



***HDMI® over Twisted Pair***  
**Long Distance Extender**  
**Over (DUAL) CAT-5e/6/7 cable**

**ASCAT60GB**  
**PRODUCT MANUAL**

## Introduction

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Thank you for purchasing the HDCable.co.uk ASCAT60GB

Your **HDMI over DUAL CAT-5e/6/7 Extender Kit** enables long distance HDMI transmission over two CAT-5e/6/7 Ethernet cables.

The kit consists of a HDMI Transmitter and a HDMI Receiver allowing the transmission of full HD 1080p for up to 60 metres.

***Note: For optimal performance we recommend using good quality CAT 6/7 cabling for 1080p transmission.***

Thank you for purchasing this HDCable.co.uk product. Please read this manual to be able to safely install, use and maintain the product at maximum performance. Please keep this manual for future reference. The information in this manual is subject to change without notice.

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## Technical features and package contents

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### Technical features:

- 1080p at 60m can be achieved
- 1080i at 120m can be achieved
- No minimum cable distance
- Automatic signal equalization
- Full HD 1080p digital transmission over Ethernet cabling
- Version 1.2 device support
- 1.65 GHz Bandwidth
- 4.95 Gbps aggregate data rate
- No loss of picture quality
- HDCP Compliant

### Package contents:

- HDMI Extender Transmitter unit
- HDMI Extender Receiver unit
- 5VDC Power Supply
- Product Manual

## Technical specification

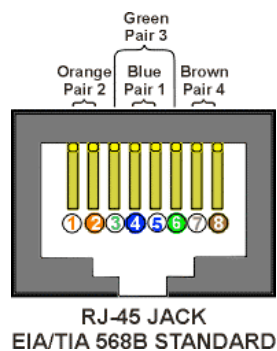
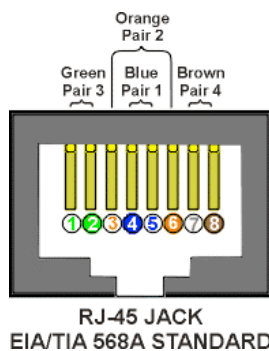
Component	Transmitter unit	Receiver unit
Input/Output connector	HDMI Type A 19 Pin	
Source Input Port	HDMI Single Link 1	N/A
Display Output Port	N/A	HDMI Single Link 1
Link connector	RJ-45 Shielded x 2	
Amplifier Bandwidth	1.65 GHz / 4.95 Gbps aggregate data rate	
Single Link Range	480i, 480p, 720p, 1080i, 1080p	
HDCP Function	HDCP Compliant	
Power Adapter	5VDC Max working current 450mA	
Enclosure	Metal	
Dimension (mm)	82(W) x 45 (D) x 21(H) mm	
Net Weight (g)	220g / 220g	

# Installation

## Transmitter and receiver units:

1. Connect a HDMI cable between the HDMI source device and ASCAT60GB Transmitter unit.
2. Connect a HDMI cable between the HDMI display and ASCAT60GB Receiver unit.
3. Connect your two CAT-5e/6 cables between the Transmitter and Receiver. Video-to-Video and DDC-to-DDC.
4. Plug the 5V power supply into the Receiver unit.
5. Turn on your display and source.
6. The video should now be displayed on the screen, if you do not see a picture, try disconnecting and reconnecting the HDMI source. Make sure your CAT-5e/6 cables are terminated correctly (straight - not crossed).

## CAT-5e/6/7 cable pin assignment options:



*(CAT-6/7 cabling recommended)*

## Troubleshooting

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### What kind of Ethernet cabling should I be using?

We recommend a minimum spec of solid core CAT-5e cable rated at 350MHz and terminated in **T568a** or **T568b** fashion. For higher resolutions and challenging distances (30m +) we strongly recommend you to use shielded STP CAT-6 or CAT-7 cabling.

### I'm getting no video on the display, what can I check?

First, make sure that both CAT cables are connected to the corresponding video and DDC ports (video-to-video & DDC-to-DDC).

Now try this power on process.

1. Power down the display, extender and source device at the mains.
2. Power on the display device.
3. Power on the extender.
4. Finally, power on the source device.
5. Now the HDCP handshake process should complete successfully and images should appear on the screen.

If the problem persists, test using shorter length cables to help diagnose whether it is an issue with the CAT cabling. If it is, re-terminate and test again. If the problem still persists, upgraded Ethernet cabling is required.

Ensure that the Ethernet cabling does not run within 15cm of any power cabling. Interference from the power cabling will seriously affect the performance of the extenders, possibly resulting in bad picture break-up or no picture at all.

*If connecting a PC to DVI monitor with a HDMI to DVI adapter, please set your PC video output frequency to 60Hz*

### Occasionally the picture blanks out, how do I fix this?

Flickering or blinking images are often caused by a loss of sync between the display and the source. This can be caused by a number of external influences.

NB. In some circumstances after the HDMI signal becomes active and extender initializes, it can take up to ten minutes for the signal equalization processing within the unit to adjust and stabilize video playback so that it is completely glitch free.

The HDMI transmission running along the Ethernet cabling is particularly susceptible to electro magnetic interference (EMI). This can be caused by being in close proximity to power cabling, fluorescent lighting or by spikes on the circuit generally caused by electrical motors such as those found in washing machines, fridges and dishwashers.

Firstly, try lowering the source resolution to see if that helps, if it does, the CAT cabling being used are unable to handle the required bandwidth or the termination is at fault. Firstly, re-terminate and test again. If the problem still persists, upgraded Ethernet cabling is required. Try upgrading the CAT cabling to shielded CAT-5 or CAT-6 cable on the video line to reduce interference.

## **Why is there a green or pink tint to my picture?**

A tint of green or pink in the picture is a result of incorrect colour space being transmitted. This can be resolved by recycling the devices to re-sync by powering off and on the source equipment. If this does not help, the DDC data containing the colour space is not being transmitted correctly due to loss in the CAT cable, try replacing the DDC cable with shielded CAT cabling.

## **When I turn on the light/power socket switch, the picture drops out momentarily?**

This is caused by a power arc/spike in the circuit that is caused when you flick the switch. If the Ethernet cabling runs close or across any power cabling at any point in the cable run, the momentary jump in power will cause a burst of electromagnetic interference (EMI) to occur. This affects the HDMI signal transmission over the extender. However, this is only for a fraction of a second and the connection is quickly re-established. Unfortunately there is no an easy fix for this problem other than re-routing the Ethernet cabling a sufficient distance away from the power cabling.

This issue can also be caused by an 'earth leak' somewhere on the electrical circuit. A qualified electrician should be able to locate and repair the fault.

## Safety and Precautions

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**Mains Supply** – operate this product only from the type of power supply indicated on the marking label. Disconnect this product from the mains before you start any maintenance or installation procedures.

**Overloading** – do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

**Liquid** – this product should not be exposed to liquid of any kind.

**Cleaning** – disconnect the product from the power before cleaning.

**Attachments** – do not use any unsupported attachments as these may be hazardous or cause damage to the product.

**Connection to the display** – disconnect the product from the mains before connecting or disconnecting the cable from the TV. Failure to do so can damage the product or the TV.

**Location** – place the product indoors to avoid exposing it to lightning, rain or sun. Do not place it near a heat source. We recommend that the product has 10cm clearance from any other appliances susceptible to electromagnetic influences.

**Lightening, storm or not in use** – unplug the product from the wall outlet during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the product due to lightening and power-surges.

**Extraneous objects** – do not insert anything through the openings in the unit where they can touch dangerous voltage points or damage parts.

**To avoid electrical shock** – do not open the product casing, do not insert metal or inflammable objects inside the product, do not touch the power plug with wet hands.



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