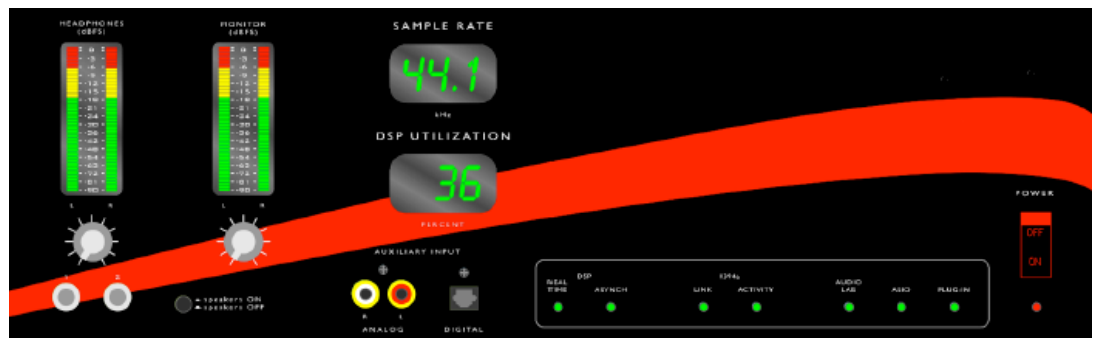


Audio Processing Laboratory Model 6604

Audio Processing Laboratory

Model 6604

TSE 6604 takes forensic audio processing and analysis to the next level. Fully integrating the capabilities of both hardware and software, TSE 6604 seamlessly handles forensic analysis and processing of all analog and digital media, including file based digital media. TSE 6604 represents productivity enhancement through a seamlessly integrated audio workstation environment, capable of blending the merits of superb audio filtering with comprehensive speech and signal processing.



Key Features:

- Multi-tasking: Productivity-enhancing features such as asynchronous “batchmode” processing will allow multiple jobs to be handled simultaneously
- Power, Power, Power: The powerful AccelCore[®] external processor hardware, based on the Analog Devices TigerSHARC[®] floating-point DSP, provides all audio I/O and performs lightning fast regardless of workload
- Handles All Media: Common analog and digital media formats, including filebased media, can be handled directly
- Seamless Integration: Both Direct-X and VST plug-ins will be supported within the AudioLab environment. AudioLab replaces the Master Control Panel found on previous products and allows software-based tools to be mixed and matched with others that are AccelCore-based. Further, the entire setup can be preserved in a single file for easy recall and repeatability at a later date
- Advanced Visualization: Advanced real-time visualization tools such as Precision Spectrogram, Cepstral Voice Pitch Analyzer, 3D Waterfall Spectral Analyzer, and DTMF/Caller ID Visualizer will be included
- Additional Software Tools: “Relative” speaker identification, transient reduction, automatic noise/effect analysis, multi-track alignment, and conversion to common law-enforcement audio formats will also be provided

Key Benefits:

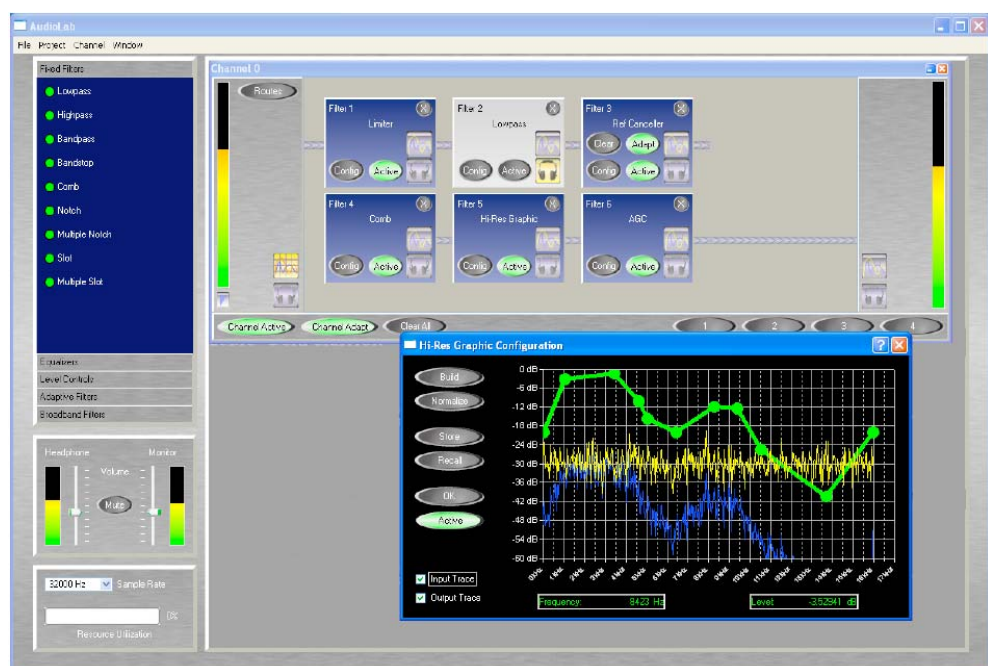
- Intuitive design
- Seamless integration
- Powerful digital filters
- Spectrum analysis
- Virtual patching capability
- Maximum flexibility
- File & tape media handling
- ASCLD reporting

Additional Consideration

- Maximum Efficiency: All real-time filters and visualization tools support multiple instances up to the maximum resource limitations of the PC, the IEEE-1394 "Firewire" interface, and the AccelCore
- Building on Experience: Includes all filtering operations of the current-generation TSE 6601 and MCAP products, plus many new real-time filters such as Clipped-Peak Restoration, Multi-band Downward Expander Noise Reduction, Precision Tracking Comb Filter, and Enhanced 1CH Adaptive and Reference Canceller filters. Simply amazing
- Sophisticated Timeline Management: Tool allows different processing to be applied to different portions of the recording while maintaining evidence integrity
- Flexible and Intuitive Interface: The redesigned graphical user interface is easy to navigate, allowing for quick filter setup and changes
- More Science - Better Results: Gamma's proven methodology and built-in scientific approach help produce results that win cases and survive legal challenges

Specifications

<i>ASIO Driver:</i>	<ul style="list-style-type: none"> • To allow third-party software products to directly utilize the AccelCore for their audio I/O
<i>Power:</i>	<ul style="list-style-type: none"> • Built-in universal AC power supply
<i>Software:</i>	<ul style="list-style-type: none"> • Interfaces via IEEE-1394a Firewire Audio lab control software runs in Windows 2000/XP or higher, (dual displays recommended)
<i>Audio I/O:</i>	<ul style="list-style-type: none"> • 8 channels of balanced analog I/O, AES/EBU digital I/O, dual TOSLINK optical digital I/O, dual S/PDIF coaxial digital I/O, ADAT 8-channel optical I/O, dual monitor outputs for connecting amplified speakers, and dual front panel stereo headphone jacks <p><i>Supports all industry standard rates up to 192 kHz</i></p>



Digital Processing	
<i>Control Microprocessor</i>	<ul style="list-style-type: none"> • One Wavefront Semiconductor DICE II, with ARM core operating at 50 MIPS, ASIC-based digital audio routing, and Firewire audio interface supporting up to 96 channels of audio streaming between the TSE 6604 and host PC • Includes Windows ASIO driver for intercommunication of digital audio data between TSE 6604 and third-party software
<i>DSP Farm</i>	<ul style="list-style-type: none"> • Nine Analog Devices ADSP-TS201S TigerSHARC™ processors, each with 24Mbits of internal RAM and 491.52MHz clock speed • Total processing throughput of 106K MIPS, or 26.5GFLOPS
<i>Other Processing</i>	<ul style="list-style-type: none"> • Texas Instruments TMS320VC5410A front-panel controller processor, with 128kB of internal RAM and 100MIPS throughput • Xilinx Spartan-3 XC3S50 FPGA, configured as a DSP audio router
<i>Digital Filters</i>	<ul style="list-style-type: none"> • Highpass, lowpass, bandpass, bandstop, comb, notch, and slot canonical filters • LMS 1CH, and Reference Canceller (2CH) adaptive filters • Automatic Spectral Inverse, Spectral Subtraction, and NoiseEQ broadband noise reduction filters • Graphic Equalizers, AGC • Other special tools, including real-time clipped-peak restoration, multiband downward expander denoiser, and “de-clicker” modules
<i>Digital Analysis</i>	<ul style="list-style-type: none"> • Real-time spectrum analyzer, single- or dual-trace, 920-line resolution • Adaptive filter coefficient display
Construction	
<i>Packaging</i>	<ul style="list-style-type: none"> • 5.25" H x 17.0" W x 12.0" D, 10 lbs. Rugged aluminum enclosure with black powder-coat finish and multi-color panel overlays.
<i>Power</i>	<ul style="list-style-type: none"> • 85 - 264 VAC, 47-63 Hz universal with IEC320 inlet, 100VA maximum
<i>Host Computer</i>	<ul style="list-style-type: none"> • Recommended Intel Pentium IV 2.0 GHz (or higher) desktop or laptop PC with mouse, 1024x768 SVGA monitor (dual monitors recommended), 1GB RAM, CD-ROM, 80 GB HD, Windows XP SP2, and at least one free IEEE-1394a “Firewire” interface port available. Active matrix LCD display recommended if notebook used.
<i>Streaming Interface</i>	<ul style="list-style-type: none"> • Standard “ASIO” audio driver interface, supporting up to 16 channels of playback and record simultaneously. Provides capability to process WAV or other file-based data through the TSE 6604 hardware via the Firewire connection. Compatible with Adobe Audition 2.0 and Sound Forge 8.0 software.



If you would like further Information about ELAMAN,
or would like to discuss a specific requirement or project, please contact us at:

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