

## **ARCHITECTS & ENGINEERS SPECIFICATION for the YG2/YS2 unit**

The optical, digital I/O network module shall be part of a synchronous fiber optical network. The network module shall be compatible with all Yamaha devices with Mini - YGDAI-Slots. The main card shall allow a direct connection of Yamaha digital consoles and other devices to the network. Up to 64 audio inputs and 64 audio outputs shall be transmitted to and from the main card via the optical interface. Supporting both Yamaha standards 16 IN and 16 OUT (e.g. PM5D, M7CL, DME64N) and 8 IN and 8 OUT (e.g. DIO8 for PM1D, DME32), the audio channels shall be passed through the internal slot interface. In order to make further channels available the sub card shall be used in additional slots. With one main card and three sub cards, connected by standard CAT5 cables, a total of 128 channels shall be achieved. A number of main cards shall be inserted into the slots of one device to extend the number of channels handed over to the network, e.g. a maximum of 128 IN and 128 OUT by inserting two main cards in a Yamaha PM1D system. Two RS422 ports shall allow the direct transfer of Yamaha Remote or other control protocols via network. HA Remote signals shall be picked up directly at the console slots as well as through the external DB9 HA Remote connection. The word clock shall also be exchanged at the slots. The main card shall provide one RJ45 LAN port for connection of any standard 10/100MBit Ethernet device. The modules shall offer redundancy and provide maximum safety with a latency below 42 $\mu$ s. Configuration and control shall be possible using the USB, LAN or RS232 ports. Control software shall operate on a PC, offering full remote access and upgradeable internal logic. The module shall be compliant with the CE/FCC 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 device shall be compliant with EN60065 - Safety requirements.

The optical, digital I/O network module shall be the Optocore® YG2/YS2 unit.