

AIXpressor



The AIXpressor is a processing powerhouse taking Jünger Audio's legendary performance and sound quality to the next level.

A large, stylized, light blue "jünger" logo is visible in the background of the top right section of the image.

Jünger Audio™ AIXpressor

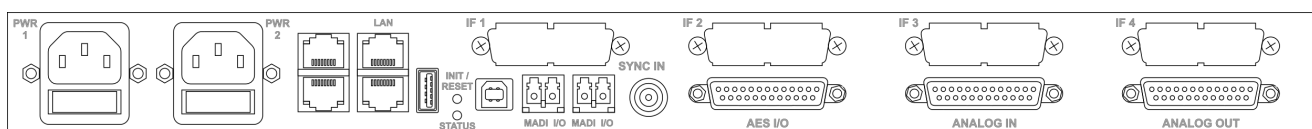
Universal Audio Interface with optional Jünger processing

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AES67
Livewire+™



**Reliable hardware.
Flexible software.**



Overview

The AIXpressor 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, -41 metadata support, 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, flexAI, makes deploying legendary Jünger Audio processing on the AIXpressor simple and straightforward. Easily tailored to match your exact needs, AIXpressor is a true processing powerhouse. When using Jünger Audio's new interface format, tieLight™, AIXpressor can transport up to 1024 channels of virtually latency-free audio to an additional processing unit such as the flexAIServer.

Features

- Powerful x86 based processing core
- On board interfaces:
 - Audio-over-IP
 - AES67 / SMPTE ST 2110-30 and -31
 - ST 2110-41 Metadata over Ethernet
 - 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

* via optional I/O card

Maximum flexibility



- 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
- Browser-based audio confidence monitoring
- 16.5 cm touch-sensitive display
- Optional Audio processing
 - Program processing up to 7.1.4 channels, including Junger Audio Level Magic Loudness Processor
 - Voice Processing
 - Voice Over Mixing (stereo and 5.1) w/ mix-minus and output processing
 - Automixing (stereo and 5.1) with optional A.I. support
 - Upmixing up to 7.1.4 channels
 - Matrix Mixer with up to 16 input and output channels
 - Long, multi-channel, audio delay
 - FM Radio Conditioning
 - GfK Watermarking
 - Dolby E encoding/decoding
 - Dolby ED2 encoding/decoding
 - S-ADM authoring for Dolby Atmos
 - S-ADM renderer for Dolby Atmos
 - MPEG-H 3D Audio renderer
 - MPEG-H 3D Audio authoring
 - MPEG-H 3D Audio encoding
 - Immersive Monitor Controller
- SNMP
- Ember+ and NMOS IS-04 & IS-05



Demand a solution, not just a machine

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 ST 2110-30 and -31. Additionally, Metadata over Ethernet as standardized in SMPTE ST 2110-41 is supported. 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, AIXpressor 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

AIXpressor is based on the entirely new audio processing infrastructure platform we call flexAI. With flexAI, 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 flexAI-based applications can run on the AIXpressor as well as Jünger Audio's growing range of flexAI audio processing servers, with virtualized and cloud-based solutions on the horizon.

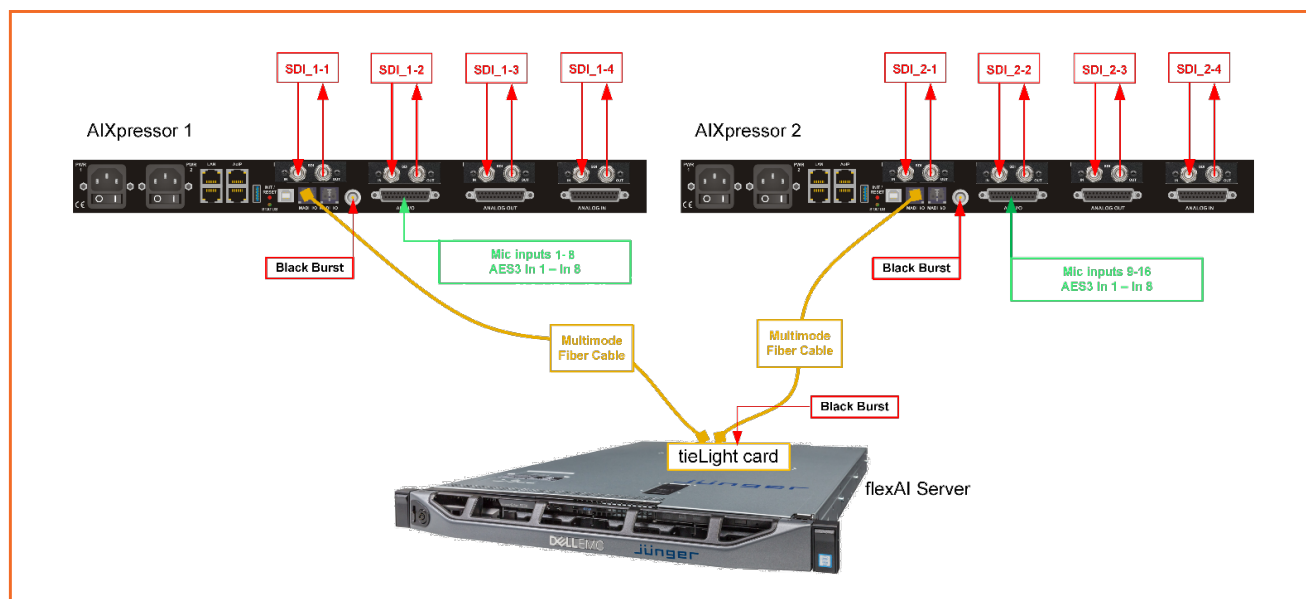
**** UHD workflows can be supported via four SDI option cards**

Smart operation/ Eco-friendly



Cascading Made Simple

The AIXpressor 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. AIXpressor and flexAIserver 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 Junger Audio's tradition of comprehensive remote control and automation, all functionality is operated from a completely new designed web interface. Audio monitoring of various points in the processing paths is available via the browser interface for troubleshooting confidence monitoring.

Eco and Budget Friendly

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



Elegant functionality

Specifications

The base AIXpressor 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 sample rate converters (individually switchable for each stereo pair)

SFP slot

- 2 x SFP slots, capable of supporting either 64-ch MAD I 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.
- Standard mode or redundant mode with automatic failure switch-over
- 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.
- Standard mode or redundant mode with automatic failure switch-over
- Single or multi-mode fiber interfaces available
- The tieLight protocol supports the transport of up to 1024 audio channels across a fiber optic connection

Fully-featured stand-alone audio processor



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
- Metadata over Ethernet: SMPTE ST 2110-41

Optional I/O Interfaces

Four option card slots are supported in the AIXpressor.

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
- 4-ch Microphone Input

*Option cards should be ordered with the unit and are installed at the factory

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, MADI

Sample Rate/Resolution/Frequency Response

- 48kHz, 24-bit, 5Hz – 24kHz

Control

- Remote control via standard web browser, including web-based audio confidence monitoring at various points in the processing chains
- Ember+
- NMOS IS-04 & IS-05
- SNMP (monitoring)

Flexible audio processing. Unlimited possibilities.



Audio Processing

Audio processing is available as optional software modules.

Processing options include:

- Program processing up to 7.1.4 channels, including Jünger Audio Level Magic Loudness Processor
- Voice Processing
- Voice Over Mixing (stereo and 5.1) w/ mix-minus and output processing
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Ethernet

- Four Gigabit RJ-45 connections

Power

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

A 1RU processing powerhouse.



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

- Manufacturer's standard warranty is two years on parts and labor [TelosCare PLUS™](#) is included for additional layers of support and protection

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