPY, AUTO toggle switch)	Select EDID mode. AUTO: When the switch is turned to "AUTO", the unit will compare the EDID settings of the display devices on the HDMI OUT1~4 ports, and then transmit the optimal resolution to the source device, which then transmits the signal to all output devices. COPY: When the switch is turned to "COPY", this unit will copy the EDID setting of the display device of the HDMI OUT 1 port to the source device, which will transmit the signal to all output devices. Note: If the HDMI OUT 1 port does not detect an available EDID setting, the EDID of the HDMI OUT 2/3/4 port will be copied. The priority order is OUT 1 ~ OUT 4.
6	4K→1080P toggle switch	OFF: When the switch is turned to "OFF", the signal input and output are in a straight-through state. ON: When the switch is turned to "ON", the input signal will be reduced (4k->1080P) and then output.



2.2 Back Panel introduction



Connectors, Controls & Indicators

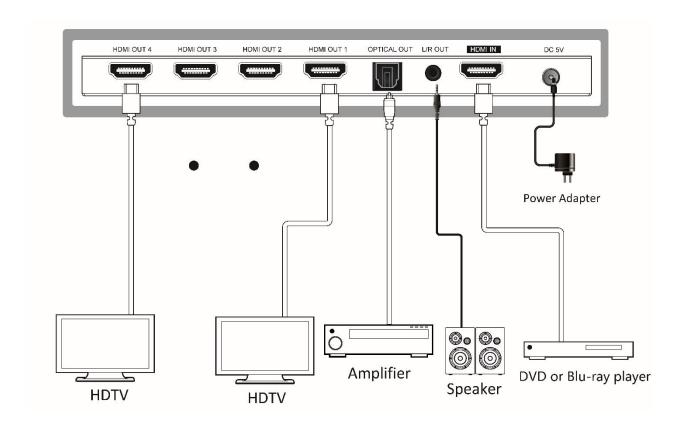
No.	Name	Functional description
1	HDMI OUT1-4	HDMI signal output port. Connect to HDMI display, such as TV or monitor.
2	OPTICAL OUT	Fiber-Optical audio output. Connect to the amplifier, and output audio from the HDMI IN port.
3	L/R OUT	Analog audio output. Connect to speakers, and output audio from the HDMI IN port.
4	HDMI IN	HDMI input. Connect to HDMI source equipment, such as DVD or PS4.
5	DC 5V In	5V DC power supply interface.



3. Functional performance

- > Comply with HDMI 2.0b, HDCP2.2 and HDCP1.4
- > Support 18Gbps video bandwidth
- \triangleright Support high video resolution up to 4K \times 2K@ 50/60Hz(4:4:4)
- > Support digital and analog audio stripping
- Output ports support signal pass-through and 4K->1080P video scaling
- Two EDID modes can be selected by the toggle switch on the panel: COPY/AUTO
- > Support analog audio formats: PCM 2.0
- Support Fiber-Optical audio formats: LPCM 2.0/2.1/5.1CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS 5.1, DTS-ES 6/DTS-HDMA 5.1, DTS HD-HRA 5.1

4. Schematic diagram





安全指示

用户手册和设备上所使用的符号,指出可能对用户或他人造成的伤害以及财产受损的风险,为了您能够安全、正确使用设备,标识及其含义如下,请确保在阅读用户手册之前正确理解这些标识。



美国联邦通讯委员会对电子产品EMC的 认证标志。



产品中含有一些金属元器件, 请注意环保。



通过欧盟议会和欧盟理事会2002/95/EC 指令。



CE认证表示此产品已经达到了欧盟指令 规定的安全要求,用户可放心使用。



此为A 级产品,在生活环境中,该产品可能会造成无线电干扰。在这种情况下,可能需要用户对干扰采取切实可行的措施。



提醒使用者设备内出现的未绝缘的危险电 压可能会导致人遭受电击

A CAUTION

警告:为了避免电击,请不要打开机盖,也不要将无用的部分放在机箱内。请与有 资格的服务人员联系。

一般信息指示



列示了可能导致操作或设置不成功的内容 及一些需要注意的相关信息。

警告

为确保设备可靠使用及人员人身安全,请在安装、使用和维护时,请遵守以下事项:

安装时的注意事项:

- 请勿在下列场所使用本产品:有灰尘、油烟、导电性尘埃、腐蚀性气体、可燃性气体的场所;暴露于高温、结露、风雨的场合;有振动、冲击的场合。电击、火灾、误操作也会导致产品损坏和恶化;
- 在进行螺丝孔加工和接线时,不要使金属屑和电线头掉入控制器的通风孔内,这有可能引起火灾、故障、误操作;
- 产品在安装工作结束,需要保证通风面上没有异物,包括防 尘纸等包装物品,否则可能导致运行时散热不畅,引起火灾、 故障、误操作:
- 避免带电状态进行接线、插拔电缆插头,否则容易导致电击,或导致电路损坏;
- 安装和接线必须牢固可靠,接触不良可能导致误操作;
- 对于在干扰严重的应用场合,高频信号的输入或输出电缆应选用屏蔽电缆,以提高系统的抗干扰性能。

布线时的注意事项:

- 必须将外部电源全部切断后,才能进行安装、接线等操作, 否则可能引起触电或设备损坏;
- 本产品通过电源线的接地导线接地,为避免电击,必须将接地导线与大地相连,在对本产品的输入端或输出端进行连接之前,请务必将本产品正确接地;
- 在安装布线完毕,立即清除异物,通电前请盖好产品的端子 盖板、避免引起触电。

保养时的注意事项:

- 请勿在通电时触摸端子,否则可能引起电击、误操作;
- 请在关闭电源后进行清扫和端子的旋紧工作,通电时这些操作可能引起触电;
- 请在关闭电源后进行通讯信号电缆的连接或拆除、扩展模块 或控制单元的电缆连接或拆除等操作,否则可能引起设备损坏、误操作;
- 请勿拆卸设备,避免损坏内部电气元件;
- 务必熟读本手册,充分确认安全后,再进行程序的变更、试运行、启动和停止操作。

产品报废时的注意事项:

- 电路板上的电解电容器焚烧时可能发生爆炸;
- 请分类收集和处理,不能投入生活垃圾中;
- 请按工业废弃物进行处理,或者按当地的环境保护规定处理。



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1. 技术参数



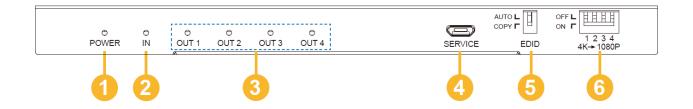
下表列出了D8的规格:

参数规格		
HDMI标准	HDMI 2.0b	
HDCP标准	HDCP 2.2, HDCP 1.4	
视频带宽	18Gbps	
视频分辨率	720P50/60Hz, 1080P50/60Hz, 4K2K24Hz, 4K2K30Hz, 4K2K@50/60Hz (4:4:4)	
颜色空间	RGB, YCbCr 4:4:4, YCbCr 4:2:2	
颜色深度	8-bit (4K60Hz), 12-bit (1080P)	
HDMI音频格式	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD	
光纤音频格式	LPCM 2.0/2.1CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS5.1, DTS-ES6, DTS-HDMA5.1, DTS HD-HBR 5.1	
L/R 音频格式	PCM 2.0	
静电保护	±8kV (空气放电), ±4kV (接触放电)	
外壳	金属外壳	
颜色	黑色	
尺寸	180mm[长]×62mm[宽]×14mm[高]	
重量	227克	
供电电源	输入: AC 100~240V 50/60Hz 输出: DC 5V/1A	
电源功耗	3.5W	
工作温度	0° C~40° C/32° F~104° F	
储存温度	-20° C~60° C/-4° F~104° F	
相对湿度	20~90% RH (无凝结)	
输入端口	1 x HDMI Type A [19-pin母座]	
输出端口	4 x HDMI Type A [19-pin母座] 1 x L/R 音频端口 [3.5mm Stereo Mini-jack] 1 x 光纤音频端口 [S/PDIF]	



2. 物理描述

2.1 前面板介绍



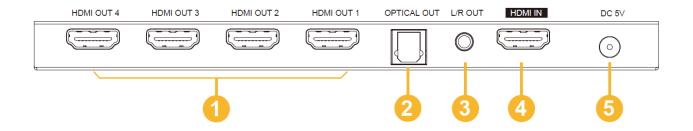
连接器、控制器和指示器

标号	名称	功能描述
1	Power	电源指示灯。当设备通电时,蓝色指示灯 点亮。
2	IN	HDMI输入信号指示灯。当HDMI IN端口有信号输入时,蓝色指示灯点亮。
3	OUT 1- 4	HDMI输出信号指示灯。当HDMI OUT 1/2/3/4端口有信号输出时,对应的蓝色指 示灯点亮。
4	SERVICE	固件升级端口(仅生产可用)。
5	EDID (COPY, AUTO 拨动开关)	选择EDID模式。 AUTO: 开关拨至 "AUTO"时,本机将比较HDMI OUT1~4端口显示设备的EDID设置,然后将最优分辨率传输到源设备,源设备再把信号传输到所有输出设备。 COPY: 开关拨至 "COPY"时,本机将HDMI OUT 1端口显示设备的EDID设置复制到源设备,源设备再把信号传输到所有输出设备。注意: 若HDMI OUT 1端口未检测到可用的EDID设置,则会复制HDMI OUT 2/3/4端口的EDID。优先级顺序是OUT1~OUT 4。
6	4K→1080P 拨动开关	OFF: 开关拨至 "OFF" 时,信号输入和输出为直通状态。 ON: 开关拨至 "ON" 时,输入信号会被缩小 (4k->1080P) 之后再输出。



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2.2 后面板介绍



连接器、控制器和指示器

标号	名称	功能描述
1	HDMI OUT1-4	HDMI输出口。连接HDMI显示设备,如TV 或监视器。
2	OPTICAL OUT	光纤音频输出口,连接功放,输出来自 HDMI IN端口的音频。
3	L/R OUT	模拟音频输出口,连接音箱,输出来自 HDMI IN端口的音频。
4	HDMI IN	HDMI输入口。连接HDMI源设备,如DVD播放器或PS4。
5	DC 5V In	5V DC 电源供电接口。

3. 功能特性

- ➤ 符合HDMI 2.0b, HDCP 2.2 / HDCP 1.4规范
- ▶ 支持18 Gbps视频带宽
- ➤ 视频分辨率最高支持4K2K@50/60Hz (4:4:4)
- > 支持数字和模拟音频剥离功能
- ➤ 输出端口支持信号直通和4K->1080P 视频缩放功能
- ▶ 通过面板上的拨动开关可以选择两种EDID模式: COPY/AUTO
- ▶ 支持模拟音频格式: PCM 2.0
- ▶ 支持光纤音频格式: LPCM 2.0/2.1/5.1CH, Dolby 5.1, Dolby True HD, Dolby DD+, DTS 5.1, DTS-ES 6/DTS-HDMA 5.1, DTS HD-HRA 5.1

4. 系统连接图

