## INTRODUCTION

The MUX22-IVT/x is a pair of units providing bi-directional fiber transmission of up to 16 x 12/3G-SDI channels, 256/256 MADI or Analog/Digital Intercom connectivity, plus 4 x GPIO, 4 x LAN and SYNC

This Quick Start Guide describes all main features of the MUX-22 pair and describes how to connect system in a few steps, using a MUX22-IVT/MADI in a 6/2 configuration as an example.

CABLE CONNECTION

A BroaMan MUX-22 set is delivered as preconfigured point-to-point set which consists of two devices. It requires only a proper cable connection to start working with the system. After unpacking the devices please follow the steps:

1. Connect crossed duplex singlemode fiber cable locally on each device – from Link 1 transceiver to Link 1 coupler (this connection enables integration of OPTOCORE board, which provides intercom and data connectivity, into the COM fiber)
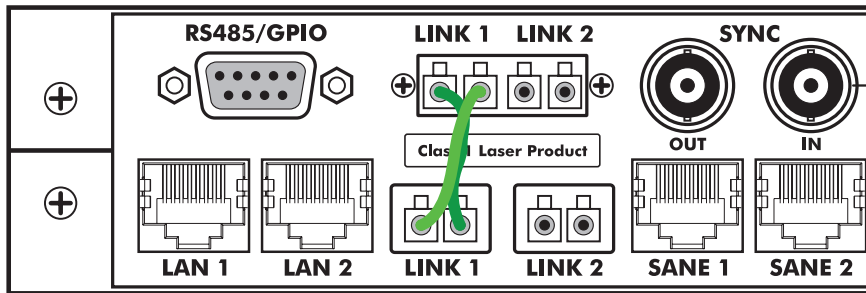
2. Connect crossed duplex singlemode fiber cable between two devices – from COM 1 coupler on the first device to the COM 1 coupler on the second unit
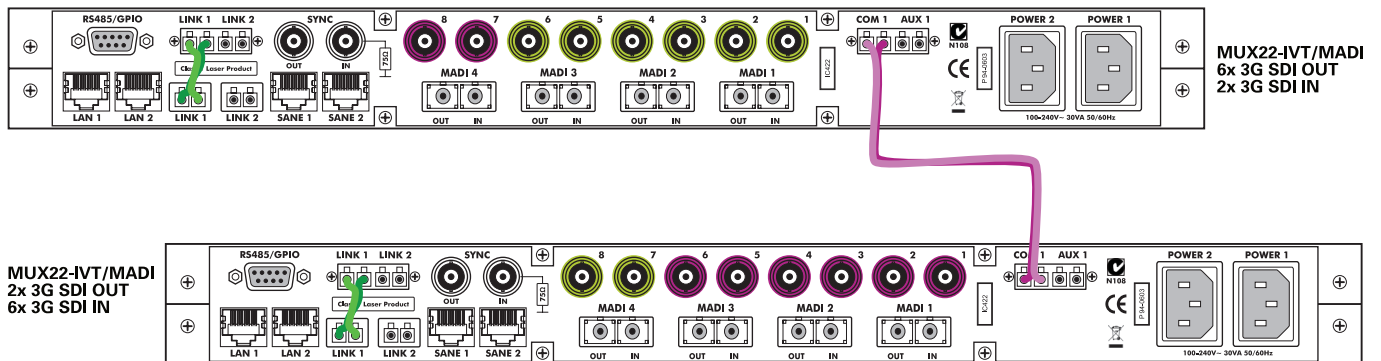
CONNECTIVITY
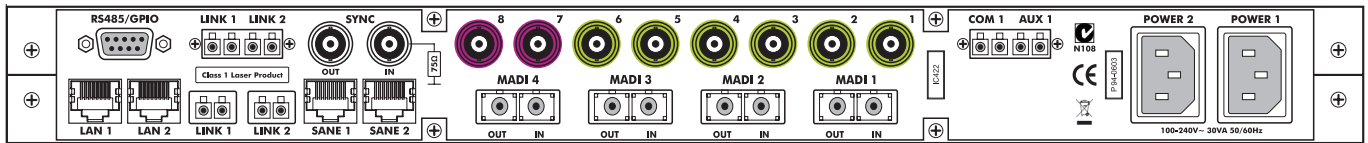
VIDEO

- BNC Ports 1-6 – 3G-SDI Inputs with reclockers (patched to outs 1-6 on the second unit)
- BNC Ports 7-8 – 3G-SDI Outputs (patched to inputs 7-8 on the second unit)

AUDIO

- 4 ports of optical MADI with SC-connectors for up to 256/256 channels of digital audio

Channels are freely routable independently of MADI streams

ETHERNET

- LAN 1-2 – 2 x RJ45 LAN ports
- SANE 1-2 – 2 x RJ45 SANE (audio over Cat5 by OPTOCORE) / LAN ports

Fiber connection between two units creates 8-port unmanaged 100Mbit Ethernet switch.

GPIO

- RS485/GPIO – 4 x GPI, 4 x GPO ports on D-SUB-15 connector

Four bi-directional GPIO ports are patched 1:1 between two Mux22 devices.
Patching can be changed in OPTOCORE Control Software.
Detailed pinout can be found in the Mux22 Operating Manual.

AUX

- AUX 1 – 1310nm fiber tunnel, not dependent on protocol or bandwidth

Aux port can be used for 1G or 10G Ethernet tunnel or any closed 3rd party protocol.

SYNC

- Sync IN – configurable Sync Input (Tri-Level-Sync, Blackburst or Word Clock)
- Sync OUT – configurable Sync Output (Tri-Level-Sync, Blackburst or Word Clock)

By default device with ID1 is the Sync Master. External Sync source should be connected to Sync IN on ID1. Default Sync setup is Bi-Level blackburst NTSC IN and OUT. Sync Mode can be changed in OPTOCORE Control Software.

COM

- COM 1 – fiber combined port which carries all video, intercom and data signals