Seismic shift

Disarmingly simple but surprisingly effective, Townshend Piano Isolators have been shown to transform any piano for the better, bringing depth and clarity to sound with less effort from the player. **Mark Swartzentruber** reports

When eminent audio engineer Max Townshend was asked to develop a sound-isolating system for piano castors, his original intention was to stop sound penetrating through buildings and lessen its impact on neighbours. The device he came up with turned out, unexpectedly, to have a wider application than sound insulation alone.

Townshend spent many years producing and designing sound isolation equipment for audiophile hi-fi systems, so he was convinced that his Piano Isolators would do what they were designed for – lessening the transfer of vibration from the instrument to the floor. He was not sure, however, what effect this would have on the sound of the instrument, or how it would affect the experience of playing. So I was invited trial the prototype and record my impressions from a performer's point of view.

The first instrument we tested was an old Bösendorfer baby grand. Like many pianos from the turn of the 20th century, it had seen better days and had a muddy-sounding bass register and a thin treble with short sustain. When the Isolators were put under the legs, however, a transformation occurred. The muddiness cleared and the bass gained transparency. The treble was brighter and seemed to have more length of tone. I could hear contrapuntal lines more clearly and control dynamics with more subtlety. In other words, the Isolators gave me an instant upgrade: the small piano felt like a bigger instrument in a much better acoustic.

Encouraged by what we heard, we arranged further trials on Steinway, Fazioli and Kawai grands. The result each time was the same, clarifying the sound and making the instruments easier to play. When we put the Isolators under the Steinway concert grand in the ideal recording acoustics of Henry Wood Hall, the instrument's projection was more open and immediate. Listening to the recording playback, I felt that my playing was more musical in the takes with damped springs under the piano's legs than without them. My experience of performing was significantly enhanced, and the musical results displayed a deeper, more spacious sense of tone.

How can such a seemingly simple intervention have such a transformative effect? Since sound is prevented from being transferred into the floor through the legs of the piano, the instrument vibrates more freely. Energy is no longer absorbed by the floor, and random distortions, especially in the bass and tenor, are reduced, resulting in a cleaner, more transparent tone with richer harmonics. More of the performer's effort goes into airborne sound, making it easier to hear complex textures and produce subtle dynamics. It also becomes easier to hear right to the end of the decay of each note, and to adjust more sensitively to timing and dynamic levels.