4K Enterprise AV Over IP Solutions

ENTERPRISE AV OVER IP
AUDIO/VIDEO/CONTROL SOLUTIONS

Key Digital's Enterprise AV over IP solutions create expandable HDMI over IP systems that can be scaled to fit any commercial installation.

Key digital PRO MANAGEMENT SOFTWARE

KEY DIGITAL APP READY

HDMI

KD-IP1022DEC

4K UHD AV over IP Decoder with Independent Video, Audio, KVM/USB Routing and Video Wall Processing. Audio De-Embed with Volume, Delay, and Bass/Mid/Treble Control, 2 port PoE LAN Switch, Local HDMI In, 3 port IR, RS-232, Trigger Master Controller / Control Gateway.

DECODER ▶
4K
HDCP 2.2

› **Enterprise AV Over IP**: Utilizes a managed gigabit network switch to enable video distribution, matrix switching, and extension

› **Video Wall Processing**: Encoder + Decoder systems create video walls with up to 16 vertical and 16 horizontal monitors

› **Independent Switching**: Video, Audio, and USB switching all independently routable routed for multi-layer systems

› **Control**: 3 multi-function ports may be used as third-party control interface, Compass Control® Pro master controller, control extension via IP, or callable via KeyCode open API

› **Key Digital® App Ready**: Network scan & detect populates pre-built GUI including image preview, and finger drag video wall layout control

› **HDCP 2.2**: Compliancy up to HDCP 2.2 and backward compliant

› **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 (10.2Gbps max bandwidth)

› **4K Down-scale**: Incoming 4K resolution can be down-converted to 1080p or 720p at each decoder, enabling monitors to display content at optimal resolution at all times

› **Audio De-Embedding**: At Encoder and Decoder for ease of integration with audio systems

› **Audio Pre-Amp**: Variable level settings for volume, muting, EQ, balance, and lip-sync delay per Encoder and Decoder

› **HDMI Pass-Through (ENC)**: Enables connection to local monitor or other AV Devices

› **Local HDMI Input (DEC)**: Creates localized input option ideal for presentation spaces

› **Signal Extension**: Up to 330 ft. / 100 m @ 4K 24/25/30(4:4:4)/60(4:2:0) into network switch or point-to-point

› **Power over Ethernet**: Does not require power supply when integrated with compatible PoE network switch.

› **Redundant Power Connection**: Added reliability for non-PoE integration.

› **Data Stream Bandwidth**: < 900Mbps / **Latency**: <40ms at 4K. Less at lower resolution.

› **Installation**: Use KD-SMS16 to install up to twelve KD-IP822/ENC/DEC units in rack

› **Dual LAN**: Built-in switch enables network connectivity and PoE powering of connected devices.

› **USB 2.0**: Supports synchronous and isochronous connections (web cams not supported)

› **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 60 f/s

› **EDID Control**: Internal library features 15 default EDID configurations and native EDID data from Output/Display devices connected to Decoder

› **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 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 Encoder and Decoder units

› **RS-232**: Bi-Directional control to/from Encoder and Decoder unit on Phoenix connector

› **RS-232/TCP-IP Control Mode**: Provides control of unit as well as connectivity status

› **Lossless compressed digital audio**: Support for Dolby® TrueHD, Dolby® Digital Plus, Dolby Atmos®, and DTS-HD Master Audio™

› **Control System Support**: Controllable by all IR, RS-232 & TCP/IP supported control systems via open API: Compass Control® Pro, AMX®, Control4®, Crestron®, KNX®, RTI®, Savant, URC®, Leviton® etc.

› **Compass Control® Pro Inside**: Built-in 3 port Compass Control® Pro master controller.
  » KD-ProCL1/2/4/8 Software Activation License sold separately. Required to activate iOS controllers.

| Digital Video Matrix | Digital Video Distribution System | Digital Video Switcher | Video Wall Controller | Digital Video Extender | KVM Matrix | **Master Controller** |

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