



Technology...since 1937
www.antiference.co.uk



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 up to 4K/UHD@60Hz (2160p) resolution signals up to 200 meters over a single CAT6 cable using Internet protocol (IP).

It supports IR control and a one-to-one or one-to-multiple configuration options.

Additional receivers may be added (HDMIIPRX) to provide a single source to multiple displays using an Antiference Clear Switch Gigabit Ethernet switch.

2. Features

1. HDMI IP extender kit over CAT6 cable
2. Supports full HD 1080p@60Hz, UHD@60Hz & 4K@25Hz with HDCP2.2
3. Extend HD/UHD signal over IP CAT6 up to 200 meters
4. One-way IR control system
5. Supports one-to-one or one-to-multiple connections
6. Compatible with Antiference Clear Switch Ethernet switches for one-to-multiple connections (HDMIIPRX required for each additional display)
7. Lightning, surge & ESD protection



3. Package contents



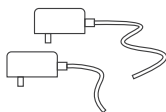
Sender x 1pc



Receiver x 1pc



User Manual x1pc



DC5V/1A x2pcs
(POE version does
not have this option)



IR blaster extension
cable x1pc



IR receiver extension
cable x1pc

4. Operation Controls and Functions

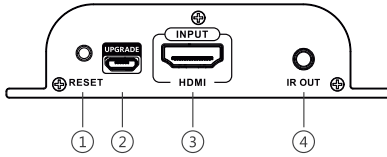
4.1. Installation Requirements

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.

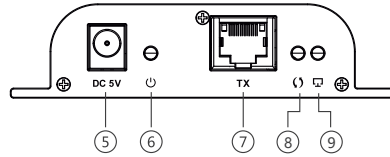


5. Product Description

5.1. HDMI Transmitter (TX)

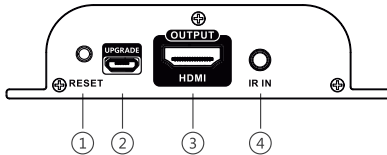


- ① Reset
- ② Firmware upgrading
- ③ HDMI signal input
- ④ IR signal output to connect with blaster extension cable

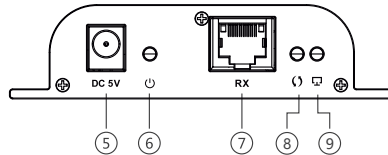


- ⑦ RJ45 signal output
- ⑧ Data transmission light
Light off: No data transmission
Steady on: The data is transmitting
- ⑨ Network link light
Light off: No Network connection
Steady on: Network connection is normal

5.2. HDMI Receiver (RX)



- ① Reset
- ② Firmware upgrading
- ③ HDMI signal output
- ④ IR signal input to connect with IR receiver extension cable
- ⑤ Power input(DC 5V/1A)
- ⑥ Power Light
The indicator will turn on when the power is turned on



- ⑦ RJ45 signal input
- ⑧ Data transmission light
Light off: No data transmission
Steady on: The data is transmitting
- ⑨ Network link light
Light off: No Network connection
Steady on: Network connection is normal

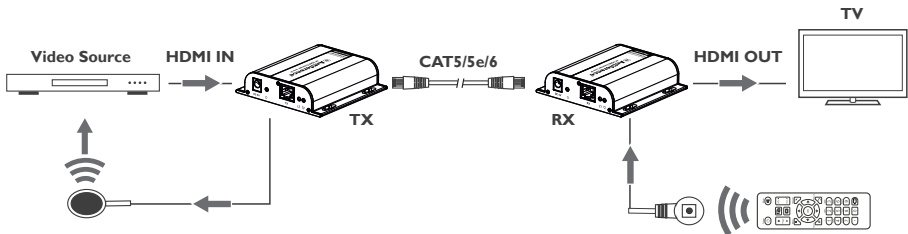
6. Installation Procedure

6.1. 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

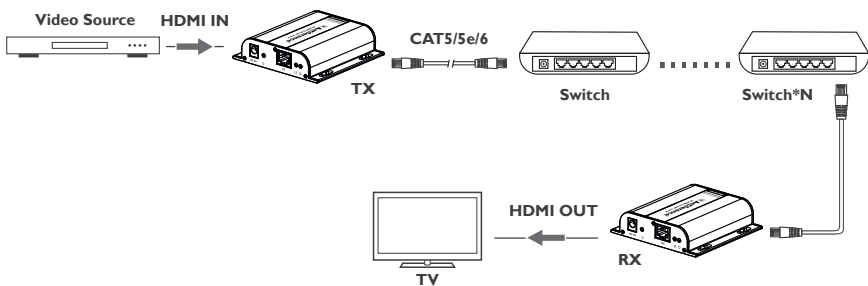
6.2. Point to Point connection

Note: cable range for one-to-one connection is 200m. One-to-multiple, range is reduced to 120m-150m depending on specification of cable and Ethernet switch.



6.3. Ethernet Switch Cascade Connection

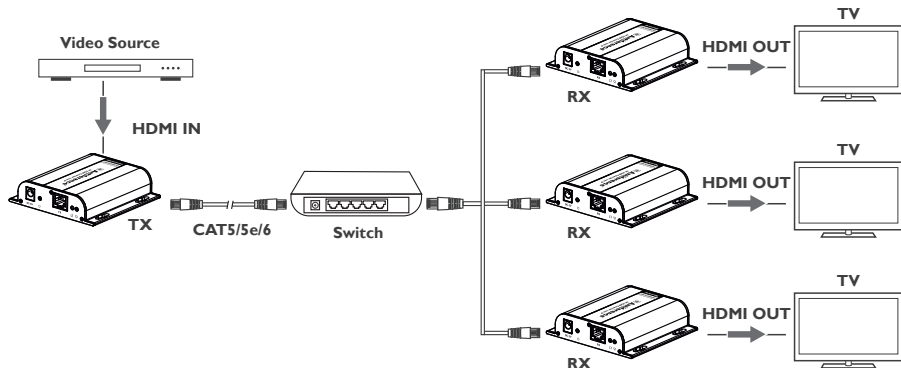
Create a connection via an existing LAN Ethernet switch for an unlimited extension.



6. Installation Procedure (cont)

6.4. One-to-Many Connection

Create a single source to multiple displays system over a LAN using an Ethernet switch. An Antiference HDMIEIPRX is required for each additional display.



Note: a Gigabit (10/100/1000) PoE Ethernet switch is recommended for greatest distance and system performance.

7. IR Set Up

1. Connect IR blaster (TX) to the IR OUT port of the transmitter/sender.
2. Connect the IR receiver (RX) to the IR IN port on the receiver.
3. Position the IR blaster in front of the IR receiving window on the source.
4. IR control is now possible from the receiver location.

8. FAQ

- Q** TV Display shows ‘waiting for connection’
- A**
1. Check the power is connected to the Transmitter and Ethernet switch (if used).
 2. Check CAT6 cables are correctly terminated to 568B configuration
 3. Ensure all connections are pushed in correctly.
 4. Press the reset button to reset TX or RX
- Q** TV Display ‘please check the TX input signal’
- 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.
 3. Check the source is outputting signal. Try connecting directly to a display to check
- Q** Signal is unstable/corrupted
- A**
1. Reset the TX or RX with the reset button
 2. Try new HDMI cables.
 3. Check wiring configuration. Consider making new cable terminations.

9. Technical Specifications

Item	Sender	Receiver
Video		
Input interface	1x HDMI	1x RJ45
Output interface	1x RJ45	1x HDMI
HDMI length	≤ 5m	≤ 5m
Maximum transfer rate	18Gbps	
Compatibility	HDMI 2.0	
	HDCP 1.4/HDCP 2.2	
Resolutions	4096x2160@24/30/50/60Hz, 3840x2160@24/30/50/60Hz, 1080P@24/25/30/50/60Hz, 720P@50/60Hz, 576P@60Hz, 480P@60Hz, 1920x1200, 1680x1050, 1600x900, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600	
Connection types	One-to-one connection One-to-many connection Switch cascading	
Transmission distance	CAT5 80m / CAT5E 100m / CAT6 120m	

Transmission latency	1080P: 80~130ms 4K@60Hz: 150~220ms	
Audio signal		
Input interface	1×HDMI	1×RJ45
Output interface	1×RJ45	1×HDMI
HDMI output	LPCM 2.0	
Command Signal		
IR interface	1x 3.5mm IR OUT	1x 3.5mm IR IN
IR receiving range	≤ 5m	
IR frequency	20kHz~60kHz	
Power		
Power Supply	DC 5V/1A	DC 5V/1A
Power Consumption	TX ≤ 3.5W	RX ≤ 2.5W
Operating Environment		
Working temperature	- 20°C~60°C	
Storage temperature	- 30°C~70°C	
Humidity	0~90%RH (no condensation)	
Physical Properties		
Housing	Aluminium	
Weight	156g	154g
Color	Black	
Dimensions	96.8(L)*94(W)*23.7(H)mm	
Protection	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2	
	Lightning protection, Surge protection	



10. Declaration

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





Technology...since 1937

www.antiference.co.uk