

OMUX OPTICAL MULTIPLEXER

LWC SWITCHING SYSTEM

- 4 independent 4-in-1 multiplexers in a single-unit 19" module
- Per multiplexer: automatic priority-controlled multiplexing of four fibre-optic lines
- Controllable using remote-control relays
- Universally applicable on AURUS, CRESCENDO and NEXUS systems
- Redundant power supply supported
- Interchangeable SFP optical ports supporting data rates of up to 3 Gbps
- Configurable as a wavelength converter or singlemode-to-multimode converter using various modules



LWC MULTIPLEXER

The Optical Multiplex System is designed for connecting a portable device over preinstalled lines to the Stage Tec LWC system (for example, a portable NEXUS Base Device to the NEXUS audio network). Similarly, the multiplexer can be used for placing AURUS slave consoles in varying locations. The OMUX optical multiplexer integrates four completely separate units, each managing four duplex optical lines with inputs and outputs. It automatically changes to the currently established connection.

AUTOMATED SWITCHING

The OMUX automatically detects a console or Base Device connected to it. Connections can be made and broken during operation.

The OMUX changes to a new LWC line only after the existing line has been broken in order to ensure a controlled change. Switching is prioritized: All inputs and outputs are queried in the order of their priority from Destination 1 to Destination 4, and the highest-priority line carrying a valid signal will be selected. This allows, for example, an additional unit to be connected during operation; this device will be automatically selected after the current device has been disconnected.

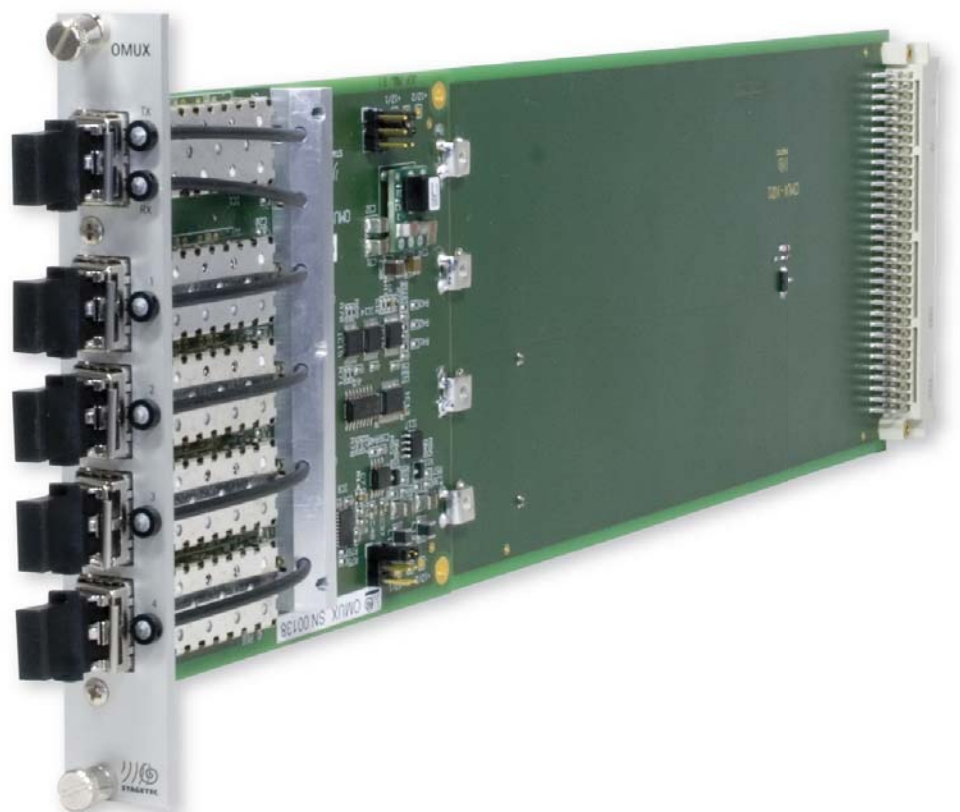
MANUAL CHANGE ON REQUEST

On request, the multiplexer is available with a remote-controlled switch. Switchover is made using TTL level or switching contacts at a dedicated 9-pole D-Sub port. Automatic changeover is disabled on this version of the OMUX.

The changeover occurs seamlessly within less than 1 ms.

REDUNDANT SUPPLY

Two power connectors are provided for dual redundant power-supply units. The OMUX is operated using external supply units fed from separate mains circuits. Of course, the OMUX can also be operated using a single power-supply unit.



OPERATION

The OMUX is a 19" unit designed for fixed installation and continuous operation. The unit automatically recognizes I/O signals, so no configuration or operation is required. With the remote-control option installed, the unit is controlled using standard TTL level logic via a multicore line. The front panel includes LEDs indicating the LWC-line states.

OPTIONS

The following versions and options are available:

- Standard version with 2 or 4 separate multiplexers in a 19" enclosure.
- A version with a single 4-1 multiplexer in a small enclosure is available for installation in narrow spaces, for example, above suspended ceilings, in walls, or under false floors.

- »Remote« option for manual remote switching using TTL control.
- Version featuring single-mode inputs and outputs.
- The OMUX single-multiplexer version is also available as a NEXUS board. In this case, the unit is powered by the NEXUS system.

The following port options are available:

- Multimode ports, 1,300 nm, up to 256 Mbps, for NEXUS, MADI
- Multimode, 870 nm, up to 1 Gbps, for AURUS
- Single-mode, customer-specific, up to 1 Gbps



OMUX SPEZIFIKATIONS		
Data formats	any (Stage Tec AURUS/AURATUS/NEXUS protocol recommended)	
Data rate	@ 3 Gbps	
I/O ports	Destination, Source: SFP modules optical	
Propagation delay	<5 ns	
Switchover latency	<1 ms	
Multiplexer	2 independent 4-1 multiplexers, duplex, priority-controlled switchover; small version: 1 × 4-1 multiplexer, duplex, priority-controlled switchover	
Remote-control facility	Terminal	D-Sub (9-pole), male
	Level	standard TTL
Power supply	The unit includes 2 supply-voltage inputs with automatic supply takeover. Either of these inputs may be used in single-supply operation.	
	Supply voltage	100 to 240 V AC
	Power dissipation	25 W typ.
	Terminal	D-Sub (9-pin), female
Operating conditions	Temperature range	0 to +50 °C / 32 to 122 °F
	Humidity	90 % (max.), non-condensing
Storage conditions	Temperature range	-35 to +70 °C / -31 to 158 °F
	Humidity	90 % (max.), non-condensing
Physical specifications	Dimensions	19", 1 U, depth <150 mm / 5.9"; small version: approx. 170.5 × 55 × 143 mm / 6.71 × 2.17 × 5.63"
	Weight	1.2 kg (with power-supply unit)

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