

Jim Barbour: PhD by Project, March 2017

Information about the Audio Examples:

The sound works accompany this thesis on a USB memory stick in two forms: as two 7.1 stems titled horizontal (H) and elevated (E), to be assigned to loudspeaker locations equivalent to the Equidome; and as a stereo binaural file for listening on headphones.

The channel allocations for the 7.1 stems are as follows:

- 1: Left Front
- 2: Right Front
- 3: Centre (not used)
- 4: LFE
- 5: Left Rear
- 6: Right Rear
- 7: Left Side
- 8: Right Side

There is also a Reaper¹ software file which can be used for playback of the 7.1 stems with the appropriate output assignments. At the start of the Reaper file, there is audio for loudspeaker setup.

The binaural recording was made in the Equidome using the Sennheiser MKE 2002 binaural microphone system, with updated Sennheiser omni-directional capsules, mounted on the Sennheiser dummy head. I have provided the binaural recordings for use where a 3D loudspeaker array is not available, and note that this is not the preferred listening environment.

¹ Reaper audio software, [<Error! Hyperlink reference not valid.>](#)