



*All-In-One Television Loudness Controller and Audio Processor  
Includes Proven AEROMAX® and UPMAX® II Algorithms, Dolby® Coding  
plus BS.1770 Loudness Metering and TCP/IP Remote. Optional Nielsen Watermarking*

## **AERO.100** DTV Audio Processor

**Aero.100 0.13.63**

**Host: A1H-509999**  
**IP: 192.168.1.120**

# Introducing AERO.100

## *Highest Quality Television Audio Processing - Unbeatable Value.*

Hybrid dynamic range and loudness control with new Advanced ITU Limiter provide set-and-forget compliance *and* viewer-pleasing quality while included features deliver incredible cost-savings.



Handling up to 10 channels of audio, encoded or baseband, AES, or SDI, the Linear Acoustic AERO.100 offers all-inclusive audio processing for television broadcast via over the air, over the top, and mobile services. The new Advanced ITU (AI) Limiter enables a simple loudness target to be set, and the AERO.100 does the rest to assure compliance and quality.

### **AERO.100 Includes:**

- Linear Acoustic AEROMAX<sup>®</sup> loudness and dynamics control
- UPMAX<sup>®</sup> II automatic upmixing and downmixing
- Intelligent Dynamics<sup>™</sup> with NEW Advanced ITU (AI) Limiter
- 5.1+2+2 (Local/EAS) 10-channel structure
- Dolby Digital (AC-3)/E decoding and Dolby Digital (AC-3) encoding
- 3GHz HD/SD-SDI I/O with included video delay
- 8 channels of AES I/O with reference input

- Dual PSU and relay bypass
- Extensive TCP/IP remote control and HTTP control

### **Options:**

- Nielsen Watermark encoder (can be field-enabled)
- Non-coding version (drops the Dolby coding and the price!)

# AERO.100



New Linear Acoustic Intelligent Dynamics™ (ID) is a patented hybrid of single-ended and metadata control. It is an infinitely and automatically adjustable balance between permanent and reversible and the overall amount of control - all driven by the content itself. Compliant, high-quality content is preserved and unknown content is adjusted for compliance resulting in consistently pleasing audio delivered to consumers. ID can also be used to tailor content for the type of delivery. No longer one-size-fits-all, processing can be separately tailored for over-the-air (OTA), over-the-top (OTT), and mobile - all automatically, all in one unit.

How does it sound? Exactly like the highest quality audio control always provided by Linear Acoustic: Exceptional. The difference is that audio can remain untouched. Or not. It's up to the content and the broadcaster.

Finally the choice of compliance or quality is easy: Choose both. Automatically!



Comprehensive TCP/IP remote provides control over all system settings, processing and coding parameters plus extensive metering of signal presence, processing and coding activity, and audio loudness. System status reports physical I/O details along with system, power supply and environmental health. The remote application also delivers remote audio, up to 5.1 channels, so the user can audition signal quality anywhere link bandwidth permits. An HTTP server is also included for simple get/set control of all parameters and retrieval of status.

Designed and built in the USA, the lightweight and rugged 1RU AERO.100 is a solid investment in performance and flexibility. Though most all features are standard, options can be enabled by simply entering a factory provided key.

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

**The AERO.100 is backed by the world-class support and expertise of Linear Acoustic where 24-7 assistance is always just a phone call away.**

# AERO.100 Specifications:

## Processing

- 5.1+2+2 (Local/EAS) AEROMAX<sup>®</sup> multistage adaptive wideband and multiband loudness and dynamic range control with ITU-R BS.1770 loudness metering
- Dual UPMAX<sup>®</sup> II two-channel to 5.1 channel upmixers plus main channel downmixing, automatic bypass of discrete content.
- Linear Acoustic Intelligent Dynamics™ with NEW Advanced ITU (AI) Limiter

## Audio Encoding/Decoding

- Dolby Digital (AC-3) encoding/decoding, up to 5.1 channels
- Dolby E decoding
- Dolby Digital Plus encode/decode and Dolby E Encode (Q4, 2013)

## Sample Rate/Resolution/Frequency Response

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

## AES I/O

Eight main inputs plus reference via 75-Ohm BNC female connectors, internally terminated; Eight main outputs plus Encoder; Signal levels per SMPTE 276M/AES-31D-2001

## SDI I/O

Auto-sensing 3GHz HD/SD-SDI (SMPTE 292M/259M) inputs, up to 1080p/60/59.94/50Hz, access to audio and VANC metadata

## Parallel GPI/O Control Port

25-pin female D connector; 0-5V TTL levels for 8 inputs and 8 outputs; controls simple preset recalls plus voiceover/EAS insertion

## Ethernet Remote Control

Gigabit Ethernet supports included TCP/IP remote control application; HTTP server included for get/set control of all parameters.

## Front Panel Controls and Indicators

Graphical OLED display

## Serial Metadata

9-pin female D connector; 115.2 kbps; pinout per SMPTE 207M (RS-485); Designed to directly interface with Dolby serial metadata (SMPTE RDD6)

## Power Requirements

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

## Dimensions and Weight

One rack unit- 1.75"H x 19"W x 15.5"D (44 x 483 x 394 mm) Net weight: 9 lbs (4 kg); shipping: 12 lbs (5.4 kg) approximate.

## Environmental

Fan cooled. Operating: 0 to 50 degrees C, non-operating -20 to 70 degrees C.

## Regulatory

North America: Tested to comply with the limits for a class A digital device pursuant to Part 15 of the FCC rules (CFR). Power supplies are UL tested and approved.

Europe: Tested to comply with the requirements of harmonised Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC as indicated by the affixed CE marking; RoHS and WEEE compliant

## Warranty

Two-years limited parts and labor

## Options:

- Nielsen Watermark Encoder (5.1+2)
- Non-coding version (eliminates Dolby encoding and decoding)

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