

# Pointfuse Powers Virtual Reality for West End and Broadway Shows



Pointfuse point cloud software is helping to boost the appeal of West End and Broadway with laser scanning and Virtual Reality (VR) specialist Preevue by dramatically reducing the time taken to process complex laser scans into usable and accessible 3D models for visualisations. These visualisations, created with Preevue's in house VR software, are used to see how a set design fits in a new theatre, optimise line of sight modifications to maximise ticket sales and provide virtual site visits. Preevue has already used Pointfuse on Jim Steinman's 'Bat out of Hell - The Musical' when it made its West End debut earlier this year.

"The foundation of all our visualisations is laser scanning. Many theatres have no plans or they are inaccurate if they do exist, so laser scanning is a time and cost effective starting point," said Ryan Metcalfe, Founder and Managing Director Preevue. "However, visualisations are only ever as accurate as the scans you start with, so scanning to an accuracy of 2mm gives us absolute confidence in the outputs we produce and the decisions that are subsequently made. This level of accuracy can, however, present its own issues such as the long turnaround times on triangulated meshes from the point cloud. Using Pointfuse allows us to get to work much sooner with a quickly generated 3D model."

For example, working on 'Bat out of Hell', Preevue completed a thorough laser scan of the Dominion Theatre in London's West End using a FARO Focus X330. Capturing more than 150,000,000 individual measurements the resulting point cloud was more than 40GB in size. Prior to the introduction of Pointfuse to the workflow, this raw data would have taken many days to process. However, the 3D model with classified surfaces took just a few hours to process.

The resulting outputs, including VR visualisations were used for both production and ongoing marketing including set design, site line checks, ticket pricing and venue and set CAD drafting. Preevue also developed a first of its kind augmented reality app to enhance the audience's experience.