

KanexPro®



4K HDR HDMI 2.0 18G Extender 50M over Cat6

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MPN: EXT-USB250M

VER. 1.0

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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1. Introduction

The KanexPro EXT-50M18G extender is a set of transmitter and receiver which sends full UHD 4K/60 HDMI signals over CAT6 cable up to 164ft. (50m). The transmitter module features a local HDMI output for preview monitor or local display support enabling you to see what you are extending over CATx cable. Beneficial for large lecture halls, house of worship centers and conference rooms. For control, the extender set can send/ receive IR signals from each other over CAT5e/6 cable with IR pass-through.

The extender includes two units: transmitter unit and receiver unit. The transmitter unit is responsible for capturing HDMI input signal and carries the signal via one cost effective Cat6 cable and emitting IR control signals. The receiver unit is responsible for receiving the HDMI signal and transmitting IR control signal.

The extender offers the most convenient solution for HDMI extension over a single Cat5e/6 with long distance capability, and is the perfect solution for any application.

2. Features

- HDMI 2.0, HDCP 2.2 / HDCP 1.4 and DVI 1.0 compliant
- Supports 18Gbps bandwidth
- Supports input and output video resolution up to 4k2k@60Hz 4:4:4, extends
- distance up to 164ft / 50 meters
- Supports one HDMI loop output
- Supports one-way IR pass-through
- Supports HDR function
- Supports PoC (Power over Cable) function, it means that either transmitter or receiver is powered supply by 12V/1A power adapter, the other doesn't need power supply.)
- Supports automatic copy EDID function
- Compact design for easy and flexible installation.

3. Package Contents

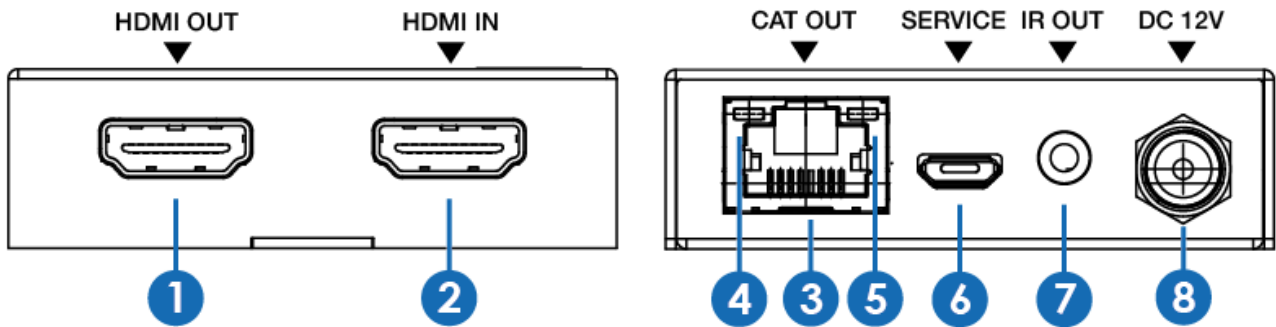
1. 1× HDMI 18Gbps Extender (Transmitter)
2. 1× HDMI 18Gbps Extender (Receiver)
3. 1× IR Blaster cable (1.5 meters)
4. 1× 20-60KHz IR Receiver cable (1.5 meters)
5. 1× 12V/1A Locking Power adapter
6. 4× Mounting Ears
7. 1× User Manual

4. Specifications

Technical		
HDMI Compliance	HDMI 2.0	
HDCP Compliance	HDCP 2.2 / HDCP 1.4	
Video Bandwidth	18Gbps	
Video Resolution	Up to 4K60Hz 4:4:4	
Color Space	RGB / YCbCr 4:4:4, YCbCr 4:2:2/4:2:0, YUV 4:4:4	
Color Depth	8/10/12-bit (1080P60Hz, 4K30Hz, 4K60Hz YCbCr 4:2:2/4:2:0) 8-bit (4K60Hz 4:4:4)	
HDMI Audio Formats	LPCM 2.0/2.1/5.1/6.1/7.1, Dolby Digital, Dolby TrueHD, Dolby Digital Plus(DD+), DTS-ES, DTS HD Master, DTS HD-HRA, DTS-X	
ESD Protection	Human body model – 38kV (Air-gap discharge) &34kV (Contact discharge)	
Connections		
Transmitter	Inputs: 1x HDMI Type A [19-pin female] 1x SERVICE [Micro USB, Update port] Outputs: 1x HDMI Type A [19-pin female] 1x IR OUT [3.5mm Stereo Mini-jack] 1x CAT OUT [RJ45, 8-pin female]	
Receiver	Inputs: 1x IR IN [3.5mm Stereo Mini-jack] 1x CAT IN [RJ45, 8-pin female] 1x SERVICE [Micro USB, Update port] Outputs: 1x HDMI Type A [19-pin female]	
Mechanical		
Housing	Metal Enclosure	
Color	Black	
Dimensions	Transmitter / Receiver: 61mm [W] x 88mm [D] x 18mm [H]	
Weight	Transmitter: 160g, Receiver: 155g	
Power Supply	Input: AC 100 - 240V 50/60Hz Output: DC 12V/1A	
Power Consumption	3.84 W	
Operating Temperature	32 - 104°F / 0 - 40°C	
Storage Temperature	-4 - 140°F / -20 - 60°C	
Relative Humidity	20 - 90% RH (no condensation)	
Resolution / Distance	4K60 - Feet / Meters	4K30 / 1080P - Feet / Meters
CAT5e	164ft / 50M	164ft / 50M
CAT6/6a/7	197ft / 60M	230ft / 70M
HDMI IN/OUT	10ft / 3M	30ft / 10M
The use of "Premium High-Speed HDMI" cable is highly recommended.		

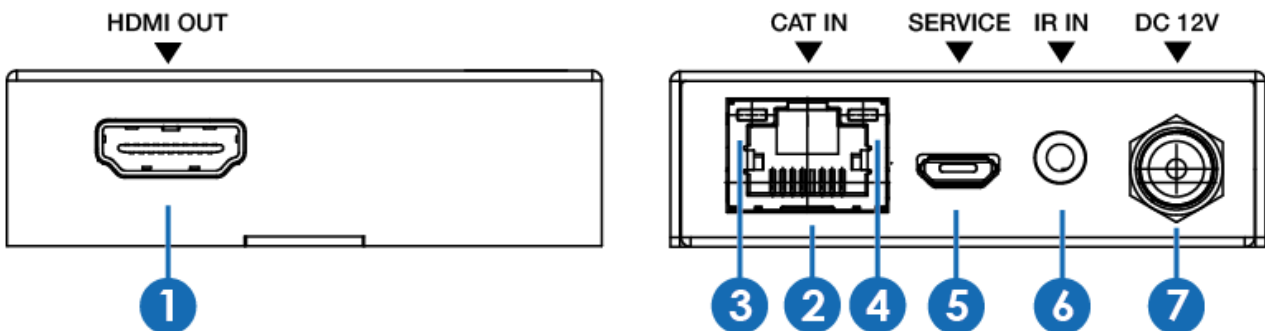
5. Operation Controls and Functions

5.1 Transmitter Panel



Number	Name	Function description
1	HDMI OUT	HDMI loop output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	HDMI IN	HDMI input port, connect to HDMI source device such as DVD or PS4 player with an HDMI cable.
3	CAT OUT	Connect to CAT IN port on the receiving end with a CAT6 cable.
4	Power Indicator Lamp (Green)	The lamp will illuminate when the transmitter is powered on.
5	Data signal Indicator Lamp (Orange)	The lamp will illuminate when the transmitter and the receiver have signal transmission.
6	SERVICE port	For firmware updated use.
7	IR OUT	Connect to wideband IR Blaster cable. The IR signal is from the IR IN port of the receiver.
8	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (Note: The extender supports PoC function, it means that either transmitter or receiver is powered supply by 12V/1A power adapter, the other doesn't need power supply.)

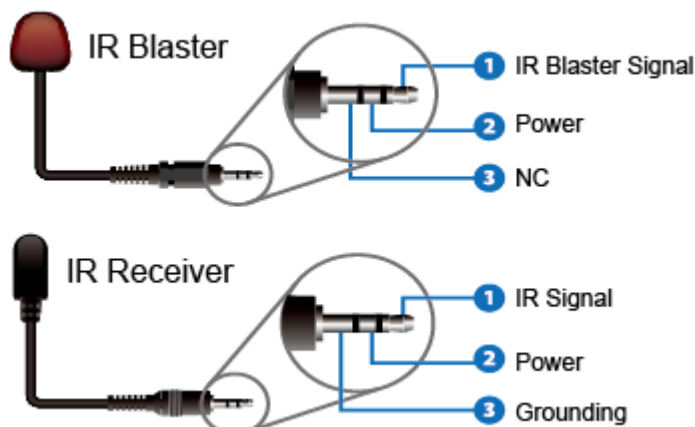
5.2 Receiver Panel



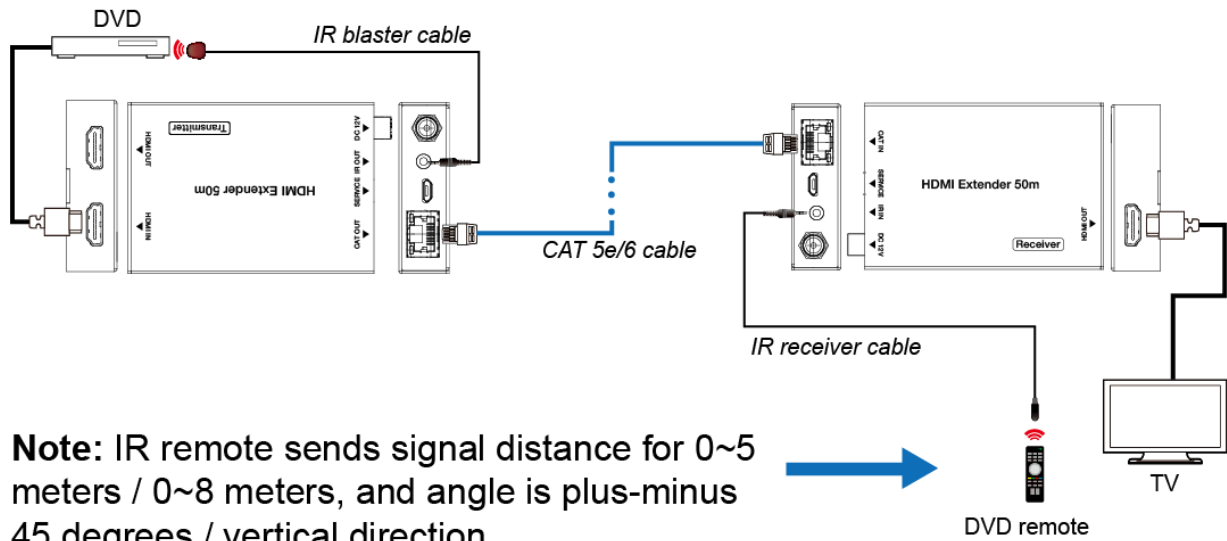
Number	Name	Function description
1	HDMI OUT	HDMI output port, connect to HDMI display device such as TV or Projector with an HDMI cable.
2	CAT IN	Connect to CAT OUT port on the transmitter end with a CAT6 cable.
3	Power Indicator Lamp (Green)	The lamp will illuminate when the receiver is powered on.
4	Data signal Indicator Lamp (Orange)	The lamp will illuminate when the transmitter and the receiver have signal transmission.
5	SERVICE port	For firmware updated use.
6	IR IN	Connect to wideband IR Receiver cable. The IR signal will send to the IR OUT port of the transmitter.
7	DC 12V	Plug DC 12V/1A power supply into the unit and connect the adapter to an AC outlet. (Note: The extender supports PoC function, it means that either transmitter or receiver is powered supply by 12V/1A power adapter, the other doesn't need power supply.)

5.3 IR Pin Definition

IR Receiver and Blaster pin's definition as below:

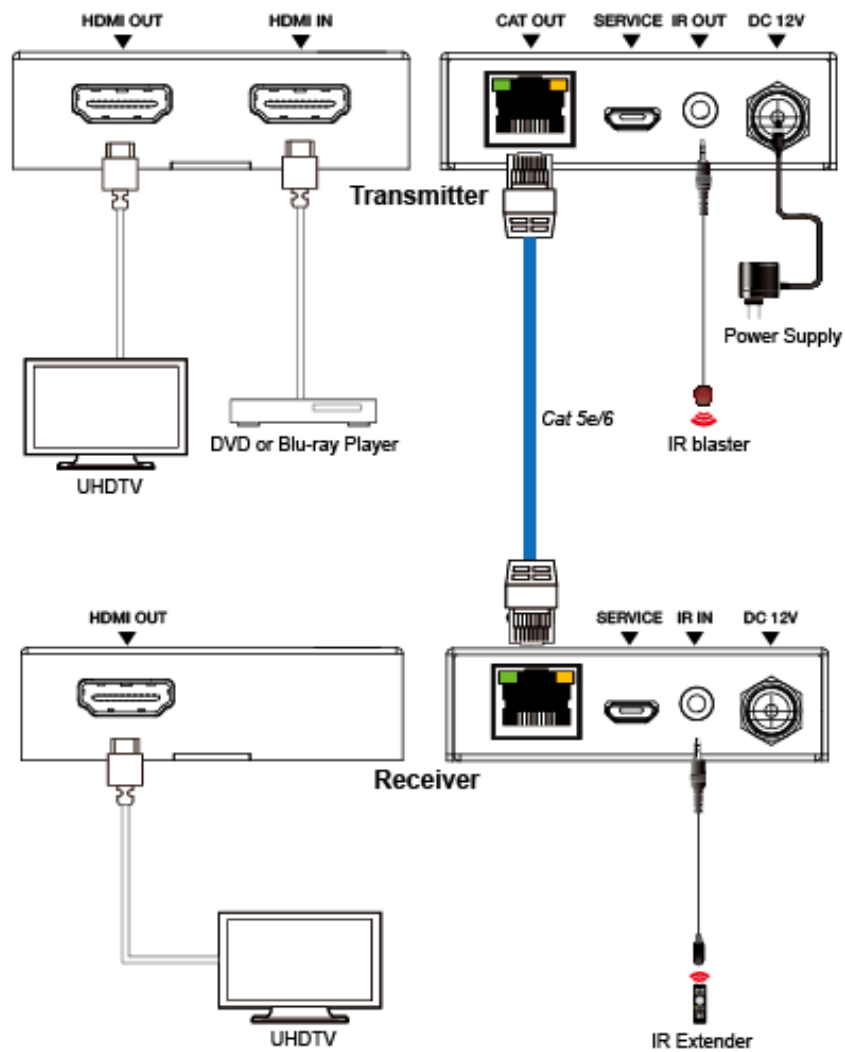


The following is IR system diagram about IR cable use method.



Note: IR remote sends signal distance for 0~5 meters / 0~8 meters, and angle is plus-minus 45 degrees / vertical direction .

6. Application Example



7. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

① Warranty

The limited warranty period of the product is fixed 3 (three) years.

② Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

③ Warranty Exclusions:

Warranty expiration.

Factory applied serial number has been altered or removed from the product.

Damage, deterioration or malfunction caused by:

- ✓ Normal wear and tear.
- ✓ Use of supplies or parts not meeting our specifications.
- ✓ No certificate or invoice as the proof of warranty.
- ✓ The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
- ✓ Damage caused by force majeure.
- ✓ Servicing not authorized by distributor.
- ✓ Any other causes which does not relate to a product defect. Shipping fees, installation or labor charges for installation or setup of the product.

④ Documentation:

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defect has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of distributor.

Remarks: For further assistance or solutions, please contact your local distributor.