



Position Title: Senior Loudspeaker Systems Engineer (Acoustics / Hardware / DSP)

Location: Lawrence, KS

Department: Product Development (ML - R&D)

Reports To: Sr. Project Manager (Martin Logan - ML)

Job Type: Full-Time

Company Overview: Martin Logan (ML) is a renowned manufacturer of high-fidelity premium audio equipment, specializing in electrostatic and hybrid loudspeakers. Founded in 1983 in Lawrence Kansas, ML has become a leader in innovative speaker design, offering exceptional sound quality and sophisticated aesthetics. We at ML are seeking a skilled and motivated Electronic Designer to join our dynamic team of professionals and contribute to our cutting-edge projects.

Position Summary: We are seeking a visionary **Senior Loudspeaker Systems Engineer** to pioneer the next generation of our world-class, high-end speaker systems. In this role, you will own the entire acoustic and electro-mechanical signal chain. You will bridge the gap between physical transducer mechanics, premium analog/digital hardware, and advanced digital signal processing (DSP). From customizing bespoke driver architectures to programming precision active crossovers and room-correction filters, your work will directly define the signature sonic luxury and breathtaking imaging our brand is celebrated for.

Key Responsibilities:

1. Electro-Acoustic System Design:

- Architect high-performance, multi-way active and passive loudspeaker systems, optimizing the synergy between cabinets, custom drivers, and electronics

2. Premium Electronics Design:

- Develop audiophile-grade, low-noise analog input stages, ultra-clean DAC/ADC paths, and robust power delivery networks

3. Advanced DSP & Crossover Design:

- Architect and implement analog/digital crossover networks, phase correction, dynamic protection algorithms, and boundary/room-compensation filters

4. Advanced Lab Metrology:

- Lead exhaustive objective validation using state-of-the-art diagnostic tools (e.g., Klippel R&D systems, Audio Precision)



5. Critical Listening:

- Conduct structured, subjective double-blind listening tests to "voice" the loudspeaker, gracefully balancing perfect engineering data with emotional musicality

Qualifications:

- **Education:** Bachelor's or Master's degree in Electrical Engineering or Acoustical Engineering, Software Engineering (with an acoustics focus)
- **Experience:** 7+ years designing high-end consumer, studio monitor, car audio, or professional concert-level loudspeaker electronics systems
- **DSP & Simulation Tools:** Proficiency in analog filter as well as DSP filter mathematics with the ability to use Mathcad, Matlab, or specialized design software for designing and simulating passive and active and DSP filter behaviors and the resulting acoustic responses
- **Mixed-Signal Circuit Design:** Proven track record of designing low-distortion analog and digital circuits, schematics and PCB layouts optimized for audio signal integrity

Preferred Qualifications:

- **Embedded Software:** Experience writing embedded C and/or configuring dedicated audio DSP architectures (e.g. Analog Device SigmaDSP or Dream DSP)
- **Audio Precision:** Experience setting up Audio precision systems for quality control and using the equipment for design validation
- **Software:** C# experience helpful for in house software maintenance

Equal Opportunity Employer: ML is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.

As part of the *Fighting Against Forced Labour and Child Labour in Supply Chains Act (the "Act")*, Paradigm Electronics Inc. will not employ any children under the age of 15, by taking special precautions to safeguard the health, security, and rights of persons under the age of 18 and ensure that they do not perform any hazardous work. We are committed to an inclusive, equitable and accessible workplace where all employees are valued. Accommodations are available upon request for candidates participating in our selection process.