

Some Outstanding Optocore features

- **Network specially designed for Audio and Video**

We developed an audio and video network from conception to finished protocol without the compromises of security, latency, bandwidth and jitter inherent to systems which try to adapt inappropriate low-cost simple data networks built for computer data exchange, never intended or designed for professional production requirements.

- **Ultra low latency – 41,6µs over all devices from any point to any point**

Due to our unique synchronous design the digital delay over the complete network from any point to any point is just 41,6µs – this includes the matrix and remains constant regardless of the number of nodes on the network.

- **Fibre optic cable has very low weight, and offers the highest possible security and longest distance**

Fibre optic cables are the lightest – a typical network duplex fibre cable weights 5,8kg/km (20 lbs/mile). Compare this with an unshielded CAT5 cable at 38kg/km (135 lbs./mile) or with your snake or multi-core. Transmission distances between devices of 700m (2300 feet) on multi-mode cables, and up to 110km (68 miles) on single-mode cables is standard on the Optocore protocol.

- **Built-in second ring for fibre cable redundancy**

The second ring provides cable redundancy – if a cable breaks, the network recovers in one sample cycle!

- **High Bandwidth** – 1Gbit/s for 512 audio channels or you can re-allocate the bandwidth to suit your needs. For example, it is possible to add more data or video channels in place of audio channels.

- **Complete Signal Integration on One Fibre**

In addition to audio, the Optocore protocol allows the transport of any kind of signal simultaneously such as Video, DMX, MIDI and various control data like Ethernet, RS422, RS485. Via Ethernet you can transmit anything using converter boxes – e.g. Video, Intercom, USB, RS232, CAN. With Optocore there is really no need to lay down additional cables anymore.

- **Scaleable System**

As your requirements grow, you simply add devices to enlarge the system with new features or higher channel count.

- **No central switch**

Every Optocore device acts like a full-featured switch, eliminating the need for a central switch. A central switch failure in other networks means your network is down. Optocore's redundant system with shared protocol means your network is not vulnerable to a central switch failure.

- **Single channel matrix**

Every device has full access to all channels and can individually extract any channel on a single channel basis.

- **Extensive control and monitor possibilities**

Via the Optocore Software you can supervise the whole network, change settings, display levels and log events.



- **Unique additional specials**

To name just a few: control Optocore A/D converters directly from Yamaha consoles, virtual Ethernet switch features redundancy without special programming like spanning tree, practical jitter-free word clock distribution, 400V tolerant power supplies, redundant power supplies, temperature controlled fans.

- **Electrical Isolation**

Fibre optic is essentially free of any electromagnetic energy field issues. The inherent technology provides millions of volts of electrical isolation eliminating hum and other problems caused by induction. Fibre is also unaffected by grounding issues thus eliminating the need for those last minute ground lifts. CAT5 transformers are tolerant to only 1500 volts. Fibre technology will perform when CAT5 fails, especially in situations requiring multiple generators.

- **12 years of experience**

We are proud to be the pioneers of Audio Networking, and you can buy a lot – but not experience.

OPTOCORE

is a patented, synchronous, optical fibre network system with a data-rate of 1Gbit/sec (delivering 512 audio channels @ 48kHz), specially designed to meet the requirements of the professional live audio, broadcast, studio, permanent installation, emergency notification and video industries. The system offers a unique, flexible and scalable, dual redundant ring structure providing maximum safety in a user-friendly network with exceptionally low latency whilst using the least possible amount of optical fibres. Control and channel routing is easily achieved from any point within the network by computer or media-access device. For more outstanding Optocore features please visit: www.optocore.com



OPTOCORE

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