

DVDO



DVDO-CAT4K-70-CC

4K60 HDMI 70m Cascading Extender over Category with ARC

User Manual

Version v1.0

• Important Safety Notice

1. Do not mix up HDMI to RJ45 transmitter and RJ45 to HDMI receiver before installation.
2. Do not hot plug when it is working.
3. Use DC5V/2A power supply only. Make sure specification matched if using 3rd party adapters.
4. Static electricity will cause damage of the device, please do ESD protection when using the device.

• Introduction

DVDO-CAT4K-70-CC includes a transmitter unit and a receiver unit, allowing HDMI signals to be transmitted up to 70 meters at 4K resolution using a CAT6/6A/7 network cable. It is perfect for outdoor advertising, video clips, monitor system, home entertainment, and conference, etc.

• Features

1. Zero latency.
2. 4K@60Hz HDMI signal can be transmitted 70 meters through a CAT6/6A/7 network cable.
3. Supports up to 10 receivers in cascade, auto adapt to display resolution (additional receivers sold separately – P/N: DVDO-CAT4K-70-CC-Rx).
4. The receiver can extract the digital audio from the transmitter through the S/PDIF port.
5. Supports HDR10.
6. Supports EDID passthrough, auto downscaling.
7. Transmitter support one HDMI loop-out.
8. Support bi-directional IR passback function (20~60KHz).
9. Lightning Protection, Surge Protection, ESD Protection.

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• Package Contents



Transmitter unit x1pc



Receiver unit x1pc



DC5V/2A x2pcs



User manual x1pc



IR blaster extension cable*1



IR receiver extension cable*1



Mounting brackets x4pcs



Screw x10pcs

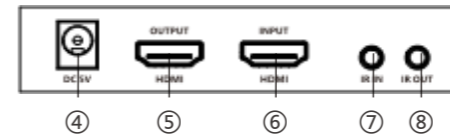
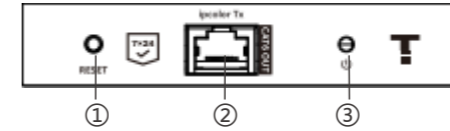


Screw x2pcs

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• Interfaces

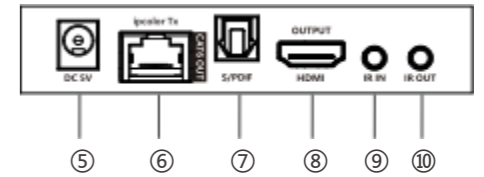
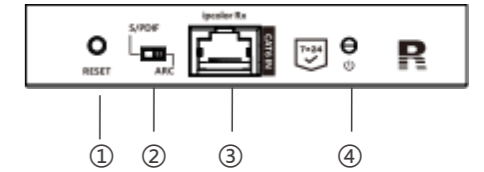
1. Transmitter (TX)



1	Reset button	Press to restart the device
2	Rj45 signal output	Connect with network cable
3	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
4	DC5V input	Connect with DC5V/2A power adapter
5	HDMI output	Connect with HDMI display device
6	HDMI input	Connect with the source device
7	IR in	Connect with IR receiver extension cable, please make sure the remote control used is within the effective range
8	IR out	Connect with IR blaster extension cable, please get closer to the source device while using

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2. Receiver (RX)



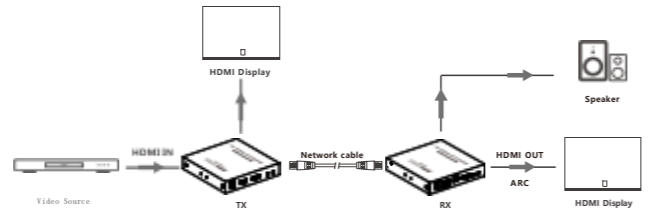
1	Reset button	Press to restart the device
2	Audio switch	Choose to decode audio from HDMI or ARC output from fiber optic interface
3	Rj45 signal input	Connect with network cable
4	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
5	DC5V input	Connect with DC5V/2A power adapter
6	Rj45 signal output	Connect with network cable
7	S/PDIF out	Output digital audio signal.
8	HDMI output	Connect with HDMI display device
9	IR in	Connect with IR receiver extension cable, please make sure the remote control used is within the effective range
10	IR out	Connect with IR blaster extension cable, please get closer to the source device while using

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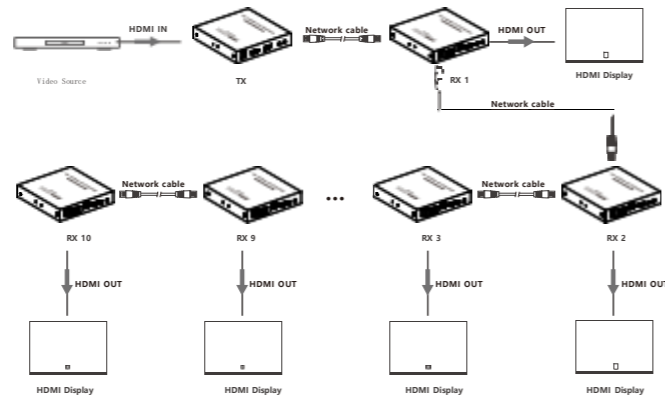
• Installation Procedure

1. Connection

one to one:



one to many:



Note: To ensure the quality of signal transmission, please use network cable within 50 meters when cascaded.

Follow the standard of IEEE-568B, It is recommended to select a network cable with less loss and crosstalk.

- 1-Orange/white 2-Orange 3-Green/white
- 4-Blue 5-Blue/white 6-Green
- 7-Brown/white 8-Brown



2. Connection instructions

- 1) Connect the source device to the HDMI in port of the transmitter with an HDMI cable, and connect the HDMI out port of the receiver to the display device with another HDMI cable.
- 2) Connect the CAT out port of the transmitter and the CAT in port of the receiver via a network cable (CAT6/CAT6A/CAT7). If cascading is used, connect the CAT out port of the previous receiver to the CAT in port of the next receiver.
- 3) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
- 4) Plug the power supply into the device to get started.

[NOTE]: It is recommended to use a length range within 2~70m network cable. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be with poor quality.

3. IR User Guide

- 1) IR blaster extension cable should plug in the IR OUT port of the transmitter and receiver, IR receiver extension cable should plug in the IR IN port of the transmitter and receiver.
- 2) The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
- 3) Face the receiving head of the IR receiver extension cable to the user for convenient remote control.

• FAQ

- Q: There is no output on screen when all connections are correct?
- A: 1) Please make sure the HDMI cables supports 4K×2K if the output signal from the source device is 4K×2K resolution.
 2) Please check and make sure the network cable insert to the RJ45 port well.
 3) Restart the transmitter or receiver by pressing the reset button.
- Q: Black screen happened on the display/monitor?
- A: 1) Check if the length of the cable is within the specified range.
 2) Reset the transmitter to re-built the connection.
- Q: The display shows unusual color or no sound?
- A: 1) Reset the transmitter or receiver to re-built the connection.
 2) Check if the HDMI cables are connected well.
 3) Reconnect the network cable.

• Specifications

	Items	Specification
Power supply	Voltage/Current	DC 5V/2A
	Power consumption	TX<4W RX<4W
HDMI Performance And Interface	HDMI compliance	HDMI 2.0
	HDCP compliance	HDCP 2.2
	HDMI resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600
	Supports audio formats	LPCM/DTS-H D/DTS-Audi / Dolby Digital 5.1CH / Dolby Atmos
	Input and output TMDS signal	0.7~1.2Vp-p(TMDS)
	Input and output DDC signal	5Vp-p(TTL)
Transmission Distance	Input cable length	≤8m(AWG24)
	Output cable length	≤8m(AWG24)
Protection Lever	CAT6/6A/7	≤70m
Operating Environment	Electrostatic protection of the whole machine	1a Contact discharge level 3 1b Air discharge level 3 Implementation of the standard: IEC61000-4-2
	Working temperature	-20~60℃
	Storage temperature	-30~70℃
Body properties	Humidity (no condensation)	0~90%RH
	Dimension	105.5(L) x 102.5(W) x 20(H)mm
	Material	Metal
	Color	Black
	Weight	TX: 243g RX: 243g

Disclaimer

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