



Enterprise Class Audio Control and Metering

AERO.soft

Unlimited Audio Control

Introducing AERO.soft™

Operating on the new Linear Acoustic AERO.soft Processing Engine hardware, AERO.soft is an enterprise-wide audio and loudness management solution for high density applications. It features trusted Linear Acoustic AEROMAX® loudness control, UPMAX® II upmixing/downmixing, ITU-R BS.1770-3 metering, and the latest Dolby® encoding and decoding ensuring compliance with world-wide audio loudness regulations while maintaining the highest audio quality. Audio over IP (AoIP) connectivity via Livewire+/AES-67 enables I/O of any flavor and combination or integration with third party video and/or audio encoding software.



AERO.soft features:

- Very high channel capacity software runs real-time on AERO.soft Processing Engine
- I/O Independence via Livewire+/AES-67 AoIP
- Linear Acoustic AEROMAX® loudness/dynamics control
- UPMAX® II upmixing/downmixing with AutoMAX 5.1 surround/2.0 channel detection and switching
- Intelligent Dynamics™ with Advanced ITU (AI) Limiter
- AMX5.1 (5.1+2+2), AMX2.0 (2+2+2), and AMX5x2 (2+2+2+2+2) instances available
- ITU-R BS.1770-3 compliant metering
- NfRemote client enables control, metering, and local audio monitoring
- Dolby Digital (AC-3), Dolby Digital Plus, and Dolby E encoding and decoding options
- Nielsen® watermark encoding

AERO.soft

AERO.soft: Audio Control Without Bounds.

AERO.soft includes the AEROMAX adaptive wideband and multiband, multistage ITU compliant loudness control algorithm. Upmixing is provided by the Hollywood-approved UPMAX® II algorithm which provides an engaging 5.1-channel audio experience for two channel sources. Loudness, spectral balance, and image shifts are controlled while preserving more of the original content than previously possible. AERO.soft uses the latest Dolby codecs which support Evolution, part of their new Intelligent Media Framework.

The AERO.soft Processing Engine is capable of handling up to eight processing instances in any combination of AMX5.1 (5.1+2+2), AMX2.0 (2+2+2), or AMX5x2 (2+2+2+2+2) configurations. AMX5.1 instances include dual upmixing while each AMX2.0 and AMX5x2 instance provides a downmix of the primary program audio prior to processing. All configurations support auto downmix output, support for SAP/DVS, support for voiceover, EAS, and local emergency audio insertion, and optionally, Audio Description (warble tone) functionality. ITU-R BS.1770-3 or EBU 128 meters are present on each output. Dolby Digital (AC-3), Dolby Digital Plus, and Dolby E encoding and decoding is optionally available for each instance along with Nielsen watermark encoding.

Linear Acoustic Intelligent Dynamics™

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 processing 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.

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.



More about Livewire Audio over IP and xNode Interfaces

Broadcast facilities have been using Axia Livewire AoIP (audio over IP) technology to route hundreds of audio channels using standard Ethernet switches, cables and other components. With thousands of devices on the air every day, reliability is proven.

Livewire is lightning fast, simple to implement, easy to manage, conforms to the AES-67 standard and is the technology upon which Ravenna is built. It also significantly reduces the number of cables and wires needed to transport and share audio throughout the broadcast plant. Nearly any audio source - analog or AES and now SDI - and myriad equipment from phone systems to codecs to satellite receivers - can be made a part of a Livewire network.

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

AERO.soft Specifications:

Processing

- AEROMAX[®] multistage adaptive wideband and multiband loudness and dynamic range control with ITU-R BS.1770-3 loudness metering
- UPMAX[®] II two-channel to 5.1 channel upmixing and downmixing, automatically bypasses discrete content.
- Includes Auto Downmix output, support for SAP/DVS, Voiceover, and optional Audio Description (warble tone) functionality
- Includes Linear Acoustic Intelligent Dynamics™ works with Dolby Evolution as part of their Intelligent Media Platform

Remote Control

Dedicated TCP/IP remote control application provides extensive metering, control, system management and remote monitoring of one or many instances; HTTP server included for get/set control of all parameters

Options (vary depending on configuration)

- Up to eight AEROMAX[®] processing engines in any combination of AMX5.1 (5.1+2+2), AMX2.0 (2+2+2), or AMX5x2 (2+2+2+2+2) configurations
- Dolby Digital (AC-3), Dolby Digital Plus, and Dolby E encoding and/or decoding for any/all instances
- Nielsen watermark encoding for any/all instances
- Audio Description (warble tone) for any/all instances

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Linear Acoustic AERO.soft Signal Flow

