



Sound Momentum

Eclipse audio stand

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In this review, we focus our ears on an under-appreciated component of audio and video systems: the equipment rack. Often described as the foundation of a system, equipment racks truly can improve playback and for this reason, deserve our attention.

Many years ago, a review in this magazine titled "How does your system sound?" addressed the issue of audio racks. The product reviewed, the "Rack of Silence" from the Swedish firm Solid Tech, raised interest because it applied the principles of isolation and decoupling that our acoustics articles were dealing with at the time, while paying careful attention to the type of material with which these supports were manufactured. Like the acoustic treatment of a listening or home theatre room, equipment racks are an integral part of a system's foundation, maximizing quality of the sound and of the music. As proof, virtually every audio and video distributor and reseller has at least one brand of support equipment in his portfolio. We recently requested an equipment rack from a local designer, to find out more about the technology involved in this type of product and, more to the point, its contribution to improving musical performance.



SOUND MOMENTUM

Sound Momentum is a Quebec company led by Jean Leclerc, dedicated to the design and manufacturing of acoustic panels and equipment supports. The model under review is from the **Eclipse series**. In addition to providing proper support to audio or video components, the rack is designed to control and dissipate unwanted vibrations coming from the devices themselves or from the floor supporting the system.

ECLIPSE MODEL

At 18 inches deep, 24 wide and 23 inches high, the Eclipse rack comprises three levels where the shelves are spaced at 4, 6, 8 or 10 inches, depending on the height of the electronics. The review model has 8" spacing between the shelves. The four pillars that support the shelves are solid 6061t6 aluminium with a diameter of 1 1/4 inches. The shelves are solid 1 1/16 inch maple, available in several colours with a lacquered finish. What distinguishes the Eclipse cabinet, among other things, is that it includes a stainless steel decoupling system on each of the rack's feet and a mechanical grounding system (optional) also

made of stainless steel. These systems have been designed to insulate the rack from external vibration while also providing a strong mechanical grounding that drains any vibration and resonance from the components themselves or generated within the rack structure.

We have learned over time that each type of support material has its own acoustic characteristics. Wood, glass, steel, granite or marble differ in how they store, dissipate and release vibrational energy. To add to that, the very materials of audio and video components can generate this same type of effect, all creating tiny but real mini seismic events that can add colour and distortion. Controlling vibration in high-fidelity equipment is fundamental to improving the quality of sound and music reproduction. This is particularly true at the high-end where sophisticated and elaborate circuits must deal with tiny and sensitive signals. Eliminating vibration has become more than a leitmotif, it is a basic requirement for peace of mind (and of ears!) of many an audiophile.

INSTALLATION

Sources are usually the first components that benefit from proper support and vibration control. Accordingly, we installed a turntable, a CD player and a digital-to-analogue converter on separate shelves of the **Sound Momentum Eclipse** unit, after ensuring that the shelves were level, the feet solidly positioned on the floor, and the mechanical grounding (floating ground) adjusted to ensure proper decoupling between the floor and the rack.

APPRECIATION

The first impression is one of solidity, a real sense that the Eclipse rack and the equipment sited on it are far better grounded. Nothing moves, as this piece of furniture is perfectly stable yet ingeniously decoupled from the ground, a feat that has rarely been seen in our listening room and which bodes well for the rest. Among the sources most

sensitive to vibration, the turntable, arm and cartridge will benefit the most from this type of support rack. The gains were immediately obvious when we spun our first record. The performance is there with real and tangible improvements in coherency and musical involvement.

Let's experiment a bit with **Sound Momentum's** 'recouplers'. These are small, stainless steel, finely machined and polished cylinders in two sizes. The devices are adjusted by rotational movement to obtain a floating 'recoupling' system. While the preferred installation is to use two units, one on either side on one of the Eclipse's shelves, one or two units can also be placed on the components themselves. Despite having any real expectation of their possible benefits, by repeatedly listening with and without the units, their contribution to the presentation became clear. They raise sound quality by a meaningful notch, as if their insertion on a shelf dissipates the extra vibration, collecting it and draining the overflow from both the rack itself and from the components placed on the shelves. Amazing!

VERDICT

Sound Momentum's research and design work over a period of more than a year has paid off, as the audible benefits of the Eclipse audio rack demonstrate. To have achieved a rack system with this level of performance in this price range is remarkable. We were so convinced by the improvements that the Eclipse rack brought to our source components, that we've ordered a second one, this time dedicated to the amplification units of our audio system.

Sound Momentum Eclipse: audio rack
 Manufacturer: Sound Momentum
www.soundmomentum.com