

LINEAR ACOUSTIC AERO.10

DTV Audio Processor



Uncompromised Quality, Incredible Value

AERO.10 delivers the high-quality loudness control, upmixing, and flexible signal routing expected in a Linear Acoustic television processor in a 1RU product designed especially for PCM-only applications where Dolby® coded audio and audience measurement watermarking are not required.

Loudness control and upmixing/downmixing are entrusted to industry-standard AEROMAX® and UPMAX®-II algorithms, ensuring a consistent and compliant output level for main channel and SAP audio without compromising audio quality - a combination to make loudness meters and viewers equally happy. LKFS/LUFS loudness metering and logging is provided for each program.

AERO.10 can be customized in the field in your choice of three program configurations: AMX5.1 (5.1+2+2), AMX2.0 (2+2+2), or AMX5x2 (2+2+2+2+2). AMX5.1 and AMX2.0 configurations offer dual UPMAX®-II upmixing to create compelling 5.1-channel audio from 2-channel sources, and a downmix that is nearly indistinguishable from the original source.

I/O includes 8 audio pairs via HD/SD-SDI and 4 audio pairs via AES-3 with flexible pair shuffling on both the input and output, plus one balanced analog audio pair. Compensating video delay (SDI input) and per-pair audio delays ensure A/V sync. Local audio insertion allows an external audio source such as EAS or text-to-speech to be introduced into the main or secondary program audio outputs.

AERO.10 offers the convenience of a front panel display and controls but can also be remotely controlled, set up, and monitored via the included NfRemote software. A built-in http server allows for automated control and loudness log retrieval.

Failover bypass relays on all I/O maintain signal continuity, while dual auto-ranging power supplies provide redundancy and worldwide compatibility.



Specifications

Processing

One instance of AEROMAX® processing in field-selectable AMX5.1 (5.1+2+2), AMX2.0 (2+2+2), or AMX5x2 (2+2+2+2+2) configurations. UPMAX®-II upmixing/downmixing with automatic detection and automatic downmix replacement

Reference

48kHz reference via AES (including DARS), AES Input 1, SDI, or internal clock (standalone use only)

Sample Rate/Resolution/Frequency Response

48kHz, 24-bit, 20Hz - 20kHz below threshold

AES I/O

Four 2-channel inputs/outputs via 75 Ohm BNC unbalanced female connectors, internally terminated; signal levels per SMPTE 276M/AES-3ID-2001

SDI I/O

One auto-sensing HD/SD-SDI input (SMPTE 292M/259M), up to 1080i/60/59.94/50Hz, with de-embedding for 8 audio pairs; re-embedding for 8 audio pairs via one SDI output; supports SMPTE 2020 A and B VANC metadata

Analog I/O (Stereo)

9-pin female D connector; 10K Ohm balanced stereo inputs; balanced stereo outputs, +4dBu nominal, +24dBu maximum into 600 Ohms

Parallel GPI/O Control Port

25-pin female D connector, 0-5V TTL levels, for 8 inputs and outputs; controls preset recall plus local audio insertion

Ethernet Connection

Gigabit Ethernet provides TCP/IP remote control, access to http server, and NfRemote software

Front Panel Display and Controls

Rotary encoder plus monochrome display and headphone output

Power

Dual internal power supplies, each rated at 100-264VAC, 50/60Hz, auto-sensing, 100W maximum total

Dimensions and Weight

1RU - 1.75"H x 19"W x 15.5"D (44 x 483 x 394 mm); approximate net weight 9 lbs. (4 kg); approximate shipping weight 12 lbs. (5.4 kg)

Environmental

Fan cooled; operating temperature 32 to 122 degrees F (0 - 50 degrees C); non-operating temperature -4 to 158 degrees F (-20 - 70 degrees C)

Regulatory

North America - FCC and CE tested and compliant; power supplies are UL approved

Europe - Complies with European Union Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended by Commission Decisions 2005/618/EC, 2005/717/EC, 2005/747/EC (RoHS Directive), and WEEE

Warranty

Standard 2-year limited parts and warranty

Specifications are subject to change without notice.