DVDO





DVDO-RS-4

4K HDMI & USB-C Wall Plate Extender Kit over Ethernet

User Manual

Version v1.0

Thank you for purchasing DVDO-RS-4

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.

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1. Introduction

DVDO-RS-4 is an extender kit over category cable including a wall plate transmitter with switchable HDMI and USB-C inputs and a receiver. It features a US one-gang enclosure for Decora-style wall plate openings as well as a white wall plate and faceplate. It supports video resolutions up to 4K2K@50/60Hz 4:4:4.

The CAT6 output can extend video transmission distance up to 164ft / 50m. The product is remotely powered by the receiver or other CAT-equipped devices via POC.

2. Features

- Compliant with HDMI 2.0b, HDCP 2.2 and DisplayPort 1.2a
- HDMI input supports 18Gbps video bandwidth;
USB-C input supports 5.4Gbps video bandwidth
- Video resolution up to 4K2K@50/60Hz 4:4:4
- CAT6 output can extend video transmission distance up to 164ft / 50m for 4K@24 or 115ft / 35m for 4K@60 444 via a single CAT5e/6 cable
- Support 3D, HDR10 and Dolby Vision
- HDMI audio formats support LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
- Support HDMI and USB-C inputs as well as a USB-C charging port
- US one-gang enclosure for Decora-style wall plate openings
- Input signal selection supports automatic mode and manual mode
- Support POC function (only from Receiver to Transmitter)

3. Package Contents

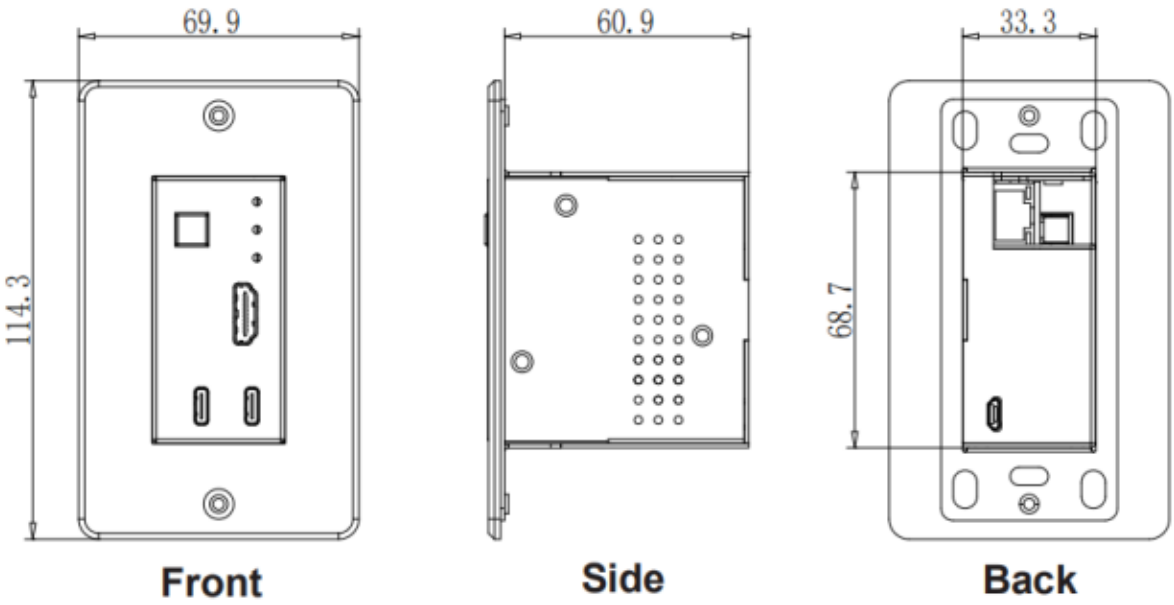
① 1 x Wall Plate CAT Transmitter
② 1 x CAT Receiver
③ 1 x Power Supply with Interchangeable Plugs
④ 1 x Cover Plate with Screws
⑤ 2 x Mounting Ears for Receiver
⑥ 1 x User Manual

4. Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
DP Compliance	Display Port 1.2a
Video Bandwidth	USB-C: 5.4 Gbps
	HDMI: 18 Gbps
Video Resolution	480i~1080p50/60Hz, 4Kx2K@24/30Hz, 4k2k@60Hz
Color Space	RGB, YCbCr 4:4:4 / 4:2:2, YUV 4:2:0
Color Depth	8/10/12-bit (1080P@60Hz) 8-bit (4K@60Hz)
HDR	Support
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD
Transmission Distance	Max distance (4K@24) : 164ft / 50m over CAT5e/6 Max distance (4K@60) : 115ft / 35m over CAT5e/6
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Inputs: 1 x HDMI Type A [19-pin female] 1 x USB-C Outputs: 1 x CAT6 OUT [RJ45, 8-pin female] 1x USB-C (only for charging) Control: 1x FW [Micro USB, Update port]
Receiver	Input: 1x CAT IN [RJ45, 8-pin female] Output: 1x HDMI OUT [Type A, 19-pin female] Controls: 1x IR IN [3.5mm Stereo Mini-jack] 1x SERVICE [Micro USB, Update port]

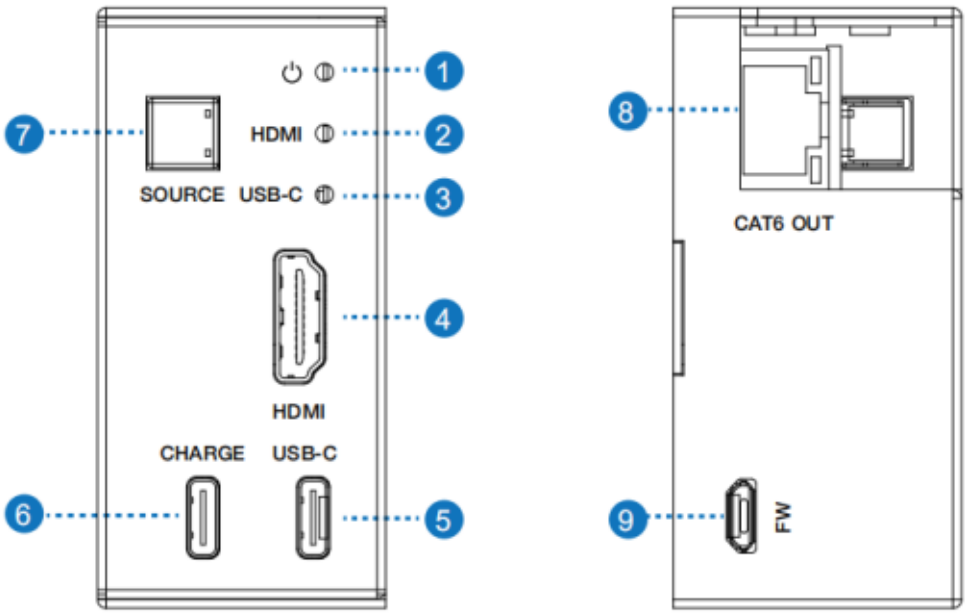
Mechanical	
Housing	Metal Enclosure
Color	White
Dimensions	Wall plate: 33.3mm [W] x 65.7mm [D] x 68.7mm [H] Faceplate: 69.9mm [W] x 3mm [D] x 114.3mm [H] Receiver: 88mm (W) × 61mm (D) × 18mm (H)
Weight	Wall plate: 195g, Receiver: 155g
Power Supply	POC (only from Receiver to Transmitter)
Power Consumption	Wall plate: 3W (Max), Receiver: 3.72W (Max)
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20- 90% RH (no condensation)

5. Product Dimensions (mm)



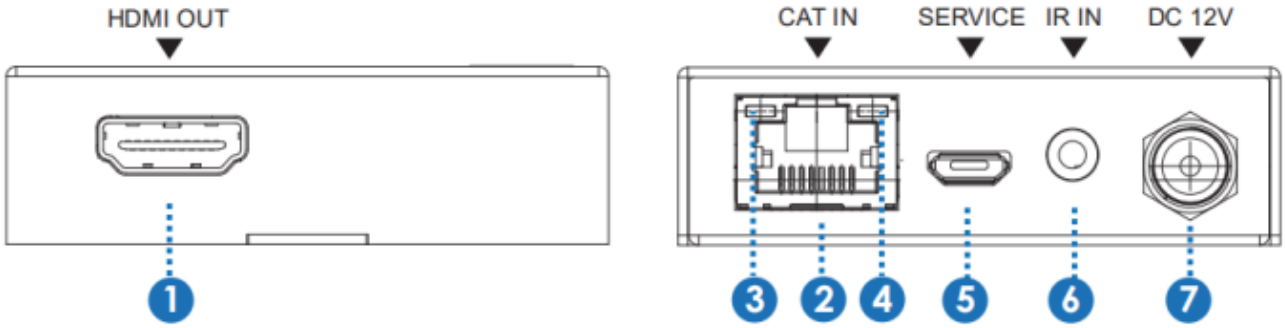
6. Operation Controls and Functions

6.1 Transmitter Panel



No.	Name	Function Description
1	Power LED	The power LED indicator will illuminate in green when the product is powered on, and red when the product is on standby.
2	HDMI LED	When the HDMI input port is active and the HDMI signal is detected, the green LED will be on.
3	USB-C LED	When the USB-C input port is active and USB-C signal is detected, the green LED will be on.
4	HDMI port	HDMI input port, connect to HDMI source device.
5	USB-C port	(1) USB-C signal input port. (2) Charging port for devices with USB-C port.
6	CHARGE port	Connect this port to power supply, then the USB-C port will power the connected device.
7	SOURCE button	Used to switch HDMI / USB-C input signal.
8	CAT6 OUT	Connect to the CAT IN port of Receiver with a CAT5e/6 cable.
9	FW port	Firmware update port.

6.2 Receiver Panel



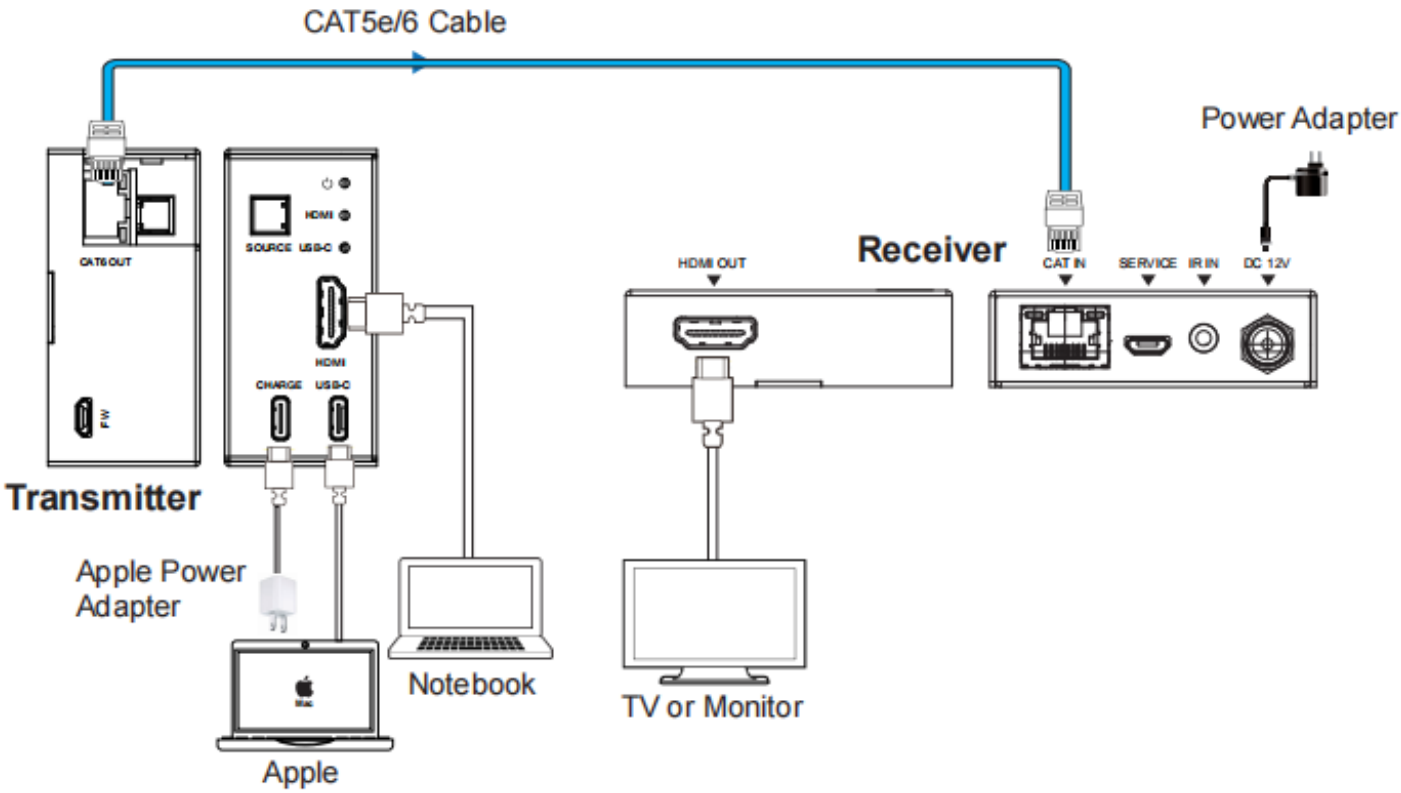
No.	Name	Function Description
1	HDMI OUT	HDMI output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	CAT IN	Connect to the CAT6 OUT port on the transmitter with a CAT cable.
3	Power Indicator Lamp (Green)	When the receiver is powered on, the power indicator lamp will be on.
4	Data signal Indicator Lamp (Orange)	When there is signal transmission between the transmitter and the receiver, the lamp will be on.
5	SERVICE port	Used for firmware update.
6	IR IN	IR signal input port. Connect to the IR Receiver cable.
7	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (**Note:** The CAT receiver provides power for the transmitter via a CAT cable.)

Note:

This transmitter supports automatic/manual mode for source signal input. In manual switching mode, press the SOURCE button to select HDMI/ USB-C input source.

In automatic switching mode, the last connected or the currently connected source signal will be selected automatically; When both HDMI and USB-C ports are connected to active signal, HDMI signal input is preferred.

7. Application Example



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