

444^K**4K@60Hz
YUV4:4:4,
18Gbps, HDR**

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



- Double gang Wall plate transmitter
- HDMI 2.0 4K@60Hz
- 4:4:4, 18G, HDR10, Dolby Vision
- HDCP 2.2/1.3 compliant
- Dual mirrored outputs on receiver
- 70m CAT 6/6A STP cable
- Bi-directional RS232/IR pass through
- VGA input with embedding audio
- Priority switching HDMI & VGA
- HDMI resolutions 4K, 2K & 1080p
- CEC compliant
- Integral mounting brackets
- Secure DC connection
- POC (remote powering wall plate)

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-912** is a flexible and cost effective wall plate transmitter and compact receiver solution for extending HDMI, RGBHV, bi-directional IR, full duplex RS232 together and POC (remote power over cable). The pair of units are supplied as a convenient UK size double gang transmitter wall/floor plate (**444K-TX912-WP**) together with its complementary compact receiver (**444K-RX750**). The **444K-912** comes with all the IR accessories and by incorporating the full HDBaseT technology 4K UHD HDMI signals can be transmitted up to 70m away

The **444K-TX912-WP** transmitter wall plate allows the connection of both HDMI and RGBHV formats. Selection between both signals is controlled by a priority switch (last connected wins) or a manual button, status of which is shown via LED indicators above the active input. The RGBHV signal is digitised and converted to HDMI with the embedded stereo audio connected via the mini-jack input.

The **444K-912** pair also allows the pass through of wide band bi-directional InfraRed signals and full duplex RS232 up to 115Kbaud. The wall plate is powered through the Cat6 cable from the receiver with a 24V PSU. Dual mirrored HDMI outputs on the receiver provide a convenient solution to back to back displays commonly found in Digital Signage applications.

Smart-e



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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 |

Video – Analogue

| | |
|------------------------|--------------------------------|
| Standards | VESA |
| Bandwidth | 400 MHz |
| Resolution range - DTV | 480i, 480p, 720p, 1080i, 1080p |
| Resolution range - PC | VGA, SVGA, XGA, SXGA, UXGA |
| Frame rate | 24, 25, 30, 50 & 60 Hz |
| Resolution range | VGA, SVGA, XGA, SXGA, UXGA |
| Format | RGBHV and YPrPb |

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 – Analogue

| | |
|-----------|---------------------|
| Standards | Stereo - unbalanced |
| Bandwidth | 20 - 20 kHz |

Power & Environment

| | |
|--------------------------------|-------------------------------|
| 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% |
| MTBF | 30,000 hours |

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TECHNICAL SPECIFICATION

Control - RS232

| | |
|---------------------|------------------|
| Connector (TX & RX) | 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 |

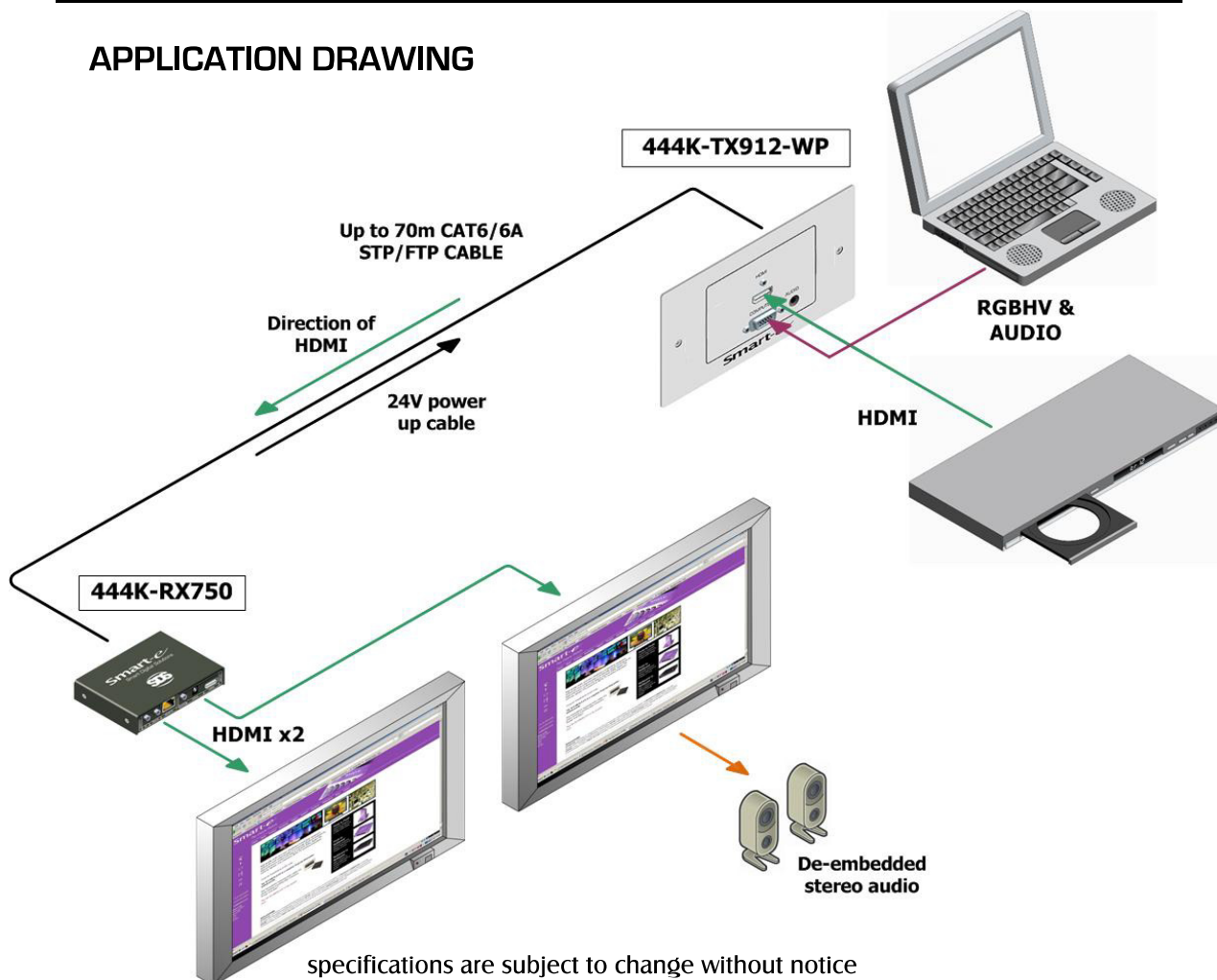
Control - IR

| | |
|------------------|---------------------------------|
| Connector (TX) | 5pin Phoenix |
| Connector (RX) | 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 STP CAT 6 or CAT 6A |

APPLICATION DRAWING



specifications are subject to change without notice

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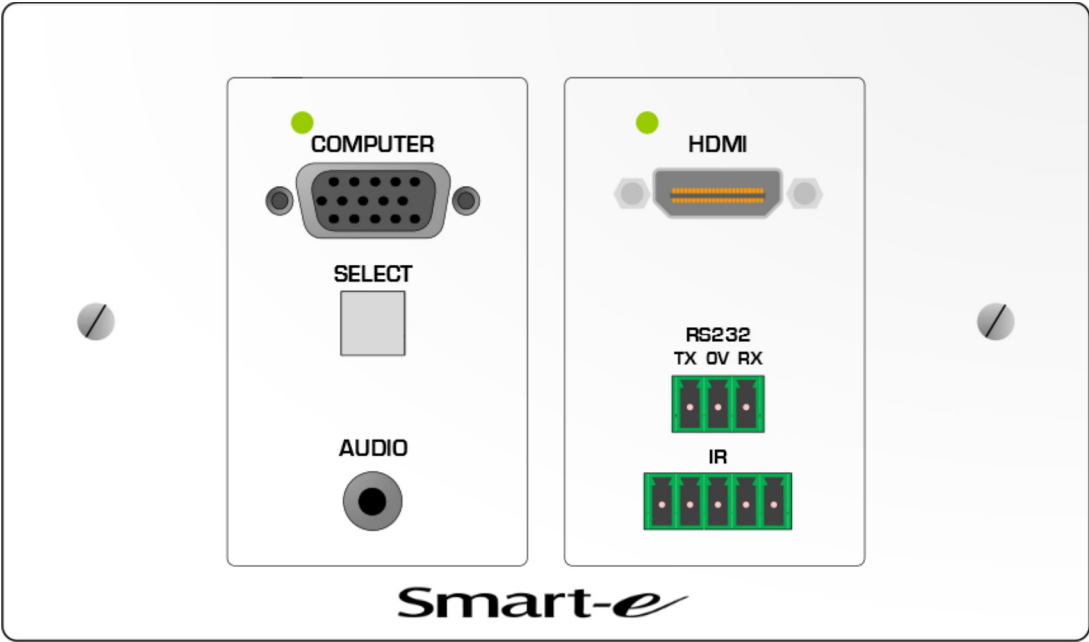
SPECIFICATION - UNITS

Transmitter

| | |
|-----------------|--------------------------------------|
| Input connector | |
| Digital video | HDMI |
| Embedded audio | HDMI |
| Analogue video | Sub miniature high density D9 socket |
| Analogue audio | 3.5mm jack socket |
| RS232 | 3Pin Phoenix |
| IR | 5Pin Phoenix |
| Cat cable | RJ45 screened connector |

Physical

| | |
|------------|---|
| Dimensions | 145 x 85 x 20mm (UK double gang wall plate) |
| Weight | 200g |
| Power | 3 Watts |



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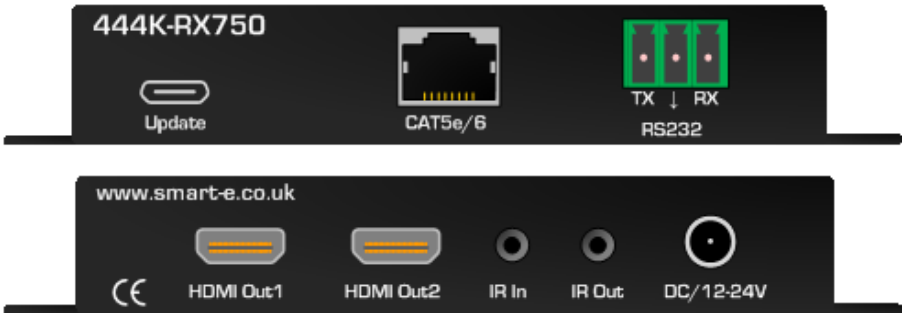
SPECIFICATION - UNITS

Receiver

| | |
|------------------|--------------------------------------|
| Output connector | |
| Digital video | HDMI x 2 |
| Embedded audio | HDMI |
| Analogue video | Sub miniature high density D9 socket |
| RS232 | 3Pin Phoenix |
| IR | 3.5mm jack socket |
| Cat cable | RJ45 screened connectors |

Physical

| | |
|--------------------------|---------------------------|
| Dimensions | 119x67x20mm |
| Dimensions with brackets | 139x67x20mm |
| Product weight | 0.5Kg |
| Power | 3 Watts |
| Connector | 2.1mm DC socket - locking |



PANEL DRAWING