



AC7811

4K HDMI 2.0 extender set over CAT6 UTP with IR support, 60 meters

en

Manual

AC7811 | 4K HDMI 2.0 extender set over CAT6 UTP with IR support, 60m

Table of contents

1.0 Introduction	3
1.1 Packing contents	3
1.2 Features	3
2.0 Specifications	4
3.0 Transmitter	5
4.0 Receiver Panel	6
5.0 Connection diagram	7
6.0 Supported Resolutions	8
7.0 Service and support	9
8.0 Warning and points of attention	9
9.0 Warranty conditions	10

1.0 Introduction

The AC7811 HDMI 2.0 extender set allows you to extend an HDMI signal via CAT6/6a UTP over a distance up to 60 meters with a maximum resolution of 4K@60Hz. The set supports bi-directional Power over Cable (PoC) which means that the receiver unit is powered by the transmitter unit or the receiver unit can power the transmitter. Additionally, the transmitter unit has an HDMI output for connecting a local display. An infrared transmitter and receiver are included to control the source device with its standard remote control. The AC7811 supports EDID copy, Chroma Sampling 4:4:4 and is equipped with a secure locked power connection and a detachable mounting bracket.

1.1 Packing contents

The following parts need to be present in the packing:

- 1 × 18Gbps HDMI Extender (Transmitter)
- 1 × 18Gbps HDMI Extender (Receiver)
- 1 × IR Blaster Cable (1.5 meters)
- 1 × IR Wideband Receiver cable (1.5 meters)
- 4 × Mounting Bracket
- 8 × Machine Screws (KM3*4)
- 1 × 12V/1A Locking Power Adapter
- 1 × Quick Install Guide

1.2 Features

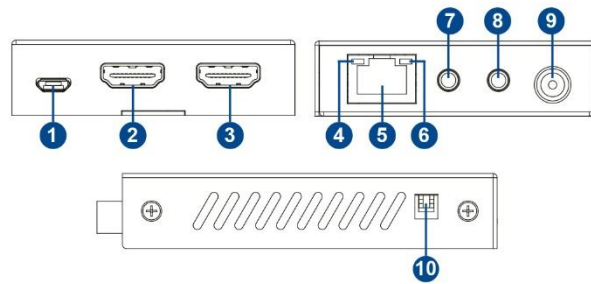
- Maximum resolution: 4K@60Hz - 60meters, 4K@30Hz - 70 meters and 1080p@60Hz - 70 meters
- Support 18Gbps video bandwidth
- Power over Cable (PoC): powered by transmitter or receiver by using the CAT6 cable
- Secure locked power connection and detachable mounting bracket
- Support HDR, HDR10, HDR10+, Dolby Vision, HLG
- Audio formats: LPCM 7.1, Dolby True HD, DTS HD Master
- EDID copy pass-through function between the source device and display device
- IR extension: Infrared transmitter and receiver included

2.0 Specifications

Technical	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Video Resolution	Up to 4K2K@60Hz RGB/YCBCR 4:4:4
IR Level	5Vp-p
IR Frequency	Wideband 20K-60KHz
Transmission Distance	4K2K@60Hz 4:4:4--70m, 1080P--70m (CAT6/6a cable)
Color Space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
Color Depth	8/10/12bit
HDR	HDR, HDR10, HDR10+, Dolby Vision, HLG
Audio Formats	HDMI: LPCM 7.1CH, Dolby True HD, DTS-HD Master Optical: Dolby 5.1, DTS 5.1, PCM 2.0

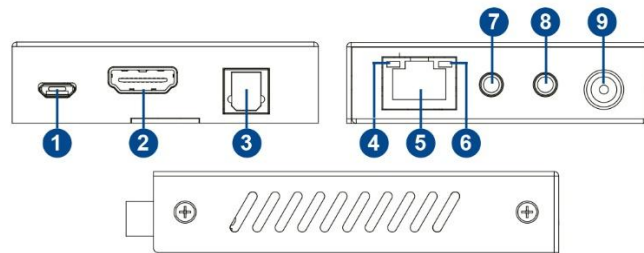
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	Transmitter / Receiver: 90mm (W)×68mm (D)×18mm (H)
Weight	Transmitter: 175g, Receiver: 175g
Power Supply	DC 12V/1A; Support bi-directional POC function
Power Consumption	3.36 W (max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

3.0 Transmitter



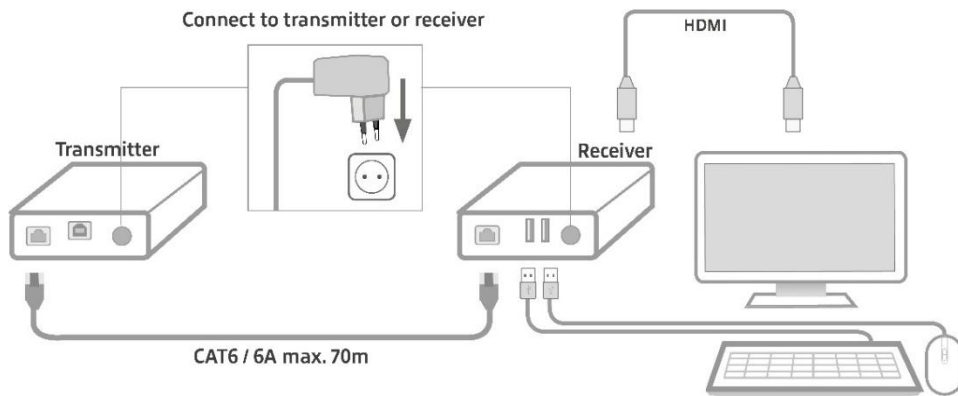
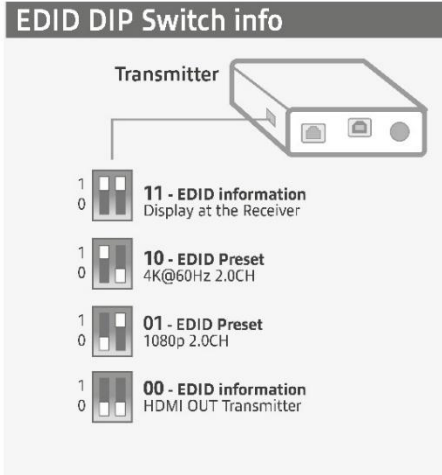
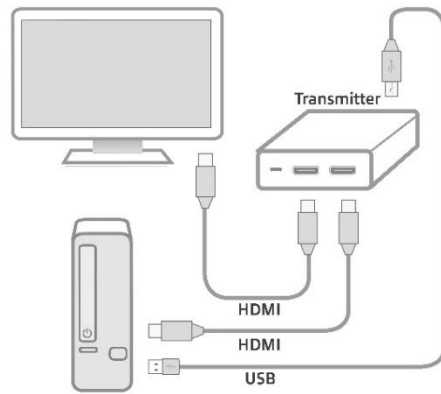
No.	Name	Function Description
1	SERVICE	Firmware update port.
2	HDMI OUT	This port is intended for connecting an HDMI display device via an HDMI cable. To ensure optimal performance, it is recommended to use an HDMI 2.0 cable with a maximum length of 3 meters. Furthermore, the port can be used to daisy-chain the signal to the input of another extender.
3	HDMI IN	This port is designed for connecting an HDMI source device using an HDMI cable. To achieve optimal performance, it is advisable to use an HDMI 2.0 cable with a maximum length of 3 meters.
4	CAT OUT	This connector is used to connect to the CAT IN port of the receiver using a CAT6 or CAT6a cable.
5	Link Signal Indicator (Green)	<ul style="list-style-type: none"> ▪ Light on: Transmitter and Receiver are in good connection status. ▪ Light flashing: Transmitter and Receiver are in poor connection status. ▪ Light off: Transmitter and Receiver are not connected.
6	Data Signal Indicator (Orange)	<ul style="list-style-type: none"> ▪ Light on: HDMI signal present with HDCP encryption. ▪ Light flashing: HDMI signal present without HDCP encryption. ▪ Light off: No HDMI signal present.
7	IR IN	Connect the IR receiver cable to enable the IR signal to be transmitted to the IR OUT port of the receiver.
8	IR OUT	Connect the IR blaster cable to enable the IR signal to be emitted from the IR IN port of the receiver.
9	DC 12V	DC 12V/1A power input port. <i>Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply.</i>
10	EDID DIP switch	Use the DIP switch to configure the EDID settings. Setting the switch to the upper position represents "1," while setting it to the lower position represents "0." 11 - EDID information is copied from the display at the Rx HDMI OUT. 10 - EDID is preset to 4K@60Hz 2.0CH 01 - EDID is preset to 1080p 2.0CH 00 - EDID information is copied from the HDMI OUT at the Tx.

4.0 Receiver Panel



No.	Name	Function Description
1	SERVICE	Firmware update port.
2	HDMI OUT	This port is intended for connecting an HDMI display device via an HDMI cable. To ensure optimal performance, it is recommended to use an HDMI 2.0 cable with a maximum length of 3 meters.
3	TOSLINK	Optical fiber audio output port.
4	CAT IN	This connector is used to connect to the CAT OUT port of the transmitter using a CAT6 or CAT6a cable.
5	Link Signal Indicator (Green)	<ul style="list-style-type: none"> ▪ Light on: Transmitter and Receiver are in good connection status. ▪ Light flashing: Transmitter and Receiver are in poor connection status. ▪ Light off: Transmitter and Receiver are not connected.
6	Data Signal Indicator (Orange)	<ul style="list-style-type: none"> ▪ Light on: HDMI signal present with HDCP encryption. ▪ Light flashing: HDMI signal present without HDCP encryption. ▪ Light off: No HDMI signal present.
7	IR IN	Connect the IR receiver cable to enable the IR signal to be transmitted to the IR OUT port of the transmitter.
8	IR OUT	Connect the IR blaster cable to enable the IR signal to be emitted from the IR IN port of the transmitter.
9	DC 12V	DC 12V/1A power input port. <i>Note that the extender supports POC function, it means that either Transmitter or Receiver is connected to 12V/1A power supply, the other doesn't need power supply.</i>

5.0 Connection diagram



6.0 Supported Resolutions

4096x2160P24/25/30/50/60Hz
3840x2160P24/25/30/50/60Hz
1920x1200P24/25/30/50/60Hz
1920x1080P24/25/30/50/60
1920x1080i50/60, 1680x1050P24/25/30/50/60Hz
1680x720P24/25/30Hz
1600x1200P24/25/30/50/60Hz
1600x900P24/25/30/50/60Hz
1440x900P50/60Hz
1400x1050P60Hz
1366x768P24/25/30/50/60Hz
1360x768P60Hz
1280x1024P60Hz
1280x768P60/120Hz
1280x720P24/25/30/50/60/100/120Hz
1024x768P60Hz
1024x576P60Hz
852x480P60Hz
848x480P60Hz
800x600P60/120
720x576P50/100Hz
720x480P60/120Hz
640x480P60Hz

7.0 Service and support

This user manual has been carefully written by ACT's technical experts. If you have problems installing or using the product, please check the **support** link at the website www.act-connectivity.com.

8.0 Warning and points of attention



Due to laws, directives and regulations set out by the European parliament, some (wireless) devices could be subject to limitations concerning its use in certain European member states. In certain European member states the use of such devices could be prohibited. Contact your (local) government for more information about this limitations.

Always follow up the instructions in the manual*, especially where it concerns devices which need to be assembled.

Warning: In most cases this concerns an electronic device. Wrong/improper use may lead to (severe) injuries!

When you connect the device to the mains, make sure it will not be damaged or subject to (high) pressure.

A power socket is needed which should be close and easy accessible from the device.

Repairing of the device should be done by qualified ACT staff. Never try to repair the device yourself. The warranty immediately voids when products have undergone self-repair and/or by misuse. For extended warranty conditions, please visit our website at www.act-connectivity.com

Dispose of the device appropriately. Please follow your countries regulation for the disposal of electronic goods.

Please check below safety points carefully:

- Do not apply external force on the cables
- Do not unplug the device by pulling the power cable
- Do not place the device near heating elements
- Do not let the device come in contact with water or other liquids
- If there is any strange sound, smoke or odor, remove the device immediately from the power outlet.
- Do not put any sharp objects into the venting hole of a product
- Do not use any damaged cables (risk of electric shock)
- Keep the product out of reach of children
- Wipe off the product with soft fabric, not water mop.
- Keep the power plug and outlet clean
- Do not unplug the device from the power outlet with wet hands
- Unplug the device when you don't use it for a long time
- Use the device at a well ventilated place

**Tip: ACT manuals are written with great care. However, due to new technological developments it can happen that a printed manual does not longer contain the most recent information. If you are experiencing any problems with the printed manual or you cannot find what you are looking for, please always check our website www.act-connectivity.com first for the newest updated manual.*

*Frequently asked questions (FAQ). Consult **support** on our website www.act-connectivity.com and see if you can find the right information about your product here. It is highly advisable to consult the FAQ section first, the answer is often here.*

9.0 Warranty conditions

The ACT warranty applies to all ACT products. After buying a second-hand ACT product the remaining period of warranty is measured from the moment of purchase by the product's initial owner. ACT warranty applies to all ACT products and parts, indissolubly connected or mounted to the product it concerns. Power supply adapters, batteries, antennas and all other products not directly integrated in or connected to the main product or products of which, without reasonable doubt, can be assumed that wear and tear during use will show a different pattern than the main product, are not covered by the ACT warranty. Products are not covered by the ACT warranty when exposed to incorrect/improper use, external influences or when opening the service parts of the product by parties other than ACT. ACT may use refurbished materials for repair or replacement of your defective product. ACT cannot be held responsible for changes in network settings by internet providers. We cannot guarantee that the ACT networking product will keep working when settings are changed by the internet providers. ACT cannot guarantee the working of web services, apps and other third party content that is available through ACT products

When my product gets defective

Should you encounter a product rendered defective for reasons other than described above: Please contact your point of purchase for taking care of your defective product.