

SURVEY_1.pdf – update August 31, 2011

The Survey_1 files are from recordings of the University of Texas at Austin Chamber Winds Recital on November 23, 2008, at Bates Recital Hall in the Butler School of Music using 3 tetrahedral ambisonic microphones: an experimental (DIY) microphone, a Core Sound TetraMic, and a Soundfield MkV. The MkV was one row of seats forward of the dual mount accommodating the TetraMic and experimental microphone.

Only the omnidirectional “w” channel was used in this study to compare the quality of the 3 microphones and to preclude any anomalies related to surround localization. In a quasi-random fashion, the channels were cut to permit comparisons during both the quiet and musical passages. Survey listeners were provided a CD with track markers to indicate changes of microphones. A table was provided to identify the microphone source for each track. The approximate hour-long recording was divided into 38 segments.

Listeners were asked to analyze the recordings on equipment and in an environment with which they were familiar, a place where they might listen to their favorite music. They were asked to report what they heard (or did not), for example, tonal quality, noise, "warmth," favoritism toward a particular microphone sound, comparisons among the microphones, etc. The answers would be subjective.

CD audio is not convertible to ISO format for data for storage and transmission. Therefore, the Survey_1 files on this website are in the form of 3 .wav files. Using multitrack sound editing software, open the 3 files onto 3 separate but parallel tracks. Be sure to align each track to begin at 0. Play the tracks as a monaural mix. You can identify which microphone is being heard by the waveform on the computer display.

Note: No equalization was applied to the experimental microphone track. Core Sound provides equalization curves for the TetraMic that was applied in VVMic. Soundfield provides correction for the MkV within the controller. Processing was limited to normalizing the levels over the entire “w” channel file.

Thank you for your interest in this project. Please feel free to look around the ACTLab website. Comments are welcome.

Dan Hemingson
dhemingson (at) mail.utexas.edu

Credits:
The University of Texas Chamber Winds
Dr. Scott Hanna, Conductor
Butler School of Music
The University of Texas at Austin

Music:
Carl H. Reinecke
"Octet, op.216"