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
















PRODUCT GUIDE 2025



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### Where to buy SY products

We have a worldwide network of distributors and resellers, to find one near you please contact us at [www.sy.uk/contact](http://www.sy.uk/contact) or call +44 (0)161 868 3450

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# Message from our Founder



At SY Electronics, our commitment to innovation is matched only by our dedication to supporting the professionals who bring our technology to life. The 2025 product catalogue introduces 21 new solutions, each carefully designed to meet the evolving demands of today's AV environments. From cutting-edge HDMI distribution amplifiers to versatile switchers and extenders, we are proud to set new standards for performance, reliability, and cost efficiency.

We understand that the success of every installation depends not only on robust, high-quality products but also on the expertise and confidence of those implementing them. That's why we place a strong emphasis on exceptional support and training for system integrators. Through comprehensive resources, hands-on workshops, and tailored guidance, we ensure you are fully equipped to unlock the potential of our solutions and deliver outstanding results.

Together, we are shaping a future where technology connects, informs, and inspires.

## New Products for 2025



MC-4



MC-33



MC-44A



RDL-45



WXT-21



Apollo 91



Apollo 91U



HCS41A-48G



HS41A-48G



EVC-2000



FM10-18G



FM03-48G



HDX80-4K



WBT-21



WBT-41U



USB3-100



HDA24A-48G



HDA28A-48G



APA-80



AC2



EDID Master Pro

# Control KC & KCS Range



NebulaStudio®



Featuring an extensive array of ports and fully customisable function, the latest SY controllers usher in a new era of control possibilities. Configuring KC and KCS keypads is a straightforward, code-free process, thanks to SY Electronics' user-friendly NebulaStudio® software.

Available in 4, 6, 8, or 10 RGB button formats, KC and KCS controllers are available with options for a rotary dial and LED bar for control of a wide variety of external hardware. RGB backlit buttons can be assigned from a wide palette of colours and intensity with the added option of 'soft-transition' technology for smooth colour fades. Buttons are individually labelable complete with clear protective caps.

The utilisation of flexi-port technology maximises comms port functionality, providing up to 6x RS232 ports, 1x RS485 ports, 4x IR ports, and an optional PoE LAN port (KC). Additionally, four low voltage GPIO ports (24V, 0.2A) with enhanced over-current protection allow direct interfacing to relays and switches. All KC and KCS controllers feature an integral universal IR learner for swift IR remote control handset code learning. These controllers can be deployed as standalone or networked units, suitable for wall-mounting or recessing into furniture.

The durable aluminium faceplate is offered in three finishes: white, black, and brushed aluminium. Single (KCS) and double gang (KC) options cater to standard UK, EU, and US back-boxes.

SY Electronics has introduced NebulaStudio® software as a tool for simple, codeless configuration of KC and KCS controllers. Integrators can easily assign states, command sequences, for interaction with specific end-point devices, delays, and customise button colours, without the need for intricate coding or prior programming expertise.

The asynchronous capability of NebulaStudio® allows multiple commands to be executed simultaneously, and for more intricate requirements, and control of multiroom/networked controllers, Lua programming is also available. KC and KCS keypads are ideal for all manner of education and conferencing settings.



KC Back

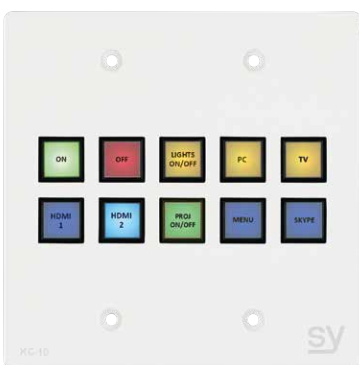


KCS Back

- **Choice of 4, 6, 8, or 10 illuminated buttons (RGB)**
- **Rotary Dial Control** (rotary dial with LED bar versions available)
- **Up to 6x RS232, 1x RS485, 4x IR emitter**
- **2x Flexi-Ports - Maximise comm port options**
- **Optional Ethernet port with PoE** (Control up to 128 devices)
- **4x digital I/O ports** (24V, 200mA - over current and back EMF protected)
- **Built-In universal Infra-Red Learner** (25-60KHz carrier)
- **Up to 32 concurrent event timers**
- **NebulaStudio® platform - 'no-code' or LUA scripting**
- **Programmable via USB-C or via LAN connection (RJ45)**
- **Durable and resilient**

## KC

6 & 10 Button Controller



6x RS232, RS485, 4x IR, 4x digital I/O, LAN, PoE  
Finishes: White, Black, Brushed Aluminium

## KCS with Rotary Dial

4V, 6V, & 8V Button Controller With Rotary Dial



6x RS232, RS485, 4x IR, 4x digital I/O, LAN, PoE  
Finishes: White, Black, Brushed Aluminium

## KCS

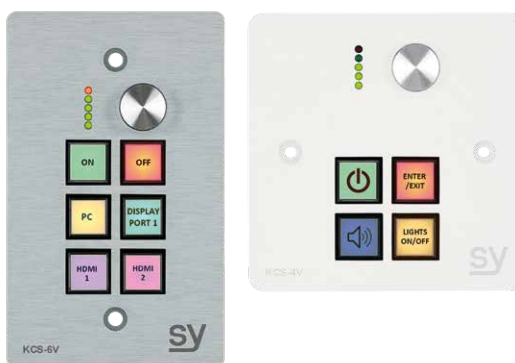
4 & 8 Button Controller



4x RS232, 4x IR, 4x digital I/O  
Finishes: White, Black, Brushed Aluminium

## KCS with Rotary Dial

4V & 6V Button Controller With Rotary Dial



4x RS232, 4x IR, 4x digital I/O  
Finishes: White, Black, Brushed Aluminium

### Region

| Region   | KC-4V | KC-6 | KC-6V | KC-8V | KC-10 | KCS-4 | KCS-4V | KCS-6V | KCS-8 |
|----------|-------|------|-------|-------|-------|-------|--------|--------|-------|
| UK       |       |      |       |       |       |       |        |        |       |
| European |       |      |       |       |       |       |        |        |       |
| USA      |       |      |       |       |       |       |        |        |       |

\*Using standard UK backbox

### Finishes

- White
- Black
- Brushed Aluminium

# Control

## MC-4

A Powerful Controller With Flexi RS232/IR Ports

NEW FOR  
2025



Packed with many features and extremely flexible, MC-4 can be deployed as a remote RS232/IR interface or as a powerful Controller. It can be used as Master controller, or Slave to any controller.

- 4x Flexi ports
- Up to 4x RS232
- Up to 8x IR outputs
- 1x RS485 bus
- 1x Ethernet (LAN) with PoE
- WiFi option
- High-level security protocol
- Large program memory
- RS232 matrix option
- RS232/IR over LAN
- No Code configure with NebulaStudio® for rapid development
- Supports LUA programming for hard-core programmers
- Stand-alone controller/expander
- Din-rail mountable

## MC-33

A Powerful Controller With Flexi Analogue I/O Ports

NEW FOR  
2025



Packed with many features and extremely flexible, MC-33 can be deployed as a remote Digital I/O interface or as a powerful Controller. It can be used as Master controller, or Slave to any controller.

- 3x Relays (2x NO and 1x CO)
- 3x GPIO (24V tolerant, 200mA sink & 100mA source)
- Internal weak pullups in input mode
- 1x RS232/RS485 Flexi communication port
- 1x Ethernet (LAN) with PoE
- WiFi option
- High-level security protocol
- Large program memory
- No Code configure with NebulaStudio® for rapid development
- Supports LUA programming for hard-core programmers
- Stand-alone controller/expander
- Din-rail mountable

## MC-44A

A Powerful Controller With Flexi Analogue I/O Ports

NEW FOR  
2025



Packed with many features and extremely flexible, MC-44A can be deployed as a remote Analogue I/O interface or as a powerful Controller. It can be used as Master controller, or Slave to any controller.

- **4x Analogue inputs** (12-bit resolution)
- **4x Flexible Analogue GPIO**
- **0-10V output** (can source up to 20mA)
- **0-20mA current source** (perfect for 4-20mA current signal)
- **Analogue inputs** (12-bit resolution)
- **1x RS232/RS485 Flexible communication port**
- **1x Ethernet (LAN) with PoE**
- **WiFi option**
- **High-level security protocol**
- **Large program memory**
- **No Code configure with NebulaStudio® for rapid development**
- **Supports LUA programming for hard-core programmers**
- **Stand-alone controller/expander**
- **Din-rail mountable**

## RLD-45

Relay + Universal I/O Expander

NEW FOR  
2025



An I/O expansion device intended to work alongside any controller such as MCx, KCx, via RS232/RS485. This highly flexible Digital/Analogue I/O expander with 4 relays can be strategically put where needed, as part of a distributed control system.

- **4x Relays** (CO - Change Over)
- **4x universal GPIO**
- **1x digital/analogue input**
- **24V tolerant, 200mA sink & 100mA source**
- **Internal weak pullup in digital input mode**
- **10-bit resolution in analogue input mode**
- **1x RS232/RS485 communication port**
- **Bluetooth facility for setup and diagnostics**
- **Din-rail mountable**
- **Compact design - 51.5x90x11.5 mm (WDH)**

# Xcalibur

## Using HX Technology to Send HDMI 2.0 Signals via Cat6 - 4K@60Hz 4:4:4 at 120m and 1080p at 150m

The Xcalibur range from SY Electronics, featuring HX technology, present a dependable and cost-effective solution for effectively handling high bandwidth video distribution. Xcalibur provides a feature rich, powerful and reliable hub, designed with the professional system integrators in mind. Suitable for the ever-growing demands in AV sectors including education, residential, meeting rooms and other commercial spaces.

- **HDMI 2.0** (18Gbps)
- **Audio De-embedding**
- **EDID and HDCP Control**
- **1080p to 150m**
- **PoC**
- **Test Pattern Generator**
- **4K60 4:4:4 to 120m**
- **RS232 Passthrough**
- **VKA** (Video Keep Alive)
- **HDR 10, 10+, & Dolby Vision**
- **RS232 Control**
- **Down Scaler**
- **Bi-directional IR**

Note:  
 Xcalibur-11 Transmitter HDMI Loop out.  
 Xcalibur-11 Receiver De-embedded stereo Audio output.  
 Xcalibur-14 De-embedded Balanced + Digital Coax Audio per output. HDMI Loop out.  
 Xcalibur-44/88 Mirrored HX + HDMI outputs. De-embedded Balanced + Digital Coax Audio per output. Source & Sink control via CEC. LAN, RS232 and IR control.

## Xcalibur 21 4K60 HDMI & USB-C Extender (120/150m)

NEW FOR  
2025



Dual input 4K60 wall-mount (single gang) Xcalibur extender, complete with Xcalibur receiver is capable of extending HDMI 2.0b video, RS232, over a single Cat6 to 120m. Feature rich programmable functions such as VKA or auto display power control, ensures optimum suitability for a variety of applications.

- **Dual input single gang wall-mount extender**
  - 1x USB Type-C
  - 1x HDMI 2.0b
- **4K60 4:4:4 up to 120m, 1080p up to 150m**
- **Display on/off - Front panel, RS232, CEC, IR**
- **Input selection - Auto, Front panel, RS232**
- **EDID & HDCP extensive management**
- **Test Pattern Generator**
- **VKA** (Video Keep Alive)
- **Built-in IR learner**

## Xcalibur 11 4K60 HDMI Extender (120/150m) With De-embed Audio



**Xcalibur 11** - Compact HDMI Extender using HX Technology, with all the common features of Xcalibur capabilities, such as: HDMI 2.0 (18Gbps) capable, Transmission distance of 4K60 4:4:4 to 120m and 1080p to 150m, HDR 10, 10+, and Dolby Vision capable, Down-Scaling, EDID & HDCP control, Test Pattern, VKA, Bi-directional IR, RS232 control, RS232 pass-through, PoC. **Xcalibur 11 Receiver unit has Audio de-embed output.**

# Xcalibur 14

1x4 HDMI 2.0 Splitter/Extender With Loop-out & 4 HX Outputs



**Xcalibur 14** - A powerful 1:4 Splitter/Extender, with all the common features of Xcalibur capabilities. The output video streams can be individually controlled. CEC pass-through, EDID and Test Pattern switch settings, Balanced Analogue Audio + Digital Coax Audio. Independent RS232 distribution down each HX line. **The Xcalibur 14 Set, comes complete with 4x Xcalibur 11 Receivers.**

# Xcalibur 44

4x4 HDMI 2.0 HX Matrix - 4 HDMI Inputs, 4 [HX + HDMI] Outputs



**Xcalibur 44** - A powerful Matrix, with all the common features of Xcalibur capabilities. Mirrored HX + HDMI outputs. De-embedded Balanced Audio + Digital Coax Audio per output. Source & Sink control via CEC. LAN, RS232 and IR control. Housed in a convenient 1U chassis. **The Xcalibur 44 Set, comes complete with 4x Xcalibur 11 Receivers.**

# Xcalibur 88

8x8 HDMI 2.0 HX Matrix - 8 HDMI Inputs, 8 [HX + HDMI] Outputs



**Xcalibur 88** - A powerful Matrix, with all the common features of Xcalibur capabilities. Mirrored HX + HDMI outputs. De-embedded Balanced Audio + Digital Coax Audio per output. Source & Sink control via CEC. LAN, RS232 and IR control. Housed in a convenient 2U chassis. **The Xcalibur 88 Set, comes complete with 8x Xcalibur 11 Receivers.**

# Switchers Wireless BYOD

## Wizard 4U2

4K BYOD Wireless/LAN Presentation System With Dual Screen & USB Camera Switching Capabilities



Up to 16 wireless sources can connect to Wizard 4U2, up to 4 of which can be displayed on either screen, using HDMI/USB-C dongle, Miracast or airplay. Independent annotation/drawing facility for each screen provides enhances user experience, whilst the resultant screen shots can be saved and shared. USB devices can easily be switched between room PC and the laptops. USB web cam, microphone, and speaker peripherals connected to Wizard 4U2 can be used to connect back to the source over WIFI effortlessly. Wizard 4U2 is the best in class with 4K resolution, dual screen, single/multi-view screens, touch-back, USB peripheral sharing, audio breakout, and many more functions. Wizard 4U2 is intuitive to operate and provides a perfect solution for all collaboration/presentation environment without compromise.

- Dual independent output Screen sharing
- Up to 4 sources shared in one screen
- Single, dual, triple, or quad multi-view
- 4K wireless sharing - Dongle, Miracast, Airplay
- Touch back support - Wireless and wired
- Dual camera switching
- Dual isolated LAN ports
- Display content sharing to remote participants

## Wand C 4K

Wireless USB-C Dongle For Use With Wizard 4U2

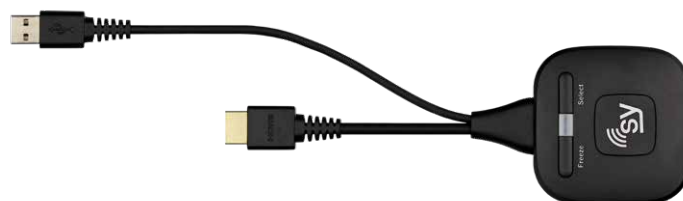


The Wand C 4K is a perfect complement to the Wizard 4U2. It can be used with any PC, laptop, tablet, media-player, or mobile for easy BYOD wireless connection. Easy to operate without the need for any software to be installed. Simply 'Touch to Show' on either output one or two on the Wizard 4U2. This can be displayed in either single or multi-view.

- Wireless USB-C BYOD dongle
- Use with any PC, Laptop, Tablet, Mobile phone
- Join in MV mode or in full screen at a touch
- Secure and easy to pair up
- Requires no software to be installed
- Simply Connect & Present
- 4K

## Wand H 4K

Wireless HDMI Dongle For Use With Wizard 4U2



The Wand H 4K is a perfect complement to the Wizard 4U2. It can be used with any PC, laptop, or media-player for easy BYOD wireless connection. Easy to operate without the need for any software to be installed. Simply 'Touch to Show' on either output one or two on the Wizard 4U2. This can be displayed in either single or multi-view.

- Wireless HDMI BYOD dongle
- Use with any PC or Laptop
- Join in MV mode or in full screen at a touch
- Secure and easy to pair up
- Requires no software to be installed
- Simply Connect & Present
- 4K



## Wizard 4U

Wireless Presentation Device With USB Mic/Cam Over WiFi

4K 18G BYOD SS 



- Pure wireless presentation/collaboration BYOD experience - No messy cables
- Present your video using, Airplay, Miracast, Chromecast, LAN
- 'Touch to Show' using the wireless Wand dongles
- Compatible with mainstream VC platforms - Teams, Zoom, Webex
- Supports Single, Dual, Triple, or Quad view
- Supports wireless Touch Back
- Can transmit back USB Camera/Audio
- Wireless content input up to 1080p
- Control and content preview using OSD
- Supports Whiteboard and On-screen Annotation
- Customisable home screen
- Central Management App
- Best-in-class data security, with Dual Network and high standard encryption
- PoE or external PSU

Wizard 4U is a wireless presentation/collaboration switch - An optimal solution for any meeting room or huddle space. The image contents of the PC, notebook, tablet, mobile phone, or any other video source can be casted to a display wirelessly, using Airplay, Chromecast, Miracast, LAN network or USB-C/HDMI Wand dongles. Presentation is simple and intuitive, with individual screen sharing or as multi-view with up to 4 images, at a touch of a button. The Touch-Back facility allows a presenter to navigate the source (PC, Laptop, etc.) from the display side. Furthermore, the presenter can annotate the screen image or just use it as a white-board. The annotated image/white-board can be saved and sent to other delegates. The Moderator facility ensures easy control of presentation with facilities such as, Stop sharing, Full-screen mode, Audio mute, and many more. The Wizard 4U can also transmit back USB Cam/audio over Wi-Fi, making it even more practical and friendly for remote participants and integration with facilities such as Zoom, Teams, and more. No cables, No mess, No limitation - Just present with ease.

# Wizard 4

Wireless Presentation Device

4K 18G BYOD SS 



- Pure wireless presentation/collaboration BYOD experience - No messy cables
- Present your video using, Airplay, Miracast, Chromecast, LAN
- 'Touch to Show' using the wireless Wand dongles
- Compatible with mainstream VC platforms - Teams, Zoom, Webex
- Supports Single, Dual, Triple, or Quad view
- Wireless content input up to 1080p
- Control and content preview using OSD
- Supports Whiteboard and On-screen Annotation
- Supports wireless Touch Back
- Customisable home screen
- Central Management App
- Best-in-class data security, with Dual Network and high standard encryption
- PoE or external PSU

Wizard 4 is a wireless presentation/collaboration switch – An optimal solution for any meeting room or huddle space. The image contents of PC, notebook, tablet, mobile phone, or any other video source can be wirelessly casted to a display wirelessly, using Airplay, Chromecast, Miracast, Lan network or USB-C/HDMI Wand dongle. Presentation is simple and intuitive, with individual screen sharing or as multi-view with up to 4 images, at a touch of a button. The Touch-Back facility allows a presenter to navigate the source (PC, Laptop) from the display side. Furthermore, the presenter can annotate the screen image or just use it as a white-board. The annotated image/white-board can be saved and sent to other delegates. The Moderator facility ensures easy control of presentation with facilities such as, Stop sharing, Full-screen mode, Audio mute, and many more. No cables, No mess, No limitation – Just present at will with ease.

## Wand C

Wireless USB-C Dongle For Use With Wizard 4 & 4U



The Wand C is a perfect complement to the Wizard 4 & 4U. It can be used with any PC, laptop, tablet, media-player, or mobile for easy BYOD wireless connection. Easy to operate without the need for any software to be installed. Simply 'Touch to Show' in single or multi-view display. The Wand features visual and Haptic feedback to confirm operation choice.

- Wireless USB-C BYOD dongle
- Use with any PC, Laptop, Tablet, Mobile phone
- Join in MV mode or in full screen at a touch
- Secure and easy to pair up
- Requires no software to be installed
- Simply Connect & Present
- 1080p



## Wand H

Wireless HDMI Dongle For Use With Wizard 4 & 4U



The Wand H is a perfect complement to the Wizard 4 & 4U. It can be used with any PC, laptop, or media-player, for easy BYOD wireless connection. Easy to operate without the need for any software to be installed. Simply 'Touch to Show' in single or multi-view display. The Wand features visual and Haptic feedback to confirm operation choice.

- Wireless HDMI BYOD dongle
- Use with any PC or Laptop
- Join in MV mode or in full screen at a touch
- Secure and easy to pair up
- Requires no software to be installed
- Simply Connect & Present
- 1080p

# Switchers Seamless/Fast

## MFS51-18G

5 input Multi-Format Presentation Fast Switcher With Full Up/Down Scaler



The MFS51-18G is a powerful & flexible 4K Scaling Presentation Switcher with input resolutions up to HDMI 2.0 4K60 4:4:4 (18Gbps) and output at different resolutions up to 4K30. It offers fast switching between the 3x HDMI, 1x DisplayPort and 1x VGA (or component/composite) inputs with scaled mirrored video outputs as HDMI and HDBaseT (4K30 to 40m, 1080p to 70m - using Slim70-Edge Rx). The unit allows for de-embedded stereo audio output, as well as embedding any external audio on to the selected input with line or microphone (phantom power available) facility.

- Supports inputs up to **HDMI 2.0 4K60** (18Gbps)
- **3x HDMI 2.0, 1x DisplayPort 1.2, 1x VGA inputs**
- **Full up/down scaler to 4K30**
- **HDCP 1.4 & 2.2 compliant**
- **HDBaseT output to 70m @1080p or 40m @4K30**
- **Extensive audio embedding/de-embedding and microphone functions inc. auto ducking**
- **Auto switch and monitor on/off options**
- **Easy EDID and HDCP Management**
- **Control: Front panel, IR, RS232, LAN, Contact closure**

# Switchers Multi-format/HDMI

## APOLLO 91

9x1 4K60 Seamless Presentation Switcher, Multi-viewer

NEW FOR  
2025



An advanced 4K60 seamless switcher with built-in HDBaseT output and Multi-view capability.

- **7x HDMI 2.0b 4K60 4:4:4** (18Gbps)
- **1x Display port** (4K60)
- **1x USB-C** (4K60) with **60W charging**
- **4x balanced stereo analogue inputs**
- **2x Mic/Line inputs**
- **Mirrored outputs: HDBT** (100m), **2x HDMI**
- **Seamless Switching**
- **Extensive Multi-view modes: Dual, Triple, Quad, PnP**
- **Scale up/down to 4K60 4:4:4**
- **Audio out - Toslink, balanced stereo analogue**
- **Audio de-embed and embedding functionality**
- **Audio Break-away or follow-video capability**
- **RS232 and IR pass-through**
- **Control: LAN and RS232**

## APOLLO 91U

9x1 4K60 Seamless KVM Switcher, Multi-viewer

NEW FOR  
2025



A powerful and highly advanced 4K60 seamless KVM switcher, with myriads of useful features. The up/down scaler ensures video compatibility, whilst the many Multi-viewer options aid in managing the sources. The Keyboard & Mouse hotkey as well the roaming mouse functions assist navigating between the sources yet further.

- **7x HDMI 2.0b 4K60 4:4:4** (18Gbps)
- **1x Display port** (4K60)
- **1x USB-C** (4K60) with **60W charging**
- **7x USB-B** (Source)
- **5x USB-A** (Device)
- **Mirrored outputs: HDBT** (100m), **2x HDMI**
- **Seamless Switching**
- **Extensive Multi-view modes: Dual, Triple, Quad, PnP**
- **Scale up/down to 4K60 4:4:4**
- **Audio out - Toslink, balanced stereo analogue**
- **Keyboard & Mouse Hot-Key control**
- **Roaming mouse function in MV mode**
- **RS232 and IR pass-through**
- **Control: LAN and RS232**



## HCS41A-48G

4x1 48Gbps HDMI & USB-C Switcher

NEW FOR  
2025



48Gbps HDMI 2.1a and USB-C 4 port switcher packed with amazing features. Extensive EDID & HDCP management as well Test Pattern Generator to assist installations, whilst features such as Display on/off, video mute, VKA, etc. elevate the system functionality.

- **8K 4x1 switcher - 2x HDMI & 2x USB-C inputs**
- **8K60 4:2:0 12 bit HDR** (48Gbps bandwidth)
- **USB-C host charging** (Optional)
- **ALLM** (Auto Low Latency Mode) & **VRR** (Variable Refresh Rate)
- **Support eARC back to input 1**
- **HDCP 2.3 support**
- **EDID & HDCP advanced management**
- **Test Pattern Generator - Assist system integration**
- **VKA** (Video Keep Alive) **function**
- **Auto & manual switching**
- **Audio de-embed - Optical Toslink, Stereo Analogue L/R** (3.5mm Jack)
- **Screen mute for privacy**
- **Display on/off**
- **Upgradable via GUI**
- **Extensive API for unit configuration via RS232**
- **Control: Front panel, LAN, RS232, IR**

## HS41A-48G

4x1 HDMI 2.1 (48Gbps) Switcher

NEW FOR  
2025



- **4x1 HDMI 2.1a (48Gbps) Switcher**
- **8K60 4:2:0 12 bit, 8K30 4:4:4 12 bit, 4K120 4:4:4 12bit**
- **8K → 4K/2K downscaling**
- **HDR to SDR conversion option**
- **EDID and HDCP 2.3 advanced management**
- **ALLM (Auto Low Latency Mode) & VRR (Variable Refresh Rate)**
- **Audio Out - Optical Toslink, Balanced Stereo Analogue**
- **Test Pattern Generator**
- **HDMI output can power an AOC cable**
- **Control: LAN, RS232, IR**

## HDS41-18G

4x1 HDMI 2.0 Switcher With ARC

**4K<sub>18G</sub> ARC**



The HDS41-18G is a 4x1 4K 18Gbps HDMI Switcher, compatible with all resolutions up to 4K60 4:4:4. Easily de-embed the audio via L/R analogue or optical TosLink. This unit also supports ARC (Audio Return Channel), CEC Pass Through, HDCP, and EDID management. Auto Switching for easy input selection. Control is available via RS232, IR and front panel.

- **4x1 HDMI 18Gbps Switcher**
- **Supports all HDMI resolutions up to 4K60 4:4:4 HDR**
- **De-embedded audio**
- **Auto Switching**
- **Control from RS232, IR, Front panel**
- **ARC support**
- **Supports CEC Pass Through**
- **HDCP Management**
- **EDID Management**

## MSU-121

12 input Presentation Switcher



A cost effective 4K Presentation Switcher with output scaling resolutions up to 1920x1200. With 10x 4K HDMI as well as 2x VGA inputs, this switcher is suitable for a variety of installations. The MSU-121 is a smart choice for education and corporate environments.

- **Inputs: 10x HDMI (4K30) and 2x VGA (1920x1200)**
- **Scaled Outputs: 2x Mirrored HDMI (1080p Max)**
- **Supports HDCP 1.4 with cascade management**
- **Extensive EDID**
- **De-embedded Audio - Stereo jack + balanced output**
- **Front panel Lock/Unlock**
- **Contact closure selection & Tally out**
- **RS232 and TCP/IP control**

# Video Wall Processors

## VWP-24-18G

High resolution Video-Wall Processor - HDMI 2.0 18Gbps



## VWP-29-18G

High resolution Video-Wall Processor - HDMI 2.0 18Gbps



These Dual input Video-Wall processors can accept a wide range of HDMI inputs up to 4K60 4:4:4. All outputs can be scaled to target display's optimum resolution. These units can be operated as stand alone or cascaded several times to accommodate very large video-wall configurations.

- **Inputs: 2x HDMI 2.0** (All resolutions up to 4K60 4:4:4)
- **Outputs: 4/9x HDMI 2.0** (All resolutions up to 4K60 4:4:4)
- **Bezel compensation - Quick and easy**
- **Screen Stitching - Second video to any display within VW**
- **Dynamic Single or Multiple Video-Wall capability**
- **Cascade or Daisy-Chain - Can create large VW (8x8)**
- **Pre-set configurations - Simple recall of saved VW effects**
- **Extensive EDID and HDCP Management**
- **Test Pattern and OSD labels to help installation**
- **RS232 and TCP/IP control**

# Matrix Seamless

## Apollo 41

4x1 Seamless Switch, Multi-viewer



The Apollo 41 multi-viewer is a 4x1 Seamless Video Switcher with multi-view capability. It is HDMI 2.0 rated and can handle all resolutions up to 4K60 4:4:4, with full up/down scaler (resolution & refresh rate). The unit can also display in multi-view mode (Dual, triple, Quad, or PiP), with customisation capability. The de-embed audio is available as optical Toslink as well as L+R analogue output. The break-away audio source can be from any one of the HDMI inputs. The unit can be controlled via front panel buttons, IR remote, RS232 commands.

- **4x1 Seamless switcher**
- **HDMI 2.0b 4K60 4:4:4** (18Gbps)
- **Full up/down scaler – any resolution, any refresh rate**
- **Multi-view display – Dual, Triple, Quad, PiP**
- **HDCP 2.2 and HDCP 1.x compliant**
- **Extensive EDID and HDCP management**
- **De-embed Audio – Optical Toslink, and L+R Analogue**
- **VKA – Video Keep Active**
- **Test Pattern Generator**

## Apollo 42

4x2 Seamless Matrix, Multi-viewer



The Apollo 42 multi-viewer is a 4x2 Seamless Video Matrix with multi-view capability. It is HDMI 2.0 rated and can handle all resolutions up to 4K60 4:4:4, with full up/down scaler (resolution & refresh rate) per output. Each output can also independently display in multi-view mode (Dual, triple, Quad, or PiP), with customisation capability. Each set of de-embed audio outputs are available as optical Toslink as well as L+R analogue output. The break-away audio source can be from any one of the HDMI inputs. The unit can be controlled via front panel buttons, IR remote, RS232 commands.

- **4x2 Seamless video Matrix**
- **HDMI 2.0b 4K60 4:4:4** (18Gbps)
- **Full up/down scaler – any resolution, any refresh rate**
- **Multi-view display – Dual, Triple, Quad, PiP**
- **HDCP 2.2 and HDCP 1.x compliant**
- **Extensive EDID and HDCP management**
- **De-embed Audio – Optical Toslink, and L+R Analogue**
- **VKA – Video Keep Active**
- **Test Pattern Generator**

# SMS-44-18G

4x4 HDMI 2.0 Seamless Matrix With Full Scaler & Video Wall Mode



SEAMLESS



SMS-44-18G is a powerful 4x4 HDMI 2.0 (4K60 4:4:4) Seamless Matrix, with accurate 4K scaling per output. Benefitting from totally independent input and output resolutions/refresh rates (up to 4K60), ensures optimum display per output at rapid switching speeds, with HDCP control and HDR compatibility. Mixed Video-Wall and Matrix facility ensures maximum flexibility. A front panel locking feature helps prevent accidental operation. The Audio De-embedded Output can select from any Input Source Audio signal, or it can follow the HDMI Output. SMS-44-18G can be controlled from Front Panel, IR, RS232, and LAN.

- **4x4 HDMI 2.0 (18Gbps) Seamless Scaler Matrix**
- **Supports all resolutions up to 4K60 4:4:4 (18Gbps)**
- **Seamless switching**
- **Powerful Up/Down scaler per output**
- **Flexible Video-Wall capability**
- **Test Pattern Generator per output**
- **4x L/R audio embed**
- **4x Stereo/Toslink & Balanced Stereo De-embed**
- **4x4 IR Matrix**
- **Extensive EDID and HDCP Management**
- **Control: Front Panel, IR, RS232, LAN**

# SMS-88-18G

8x8 HDMI 2.0 Seamless Matrix With Full Scaler & Video Wall Mode



SEAMLESS



SMS-88-18G is a very powerful 8x8 HDMI 2.0 (4K60 4:4:4) Seamless Matrix, with accurate 4K scaling per output. Benefitting from totally independent input and output resolutions/refresh rates (up to 4K60), ensures optimum display per output at rapid switching speeds, with HDCP control and HDR compatibility. Mixed Video-Wall and Matrix facility ensures maximum flexibility. A front panel locking feature helps prevent accidental operation. Supports 8x external audio embedding facility, as well as 8x de-embedded L/R audio outputs. SMS-88-18G can be controlled from Front Panel, IR, RS232, and LAN.

- **8x8 HDMI 2.0 (18Gbps) Seamless Scaler Matrix**
- **Supports resolutions up to 4K60 4:4:4 (18Gbps)**
- **Seamless switching**
- **Powerful Up/Down scaler per output**
- **Flexible Video-Wall capability**
- **8x embed and 8x L/R de-embed facility**
- **8x8 IR matrix**
- **Individual input or output locking**
- **Flexible Mixed Video-Wall capability**
- **Extensive EDID & HDCP Management**
- **Control: Front Panel, IR, RS232, LAN**
- **1U 19" rack mount**

# Matrix HDMI

## MSU44-18G

4x4 HDMI 2.0 18Gbps Matrix



The MSU44-18G is a 4x4 HDMI matrix switcher with full 18Gbps bandwidth and both analogue and digital audio De-embedding on each of its outputs. Each output can automatically downscale 4K to 2K where necessary to ensure that an image will be received on all Displays. The matrix has four methods of control: Front Panel, RS232, LAN or IR. A front panel locking feature helps prevent accidental operation.

- **4x4 HDMI 2.0 (18Gbps) Matrix**
- **HDMI resolution up to 4K60 4:4:4 (18Gbps)**
- **Auto-scaling 4K to 2K per output**
- **HDCP 1.4 and HDCP 2.2 compliant**
- **Supports HDR10, HLG, & Dolby Vision**
- **Extensive EDID & HDCP Management**
- **4x Analogue**
- **4x Digital Coax audio outputs**
- **Control from Front Panel, RS232, LAN & IR**
- **Memory scene Pre-sets**
- **Test Pattern Generator (Various Resolutions and Colours)**
- **Web Browser GUI**

## MSU88-18G

8x8 HDMI 2.0 18Gbps Matrix



The MSU88-18G is an 8x8 HDMI matrix switcher with full 18Gbps bandwidth and both analogue and digital audio De-embedding on each of its outputs. Each output can automatically downscale 4K to 2K where necessary to ensure that an image will be received on all Displays. The matrix has four methods of control: Front Panel, RS232, LAN or IR. A front panel locking feature helps prevent accidental operation.

- **8x8 HDMI 2.0 (18Gbps) Matrix**
- **HDMI resolution up to 4K60 4:4:4 (18Gbps)**
- **Auto-scaling 4K to 2K per output**
- **HDCP 1.4 and HDCP 2.2 compliant**
- **Supports HDR10, HLG, & Dolby Vision**
- **Extensive EDID & HDCP Management**
- **8x Analogue + 8x Digital Coax audio outputs**
- **8x Analogue audio inputs**
- **Control from Front Panel, RS232, LAN & IR**
- **Memory scene Pre-sets**
- **Test Pattern Generator (Various Resolutions and Colours)**
- **Web Browser GUI**



## MS42-18G

4x2 HDMI 2.0 Scaler Matrix



A superb HDMI 2.0b 4K60 4:4:4 Scaler Matrix with 18Gbps signal bandwidth, supporting HDR and HLG. Each output can be scaled from 4K to 1080p with HDCP 2.2 to HDCP 1.4 conversion, ensuring compatibility with HD monitors. Also supports Dolby Vision. Audio de-embedding is provided for each output, with stereo L/R, as well as optical Toslink. The Auto option ensures automatic input selection, as well as enabling each display to be automatically turned on/off, using CEC or RS232 control.

- **4x2 HDMI 2.0 (18Gbps) Scaler Matrix**
- **All resolutions up to 4K60 4:4:4 (18Gbps)**
- **Output Modes: 4K to 1080p scaler, Auto, bypass, HDBT mode**
- **Optical and L/R de-embedded audio per output**
- **Extensive EDID management**
- **Auto Selection and display on/off option**
- **Control: Front panel, IR, RS232, LAN**

## MS51U-18G

5x1 Seamless 4K60 Presentation Switcher,  
With 3x HDMI & 2x USB-C Inputs








Picture perfect 4K60 5x1 seamless switcher and multi-viewer with USB-3.0 as well as mirrored HDMI and HDBT output. Full control of KVM operation via local or remote HDBT receiver. Optimised presentation requirements are achievable with seamless switching, multi-view options together with independent audio routing. The Dante in/out audio interface can effortlessly integrate into Dante enabled system, with flexible audio embed/de-embed management. The balanced analogue audio in/out further ensures high quality audio interface options.

- 5x1 seamless switcher and multi-viewer
- HDMI 2.0 4K60 18Gbps presentation switcher
- Input: 2x USB-C, 3x HDMI, analogue audio, Dante 2ch
- Output: HDMI, mirrored HDBT, analogue audio, Dante 2ch
- 2x USB-3.0, 2x USB-2.0 USB device
- Dante 2x2 audio (input and output)
- Audio embed and de-embed
- Control: TCP/IP and web GUI, RES232, IR, front panel, CEC
- Ethernet over USB-C for seamless internet
- 60W USB-C source charging

## Apollo 41U

4x1 Video Seamless KVM (USB 3.0)  
Switcher, Multi-viewer








The Apollo 41U is a 4x1 Seamless KVM with multi-view capability. It is HDMI 2.0 rated and can handle all resolutions up to 4K60 4:4:4, with full up/down scaler (resolution & refresh rate). The unit can also display in multi-view mode (Dual, Triple, Quad, or PiP), with customisation capability. The de-embed audio is available as optical Toslink as well as L+R analogue output. The break-away audio source can be from any one of the HDMI inputs. Keyboard Hotkey and Roaming mouse facility ensures ease of use and maximises flexibility. The unit can be controlled via front panel buttons, IR remote, RS232 commands.

- 4x1 Seamless KVM switcher with USB 3.0
- HDMI 2.0b 4K60 4:4:4 (18Gbps)
- Full up/down scaler – any resolution, any refresh rate
- Multi-view display – Dual, Triple, Quad, PiP
- 2x additional USB 3.0 ports + Roaming mouse/keyboard Hotkeys
- HDCP 2.2 and HDCP 1.x compliant
- Extensive EDID and HDCP management
- De-embed Audio – Optical Toslink, and L+R Analogue
- 3x USB 3.0 peripheral ports
- Test Pattern Generator

# KVM41-U3-18G

Quad USB 3.0 KVM Switch



KVM41-U3-18G is a 4 port KVM switch, with 2x HID USB, 2x USB 2.0, 2x USB 3.0 peripherals. The unit is capable of handling all video resolutions up to 4K60 4:4:4 (18Gbps). Input selection can be made using Front panel buttons, RS232, Keyboard Hotkey, or Mouse Hotkey. Extensive EDID and HDCP management facility helps to optimise system set up. Ideal for use anywhere multiple computers are controlled by one operator, for example within Financial Institutions, Transport Control Centres, Education, Conferencing Facilities, Medical Facilities and Hospitality Establishments, to name but a few.

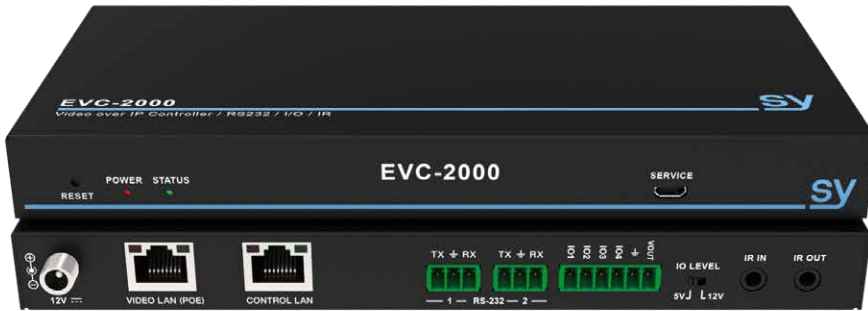
- **4x1 KVM switcher with USB 3.0**
- **HDMI 2.0, 18Gbps - All resolution up to 4K60 4:4:4, HDR**
- **Supports 2x HID USB, 2x USB 2.0, 2x USB 3.0 type-A peripherals**
- **Supports Dolby Vision, HLG, HDR10, Deep Colour up to 12-bit**
- **Supports LPCM audio up to 7.1, Dolby Atmos, DTS-X**
- **Supports HDCP 2.2 and HDCP 1.4**
- **Extensive EDID and HDCP management**
- **L/R Analogue Audio de-embedding**
- **Control - Keyboard hotkey, Mouse hotkey, Front Panel button and RS232**
- **Supplied with side mounting brackets**

# AV over IP

## EVC-2000

Video over IP Controller (Dual 1G Network)

NEW FOR 2025



The EVC-2000 Video over IP Controller manages and controls all E600 encoders and decoders in a distributed Video over IP (VOIP) network. The Dual 1G network ports ensure isolation between the multicast Video distribution network and the control network.

EVC-2000 supports Web GUI/TCP/RS-232/IR/GPIO controls and PoE function. Video streams, CEC, USB, RS232, IR, and Audio can be routed synchronously or independently. Dante audio management is easy to manage and integrate with Dante Audio network. Video-Wall, Scaling, rotation, as well as ARC/eARC conversion and management are amongst many available facilities.

- **Dual network Controller – Isolate Video (PoE) and Control networks**
- **Flexible IP configuration – Auto, DHCP, and Manual**
- **HTTPS, SSH, SFTP security compatible**
- **Simple yet powerful Video, USB, RS232, IR, Audio, Dante distribution & management**
- **Video-wall, video rotation, video scaling features**
- **Pre-view video – Convenient facility**
- **System Management – Easy Project management and system configuration**
- **Web GUI control – intuitive Drag & Drop operations**
- **Extensive protection against ESD and lightning**
- **Reliability – Designed for 24/7 operation. Fit & Forget**

## E600

Video over IP Distribution (1G Network)



The E600 boasts versatile features, including both Cat6 and fibre output ports within a single box. Delivering high resolution video over IP up to 4K60 4:4:4 18Gbps, utilising JPEG2000 technology. Flexible connectivity between all encoders and decoders over a 1G switch allows point to point distribution along with matrix capabilities. Possesses a wide range of control options including front panel, IR or RS232. The encoder input supports up to 4K60 4:4:4, providing options for audio embedding or de-embedding, the decoder output also supports up to 4K60 4:4:4 with audio de-embedding.

- **Video over IP**
- **4K60**
- **USB 2.0**
- **KVM support**
- **Bi-directional RS232**
- **Two-way IR**
- **ARC/eARC**
- **CEC**
- **Two digital I/O ports**
- **Supports PoE**
- **HDMI 2.0 – 4K60 4:4:4 18Gbps**
- **Up to HDCP 2.2 compliant**
- **Video Wall configuration up to 9x9**
- **1G Ethernet up to 100m**
- **Cat6 or SPF+ fibre**

# Extenders HDMI

## FM10-18G

18Gbps HDMI Fibre Extender

NEW FOR 2025



HDMI 2.0 (18Gbps) extension over simplex SM fiber (LC) at up to an impressive 10Km. RS232 and IR signals are also transported over this single fiber. Audio embed and de-embed functions are nice additional features, together with a built-in Test Pattern Generator.

- **HDMI 2.0b (4K60 4:4:4) over fibre with 10Km range** (single-mode fibre)
- **Bi-directional RS232 and IR pass-through**
- **HDMI local loop-out on the transmitter unit**
- **EDID management**
- **HDCP 2.2 and DVI 1.0 compliant**
- **Test Pattern Generator**
- **Audio embedding on the transmitter unit**
- **Audio de-embedding on the receiver unit**
- **Fibre connection via simplex LC connection**

## FM03-48G

48Gbps HDMI Fibre Extender

NEW FOR 2025



HDMI 2.1b (48Gbps) HDMI extension over simplex MM fibre (LC) at up to 300m.

- **Extends HDMI 2.1a (8K60 4:2:0 12 bits) over a single fibre** (multi-mode fibre) **to 300m**
- **Bi-directional RS232 and IR pass-through**
- **Re-clock video signal**
- **HDMI local loop-out on the transmitter unit**
- **Dual HDMI output on the receiver unit**
- **EDID management**
- **Compliant up to HDCP 2.3**
- **Test Pattern Generator**
- **Audio de-embedding on the receiver unit**
- **Single multi-mode fibre**

## HDX80-4K

4K Cat6 Extender

NEW FOR 2025



From the essential extender range the HDX80-4K delivers all resolutions up to 4K HDMI at up to 80m over a Cat6 cable.

- **Extends HDMI 1.4b (4K60 4:2:0 or 4K30 4:4:4) over 80m of Cat6**
- **HDMI loop-out (Transmitter)**
- **Bi-directional IR**
- **Support for PoC at one end**
- **Essential range cool technology ensures the longevity of the product**
- **Compliant up to HDCP 1.4**
- **EDID pass-through**
- **Built-in mounting brackets**

# Extenders HDMI

## WBT-21

HDBaseT 4K Wall-plate Extender

NEW FOR 2025



Dual input 4K wall-mount (2 gang) HDBT extender, which can directly connect to any HDBaseT enabled display. HDMI Video, RS232, and IR signals are extended over a single Cat6 to 70m. Feature rich programmable functions such as VKA or auto display power control, ensures optimum suitability for a variety of applications.

- **Dual input double-gang wall-mount HDBT extender**
  - 1x **USB Type-C**, (capable of 60W charging)
  - 1x **HDMI 1.4b**
  - 1x **USB Type-B**
- **4K30 4:4:4 up to 40m, 1080p up to 70m**
- **Display on/off – Front panel, RS232, CEC, IR**
- **Input selection – Auto, Front panel, RS232**
- **EDID & HDCP extensive management**
- **VKA** (Video Keep Alive)
- **Built-in IR learner**

## WBT-41U

HDBaseT 4K60 Wall-plate Extender

NEW FOR 2025



Feature rich 4K60 wall-mount 4 input HDBT extender. HDMI Video, USB, RS232, and IR signals are extended over a single Cat6 to 100m. Feature rich programmable functions such as VKA or auto display power control, ensures optimum suitability for a variety of applications.

- **4x 4K60 video & USB inputs**
  - 2x **USB Type-C**, (one port capable of 60W charging)
  - 2x **HDMI 2.0b**
  - 2x **USB Type-B** (each coupled with a HDMI port)
- **Extends HDMI 2.1b (4K60 4:4:4) up to 100m**
- **Display on/off – Front panel/Auto, using RS232, CEC, or IR**
- **Input selection – Auto, Front panel, RS232**
- **EDID & HDCP extensive management**
- **VKA** (Video Keep Alive)
- **Built-in IR learner**

# SLIM 70 PRO

Feature Rich HDBT Extender



We've taken the most reliable and slimmest 4K HDBT extender set on the market and pumped it full of performance enhancing features. The unit is capable of extending HDMI signals via Cat6 up to 70m @1080p or 40m @4K, bi-directional IR and 2x RS232. The enhancements include support and management of HDCP 1.4 and HDCP 2.2, built-in down-scaler for 4K60 4:4:4 to 4K60 4:2:0/1080p, and Test Pattern Generator with Checkerboard or Solid Colour Patterns for a wide range of resolutions/frame rates.

The Video Keep Alive function maintains video output when there is no signal detected. The HPD Control function can force the source to re-communicate with the display, and Audio De-embedding is available via Analogue Stereo L/R or Optical S/PDIF. EDID management, Temperature diagnostics, overheat detection and reporting with auto shut off facility plus the use of a single 48V power supply with iPoC (intelligent PoC) from either side are amongst the many added features. All this functionality is still packed in a small form factor and still the slimmest HDBaseT extender in the world. The Slim70-Pro extender is formidable and one of the most versatile and innovative products we have designed to date.

- Single Cat6 to 70m @1080p or 40m @4K
- Resolution Scaling 4K to 1080p or Colour Space Scaling 4:4:4 to 4:2:0
- HDCP 1.4/2.2 management
- Test Pattern Generator
- Video Keep Alive option
- Audio de-embedder
- Cable length measurement
- Temperature diagnostics, reporting and auto recover
- Extensive EDID management
- HPD control
- Bi-directional IR
- 2x Bi-directional RS232
- 48V PSU with iPoC (intelligent PoC) from either side

# UHD-FM

4K HDMI Over Fibre Extender - RS232, USB



4K Fibre extender to 1.4Km with USB and RS232 capability. Both the Transmitter and Receiver units can have up to 4 devices each (Keyboard, Mouse, Touch-screen, Data storage), allowing full control from either end. The RS232 can be set to any baud rate (1200 to 115.2K), with simple pc configuration interface.

- Duplex LC SFP+ Fibre HDMI/KVM extender
- Supports HDM I.4, 4K60 4:2:0 (10.2Gbps)
- Can extend 4K video to 1400m (Single-mode fibre)
- Accepts 4x USB-A HID device on each side
- Supports, Keyboard, Mouse, Touch-screen, Storage
- Hotkey controllable
- Bi-directional RS232 up to 115.2Kb

# UFM-4K

Mini 4K Over Fibre Extender



4K mini Fibre extender, using only a single filament with LC-LC connections. Bypass EDID and HDCP 1.4 are supported for up to 300m using any type of fibre (Multi-mode or Single-mode). Maximum distance of 2Km (Single-mode) can be achieved without HDCP encryption.

- Mini Fibre optic extender
- Supports HDM I.4, 4K30 4:2:0 (10.2Gbps)
- Simplex LC-LC connection (mono fibre)
- 300m extension using Multi-mode or Single Mode
- 2000m using Single-mode (HDCP not supported)
- Pass-through EDID
- Totally immune to EMC and ground noise

# Extenders USB

NEW FOR 2025

## USB3-100

USB 3.2 Gen1 Extender



This dual input USB 3.2 Gen1 extender uses a single Cat6 cable (100m), facilitating 2 local devices, 4x remote devices, and RS232 passthrough/control. The host USB-C charging option creates flexibility and convenience.

- 5Gbps USB 3.2 Gen1 100m extender
- Dual selectable inputs - USB-C & USB-B
- 4x Remote USB devices (2x USB-C and 2x USB-A)
- USB-C host charging (Optional)
- Locking screw for all USB-C
- Auto & manual switching
- 2 devices bundled with host
- Two-way PoC with PoC on/off option
- RS232 control and pass-through
- USB devices power mode management
- USB devices overload protection (3.5A)

## Xcalibur 11U

HDMI 2.0 & USB Extender



Using HX technology, Xcalibur 11U can extend HDMI 2.0 (18Gbps) video signals along with USB 2.0 data for use with KVM etc. Transmit HDMI 2.0 up to 4K60 4:4:4 to 120m over a single Cat6, with Auto Down-Scaling, EDID & HDCP control. The USB 2.0 can handle Video, Keyboard/ Mouse and USB storage.

- HDMI 2.0b - Supports up to 4K60 4:4:4 (18Gbps)
- USB 2.0 - Supports all USB 2.0 or below, to 170 Mbps max.
- Supports Bulk, Control, Interrupt, and Isochronous Transfers
- USB Transmission distance: 100m
- Auto 4K to 1080p intelligent Scaler
- HDCP 1.4/2.2 compliant
- HDCP management
- EDID management
- Bi-directional IR
- PoC - Requires only one PSU at the Transmitter or Receiver

## USB50

USB 2.0 Over Cat6 Extender



The USB50 extender can extend USB 2.0 data at maximum rate up to 50m using a single Cat6 cable. Only the receiver requires a power supply. Full compliance of all USB 2.0 formats ensures flawless operation, including Video and Audio streams. 2x USB-A connectors are available at the receiver. Simply Plug & Go.

- USB 2.0 over Cat6 extender to 50m
- Supports all USB 2.0 or below, to 480 Mbps max.
- Supports Bulk, Control, Interrupt, and Isochronous Transfers
- Perfect for Keyboard, mouse, video, and audio
- Only one PSU at the receiver end

## USB100

USB 2.0 Over Cat6 Extender



The USB100 extender can extend USB 2.0 data at 170 Mbps up to 100m using a single Cat6 cable. Use a PSU at both the Transmitter and Receiver. Full compliance of all USB 2.0 formats ensures flawless operation, including Video and Audio streams. 2x USB-A connectors are available at the receiver. Simply Plug & Go.

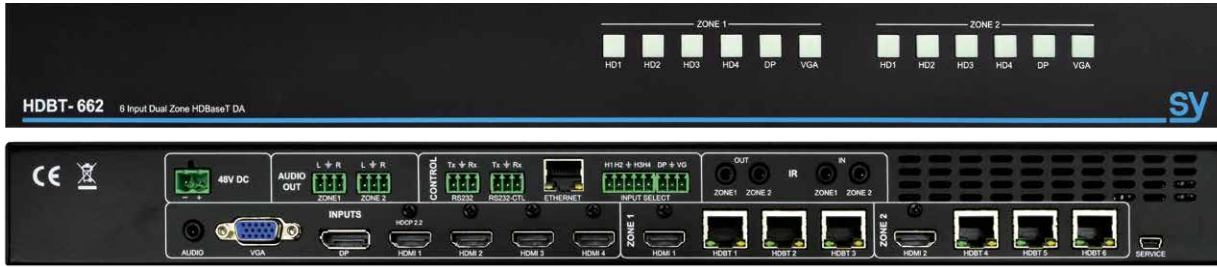
- USB 2.0 over Cat6 extender to 100m
- Supports all USB 2.0 or below, to 170 Mbps max.
- Supports Bulk, Control, Interrupt, and Isochronous Transfers
- Perfect for Keyboard, mouse, video, and audio

# ■ Splitters HDBT

## HDBT-662

Two Zone Multi-Format HDBaseT Switcher DA (2 Independent 3+1 Zoned Outputs)

4K<sub>30</sub>



This feature rich and flexible Multi-format Switcher DA has 4x HDMI, 1x DisplayPort, 1x VGA inputs, as well as a dual Zone outputs. Each Zone comprises of 3x HDBaseT and 1x HDMI outputs (Mirrored), with independent de-embedded audio, IR and RS232 pass-through. Zone 1 HDBaseT output has a 70m (1080p) range, whilst Zone 2 has 100m (1080p).

- **HDMI 1.4, 4K60 4:2:0 (10.2Gbps) switcher DA**
- **4x HDMI, 1x DisplayPort, 1x VGA inputs**
- **Dual Zoned outputs (6x2 Matrixed Zones)**
- **Each Zone: 3x HDBaseT, 1x HDMI outputs**  
**L/R de-embedded audio**  
**IR & RS232 pass through**
- **Zone 1 HDBT: 1080p @70m, 4K30 @40m**
- **Zone 2 HDBT: 1080p @100m, 4K30 @70m**
- **Control: Front panel, IR, RS232, LAN**
- **Single PSU: Provides power (iPoC) to receivers**



# Splitters HDMI

## HDA24A-48G

48Gbps 2:4 HDMI 2.1 Splitter With Audio De-embedding



A 48Gbps 4-way HDMI splitter with an integrated 2-way switcher on the input side offering a wealth of advanced features such as downscaling, VKA, EDID management, de-embedding and much more.

- **Dual HDMI inputs with 4 HDMI outputs (2:4)**
- **HDMI 2.1b - 48Gbps video bandwidth**
- **All resolutions up to 8K60 4:2:0 12 bit, 8K30 4:4:4 12 bit, 4K120 4:4:4 12bit**
- **8K → 4K/2K independent downscaling on each output**
- **HDR to SDR conversion option (per output)**
- **EDID and HDCP 2.3 advanced management**
- **ALLM (Auto Low Latency Mode) & VRR (Variable Refresh Rate)**
- **Test Pattern Generator**
- **Each HDMI output can power an AOC cable**
- **RS232, IR control**

## HDA28A-48G

48Gbps 2:8 HDMI 2.1 Splitter With Audio De-embedding



Dual input 48Gbps HDMI 2.1a 8-way splitter offering a wealth of advanced features such as downscaling, VKA, EDID & HDCP management, audio de-embedding and much more.

- **Dual HDMI inputs with 8 HDMI outputs (2:8)**
- **HDMI 2.1b - 48Gbps video bandwidth**
- **All resolutions up to 8K60 4:2:0 12 bit, 8K30 4:4:4 12 bit, 4K120 4:4:4 12bit**
- **8K → 4K/2K independent downscaling on each output**
- **HDR to SDR conversion option (per output)**
- **EDID and HDCP 2.3 advanced management**
- **ALLM (Auto Low Latency Mode) & VRR (Variable Refresh Rate)**
- **Test Pattern Generator**
- **Each HDMI output can power an AOC cable**
- **RS232, IR control**

## HDS12-18G

1x2 HDMI 2.0 Splitter With Enhanced EDID Management



- 1x2 HDMI 2.0 (18Gbps) splitter
- HDMI 2.0, 4K60 4:4:4
- 4K to 1080p Down Scaling per output
- HDCP 2.2 compliant

A compact dual HDMI 2.0 Splitter/DA, with an extensive EDID management facility. Compatible with all resolutions up to 4K60 4:4:4. It features independent auto downscaling for each output, allowing 4K content to be automatically converted to 1080p where necessary. Each HDMI port has the ability to power/support the connection of long distance AOC. Additional control for HDMI signals with the Cascade mode dip switch. For the best performance, we recommend the use of SY's Stealth HDMI 2.0 cables, or for longer distances our SY Centaur AOC Hybrid Fibre cables which are available in various lengths up to 100m.

- Extensive EDID management
- Supports Cascade mode
- Slim and compact
- Fully compatible with AOC

## HDS14-18G

1x4 HDMI 2.0 Splitter With Down-Scaler



- 1x4 HDMI 2.0 (18Gbps) splitter
- HDMI 2.0, 4K60 4:4:4
- 4K to 1080p Down Scaling per output
- HDCP 2.2 compliant

A compact quad HDMI 2.0 Splitter/DA, with an extensive EDID management facility. Compatible with all resolutions up to 4K60 4:4:4. It features independent auto downscaling for each output, allowing 4K content to be automatically converted to 1080p where necessary. Each HDMI port has the ability to power/support the connection of long distance AOC. Additional control for HDMI signals with the Cascade mode dip switch. For the best performance, we recommend the use of SY's Stealth HDMI 2.0 cables, or for longer distances our SY Centaur AOC Hybrid Fibre cables which are available in various lengths up to 100m.

- Extensive EDID management
- Supports Cascade mode
- Slim and compact
- Fully compatible with AOC

## HDS18-18G

1x8 HDMI 2.0 Splitter With Smart EDID Management



A compact 8x HDMI 2.0 Splitter/DA, with an extensive EDID management facility. Compatible with all resolutions up to 4K60 4:4:4. It features independent auto downscaling for each output, allowing 4K content to be automatically converted to 1080p where necessary. Each HDMI port has the ability to power/support the connection of long distance AOC. Additional control for HDMI signals with the Cascade mode dip switch. For the best performance, we recommend the use of SY's Stealth HDMI 2.0 cables, or for longer distances our SY Centaur AOC Hybrid Fibre cables which are available in various lengths up to 100m.

- 1x8 HDMI 2.0 (18Gbps) splitter
- HDMI 2.0, 4K60 4:4:4
- 4K to 1080p Down Scaling per output
- HDCP 2.2 compliant

- Extensive EDID management
- Supports Cascade mode
- Slim and compact
- Fully compatible with AOC

# Audio Amplifiers

## APA-80

80W rms Stereo Audio Amplifier

NEW FOR  
2025



The APA-80 is a two-channel, class-D amplifier delivering 40 watts per channel into a 4 ohm load. As well as control of Volume, it also has a built-in EQ section and a digital Delay for optimal sound tuning. This feature rich amplifier has 2x Microphone inputs, 4x Line inputs and can be controlled via RS232 or Bluetooth.

- **40W x 2 (4Ω RMS)**
- **Class D digital amplifier** (High efficiency)
- **Can integrate mic inputs with main input channels**
- **2 independent Mic inputs** (3-pin phoenix) **with format selection switches**
  - Phantom 48V
  - Mic
  - Line
- **Main input channels with independent connections**
  - **Differential balanced stereo line input** (5-pin phoenix)
  - **Stereo RCA L+R**
  - **3.5mm combo jack** (accepts mini-Toslink or stereo L/R jack)
- **Output**
  - **Stereo Line output**
  - **Stereo Speaker power output 40W+40W**
- **Built-in EQ for optimal audio tuning**
- **Up to 250ms audio delay**
- **Facility for remote analogue volume control**
- **Control: Front panel, RS232, Bluetooth**

## 2A-100W

Dual Input 2x 50W Stereo Audio Amplifier With RS232 Control



A powerful yet compact 100W Class-D digital amplifier capable of delivering 2x 50W of power. Choice of analogue L/R stereo or Toslink optical, with optional voice-over microphone. Stunning looks and easy to operate via Front Panel, IR, RS232 or LAN. Suitable for multimedia applications, residential as well as meeting rooms.

- **50W x 2 (4Ω RMS) output in stereo, mono or bridge configuration**
- **Analogue Stereo or Optical Toslink audio inputs**
- **Mic/Line voice-over input**
- **Microphone 48V Phantom power option**
- **Microphone auto ducking**
- **Loop out option for synchronised cascading**
- **OLED front panel display**
- **Powerful and detailed Web GUI control**
- **Control: Front panel, IR, RS232, LAN (GUI)**

## 3A-40W

Audio Amplifier 40W 70/100 Line Output With RS232 Control



The 3A-40W is a 40W compact power amplifier, with a choice of 70V or 100V line output. The unit has 3 audio inputs as well as Mic/Line voice-over, and powerful RS232 control.

- **40W power @70/100V line out**
- **L/R RCA, 3.5mm jack or Toslink Line inputs**
- **Mic/Line voice-over input**
- **Microphone 48V Phantom power option**
- **Microphone auto ducking**
- **Line/Mic/Bass/Treble volume control**
- **Control: Front panel, IR, RS232**

# Audio De-embedders

## AD-18G

HDMI 2.0 Audio De-embedder - 18Gbps

4K 18G



The AD-18G de-embedder is HDMI 2.0, 4K60 4:4:4 (18Gbps) rated, with EDID and CEC pass-through. In 2 CH mode, it de-embeds the audio simultaneously to all 3 audio outputs (Balance stereo, L+R & Coaxial S/PDIF). In Bitstream mode, the audio is de-embedded only to the Coax S/PDIF.

- **HDMI 2.0, 4K60 4:4:4 (18Gbps), HDCP 2.2, HDR and CEC compliant**
- **HDCP 2.2 to HDCP 1.4 convertor**
- **HDMI HBR (High Bit Rate) supported in PASS mode**
- **LPCM, Dolby 2/5.1 and DTS 2/5.1**
- **L+R and Balanced stereo analogue with Coax S/PDIF audio outputs**
- **Audio De-embed, even when no display is connected**
- **Supported Audio input modes: Pass-through, Bitstream, PCM**

# Audio Conditioners

## AC2

Dual Input Audio Conditioner – Delay, Volume, Equaliser

NEW FOR  
2025



2 input audio conditioner with delay, volume and built-in EQ for optimal audio tuning controlled via RS232 or Bluetooth. This small and yet extremely powerful unit is very easy to set up and control.

- **3 Audio input channels**
  - **Differential stereo output** (5-pin phoenix)
  - **3.5mm combo jack** (accepts mini-Toslink or stereo L/R jack)
- **Up to 5 seconds audio delay in 10ms increments**
- **Volume level control**
- **Multi-band Equaliser - Optimal sound management**
- **Can harmonise delay and volume per input channel**
- **Mobile App set up - Convenient and extensive**
- **Control: Front panel, RS232, and Bluetooth**



# Control Accessories

## HV2M-B2

Screen/Motor Drive Relay



HV2M-B2 Dual High Voltage Motor Relay, is specifically designed for controlling 240V bi-directional AC motors as used in projection screens/lifts. The built-in failsafe feature prevents both of the relay outputs from being active simultaneously. It interfaces directly with any SY series keypad or any other control system, providing isolated output contacts.

- 2 none overlapping HV relays – NO, NC contacts
- Motor protection – Only one relay allowed to energise at a time
- Total input/output isolation
- Simple interface with SY Keypad controllers
- Control projection screen/lift, shades, etc

## LV2-DIN

Dual Change-over DIN Relay



The LV2-DIN provides two independently controllable change over relay contacts that can switch up to 12V DC at 20A max, or 240V at 5A. Simple interface with all SY Keypad controllers.

- 2 independent Change Over Relays - NO, NC contacts
- Contact rating - 48V 5A, 240V 3A
- Suitable for switching external lighting/screen controllers
- Simple interface with SY Keypad controllers
- DIN rail mounting

## HV2C-DIN

Dual Normally Open DIN Relay



HV2C-DIN provides two independent Normally Open (NO) relay outputs, with contact ratings of 240V AC at 7A. Simple interface with SY Keypad controllers with total isolation.

- 2 independent HV relays - Normally Open (NO) contacts
- Contact ratings of 240V at 7A
- Total input/output isolation
- Simple interface with SY Keypad controllers
- Control projection screen/lift, shades, etc

# Input Plates

Wide range of different input plates. Below are some of the popular items. Please get in touch with us for full available range.

## WP-H

UK Single Gang HDMI Wall Plate



Single gang HDMI input plate, with 150mm HDMI lead extension (Female-Female) for ease of installation. Available in UK and EU single gang size with a choice of pearl white or brushed aluminium finish.

- **Stylish HDMI single gang input plate**
- **150mm HDMI fly-lead** (Female to Female)
- **UK or EU single gang options**
- **Available in pearl white or brushed aluminium**

## WP-HV

HDMI and VGA Input plate



Single gang HDMI and VGA (+ 3.5mm audio) input plate. The HDMI connection has a 150mm fly-lead (Female-Female), whilst the VGA connection and 3.5mm audio input connect via 15 pin screw terminals. Available in UK and EU single gang size with a choice of pearl white or brushed aluminium finish.

- **Stylish HDMI & VGA single gang input plate**
- **150mm HDMI fly-lead** (Female to Female)
- **15 pin connector for VGA and Audio**
- **UK or EU single gang options**
- **Available in pearl white or brushed aluminium**

## WP-HVU-S

HDMI, VGA and USB-A Input Plate



Single gang HDMI, VGA and USB-A input plate. The HDMI and USB-A connections have a 150mm fly-lead (Female-Female), whilst the VGA connection and 3.5mm audio input connect via 15 pin screw terminals. Available in UK and EU single gang size with a choice of pearl white or brushed aluminium finish.

- **HDMI, VGA and USB-A Single gang input plate**
- **150mm HDMI & USB-A fly-lead** (Female to Female)
- **15 pin connector for VGA and Audio**
- **UK or EU single gang options**
- **Available in pearl white or brushed aluminium**

## WP-HVU

HDMI, VGA and USB-B Input Plate



Dual gang HDMI, VGA and USB-B input plate. The HDMI and USB-B connections have a 150mm fly-lead (Female-Female), whilst the VGA connection and audio 3.5mm input connect via 15 pin screw terminals. Available in UK and EU double gang size with a choice of pearl white or brushed aluminium finish.

- **HDMI, VGA and USB-B double gang input plate**
- **150mm HDMI & USB-B fly-lead** (Female to Female)
- **15 pin connector for VGA and Audio**
- **UK or EU double gang options**
- **Available in pearl white or brushed aluminium**

## WP-2HVU

2x HDMI, VGA and USB-B Input Plate



Dual gang 2x HDMI, VGA and USB-B input plate. The HDMI and USB-B connections have a 150mm fly-lead (Female-Female), whilst the VGA connection and audio 3.5mm input connect via 15 pin screw terminals. Available in UK and EU double gang size with a choice of pearl white or brushed aluminium finish.

- **2x HDMI, VGA and USB-B double gang input plate**
- **150mm HDMI & USB-B fly-lead** (Female to Female)
- **15 pin connector for VGA and Audio**
- **UK double gang options**
- **Available in pearl white**

# Signal Management

## EDID MASTER PRO

HDMI 2.1 8K60 Inline EDID Manager

NEW FOR  
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HDMI 2.1b (48Gbps) EDID Master Pro, is a professional high-end EDID management device. 12 pre-defined, together with 4 user-definable EDIDs can be selected. The EDID requirements can be tailored with ease, using mobiles and tablets.

- 16 EDID selections. 4 user-defined/editable EDID blocks
- Powerful EDID Editor – Resolution, refresh rate, Audio channels, Audio format
- Bluetooth and USB-C interface for enhanced management
- Low power – No external PSU required
- Fit & forget
- Very Compact design. 35x43x9 mm (WxDxH)



# Cables

## Stealth-18G

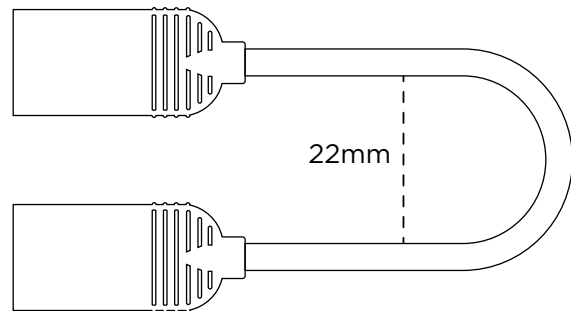
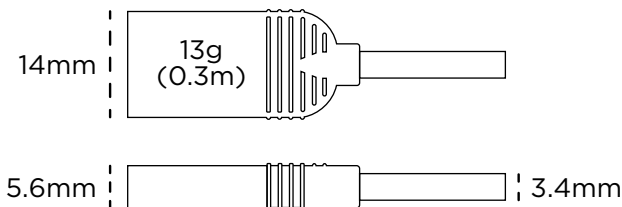
Slimmest 18Gbps HDMI 2.0 Cable

4K 18G



Designed with quality in mind, the Stealth-18G is a specially constructed cable, with a unique super slim one piece HDMI metal headshell which exhibits a High-Grip, ensuring connection integrity and avoiding accidental disconnection. With only 12mm bend radius, the Stealth-18G is a perfect option for rack/cabinet management, patch panels, residential A/V, IT, low profile and gaming requirements.

- **HDMI 2.0, 4K60 4:4:4 (18Gbps) tested**
- **Unique full metal HDMI connector - Slimmest in the world**
- **Super high grip - Ensures cable retention**
- **Superior shielding - Full shielding end to end**
- **Reduce RF emissions impacting Bluetooth & Wi-Fi**
- **HDCP 2.2, HDR, HLG, HPD, ARC, Ethernet, CEC compliant**
- **3.4mm diameter - 5x slimmer than standard**
- **12mm bend radius**
- **Lengths: 0.3m, 0.5m, 0.75m, 1.0m, 1.5m, 2.0m**



## Centaur 4K AOC

HDMI 2.0, 4K60 4:4:4 AOC Up To 100m

4K 18G



The Centaur AOC Plenum rated cables deliver uncompressed HDMI 2.0 18Gbps transmissions for long distance extension. These hybrid cables are built with quality in mind, using specially designed high-grade cables and the latest VCSEL laser technology. Low power design ensures stable performance over all distances, powered only by the source. Applications include residential A/V, IT, gaming, medical, conference rooms and retail signage.

- **Uncompressed HDMI 2.0, 4K60 4:4:4 (18Gbps)**
- **HDCP 2.2, HDR, HLG, HPD, ARC, Ethernet, CEC compliant**
- **VCSEL active chipset ensures signal integrity**
- **Die-cast metal shell for superior shielding**
- **Reduced EMI & RFI emissions that can impact Bluetooth & WIFI**
- **4.5mm cable thickness with 25mm bend radius**
- **Compact, light and flexible**
- **Low power - No external power required**
- **Cost effective extension cables, lengths: 7.5m, 10m, 15m, 20m, 30m, 50m, 75m, 100m**
- **Plenum rated**
- **Plug & Play**

## Centaur Armoured AOC

18Gbps HDMI 2.0 Armored AOC

4K<sub>18G</sub>



The Centaur Armoured AOC Plenum rated cables deliver uncompressed HDMI 2.0 18Gbps transmissions for long distance extension. These hybrid cables are built with quality in mind, using specially designed high-grade cables and the latest VCSEL laser technology. Low power design ensures stable performance over all distances, powered only by the source. Applications include residential A/V, IT, gaming, medical, conference rooms and retail signage.

- **HDMI 2.0, 4K60 4:4:4** (18Gbps)
- **HDCP 2.2, HDR, HLG, HPD, ARC, Ethernet, CEC compliant**
- **VCSEL active chipset ensures signal integrity**
- **Die-cast metal shell for superior shielding**
- **Armoured - Protected with spiral stainless steel covering**
- **4.5mm cable thickness with 25mm bend radius**
- **Compact, light and flexible**
- **Low power - No external power required**
- **Cost effective extension cables, lengths: 10m, 15m, 20m, 30m, 50m, 75m, 100m**
- **Plenum rated**
- **Plug & Play**
- **70Kg pull weight**

## Centaur 48G AOC

HDMI 2.1, 8K60 4:2:0 AOC Up To 100m

8K<sub>48G</sub>



The Centaur 48G AOC cables deliver uncompressed HDMI 2.1 48G transmissions for long distance extension. These hybrid cables are built with quality in mind, using specially designed high-grade cables. Low power design ensures stable performance over all distances, powered only by the source. Applications include residential A/V, IT, gaming, medical, conference rooms and retail signage.

- **Uncompressed HDMI 2.1, 8K60 4:2:0 12bit/8K30 4:4:4/4K120 4:4:4** (48Gbps)
- **HDCP 1.4, HDCP 2.2 and HDCP 2.3 compliant**
- **Die-cast metal shell for superior shielding**
- **Reduced EMI & RFI emissions that can impact Bluetooth & WIFI**
- **5.3mm cable thickness with 20mm bend radius**
- **Low power - No external power required**
- **Self-detecting function for EDID**
- **Cost effective extension cables, lengths: 10m, 15m, 20m, 30m, 50m, 75m, 100m**
- **RoHS 2.0 and REACH compliant**
- **Plug & Play**



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