IsoAcoustics at Massey Hall’s Deane Cameron Recording Studio



Picture: Simon Tanebaum

The extensive renovation of Massey Hall in Toronto, Canada, included the construction of a sophisticated Dolby Atmos studio for content capturing. The elaborate monitoring system required equally elaborate decoupling – and IsoAcoustics delivered.

Dating back to 1894, Massey Hall is the oldest concert hall in Canada, but has recently undergone extensive renovations. Doug McKendrick, Vice President Production & Technology of the Corporation of Massey Hall and Roy Thomson Hall, describes the scope of the project: “Over the years, the wear and tear had become evident, prompting a monumental renovation project in 2013. This endeavor encompassed a comprehensive restoration of the hall itself and the construction of a new 7-story tower attached to the south side of Massey Hall, named the Allied Music Centre.” The new building houses a venue, a bar, a theatre … and a state-of-the-art recording studio on the 7th floor.

Named after the late President and CEO of the Corporation of Massey Hall and Roy Thomson Hall Deane Cameron, the newly established recording studio is connected to its dedicated recording rooms, but also to all venues in Massey Hall and the Allied

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Music Centre. “The integration of content capture, encompassing both video and audio, was a significant emphasis during our venue's renovation,” McKendrick explains. “As part of this effort, we've introduced the Deane Cameron Recording Studio, situated on the 7th floor. This studio serves as the central hub for audio capture within the building and is equipped with a cutting-edge 9.1.4 Dolby Atmos mixing and monitoring system.”

A marked difference between the Deane Cameron Recording Studio and similar facilities is its versatility. The studio can capture audio from Massey Hall and all venues in the Allied Music Centre via fiber optic connections, allowing for astonishing flexibility when it comes to recording events. But even without the venues, the studio provides a live recording room and multiple isolation booths, giving upcoming artists a chance to record their visions with top-quality equipment. And with its Dolby Atmos setup, Deane Cameron Recording Studio is fully capable of creating immersive audio experiences. “As we considered our studio project, Eddie Kramer's encouragement to explore the Dolby Atmos technology resonated with us. It felt short-sighted to construct a new studio without the infrastructure to support Dolby Atmos and other immersive formats.” McKendrick very much supports the current trend towards immersive formats. “The inclusion of Dolby Atmos technology adds a new dimension to our capabilities. It opens the door for immersive audio mixing, which has the potential to elevate the listening experience and creativity for artists and audiences alike. We eagerly anticipate the creative possibilities that Dolby Atmos will bring to our work.”

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The monitoring setup at the Deane Cameron Recording Studio consists of ATC speakers, and the ceiling speakers in particular posed a challenge. McKendrick eventually entrusted IsoAcoustics with finding a solution. “We sought a product capable of supporting the weight, which is substantial at 66 lbs.” The IsoAcoustics V120 was perfect for the job. “We wanted a solution with a sleek and aesthetically pleasing design. Dave Morrison and his team at IsoAcoustics exceeded our expectations, delivering an outstanding product that also provides isolation. This combination makes this new product truly remarkable.” The suggestion to work with IsoAcoustics came, once again, from Grammy Award winning engineer and producer Eddie Kramer (Jimi Hendrix, Led Zeppelin, The Rolling Stones), who acts as an advisor for Massey Hall. “I thought: how are we going to hang these heavy ATC SMC25A speakers from the ceiling?” Kramer reminisces. “We checked everywhere and couldn’t find anything that would give us the swivel and angles we would need for Dolby Atmos. So who could we talk too? I called Dave Morrison at IsoAcoustics and in a short time we had a plan. With their can-do attitude and old-fashioned ingenuity we had our solution. Secure, flexible, and sounding amazing.”

The control room featured a pipe grid structure connected to the ceiling. The isolation brackets were mounted to the metal tube structures using truss clamps. The ceiling tubes allowed the monitors to be positioned correctly and the IsoAcoustics V120 mount isolated the monitors from the structure and allowed the monitors to be rotated and tilted so the position and focus of the monitors could be

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optimized for the Dolby Atmos setup. Doug McKendrick is excited about the solution: “We were all deeply impressed by the precision and attention to detail displayed by Dave and the IsoAcoustics team. They delivered exactly as promised, precisely when they said they would. The resulting product seamlessly installed on the first attempt. Their dedication and support were truly remarkable, and we are immensely grateful for their help.”

When the studio was built, McKendrick first tried the rooms without audio isolation. “We deliberately began our work without any ISO-PUCKs installed to genuinely experience the room's characteristics. Then, we began isolating various elements. I was pleasantly surprised by how much of a difference it made; it notably cleared up some low mid frequencies and generally improved the overall audio quality.” This led to a considerably better starting point when it came to finalizing the room with room EQ. “In my experience, when it came to fine-tuning the room, the ISO-PUCKs played a crucial role in addressing certain issues even before we resorted to using measurement microphones and equalization. Being able to resolve problems without relying on EQ adjustments is a significant advantage and well worth the effort.” Both the ISO-PUCKs and the V120 mounts that were used for the ceiling speakers mitigate the transfer of vibration into the supporting structure and cavities, reducing the excitation of the supporting structure, the transfer of energy through the structure, and the conduction of vibrations back into the speaker.

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