Sound files

Hearing and tinnitus matching:

* Tone and NBN types (2)
* Normal hearing, mild HL, moderate HL, severe HL profiles (4)
* **Total 8**
* 1-16 kHz (4 octaves) in ¼ octave steps (17 stimuli, of 1s duration with 1s ISI)

Experimental:

* Band-degraded, amplitude-modulated and phase-modulated types (3)
* Four hearing profiles (4)
* Octave bandwidth, in ½ octave steps, for modulated band (7)
* **Total 84 categories**
* Duration 3:20 per file (50 \* 4s stimuli)
* *For demonstration of principle, 2 sound files per category*
* *Total 168 sound files*

Frequency numbers (for tinnitus matching, and audibility check):

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Freq(kHz) | 1 | 1.2 | 1.4 | 1.7 | 2 | 2.4 | 2.8 | 3.4 | 4 | 4.8 | 5.7 | 6.7 | 8 | 9.5 | 11 | 13 | 16 |

Modulation band numbers (for file naming):

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Lower(kHz) | 1 | 1.4 | 2 | 2.8 | 4 | 5.7 | 8 |
| Upper(kHz) | 2 | 2.8 | 4 | 5.7 | 8 | 11 | 16 |

Modulation band assignment table: selection of active (A) and control (C) modulation bands based on tinnitus frequency match:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Mod 1 | Mod 2 | Mod 3 | Mod 4 | Mod 5 | Mod 6 | Mod 7 |
| Match 1 | A1 |  | C1 |  |  |  |  |
| Match 2 | A1 |  | C1 |  |  |  |  |
| Match 3 | A1 |  | C1 |  |  |  |  |
| Match 4 | A2 | A1 |  | C1 |  |  |  |
| Match 5 |  | A1 |  | C1 |  |  |  |
| Match 6 |  | A2 | A1 |  | C1 |  |  |
| Match 7 |  |  | A1 |  | C1 |  |  |
| Match 8 |  |  | A2 | A1 |  | C1 |  |
| Match 9 |  |  |  | A1 |  | C1 |  |
| Match 10 |  | C2 | C1 | A2 | A1 |  |  |
| Match 11 |  |  | C1 |  | A1 |  |  |
| Match 12 |  |  | C2 | C1 | A2 | A1 |  |
| Match 13 |  |  |  | C1 |  | A1 |  |
| Match 14 |  |  |  | C1 |  | A1 |  |
| Match 15 |  |  |  |  | C1 |  | A1 |
| Match 16 |  |  |  |  | C1 |  | A1 |
| Match 17 |  |  |  |  | C1 |  | A1 |

A1 = preferred active band. A2 = use only if one or more frequencies within A1 are inaudible

C1 = preferred control band. C2 = use only if A2 is used instead of A1

Grey rows indicate infrequently occurring match frequencies