



TECHNOLOGY... SINCE 1937

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HDMI

HDMI70V3P

4K 70m Extender with Auto-scaling, HDMI loop, IR control & PoC

User Guide



Important Safety Notice

Thank you for purchasing this Antiference HDMI distribution product. Please read the following instructions carefully and retain for future reference.

1. Do not place any items on the device
2. Ensure no liquids are on or near the device as splashes may damage the unit
3. For cleaning, use a damp cloth only without solvents
4. Do not attempt to open the case as there is a danger of electric shock
5. Repairs should be carried out by a qualified technician
6. Place the unit in a well ventilated area to prevent overheating
7. Carry out the installation before connecting the device to a source of power
8. Use only the supplied power supply as 3rd party products may damage the product

1. Introduction

This HDMI extender sends 1080@60Hz or 4K/UHD@60Hz (2160p) resolution signals up to 70meters over a single CAT6 cable with HDCP 2.2 support.

This extender features an autoscaling function to enable use of a 1080p display with a 4K source.

It supports HDR, 24bit deep colour, IR control, an HDMI loop out for local display & PoC function.

Audio can be extracted from the reciever via the S/PDIF port.

2. Features

1. Auto-scaling to allow use of 1080p display & 4K source
2. Supports full HD 1080p@60Hz, UHD@60Hz & 4K@25Hz with HDCP2.2
3. Extend HD/UHD signal over CAT6 up to 70 meters
4. Audio extractor via S/PDIF on receiver
5. HDMI loop out on transmitter
6. HDR supported with 4:4:4 colour space
7. One-way IR control system
8. PoC system
9. Supports audio formats: LPCM/DTS-HD/DTS-Audio/Dolby TrueHD 7.1/
Dolby Digital 5.1
10. Lightning, surge & ESD protection

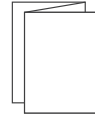
3. Package contents



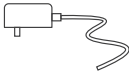
Transmitter unit x1pc



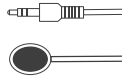
Receiver unit x1pc



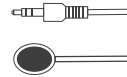
User manual x1pc



DC12V/1A x1pc



IR blaster extension
cable x1pc



IR Receiver extension
cable x4pcs



Mounting brackets
x8pcs



Screw x18pcs

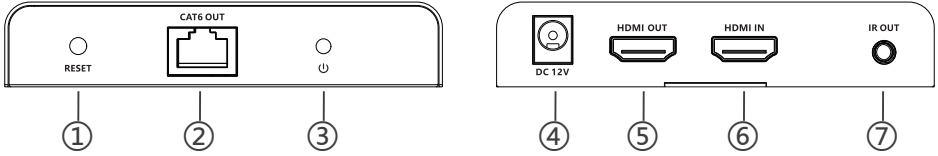
4. Operation Controls and Functions

4.1. Installation Requirements

1. HDMI source device such as SKY Q or HD, Blu Ray player, Apple TV, CCTV etc
2. HDMI display device with HDMI input port – HDTV, monitor or projector
3. UTP/STP CAT6/6A/7 cable, following the standard IEEE-568B.

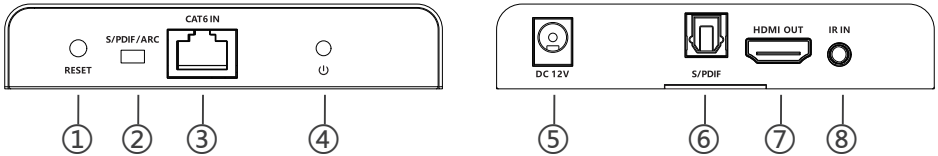
5. Product Description

5.1. HDMI Transmitter (TX)



①	Reset button	Press to restart the device
②	RJ45 signal output	Connect with network cable
③	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
④	DC12V input	Connect with DC12V/1A power adapter
⑤	HDMI output port	Connect with HDMI display device
⑥	HDMI input port	Connect with the source device
⑦	IR out	Connect with IR blaster extension cable, please get closer to the source device while using

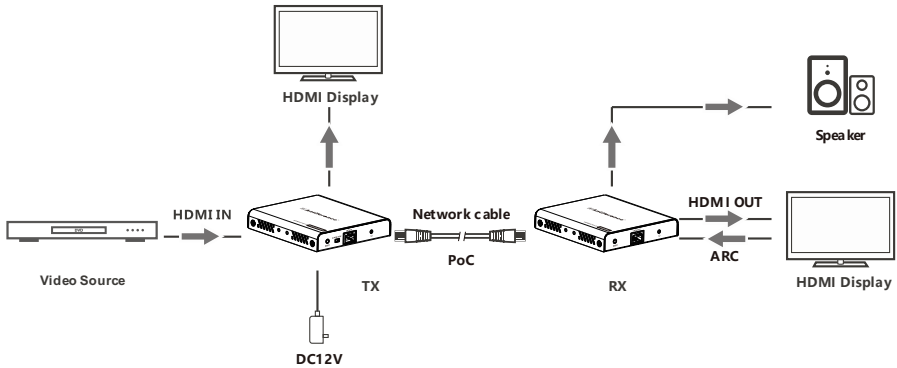
5.2. HDMI Receiver (RX)



①	Reset button	Press to restart the device
②	Audio switch	Choose to decode audio from HDMI or ARC output from fiber optic interface
③	RJ45 signal input	Connect with network cable
④	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
⑤	DC12V input	Connect with DC12V/1A power adapter
⑥	S/PDIF out	Output digital audio signal
⑦	HDMI output	Connect with HDMI display device
⑧	IR in	Connect with IR receiver extension cable, please make sure the remote control is used within the effective range

6. Installation Procedure

6.1. Connection Diagram



6.2. To make a Cat5e/6 network cable, follow standard IEEE-568B

1. White and orange
2. Orange
3. White and green
4. Blue
5. White and blue
6. Green
7. White and brown
8. Brown

6.3. Connection Instruction

1. Connect the source device to the HDMI port on the TX and connect the display to the HDMI port on the RX.
2. Connect the TX and RX together with a CAT6/CAT6A/CAT7 network cable.
3. A local display may be connected to the HDMI loop on the TX if required.
4. Connect the power supply to the TX & RX

Note: recommended cable length range 2 ~ 70m

6.4. Auto-scaling function

1. The autoscaling function allows a 1080p display to be connected to the receiver end when a 4K source is connected to the transmitter. The receiver auto-scales the resolution to 1080p. It **does not support 720p**
2. The HDMI loop out **does not** support auto-scaling. If the source connected to the transmitter is 4K, then the display connected to the HDMI loop out must also be 4K for video to be displayed.

7. FAQ

Q No audio/video being received?

- A**
1. Check the resolution of the source. If 4K is being used, check compatibility of the displays
 2. Check audio format from source is compatible with display. Revert to PCM to test.
 3. Ensure all connections are pushed in correctly.
 4. Press the reset button to restart TX or RX

Q Black screen displayed

- A**
1. Make sure the EDU (TV or display) is switched to the correct HDMI input.
 2. Check the cable is within the specified cable length range.

Q Display shows unusual colour or no sound is being received

- A**
1. Reset the TX or RX with the reset button
 2. Try new HDMI cables

8. Technical Specifications

	Items	Specification
Transmission protocol	Voltage/Current	DC12V/1A
	Power consumption	TX<4W RX<4W
HDMI Performance And Interface	HDMI compliance	HDMI2.0
	HDCP compliance	HDCP 2.2
	HDMI resolution	480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz, 3840x2160@24/25/30/50/60Hz, 4096x2160@24/25Hz, 1280x960, 1280x800, 1280x768, 1680x1050, 1360x768, 1366x768, 1600x900, 1024x768, 800x600
	Supports audio formats	LPCM/DTS-HD/DTS-Audio/Dolby TrueHD 7.1/ Dolby Digital 5.1
	Input and output TMDS signal	0.7~1.2Vp-p(TMDS)
	Input and output DDC signal	5Vp-p(TTL)
	Input cable length	≤8m(AWG24)
	Output cable length	≤8m(AWG24)
Transmission Distance	CAT6/6A/7	≤70m
Protection Level	Electrostatic protection of the whole machine	Ia Contact discharge level 3 Ib Air discharge level 3 Implementation of the standard: IEC61000-4-2
Operating Environment	Working temperature	-20~60 C
	Storage temperature	-30~70 C
	Humidity(no condensation)	0~90% RH
Body Properties	Dimension	106.0(L)x99.0(W)×26.2(H)mm
	Material	Aluminium alloy material +crystal panel
	Treatment process	Grit blast
	Color	Black
	Weight	TX:210g RX:210g

Declaration of Conformity

We, ANTIFERENCE LIMITED herewith declare that the HDMI extender kit complies with all essential requirements and any other applicable conditions set forth on directive 2014/30/EU.

According to the WEEE (Waste Electrical and Electronic Equipment) EU Directive, do not dispose of this product as household waste or commercial waste. Waste Electrical and Electronic Equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

A full declaration document can be found on our website www.antiference.co.uk

