



# HDMI Extender Set, 4K/60Hz, 70 m



**Manual**  
DS-55506

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## 1. Introduction

The DIGITUS HDMI Extender Set enables HDMI signal transmission over a distance of up to 70 m (4K/30Hz). The extender set supports UHD resolution (4K2K/60 Hz, 4:4:4, 18 Gbps) over a CAT 6/7/8 cable (60m distance). Thanks to PoC, only one unit needs to be supplied with power by an external power adapter. HDR, HDCP support as well as automatic EDID detection are also included as features. Using the HDMI loop-out to the transmitter unit, a local monitor can be connected in order to monitor the output to the receiver.

## **2. Main Features**

- HDMI 2.0
- Supports Cat5e, CAT 6, CAT 6A, CAT 7, CAT 8 network cable
- 18 Gbps video bandwidth
- Supports 4K2K/60 Hz, 4:4:4
- HDCP 2.2 / 1.4
- Maximum transmission distance: 70 m
- PoC (Power over Cable) - Only the unit requires an external power adapter
- Automatic EDID detection
- HDR support
- HDMI loop-out / output – Connection of local monitor to the source device

## **3. Package Contents**

- 1x Transmitter unit
- 1x Receiver unit
- 1x IR transmission cable (1.5 m)
- 1x IR receiver cable (1.5 m)
- 1x Power adapter (DC 12V/1A, 1.2 m)
- 4x Mounting plate
- 1x User manual

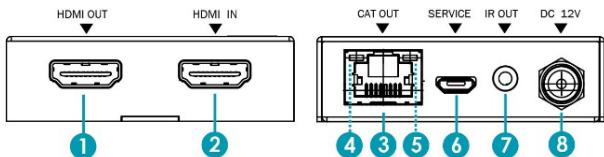
## 4. Specification

<b>Technical</b>	
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 ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
<b>Connections</b>	
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]

<b>Mechanical</b>		
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)	
<b>Resolution / Distance</b>	<b>4K60 - Feet / Meters</b>	<b>4K30 / 1080P - Feet / Meters</b>
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		

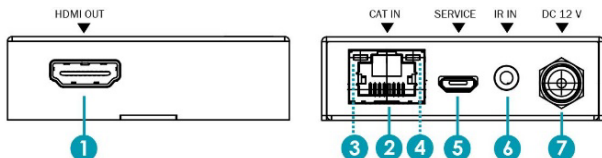
## 5. Operating Controls and Functions

### 5.1 Transmitter Panel



No.	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. <b>(Note:</b> 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.)



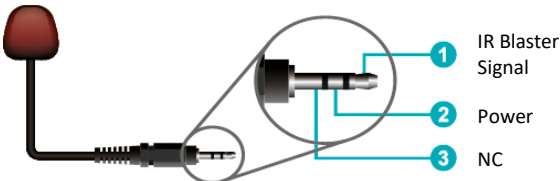
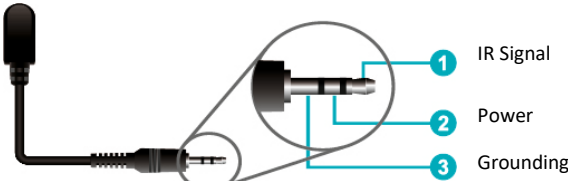
## 5.2 Receiver Panel



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 CAT OUT port on the transmitter end with a CAT6 cable.
3	Power Indicator Lamp (Green)	Connect to CAT IN port on the receiving end with a CAT6 cable
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. ( <b>Note:</b> 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.)

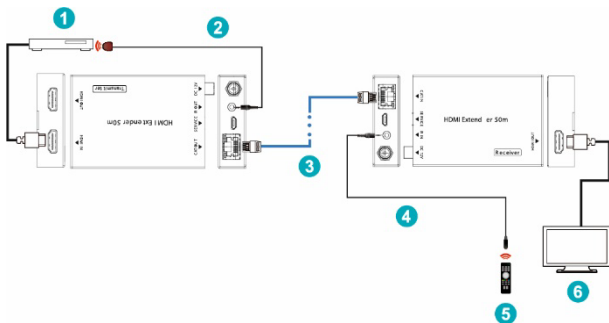
### 5.3 IR Pin Definition

IR Receiver and Blaster pin's definition as below:

	
IR RECEIVER	IR BLASTER
<p>IR Blaster</p> 	
<p>IR Receiver</p> 	



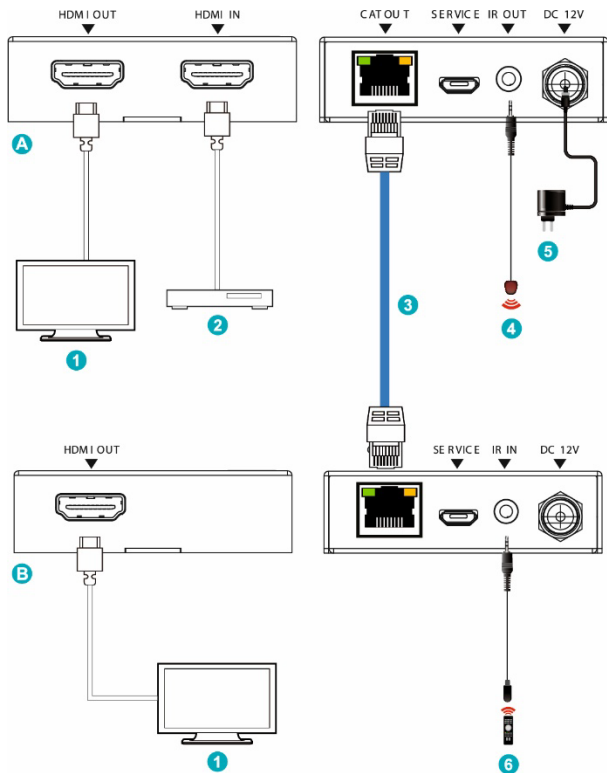
The following is IR system diagram about IR cable use method.



1	DVD	4	IR receiver cable
2	IR blaster cable	5	DVD remote
3	CAT 5e/6 cable	6	TV

**Note:** IR remote sends signal distance for 0~5meters / 0~8 meters,  
and angle is plus-minus45 degrees / vertical direction

## 6. Application Example



A	Transmitter	3	CAT 5e/6
B	Receiver	4	IR blaster
1	UHDTV	5	Power Supply
2	DVD or Blu-ray Player	6	IR Extender

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