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To: Fred Ward
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Subject: Recommendations for new product line, preliminary.

Foreword

Elysian Audio needs a new product to add to its prestigious line of professional sound reproduction hardware in order to stay competitive in the marketplace. In order to address this problem, it was my assignment to investigate new areas and products that Elysian Audio could develop and produce. The purpose of this report is to gain approval for beginning preliminary product design.

Summary

Elysian Audio's current line of products includes power amplifiers, pre amplifiers, audio converters, and a wide array of loudspeakers. Everything we make is based on high quality and high fidelity audio reproduction. However, we cannot control the listening environment that our customers put our equipment in. Furthermore, we cannot control how the user connects the equipment. This can result in significant degradation of sound quality that negatively affects the image of Elysian Audio and its products even though the products are not to blame.

The way to correct for differences in the listening environment and equipment setup is to use an audio equalizer connected just before the power amplifier. This device can be used to remedy environmental response. However, equalizers are very difficult to tune and require a sound engineer to properly set up. If the environment changes, a sound engineer must return and recalibrate the entire system. This process is time consuming and costly for the consumer.

An audio equalizer that can automatically calibrate itself is needed to both correct environmental response and eliminate the need for a professional sound engineer to be constantly on call. Currently, Elysian Audio does not produce any form of equalizer, automatic or manual.

Elysian Audio will benefit by creating an automated equalizer. It will complete our product line from sound source to listening. Consumers will save costs on professional installation, diverting some of those funds to us to purchase the automated equalizer. Consumers will accept this product because of its higher performance versus price ratio.

A number of other companies have successfully developed automated equalizers. There is a viable market for this type of device and it would be well received by the consumers. Development can be carried out on standard digital signal processing development hardware we have at our disposal here. Because the automated equalizer function is mainly a software task, the manufacturing costs will be low, keeping sales margins high and making this a cost-effective product.

An automated equalizer is also very flexible. Beyond the base product, a number of add-ons could be developed to make further adjustments to the audio signal, or perhaps monitor it with a computer. These add-ons again would be mostly software based but could be major product revisions or advancements to create multiple versions of the equalizer at different cost tiers, as in entry-level, professional, and elite.

I believe that this would be a great addition to Elysian Audio. Time-to-market will be fast and returns could be very high depending on marketing strategy and pricing options.

If this project is undertaken, the engineers and marketers will be pressed to get this product to the consumers as soon as possible. However, once released, the product will be well received. If this product is included with our package deals it will significantly reduce the installation costs for our customers and increase the out-of-box satisfaction with our products. This will elevate our brand status and increase revenues.

It is therefore my recommendation that Elysian Audio start the preliminary product design for an automated audio equalizer. Management must approve of this plan and allocate a design budget of and a support staff to begin this work immediately.