

# 44<sup>K</sup>

4K@60Hz  
YUV4:4:4,  
18Gbps, HDR10

## Flexible and comprehensive professional USB 2.0 KVM extender with CAT 6 distribution system for Commercial, Education and Residential use



- HDBaseT 2 technology
- HDMI 2.0 4K@60Hz
- 4:4:4, 18G, HDR10, Dolby Vision
- HDCP 2.2/1.4 compliant
- Looping HDMI input
- EDID copy local/remote

- 100m CAT 6/6A STP/FTP
- 150m Long Reach mode option
- HDMI resolutions 4K, 2K & 1080p
- Full duplex RS232 pass through
- Bi-directional IR pass through
- CEC compliant
- Local USB connection for K/M
- Dual USB port on receiver
- Integral mounting brackets
- Secure DC connection
- POC (remote powering TX or RX)
- Slim profile 24mm

### Distribute high resolution 4K UHD HDMI video together with USB 2.0, IR, RS232 and audio over a single CAT 6 cable up to 100m

The **4K-985-USB** is a flexible and cost effective KVM extender for HDMI, USB 2.0, bi-directional IR, full duplex RS232 together with Power Over Cable (POC). Consisting of a transmitter/receiver pair, both units are compact and come with mounting brackets. By incorporating the full HDBaseT2 technology 4K UHD HDMI signals can be transmitted up to 100m.

The **4K-985-USB** is a HDBaseT KVM extender pair capable of distributing HDMI, HDR10 signals up to 4K UHD resolutions to 100m of Cat 5e-6 cable. By implementing the complete **5-Play** of the HDBaseT2 specification the extender pairs also provides the pass through of wide band bi-directional InfraRed signals, full duplex RS232 up to 115Kbaud and stereo audio. USB 2.0 extension is achieved by harnessing the internal 100BaseT Ethernet link within the HDBaseT protocol.

A looping HDMI input together with a USB hub on the transmitter **4K-TX985-USB** unit allow for a local PC to be connected. EDID can be read locally or from the remote display through the Cat 6A cable selectable. An extended option available on the HDBaseT chip set allows for 150m transmission for HDMI resolutions up to 1080p.

Each unit is powered via a 24V PSU which can also power the other remote device through the same cable

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

Smart-e



## TECHNICAL SPECIFICATION

### Video – Digital

Connectors	HDMI (Type A) input/output
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
Audio output (RX)	Analogue stereo & SPDIF
Analogue audio connector	3.5mm mini-jack socket
SPDIF connector	RCA phono

### Power

DC Voltage	External 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	14W [max]/ 1.2W [standby]
Operating temperature	0-40 degrees C
Storage temperature	-20-60 degrees C
Relative humidity	20-90%
Dimensions (each unit)	172x114x24mm
Dimensions with brackets (each unit)	190x114x24mm
Product weight	0.5Kg
MTBF	30,000 hours



## TECHNICAL SPECIFICATION

### Passthrough - USB

Connectors	USB (Type B) input/(Type A) output
Signal type	USB
Standards	USB 2.0.
Maximum data rate	480 Mbit/s

### Passthrough - RS232

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

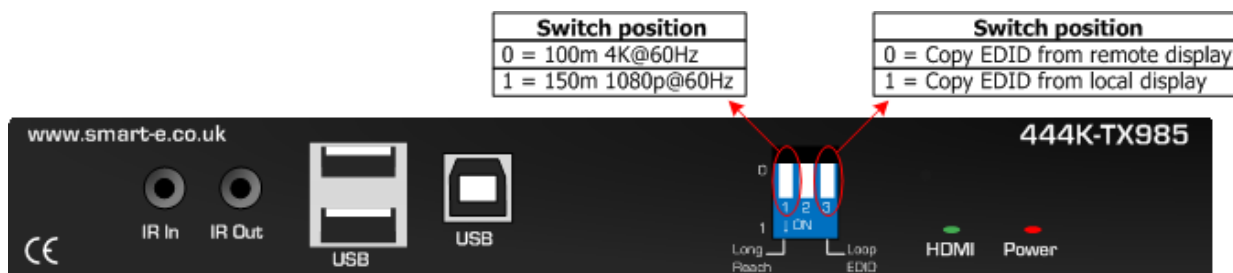
### Passthrough - IR

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

### Cat cable connectivity

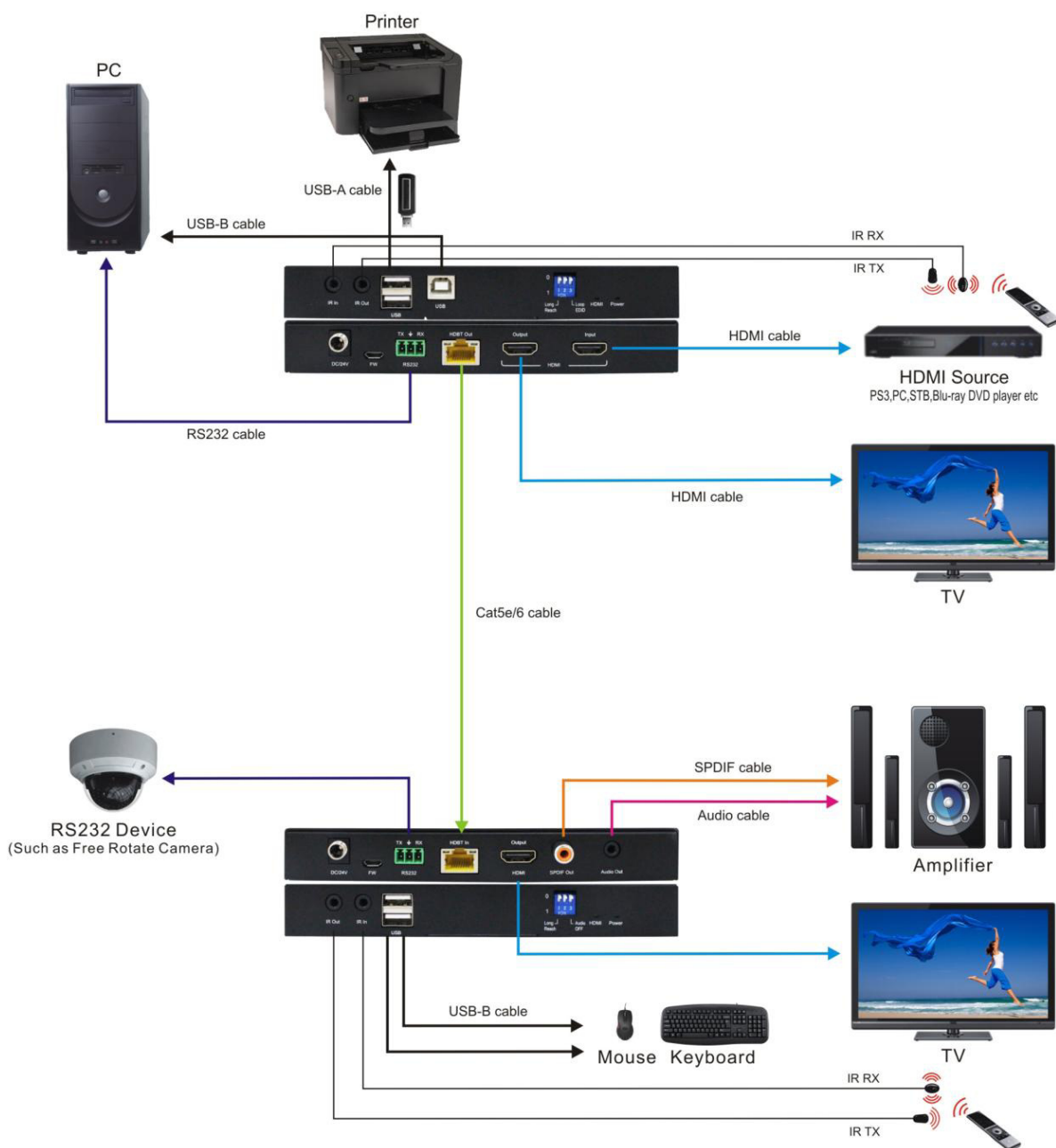
Number of cables	1 x Cat 6/6A screened twisted pair cables
Connectors	1 x female screened RJ45 connectors per unit
Termination standard	TIA/EIA T568B
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth STP (shielded twisted pair)
Transmission distance	100m shielded twisted pair CAT 6 or CAT 6A

## TX PANEL DRAWING

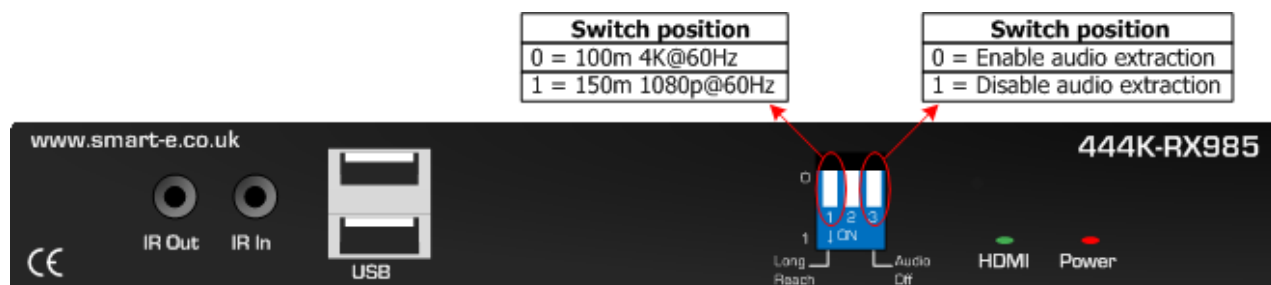


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## APPLICATION DRAWING



## RX PANEL DRAWINGS



specifications are subject to change without notice