

UPMIX ENGINE

*Advanced Real-Time Upmixer
for Professional Immersive
Audio Applications*



PRODUCT OVERVIEW

Upmix Engine converts stereo content into immersive multichannel audio in real-time, without altering the original mix. Powered by the RISE algorithm, the engine intelligently redistributes spectral elements across multiple channels, delivering rich immersive experiences without multitrack stems or object-based mixes.

LF Warp functionality enables reshaping of low-frequency imaging for enhanced bass control and impact. FocusField technology allows detailed definition and steering of the spatial image, adapting the focus to fit the application.

Featuring flexible Dante™, AES3, MADI, and balanced analog I/O connectivity, Upmix Engine is equipped for demanding live events and tours, performance venues, corporate events and broadcast scenarios.

KEY FEATURES

- ▶ Real-time stereo to immersive upmixing with low latency
- ▶ LF Warp low-frequency imaging control
- ▶ FocusField steering and shaping of immersive image
- ▶ Dante™, MADI, AES, AVB*, and balanced analog I/O
- ▶ Upmix to 5.1 / 7.1 / 7.1.4 / custom arrays
- ▶ 12 configurable output channels
- ▶ Front-panel touchscreen and rotary
- ▶ Remote control via web UI and OSC (Ethernet)
- ▶ Redundant power and network options
- ▶ 19" Rackmount 1RU

APPLICATIONS

- ▶ Live events and touring
- ▶ Live venues
- ▶ Corporate events
- ▶ Broadcast

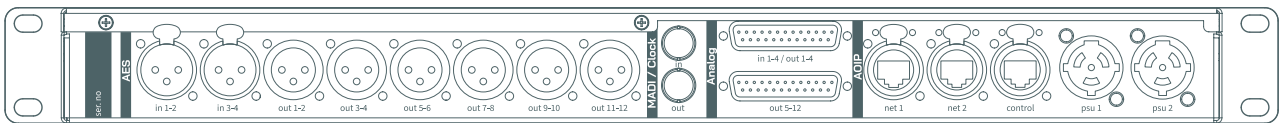
TECHNICAL SPECIFICATIONS

Audio Performance

Parameter	Specification
Upmixing cores	2 configurable as Quad, Hexa, Octa or Spatial Di or Quad)
Sample Rate	48 / 96 kHz (selectable)
Bit Depth	24-bit
Latency (DSP core)	< 9 ms (Analog in to Analog out)
Dynamic Range	> 118 dB (To be confirmed)
THD+N	< 0.002% @ 1 kHz (To be confirmed)
Channel Processing	4 in / up to 12 out

*Milan certification pending





Inputs (Selectable Routing Matrix)

Input Type	Count / Format
Analog Balanced	4 Channels (D-SUB)
AES3	4 Channels (2 x XLR)
Dante™ (AES67 compatible)	4 Channels (EtherCON Redundant)
AVB (Milan certification pending)	4 Channels (EtherCON Redundant Shared with Dante)
MADI (optical or coaxial)	4 channels (BNC)
Word Clock	1 (BNC Shared with Madi, selectable)

Outputs (Assignable Routing Matrix)

Output Type	Count / Format
Analog Balanced	Up to 12 Channels (D-SUB)
AES3	Up to 12 Channels (6 x XLR)
Dante™	Up to 12 Channels (EtherCON Redundant)
AVB (Milan certification pending)	Up to 12 Channels (EtherCON Redundant Shared with Dante)
MADI	Up to 12 Channels (BNC)
Word Clock	1 (BNC Shared with Madi, selectable)



Processing & Control

Feature	Specification
Rise Upmix Algorithm	Realtime Immersive Stereo Expansion
Presets	10 Default, 10 user-definable
Output Processing	Full matrix with per-channel delay, gain, polarity & parametric EQ
Remote Control	Web UI and OSC via Ethernet
Front Panel	TouchScreen + rotary encoder
Status LEDs	PSU 1, PSU2

Clocking & Sync

Word Clock In/Out (BNC)
AES/Dante/AVB/MADI sync
Internal / External (selectable)

Power & Mechanical

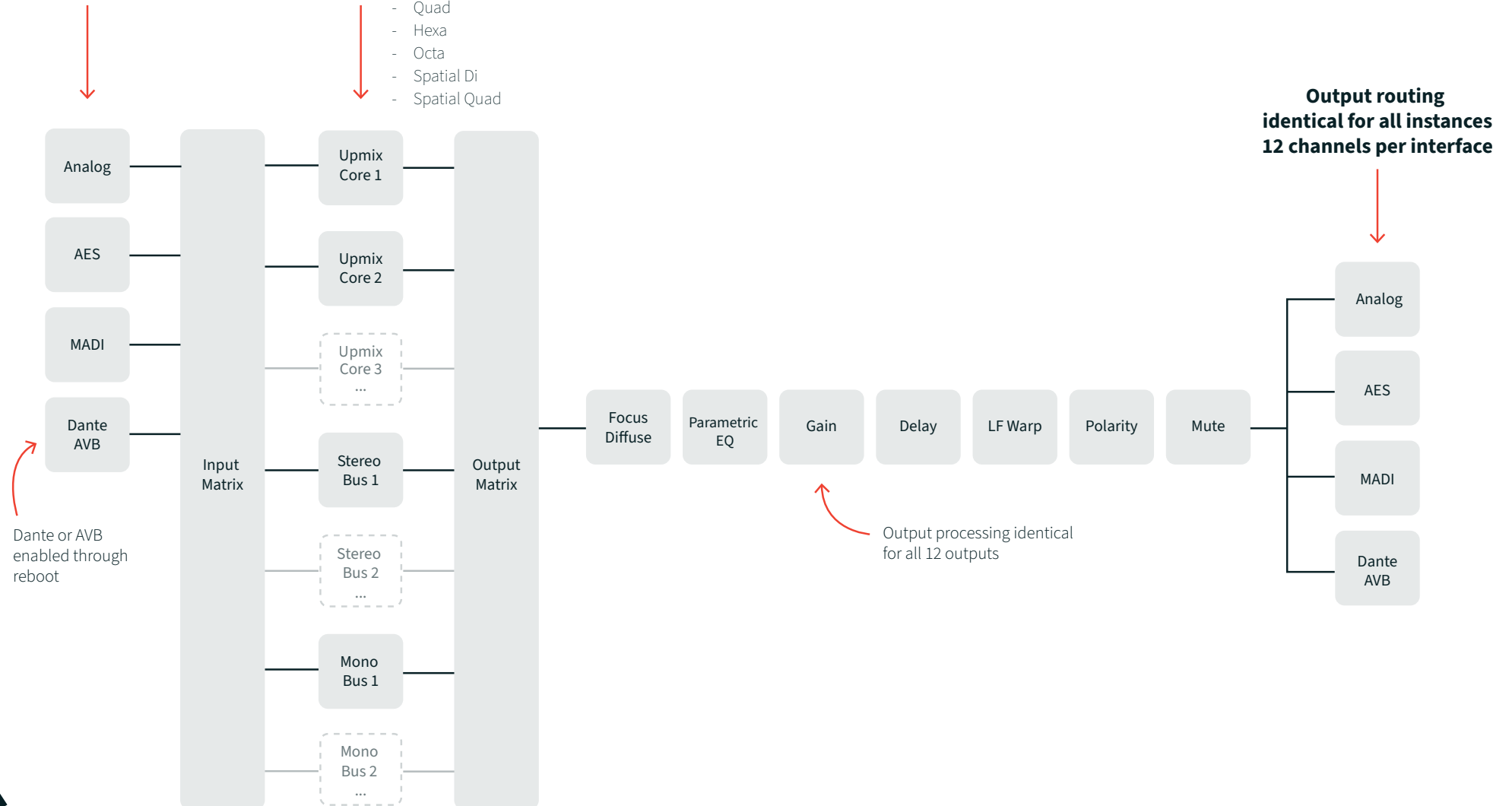
Parameter	Specification
Power Supply	Dual redundant internal PSU (100–240 VAC)
Power Consumption	< 28 W per PSU
Mounting	19" 1RU (standard)
Dimensions (W × D × H)	482 × 220 × 44 mm
Weight	~3.5 kg (7.72 lbs)
Operating Temp	0–45°C, fan-cooled



4 input channels per interface

Upmix Modes:

- Quad
- Hexa
- Octa
- Spatial Di
- Spatial Quad



VERSIONS & ORDERING

Model

AUE25
AUE25DSUB

Description

Upmix Engine
Upmix Engine D-SUB Cable set

COMPLIANCE

- CE, FCC, RoHS, (Milan certification pending)
- Designed and assembled in the EU

CONTACT

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Disclaimer: All information in this document is preliminary and subject to change without notice. The manufacturer assumes no responsibility for errors or omissions, and reserves the right to make changes to the products described herein without notice.

