# Jünger™ Audio AlXpressor Universal Audio Interface with optional Jünger Power House Processing



## **OVERVIEW**

The Jünger AlXpressor offers unparalleled I/O flexibility and audio processing power. It takes converting many of the most widely used AoIP formats - including Telos Alliance Livewire+, AES67, SMPTE ST 2110-30 and -31, and Audinate's Dante\* - to a whole new level while offering support for traditional analog, MADI, AES3, SDI\*, and microphone\* signals.

A new processing architecture, flexAl, makes deploying legendary Jünger Audio processing on the AlXpressor simple and straightforward. Easily tailored to match your exact needs, AlXpressor is a true processing powerhouse. When using Junger Audio's new interface format, tieLight, AlXpressor can transport up to 1024 channels of virtually latency-free audio to an additional processing unit such as the flexAlserver.

<sup>\*</sup> via optional I/O cards

# **FEATURES**

- Powerful x86 based processing core
- On board interfaces:
  - Audio-over-IP
    - AES67 / SMPTE ST 2110-30 and -31
    - Telos Alliance Livewire+
  - 2x MADI or proprietary 1024-ch tieLight via SFP modules (sold separately)
  - AES3 I/O; user selectable between 4/4 or 2/6
  - Analog I/O; user selectable between 8/8 or 4/12
  - Reference Sync in
- 4 option card slots to support additional modules for SDI (3G/HD/SD), mic inputs,
  Dante, and additional analog and AES3 I/O
- Powerful headphone output
- Dual, redundant, universal Power Supplies
- Browser-based remote control
- 16.5 cm touch sensitive display
- Optional Audio processing
  - Program Processing including Level Magic Loudness Processor
  - Voice Processing
  - Voice Over Mixing (stereo and 5.1) w/ mix-minus and output processing
  - Upmixing
  - GfK Watermarking
  - Dolby E encoding / decoding
  - MPEG-H 3D Audio Renderer
  - MPEG-H 3D Audio Authoring
- SNMP
- Ember+ and NMOS

## IN DEPTH

#### Maximum Interface Flexibility

The AIXpressor comes in a compact one rack unit high 19" housing, packed with a high-performance processing system and comprehensive media interfacing. It is equipped with a plethora of on-board media interfaces and four expansion slots for maximum flexibility. AIXpressor comes with redundant Ethernet ports as well as Audio-over-IP (AoIP) interfaces which support IP-based media formats and standards such as Telos Alliance Livewire+, AES67, and SMPTE ST2110-30. MADI, AES3 and analog I/O complete its comprehensive range of built-in audio connections.

Four expansion slots can be equipped with additional expansion cards, such as 3G/HD-SDI,\*\* Audinate's Dante AoIP, microphone inputs, optical and coaxial MADI, AES3 and analog inputs and outputs.

## **Processing Power House**

Powered by an x86 CPU-based processor, AlXpressor is Jünger Audio's most flexible and advanced audio processing solution to date with almost unlimited possibilities, both now and in the future as technology evolves and your needs change. The new processing core is powerful enough to handle coding, decoding, and audio processing without the need for additional DSP cards or codec boards.

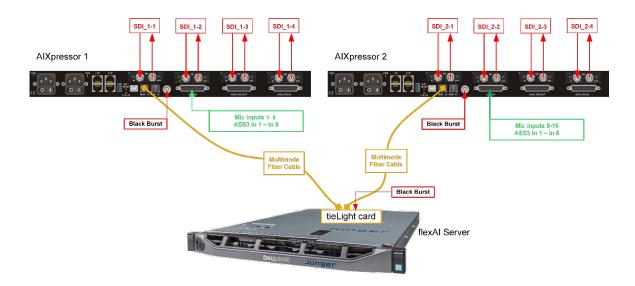
#### flexAI - Any Process, All Platforms

AlXpressor is based on the entirely new audio processing infrastructure platform we call flexAl. With flexAl, user-specific solutions can be created without the usual limitations imposed by traditional hardware, much in the same way plug-ins are used in a digital audio workstation. All flexAl-based applications can run on the AlXpressor as well as Jünger Audio's growing range of flexAl audio processing servers, with virtualized solutions on the horizon.

<sup>\*\*</sup> UHD workflows can be supported via four SDI option cards

#### Cascading Made Simple

The AlXpressor is a full-featured stand-alone audio processor, but one that was designed with scalability in mind. This philosophy applies not only to features and upgrades but also with regard to its role in larger systems. AlXpressor and flexAlserver devices are designed to work with a larger processing array to provide the distributed processing and load-balancing necessary for high channel-count applications. To help facilitate the exchange of audio and data between devices, Junger Audio has developed tieLight, a multichannel, low-latency, point-to-point connection for connecting and cascading across multiple devices. One optical tieLight interface is capable of transporting up to 1024 audio channels in each direction without introducing any relevant latency.



#### **Smart Operation**

Following Jünger Audio's tradition of comprehensive remote control and automation, all functionality is operated from a completely new designed web interface.

## Eco and Budget Friendly

Considering its processing power and capabilities, AlXpressor's high-efficiency redundant power supplies use very little power and help reduce the carbon footprint of your facility.

## **SPECIFICATIONS**

The base AlXpressor unit is designed to be used as a flexible audio interface. Audio processing features are optional and enabled via field-installable software license keys.

#### Analog I/O

- User selectable 8-channel analog input / 8-channel analog output, or 4-channel analog input / 12-channel analog output via AES59 standard DB-25 connector.
- Dedicated 8-channel analog output on AES59 standard DB-25 connector; +4 dBu balanced.

#### **AES3 I/O**

- User selectable 4 stereo pairs input / 4 output, or 2 inputs / 6 outputs. AES3 I/O connections are balanced, 110 Ohms, DB-25 connector wired to the AES59 standard.
- Input sampling rate converters (individually switchable for each stereo pair)

#### SFP slot

 2 x SFP slots, capable of supporting either 64-ch MADI or 1024-ch tieLight™ interfaces when populated with SFP modules (sold separately)

#### MADI I/O

- Up to two 64-ch MADI I/O are supported via SFP modules (sold separately). Mutually exclusive with tieLight™ interfaces; user-configurable.
- Single or multi-mode fiber interfaces or micro-BNC available

## tieLight™

- Up to two proprietary 1024-ch tieLight™ interfaces supported via SFP modules (sold separately).
  Mutually exclusive with MADI interfaces; user-configurable.
- Single or multi-mode fiber interfaces available

#### Audio over IP (AoIP)

- Ethernet ports supporting bi-directional Livewire+ audio, AES67 I/O, and SMPTE ST 2110-30 and -31.
- ST 2110-30 Levels A, B, and C are supported
- ST 2022-7 redundancy

#### Optional I/O Interfaces

# Four option card slots are supported in the AlXpressor. Available option cards include:

- SDI I/O (3G/HD/SD)
- 4-ch Analog I/O
- 8-ch AES/EBU I/O
- 64-ch Audinate Dante™
- 64-ch MADI I/O

## Reference/Sync

- 48kHz reference via AES3, MADI, PTP or external Sync Input
- Sync Input (75 ohm, internally terminated BNC connector) handles Word clock, AES3/AES11,
  Black Burst, Tri-Level sync inputs,
- Sync from option cards (when installed); SDI, Dante

## Sample Rate/Resolution/Frequency Response

■ 48kHz, 24-bit, 5Hz – 24kHz

#### Control

- Remote control via standard web browser
- Ember+ and NMOS
- SNMP (monitoring)

#### **Audio Processing**

Audio processing is available as optional software modules. Processing options include:

- Program Processing, including Level Magic Loudness Processor
- Voice Processing
- Voice Over Mixing (stereo and 5.1) w/ mix-minus and output processing
- Upmixing
- GfK Watermarking
- Dolby E encoding / decoding
- MPEG-H 3D Audio Renderer
- MPEG-H 3D Audio Authoring

<sup>\*</sup>Option cards should be ordered with the unit and are installed at the factory

#### **Ethernet**

Four Gigabit RJ-45 connections

#### Power

- Dual internal redundant auto-ranging power supplies
- 100-240 VAC, 50/60 Hz, 95W maximum total

# Dimensions and Weight

- 19" W x 17.5" D x 1.75" H (approximately 48,2 x 44,4 x 4,5 cm)
- Net weight: Approximately 7.7 lbs (3,5 kg)
- Approximate shipping weight 11 lbs (5 kg)

#### Regulatory

- North America CE tested and compliant with UL-approved power supplies
- Europe Complies with European Union Directive 2011/65/EU on the restriction of use of certain hazardous substances in electrical and electronic equipment (RoHS 2 and WEEE)

## Warranty

Standard Telos Alliance 2-year limited parts and labor