



Brilliant AV image  
Deliver in Real Time

# 4KHDBT

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aegis' 4KHDBT supports 4K2K/60Hz 4:4:4 resolution and PoC. Transmit 4Ksignal to the distance up to 131 feet (40 meters) and 1080p signal to the distance up to 230 feet (70 meters). Supports comprehensive EDID management and advanced HDCP handling. Controllable by front panel buttons, IR remote, RS232 and GUI. The use of 4KHDBT series are monitoring system, conference room, television education, integration and with large screen displays etc.





## 4KHDBT-44



4KHDBT-44 is a four-input by four-output HDBaseT and HDMI matrix with HDCP 2.2 and up to 4K/UHD@60Hz video support. It transmits 4K video to distances up to 131 feet ( 40 meters ) and 1080p video to distances up to 230 feet ( 70 meters ) over a single CAT x Ethernet cable. The four HDBaseT outputs support 24V Power over Cable (PoC) feature, allowing the receivers to draw their power from the matrix over the HDBaseT cable.

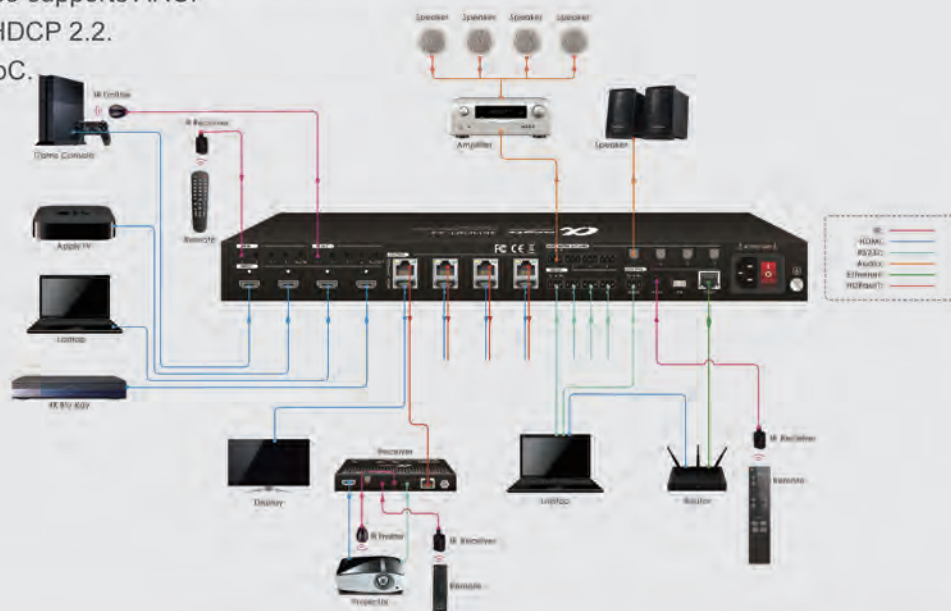
4KHDBT-44 features comprehensive EDID management and advanced HDCP handling to ensure maximum functionality with a wide range of video sources.

The matrix switcher not only supports bi-directional IR, RS232 extension but also has IR, RS232, and TCP/IP control options.



## ✓ Features

- Supports HDMI resolution up to 4K@60Hz 4:4:4, HDR10.
- Supports comprehensive EDID management and advanced HDCP handling.
- Features 4 mirrored HDMI outputs for 4 HDBaseT outputs, and the 4 HDMI outputs support 4K to 1080p down-scaling.
- Transmits 4K signal to the distance up to 131 feet (40 meters) and 1080p signal to the distance up to 230 feet (70 meters) over a single CATx Ethernet cable.
- Supports audio matrix. Provides 4 digital SPDIF audio outputs and four analog L+R audio outputs for HDMI input. SPDIF also supports ARC.
- Fully compliant with the HDMI 2.0 and HDCP 2.2.
- The 4 HDBaseT outputs support 24V PoC.





## 4KHDBT-42PS



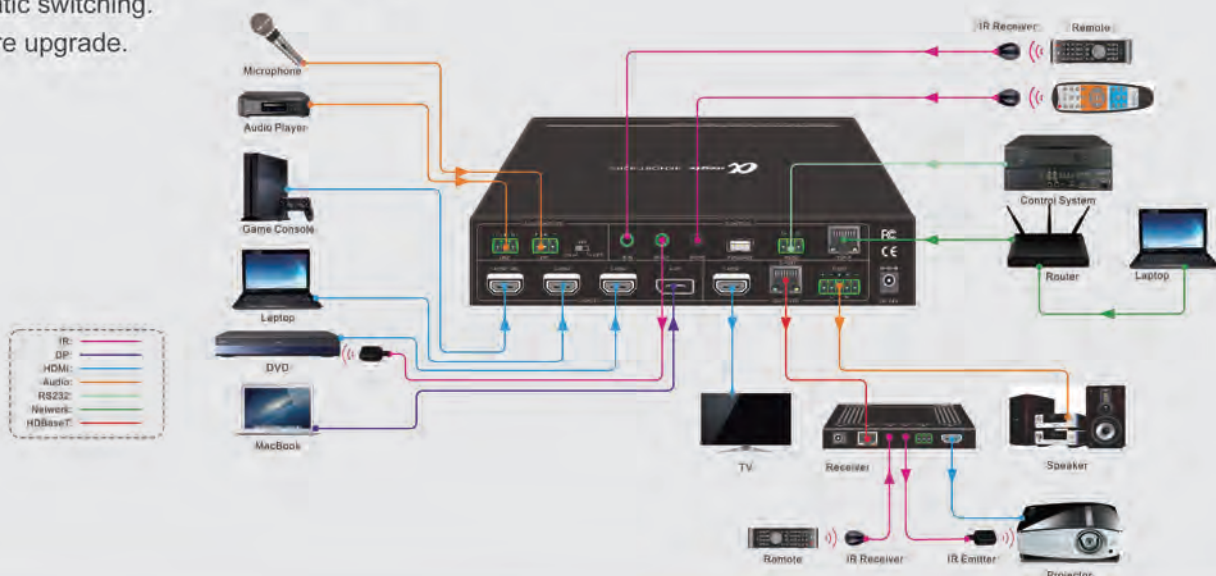
4KHDBT-42PS is designed to switch HDMI or DP video signal to HDMI and HDBaseT output. It provides HDMI\*3 inputs, DP\*1 input, HDMI\*1 output and HDBaseT\*1 output. The HDBaseT output supports PoC. It supports input video resolution up to 4Kx2K@60Hz 4:4:4. With multiple built-in EDID settings, including an EDID pass-through option, the highest quality digital video signal will be routed directly to the display.

4KHDBT-42PS supports stereo and multichannel audio on the HDMI or DP input. The switcher features multiple methods of control. The switcher can automatically switch to the newest source device added to the switcher. The switcher can be manually controlled by front panel buttons, IR, RS232, and GUI.



## ✓ Features

- The transmission distance between the switcher and HDBaseT receiver can up to 70m at 1080p, and 40m at 4K video..
- Smart EDID management: Four built-in preset EDIDs for various applications and customized setting allowed.
- 3-type microphone input: condenser microphone, dynamic microphone and wireless microphone and the MIC and LINE input can be mixed to audio outputs.
- Controllable by front panel buttons, IR remote, RS232 and GUI.
- Supports HDMI 2.0, HDCP 2.2 compliant & Supports 12V PoC.
- HDMI and DP video resolution up to 4Kx2K@60Hz 4:4:4.
- Supports DP 1.2 and Multi-Stream Transport (MST).
- Supports automatic switching.
- Supports firmware upgrade.





# MEET UNLIMITED CONNECTIVITY TO BRING AV OVER IP EVERYWHERE

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- ✔ **AV over IP** stands for **Audio-Visual over Internet Protocol** is the transmission of audio-visual data over a network such as WAN, LAN or the internet.
  - ✔ **AV over IP** means the use of standard network system to switch and transmit AV signals.
  - ✔ Imagine the ability to access and control any audio and video system from anywhere, it provides convenient and cost-effective in remote-control management. Integrators can leverage existing network infrastructure to pay for additional ports and eliminate expansion cabling during construction.
  - ✔ Therefore, AV infrastructures with IP-based infrastructures has gradually replaced the traditional AV facilities.
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# THE KEY FEATURES OF ADVANCED AV OVER IP

Scalable input sources and display outputs, conquering distance limits, up to 4k/60hz high resolution image, visually lossless video resolution, no latency levels improve performance and interoperability with other hardware and software providers.

It of this makes the installation environment cost effective, highly flexible and produce high quality of audio and video for viewers.



## ADVANTAGES



Remote Control &  
Management



Real Time Solutions



Interoperability



Cost Effectiveness



Scalable Switching



Improve Quality  
(4K/60Hz)



# COMPARISON & 4KPROIP PRODUCT LIST

	General AV System	AV over IP System
Flexibility of Transmission Distance Adjustment	Low	High
Construction Convenience	Low	High
Expansion Flexibility	Low	High
Image Display Type	Single	Multiple
Image Multiplier	No	Yes
Cross-Platform Operation	No	Yes
Multiple Combination	No	Yes

Item No.	Description
<b>Cat.6 Cable</b>	
4KPROIP-CAT-EN	4KPROIP Copper Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE
4KPROIP-CAT-DE	4KPROIP Copper Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE
4KPROIP-CAT-EN-U	4KPROIP Copper Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE & USB
4KPROIP-CAT-DE-U	4KPROIP Copper Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE & USB
<b>Fiber</b>	
4KPROIP-FOC-EN	4KPROIP Fiber Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE & SFP+
4KPROIP-FOC-DE	4KPROIP Fiber Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE & SFP+
4KPROIP-FOC-EN-U	4KPROIP Fiber Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE, SFP+ & USB
4KPROIP-FOC-DE-U	4KPROIP Fiber Encoder with HDMI, Infrared, Analog Audio, RS-232C, 1 GbE, 10GbE, SFP+ & USB
<b>Software</b>	
4KPROIP-CBS	Control Software Box



# SOLUTIONS



**Corporation**



**Health Care**



**Government & Security**



**Exhibition**



**Education**



**Housing**



**Retail**



**Entertainment**





## 4KPROIP-CAT-EN

## 4KPROIP-CAT-DE



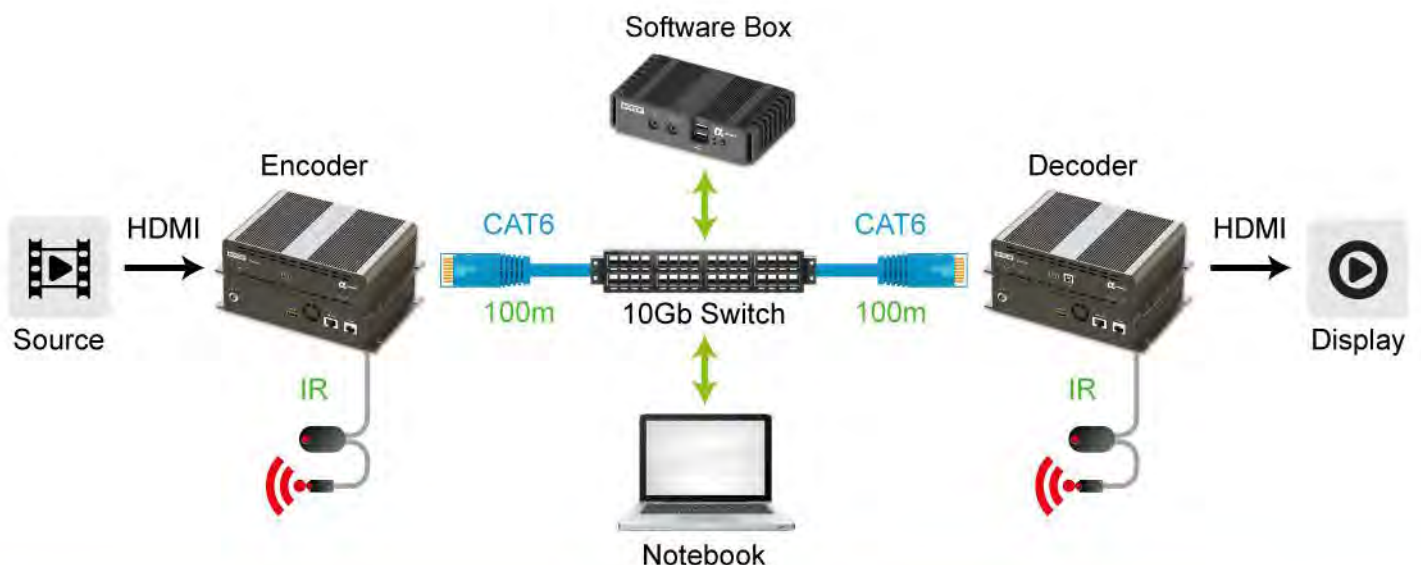
aegis 4KPROIP – Copper (Category) Cable provide streaming that carries 4K/60Hz (4:4:4) audio, video, IR, and RS-232 over an IP network in one-to-one or many-to-many configurations with fiber cable that can up to 100M. The multi-point distribution functions includes: Matrix switching, Video Wall, MultiView and Point to Point.

The function of the 4KPROIP-CAT-EN encoder (transmitter) is to receive audio and video data from variety of source interfaces and convert the data to a format suitable for transmission via 10Gbit network switch while 4KPROIP-CAT-DE decoder (Receiver) is to decoding the data from Ethernet traffic to be displayed. Delivering zero compression 4K and latency, the 4KPROIP provides supreme quality of audio and video outputs.



## ✓ Features

- Zero Compression & Zero frame latency
- Supports UltraHD 4K/60 (4:4:4), HDMI 2.0 & HDCP 2.2
- 4K/60Hz Over 10G Copper
- RS-232 Serial Port (Bidirectional)
- IR (Bidirectional)
- Scalable : wide range of down-scaling & up-scaling
- 1Gb & 10Gb network port
- Standard Industrial Cat.6 Cable up to 100M
- Line In/Out Audio
- Visual Capability : Matrix , Video Wall, MultiView, Point to Point
- Rack & Under Table Mounting







**4KPROIP-CAT-EN-U**

**4KPROIP-CAT-DE-U**



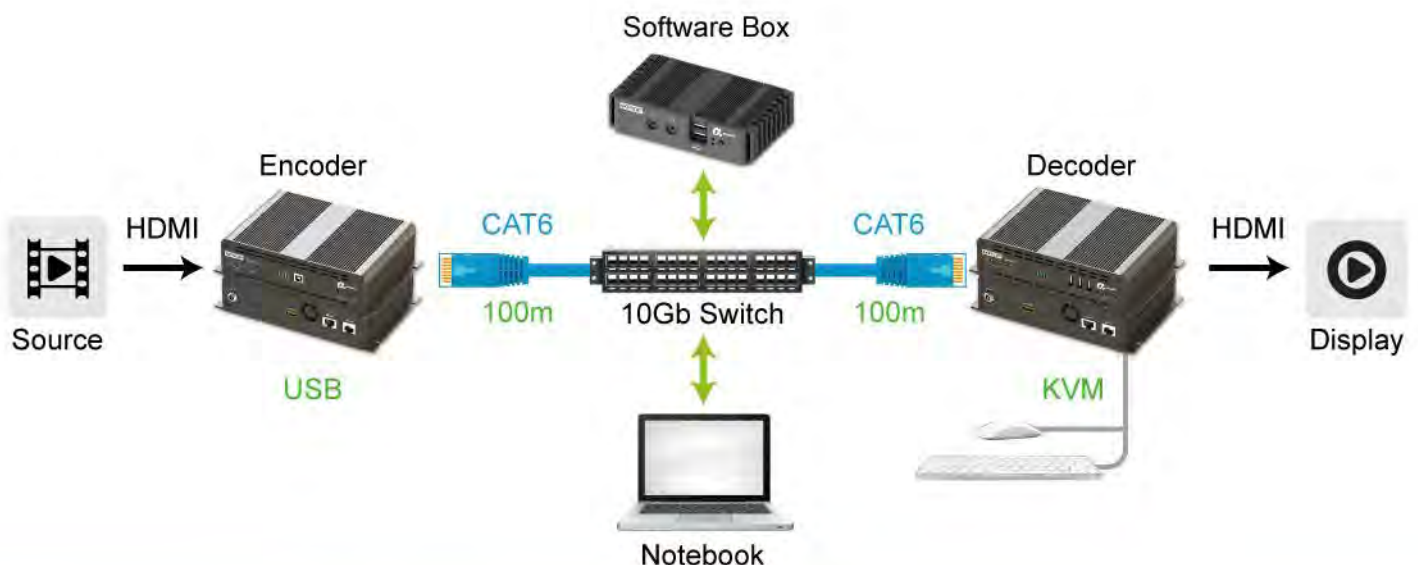
aegis 4KPROIP – Copper Cable with KVM feature provide streaming that carries 4K/60Hz (4:4:4) audio, video, IR, RS-232, USB 2.0 over an IP network in one-to-one or many-to-many configurations with fiber cable that can up to 100M. The multi-point distribution functions includes: Matrix switching, Video Wall, MultiView and Point to Point. USB ports for keyboard and mouse control (KVM features) that enabling control of remote devices.

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- USB 2.0 Type B as KVM feature







**4KPROIP-FOC-EN**

**4KPROIP-FOC-DE**



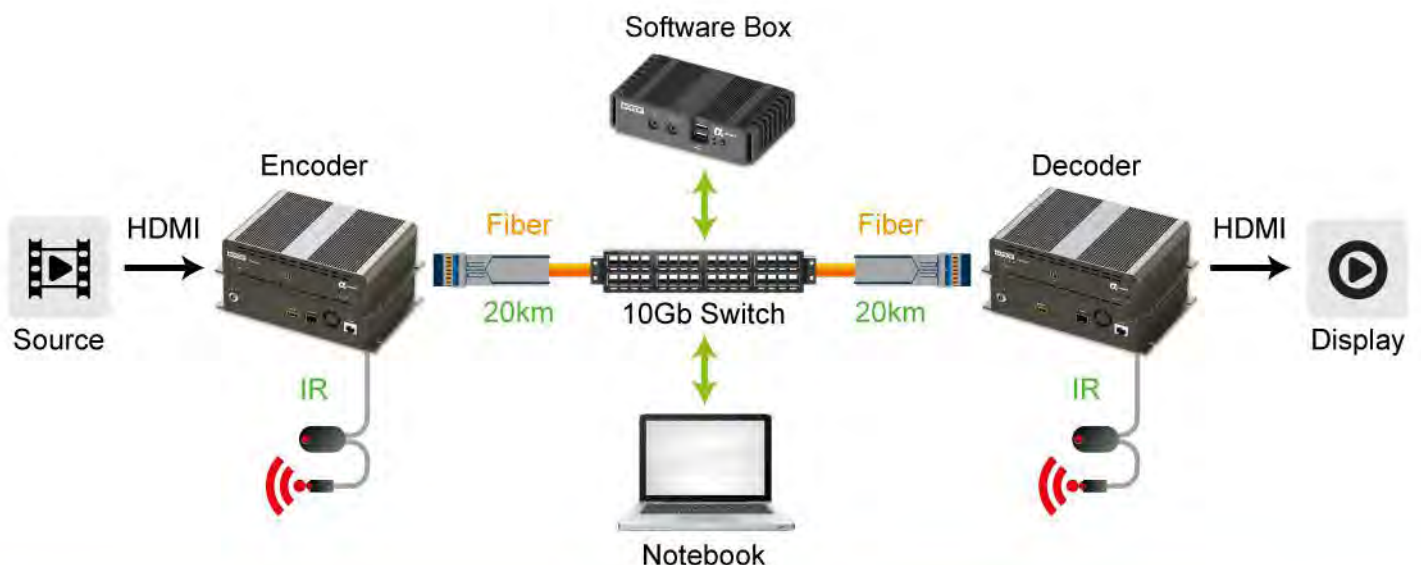
aegis 4KPROIP – Fiber Optic Cable provides streaming that carries 4K/60Hz (4:4:4) audio, video, IR, and RS-232 over an IP network in one-to-one or many-to-many configurations with fiber cable that can up to 300M. The multi-point distribution functions includes: Matrix switching, Video Wall, MultiView and Point to Point.

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- 1Gb network port
- Fiber Cable supports 10KM, 20KM, or 30KM range
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- Visual Capability : Matrix , Video Wall, MultiView, Point to Point
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**4KPROIP-FOC-EN-U**

**4KPROIP-FOC-DE-U**



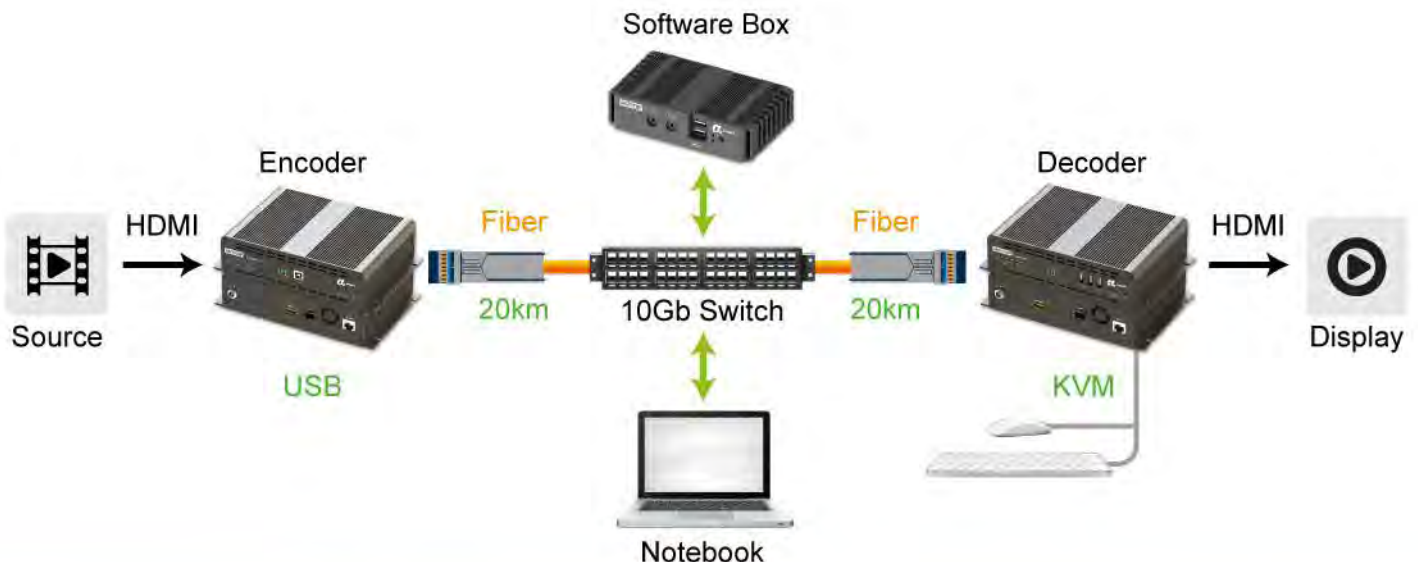
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- USB 2.0 Type B as KVM feature





# 4KPROIP-CBS

## Technological Innovation 4KPROIP-CBS

aegis 4KPROIP-CBS delivers IOT functionality to Pro AV.

It provides uncompressed, zero latency, digital video signals at up to 4k resolution, using standard Ethernet infrastructure.

It is a measurable ROI and a managed software solution not just configuration.

4KPROIP-CBS is built to satisfy the demands of routing hi-resolution 4K video to multiple destinations with every pristine detail of the original source.

Audio, analog and embedded are catered for with embedding and de-embedding features.

RS232 and IR control are also routed along side the video signal.

It also features design unique AV designs with a creative suite of tools with remote management and diagnostics. It is secure and encrypted transmission.

### MATRIX

Unprecedented flexibility and scalable signal routing is achieved through intuitive graphical control.

Colour coded icons represent exact condition of the matrix layout allowing single glance confirmation of the entire system.



### KVM/USB2.0

Route USB2.0 ports to any encoder/decoder combination.

Features independent Icron USB discovery, configuration and firmware maintenance.

PERIPHERAL (Keyboard/Mouse)	Encoder1	Encoder2
Decoder1	Blue	White
Decoder2	White	Blue

### VIDEO WALL

Create up to 8x5 video walls with extensive bezel compensation tools.

Design layouts on the fly or save as a preset for later recall.

Maintain aspect ratio and user selectable resolutions.



### CONFIGURATION

Easily provision SDVoE systems.

Encoder Settings	Status	Tools	Notes	Created	Updated
Select	ALL DEVICES	0			
Device Settings	0/0	0			
Select Device Type	Encoder	0			
Select Device	Encoder1	0			

### MULTIVIEW

Preset configurations with 42 layouts, custom layouts are available as an option.

Drag and drop configuration with in built supervisor to ensure valid layouts.

Discrete encoder audio selection and selectable output resolutions and refresh rates.

Create layouts with or without borders.







- **4K 60 HDR**

The only technology that can truly handle it.

- **HDCP compliant**

AES 128bit encrypted video delivery of protected content.

- **Seamless switching**

The only technology that can truly handle it.

- **MultiView**

Display up to 42 images for high res 4K video collaboration.

- **Built in broadcaster scaler**

Accept and display any resolution to match all your displays.

- **Superior SDVoE technology with Zero frame latency**

Picture perfect image reproduction with identical timing.

- **Complete and independent audio, video and control matrix switching**

Handles all typical signals found in Pro AV environment.

- **Unmatched I/O flexibility, one end point per source/display**

Free yourself from fixed matrix sizes forever.

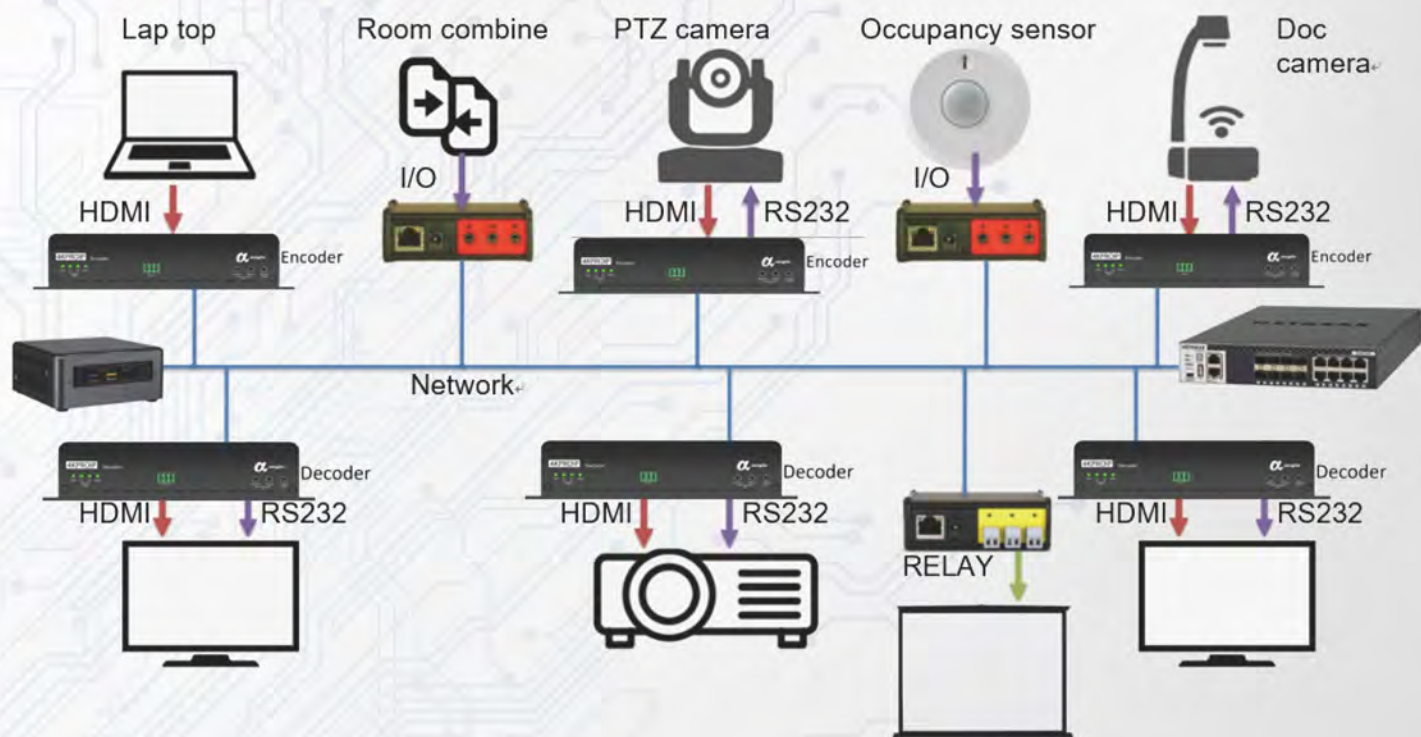
- **Video distribution using off the shelf 10GbE network switches**

Trusted performance from switch companies like Cisco and Netgear.

- **Distributed video matrix with built in redundancy**

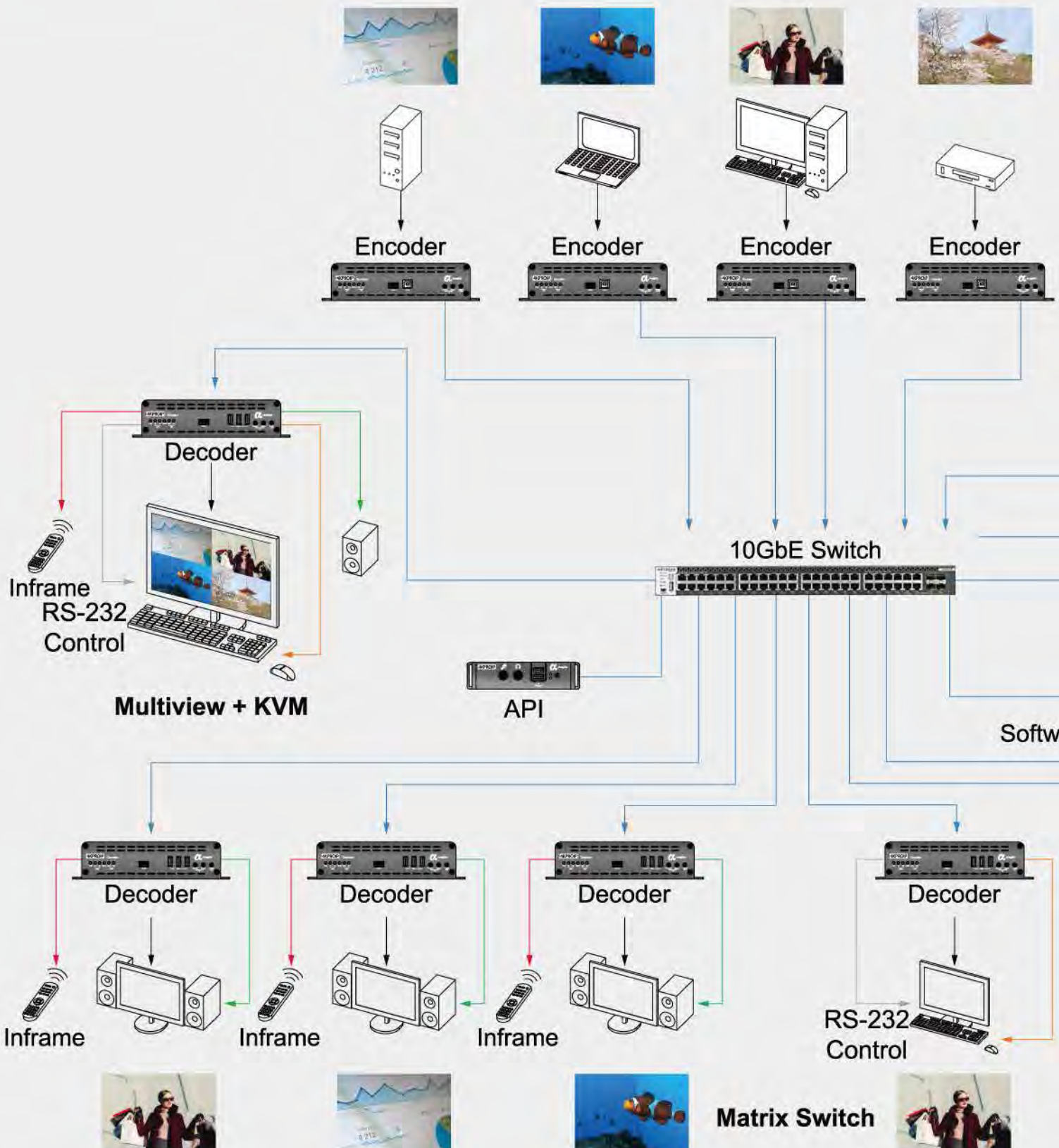
No more centralised matrix frame to fail, only end points to hot swap out, no system down time.

## GUI Applications

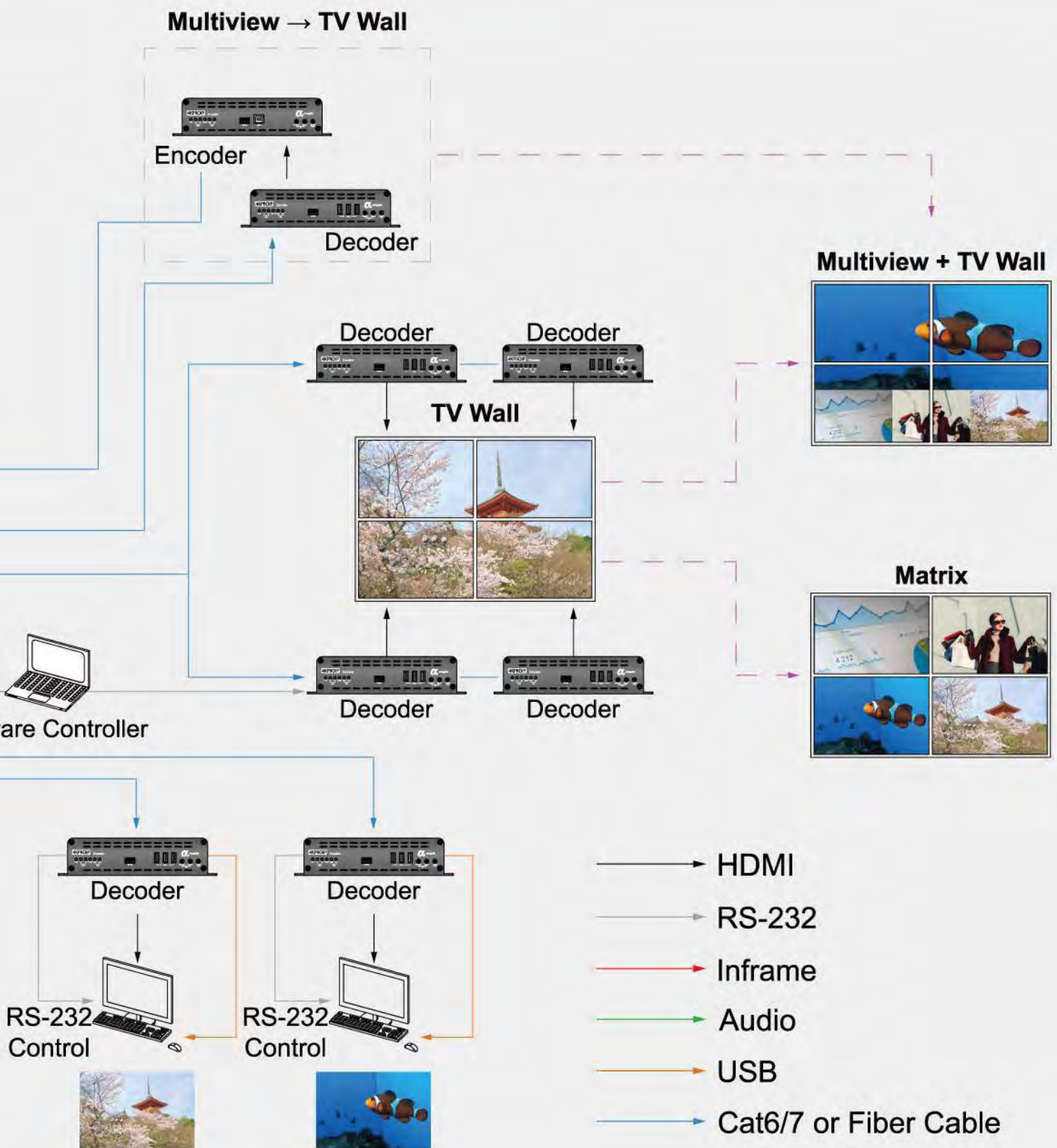




# Full Application Diagram









# 4KVIEWER SERIES

4KVIEWER series is a flexible, efficient and high performance quad screen splitter and presentation switcher that allows users to manage, control and display up to 4 AV HDMI / 4 PCs sources simultaneously via a roaming keyboard / mouse on a single screen and offers variety of oayouts. 4KVIEWER series includes 2 models, with and without USB (KVM) functions to fulfill the application purpose and budgets.

Quad View



POP



P by P



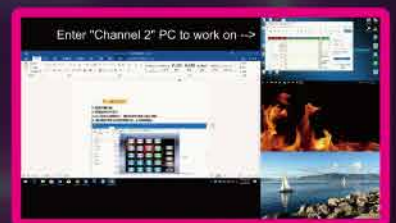
PIP



Full Screen



KVM Function







## 4KVIEWER-KVM-4

## 4KVIEWER-HDMI-4

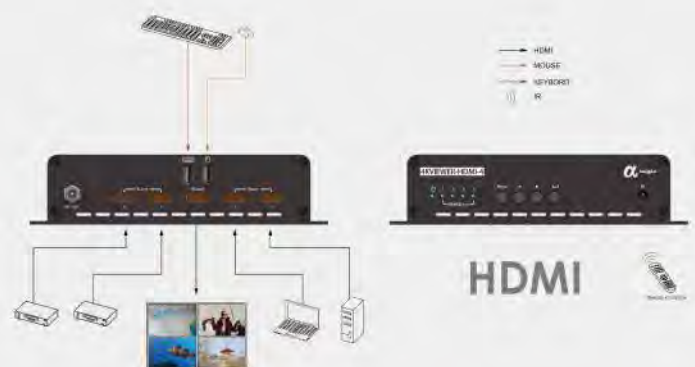
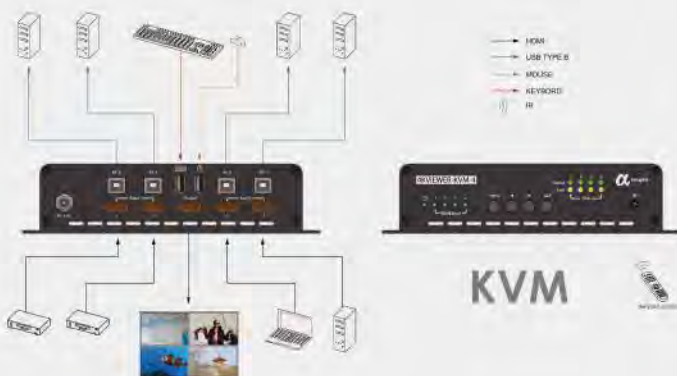


aegis 4KVIEWER series is an advanced and high performance quad view system that allow users to manage up to 4 AV sources. It allows the user to connect and control up to 4 AV or 4 PCs switches via a single set of keyboard and mouse. It provides various display modes such as Picture in Picture, Picture by Picture, Picture on Picture and users free styles. It is easy to drag, drop, resize, reposition and disable images as users' wants. Same flexibility for audio functions. Users can also switching between 4 PCs and enter in a selected PC to work on. Its set up is simple; just plug cables to appropriate ports then ready to play!



## Features

- Multi-view console controls up to 4 AV HDMI / 4PCs on one screen
- Flexible Display Modes: Quad View, Picture in Picture (PiP), Picture by Picture (PbP), Picture on Picture (PoP), Full Screen and other user free style by dragging, resizing and/or repositioning.
- Superior video quality – Up to 4K (4096 x 2160 @ 30Hz)
- Push buttons, OSD, IR Remote Control or Keyboard/-Mouse
- Image faded out and faded in function
- Up to 3 profiles of free style can be saved
- Flexibility of disable images and selection of audio source functions
- Complaint with HDMI 1.4 & HDCP 1.4
- Console keyboard mouse emulation / bypass feature that support most multimedia keyboards, mouse and multifunction mice
- No installation routines, no software configuration needed
- Drag, Drop, enlarge, reduce and save the free style display





# 4KCHANGER

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With auto-detect source function, you can just press a button to switch outputs from 4 different input sources into a HDMI output via Ethernet connection. This box is easy to connect HDMI, Mini DisplayPort, VGA +3.5mm Audio, and Type-C to a HDMI devices which provides video and audio to the display or projector.

The table box has an attractive finish that can match any conference room style.







## 4KCHANGER-TC1

## 4KCHANGER-TC2



4KCHANGER-TC1 is a multi-format connectivity box that provides AV, networking and USB charging connectivity in a conference room or classroom. For longer distances or larger space, 4KCHANGER-TC2 model which comes with an HDMI extender of 30M AV transmission will be the best choice and fulfill the application needs. Both models are with auto-detect source function, you can just press a button to switch outputs from 4 different input sources into a HDMI output. It is easy to connect HDMI, Mini DisplayPort, VGA +3.5mm Audio, and Type-C to a HDMI display or projector. The box supports high-definition video resolution up to 4K@60Hz to ensure the quality of presenters' presentation. It also has USB charging feature for charging mobile devices. As a table box, It is designed to be hidden inside the table that make the box nicely integrated into the table or podium surface; moreover, it also features with a stylish pop-up cover that hides ports when they're not in use.



### ✓ Features

- Accessibility : Allow 4 different inputs: Type-C, VGA+3.5mm Audio, Mini DP & HDMI
- Easy to switch : Auto Detect Source and Select Button functions
- Great AV presentation : support resolution up to 4K@60Hz
- Convenience : provide USB-A & USB-C charging
- Ethernet port : serve as a passing-through connection

### ✓ Features

- Accessibility : Allow 4 different inputs: Type-C, VGA+3.5mm Audio, Mini DP & HDMI
- Easy to switch : Auto Detect Source and Select Button Functions
- Great AV presentation : support resolution up to 4K@60Hz
- Convenience : provide USB-A & USB-C charging
- Flexibility : for large room space, choice of adding 30M Ethernet cable (POC) to delivery of power and data transmission distance.
- Ethernet port : serve as a passing-through connection





# 4KEXTENDER

aegis 4KEXTENDER series offers 3 models : HDMI, HDMI with KVM and DP with KVM extension up to 100M distance from a HDMI or DP source to a display using Cat.6 cables. 4KEXTENDER features of supporting 4K/60Hz high quality AV, transferring deep color video and lossless compressed audio that make 4KEXTENDER series a cost-effective and smart choice for gaming, entertainment, conference and outdoor advertising etc. applications. aegis 4KEXTENDER - DP - 100KVM also feature bidirectional PoC.







## 4KEXTENDER-100

## 4KEXTENDER-100-KVM



aegis' 4KEXTENDER-100 and 4KEXTENDER-100-KVM allows one HDMI 2.0 or 1.4 to be connected up to 100M over single Cat6 Ethernet cables for PC, DVD, PS4 and more devices. The 4KEXTENDER-100-KVM has USB 1.1 type B that offers KVM feature that allows user to control AV data from a distance. 4KEXTENDER series also provide RS 232 peripherals and 4K/60Hz high quality AV, transferring deep color video and lossless compressed audio that make 4KEXTENDER series a smart choice for entertainment, conference and outdoor advertising etc. Plus, Bi-directional IR transmission is supported that make convenient to control a HDMI video source.

### Applications :

Conference Room / Collaborative PC systems / Commercial and Residential AV systems / Classroom broadcastings / Hospital Signage systems



## ✓ Features

- Extends HDMI signals up to 100M
- Supports RS232 peripherals
- High Resolution up to 4K/60Hz (4:2:2)
- Supports lossless compressed Digital Audio
- Supports digital video formats in 'Deep Color' mode at up to 36-bit (12-bit/color)
- Uses a single CAT6/6A/7 cable for Data/DDC Transmission
- Optimal transmission quality regardless of the incoming signal quality
- Supports Bi-direction IR control HDMI source and display
- Easy to install and operate



## ✓ Features

- Extends HDMI signals up to 100M
- USB 1.1 Type B & Supports RS232 peripherals
- High Resolution up to 4K/60Hz (4:2:2)
- Supports digital video formats in 'Deep Color' mode at up to 36-bit (12-bit/color)
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## 4KEXTENDER-DP-100KVM

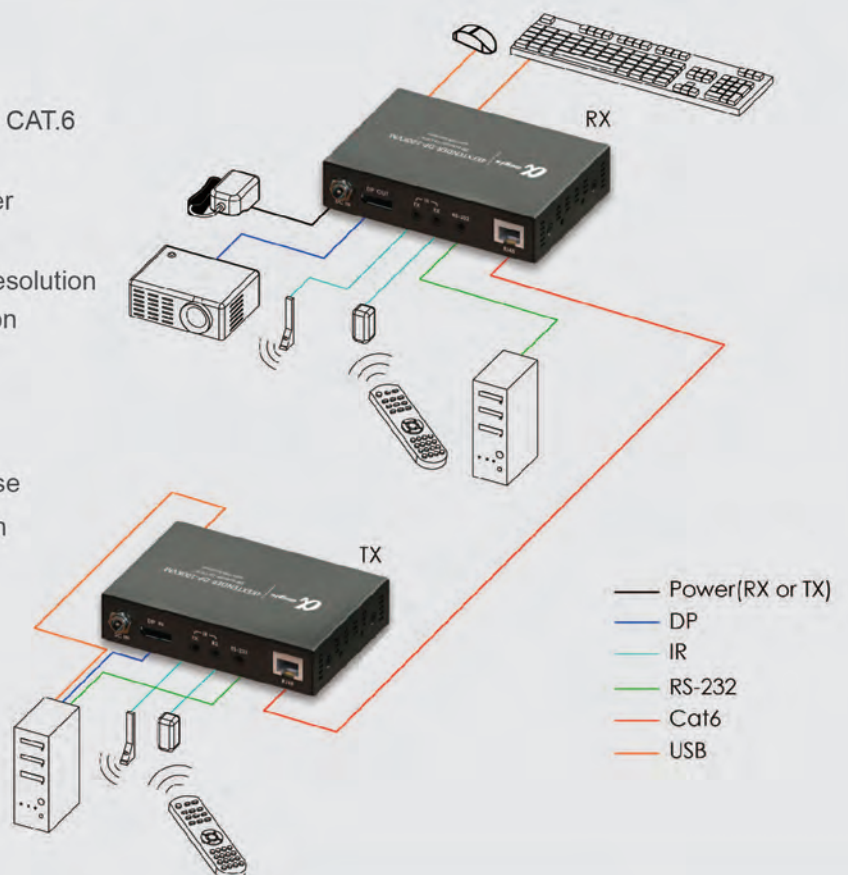


aegis' 4KEXTENDER - DisplayPort extender provide reliable, long distance signal extension for DisplayPort devices in a wide range of AV applications. This DP extender uses AVT technology to help simplify integration and ensure reliable operation. The 4KEXTENDER-DP-100KVM is a one-input DP transmitter that sends DP, audio and control up to 330 feet (100 meters) over a shielded CATx cable. It supports video resolutions up to 4K/60hz at 4:4:4 chroma sampling and complies with HDCP 1.3. It also supports bidirectional RS232 and IR signals. Moreover, it is compatible with aegis' 4KEXTENDER-100KVM HDMI Receiver to transmit AV signal to a display.



## Features

- Audio and video are transmitted digitally over CAT.6 (or up) cable without signal loss
- DP Transmitter compatible with a DP Receiver or a aegis HDMI extender Receiver
- Range: 100 meters with 4K2K/60Hz (4:4:4) resolution
- Compliant with DP1.2a, main link configuration
- HDCP Support 1.3
- HBR2/HBR/RBR link rate
- 1, 2, or 4 lanes
- Support Connect USB type Keyboard & Mouse
- Support Bidirectional IR/RS-232 pass-through
- Two ways PoC, either form Tx or Rx







**SDVoE™**  
DESIGN PARTNER

**HDMI™**  
HIGH-DEFINITION MULTIMEDIA INTERFACE



**FC CE**



aegis passionates in providing the complete AV solution for a variety of global markets. We have been committed to AV advancing technology since the beginning and will continue to develop and produce the most cost-effective products for our global customers

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