LINEAR ACOUSTIC AERO.100
DTV Audio Processor

Quality, Flexibility, and Value

AERO.100 provides all of the performance and features television broadcasters have come to expect from Linear Acoustic in a compact, 1RU loudness management platform.

Built around industry-standard AEROMAX® processing and UPMAX®-II upmixing and downmixing, AERO.100 delivers a consistent and compliant output level for main channel and SAP audio without compromising audio quality, ensuring both a happy loudness meter and happy viewers. LKFS/LUFS loudness metering and logging is provided for each program.

AERO.100 hosts either one or two processing instances in your choice of AMX5.1 (5.1+2+2), AMX2.0 (2+2+2), or AMX5x2 (2+2+2+2+2) configurations. 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.

The first processing engine of any AMX instance can be optionally configured to include Dolby® Digital/Dolby Digital Plus transcoding. This feature provides decoding of any Dolby Digital/Dolby Digital Plus content to PCM for loudness processing, and encoding to Dolby Digital/Dolby Digital Plus for transmission.

The optional Nielsen® watermark encoder offers independent watermarking for each processing engine within an instance, including N2, N6, and CBET.

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. 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.

The included NfRemote software provides setup and control of system and processing settings, while 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 or two instances of AEROMAX® processing in 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.

**Audio Coding & Watermarking**
Available Dolby® Digital/Dolby Digital Plus transcoding. Available Nielsen® watermark encoding, including N2, N6, and CBET.

**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-3 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.

**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 Indicators**
Graphical OLED display for system software, host name, and IP address.

**Power**
Dual internal power supplies, each rated at 100-264 VAC, 50/60Hz, auto-sensing, 150W maximum total.

**Dimensions and Weight**
1RU – 1.75"H x 19"W x 15.5"D (44 x 483 x 395 mm); approximate net weight 9 lbs. (4 kg); approximate shipping weight 15 lbs. (6.80 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.


**Warranty**
Standard 2-year limited parts and warranty.

Specifications are subject to change without notice.

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