



## KD-X411ProK

HDBaseT/HDMI via Single CAT5e/6 (Tx+Rx Set) Extenders with Audio De-embedding, EDID Control, Hot Plug Control, Full Buffer System, IR Sensor, Up/Down IR & RS-232, support Ultra HD/4K & HDCP2.2

### Key Features

- › **HDBaseT via Single CAT5e/6 UTP/STP Extension:** With fully automatic adjustment of feedback, equalization, and amplification depending on cabling length
- › **Signal Extension:**
  - › Up to 150 ft. @ 4K 24/25/30(4:4:4)/60(4:2:0) using KD-CAT6STP1X cabling
  - › Up to 125 ft. @ 4K 24/25/30(4:4:4)/60(4:2:0) using third-party CAT5e/6 UTP/STP cabling
  - › Up to 250 ft. @ 1080p / 1920x1200 using KD-CAT6STP1X cabling
  - › Up to 230 ft. @ 1080p / 1920x1200 using third-party CAT5e/6 UTP/STP
- › **4K/Ultra HD Resolution:** Support for 4096x2160 or 3840x2160 24/25/30Hz at 4:4:4/8 Bit or 60Hz at 4:2:0/8 Bit
- › **Audio De-Embedding:** Audio from the HDMI input is de-embedded through the Coax digital (PCM) and/or Analog L/R audio output
- › **HDMI® and HDCP Licensing:** Fully licensed and compatible with HDCP 2.2 and HDMI latest technology such as 4K/UHD 4:2:0/8bit at 60f/s
- › **EDID Control:** Internal library features 15 default EDID configurations and native EDID data from Output/Display devices connected via Rx
- › **Hot Plug Detection Control:** Enables integrator to choose if active signal voltage is forced to connected input devices
- › **Full Buffer System™:** Manages TMDS re-clocking / signal re-generation, HDCP authentication with source & display, EDID Control handshake, and Hot Plug control
- › **IR Sensor:** Sensor powering via +5V on Rx unit's IR In port collects line-of-sight IR from remote(s) without external IR connecting block
- › **Up/Down IR:** Two channels of IR enable control to/from devices connected to Tx and Rx units
- › **RS-232:** Bi-Directional control to/from Tx and Rx unit on 3.5mm connector
- › **Rotary Switch RS-232 Control Mode:** Provides control of Tx unit as well as connectivity status
- › **3D:** Support for standard 3D stereoscopic signal formats



**TxRx**  
**HDCP2.2**

**HDBaseT™**  
**HDMI®**  
HIGH-QUALITY MULTIMEDIA INTERFACE

**Ultra HD/4K**

- › **Deep Color Support:** 12bit Deep Color video / 8bit color for 4K/UHD
- › **Lossless compressed digital audio:** Support for Dolby® TrueHD, Dolby® Digital Plus and DTS-HD Master Audio™
- › **CEC Support:** For inter-device control between main input and output HDMI channel
- › **I2C Communication:** EDID and HDCP authentication to Display and Source
- › **Control System Support:** Compatible with Compass Control®, AMX®, Control4®, Crestron®, KNX®, RTI®, Savant, URC®, Leviton® etc.

### Specifications

- › Inputs Tx (Each): 1 HDMI, 1 IR In
- › Outputs Tx (Each): 1 CAT5e/6 UTP/STP, 1 IR Out /RS-232 Bi-Directional, 1 Analog Audio, 1 Digital Audio I
- › Inputs Rx (Each): 1 CAT5e/6 UTP/STP, 1 IR In
- › Outputs Rx (Each): 1 HDMI, 1 IR Out /RS-232 Bi-Directional
- › Regulation: CE, RoHS, WEEE
- › Enclosure: Black Metal
- › Product (Each): 5" x 4.06" x 1.06", Weight: 0.6 lbs
- › Shipping Carton: 8.67" x 4.1" x 4.7", Weight: 2.5 lbs
- › Power Supply: (2) KD-PS5V2ASC, 5V/2A, 100-240VAC, 50-60Hz, Interchangeable head with screw-in connector
- › Accessories: (2) Mounting Brackets, (1) IR Emitter, (1) IR Sensor



### System Design Example



\* For all installations, we highly recommend use of KD-CAT6STP1X STP cabling, especially in hostile electrical environments. The shield of CAT6STP must be soldered on both ends to the shield of RJ45 connector used. The CAT5/5e/6 cable has to be terminated according to TIA/EIA-568-B standard. The use of STP CAT5, 5e is not recommended.