

**PERCEPTUAL EVALUATION OF STAGE
ACOUSTICS FOR JAZZ COMBOS**

By

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ABSTRACT

Unlike the field of audience acoustics, which has been extensively researched, comparatively little has been examined about the place where the musician actually plays. However, since the quality of a musical performance is dependent upon the musician, and the musician relies on what they hear to make adjustments in their music, stage acoustics are a vital part of a good concert hall. Most of the research concerning stage acoustics has been focused on classical music, but this is only a small subset of music in the modern age. This research project examines stage acoustics in relation to small jazz combos using virtual models of several performance venues auralized using an ambisonic playback system. Backing tracks and the subject's sound were convolved and played back in real time. Using a survey method, stage conditions that are important for jazz music and their effects can be determined, allowing for a better understanding for stage construction in venues where jazz will be played. It was determined that communication and engagement between the audience and musicians, as well as between musicians and other members of their ensemble are extremely important to jazz musicians. A small, intimate venue with a reverberation time of 1–1.5 seconds is preferred for improvisational jazz.