

ARCHITECTS & ENGINEERS SPECIFICATION for the LX4B unit

The optical, digital network module shall provide an analog interface. It shall be part of a synchronous fiber optical network. The device with 48 analog outputs and 16 line inputs shall function as an A/D and D/A converter FOH unit. Due to the optical fiber connection no losses due to resistance, capacitance or inductance shall occur. Disturbances inflicted by cables such as power lines or other devices shall not influence the audio signals. Galvanic isolation between the devices shall be given, thus ground loops shall not exist. 48 line level outputs shall be available at multi-pin connectors. The level shall be adjusted (0 dB / -10 dB). 16 analog line level inputs with level adjustment (0 dB / +10 dB) shall provide the return path. 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 output 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 41.6 μ s. 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® LX4B unit.