GINEAR ACOUST

High Density Metadata Audio Control with Dolby® Coding, UPMAX® ITU-R BS.1770 Loudness Metering, TCP/IP Remote, Nielsen Watermarking

AERO.1000 Audio/Loudness Platform



## Introducing AERO.1000 -

Simply the most advanced audio control platform available.

High density coding with traditional and metadata-based audio loudness and dynamic range control provides peace of mind compliance and viewer-pleasing quality and consistency.



Handling up to 64 channels of audio, encoded or baseband, AES, SDI or DVB-ASI, the Linear Acoustic AERO. 1000 offers extremely high density along with connectivity to signals present in modern broadcast facilities. For easy applicability to any system design, compensating video delay and 3GHz compatibility are included as standard features.

## AERO. 1000 features:

- Linear Acoustic Intelligent Dynamics™ Options:
  3GHz HD/SD-SDI I/O with included video delay
  Up to 8 AEROMAX audio engines including UPMAX
  I6 channels of AES I/O with reference input
  Up to 8 Dolby Decoders plus 8 Dolby Encoders
  +4dBu Analogue I/O with headphone output
  Up to eight Nielsen Watermark encoders
  Dual PSU and relay bypass
  Extensive TCP/IP remote control and HTTP control
  \*All options can be field-enabled via factory supplied keys
- AERO.1000

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New Linear Acoustic Intelligent Dynamics<sup>™</sup> is a patented hybrid of our popular wideband and multiband look-ahead techniques and Dynamic Range Control (DRC) metadata. An infinitely adjustable balance between permanent and reversible control is provided to enable quality to be preserved while delivering consistently pleasing audio. How does it sound? Exactly like the highest quality audio control always provided by Linear Acoustic: Exceptional. The difference is that now audio can remain untouched. Or not.

Broadcasters can choose reversible control for high quality trusted programming and use permanent control where necessary.

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



Menu

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, to the user so that signal quality can be auditioned anywhere link bandwidth permits. HTTP server is also included for simple get/set control of all parameters and status.

Designed and assembled in the USA, the lightweight and rugged IRU AERO.1000 is a solid investment in performance and flexibility. Fully field-upgradable, all options can be enabled by simply entering a factory provided key.

A bright yellow OLED display and integrated rotary navigation cluster provide straightforward menu navigation and function adjustment. Failover bypass relays on all I/O maintain signal continuity and dual auto-ranging power supplies enable redundancy and worldwide compatibility.

The AERO.1000 is backed by the world-class support and expertise of Linear Acoustic. Assistance is always just a phone call away.

# AERO.1000 Specifications:

## Processing

- Linear Acoustic Intelligent Dynamics™
- AEROMAX<sup>®</sup> multistage adaptive wideband and multiband loudness and dynamic range control with ITU-R BS.1770 loudness metering
- UPMAX<sup>®</sup> II two-channel to 5.1 channel upmixing and downmixing, automatically bypasses discrete content.

## 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; Eight Aux I/O via 25-pin female D connector; Signal levels per SMPTE 276M/AES-3ID-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

### Analogue I/O

10K Ohm balanced stereo inputs, +4dBu nominal, +24dBu Max.; Balanced outputs +4dBu nominal, +24dBu Max into 600 Ohms.

## Parallel GPI/O Control Port

25-pin female D connector, 0-5V TTL levels for 8 inputs and 8 outputs

## 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

Rotary navigation cluster plus graphical OLED display

### Headphone Output

6.3mm front panel connector, +12 dBu max into 600-Ohms

### Serial Metadata

9-pin female D connector; I 15.2 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.

## **Dimensions and Weight**

One rack unit- 1.75"H  $\times$  19"W  $\times$  15.5"D (44  $\times$  483  $\times$  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 (vary depending on configuration)**

- Up to 8 Dolby E/Digital/Plus Decoders and Encoders
- Up to 8 AEROMAX 5.1+2+Local Engines with dual UPMAX II upmix/downmix
- Up to 8 Nielsen Watermark Encoders
- DVB-ASI I/O supporting up to four PIDs

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