

# Ariane

# SEQUEL

Digital Audio Leveler



## Making things sound better.

- User determined 'Instantaneous Dynamic Range' (IDR) control allows more natural dynamics. User-selectable modes include Stereo Matrix processing, conventional Stereo and Independent Dual Mono modes. Savable user presets with automatic daypart clock.
- Matrix sum & difference processing maximizes the FM transmission medium with sum-referenced control on the difference signal for a more consistent stereo stage and better loudness density.
- Removal of low frequency components from the difference (L-R) signal reduce intermodulation products and improve multipath performance.
- Adjustable multiband crossover points place equal energy in all bands to help prevent spectral skewing during large gain changes.
- RMS detection for control mimics the audio power sensitivities of human hearing.
- Extremely wide acceptance range utilizes feed-forward topology for over 30db of input range.
- Completely digital audio path.
- Analog and AES/EBU digital inputs and outputs.
- Adjustable sample rate: 32, 44.1 or 48 kHz (or sync).
- Peak and RMS input and output metering.
- Output peak protection limiting.

### *The Ariane is great for...*

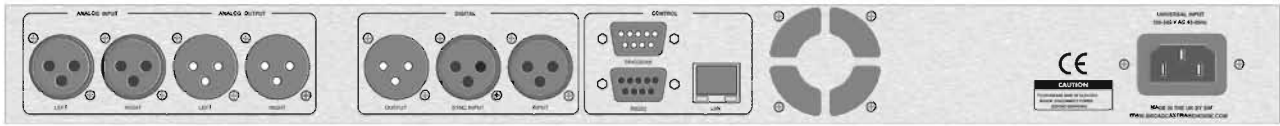
- 🎧 Pre-processing Radio or TV Program Audio, for a more controlled but open On-Air signal...
- 🎧 Production/Dubbing to create consistency...
- 🎧 IBOC/Streaming/Webcasting leveler for a more even, listenable sound...
- 🎧 Satellite or remote broadcast feeds...
- 🎧 Anywhere there are unknown or uncontrolled audio levels that need to be tamed without adding a 'processed' sound!

# TRANSLANTECH SOUND, LLC

50 West 106th Street, Suite 5C  
New York, NY 10025  
212.222.0330

For more information please call, or email: [sales@translantech.com](mailto:sales@translantech.com)

## [www.translantech.com](http://www.translantech.com)



## FAQ Frequently Asked Questions about the Ariane Sequel Digital Audio Leveler

### **Q: Can the Ariane be used with other processors?**

A: Of course! The *Ariane* was designed to be the ideal preparation processor, optimizing the consistency of the final mix from radio and television broadcast consoles or automation systems. The caveat is that if you now use a single-box processor by itself, when you add the *Sequel* to the mix it's a good idea to reduce or disable certain portions of subsequent processing, i.e., usually the AGC, in the following processor system to avoid too much overall gain. By dividing the responsibilities so the wide-range control is left to the *Sequel*, leaving the peak limiting to be taken care of in the final processor, each can do its job best, with the sum of the pieces being superior to either alone. Even the latest model digital broadcast processors can benefit from the easy upgrade of putting an *Ariane Sequel* first in line!

### **Q: Won't the Sequel 'fight' the other processing?**

A: From the beginning, the *Ariane* was expressly designed to work with other processors. It works especially well in an environment where some programming is already processed and other elements aren't. The RMS detection with "window" (hysteresis) gated-release system is especially intelligent, knowing NOT to process when the audio doesn't need it! Since the *Ariane* is basically just doing what an idealized board operator would do, it doesn't sound processed. Matter of fact, the fatigue factor is so low, you can listen to an *Ariane* by itself for hours on end!

### **Q: So what exactly does the Ariane do, and why would it be so much better than the wideband AGC already built into my present processor?**

A: The *Ariane* is designed to deliver a very consistent level with minimal processed sound to the following processor, where any 'signature' sound can then be created. Because it is multiband with no wideband processing, the *Ariane* is not subject to the limitations of wide-band AGCs, e.g., intermodulation pumping. Its detection system is RMS-based, and as such is similar to human hearing sensitivity. Because of its unique design, the *Ariane Sequel* is almost completely immune to 'spectral skewing,' the anomaly where one portion of the spectrum dominates or recedes, depending on the level of incoming audio. In short, the *Ariane Sequel* can handle virtually any level you give it, with little or no noticeable processing artifacts!

### **Q: I heard the Ariane uses matrix processing. Doesn't that exaggerate the stereo field? What about creating multi-path distortion? That's the last thing we need!**

A: The *Ariane Sequel* can be used as a matrix processor, but the end result is not an exaggerated stereo (unless you really want that!), but rather, a controlled stereo. And there are serious benefits to be had by controlling the stereo content, not the least of which is the actual reduction in multipath artifacts, by reducing the extremes of stereo subcarrier energy. You can also optionally reduce the low frequency energy of the L-R, and/or use the multiband outputs to tailor the L-R energy spectrum to meet special needs. Because the L-R control system is identical to the mono system, it too uses the proprietary RMS detection with 'window' gated-release system to minimize audibility of the control process.

Of course, you can eliminate the whole issue of stereo matrixing: the *Sequel* has a pure Stereo mode, with user-defined channel coupling. And for AM mono users there is also a new Dual-Mono mode, with two independent channels of *Ariane* processing in one box!

### **Q: Where in the broadcast chain does the Sequel fit in?**

A: The *Sequel* usually goes at the output of the program console or automation system, before any other processing. It can be used to drive a digital or analog STL or telephone lines to the transmitter, if the final processing resides there.

### **Q: Today's music is SO processed! Why on earth would I want to add more processing to an already processed source?**

A: Why indeed! The *Ariane*, unique in its field, analyzes the incoming audio band by band to determine the amount of processing that has already taken place. It then uses its proprietary onboard intelligence, with guidance by the user, to decide whether or not to process further. On some material, the *Ariane* may actually do almost nothing, but rather just pass it on to the output unchanged, simply putting it at the proper level once and leaving it. Then, when programming comes along that does need control, the *Ariane* recognizes that and jumps to action. It's pretty amazing, if we do say so ourselves!

### **Q: What are some other uses for the Sequel?**

A: The *Ariane Sequel* is a truly powerful yet unobtrusive utility level controller. For example, it's unsurpassed as a natural-sounding standalone IBOC main or secondary channel leveler. In a network TV environment, a *Sequel* could be used at the remote truck to level the audio mix on its way to the studio; at the network HQ, to ensure source-to-source consistency from satellite and remote pickups and as a production processor for ads and promos; and at the master control, for final level and loudness consistency. Since the *Ariane* uniquely analyzes incoming audio to prevent action upon previously processed material, audio quality is not compromised by having even several *Sequels* in series! Still other uses for the *Sequel* include Public Address, internet web streaming and high-quality mastering for music recording and film.

### **Q: Speaking of web streams and IBOC, what else do I need to stream with a Sequel?**

A: Possibly nothing, depending on how aggressively you want to process. The *Ariane Sequel's* output is consistent and non-fatiguing all by itself. Unlike competing peak-based processors, *Ariane's* RMS control is inherently data reduction-friendly and naturally creates a controlled signal that is less prone to the telltale nasty, gurgling 'digital' sound we all know. The built-in protection limiting allows its output to be perfectly prepared for streaming. Just add your favorite encoder!

### **Q: What provisions are there for remote control?**

A: The *Ariane Sequel* can be remote controlled via its RS-232 or TCP/IP connections on the rear panel. The Windows remote control program is proprietary, password-controlled and cannot be accessed by unauthorized users. All front panel controls are available via remote control, and presets can be saved and recalled to and from your computer. The RS232 jack can also be used to perform system upgrades as they become available. A simple contact closure can access the eight user presets, or use the onboard system clock for easy daypart automation.