

Black Ravioli From Renaissance Audio

Technology

There are many forms of energy that can restrict or degrade the performance of a piece of audio or visual equipment and they are almost certain to be present in some form or other within the domestic environment. It is generally accepted that the impact of energy in the form of vibration is the most common problem and that it should be mitigated to realise best performance from a system. It is a complex scenario since vibration can present both direct and in-direct threats to performance and in addressing the problem it is very important that the solution provided does not add any audible signature to the performance.

The vibration control can be broken down into three requirements,

- Coupling
- De-coupling
- Energy conversion

How well you address each of these requirements by design or maybe more importantly how well you can apply and maintain your solution during the installation and operation of your system is really the basis for how successful you are in mitigating the threat of vibration on the equipment. There are many products available to the public that address some of the above requirements and there are others that do consider them all, but the degree to which they resolve them varies considerably.

The Black Ravioli system does address coupling, de-coupling and energy conversion in a functional and simple package to provide an energy control system that is effective across the discernable audio and visual spectrums and beyond.

In the design of the Black Ravioli system we have focused on the point of interface to the support and the equipment in the system, and not the support itself. To form any view on actual performance and to make improvements we believe it is imperative to establish a design boundary that is consistent and so far as reasonably practicable constrained to the equipment boundary. This is much more difficult to achieve if you include the support.

The Black Ravioli pad is constructed of a number of layers of two differing materials that are held within a fabric enclosure. One material layer is a proprietary laminate that provides the means of a very efficient and fast energy conversion and the other layer provides segregation that contributes to the coupling/de-coupling scenario. The pad is intentionally pliable to allow good coupling with the equipment. This feature also allows the equipment to settle and find a relaxed position. The effect of the pads on the system should become apparent almost immediately but due to the settling process full performance

may take a number of days to achieve.

The layered structure of the Black Ravioli pads is designed to give a amount of de-coupling but the design does assume that the pads will be used on an appropriate non-resonant platform that is sited on a stable floor, or wall. The spacer and risers are specifically engineered from corian material to provide further decoupling as well as providing additional clearance to remove the existing equipment feet from the solution.

When considering energy transfer we focus on capacity and speed. The structure we use gives us very good performance for both these aspects and the Black Ravioli solution offers a very large capacity for energy transfer at the interface with minimal feedback . Importantly capacity can easily be increased by adding more pads if required. The speed at which the energy transfer takes place is where the Black Ravioli system does differ significantly form other solutions. The fast action and reaction of the pad is effective for a wide audio spectrum and defines its unique contribution to system performance. _