# KanexPro

# 150 meter HDMI® Extender over HDBaseT™ w/POE, IR &

**RS-232C** 





#### Version 1.1

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Please look out for the latest update on the product page.

# Thank you for purchasing this product

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

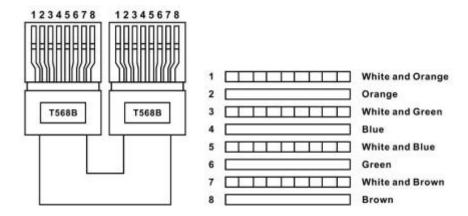
This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment.

## **Table of Contents**

Introduction	4
Features	4
Package Contents	5
	Introduction  Features  Package Contents  Specifications  Operation Controls and Functions  Connection Diagram  Warranty Information

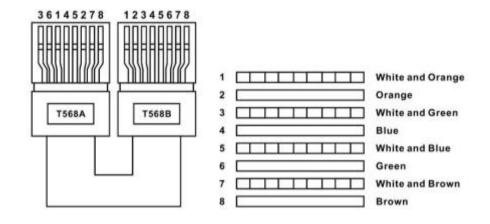
# Caution

The extender needs to follow direct interconnection method CAT cable. We recommend use a solid CAT6a shielded or better for the longer run.



Direct interconnection method

The extender will go into protection mode automatically and no video out when using cross interconnection method CAT cable.



Cross interconnection method

## 1. Introduction

The KanexPro EXT-HDBT150M is a transmitter - receiver set that enables you to route 1080P/60 HD signals up to 492 feet (150 meters) over single CAT6 cable using HDBaseT Technology. It supports the latest HDCP 2.2 with EDID pass-through. The extender supports PoE (power over Ethernet) requiring you to power from either the sender or receiver side. Locking power supplies gives you the utmost flexibility and prevent power cable from being snatched.

## 2. Features

Extend uncompressed HDMI over single CAT5e/6 cable up to 150m

- Powered over Ethernet (PoE) requiring only one power supply
- HDMI Loop -out for local HDMI output
- Supports high-resolutions up to 1080p/60@48bit
- HDCP compliant w/ EDID pass-through
- Bi-directional RS -232 protocol transmitted over CAT6
- Bi-directional IR control transmitter over CAT6
- Compact aluminum enclosure
- External power supply (100V-240V AC, 50/60Hz)
- Backed by KanexPro 3-Year Warranty

# 3. Package Contents

- ♦ 1 x HDMI Extender Transmitter
- ♦ 1 x HDMI Extender Receiver
- ♦ 1 x Wideband IR Emitter cable
- ♦ 1 x Wideband IR Receiver cable
- ♦ 1 x 24V/1A Power Adaptor
- ♦ 1 x User Manual

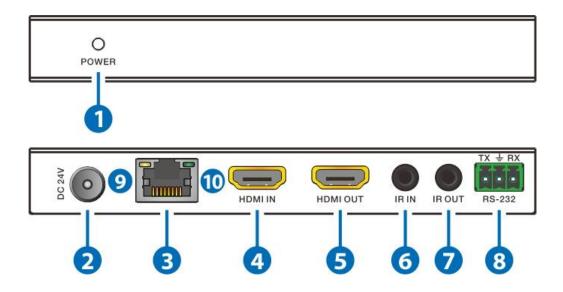
# 4. Specifications

Technical	
HDMI Compliance	HDMI 1.4
HDCP Compliance	HDCP 1.4
Video Bandwidth	225MHz
Video Resolutions	up to1080P @60Hz YUV4:4:4、RGB4:4:4

Color Space	RGB, YUV4:4:4, YUV 4:2:2		
	0.1%		
Color Depth	8-bit		
HDMI Audio Formats	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby		
(Pass-through)	True HD, DTS-HD Master Audio, Dolby Atmos, DTS:X		
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)		
Connections			
Inputs	Transmitter :1x HDMI Type A [19-pin female]		
	1x IR INPUT [3.5mm Stereo Mini-jack]		
	1x RS232 [Phoenix jack]		
	Receiver: 1x HDBaseT in [RJ45]		
	1x IR INPUT [3.5mm Stereo Mini-jack]		
	1x RS232 [Phoenix jack]		
Outputs	Transmitter: 1x HDBaseT Out [RJ45]		
	1x HDMI Type A [19-pin female]		
	1x IR OUTPUT [3.5mm Stereo Mini-jack]		
	Receiver: 1x HDMI Type A [19-pin female]		
	1x IR OUTPUT [3.5mm Stereo Mini-jack]		
Mechanical			
Housing	Metal Enclosure		
Color	Black		
Dimensions	140mm [W] x 65mm [D] x 18mm [H]		
Weight	406g		
Power Supply	Input: AC100 - 240V 50/60Hz		
	Output: DC 24V/1A (US/EU standards, CE/FCC/UL certified)		
Power Consumption	6W		
Operation	32 - 104°F / 0 - 40°C		
Temperature	02 .0/0 .00		
Storage temperature	-4 - 140°F / -20 - 60°C		
Relative Humidity	20 - 90% RH (no condensation)		

# 5. Operation Controls and Functions

## 5.1 Transmitter



- 1. Power: System power indicator.
- 2.DC 24V: Connect 24V/1A adaptor to AC wall outlet for power supply.
- **3.HDBaseT Out:** Standard HDBaseT output port. Connect HDBaseT receiver with a UTP cable following the standard of direct interconnection method.
- **4.HDMI In:** Connect to HDMI source device such as Blu-ray or PS4 player.
- **5.HDMI OUT:** Connect to HDTV or monitor HDMI input port.
- **6.IR In:** Channel 2 IR Receiver. Connect to an IR receiver cable.
- 7.IR Out: Channel 1 IR Transmitter. Connect to an IR emitter cable.
- **8.RS-232:** Phoenix jack provide serial port control from transmitter to receiver.

#### 9. Connection Signal Indicator Lamp

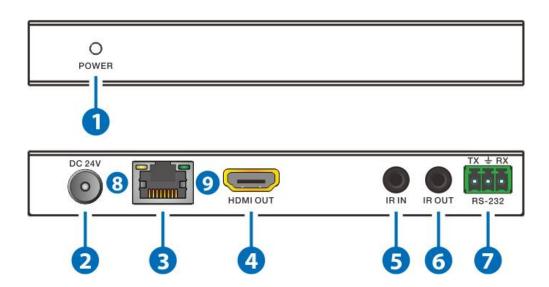
 Illuminate: The Transmitter and Receiver are in good connections status.

- Flashing: The Transmitter and Receiver are in poor connections status.
- Dark: The Transmitter and Receiver are not connected.

#### 10.Data Signal Indicator Lamp

- Illuminate: HDMI signal with HDCP.
- Flashing: HDMI signal without HDCP.
- Dark: No HDMI signal.

## 5.2 Receiver



- 1. Power: System power indicator.
- 2. DC 24V: Connect 24V/1A adaptor to AC wall outlet for power supply.
- 3. HDBaseT in: Standard HDBaseT input port. Connect HDBaseT
  - a. Transmitter with a UTP cable following the standard of direct
  - b. interconnection method.
- 4. **HDMI Out:** Connect to the HDTV or monitor HDMI input port.
- 5. **IR in:** Channel 1 IR Receiver. Connect to an IR receiver cable.

- 6. IR Out: Channel 2 IR Transmitter. Connect to an IR emitter cable.
- 7. **RS-232:** Phoenix jack provide Serial port control signal from
  - a. transmitter to receiver.

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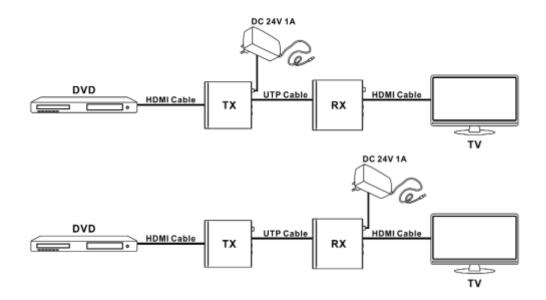
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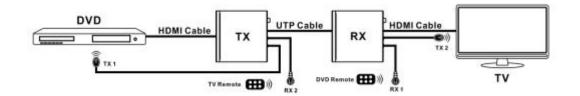
## • Description 1

POC (Power over Ethernet) Application Example



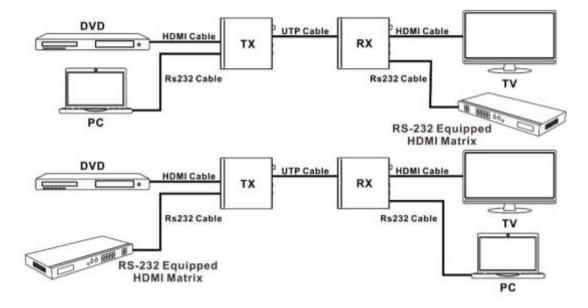
## • Description 2

### **Bi-directional Infrared Control Application Example**

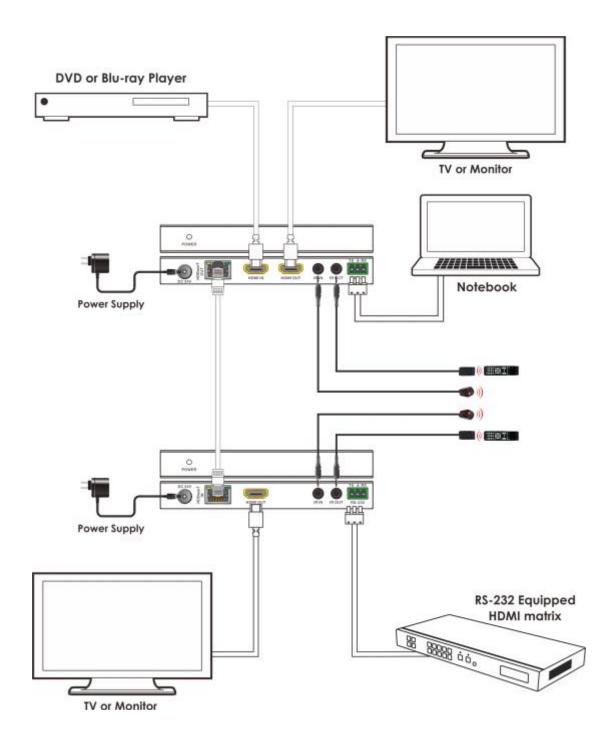


## • Description 3

Bidirectional RS232 control Application Example



# 6. Simple Connection Diagram



# 7. Warranty

#### A. LIMITED WARRANTY

KanexPro® warrants that (a) its products (the "Product") will perform greatly in agreement with the accompanying written materials for a period of 36 months (3 full years) from the date of receipt and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 3 years.

#### **B. CUSTOMER REMEDIES**

KanexPro's entire liability and Customer's exclusive remedy shall be, at KanexPro option, either return of the price paid for the product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to KanexPro with a copy of customers' receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period of 3 years, whichever is longer.

#### C. NO OTHER WARRANTIES

To the maximum extent permitted by applicable law, KanexPro disclaims all other warranties, either express or implied, including, but not limited to implied warranties of merchantability and fitness for a purpose, regarding the product and any related written materials. This limited warranty gives customers specific legal rights. Customers may have other rights depending on the jurisdiction.

#### D. NO LIABILITY FOR DAMAGES

To the maximum extent permitted by applicable law, in no event shall KanexPro be liable for any damages whatsoever (including without limitation, special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use this product, even if KanexPro has been advised of the possibility of such damages.



1405 Pioneer Street Brea, CA 92821 www.kanexpro.com