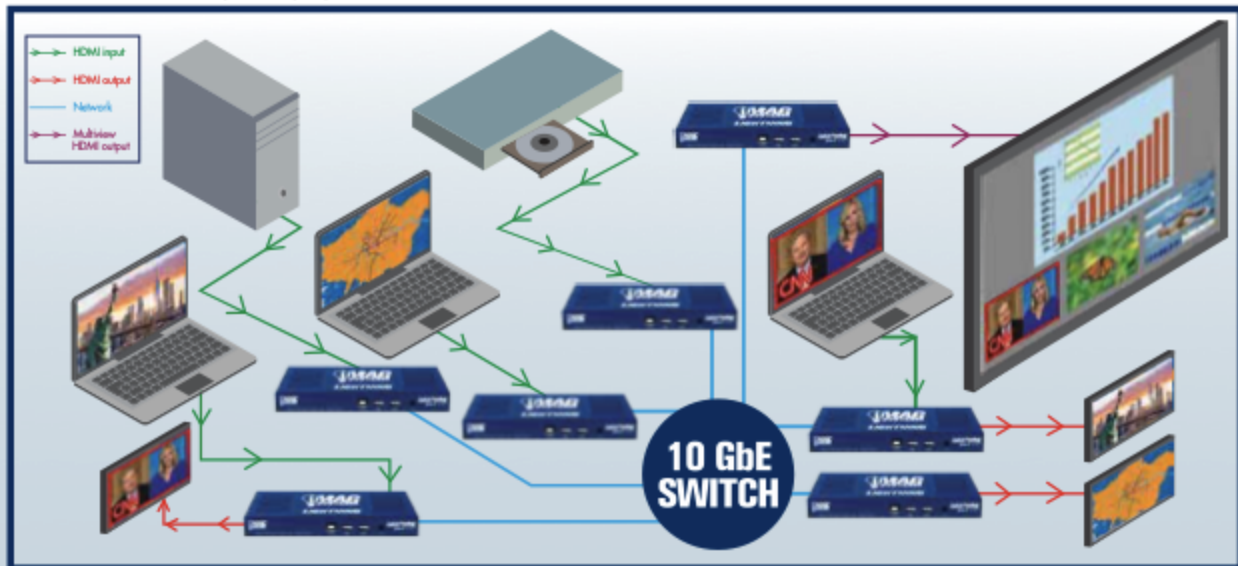# LIGHTNING

SDVoE™ TRANSCEIVER

iMAG SYSTEMS

LIGHTNING is an uncompromising AV over IP system with a performance and feature set that redefines PRO AV. Utilising award winning **SDVoE** *technology*, it's performance makes it the only choice for replacing the traditional matrix switch. Applications with exacting image reproduction, like Medical and Command and Control, can only be realised with the performance that **SDVoE** provides.

Expect pristine Matrix Switching, flawless Video Walls and Multi-View video compositing of up to 32 images with the use of **LIGHTNING.**

The **TRANSCEIVER** function of **LIGHTNING** makes it unique in the AV over IP world, not only allowing configuration as a either an encoder or decoder, but providing simultaneous operation of encoding and decoding. Yes, one unit can send and receive content at the same time, cutting down box count and simplifying deployment.

LIGHTNING's capabilities are realised through software management by **DIRECTOR**, unleashing a feature set designed to improve life for the integrator, whilst accommodating to the needs of all stake holders. Improve your deployments by implementing analytics, event and scheduling automation, QR code operations, and a host of other managed services processes.

Discover the new way to deploy PRO AV with **LIGHTNING** and **DIRECTOR.**

4K OVER iP | 1080P OVER iP | MATRIX OVER iP | VIDEO WALL OVER iP | CONTROL OVER iP | POINT TO POINT OVER iP | MULTIVIEW OVER iP | USB2.0 OVER iP

SPECIFICATION

Transceiver function
- Configure as Encoder or Decoder
- Simultaneous bi-directional transmission
- Stand alone bi-directional point to point

Video Interfaces
- HDMI 2.0 / HDMI 1.4 / DVI 2.0
- Pixel clock up to 594 MHz

Video Resolutions All SD, HD, and other resolutions up to
- 4K / 60 Hz / RGB and 4:4:4 8 bit
- 4K / 60 Hz / 4:2:2 10 bit for broadcast and medical applications
- 4K / 60 Hz / 4:2:0 10 bit and 12 bit HDR

Audio Interfaces
- All audio formats supported by HDMI 1.4 and HDMI 2.0, including: LPCM, Dolby Digital/Plus/EX, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD I2S stereo input and output up to 48 kHz 24-bit
- Independent routing of audio/video/serial/IR/USB 2.0

Power
- PoE

Control Interfaces
- RS-232 (up to 115.2 kbaud)
- Infrared
- USB 2.0 (HID)

- Gigabit Ethernet

Transmission Distance (Cat6a/Cat5e)
- Up to 100/60 meters for 4K / 60 Hz / 4:4:4 video
- Up to 160/130 meters for 4K / 30 Hz / 4:4:4 video
- Up to 250/230 meters for HD video
- Distances over 100 meters are supported on point to point links only
- Digital Content Protection HDCP 1.2 / HDCP 2.2 Compatible

AV Processing Technology SDVoE AVP2000T
- Broadcast quality up-scaling and downscaling
- Colorspace and frame-rate conversion
- Multi-source video compositing
- Ultra-light compression for 4K60 4:4:4
- Audio embedding and de-embedding
- Audio down-mixing and re-sampling

Synchronization Technology AptoVision ACR (Automatic Clock Recovery)
- Multiple displays genlocked to single source
- Zero-frame latency (100 microseconds)

Multi-Signal Streaming Technology BlueRiver Channel Coder
- Encoding multiple native signals into IP streams
- Composite up to 32 images onto a single display
- Bidirectional, 10Gbps

Encryption AES-128

iMAG SYSTEMS AWARDS

the BEST of INTEGRATE.COM 2016
rAVe ONDEMAND INTEGRATE.COM

the BEST of Integrated Systems Europe 2017
rAVe 2017

rAVe (Publications) the BEST of INTEGRATE 2017 award winner

DIRECTOR