

ARCHITECTS & ENGINEERS SPECIFICATION for the LX4AP unit

The optical, digital network module shall provide an analog interface. It shall be part of a synchronous fiber optical network. The A/D and D/A converters shall provide 48 microphone or line level inputs and 16 analog return outputs. The LX4AP shall be considered as a stage box with direct LINK to the network. 48 XLR input channels shall stand for 48 microphone channels; each shall include microphone pre-amp, phantom power and selectable gains in 1 dB steps from 0 dB to +66 dB. 16 XLR return channels shall have a selectable channel level of 0dB and -10dB. Two RS485 interfaces shall exchange control data such as RS422, RS485, DMX and MIDI. Audio, video and data signals shall be transmitted via optical fiber. Redundant fiber connections shall be established using the two provided optical LINK-interfaces. Depending on the fiber optic transceivers, distances from 700 m up to 70 km shall be covered. The device shall include a composite video input interface. Redundant power supply and safeguards against malfunctions shall be provided through a dual power supply unit with automatic switchover. The digital I/O device shall include two optical 1 Gbps LINK interfaces with duplex SC-connectors, offering redundancy and providing maximum safety with an extreme low latency of 41.6µs. Configuration and control shall be possible using the USB and RS232 ports. Control software shall operate on a PC, offering full remote access and upgradeable internal logic. LED banks on the front of the device shall provide comprehensive status control. The module shall be compliant with the CE conformity and shall be used in E1, E2, E3, E4, or E5 environments according to the harmonized European standards EN55103-1 and EN55103-2.

The optical, digital I/O network module shall be the Optocore® LX4AP unit.