

**EVALUATING THE PERFORMANCE OF VIRTUAL  
MICROPHONE CONTROL, A TOOL FOR REAL TIME  
AUDIO SPATIALIZATION**

By

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Microphone Control, (ViMiC) is a spatialization tool developed using the Jamoma framework in Max/MSP. Developed as a tool for real time audio spatialization, the ViMiC environment generates reverberation and amplitude differences based on source and receiver positions in a virtual space. In order to evaluate the performance of the software, a number of common stereo and surround recording techniques were assembled in a physical space, and recreated virtually in ViMiC. The settings in the virtual environment were modified until measured acoustical parameters matched the physical environment. This was accomplished by batch processing impulse responses while iterating through settings in ViMiC. The resulting data proves ViMiC can be used as a tool for accurate audio spatialization, following a calibration derived using these batch processing methods.