

**444<sup>K</sup>****4K@60Hz  
YUV4:4:4,  
18Gbps, HDR10****Product: 444K-750  
HDBaseT TX/RX**

## Flexible and comprehensive professional HDMI extender with CAT 6 distribution system for Commercial, Education and Residential use



- HDBaseT technology
- HDMI 2.0 4K@60Hz
- 4:4:4, 18G, HDR10, Dolby Vision
- HDCP 2.2/1.3 compliant
- Dual mirrored outputs
- Full duplex RS232 pass through
- Bi-directional IR pass through
- 70m CAT 6/6A STP/FTP
- HDMI resolutions 4K, 2K & 1080p
- CEC compliant
- Integral mounting brackets
- Secure DC connection
- POC (remote powering receivers)
- Slim profile 20mm

### Distribute high resolution UHD HDMI video together with IR and RS232 over a single CAT 6 screened twisted pair cable up to 70m

The **444K-750** is a flexible and cost effective HDBaseT pair solution for extending HDMI, bi-directional IR, full duplex RS232 together with POC (remote power over cable). The unit is very compact and comes with the IR accessories. By incorporating the full HDBaseT technology 4K UHD HDMI signals can be transmitted up to 70m away over CAT 6/6A STP/FTP.

The **444K-750** is a pair of TX/RX HDBaseT extenders capable of transmitting UHD HDMI signals up to 4K UHD resolutions. Implementing the complete 4-Play of the HDBaseT specification the receiver extender also provides the pass through of wide band bi-directional InfraRed signals and full duplex RS232 up to 115Kbaud. Whilst POC power (12-24V) can be sent by either the TX, RX, Matrix or Splitter through the Cat 6 cable to provide power to the remote end. All that is required is a single Cat 6 cable connection to provide all these features. Dual mirrored HDMI outputs provide a convenient solution to back to back displays commonly found in Digital Signage applications.

The **444K-750** can connect to any other product in the **4Kconnect** range as an extender or into or out of a matrix.

The 4Kconnect range is from a family of digital extenders & matrices using standard CAT 6-8 STP cable to transmit HD signals over long distances

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DESIGN

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## TECHNICAL SPECIFICATION

**Video - Digital**

Connectors	2 x HDMI (Type A) outputs
Signal type	HDMI - TMDS
Standards	HDMI 2.0. HDCP 2.2/ 1.4
Maximum data rate	4.5Gbps per colour
Maximum pixel clock	340MHz
Resolution range - DTV	Max 4096x2160 @60Hz 36 bit colour depth
Resolution range - PC	Max 1920x1200 @60Hz 24 bit colour depth
Frame rate	24, 25, 30, 50 & 60 Hz
Gain	0 dB
Formats	RGB and YCrCb
Colour space	4:4:4, 4:2:2 & 4:2:0
Clock jitter	<0.15T bit
Rise time	<0.3T bit (20-80%)
Fall time	<0.3T bit (20-80%)
Maximum transmission delay	5ns (+/- 1ns)
Signal strength	TMDS +/- 0.4V pk-pk
TMDS signal level	2.9V - 3.3V
Impedance	50R
Maximum DC offset	15mV
Maximum input cable length	15m 24 AWG
Maximum output cable length	15m 24 AWG

**Audio - Digital**

Standards	Embedded within the HDMI signal, SPDIF
Maximum audio channels	8
Maximum sample rate per channel	192 kHz
Sample size	16-24 bits

**Power**

DC Voltage	External 12-24V PSU
DC connector	2.1mm jack with screw fitting
AC Voltage (External Supply)	100-230 VAC
AC frequency (External Supply)	50/60 Hz
Power consumption	6W (max)/1.2W (standby)
Operating temperature	0-40 degrees C
Storage temperature	-20-60 degrees C
Relative humidity	20-90%
Dimensions (each unit)	119x67x20mm
Dimensions with brackets (each unit)	139x67x20mm
Product weight	0.5Kg
MTBF	30,000 hours

**TECHNICAL SPECIFICATION**

**Control - RS232**

Connector	3pin Phoenix
Signal type	Full duplex
Signal level	+/- 5V
Baud rate	115200
Data bits	8
Stop bits	1
Parity	None
Pinout	1-RX, 2-OV, 3-TX

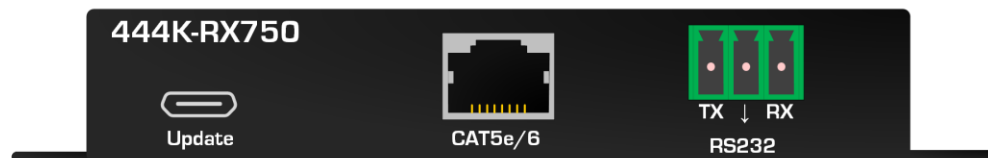
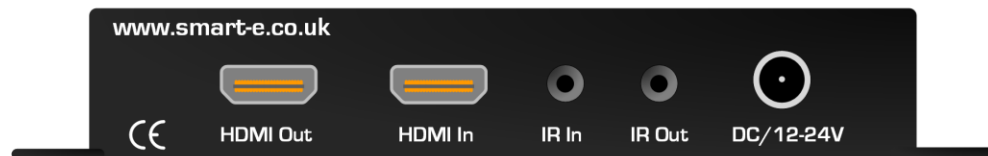
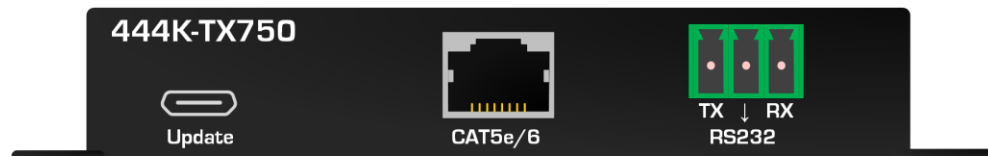
**Control - IR**

Connector	3.5mm mini-jack socket
Signal type	Full duplex (via 2 connections)
Signal bandwidth	20-60KHz

**Cat cable connectivity**

Number of cables	1 x Cat 6/6A screened twisted pair cables
Connectors	1 x female screened RJ45 connectors per unit
Termination standard	TIA/EIA T568B
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth STP (shielded twisted pair)
Transmission distance	70m shielded twisted pair CAT 6 or CAT 6A

**PANEL DRAWING**



specifications are subject to change without notice

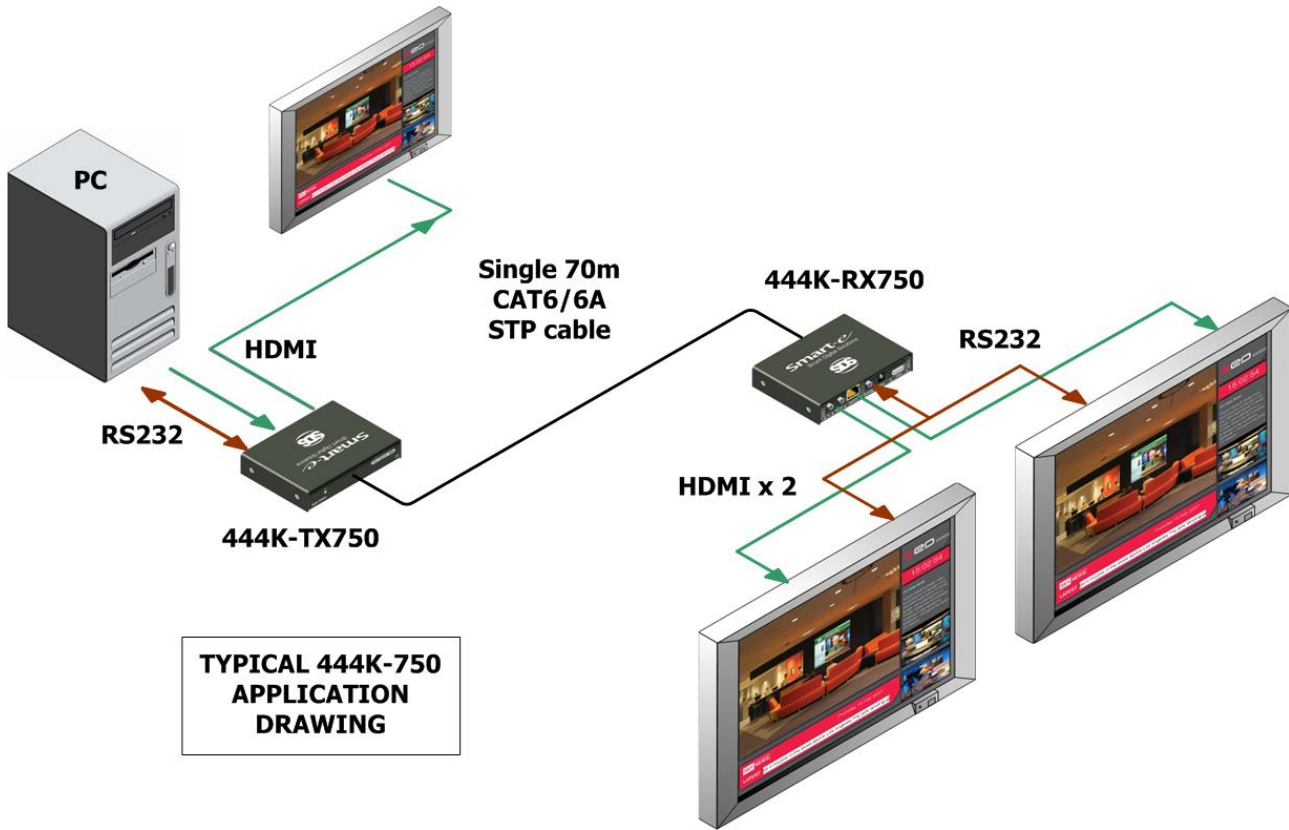
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### APPLICATION DRAWING



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