

digitech

# 4K HDMI CAT6 Extender

with IR Extender



Model:  
**AC1785**

## Instruction Manual

## INTRODUCTION:

This product can achieve up to 70m transmission distance while still supporting up to 1080p 60Hz signals or 40m transmission distance while still supporting up to 4K 30Hz signals. Features EDID management, which allows and encourages source and display “handshake” for seamless integration. With only one CAT6 cable (not included), high definition sources with HDMI outputs can be connected to 4K displays with HDMI inputs over long distances. Deep colour video, DTS-HD or Dolby TrueHD audio is supported and compatible with the extender. In addition, the extender is also equipped with bi-directional IR pass-through which allows for source or display control.

The extender includes two units: transmitting unit and receiving unit. The transmitting unit is used to capture the HDMI input with IR signals and carries the signals via one CAT6 cable (not included). The receiving unit is responsible for equalizing the transmitted HDMI signal and reconstructing IR control signals. The extender offers the most convenient solution for HDMI extension over a single CAT6 with long distance capability, and is the perfect solution for any application.

## SAFETY:

1. Do not open or repair the device without professional assistance to avoid electrical shock.
2. Do not expose this unit to water, moisture or any liquid.
3. Position the unit in a well ventilated area to prevent the unit from overheating.
4. Only use the supplied DC 12V/1A power adaptor. If you use any third party power supplies, ensure the voltage is the same to prevent the unit from damage.

## FEATURES:

- HDMI 1.4b, HDCP 1.4 and DVI 1.0 compliant
- Support video resolution up to 4k2k@30Hz YUV 4:4:4
- The maximum transmission distance via a single CAT6 cable (not included) is as follows: CAT6: 70m for 1080p, 40m for 4K
- HDMI Pass-Through
- HDCP & 3D Support
- EDID Data Transmission
- Infrared Extender

## SPECIFICATIONS:

Transmission Distance:	Up to 70m on 1080p @ 60Hz, Up to 40m on 4K @ 30Hz
HDMI:	1.4b
HDCP:	1.4
Resolution:	Up to 4K (3820x1920) @ 30Hz and Up to 1080p (1920 x 1080) @ 60Hz
Video Bandwidth:	10.2Gbps
Audio:	LPCM 2/5.1/7.1CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X
Colour Depth:	24-bit
Infrared Frequency:	20-60KHz
Power:	DC 12V/1A (Transmitter)
Power Consumption:	1.86W (Transmitter), 0.87W (Receiver)
Dimensions:	79.5(D) x 69(W) x 16.5(H)mm (Each)

## PACKAGE CONTENTS:



1 x HDMI Transmitter



1 x HDMI Receiver



1 x Infrared Emitter

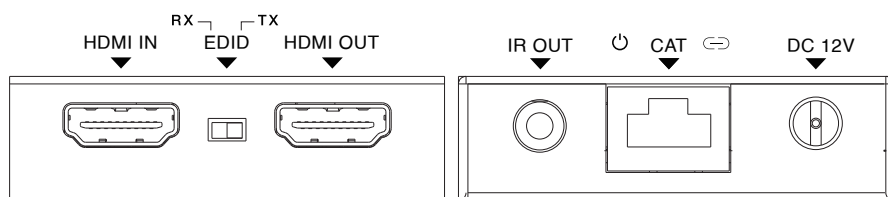


1 x Infrared Receiver



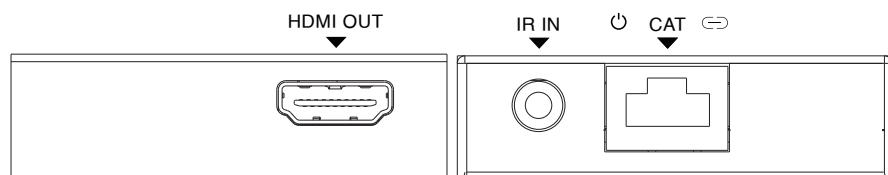
1 x Mains Power Adaptor

## PANEL DESCRIPTIONS (TRANSMITTING UNIT):



1. **HDMI IN:** HDMI signal input port. Connect to HDMI source device such as DVD or Set-top box.
2. **EDID DIP SWITCH:** The switch is used for selecting EDID: Switch to the right position, the extender will copy HDMI loop out display EDID information to signal source; Switch to the left position, the extender will copy Receiver display EDID to signal source.
3. **HDMI OUT:** HDMI signal loop out port. Connect to HDMI display device such as HDTV.
4. **IR OUT:** Connect to IR blaster cable, the IR signal is from the IR IN port of the receiver.
5. **POWER LED:** When the transmitter is powered on, the LED will be on.
6. **CAT:** CAT output port. Connect to the CAT input port of the receiver with CAT6 cable (not included).
7. **DIGITAL SIGNAL INDICATOR LIGHT:**  
Light on: HDMI signal with HDCP.  
Light flashing: HDMI signal without HDCP.  
Light off: No HDMI signal.
8. **DC 12V:** DC 12V power supply port.

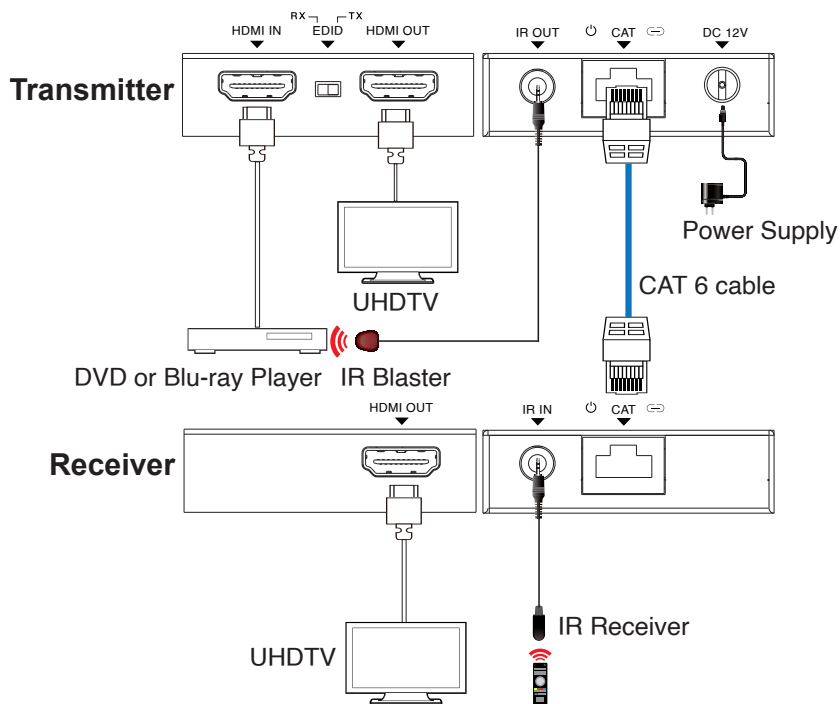
## PANEL DESCRIPTIONS (RECEIVER UNIT):



## PANEL DESCRIPTIONS (RECEIVER UNIT):

1. **HDMI OUT:** This output is to connect the HDMI input port of your display such as an HDTV.
2. **IR IN:** Connect to the IR Receiver for IR signal reception. Ensure that remote being used is within the direct line-of-sight of the IR receiver.
3. **POWER LED:** This LED will illuminate when the device is connected with power supply.
4. **CAT:** Connect the CAT input of the receiver with the CAT output of the transmitter with CAT6 cable (not included).
5. **DIGITAL SIGNAL INDICATOR LIGHT:**  
Light on: HDMI signal with HDCP.  
Light flashing: HDMI signal without HDCP.  
Light off: No HDMI signal.

## CONNECTION DIAGRAM:



## OPERATION:

### TRANSMITTER:

1. Connect the DC plug of the mains power adaptor to the power socket of the transmitter. Plug-in the mains power adaptor to a 240VAC wall socket.
2. Connect a HDMI cable (not included) from your source device such as PayTV, DVD player or media player to the HDMI input of the transmitter.
3. Connect a HDMI cable (not included) from the HDMI output of the transmitter to your TV or monitor's HDMI input. This will allow you to view your TV or monitor while extending the signal.
4. Connect a CAT6 ethernet network cable (not included) to the ethernet output of the transmitter.
5. Connect the infrared (IR) emitter cable to the IR output socket located on the transmitter.
6. Peel of the 3M sticker located on the back of the infrared (IR) emitter and stick the emitter in front of the infrared port of your device such as PayTV, DVD player or media player. The remote control of your device will still work even with the emitter placed over the top of the infrared port.

Please refer to your device's user manual if you are unsure of where the infrared port is located.

### RECEIVER:

1. Connect opposite end of the CAT6 ethernet network cable (not included) to the ethernet input of the receiver.
2. Connect a HDMI cable (not included) from the HDMI output of the receiver to your TV or monitor;s HDMI input.
3. Connect the infrared (IR) receiver cable to the IR input socket located on the receiver.
4. Place infrared receiver end in front of your TV or monitor so the infrared can be controlled.

## TROUBLESHOOTING:

Problem:	Solution:
No Video Output	Adjust the EDID switch on the transmitter, switch it to the opposite position.
	Check to see your source device and monitor/TV's resolution and frequency matches the supported resolution of the HDMI extender.
	Check to see if your source device and monitors/TVs are all switched on.
	Ensure you have a CAT6 standard ethernet cable connector, crossover cables will not work.
	Check to see if the mains power adaptor is connected properly and switched on.
	Reconnect the HDMI cables on both the transmitter and receiver.
Image is flicking or unstable	Check to see if the Link LED and Power LED indicators are lit.
	Reconnect the HDMI cables on both the transmitter and receiver and make sure the HDMI cables are functioning correctly.
Will not change channels on the infrared remote	Reattach the infrared emitter over the infrared port of your source device. The position may not be directly in line with your infrared port of your device.
	This device supports an infrared frequency of 20-60KHz, your device may not be compatible within this range. Refer to the manufacturer's user manual of your device to confirm the range.
LED indicators won't show	Check to see if the mains power adaptors are connected properly and switched on.
	Reconnect the HDMI cables on both the transmitter and receiver.

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