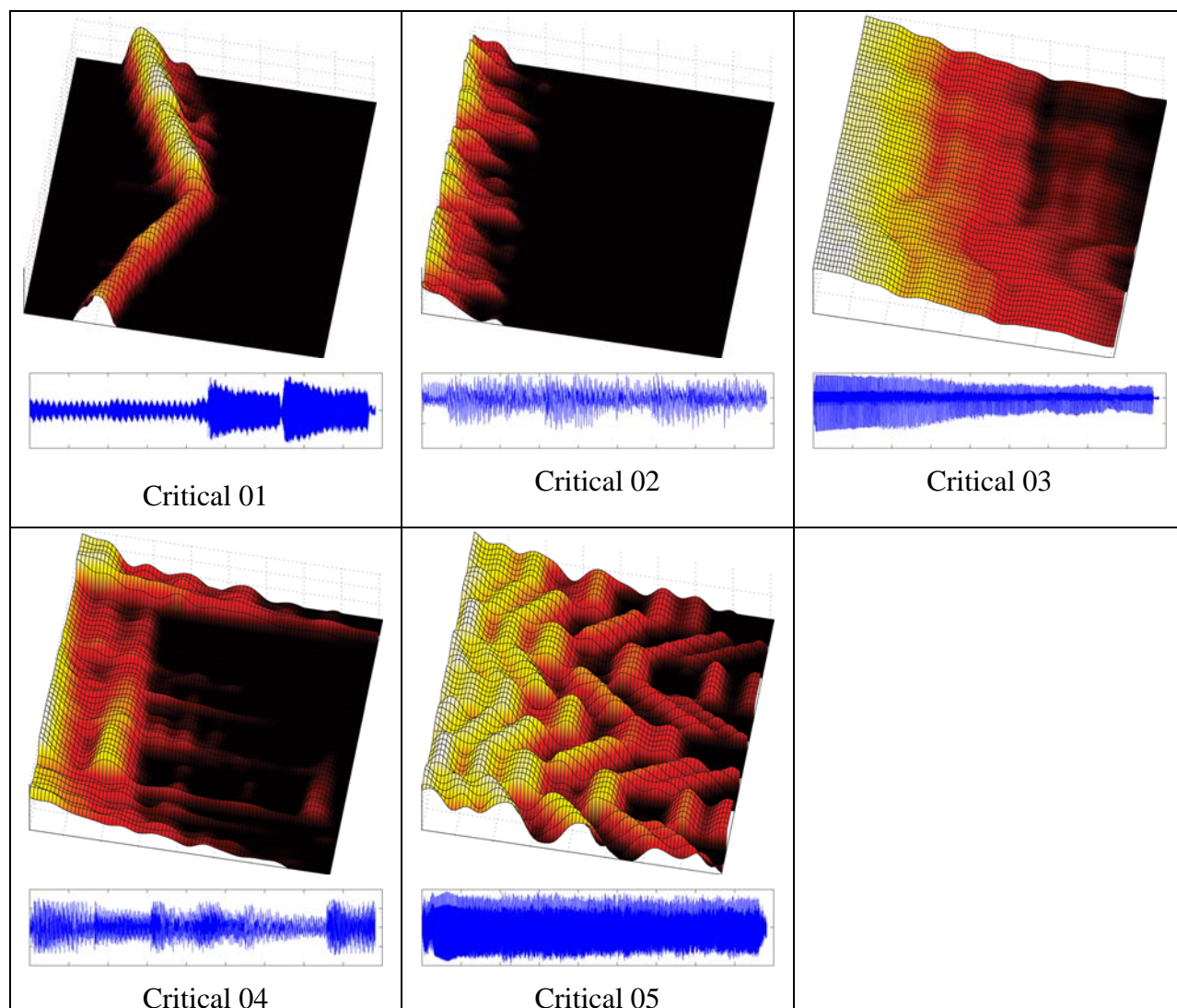


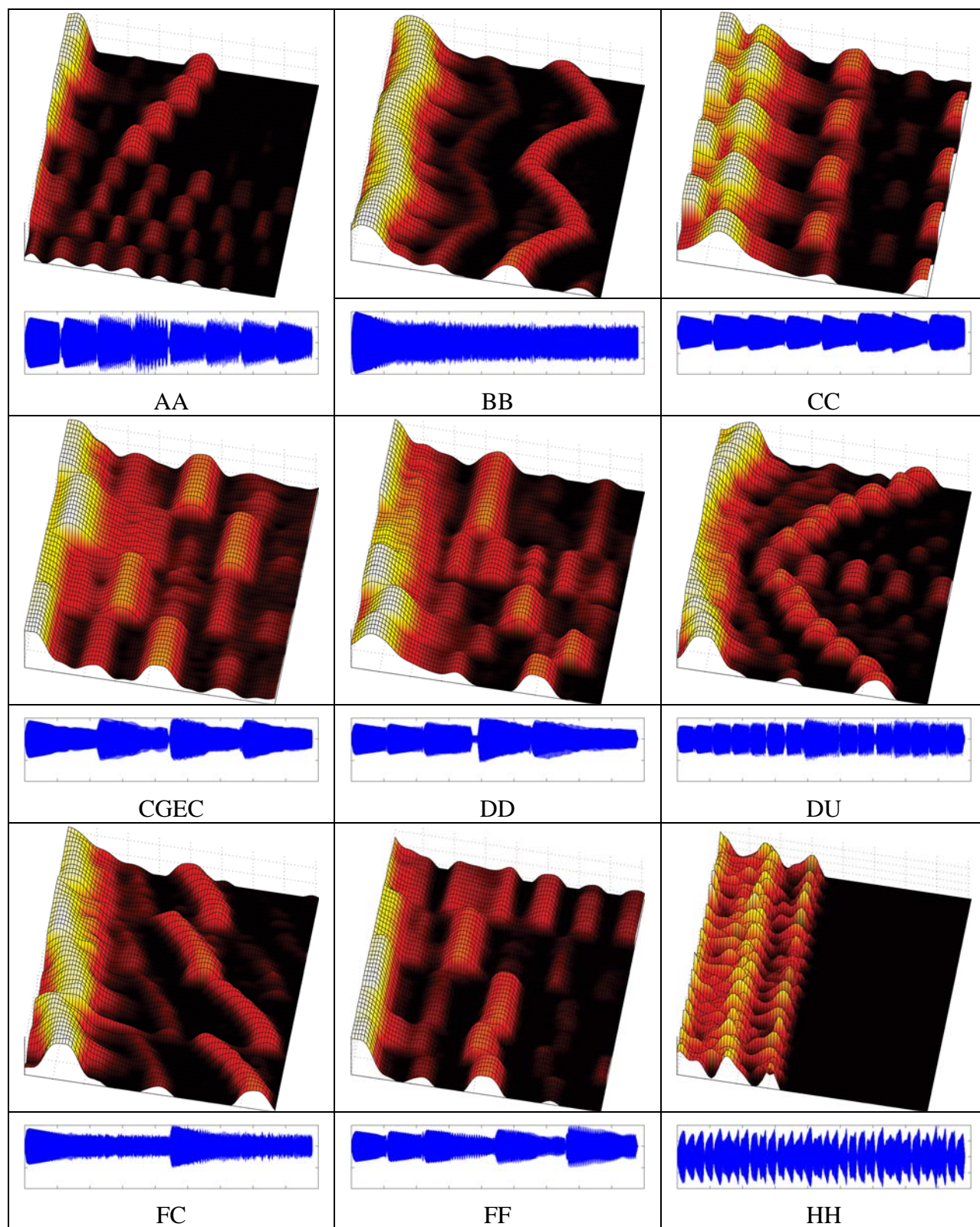
## 9. Appendix

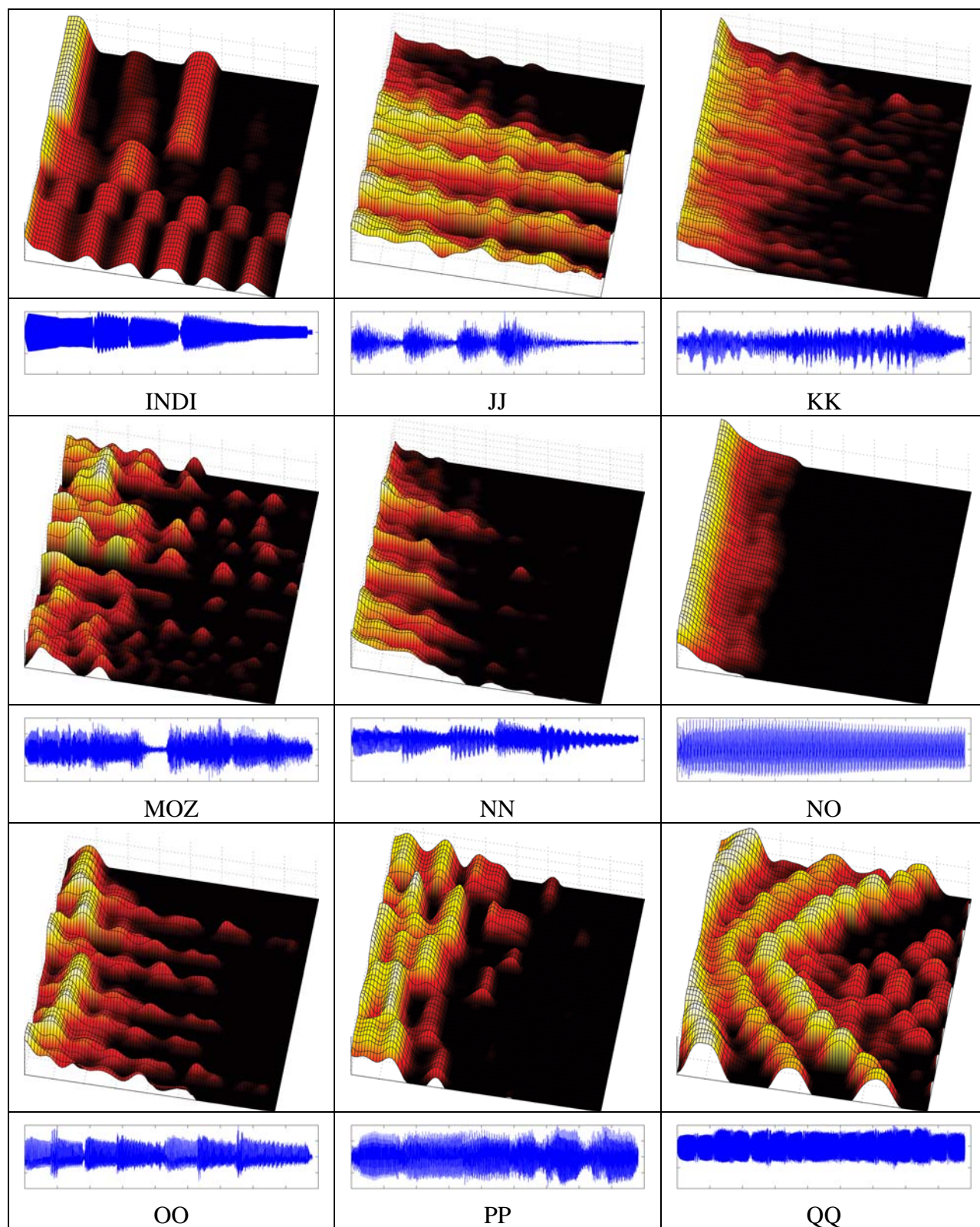
### 9.1. Appendix A: Graphic Representations of Auditory Stimuli

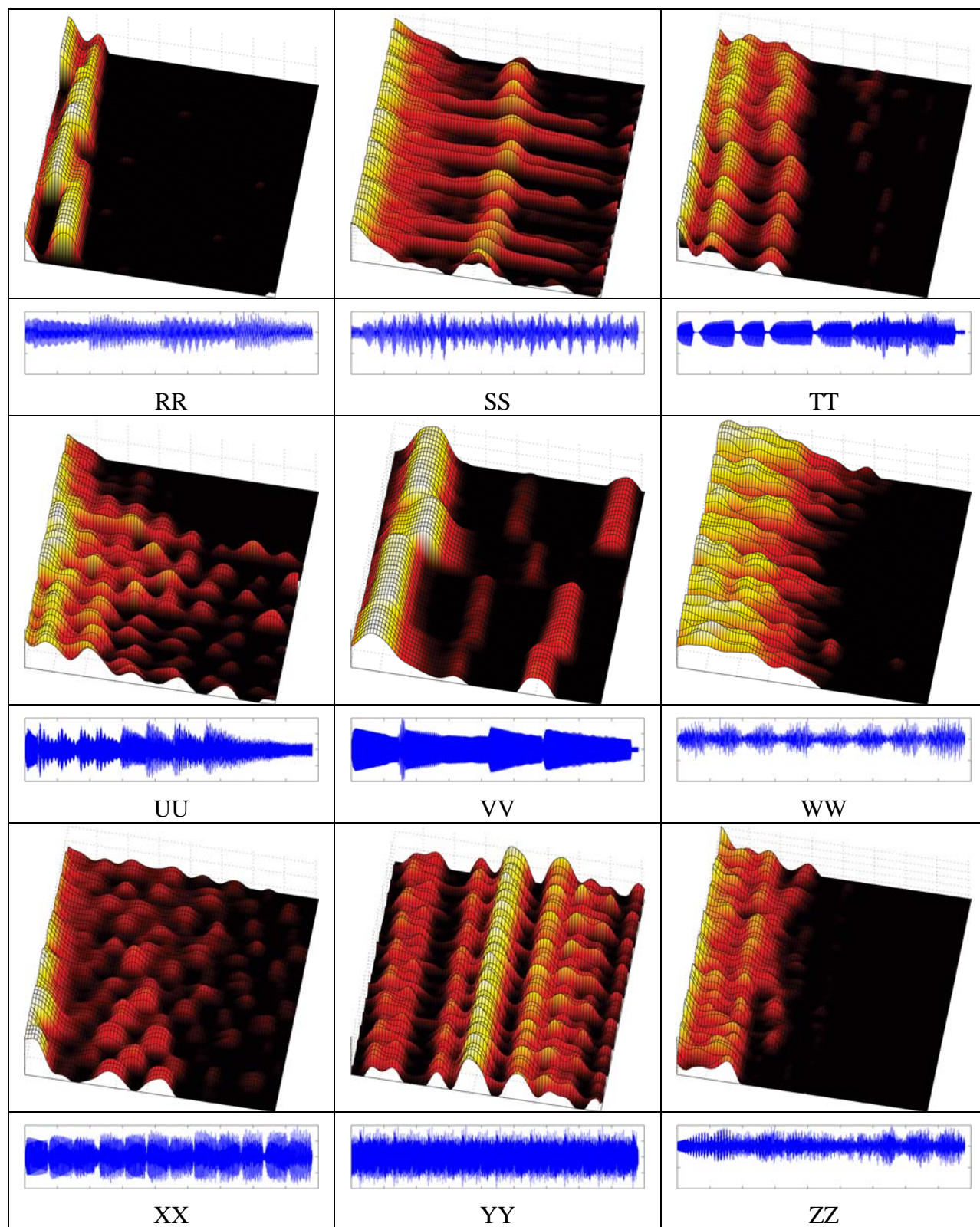
**Table 10:** spectrograms of all auditory stimuli used in the experiments. The top row shows a 3-dimensional spectrogram of the each stimulus. The x-axes represents the frequency (100Hz to 10Khz), the y-axes the time (all stimuli were 1 second long) and the z-axes the amplitude. Higher amplitude is also color-coded: darker areas have low relative amplitude and lighter areas have higher amplitudes.

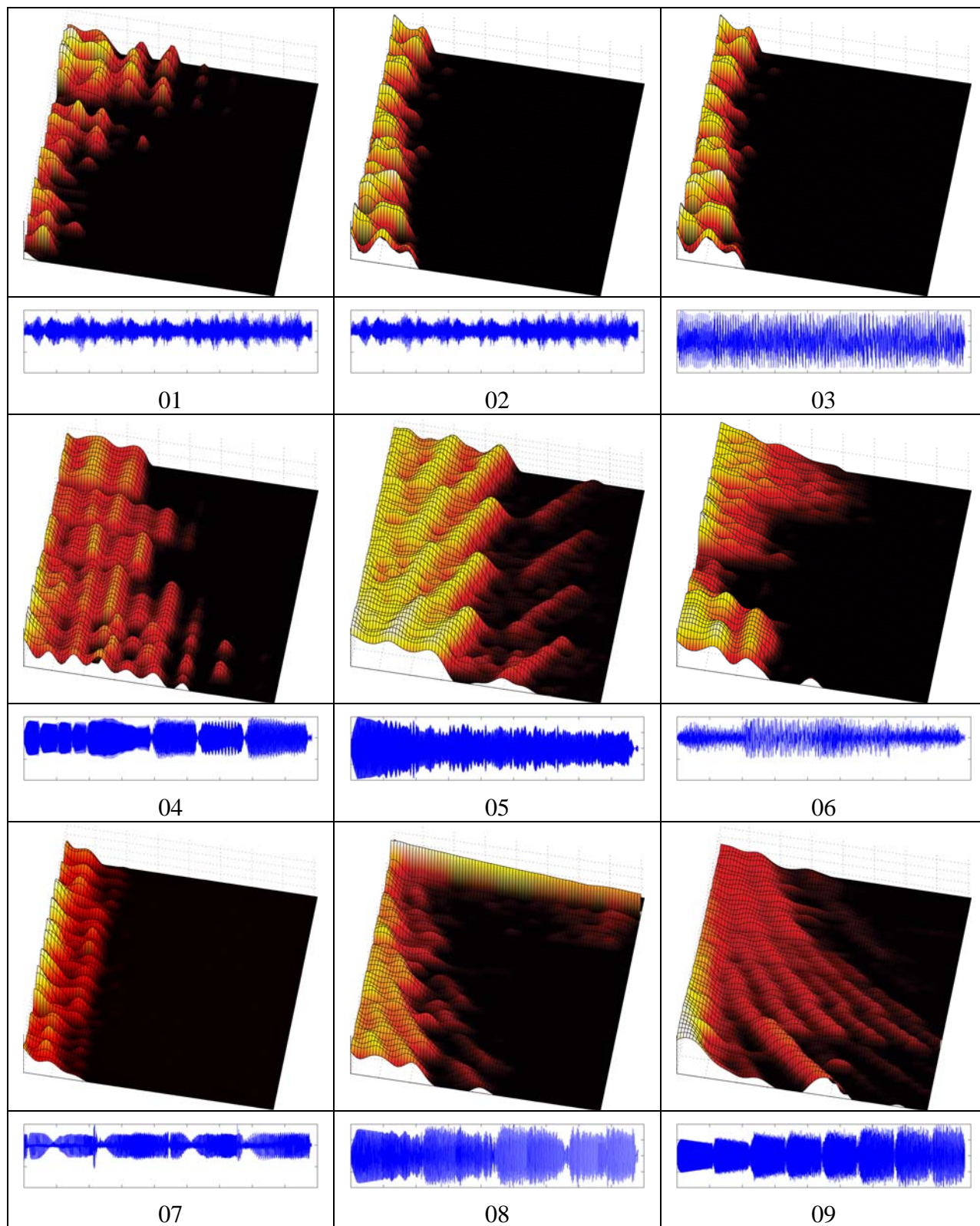
The second row shows a time vs. phase display.

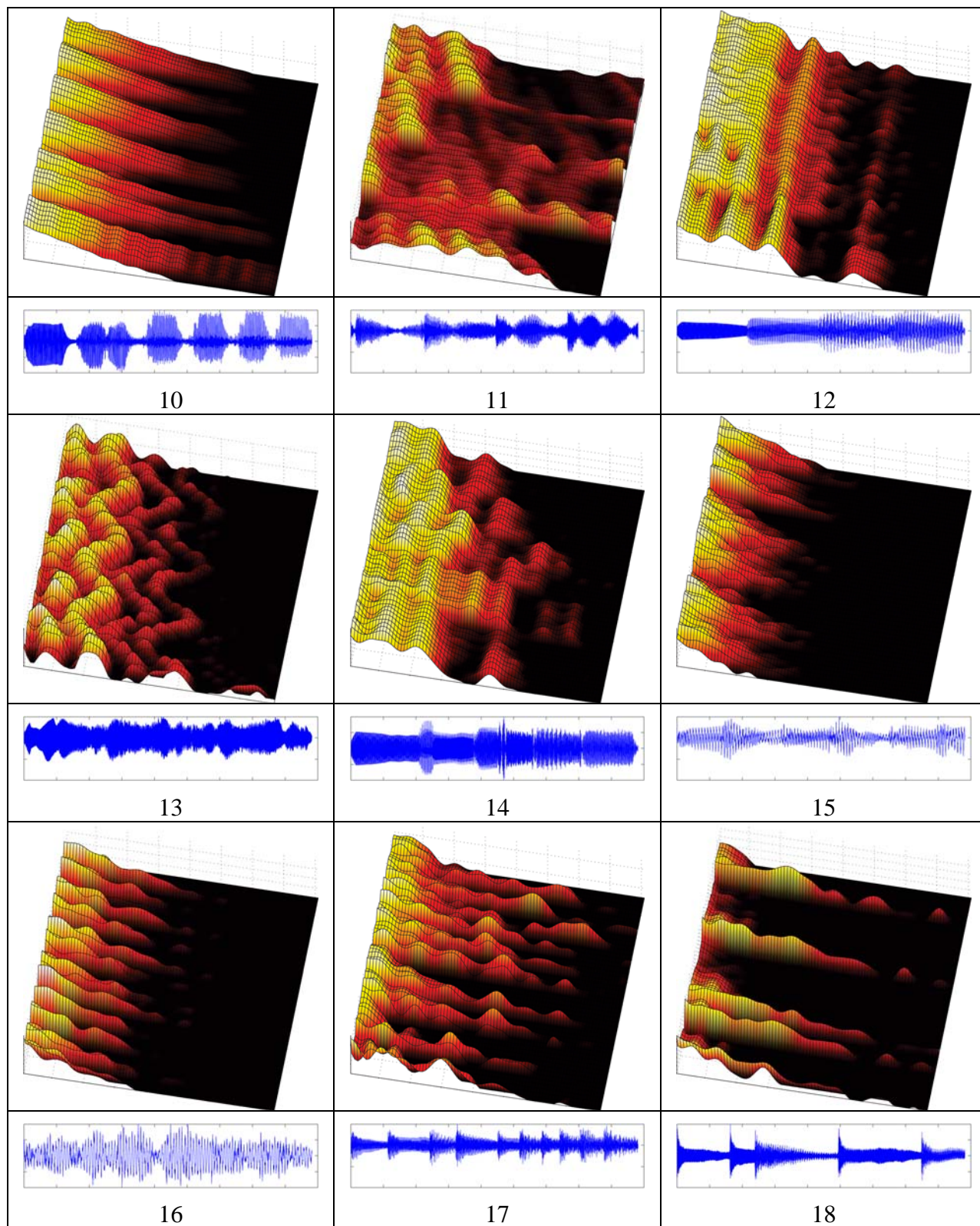


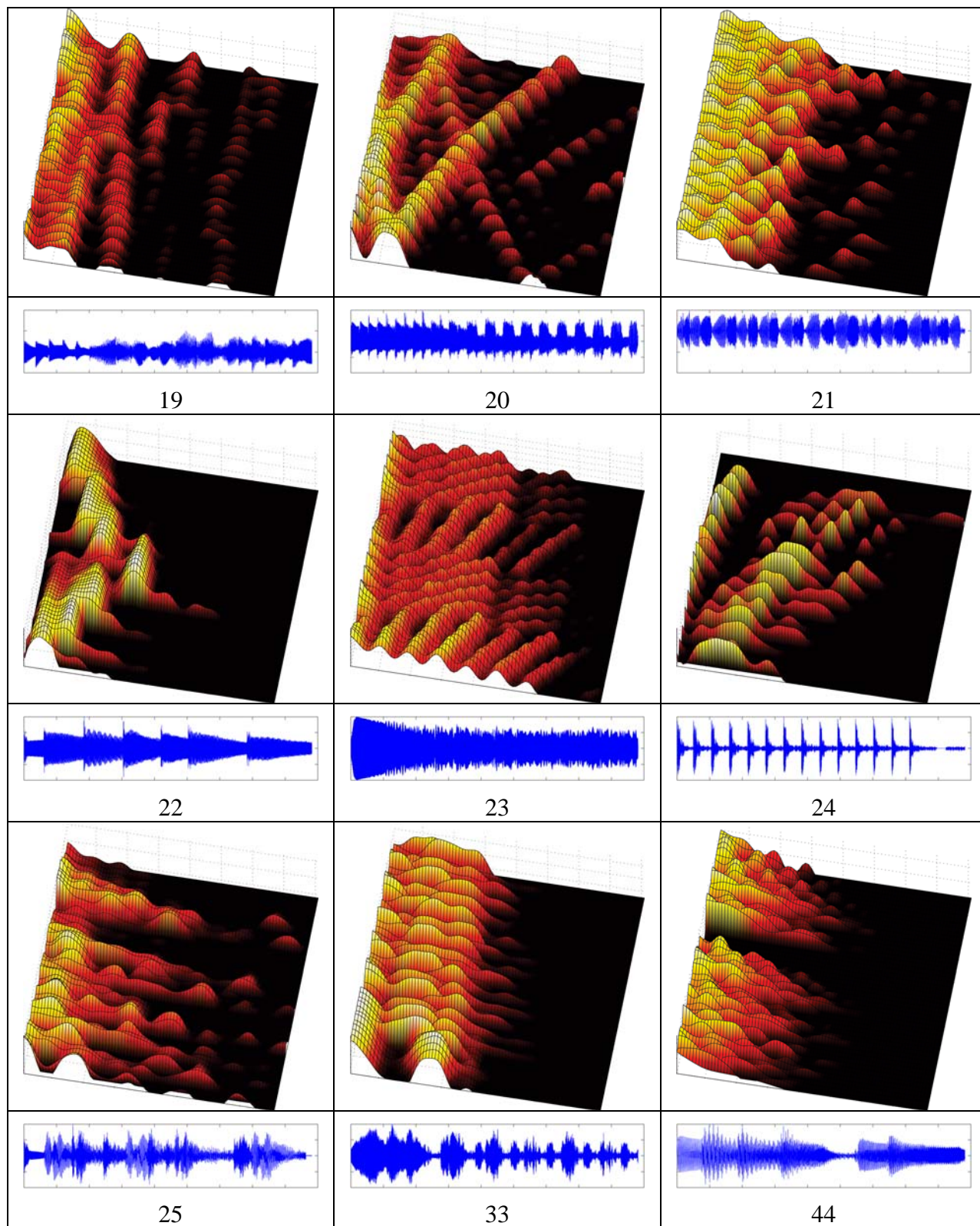


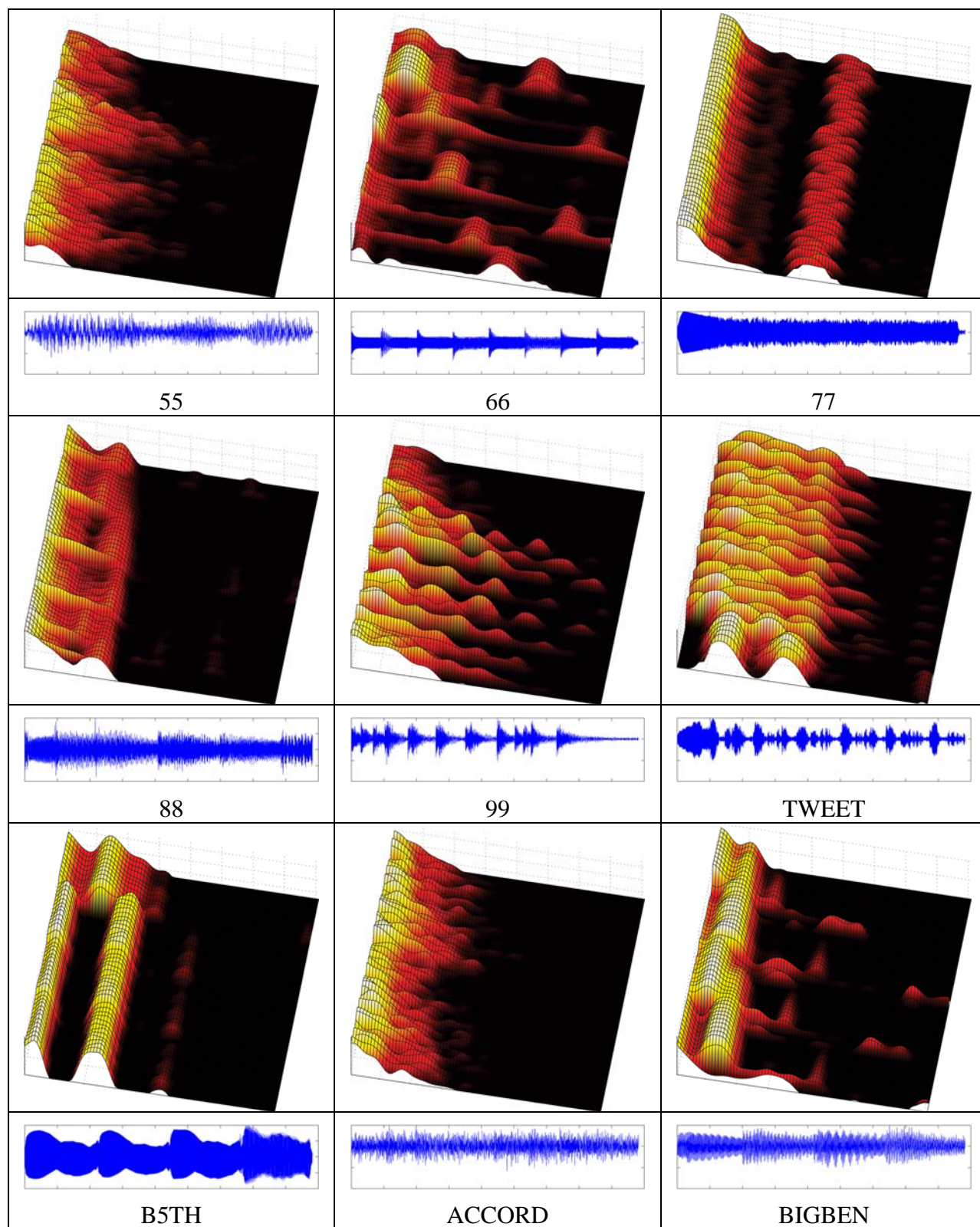




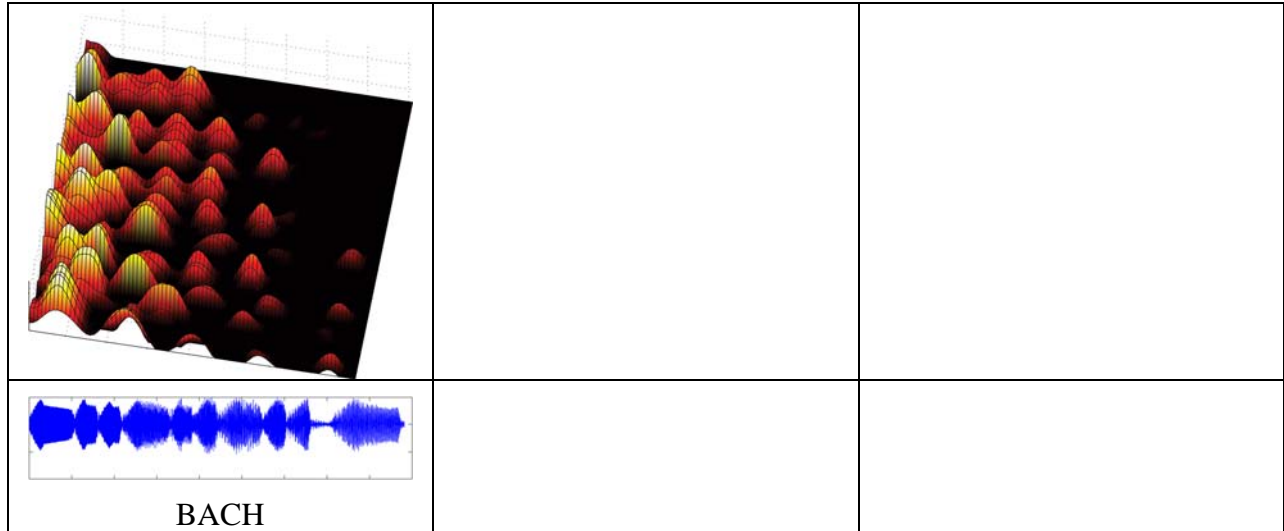












## 9.2. Appendix B: Software code

All applications for the creation of test trials and the display of stimuli was written in the multimedia graphic programming environment MAX® by Opcode.

### 9.2.1. Visual Random Generator

```

max v2;
#N vpatcher 25 44 949 675;
#P message 476 141 129 196620 52 scale;
#P hidden newex 476 115 60 196617 prepend set;
#P hidden newex 476 92 45 196617 r toPack;
#P hidden newex 32 280 41 196617 s write;
#P hidden newex 223 714 54 196617 unpack s s;
#P hidden button 37 442 15 0;
#P user ubutton 16 0 90 51 0 0;
#P message 15 0 91 196644 clear;
#P user ubutton 112 0 118 48 0 0;
#P message 111 0 120 196644 create;
#P hidden newex 726 566 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 726 494 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 726 422 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 726 350 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 726 281 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 70 127 39 196617 s start;
#P hidden newex 113 68 53 196617 delay 500;
#P newex 171 530 45 196617 s toPack;
#P newex 224 485 45 196617 s toPack;
#P newex 279 443 45 196617 s toPack;
#P newex 327 398 45 196617 s toPack;
#P hidden newex 64 596 45 196617 s toPack;
#P hidden newex 223 693 45 196617 r toPack;
#P hidden message 471 622 33 196617 min 0;
#P hidden number 434 665 35 9 0 0 0 3;

```

```
#P hidden newex 529 622 45 196617 r crit05;
#P hidden newex 572 643 45 196617 r crit05;
#P hidden newex 471 601 39 196617 r clear;
#P hidden message 513 622 14 196617 0;
#P hidden button 513 603 15 0;
#P hidden newex 471 663 111 196617 if $i1 == $i2 then bang;
#P hidden newex 471 642 66 196617 counter;
#P hidden newex 471 552 66 196617 counter;
#P hidden newex 471 573 111 196617 if $i1 == $i2 then bang;
#P hidden button 513 513 15 0;
#P hidden message 513 532 14 196617 0;
#P hidden newex 471 511 39 196617 r clear;
#P hidden newex 572 553 45 196617 r crit04;
#P hidden newex 529 532 45 196617 r crit04;
#P hidden number 434 575 35 9 0 0 0 3;
#P hidden message 471 532 33 196617 min 0;
#P hidden message 471 442 33 196617 min 0;
#P hidden number 434 485 35 9 0 0 0 3;
#P hidden newex 529 442 45 196617 r crit03;
#P hidden newex 572 463 45 196617 r crit03;
#P hidden newex 471 421 39 196617 r clear;
#P hidden message 513 442 14 196617 0;
#P hidden button 513 423 15 0;
#P hidden newex 471 483 111 196617 if $i1 == $i2 then bang;
#P hidden newex 471 462 66 196617 counter;
#P hidden newex 471 377 66 196617 counter;
#P hidden newex 471 398 111 196617 if $i1 == $i2 then bang;
#P hidden button 513 338 15 0;
#P hidden message 513 357 14 196617 0;
#P hidden newex 471 336 39 196617 r clear;
#P hidden newex 572 378 45 196617 r crit02;
#P hidden newex 529 357 45 196617 r crit02;
#P hidden number 434 400 35 9 0 0 0 3;
#P hidden message 471 357 33 196617 min 0;
#P user GSwitch2 142 447 39 32 1 0;
#P message 151 424 14 196617 1;
#P button 171 485 15 0;
#P message 129 424 14 196617 0;
#P message 171 511 45 196617 5 crit05;
#P message 224 466 45 196617 4 crit04;
#P message 182 383 14 196617 0;
#P button 224 444 15 0;
#P message 204 383 14 196617 1;
#P user GSwitch2 195 406 39 32 1 0;
#P user GSwitch2 250 365 39 32 1 0;
#P message 259 342 14 196617 1;
#P button 279 403 15 0;
#P message 237 342 14 196617 0;
#P message 279 424 45 196617 3 crit03;
#P newex 374 352 45 196617 s toPack;
#P message 327 378 45 196617 2 crit02;
#P message 285 294 14 196617 0;
#P button 327 355 15 0;
#P message 307 294 14 196617 1;
#P user GSwitch2 298 317 39 32 1 0;
#P hidden newex 32 252 59 196617 delay 1000;
```

#P hidden button 688 526 15 0;  
#P hidden newex 644 525 39 196617 r clear;  
#P hidden newex 662 571 45 196617 s crit05;  
#P comment 704 519 173 196626 number of crit05;  
#P number 662 545 40 14 0 0 36 3;  
#P user hslider 704 545 21 139 46 1 0 0;  
#P user hslider 706 471 22 138 46 1 0 0;  
#P number 661 471 40 14 0 0 36 3;  
#P comment 706 445 173 196626 number of crit04;  
#P hidden newex 661 497 45 196617 s crit04;  
#P hidden newex 644 451 39 196617 r clear;  
#P hidden button 688 452 15 0;  
#P hidden button 688 378 15 0;  
#P hidden newex 645 377 39 196617 r clear;  
#P hidden newex 663 422 45 196617 s crit03;  
#P comment 706 370 173 196626 number of crit03;  
#P number 663 396 40 14 0 0 36 3;  
#P user hslider 706 396 22 140 46 1 0 0;  
#P user hslider 706 325 22 138 46 1 0 0;  
#P number 663 325 40 14 0 0 36 3;  
#P comment 706 302 173 196626 number of crit02;  
#P hidden newex 663 351 45 196617 s crit02;  
#P hidden newex 649 305 39 196617 r clear;  
#P hidden button 690 306 15 0;  
#P hidden message 43 742 40 196617 write;  
#P hidden newex 43 721 41 196617 r write;  
#P comment 784 58 27 196617 slow;  
#P hidden number 668 73 35 9 0 0 0 3;  
#P user hslider 661 38 18 135 20 50 50 0;  
#P hidden message 294 71 14 196617 0;  
#P hidden message 113 90 14 196617 1;  
#P hidden button 690 238 15 0;  
#P hidden button 639 137 15 0;  
#P hidden newex 648 237 39 196617 r clear;  
#P hidden newex 657 94 39 196617 r clear;  
#P hidden message 471 268 33 196617 min 0;  
#P hidden newex 64 511 27 196617 + 6;  
#P hidden button 34 499 15 0;  
#P hidden button 42 567 15 0;  
#P hidden newex 380 125 45 196617 r stimuli;  
#P hidden newex 385 175 45 196617 r stimuli;  
#P hidden newex 202 606 45 196617 r stimuli;  
#P hidden newex 625 215 45 196617 s stimuli;  
#P hidden button 183 607 15 0;  
#P hidden number 185 710 35 9 0 0 0 3;  
#P hidden newex 136 621 43 196617 r metro;  
#P hidden newex 195 144 43 196617 s metro;  
#P hidden number 434 311 35 9 0 0 0 3;  
#P hidden newex 529 268 54 196617 r criticals;  
#P hidden newex 572 289 54 196617 r criticals;  
#P hidden newex 664 283 54 196617 s criticals;  
#P user GSwitch2 346 276 39 32 1 0;  
#P hidden newex 361 89 36 196617 r clear;  
#P hidden newex 128 599 39 196617 r clear;  
#P hidden newex 211 178 39 196617 r clear;  
#P hidden newex 471 247 39 196617 r clear;

```

#P hidden newex 64 469 39 196617 r clear;
#P hidden newex 16 90 39 196617 s clear;
#P hidden message 828 119 14 196617 1;
#P hidden newex 828 96 45 196617 loadbang;
#P hidden number 202 627 35 9 0 0 0 3;
#N vpreset 1;
#X append 1 2 12 96 285 toggle int 0 \; 17 257 706 hslider int 5 \; 18 257 664 number int 5 \; 30 177 292
number int 0 \; 33 671 223 number int 9 \; 34 163 658 hslider int;
#X append 1 2 59 \; 35 191 658 number int 60 \; 38 627 202 number int 18 \; 47 276 346 GSwitch2 int 1 \;
51 311 434 number int 0 \; 54 710 185 number int 10 \; 70 38 661;
#X append 1 2 hslider int 0 \; 71 73 668 number int 50 \; 79 325 663 number int 5 \; 80 325 706 hslider int
5 \; 81 396 706 hslider int 5 \; 82 396 663 number int 5 \; 91 471 661;
#X append 1 2 number int 5 \; 92 471 706 hslider int 5 \; 93 545 704 hslider int 5 \; 94 545 662 number int
5 \; 100 317 298 GSwitch2 int 1 \; 110 365 250 GSwitch2 int 1 \; 111 406 195;
#X append 1 2 GSwitch2 int 1 \; 120 447 142 GSwitch2 int 1 \; 122 400 434 number int 0 \; 137 485 434
number int 0 \; 140 575 434 number int 0 \; 155 665 434 number int 0 \;;
#P preset 828 140 47 27;
#P comment 706 234 203 196626 number of old critical;
#P number 658 191 41 14 0 0 36 3;
#P user hslider 658 163 24 139 90 1 1 0;
#P hidden number 223 671 35 9 0 0 0 3;
#P hidden button 162 671 15 0;
#P hidden newex 185 690 27 196617 + 1;
#P hidden number 292 177 35 9 0 0 0 3;
#P hidden newex 185 648 27 196617 urn;
#P hidden message 135 733 50 196617 sort 1 -1;
#N coll ;
#P hidden newobj 190 759 40 196617 coll;
#P hidden newex 190 738 48 196617 pack i i s;
#P hidden button 211 199 15 0;
#P message 354 253 14 196617 1;
#P hidden message 513 268 14 196617 0;
#P hidden button 513 249 15 0;
#P button 374 312 15 0;
#P message 332 253 14 196617 0;
#P hidden newex 471 309 111 196617 if $i1 == $i2 then bang;
#P number 664 257 40 14 0 0 36 3;
#P user hslider 706 257 23 140 46 1 0 0;
#P hidden newex 471 288 66 196617 counter;
#P message 374 333 50 196617 1 critical;
#P hidden button 361 110 15 0;
#P hidden message 361 128 15 196617 0;
#P hidden toggle 285 96 22 0;
#P hidden button 284 216 15 0;
#P hidden newex 284 196 111 196617 if $i1 == $i2 then bang;
#P hidden newex 284 155 66 196617 counter;
#P hidden newex 285 122 45 196617 metro;
#P hidden newex 64 556 60 196617 prepend set;
#P hidden message 64 577 85 196617 52 scale;
#N coll masterpictlist;
#P hidden newobj 64 533 91 196617 coll masterpictlist;
#P hidden message 16 69 48 196617 clear;
#P hidden newex 64 490 38 196617 urn 58;
#P comment 658 114 155 196626 number of stimuli per trial;
#P comment 661 58 23 196617 fast;
#P comment 661 19 137 196622 creation speed;

```

#P hidden connect 178 0 179 0;  
#P hidden connect 177 0 178 0;  
#P connect 102 0 104 0;  
#P hidden fasten 102 0 129 0 332 373 476 373;  
#P hidden fasten 98 0 93 0 693 543 709 543;  
#P hidden connect 175 1 26 2;  
#P hidden connect 166 0 100 0;  
#P hidden connect 165 0 47 0;  
#P hidden fasten 120 0 3 0 147 487 69 487;  
#P hidden connect 163 0 68 0;  
#P fasten 111 0 120 1 200 441 176 441;  
#P connect 111 1 113 0;  
#P hidden connect 157 0 175 0;  
#P hidden connect 154 0 148 4;  
#P hidden fasten 156 0 148 0 476 637 476 637;  
#P hidden connect 153 0 149 1;  
#P hidden connect 151 0 148 3;  
#P hidden connect 152 0 150 0;  
#P hidden fasten 86 0 81 0 693 395 711 395;  
#P hidden fasten 87 0 92 0 693 469 711 469;  
#P hidden fasten 149 0 117 0 476 685 188 685 188 415 134 415;  
#P hidden fasten 75 0 80 0 695 323 711 323;  
#P hidden fasten 139 0 147 0 476 547 476 547;  
#P hidden fasten 138 0 130 0 476 457 476 457;  
#P hidden connect 133 0 130 3;  
#P hidden connect 126 0 129 3;  
#P hidden fasten 121 0 129 0 476 372 476 372;  
#P fasten 119 0 120 0 156 443 147 443;  
#P fasten 117 0 120 0 134 444 147 444;  
#P connect 116 0 162 0;  
#P connect 115 0 161 0;  
#P hidden connect 148 0 155 0;  
#P hidden connect 148 0 149 0;  
#P hidden fasten 67 0 17 0 695 255 711 255;  
#P hidden fasten 66 0 34 0 644 151 663 151;  
#P fasten 114 0 111 0 187 403 200 403;  
#P fasten 112 0 111 0 209 402 200 402;  
#P fasten 110 0 111 1 255 401 229 401;  
#P connect 110 1 108 0;  
#P hidden connect 147 0 140 0;  
#P hidden connect 147 0 146 0;  
#P hidden fasten 146 0 114 0 476 594 243 594 243 377 187 377;  
#P hidden connect 171 0 163 0;  
#P hidden connect 171 0 164 0;  
#P hidden connect 173 0 4 0;  
#P hidden connect 175 0 26 1;  
#P connect 106 0 160 0;  
#P fasten 107 0 110 0 242 362 255 362;  
#P hidden connect 143 0 145 0;  
#P hidden connect 144 0 147 3;  
#P connect 104 0 159 0;  
#P hidden connect 169 0 120 0;  
#P hidden connect 168 0 111 0;  
#P hidden connect 141 0 147 4;  
#P hidden connect 167 0 110 0;  
#P hidden connect 136 0 130 4;

#P hidden connect 135 0 131 1;  
#P fasten 103 0 100 0 290 314 303 314;  
#P hidden connect 134 0 132 0;  
#P hidden fasten 131 0 107 0 476 502 326 502 326 335 242 335;  
#P hidden connect 130 0 137 0;  
#P hidden connect 130 0 131 0;  
#P hidden connect 129 0 122 0;  
#P hidden connect 129 0 128 0;  
#P hidden connect 142 0 146 1;  
#P hidden connect 123 0 129 4;  
#P hidden connect 99 0 176 0;  
#P hidden fasten 128 0 103 0 476 418 341 418 341 289 290 289;  
#P hidden connect 125 0 127 0;  
#P fasten 101 0 100 0 312 313 303 313;  
#P hidden connect 124 0 128 1;  
#P connect 74 0 27 0;  
#P hidden connect 61 0 62 0;  
#P hidden connect 60 0 6 0;  
#P hidden fasten 69 0 12 0 299 89 290 89;  
#P hidden fasten 76 0 75 0 654 299 695 299;  
#P hidden fasten 68 0 12 0 118 125 207 125 207 80 290 80;  
#P hidden connect 94 0 96 0;  
#P hidden fasten 97 0 98 0 649 519 693 519;  
#P hidden connect 94 0 169 0;  
#P hidden fasten 88 0 87 0 649 445 693 445;  
#P hidden fasten 85 0 86 0 650 373 693 373;  
#P hidden connect 40 0 37 0;  
#P hidden fasten 55 0 38 0 188 625 207 625;  
#P hidden connect 73 0 74 0;  
#P hidden connect 62 0 5 0;  
#P hidden connect 91 0 89 0;  
#P hidden connect 91 0 168 0;  
#P hidden fasten 59 0 9 4 385 150 345 150;  
#P hidden connect 82 0 167 0;  
#P hidden connect 58 0 10 1;  
#P hidden fasten 32 0 31 0 167 688 190 688;  
#P hidden fasten 65 0 67 0 653 231 695 231;  
#P hidden fasten 64 0 66 0 662 114 644 114;  
#P hidden connect 79 0 77 0;  
#P hidden connect 82 0 84 0;  
#P hidden connect 79 0 166 0;  
#P fasten 24 0 47 0 359 272 351 272;  
#P fasten 100 0 110 1 303 357 284 357;  
#P connect 100 1 102 0;  
#P hidden connect 23 0 16 3;  
#P hidden connect 25 0 119 0;  
#P hidden connect 25 0 112 0;  
#P hidden connect 25 0 109 0;  
#P hidden connect 25 0 101 0;  
#P hidden fasten 25 0 24 0 216 238 274 238 274 243 359 243;  
#P hidden connect 28 0 27 0;  
#P fasten 20 0 47 0 337 273 351 273;  
#P connect 15 0 105 0;  
#P hidden connect 13 0 9 3;  
#P hidden connect 6 0 158 0;  
#P hidden connect 22 0 23 0;

#P hidden connect 4 0 41 0;  
#P fasten 47 0 100 1 351 312 332 312;  
#P connect 47 1 21 0;  
#P connect 21 0 15 0;  
#P hidden fasten 21 0 16 0 379 330 397 330 397 285 476 285;  
#P hidden connect 50 0 16 4;  
#P hidden fasten 63 0 16 0 476 283 476 283;  
#P hidden fasten 11 0 99 0 289 248 37 248;  
#P hidden connect 14 0 13 0;  
#P hidden connect 49 0 19 1;  
#P hidden connect 46 0 14 0;  
#P hidden connect 93 0 94 0;  
#P hidden connect 92 0 91 0;  
#P hidden connect 54 0 26 0;  
#P hidden fasten 45 0 29 0 133 645 190 645;  
#P hidden connect 44 0 25 0;  
#P hidden fasten 45 0 55 0 133 617 178 617 178 604 188 604;  
#P hidden connect 43 0 22 0;  
#P hidden connect 42 0 3 0;  
#P hidden connect 57 0 38 0;  
#P hidden connect 81 0 82 0;  
#P hidden connect 80 0 79 0;  
#P hidden connect 38 0 29 1;  
#P hidden fasten 53 0 29 0 141 642 190 642;  
#P hidden connect 31 0 54 0;  
#P hidden fasten 29 0 31 0 190 676 190 676;  
#P hidden fasten 29 0 32 0 190 669 167 669;  
#P hidden fasten 29 0 33 0 190 667 228 667;  
#P hidden connect 26 0 27 0;  
#P hidden fasten 19 0 20 0 476 330 414 330 414 249 337 249;  
#P hidden fasten 11 0 69 0 289 235 279 235 279 65 299 65;  
#P hidden fasten 70 0 8 1 666 59 325 59;  
#P hidden connect 70 0 71 0;  
#P hidden connect 132 0 133 0;  
#P hidden connect 16 0 51 0;  
#P hidden connect 16 0 19 0;  
#P hidden connect 10 0 11 0;  
#P hidden connect 9 0 10 0;  
#P hidden connect 9 0 30 0;  
#P hidden fasten 8 0 52 0 290 143 200 143;  
#P hidden connect 8 0 9 0;  
#P hidden fasten 8 0 47 1 290 149 271 149 271 236 380 236;  
#P hidden connect 145 0 144 0;  
#P hidden connect 7 0 60 0;  
#P hidden connect 7 0 6 0;  
#P hidden connect 5 0 7 0;  
#P hidden connect 3 0 61 0;  
#P hidden connect 3 0 62 0;  
#P hidden connect 39 0 40 0;  
#P hidden connect 18 0 48 0;  
#P hidden connect 18 0 165 0;  
#P hidden connect 34 0 56 0;  
#P hidden connect 34 0 35 0;  
#P hidden connect 174 0 3 0;  
#P hidden connect 17 0 18 0;  
#P hidden connect 12 0 8 0;

```

#P connect 108 0 106 0;
#P fasten 109 0 110 0 264 361 255 361;
#P hidden fasten 108 0 130 0 284 421 434 421 434 460 476 460;
#P connect 113 0 115 0;
#P connect 120 1 118 0;
#P hidden fasten 113 0 147 0 229 462 419 462 419 549 476 549;
#P hidden connect 127 0 126 0;
#P connect 118 0 116 0;
#P hidden fasten 118 0 148 0 176 507 390 507 390 639 476 639;
#P hidden connect 150 0 151 0;
#P pop;

```

### 9.2.2. Visual Player

```

max v2;
#N vpatcher 5 43 1012 741;
#P hidden newex 40 438 92 196617 unpack 0 0 0 0 0 0;
#P hidden newex 651 -80 38 196617 r input;
#P hidden newex 16 761 38 196617 r input;
#P hidden newex 282 700 38 196617 r input;
#P hidden newex 560 315 38 196617 r input;
#P hidden newex 7 488 38 196617 s input;
#P hidden newex 22 414 43 1441802 midiin;
#P hidden newex 486 291 50 1441802 r start;
#P hidden button 486 313 15 0;
#P hidden newex 7 393 68 1441802 select 104;
#P hidden newex 7 370 27 1441802 key;
#P hidden newex 22 462 44 1441802 select;
#P hidden user GSwitch2 528 343 39 32 0 0;
#P hidden message 527 320 14 1441802 1;
#P hidden message 543 320 14 1441802 0;
#P hidden newex -35 1121 39 196617 r clear;
#P hidden message -20 773 14 1441802 1;
#P hidden user GSwitch2 -19 796 39 32 0 0;
#P hidden user GSwitch2 617 -47 39 32 0 0;
#P hidden message 617 -70 14 1441802 1;
#P hidden message 633 -70 14 1441802 0;
#P hidden newex 578 -99 50 1441802 r start;
#P hidden button 578 -77 15 0;
#P hidden newex 1119 238 29 196617 + 10;
#P hidden button 630 886 15 0;
#P hidden newex 1314 8 45 196617 loadbang;
#P hidden newex 1145 86 55 196617 r progress;
#P hidden message 1315 36 32 1441802 open;
#P hidden button 1100 236 15 0;
#P hidden newex 1112 337 79 1441802 rect as 3;
#P hidden button 1308 86 15 0;
#N graphic as 1 1053 421 1638 521;
#P hidden newobj 1338 88 68 1441802 graphic as;
#P hidden button 1090 311 15 0;
#P hidden message 1132 287 110 1441802 10 10 20 30 0 136;
#P hidden message 1364 39 38 1441802 close;
#P hidden user hslider 1110 151 18 128 31 1 0 0;
#P hidden newex 1119 213 30 196617 * 18;
#P hidden number 1110 178 35 9 0 0 0 3;

```



```
#P hidden message 1337 119 104 1441802 0 0 580 40 0 255;
#P hidden button 1314 137 15 0;
#P hidden newex 1337 155 79 1441802 rect as 2;
#N vpatcher 372 160 772 460;
#N graphic finish 0 1044 2 1652 478;
#P newobj 259 114 92 1441802 graphic finish;
#P message 224 83 32 1441802 open;
#P message 268 83 38 1441802 close;
#P message 241 147 110 1441802 0 0 640 480 0 255;
#P button 196 169 15 0;
#P newex 207 197 85 1441802 rect finish 2;
#P button 224 116 15 0;
#N coll lightcode;
#P newobj 43 149 65 196617 coll lightcode;
#P newex 43 228 131 1441802 oval finish 3;
#P message 43 206 110 196617 186 225 238 275;
#P newex 43 172 60 196617 prepend set;
#P button 20 190 15 0;
#P message 163 205 26 196617 136;
#P newex 43 126 50 196617 metro 50;
#P newex 144 63 65 196617 delay 10000;
#P message 60 99 14 196617 0;
#P message 42 99 14 196617 1;
#P inlet 188 28 15 0;
#P fasten 11 0 14 0 229 140 246 140;
#P connect 6 0 8 0;
#P connect 6 0 9 0;
#P connect 0 0 1 0;
#P connect 0 0 3 0;
#P connect 0 0 5 0;
#P connect 0 0 16 0;
#P connect 16 0 11 0;
#P fasten 16 0 17 0 229 105 264 105;
#P fasten 15 0 17 0 273 105 264 105;
#P fasten 14 0 13 0 246 165 201 165;
#P fasten 14 0 12 0 246 190 212 190;
#P connect 8 0 9 0;
#P connect 5 0 9 5;
#P connect 2 0 4 0;
#P connect 1 0 4 0;
#P connect 10 0 7 0;
#P connect 7 0 6 0;
#P connect 7 0 8 0;
#P connect 4 0 10 0;
#P connect 3 0 2 0;
#P fasten 3 0 15 0 149 84 210 84 227 73 273 73;
#P fasten 13 0 12 0 201 190 212 190;
#P pop;
#P hidden newobj 97 688 100 196617 patcher runningLight;
#P hidden newex 97 666 63 196617 r EndOfTrial;
#P hidden newex 802 729 55 196617 s progress;
#P hidden button 773 694 15 0;
#P hidden newex 802 708 27 196617 -;
#P hidden newex 802 671 68 1441802 r hitcount;
#P hidden newex 879 671 62 1441802 r FAccount;
#P hidden button 362 17 15 0;
```

```

#P hidden newex 388 31 27 196617 *;
#P hidden newex 370 -6 62 1441802 r totalst;
#P hidden newex 439 30 41 196617 / 1000;
#P hidden newex 438 -1 35 196617 r freq;
#P hidden newex 790 446 50 1441802 s check;
#P message 789 396 95 197066788 open;
#P hidden newex 64 1156 41 196617 r check;
#N vpatcher 1044 25 1642 439;
#P hidden inlet 13 61 15 0;
#P user imovie 1 2 582 394 1 ;
#M rd allpictmovie;
#P hidden connect 1 0 0 0;
#P pop 1;
#P hidden newobj -50 678 75 196617 patcher display;
#P comment 859 112 90 197066772 Trial no;;
#P number 950 114 37 20 0 0 36 22;
#P comment 870 78 79 197066772 Date;
#P hidden newex 868 1 40 196617 date;
#P hidden message 868 -21 27 196617 date;
#P number 934 51 51 14 0 0 36 3;
#P number 901 51 30 14 0 0 36 3;
#P number 869 51 30 14 0 0 36 3;
#P hidden newex 868 24 82 196617 unpack 0 0 0;
#P hidden newex 868 -46 45 196617 loadbang;
#P hidden newex 625 3 63 196617 r EndOfTrial;
#P hidden message 616 76 31 196617 set;
#P hidden newex 616 52 35 196617 r read;
#P message 689 396 96 197066788 write;
#P hidden newex 302 415 50 1441802 r start;
#P hidden newex 378 324 50 1441802 r start;
#P hidden message -94 499 32 196617 3200;
#P hidden newex -94 477 50 1441802 r black;
#P hidden newex 592 539 39 196617 s black;
#P hidden newex 549 480 44 1441802 r StFA;
#P hidden user GSwitch2 549 502 39 32 0 0;
#P hidden newex 450 357 68 1441802 r stimcode;
#P hidden newex 450 378 104 1441802 select 1 2 3 4 5;
#P hidden user GSwitch2 458 440 39 32 1 0;
#P hidden message 467 416 14 1441802 1;
#P hidden message 450 416 14 1441802 0;
#P hidden newex 481 509 41 196617 s white;
#P hidden newex 10 566 41 196617 r white;
#P hidden message 111 999 13 1441802 1;
#P hidden message 94 999 13 1441802 0;
#P hidden user GSwitch2 138 1020 39 32 1 0;
#P hidden newex 93 972 62 1441802 delay 100;
#P hidden newex 95 949 45 1441802 r play;
#P hidden newex 160 951 50 1441802 r start;
#P hidden newex 194 977 63 196617 r EndOfTrial;
#P hidden newex 211 684 63 196617 r EndOfTrial;
#P hidden newex 147 800 45 196617 delay 50;
#P hidden button 496 671 15 0;
#P hidden message 442 778 38 1441802 set ";
#P hidden newex 294 988 52 196617 r systime;
#P hidden newex 118 889 52 196617 s systime;
#P hidden newex 135 1069 68 196617 r EndOfTrial;

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#P hidden newex 528 988 68 1441802 r stimulus;  
#P hidden newex 226 704 50 1441802 r start;  
#P hidden newex 719 -43 63 196617 r EndOfTrial;  
#P hidden message 797 6 14 1441802 0;  
#P hidden newex 812 -22 50 1441802 r clear;  
#P hidden newex 797 -44 44 1441802 r stop;  
#P hidden newex 711 3 30 196617 \* 50;  
#P hidden newex 711 -21 68 1441802 r stimcode;  
#P user imovie 711 36 147 111 1 ;  
#M rd smallpictmovie;  
#P hidden message -99 593 27 196617 stop;  
#P hidden newex 131 631 68 1441802 s stimulus;  
#P hidden newex 303 479 44 1441802 r stop;  
#P hidden newex 60 608 114 196617 unpack i s;  
#P hidden message -35 606 31 196617 clear;  
#P hidden newex 26 634 30 196617 \* 50;  
#P hidden message -66 615 28 196617 read;  
#P hidden newex 51 344 50 1441802 s start;  
#P hidden message 391 406 14 1441802 0;  
#P hidden message 408 406 14 1441802 1;  
#P hidden user GSwitch2 399 433 39 32 0 0;  
#P hidden message 364 482 27 196617 stop;  
#P hidden newex 246 -26 44 1441802 r play;  
#P hidden user GSwitch2 362 583 39 32 0 0;  
#P hidden newex 410 539 50 1441802 r Pause;  
#P hidden newex 389 563 45 196617 delay;  
#P hidden newex 175 500 44 1441802 r freq;  
#P hidden newex 153 521 32 196617 delay;  
#P hidden newex 389 504 32 196617 delay;  
#P hidden newex 411 483 62 1441802 r ExpTime;  
#P hidden newex -94 301 50 1441802 r Pause;  
#P hidden newex -72 533 63 196617 r EndOfTrial;  
#P hidden newex 153 542 63 196617 s EndOfTrial;  
#P hidden newex -42 301 62 1441802 r ExpTime;  
#P hidden newex -8 525 44 1441802 r stop;  
#P hidden newex 332 252 35 196617 s stop;  
#P hidden newex 86 518 44 1441802 r read;  
#P hidden newex 5 546 50 1441802 r clear;  
#P hidden message -1 592 14 1441802 0;  
#P hidden newex 631 398 44 1441802 r read;  
#P hidden message 648 437 38 1441802 set 0;  
#P hidden button 649 420 15 0;  
#P hidden button 89 312 18 0;  
#P hidden button 654 686 19 0;  
#P hidden newex 214 125 50 1441802 s Pause;  
#P hidden newex 139 123 62 1441802 s ExpTime;  
#P hidden button 428 -67 15 0;  
#P hidden newex 428 -43 115 1441802 expr (1/\$f2)\*60000;  
#P hidden newex 468 -68 38 1441802 + int;  
#P comment 431 82 130 197066766 length of trial (s);  
#P number 570 84 41 14 0 0 0 3007;  
#P comment 434 60 119 197066766 Stimuli per min;;  
#P number 570 59 42 14 0 0 0 3007;  
#P comment 1 51 137 197066766 Stimuli Exposure Time;;  
#P comment 1 85 137 197066766 Pause between Stimuli;;  
#P number 155 52 65 20 0 0 36 22;

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#P number 155 86 65 20 0 0 36 22;
#P user hslider 276 51 26 129 61 50 0 0;
#P user hslider 276 85 26 129 61 50 0 0;
#P comment 11 0 359 1310756 Vigilance Test Settings;
#P comment 223 86 53 197066770 msec;
#P comment 221 52 53 197066770 msec;
#P hidden number 907 283 35 9 0 0 0 3;
#P hidden message 952 253 14 1441802 0;
#P hidden newex 952 231 62 1441802 r clTRcnt;
#P comment 892 318 57 197066770 Trial count;
#P user uslider 952 295 30 91 13 1 0 0;
#P hidden newex 832 290 50 196617 s clTRcnt;
#P user ubutton 832 231 114 46 0 0;
#P hidden button 494 864 15 0;
#P hidden newex 162 252 44 1441802 s read;
#P hidden newex 239 859 44 1441802 r StFA;
#P hidden user GSwitch2 280 891 39 32 0 0;
#P hidden newex 464 261 44 1441802 s StFA;
#P comment 488 232 140 197066766 stop on False Alarm;
#P toggle 464 232 22 0;
#P hidden newex 1097 403 62 1441802 r clTRcnt;
#P hidden newex 48 252 50 1441802 s clear;
#P hidden newex 311 780 45 1441802 r play;
#P hidden message 271 830 14 1441802 1;
#P hidden message 287 829 14 1441802 0;
#P hidden user GSwitch2 291 852 39 32 1 0;
#P hidden button 293 774 15 0;
#P hidden message 311 807 111 1441802 FalseAlarm;
#P hidden newex 312 827 110 1441802 select FalseAlarm;
#P hidden newex 288 932 32 1441802 s FA;
#P hidden newex 482 634 104 1441802 select 1 2 3 4 5;
#P hidden newex 482 613 68 1441802 r stimcode;
#P hidden button 592 671 17 0;
#P hidden message 665 713 14 1441802 1;
#P hidden message 632 713 14 1441802 0;
#P hidden message 568 713 14 1441802 0;
#P hidden message 543 713 14 1441802 1;
#P hidden message 474 902 97 1441802 ";
#P hidden button 505 743 15 0;
#P hidden newex 618 805 260 1441802 if $i1 == 0 & $i2 == 1 then set FalseAlarm;
#P hidden newex 618 836 259 1441802 if $i1 == 1 & $i2 == 0 then set Miss;
#P hidden newex 618 863 257 1441802 if ($i1 & $i2) == 0 then set ";
#P hidden newex 618 778 245 1441802 if ($i1 & $i2) == 1 then set Hit;
#P hidden number 548 743 35 10 0 0 0 22;
#P hidden number 643 743 35 10 0 0 0 22;
#P hidden button -61 766 15 0;
#P hidden newex -61 744 50 1441802 r start;
#P hidden message 1097 425 14 1441802 0;
#P hidden newex 1021 421 44 1441802 r read;
#P hidden newex 1021 447 68 1441802 counter 12;
#P message 550 129 14 1441802 1;
#N vpreset 1;
#X append 1 2 11 570 96 GSwitch2 int 1 \; 15 861 -47 number int 405 \; 40 404 234 GSwitch2 int 1 \; 46
867 118 number float 0. \; 51 314 689 number float 0. \; 63 1024 451 number float;
#X append 1 2 0. \; 74 1113 106 GSwitch2 int 1 \; 75 207 464 toggle int 1 \; 82 466 690 number int 0 \; 96
565 695 number int 0 \; 97 565 772 number int 0 \; 98 565 847;

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#X append 1 2 number int 0 \; 107 464 810 number int 60 \; 117 743 643 number int 0 \; 118 743 548
number int 0 \; 136 852 291 GSwitch2 int 1 \; 142 232 464 toggle int 0 \; 145 891 280;
#X append 1 2 GSwitch2 int 0 \; 151 295 952 uslider int 0 \; 155 283 907 number int 0 \; 159 85 276 hslider
int 10 \; 160 51 276 hslider int 20 \; 161 86 155 number int 500 \; 162 52 155;
#X append 1 2 number int 1000 \; 165 59 570 number int 38 \; 167 84 570 number int 90 \; 194 583 362
GSwitch2 int 0 \; 197 433 399 GSwitch2 int 0 \; 228 1020 138 GSwitch2 int 1 \; 235 440 458;
#X append 1 2 GSwitch2 int 1 \; 238 502 549 GSwitch2 int 0 \; 251 51 869 number int 6 \; 252 51 901
number int 16 \; 253 51 934 number int 1998 \; 257 114 950 number int 1 \; 278 178 1110;
#X append 1 2 number int 0 \; 280 151 1110 hslider int 0 \; 297 -47 617 GSwitch2 int 0 \; 298 796 -19
GSwitch2 int 0 \; 303 343 528 GSwitch2 int 0 \;;
#P preset 550 152 47 27;
#P comment 761 463 45 197066788 of;
#P hidden newex 883 442 62 1441802 r totalst;
#P number 810 464 62 36 0 0 36 22;
#P hidden newex 202 479 66 1441802 s totalst;
#P hidden message 442 220 14 1441802 0;
#P hidden newex 733 895 44 1441802 r read;
#P comment 847 610 73 197066772 Misses;
#P comment 772 610 79 197066772 False Alarms;
#P comment 697 610 47 197066772 Hits;
#P hidden newex 311 1159 115 1441802 unpack 0. 0 0. s s;
#P hidden message 733 918 14 1441802 0;
#P number 847 565 66 36 0 0 36 22;
#P number 772 565 62 36 0 0 36 22;
#P number 695 565 64 36 0 0 36 22;
#P hidden newex 847 540 73 1441802 r Misscount;
#P hidden newex 772 540 62 1441802 r FAccount;
#P hidden newex 695 540 68 1441802 r hitcount;
#P hidden newex 799 1121 74 1441802 s Misscount;
#P hidden newex 799 1092 66 1441802 counter;
#P hidden newex 712 992 66 1441802 counter;
#P hidden newex 712 1021 62 1441802 s FAccount;
#P hidden newex 633 994 68 1441802 s hitcount;
#P hidden newex 633 966 66 1441802 counter;
#P hidden newex 799 1064 73 1441802 select Miss;
#P hidden newex 712 965 110 1441802 select FalseAlarm;
#P hidden newex 654 940 68 1441802 select Hit;
#P comment 690 509 187 197066772 present Position;
#P number 690 466 62 36 0 0 36 22;
#P hidden newex 617 375 68 1441802 r position;
#P hidden newex 722 444 50 1441802 s write;
#P hidden newex 153 1120 50 1441802 r write;
#P hidden newex 81 1090 50 1441802 r asave;
#P hidden newex 511 261 56 1441802 s asave;
#P comment 487 210 128 197066766 autosave on/off;
#P toggle 464 207 22 0;
#P hidden user GSwitch2 106 1113 39 32 0 0;
#P hidden newex 135 1090 68 1441802 delay 5000;
#P hidden newex -94 346 44 1441802 s freq;
#P hidden newex 208 1133 44 1441802 r read;
#P hidden newex 372 988 68 1441802 r position;
#P hidden newex 139 406 68 1441802 s position;
#P hidden message 165 1157 38 1441802 write;
#P hidden button 264 1094 15 0;
#P hidden message 208 1155 38 1441802 clear;
#P hidden message 262 1156 18 1441802 cr;
```

#P hidden newex 294 1192 32 1441802 Text;  
#P hidden flonum 451 1024 35 10 0 0 0 22;  
#P hidden newex 451 988 50 1441802 r rtime;  
#P hidden newex 539 923 50 1441802 r start;  
#P hidden message 539 964 38 1441802 set 0;  
#P hidden button 539 946 15 0;  
#P hidden button 632 254 15 0;  
#P hidden message 632 275 38 1441802 set 0;  
#P hidden newex 632 231 50 1441802 r start;  
#P comment 709 179 187 197066772 present Stimulus;  
#P hidden newex 623 116 74 1441802 prepend set;  
#P hidden newex 623 93 68 1441802 r stimulus;  
#P hidden newex 689 285 50 1441802 r rtime;  
#P flonum 689 314 103 36 0 0 36 3007;  
#P hidden newex -47 903 50 1441802 s rtime;  
#P hidden newex 266 747 50 1441802 s event;  
#P hidden newex 118 821 39 1441802 timer;  
#P hidden newex 118 844 69 1441802 / 1000.;  
#P hidden flonum 118 867 70 12 0 0 32 3007;  
#P hidden newex 98 777 45 1441802 r play;  
#P hidden newex 147 777 51 1441802 r event;  
#P hidden newex 38 518 44 1441802 r play;  
#P hidden message 242 359 14 1441802 1;  
#P hidden message 225 359 14 1441802 0;  
#P hidden user GSwitch2 234 404 39 32 1 0;  
#P hidden newex 223 252 44 1441802 s play;  
#P button 689 227 53 0;  
#P hidden newex 294 1059 322 1441802 pack 0. 0 0. s s;  
#P hidden newex 294 1088 74 1441802 prepend set;  
#P hidden newex 60 630 68 1441802 s stimcode;  
#P hidden message 159 359 43 1441802 length;  
#P hidden newex 452 186 68 1441802 r loadbang;  
#P hidden newex 450 160 68 1441802 s loadbang;  
#P hidden newex 1 120 61 1441802 key;  
#P hidden newex 1 142 115 1441802 select 24 18 32 27;  
#P user ubutton 1 172 107 72 0 0;  
#P hidden message 1 252 38 1441802 clear;  
#P hidden message 112 252 32 1441802 read;  
#P user ubutton 112 172 110 71 0 0;  
#P user ubutton 332 172 107 71 0 0;  
#P user ubutton 223 172 109 72 0 0;  
#P user fpic 331 171 110 74 stop.pict 0 0;  
#P user fpic 113 171 110 74 read.pict 0 0;  
#P user fpic 224 171 109 74 play2.pict 0 0;  
#P user fpic 1 171 110 74 clear.pict 0 0;  
#P hidden message 366 515 14 1441802 1;  
#P hidden message 349 515 14 1441802 0;  
#P hidden newex 153 479 44 1441802 select;  
#P comment 689 361 163 197066772 Reaction time;  
#P hidden number -47 861 50 10 0 0 0 22;  
#P hidden newex -47 881 68 1441802 / 1000.;  
#P hidden newex -47 839 38 1441802 timer;  
#P comment 744 230 79 197066772 Paddle Press;  
#P hidden user GSwitch2 96 570 39 32 1 0;  
#P hidden message 91 543 14 1441802 0;  
#P hidden message 108 543 14 1441802 1;

#P hidden newex -94 324 62 1441802 +;  
#P hidden newex 450 137 55 1441802 loadbang;  
#N coll ;  
#P hidden newobj 104 380 80 1441802 coll;  
#P hidden message 295 1130 241 1441802 0. 0 0.405 s s;  
#P comment 796 316 70 197066788 sec;  
#P comment 831 230 115 197066772 Clear Trial counter;  
#P message 711 150 148 1441816;  
#P hidden message 660 896 70 1441802 FalseAlarm;  
#P hidden message -4 773 14 1441802 0;  
#P hidden fasten 314 0 297 1 656 -53 651 -53;  
#P hidden connect 315 1 304 1;  
#P hidden fasten 313 0 298 1 21 788 15 788;  
#P hidden fasten 309 0 315 0 27 437 45 437;  
#P hidden connect 308 0 307 0;  
#P hidden connect 309 0 304 0;  
#P hidden fasten 306 0 310 0 12 472 12 472;  
#P hidden fasten 303 0 235 1 533 425 492 425;  
#P hidden fasten 303 0 302 0 533 376 521 376 521 316 532 316;  
#P hidden fasten 303 0 174 0 533 581 659 581;  
#P hidden connect 305 0 306 0;  
#P hidden fasten 304 0 310 0 27 483 12 483;  
#P connect 300 0 66 0;  
#P hidden connect 294 0 293 0;  
#P hidden fasten 298 0 299 0 -14 829 -26 829 -26 769 -15 769;  
#P hidden connect 298 0 13 1;  
#P hidden connect 290 0 288 0;  
#P hidden connect 292 0 286 2;  
#P hidden connect 289 0 280 0;  
#P hidden fasten 295 0 297 0 638 -51 622 -51;  
#P hidden connect 271 0 270 0;  
#P hidden fasten 288 0 285 0 1320 66 1313 66;  
#P hidden connect 279 0 287 0;  
#P hidden connect 278 0 279 0;  
#P hidden connect 279 0 292 0;  
#P hidden fasten 282 0 283 0 1137 305 1095 305;  
#P hidden fasten 282 0 286 0 1137 323 1117 323;  
#P hidden fasten 281 0 284 0 1369 69 1343 69;  
#P hidden fasten 277 0 276 0 1342 136 1319 136;  
#P hidden connect 277 0 275 0;  
#P hidden connect 221 0 125 0;  
#P hidden connect 221 0 127 0;  
#P hidden connect 261 0 262 0;  
#P hidden fasten 297 0 296 0 622 -10 611 -10 611 -74 622 -74;  
#P hidden fasten 296 0 297 0 622 -51 622 -51;  
#P hidden fasten 297 0 38 0 622 207 694 207;  
#P hidden connect 29 0 28 0;  
#P hidden fasten 29 0 140 0 6 247 53 247;  
#P hidden connect 254 0 255 0;  
#P hidden connect 149 0 150 0;  
#P hidden fasten 247 0 2 0 621 140;  
#P hidden connect 245 0 80 0;  
#P hidden connect 26 0 27 0;  
#P hidden fasten 26 1 147 0 217 248 167 248;  
#P hidden fasten 26 0 42 0 117 248 148 248 148 280 247 280;  
#P hidden connect 242 0 259 0;

#P hidden fasten 312 0 49 0 287 728 271 728;  
#P hidden fasten 311 0 303 1 565 336 562 336;  
#P hidden connect 269 0 271 0;  
#P hidden connect 269 0 270 0;  
#P hidden connect 268 0 271 0;  
#P hidden connect 267 0 266 0;  
#P hidden connect 268 0 270 1;  
#P hidden fasten 266 0 264 0 391 48 431 48 431 25 444 25;  
#P hidden connect 273 0 274 0;  
#P hidden connect 233 0 235 0;  
#P hidden connect 234 0 235 0;  
#P hidden connect 270 0 272 0;  
#P hidden fasten 265 0 266 0 375 16 393 16;  
#P hidden connect 230 0 228 0;  
#P hidden connect 176 0 177 0;  
#P hidden fasten 263 0 267 0 443 19;  
#P hidden fasten 264 0 167 0 444 54 558 54 558 81 575 81;  
#P hidden fasten 263 0 266 1 443 23 410 23;  
#P hidden connect 255 0 250 0;  
#P hidden fasten 175 0 200 0 94 336 56 336;  
#P hidden fasten 175 0 6 0 94 336 134 336 134 368 109 368;  
#P hidden connect 229 0 228 0;  
#P hidden connect 250 0 251 0;  
#P hidden connect 250 2 253 0;  
#P hidden connect 250 1 252 0;  
#P hidden connect 249 0 254 0;  
#P hidden connect 248 0 247 0;  
#P hidden fasten 162 0 172 0 160 76 159 76 159 82 144 82;  
#P hidden fasten 162 0 169 0 160 79 473 79;  
#P hidden fasten 161 0 173 0 160 110 219 110 219 116 219 116;  
#P hidden fasten 260 0 64 0 69 1186 299 1186;  
#P hidden connect 174 0 128 0;  
#P hidden connect 246 0 247 0;  
#P hidden connect 239 0 238 0;  
#P hidden fasten 118 0 122 0 553 798 623 798;  
#P hidden fasten 118 0 121 0 553 831 623 831;  
#P hidden fasten 118 0 120 0 553 859 623 859;  
#P hidden connect 237 0 236 0;  
#P hidden connect 171 0 170 0;  
#P hidden fasten 171 0 169 0 433 -49 454 -49 454 -72 473 -72;  
#P hidden fasten 244 0 189 0 307 444 394 444;  
#P hidden fasten 243 0 198 0 383 350 413 350;  
#P hidden connect 241 0 242 0;  
#P hidden fasten 117 0 119 1 648 768 858 768;  
#P hidden fasten 117 0 120 1 648 768 904 768 904 858 870 858;  
#P hidden fasten 117 0 121 1 648 768 892 768 892 830 872 830;  
#P hidden fasten 118 0 119 0 553 769 623 769;  
#P hidden fasten 117 0 122 1 648 768 873 768;  
#P hidden connect 201 0 259 0;  
#P hidden connect 203 0 259 0;  
#P hidden fasten 238 1 18 0 583 542 343 542 343 511 354 511;  
#P hidden fasten 238 1 196 0 583 537 362 537 362 473 369 473;  
#P hidden connect 238 1 240 0;  
#P hidden connect 199 0 197 0;  
#P hidden connect 148 0 124 0;  
#P hidden connect 198 0 197 0;



#P hidden fasten 177 0 82 0 653 459 695 459;  
#P hidden connect 177 0 107 0;  
#P hidden connect 179 0 259 0;  
#P hidden connect 135 0 134 0;  
#P hidden connect 154 0 151 0;  
#P hidden connect 155 0 151 0;  
#P hidden fasten 235 0 197 1 463 476 443 476 443 423 433 423;  
#P hidden fasten 235 1 238 1 492 478 583 478;  
#P hidden connect 129 0 126 0;  
#P hidden connect 129 0 127 0;  
#P hidden connect 137 0 136 0;  
#P hidden connect 138 0 136 0;  
#P hidden connect 227 0 230 0;  
#P hidden connect 228 1 67 0;  
#P hidden fasten 128 0 117 0 670 738 648 738;  
#P hidden fasten 128 0 123 0 670 734 510 734;  
#P hidden fasten 127 0 123 0 637 733 510 733;  
#P hidden fasten 127 0 117 0 637 738 648 738;  
#P hidden fasten 123 0 119 0 510 769 623 769;  
#P hidden fasten 123 0 122 0 510 798 623 798;  
#P hidden fasten 123 0 121 0 510 828 623 828;  
#P hidden fasten 123 0 120 0 510 857 623 857;  
#P hidden fasten 126 0 123 0 573 734 510 734;  
#P hidden fasten 126 0 118 0 573 736 553 736;  
#P hidden fasten 197 1 196 0 433 473 369 473;  
#P hidden fasten 197 1 192 0 433 531 394 531;  
#P hidden fasten 197 1 232 0 433 480 486 480;  
#P hidden connect 226 0 227 0;  
#P hidden connect 225 0 228 1;  
#P hidden connect 224 0 229 0;  
#P hidden fasten 223 0 49 0 216 738 271 738;  
#P hidden connect 224 0 67 0;  
#P hidden connect 280 0 278 0;  
#P hidden connect 222 0 48 1;  
#P hidden connect 219 0 37 0;  
#P hidden connect 220 0 124 0;  
#P hidden fasten 116 0 13 0 -56 823 -42 823;  
#P hidden fasten 116 0 0 0 -56 789 -30 789 -30 765 1 765;  
#P hidden connect 217 0 73 0;  
#P hidden connect 236 0 233 0;  
#P hidden fasten 236 1 233 0 473 403 455 403;  
#P hidden fasten 236 2 233 0 491 403 455 403;  
#P hidden fasten 236 3 233 0 509 403 455 403;  
#P hidden fasten 236 4 233 0 527 403 455 403;  
#P hidden fasten 236 5 234 0 545 408 472 408;  
#P hidden fasten 160 0 162 0 281 80 183 80 183 45 160 45;  
#P hidden fasten 161 0 169 1 160 106 501 106;  
#P hidden fasten 160 0 171 0 281 78 269 78 269 -36 433 -36;  
#P hidden connect 231 0 179 0;  
#P hidden connect 212 0 213 0;  
#P hidden fasten 213 0 208 0 802 26 716 26;  
#P hidden connect 211 0 213 0;  
#P hidden fasten 67 0 5 0 269 1124 300 1124;  
#P hidden fasten 67 0 60 0 269 1112 396 1112 396 961 544 961;  
#P hidden connect 210 0 208 0;  
#P hidden connect 209 0 210 0;

#P hidden fasten 159 0 161 0 281 115 186 115 186 80 160 80;  
#P hidden fasten 159 0 171 0 281 121 263 121 263 -36 433 -36;  
#P hidden fasten 125 0 123 0 548 733 510 733;  
#P hidden fasten 125 0 118 0 548 736 553 736;  
#P hidden connect 124 0 37 4;  
#P hidden connect 59 0 60 0;  
#P hidden connect 287 0 286 0;  
#P hidden fasten 288 0 284 0 1320 64 1343 64;  
#P hidden connect 205 0 18 0;  
#P hidden connect 207 0 259 0;  
#P hidden fasten 204 0 202 0 65 628 31 628;  
#P hidden connect 204 0 35 0;  
#P hidden connect 204 1 206 0;  
#P hidden fasten 114 0 112 3 1102 444 1068 444;  
#P hidden connect 202 0 259 0;  
#P hidden connect 291 0 1 0;  
#P hidden connect 58 0 57 0;  
#P hidden connect 195 0 160 0;  
#P hidden fasten 196 0 189 0 369 501 394 501;  
#P hidden connect 195 0 159 0;  
#P hidden fasten 193 0 192 1 415 560 429 560;  
#P hidden connect 192 0 194 1;  
#P hidden connect 191 0 190 1;  
#P hidden connect 190 0 185 0;  
#P hidden connect 189 0 192 0;  
#P hidden fasten 189 0 199 0 394 530 382 530 382 397 396 397;  
#P hidden fasten 189 0 232 0 394 528 476 528 476 502 486 502;  
#P hidden connect 188 0 189 1;  
#P hidden connect 187 0 8 0;  
#P hidden fasten 194 1 175 0 396 619 283 619 283 301 94 301;  
#P hidden connect 184 0 8 1;  
#P hidden connect 186 0 179 0;  
#P hidden connect 183 0 179 0;  
#P hidden connect 181 0 9 0;  
#P connect 111 0 110 0;  
#P hidden fasten 215 0 49 0 231 730 271 730;  
#P hidden connect 216 0 37 3;  
#P hidden fasten 214 0 213 0 724 -19 789 -19 789 2 802 2;  
#P hidden fasten 151 0 112 3 957 408 1068 408;  
#P hidden fasten 170 0 165 0 433 -22 575 -22;  
#P hidden fasten 105 0 75 0 447 205 469 205;  
#P hidden fasten 105 0 142 0 447 228 469 228;  
#P hidden fasten 169 0 170 1 473 -48 538 -48;  
#P hidden fasten 99 0 87 3 738 961 680 961;  
#P hidden fasten 99 0 90 3 738 946 759 946;  
#P hidden fasten 99 0 91 3 738 946 894 946 894 1086 846 1086;  
#P hidden fasten 68 0 64 0 170 1193 299 1193;  
#P hidden fasten 307 0 301 0 491 336 517 336 517 312 548 312;  
#P hidden connect 46 0 218 0;  
#P hidden fasten 65 0 64 0 267 1177 299 1177;  
#P hidden fasten 66 0 64 0 213 1193 299 1193;  
#P hidden connect 60 0 37 2;  
#P hidden connect 15 0 14 0;  
#P hidden connect 153 0 154 0;  
#P hidden connect 180 0 179 0;  
#P hidden fasten 42 0 40 0 247 389 239 389;

#P hidden connect 178 0 176 0;  
#P hidden connect 141 0 114 0;  
#P hidden fasten 41 0 40 0 230 389 239 389;  
#P hidden connect 34 0 6 0;  
#P hidden fasten 139 0 137 0 316 802 292 802;  
#P hidden connect 142 0 144 0;  
#P hidden fasten 146 0 145 0 244 884 285 884;  
#P hidden fasten 75 0 77 0 469 230 516 230;  
#P hidden fasten 299 0 298 0 -15 792 -14 792;  
#P hidden fasten 301 0 303 0 548 339 533 339;  
#P hidden fasten 302 0 303 0 532 339 533 339;  
#P hidden fasten 276 0 275 0 1319 152 1342 152;  
#P hidden connect 285 0 280 0;  
#P hidden connect 285 0 282 0;  
#P hidden fasten 285 0 277 0 1313 112 1342 112;  
#P hidden connect 133 0 136 1;  
#P hidden connect 131 1 221 0;  
#P hidden connect 131 3 221 0;  
#P hidden connect 131 4 221 0;  
#P hidden connect 131 0 221 0;  
#P hidden connect 134 0 133 0;  
#P hidden connect 131 2 221 0;  
#P hidden connect 131 5 129 0;  
#P hidden connect 130 0 131 0;  
#P hidden connect 122 0 135 0;  
#P hidden fasten 122 0 124 0 623 824 479 824;  
#P hidden connect 122 0 37 4;  
#P hidden connect 122 0 291 0;  
#P hidden connect 122 0 1 0;  
#P hidden connect 121 0 37 4;  
#P hidden connect 122 0 134 0;  
#P hidden connect 121 0 1 0;  
#P hidden fasten 120 0 124 0 623 885 479 885;  
#P hidden fasten 121 0 124 0 623 853 479 853;  
#P hidden connect 120 0 37 4;  
#P hidden fasten 119 0 124 0 623 796 479 796;  
#P hidden connect 119 0 37 4;  
#P hidden connect 119 0 291 0;  
#P hidden connect 119 0 1 0;  
#P hidden connect 115 0 116 0;  
#P hidden fasten 108 0 107 0 888 460 815 460;  
#P hidden connect 104 0 99 0;  
#P hidden fasten 100 4 86 0 420 1184 777 1184 777 1052 804 1052;  
#P hidden connect 94 0 97 0;  
#P hidden connect 95 0 98 0;  
#P hidden connect 93 0 96 0;  
#P hidden connect 91 0 92 0;  
#P hidden connect 90 0 89 0;  
#P hidden connect 86 0 91 0;  
#P hidden connect 87 0 88 0;  
#P hidden connect 113 0 112 0;  
#P hidden fasten 112 0 257 0 1026 475 1016 475 1016 94 955 94;  
#P hidden connect 85 0 90 0;  
#P hidden connect 84 1 85 0;  
#P hidden fasten 84 0 87 0 659 962 638 962;  
#P hidden fasten 81 0 82 0 622 467 681 467 681 463 695 463;

#P hidden fasten 79 0 64 0 158 1183 299 1183;  
#P hidden fasten 78 0 74 0 86 1111 111 1111;  
#P hidden fasten 73 0 74 1 140 1111 140 1111;  
#P hidden connect 71 0 66 0;  
#P hidden fasten 70 0 37 1 377 1037 377 1037;  
#P hidden connect 62 0 37 2;  
#P hidden connect 62 0 63 0;  
#P hidden connect 61 0 59 0;  
#P hidden connect 56 0 58 0;  
#P hidden fasten 57 0 51 0 637 321 681 321 681 308 694 308;  
#P hidden connect 54 0 2 0;  
#P hidden connect 52 0 51 0;  
#P hidden connect 53 0 54 0;  
#P hidden connect 48 0 47 0;  
#P hidden connect 47 0 46 0;  
#P hidden connect 44 0 222 0;  
#P hidden fasten 45 0 48 0 103 801 123 801;  
#P hidden fasten 43 0 10 0 43 541 96 541;  
#P hidden connect 36 0 5 0;  
#P hidden connect 31 0 30 0;  
#P hidden fasten 33 0 105 0 457 217 447 217;  
#P hidden connect 25 0 182 0;  
#P hidden connect 24 0 175 0;  
#P hidden connect 24 0 39 0;  
#P hidden fasten 24 0 41 0 228 247 218 247 218 274 230 274;  
#P hidden fasten 24 0 19 0 228 247 371 247;  
#P hidden connect 30 0 29 0;  
#P hidden fasten 30 2 24 0 58 165 228 165;  
#P hidden fasten 30 1 26 0 32 165 117 165;  
#P hidden fasten 30 3 25 0 84 165 337 165;  
#P hidden connect 17 0 190 0;  
#P hidden fasten 17 0 18 0 158 505 149 505 149 449 354 449;  
#P hidden connect 14 0 50 0;  
#P hidden connect 13 0 15 0;  
#P hidden connect 8 0 72 0;  
#P hidden connect 7 0 32 0;  
#P hidden connect 7 0 111 0;  
#P hidden fasten 6 0 11 1 109 469 130 469;  
#P hidden connect 6 1 69 0;  
#P hidden connect 6 1 17 0;  
#P hidden fasten 6 2 34 0 179 401 207 401 207 353 164 353;  
#P hidden fasten 6 0 40 1 109 400 268 400;  
#P hidden connect 145 1 132 0;  
#P hidden fasten 283 0 286 0 1095 330 1117 330;  
#P hidden fasten 293 0 295 0 583 -54 598 -54 598 -77 638 -77;  
#P hidden fasten 136 0 138 0 296 887 256 887 256 824 276 824;  
#P hidden connect 136 0 145 1;  
#P hidden fasten 74 1 68 0 140 1150 170 1150;  
#P hidden fasten 40 1 17 1 268 441 192 441;  
#P hidden connect 37 0 36 0;  
#P hidden fasten 40 1 106 0 268 445 207 445;  
#P hidden fasten 28 0 6 0 6 286 31 286 31 368 109 368;  
#P hidden fasten 27 0 6 0 117 346 109 346;  
#P hidden fasten 19 0 194 0 371 539 367 539;  
#P hidden fasten 18 0 194 0 354 539 367 539;  
#P hidden fasten 11 0 204 0 101 606 65 606;

```
#P hidden fasten 10 0 11 0 96 563 101 563;
#P hidden fasten 9 0 11 0 113 563 101 563;
#P hidden fasten 5 0 65 0 300 1149 267 1149;
#P hidden connect 5 0 64 0;
#P hidden connect 5 0 100 0;
#P hidden connect 1 0 84 0;
#P hidden fasten 0 0 298 0 1 792 -14 792;
#P pop;
```

### 9.2.3. Auditory Random Generator

```
max v2;
#N vpatcher 13 44 994 756;
#P hidden newex 43 369 41 196617 r trials;
#P hidden newex 150 928 41 196617 s trials;
#P hidden newex 310 826 45 196617 loadbang;
#P hidden message 310 849 58 196617 ftype TEXT;
#P hidden button 931 305 15 0;
#P hidden button 735 110 15 0;
#P number 920 263 34 18 0 0 36 3;
#P hidden newex 920 240 74 196617 r countoftrials;
#P hidden newex 801 777 74 196617 s countoftrials;
#P hidden button 871 673 15 0;
#P hidden newex 871 653 53 196617 r 10trials;
#P hidden newex 2 50 54 196617 r loopback;
#P hidden user GSwitch2 532 811 39 32 0 0;
#P hidden newex 532 876 54 196617 s loopback;
#P hidden newex 532 854 59 196617 delay 2000;
#P hidden newex 362 65 34 196617 s loop;
#P hidden newex 732 725 34 196617 r loop;
#P hidden newex 333 5 53 196617 r 10trials;
#P hidden user GSwitch2 333 28 39 32 0 0;
#P hidden newex 97 83 53 196617 delay 500;
#P hidden newex 2 82 26 196617 r go;
#P hidden newex 756 244 53 196617 s 10trials;
#P hidden newex 756 180 26 196617 s go;
#P hidden message 824 720 14 196617 0;
#P hidden newex 825 700 45 196617 loadbang;
#P hidden button 10 816 47 0;
#P message 43 411 85 196617 Trial10;
#P newex 43 390 60 196617 prepend set;
#P hidden button 763 791 15 0;
#P hidden message 763 994 42 196617 Trial10;
#P hidden message 749 976 42 196617 Trial09;
#P hidden message 735 958 42 196617 Trial08;
#P hidden message 721 940 42 196617 Trial07;
#P hidden message 707 922 42 196617 Trial06;
#P hidden message 693 904 42 196617 Trial05;
#P hidden message 679 886 42 196617 Trial04;
#P hidden message 665 868 42 196617 Trial03;
#P hidden message 651 850 42 196617 Trial02;
#P hidden newex 638 808 137 196617 gate 10;
#P hidden number 539 183 35 9 0 0 0 3;
#P hidden button 432 189 15 0;
#P hidden number 467 155 35 9 0 0 0 3;
#P button 756 132 41 0;
```

```
#P hidden message 439 228 14 196617 0;
#P hidden message 456 228 14 196617 1;
#P hidden user GSwitch2 453 252 39 32 1 0;
#P hidden newex 465 198 102 196617 if $i1 == 9 then bang;
#P hidden newex 465 174 66 196617 counter 9;
#P toggle 756 200 39 0;
#P user ubutton 1 109 90 51 0 0;
#P message 0 109 91 196644 clear;
#P user ubutton 97 109 118 48 0 0;
#P message 96 109 120 196644 create;
#P message 333 107 95 196644 write;
#P hidden newex 201 202 59 196617 delay 1000;
#P user ubutton 219 109 107 50 0 0;
#P message 219 109 109 196644 check;
#P hidden newex 202 222 35 196617 s open;
#P hidden newex 711 675 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 711 603 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 711 531 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 711 459 112 196617 if $i1==0 then 0 else 1;
#P hidden newex 711 390 112 196617 if $i1==0 then 0 else 1;
#P hidden message 186 875 31 196617 dump;
#P hidden newex 220 168 39 196617 s dump;
#P hidden newex 55 236 39 196617 s start;
#P hidden newex 98 177 53 196617 delay 500;
#P hidden newex 186 853 39 196617 r dump;
#P newex 156 639 45 196617 s toPack;
#P newex 209 594 45 196617 s toPack;
#P newex 264 552 45 196617 s toPack;
#P newex 312 507 45 196617 s toPack;
#P hidden newex 93 725 45 196617 s toPack;
#P hidden newex 128 853 45 196617 r toPack;
#P hidden message 456 731 33 196617 min 0;
#P hidden number 419 774 35 9 0 0 0 3;
#P hidden newex 514 731 45 196617 r crit05;
#P hidden newex 557 752 45 196617 r crit05;
#P hidden newex 456 710 39 196617 r clear;
#P hidden message 498 731 14 196617 0;
#P hidden button 498 712 15 0;
#P hidden newex 456 772 111 196617 if $i1 == $i2 then bang;
#P hidden newex 456 751 66 196617 counter;
#P hidden newex 456 661 66 196617 counter;
#P hidden newex 456 682 111 196617 if $i1 == $i2 then bang;
#P hidden button 498 622 15 0;
#P hidden message 498 641 14 196617 0;
#P hidden newex 456 620 39 196617 r clear;
#P hidden newex 557 662 45 196617 r crit04;
#P hidden newex 514 641 45 196617 r crit04;
#P hidden number 419 684 35 9 0 0 0 3;
#P hidden message 456 641 33 196617 min 0;
#P hidden message 456 551 33 196617 min 0;
#P hidden number 419 594 35 9 0 0 0 3;
#P hidden newex 514 551 45 196617 r crit03;
#P hidden newex 557 572 45 196617 r crit03;
#P hidden newex 456 530 39 196617 r clear;
#P hidden message 498 551 14 196617 0;
#P hidden button 498 532 15 0;
```

#P hidden newex 456 592 111 196617 if \$i1 == \$i2 then bang;  
#P hidden newex 456 571 66 196617 counter;  
#P hidden newex 456 486 66 196617 counter;  
#P hidden newex 456 507 111 196617 if \$i1 == \$i2 then bang;  
#P hidden button 498 447 15 0;  
#P hidden message 498 466 14 196617 0;  
#P hidden newex 456 445 39 196617 r clear;  
#P hidden newex 557 487 45 196617 r crit02;  
#P hidden newex 514 466 45 196617 r crit02;  
#P hidden number 419 509 35 9 0 0 0 3;  
#P hidden message 456 466 33 196617 min 0;  
#P user GSwitch2 127 556 39 32 1 0;  
#P message 136 533 14 196617 1;  
#P button 156 594 15 0;  
#P message 114 533 14 196617 0;  
#P message 156 620 55 196617 crit05.mid;  
#P message 209 575 55 196617 crit04.mid;  
#P message 167 492 14 196617 0;  
#P button 209 553 15 0;  
#P message 189 492 14 196617 1;  
#P user GSwitch2 180 515 39 32 0 0;  
#P user GSwitch2 235 474 39 32 1 0;  
#P message 244 451 14 196617 1;  
#P button 264 512 15 0;  
#P message 222 451 14 196617 0;  
#P message 264 533 55 196617 crit03.mid;  
#P newex 359 461 45 196617 s toPack;  
#P message 312 487 55 196617 crit02.mid;  
#P message 270 403 14 196617 0;  
#P button 312 464 15 0;  
#P message 292 403 14 196617 1;  
#P user GSwitch2 283 426 39 32 1 0;  
#P hidden newex 333 83 53 196617 delay 500;  
#P hidden button 673 635 15 0;  
#P hidden newex 629 634 39 196617 r clear;  
#P hidden newex 647 680 45 196617 s crit05;  
#P comment 689 628 173 196626 number of crit05;  
#P number 647 654 40 14 0 0 36 3;  
#P user hslider 689 654 21 139 46 1 0 0;  
#P user hslider 691 580 22 138 46 1 0 0;  
#P number 646 580 40 14 0 0 36 3;  
#P comment 691 554 173 196626 number of crit04;  
#P hidden newex 646 606 45 196617 s crit04;  
#P hidden newex 629 560 39 196617 r clear;  
#P hidden button 673 561 15 0;  
#P hidden button 673 487 15 0;  
#P hidden newex 630 486 39 196617 r clear;  
#P hidden newex 648 531 45 196617 s crit03;  
#P comment 691 479 173 196626 number of crit03;  
#P number 648 505 40 14 0 0 36 3;  
#P user hslider 691 505 22 140 46 1 0 0;  
#P user hslider 691 434 22 138 46 1 0 0;  
#P number 648 434 40 14 0 0 36 3;  
#P comment 691 411 173 196626 number of crit02;  
#P hidden newex 648 460 45 196617 s crit02;  
#P hidden newex 634 414 39 196617 r clear;

```

#P hidden button 675 415 15 0;
#P hidden newex 242 865 41 196617 r write;
#P hidden newex 333 171 41 196617 s write;
#P comment 701 166 27 196617 slow;
#P number 578 181 35 9 0 0 0 3;
#P user hslider 578 146 18 135 20 50 50 0;
#P hidden message 279 180 14 196617 0;
#P hidden message 98 199 14 196617 1;
#P hidden button 675 347 15 0;
#P hidden button 556 245 15 0;
#P hidden newex 633 346 39 196617 r clear;
#P hidden newex 574 202 39 196617 r clear;
#P hidden message 456 377 33 196617 min 0;
#P hidden newex 4 863 39 196617 r clear;
#P hidden newex 49 620 27 196617 + 1;
#P hidden button 19 608 15 0;
#P hidden button 71 696 15 0;
#P hidden newex 365 234 45 196617 r stimuli;
#P hidden newex 370 284 45 196617 r stimuli;
#P hidden newex 108 749 45 196617 r stimuli;
#P hidden newex 588 323 45 196617 s stimuli;
#P hidden button 89 750 15 0;
#P hidden number 91 853 35 9 0 0 0 3;
#P hidden newex 42 764 43 196617 r metro;
#P hidden newex 180 253 43 196617 s metro;
#P hidden number 419 420 35 9 0 0 0 3;
#P hidden newex 514 377 54 196617 r criticals;
#P hidden newex 557 398 54 196617 r criticals;
#P hidden newex 649 392 54 196617 s criticals;
#P user GSwitch2 331 385 39 32 1 0;
#P hidden newex 346 198 36 196617 r clear;
#P hidden newex 34 742 39 196617 r clear;
#P hidden newex 196 287 39 196617 r clear;
#P hidden newex 456 356 39 196617 r clear;
#P hidden newex 49 578 39 196617 r clear;
#P hidden newex 1 199 39 196617 s clear;
#P hidden message 521 249 14 196617 1;
#P hidden newex 521 226 45 196617 loadbang;
#P hidden number 108 770 35 9 0 0 0 3;
#N vpreset 1;
#X append 1 2 13 642 10 number int 45 \; 23 205 270 toggle int 0 \; 28 366 691 hslider int 3 \; 29 366 649
number int 3 \; 41 286 277 number int 60 \; 44 271 575 hslider int;
#X append 1 2 29 \; 45 299 575 number int 30 \; 48 770 108 number int 30 \; 57 385 331 GSwitch2 int 1 \;
61 420 419 number int 0 \; 64 853 91 number int 21 \; 81 146 578;
#X append 1 2 hslider int 0 \; 82 181 578 number int 50 \; 90 434 648 number int 3 \; 91 434 691 hslider int
3 \; 92 505 691 hslider int 3 \; 93 505 648 number int 3 \; 102 580 646;
#X append 1 2 number int 3 \; 103 580 691 hslider int 3 \; 104 654 689 hslider int 3 \; 105 654 647 number
int 3 \; 111 426 283 GSwitch2 int 1 \; 121 474 235 GSwitch2 int 1 \; 122 515 180;
#X append 1 2 GSwitch2 int 0 \; 131 556 127 GSwitch2 int 1 \; 133 509 419 number int 4 \; 148 594 419
number int 4 \; 151 684 419 number int 3 \; 166 774 419 number int 4 \; 193 200 756;
#X append 1 2 toggle int 0 \; 196 252 453 GSwitch2 int 1 \; 200 155 467 number int 0 \; 202 183 539
number int 0 \; 223 28 333 GSwitch2 int 0 \; 229 811 532 GSwitch2 int 0 \; 235 263 920;
#X append 1 2 number int 0 \;;
#P preset 521 270 47 27;
#P comment 691 343 203 196626 number of old critical;
#P number 575 299 41 14 0 0 36 3;

```



#P user hslider 575 271 24 139 90 1 1 0;  
#P hidden button 68 814 15 0;  
#P hidden newex 91 833 27 196617 + 1;  
#P hidden number 277 286 35 9 0 0 0 3;  
#P hidden newex 91 791 27 196617 urn;  
#P hidden message 41 876 50 196617 sort 1 -1;  
#N collX;  
#P hidden newobj 96 902 53 196617 collX;  
#P hidden newex 96 875 42 196617 pack i s;  
#P hidden button 196 308 15 0;  
#P message 339 362 14 196617 1;  
#P hidden message 498 377 14 196617 0;  
#P hidden button 498 358 15 0;  
#P button 359 421 15 0;  
#P message 317 362 14 196617 0;  
#P hidden newex 456 418 111 196617 if \$i1 == \$i2 then bang;  
#P number 649 366 40 14 0 0 36 3;  
#P user hslider 691 366 23 140 46 1 0 0;  
#P hidden newex 456 397 66 196617 counter;  
#P message 359 442 60 196617 critical.mid;  
#P hidden button 346 219 15 0;  
#P hidden message 346 237 15 196617 0;  
#P hidden toggle 270 205 22 0;  
#P hidden button 269 325 15 0;  
#P hidden newex 269 305 111 196617 if \$i1 == \$i2 then bang;  
#P hidden newex 269 264 66 196617 counter;  
#P hidden newex 270 231 45 196617 metro;  
#P hidden newex 49 664 54 196617 unpack s s;  
#P hidden newex 93 685 60 196617 prepend set;  
#P hidden message 93 706 85 196617 14.mid;  
#N coll mastersoundlist;  
#P hidden newobj 49 642 99 196617 coll mastersoundlist;  
#P hidden message 1 178 48 196617 clear;  
#P hidden number 10 642 35 9 0 0 0 3;  
#P hidden newex 49 599 38 196617 urn 56;  
#P comment 575 222 155 196626 number of stimuli per trial;  
#P comment 578 166 23 196617 fast;  
#P comment 578 127 137 196622 creation speed;  
#P comment 795 201 153 196622 Make 10 Trials with the same settings;  
#P comment 801 139 61 196632 GO!;  
#P hidden newex 732 749 66 196617 counter 10;  
#P hidden newex 732 771 27 196617 + 1;  
#P hidden message 637 832 42 196617 Trial01;  
#P hidden message 640 1020 85 196617 write Trial01;  
#P hidden newex 641 984 88 196617 prepend set write;  
#P hidden button 621 1000 15 0;  
#P comment 745 267 171 196622 I am now creating Trial;  
#P hidden connect 241 0 214 0;  
#P hidden connect 239 0 238 0;  
#P hidden connect 212 0 2 0;  
#P hidden connect 156 0 155 0;  
#P hidden connect 143 0 144 0;  
#P hidden connect 234 0 235 0;  
#P hidden connect 138 0 137 0;  
#P hidden connect 227 0 228 0;  
#P hidden connect 229 0 227 0;

#P hidden fasten 225 0 229 1 737 745 625 745 625 801 566 801;  
#P hidden connect 225 0 6 0;  
#P hidden connect 224 0 223 0;  
#P hidden connect 222 0 190 0;  
#P hidden connect 221 0 192 0;  
#P hidden fasten 221 0 222 0 7 103 42 103 42 81 102 81;  
#P hidden connect 223 0 110 0;  
#P hidden connect 223 1 226 0;  
#P hidden connect 217 0 218 0;  
#P hidden connect 214 0 215 0;  
#P hidden connect 203 0 4 0;  
#P hidden connect 203 1 204 0;  
#P hidden connect 203 2 205 0;  
#P hidden connect 203 3 206 0;  
#P hidden connect 203 4 207 0;  
#P hidden connect 203 5 208 0;  
#P hidden connect 203 6 209 0;  
#P hidden connect 203 7 210 0;  
#P hidden connect 203 8 211 0;  
#P hidden connect 203 9 212 0;  
#P hidden connect 211 0 2 0;  
#P hidden fasten 195 0 197 0 470 221 461 221;  
#P connect 129 0 127 0;  
#P hidden fasten 129 0 159 0 161 616 375 616 375 748 461 748;  
#P hidden connect 210 0 2 0;  
#P hidden connect 194 0 201 0;  
#P hidden connect 194 0 195 0;  
#P hidden connect 194 0 202 0;  
#P connect 124 0 126 0;  
#P hidden fasten 124 0 158 0 214 571 404 571 404 658 461 658;  
#P hidden connect 209 0 2 0;  
#P hidden connect 208 0 2 0;  
#P hidden connect 207 0 2 0;  
#P hidden connect 206 0 2 0;  
#P hidden connect 205 0 2 0;  
#P hidden connect 204 0 2 0;  
#P hidden fasten 198 0 196 0 444 247 458 247;  
#P hidden fasten 197 0 196 0 461 247 458 247;  
#P hidden connect 187 0 184 0;  
#P connect 119 0 117 0;  
#P hidden fasten 119 0 141 0 269 530 419 530 419 569 461 569;  
#P hidden connect 200 0 194 0;  
#P connect 113 0 115 0;  
#P hidden fasten 113 0 140 0 317 482 461 482;  
#P hidden connect 188 0 84 0;  
#P hidden connect 183 0 131 0;  
#P hidden connect 190 0 176 0;  
#P hidden connect 190 0 175 0;  
#P hidden connect 192 0 14 0;  
#P hidden connect 178 0 38 0;  
#P hidden fasten 167 0 159 0 461 746 461 746;  
#P hidden connect 182 0 122 0;  
#P hidden connect 186 0 187 0;  
#P hidden connect 186 0 177 0;  
#P hidden connect 162 0 159 3;  
#P hidden connect 231 0 232 0;

#P hidden connect 180 0 111 0;  
#P hidden connect 230 0 192 0;  
#P hidden fasten 230 0 222 0 7 73 102 73;  
#P hidden connect 179 0 57 0;  
#P hidden connect 155 0 158 3;  
#P hidden connect 175 0 79 0;  
#P hidden connect 174 0 178 0;  
#P hidden connect 181 0 121 0;  
#P hidden connect 168 0 37 1;  
#P hidden connect 165 0 159 4;  
#P hidden fasten 150 0 158 0 461 656 461 656;  
#P hidden connect 164 0 160 1;  
#P hidden connect 163 0 161 0;  
#P hidden fasten 149 0 141 0 461 566 461 566;  
#P hidden fasten 109 0 104 0 678 652 694 652;  
#P hidden fasten 160 0 128 0 461 794 173 794 173 524 119 524;  
#P hidden connect 159 0 166 0;  
#P hidden connect 159 0 160 0;  
#P hidden connect 153 0 157 1;  
#P hidden connect 152 0 158 4;  
#P hidden fasten 98 0 103 0 678 578 696 578;  
#P hidden connect 144 0 141 3;  
#P hidden connect 147 0 141 4;  
#P hidden connect 146 0 142 1;  
#P hidden connect 145 0 143 0;  
#P hidden connect 137 0 140 3;  
#P hidden connect 158 0 151 0;  
#P hidden connect 158 0 157 0;  
#P hidden fasten 157 0 125 0 461 703 228 703 228 486 172 486;  
#P hidden connect 154 0 156 0;  
#P fasten 130 0 131 0 141 552 132 552;  
#P hidden fasten 97 0 92 0 678 504 696 504;  
#P hidden fasten 142 0 118 0 461 611 276 611 276 444 227 444;  
#P hidden connect 136 0 138 0;  
#P hidden connect 135 0 139 1;  
#P hidden connect 134 0 140 4;  
#P hidden fasten 86 0 91 0 680 432 696 432;  
#P fasten 128 0 131 0 119 553 132 553;  
#P hidden connect 141 0 148 0;  
#P hidden connect 141 0 142 0;  
#P hidden connect 140 0 133 0;  
#P hidden connect 140 0 139 0;  
#P hidden fasten 139 0 114 0 461 527 326 527 326 398 275 398;  
#P connect 127 0 173 0;  
#P hidden fasten 131 0 12 0 132 596 54 596;  
#P hidden fasten 132 0 140 0 461 481 461 481;  
#P connect 131 1 129 0;  
#P connect 126 0 172 0;  
#P hidden fasten 78 0 28 0 680 364 696 364;  
#P fasten 125 0 122 0 172 512 185 512;  
#P fasten 123 0 122 0 194 511 185 511;  
#P fasten 120 0 121 0 249 470 240 470;  
#P fasten 118 0 121 0 227 471 240 471;  
#P hidden fasten 77 0 44 0 561 259 580 259;  
#P connect 117 0 171 0;  
#P fasten 122 0 131 1 185 550 161 550;

#P connect 122 1 124 0;  
#P fasten 121 0 122 1 240 510 214 510;  
#P connect 121 1 119 0;  
#P connect 115 0 170 0;  
#P hidden connect 71 0 72 0;  
#P fasten 114 0 111 0 275 423 288 423;  
#P fasten 112 0 111 0 297 422 288 422;  
#P hidden fasten 80 0 23 0 284 198 275 198;  
#P hidden fasten 79 0 23 0 103 234 192 234 192 189 275 189;  
#P hidden connect 70 0 16 0;  
#P hidden fasten 74 0 27 0 461 392 461 392;  
#P fasten 111 0 121 1 288 466 269 466;  
#P connect 111 1 113 0;  
#P hidden fasten 65 0 48 0 94 768 113 768;  
#P hidden fasten 99 0 98 0 634 554 678 554;  
#P hidden connect 105 0 107 0;  
#P hidden connect 105 0 183 0;  
#P hidden connect 104 0 105 0;  
#P hidden connect 103 0 102 0;  
#P hidden connect 102 0 100 0;  
#P hidden connect 102 0 182 0;  
#P hidden fasten 96 0 97 0 635 482 678 482;  
#P hidden fasten 43 0 42 0 73 831 96 831;  
#P hidden connect 36 0 130 0;  
#P hidden connect 36 0 123 0;  
#P hidden connect 36 0 120 0;  
#P hidden connect 36 0 112 0;  
#P hidden fasten 36 0 35 0 201 347 259 347 259 352 344 352;  
#P hidden connect 110 0 188 0;  
#P hidden connect 93 0 95 0;  
#P hidden connect 93 0 181 0;  
#P hidden connect 92 0 93 0;  
#P hidden connect 91 0 90 0;  
#P hidden connect 90 0 180 0;  
#P hidden connect 90 0 88 0;  
#P hidden fasten 108 0 109 0 634 628 678 628;  
#P hidden connect 33 0 34 0;  
#P hidden fasten 76 0 78 0 638 340 680 340;  
#P hidden fasten 75 0 77 0 579 222 561 222;  
#P hidden connect 73 0 38 0;  
#P hidden fasten 81 0 19 1 583 168 310 168;  
#P hidden connect 81 0 82 0;  
#P hidden connect 50 0 47 0;  
#P hidden connect 39 0 38 0;  
#P connect 32 0 26 0;  
#P hidden fasten 32 0 27 0 364 439 382 439 382 394 461 394;  
#P hidden connect 216 0 38 0;  
#P hidden fasten 72 0 13 0 54 638 15 638;  
#P hidden connect 72 0 15 0;  
#P hidden fasten 69 0 20 4 370 259 330 259;  
#P fasten 35 0 57 0 344 381 336 381;  
#P hidden connect 68 0 21 1;  
#P hidden connect 67 0 48 0;  
#P hidden connect 232 0 218 0;  
#P hidden connect 25 0 24 0;  
#P hidden fasten 63 0 40 0 47 785 96 785;

#P hidden connect 60 0 27 4;  
#P hidden fasten 22 0 80 0 274 344 264 344 264 174 284 174;  
#P hidden fasten 22 0 223 1 274 344 442 344 442 25 367 25;  
#P hidden connect 64 0 37 0;  
#P hidden connect 59 0 30 1;  
#P hidden connect 56 0 25 0;  
#P hidden fasten 55 0 40 0 39 788 96 788;  
#P hidden fasten 55 0 65 0 39 760 84 760 84 747 94 747;  
#P hidden connect 54 0 36 0;  
#P fasten 57 0 111 1 336 421 317 421;  
#P connect 57 1 32 0;  
#P hidden connect 53 0 33 0;  
#P hidden connect 52 0 12 0;  
#P hidden connect 49 0 50 0;  
#P hidden connect 34 0 27 3;  
#P hidden fasten 87 0 86 0 639 410 680 410;  
#P hidden connect 48 0 40 1;  
#P hidden connect 85 0 38 0;  
#P connect 44 0 45 0;  
#P hidden connect 44 0 66 0;  
#P hidden connect 1 0 3 0;  
#P hidden connect 37 0 38 0;  
#P hidden fasten 30 0 31 0 461 439 399 439 399 358 322 358;  
#P fasten 31 0 57 0 322 382 336 382;  
#P hidden connect 27 0 61 0;  
#P hidden connect 27 0 30 0;  
#P hidden connect 21 0 22 0;  
#P connect 26 0 116 0;  
#P hidden connect 24 0 20 3;  
#P hidden connect 16 0 169 0;  
#P hidden connect 20 0 21 0;  
#P hidden connect 20 0 41 0;  
#P hidden connect 29 0 58 0;  
#P hidden connect 29 0 179 0;  
#P hidden connect 28 0 29 0;  
#P hidden fasten 19 0 62 0 275 252 185 252;  
#P hidden connect 19 0 20 0;  
#P hidden fasten 19 0 57 1 275 258 256 258 256 345 365 345;  
#P hidden connect 14 0 51 0;  
#P hidden connect 4 0 2 0;  
#P hidden connect 17 0 70 0;  
#P hidden connect 18 1 17 0;  
#P hidden connect 17 0 16 0;  
#P hidden connect 15 0 18 0;  
#P hidden connect 12 0 71 0;  
#P hidden connect 12 0 72 0;  
#P hidden fasten 3 0 38 0 645 1040 520 1040 520 895 101 895;  
#P hidden connect 42 0 64 0;  
#P hidden fasten 40 0 43 0 96 812 73 812;  
#P hidden fasten 40 0 42 0 96 819 96 819;  
#P hidden connect 38 3 240 0;  
#P hidden fasten 6 3 229 0 791 797 537 797;  
#P hidden connect 6 0 5 0;  
#P hidden fasten 6 0 233 0 737 768 806 768;  
#P hidden fasten 5 0 203 0 737 792 643 792;  
#P hidden fasten 5 0 213 0 737 791;

```

#P hidden connect 2 0 1 0;
#P hidden connect 2 0 3 0;
#P hidden connect 23 0 19 0;
#P hidden connect 193 0 220 0;
#P hidden connect 218 0 6 3;
#P hidden fasten 238 0 38 0 315 895 101 895;
#P hidden connect 161 0 162 0;
#P hidden connect 199 0 219 0;
#P hidden connect 213 0 203 1;
#P hidden connect 201 0 195 0;
#P fasten 236 0 237 0 740 304;
#P pop;

```

#### 9.2.4. Auditory Player

```

max v2;
#N vpatcher 8 46 1003 747;
#P hidden newex 198 -65 50 1441802 r clear;
#P hidden newex 249 -65 35 196617 r stop;
#P hidden button 347 -66 15 0;
#P hidden message 235 -29 14 1441802 0;
#P hidden message 249 -29 14 1441802 1;
#P hidden user GSwitch2 253 -6 39 32 1 0;
#P button 13 418 42 0;
#P flonum 812 566 121 36 0 0 36 22;
#P comment 812 608 134 197066772 % correct on non-critical;
#P comment 666 609 106 197066772 % correct on critical;
#P flonum 665 566 121 36 0 0 36 22;
#N vpatcher 348 232 874 649;
#P newex 238 343 51 196617 * 100.;
#P button 217 306 15 0;
#P newex 239 321 32 196617 / 0.;
#P newex 239 290 27 196617 -;
#P button 214 274 15 0;
#P newex 206 248 27 196617 +;
#N comlet % correct total;
#P outlet 238 379 15 0;
#P flonum 351 289 35 9 0 0 0 3;
#P button 282 255 15 0;
#P newex 309 275 32 196617 / 0.;
#P number 338 251 35 9 0 0 0 3;
#P comment 340 223 69 196617 # of correct non-crit;
#P button 322 199 15 0;
#P newex 311 230 27 196617 -;
#P comment 328 167 52 196617 # of non-crit;
#P button 269 163 15 0;
#P newex 298 178 27 196617 -;
#P flonum 116 273 35 9 0 0 0 3;
#P button 121 203 15 0;
#P newex 302 307 51 196617 * 100.;
#P number 167 197 35 9 0 0 0 3;
#P button 148 151 15 0;
#P newex 139 176 27 196617 +;
#P newex 117 241 32 196617 / 0.;
#P newex 70 305 51 196617 * 100.;

```

#P newex 303 73 68 1441802 r position;  
#P number 303 102 62 36 0 0 36 22;  
#P newex 60 72 68 1441802 r hitcount;  
#P newex 378 69 62 1441802 r FAccount;  
#P newex 212 72 73 1441802 r Misscount;  
#P number 60 97 64 36 0 0 36 22;  
#P number 378 94 62 36 0 0 36 22;  
#P number 212 97 66 36 0 0 36 22;  
#P comment 60 40 47 197066772 Hits;  
#P comment 372 21 79 197066772 False Alarms;  
#P comment 216 42 73 197066772 Misses;  
#N comlet % correct on non-criticals;  
#P outlet 302 379 15 0;  
#N comlet % correct on criticals;  
#P outlet 70 379 15 0;  
#P comment 168 181 52 196617 # of crit;  
#P fasten 17 0 16 0 144 174;  
#P fasten 33 0 34 0 211 270 219 270;  
#P connect 35 0 36 0;  
#P connect 29 0 19 0;  
#P fasten 33 0 35 1 211 270 261 270;  
#P fasten 25 0 29 0 316 258 314 258;  
#P connect 25 0 28 0;  
#P fasten 22 0 25 0 303 204 316 204;  
#P fasten 20 0 15 0 126 239 122 239;  
#P fasten 22 0 29 1 303 261 336 261;  
#P connect 19 0 2 0;  
#P fasten 22 0 30 0 303 240 287 240;  
#P fasten 16 0 20 0 144 196 126 196;  
#P fasten 16 0 15 1 144 225 144 225;  
#P connect 16 0 18 0;  
#P fasten 16 0 23 0 144 214 260 214 260 156 274 156;  
#P fasten 16 0 22 1 144 216 291 216 291 165 320 165;  
#P connect 15 0 14 0;  
#P connect 15 0 21 0;  
#P connect 13 0 12 0;  
#P connect 11 0 8 0;  
#P connect 9 0 6 0;  
#P connect 10 0 7 0;  
#P connect 36 0 38 0;  
#P connect 38 0 32 0;  
#P fasten 12 0 37 0 308 149 239 149 239 282 231 282 231 296;  
#P connect 14 0 1 0;  
#P fasten 12 0 35 0 308 150 244 150;  
#P fasten 12 0 36 1 308 151 248 151 248 276 266 276;  
#P fasten 12 0 22 0 308 158 303 158;  
#P fasten 8 0 16 0 65 169 144 169;  
#P fasten 7 0 37 0 383 149 242 149 235 295;  
#P fasten 7 0 33 1 383 144 228 144;  
#P fasten 7 0 26 0 383 194 327 194;  
#P fasten 8 0 15 0 65 230 122 230;  
#P fasten 7 0 25 1 383 218 333 218;  
#P fasten 6 0 17 0 217 146 153 146;  
#P fasten 6 0 16 1 217 156 166 156 166 168 161 168;  
#P fasten 6 0 33 0 217 145 217 145 217 231 211 231;  
#P fasten 34 0 35 0 219 292 234 292 234 279 244 279;

```
#P connect 37 0 36 0;
#P fasten 23 0 22 0 274 184 289 184 289 173 303 173;
#P fasten 26 0 33 0 327 222 211 222;
#P connect 29 0 31 0;
#P fasten 26 0 25 0 327 217 316 217;
#P fasten 30 0 29 0 287 272 314 272;
#P pop;
#P hidden newobj 529 601 79 196617 patcher percent;
#P flonum 664 656 121 36 0 0 36 22;
#P comment 800 661 178 197066772 % correct total;
#P hidden newex 680 249 50 1441802 r clear;
#P hidden message 680 274 31 196617 set 0;
#P hidden message 656 460 22 196617 set;
#P hidden newex 656 435 50 1441802 r clear;
#P comment 634 512 136 197066772 writing to file;;
#P hidden newex 634 489 73 1441802 prepend set;
#P message 634 539 314 196622 5. 7 0. ff.mid ";
#P comment 604 380 115 197066772 in Memory;;
#P hidden newex 720 41 38 196617 r input;
#N vpatcher 50 40 450 340;
#P outlet 106 157 15 0;
#P hidden newex 135 85 51 1441802 r event;
#P hidden newex 60 60 45 1441802 r play;
#P hidden newex 106 133 69 1441802 / 1000.;
#P hidden newex 106 109 39 1441802 timer;
#P hidden newex 60 83 63 1441802 delay 100;
#P connect 2 0 5 0;
#P connect 1 0 2 0;
#P hidden fasten 0 0 1 0 65 105 111 105;
#P hidden connect 4 0 1 1;
#P hidden connect 3 0 0 0;
#P pop;
#P hidden newobj 148 655 100 196617 patcher systemTime;
#P hidden newex 312 491 38 196617 r input;
#P hidden newex 439 602 38 196617 r input;
#P hidden newex 61 625 38 196617 r input;
#P hidden newex -33 593 38 196617 s input;
#N vpatcher 301 219 730 600;
#N comlet gets filtered input (key or midi);
#P outlet 216 244 15 0;
#P user GSwitch2 216 190 39 32 0 0;
#P message 208 167 14 1441802 1;
#P message 224 167 14 1441802 0;
#P newex 125 34 50 1441802 r start;
#P button 125 58 15 0;
#P newex 280 103 92 196617 unpack 0 0 0 0 0 0;
#P newex 262 79 43 1441802 midiin;
#P newex 247 58 68 1441802 select 104;
#P newex 247 35 27 1441802 key;
#P newex 262 127 44 1441802 select;
#P connect 9 0 10 0;
#P fasten 9 0 8 0 221 227 201 227 201 165 213 165;
#P fasten 7 0 9 0 229 186 221 186;
#P connect 3 0 0 0;
#P fasten 5 0 7 0 130 89 150 89 150 154 229 154;
#P fasten 3 0 4 0 267 102 285 102;
```



```

#P connect 1 0 2 0;
#P fasten 2 0 9 1 252 163 250 163;
#P fasten 0 0 9 1 267 167 250 167;
#P connect 6 0 5 0;
#P fasten 8 0 9 0 213 186 221 186;
#P connect 4 1 0 1;
#P pop;
#P hidden newobj -33 568 65 196617 patcher input;
#P hidden newex 148 677 52 196617 s systime;
#N vpatcher 50 40 450 340;
#P comment 177 168 100 196617 this patcher controls the selection of False Alarms;
#P newex 70 187 44 1441802 r StFA;
#P user GSwitch2 90 215 39 32 0 0;
#P newex 48 73 45 1441802 r play;
#P message 99 123 14 1441802 1;
#P message 115 123 14 1441802 0;
#P user GSwitch2 119 145 39 32 0 0;
#P button 121 67 15 0;
#P message 148 100 111 1441802 FalseAlarm;
#P newex 148 120 110 1441802 select FalseAlarm;
#P newex 119 255 32 1441802 s FA;
#P inlet 127 36 15 0;
#P connect 7 0 5 0;
#P connect 3 0 2 0;
#P connect 9 1 1 0;
#P fasten 4 0 3 0 126 87 153 87;
#P connect 6 0 5 0;
#P fasten 0 0 4 0 132 56 126 56;
#P fasten 0 0 3 0 132 56 153 56;
#P fasten 8 0 6 0 53 99 120 99;
#P connect 2 0 5 1;
#P fasten 10 0 9 0 75 210 95 210;
#P fasten 5 0 7 0 124 181 29 181 29 109 104 109;
#P connect 5 0 9 1;
#P pop;
#P hidden newobj 436 739 95 196617 patcher sFAcounter;
#N vpatcher 50 165 523 558;
#P newex 297 119 50 1441802 r clear;
#P inlet 84 52 15 0;
#N comlet reads Hit \, FA;
#P inlet 171 50 15 0;
#P button 147 97 15 0;
#P newex 250 119 44 1441802 r read;
#P message 250 146 14 1441802 0;
#P newex 316 349 74 1441802 s Misscount;
#P newex 316 320 66 1441802 counter;
#P newex 229 220 66 1441802 counter;
#P newex 229 249 62 1441802 s FAcount;
#P newex 150 222 68 1441802 s hitcount;
#P newex 150 194 66 1441802 counter;
#P newex 316 292 73 1441802 select Miss;
#P newex 229 193 110 1441802 select FalseAlarm;
#P newex 171 168 68 1441802 select Hit;
#P message 171 136 70 1441802 Miss;
#P outlet 269 349 15 0;
#P fasten 11 0 5 3 255 189 197 189;

```

```
#P fasten 11 0 8 3 255 174 276 174;
#P fasten 11 0 9 3 255 174 411 174 411 314 363 314;
#P connect 1 0 2 0;
#P fasten 15 0 4 0 89 95 359 95 359 270 321 270;
#P fasten 14 0 13 0 176 86 152 86;
#P connect 14 0 1 0;
#P fasten 13 0 1 0 152 123 176 123;
#P connect 9 0 0 0;
#P connect 9 0 10 0;
#P connect 8 0 7 0;
#P connect 5 0 6 0;
#P connect 4 0 9 0;
#P connect 3 0 8 0;
#P fasten 2 0 5 0 176 190 155 190;
#P connect 2 1 3 0;
#P fasten 16 0 11 0 302 141 255 141;
#P connect 12 0 11 0;
#P pop;
#P hidden newobj 467 772 89 196617 patcher scounters;
#N vpatcher 50 40 771 554;
#P button 221 134 15 0;
#P newex 260 167 28 196617 - 50;
#P newex 260 146 35 196617 r freq;
#P newex 229 193 38 1441802 delay;
#P user GSwitch2 175 171 39 32 1 0;
#P newex 308 162 55 1441802 delay 50;
#N comlet output of textfile per line;
#P outlet 344 429 15 0;
#P button 308 143 15 0;
#P newex 94 214 43 1441802 r stop;
#P message 94 239 14 1441802 0;
#P outlet 461 431 15 0;
#P inlet 648 36 15 0;
#P outlet 247 430 15 0;
#P newex 80 279 39 196617 r clear;
#P newex 106 308 41 196617 r check;
#P message 185 150 13 1441802 1;
#P message 170 150 13 1441802 0;
#P newex 135 119 62 1441802 delay 100;
#P newex 135 96 45 1441802 r play;
#P newex 204 102 50 1441802 r start;
#P newex 98 69 63 196617 r EndOfTrial;
#P newex 336 140 52 196617 r systime;
#P newex 177 221 68 196617 r EndOfTrial;
#P newex 570 140 50 1441802 r pstim;
#P newex 353 311 115 1441802 unpack 0. 0 0. s s;
#P newex 195 272 50 1441802 r write;
#P newex 123 237 50 1441802 r asave;
#P user GSwitch2 148 265 39 32 0 0;
#P newex 177 242 68 1441802 delay 5000;
#P newex 250 285 44 1441802 r read;
#P newex 414 140 68 1441802 r position;
#P message 207 309 38 1441802 write;
#P button 291 238 15 0;
#P message 250 307 38 1441802 clear;
#P message 304 308 18 1441802 cr;
```

#P newex 344 342 32 1441802 Text;  
#P flonum 510 174 35 10 0 0 0 22;  
#P newex 494 153 50 1441802 r rtime;  
#P newex 581 67 50 1441802 r start;  
#P message 581 116 38 1441802 set 0;  
#P button 581 90 15 0;  
#P newex 336 211 322 1441802 pack 0. 0 0. s s;  
#P newex 336 240 74 1441802 prepend set;  
#P message 337 282 241 1441802 5. 7 0. ff.mid " ;  
#P fasten 34 0 16 0 99 258 153 258;  
#P connect 27 0 39 0;  
#P connect 28 0 39 0;  
#P fasten 12 0 8 0 212 345 349 345;  
#P fasten 10 0 8 0 255 345 349 345;  
#P fasten 9 0 8 0 309 329 349 329;  
#P connect 4 0 36 0;  
#P connect 4 0 2 2;  
#P fasten 0 0 9 0 342 301 309 301;  
#P connect 0 0 8 0;  
#P connect 0 0 19 0;  
#P connect 0 0 33 0;  
#P connect 39 1 40 0;  
#P fasten 16 1 12 0 182 302 212 302;  
#P connect 43 0 39 1;  
#P connect 36 0 38 0;  
#P connect 32 0 36 0;  
#P connect 32 0 2 4;  
#P connect 40 0 11 0;  
#P connect 38 0 2 0;  
#P connect 35 0 34 0;  
#P connect 30 0 10 0;  
#P fasten 29 0 8 0 111 338 349 338;  
#P fasten 11 0 0 0 296 276 342 276;  
#P fasten 11 0 4 0 296 264 327 264 327 113 586 113;  
#P fasten 26 0 28 0 140 140 190 140;  
#P connect 24 0 43 0;  
#P connect 25 0 26 0;  
#P fasten 23 0 11 0 103 89 297 89 297 166 296 166;  
#P connect 22 0 2 0;  
#P fasten 23 0 27 0 103 146 175 146;  
#P connect 20 0 2 3;  
#P fasten 19 4 31 0 462 388 252 388;  
#P connect 21 0 15 0;  
#P connect 18 0 12 0;  
#P fasten 17 0 16 0 128 261 153 261;  
#P fasten 15 0 16 1 182 263 182 263;  
#P connect 14 0 10 0;  
#P fasten 13 0 2 1 419 189 419 189;  
#P connect 6 0 36 0;  
#P connect 8 0 37 0;  
#P connect 6 0 2 2;  
#P connect 6 0 7 0;  
#P connect 5 0 3 0;  
#P connect 2 0 1 0;  
#P connect 3 0 4 0;  
#P connect 1 0 0 0;

```

#P connect 42 0 40 1;
#P connect 41 0 42 0;
#P pop;
#P hidden newobj 291 697 98 196617 patcher sfilewriting;
#N vpatcher 96 211 715 641;
#P comment 211 387 27 196617 hit;
#P inlet 292 1 15 0;
#N comlet sends "Hit";
#P outlet 214 367 15 0;
#N comlet Sends "FalseAlarm";
#P outlet 262 367 15 0;
#N comlet Sends "Miss";
#P outlet 311 367 15 0;
#N comlet sets it to blank;
#P outlet 353 367 15 0;
#P comment 259 387 33 196617 FalseAlarm;
#P comment 306 387 33 196617 Miss;
#P comment 347 387 39 196617 Nothing;
#N comlet general output of this patcher;
#P outlet 187 367 15 0;
#P comment 182 387 27 196617 all;
#P button 129 87 15 0;
#P message 75 194 38 1441802 set ";
#P button 287 102 19 0;
#P button 127 280 15 0;
#P newex 115 50 385 1441802 select critical.mid crit02.mid crit03.mid crit04.mid crit05.mid;
#P newex 115 29 50 1441802 r pstim;
#P button 225 87 17 0;
#P message 298 129 14 1441802 1;
#P message 265 129 14 1441802 0;
#P message 201 129 14 1441802 0;
#P message 176 129 14 1441802 1;
#P message 107 318 97 1441802 ";
#P button 138 159 15 0;
#P newex 251 221 260 1441802 if $i1 == 0 & $i2 == 1 then set FalseAlarm;
#P newex 251 252 259 1441802 if $i1 == 1 & $i2 == 0 then set Miss;
#P newex 251 279 257 1441802 if ($i1 & $i2) == 0 then set ";
#P newex 251 194 245 1441802 if ($i1 & $i2) == 1 then set Hit;
#P number 181 159 35 10 0 0 0 22;
#P number 276 159 35 10 0 0 0 22;
#N comlet from set;
#P outlet 107 367 15 0;
#P newex 32 405 182 1441802 if ($i1 & $i2) == 1 then bang;
#P newex 32 426 28 196617 s hit;
#P connect 20 0 10 0;
#P fasten 14 0 9 0 303 150 143 150;
#P fasten 14 0 3 0 303 154 281 154;
#P fasten 13 0 3 0 270 154 281 154;
#P fasten 13 0 9 0 270 149 143 149;
#P fasten 12 0 4 0 206 152 186 152;
#P fasten 11 0 4 0 181 152 186 152;
#P fasten 12 0 9 0 206 150 143 150;
#P connect 10 0 2 0;
#P connect 4 0 1 0;
#P fasten 4 0 5 0 186 185 256 185;
#P fasten 4 0 8 0 186 214 256 214;

```

```
#P fasten 4 0 7 0 186 247 256 247;
#P fasten 4 0 6 0 186 275 256 275;
#P fasten 3 0 5 1 281 184 491 184;
#P connect 3 0 1 1;
#P fasten 3 0 6 1 281 184 537 184 537 274 503 274;
#P fasten 3 0 7 1 281 184 525 184 525 246 505 246;
#P fasten 3 0 8 1 281 184 506 184;
#P connect 31 0 19 0;
#P connect 17 4 21 0;
#P connect 17 3 21 0;
#P connect 17 1 21 0;
#P connect 17 2 21 0;
#P connect 17 5 15 0;
#P connect 17 0 21 0;
#P connect 16 0 17 0;
#P fasten 8 0 10 0 256 240 112 240;
#P connect 8 0 29 0;
#P connect 8 0 23 0;
#P fasten 7 0 10 0 256 269 112 269;
#P connect 7 0 28 0;
#P connect 7 0 23 0;
#P connect 6 0 23 0;
#P fasten 6 0 10 0 256 301 112 301;
#P connect 6 0 27 0;
#P fasten 5 0 10 0 256 212 112 212;
#P connect 5 0 23 0;
#P connect 5 0 30 0;
#P connect 1 0 0 0;
#P connect 21 0 11 0;
#P connect 21 0 13 0;
#P connect 19 0 14 0;
#P connect 18 0 10 0;
#P connect 15 0 12 0;
#P connect 15 0 13 0;
#P connect 9 0 1 0;
#P fasten 11 0 9 0 181 149 143 149;
#P fasten 9 0 5 0 143 185 256 185;
#P fasten 9 0 8 0 143 214 256 214;
#P fasten 9 0 7 0 143 244 256 244;
#P fasten 9 0 6 0 143 273 256 273;
#P pop;
#P hidden newobj 439 624 85 196617 patcher sanalysis;
#P hidden newex -29 105 55 1441802 loadbang;
#P message 722 376 171 197066776 Trial02;
#P hidden newex 505 377 50 196617 r curtrial;
#P hidden newex 505 398 95 1441802 prepend set;
#P hidden message -28 135 59 196617 ftype TEXT;
#P hidden newex 213 203 50 196617 s curtrial;
#P hidden newex 76 474 35 196617 r stop;
#P hidden newex 352 215 35 196617 s stop;
#P hidden newex 420 31 32 1441802 r MI;
#P hidden newex 393 266 32 1441802 r MI;
#P hidden newex 482 247 134 1441802 if $i1 ==1 then set 0;
#P hidden newex 172 130 44 1441802 s read;
#P hidden newex 560 195 44 1441802 s StFA;
#P comment 506 156 154 197066766 stop on False Alarm;
```

#P toggle 482 155 22 0;  
#P hidden newex 79 150 50 1441802 s clear;  
#P hidden newex 216 391 68 1441802 delay 1300;  
#P hidden message 176 462 38 1441802 clear;  
#P hidden newex 382 31 32 1441802 r FA;  
#P hidden newex 354 264 32 1441802 r FA;  
#P hidden message 354 377 38 1441802 start;  
#P hidden newex 354 352 62 1441802 delay 200;  
#P hidden button 354 331 15 0;  
#P hidden message 354 311 73 1441802 read no.mid;  
#P hidden button 33 628 15 0;  
#P hidden newex 33 603 50 1441802 r start;  
#N vpatcher 1054 350 1620 450;  
#P hidden newex 250 -41 95 1441802 prepend set;  
#P message 403 33 139 197066772 Trial02;  
#P hidden newex 216 -65 50 196617 r curtrial;  
#P hidden newex 387 -42 40 196617 date;  
#P hidden message 376 -64 27 196617 date;  
#P number 492 62 51 14 0 0 36 3;  
#P number 459 62 30 14 0 0 36 3;  
#P number 427 62 30 14 0 0 36 3;  
#P hidden newex 385 -19 82 196617 unpack 0 0 0;  
#P hidden newex 370 -86 45 196617 loadbang;  
#P comment 334 59 87 197066772 RT (sec);  
#P flonum 334 34 63 20 0 0 36 3007;  
#P hidden newex 476 -9 50 1441802 r rtime;  
#P hidden newex 440 -78 50 1441802 r start;  
#P hidden message 440 -34 38 1441802 set 0;  
#P hidden button 440 -55 15 0;  
#P hidden newex 182 -3 68 1441802 r hitcount;  
#P hidden newex 259 -3 62 1441802 r FAccount;  
#P hidden newex 334 -3 73 1441802 r Misscount;  
#P number 184 34 48 20 0 0 36 22;  
#P number 235 34 47 20 0 0 36 22;  
#P number 286 34 44 20 0 0 36 22;  
#P comment 194 59 27 197066772 H;  
#P comment 243 59 38 197066772 FA;  
#P comment 295 59 26 197066772 M;  
#P hidden newex -72 55 68 1441802 r position;  
#P number 10 33 62 24 0 0 36 22;  
#P number 111 33 62 24 0 0 36 22;  
#P hidden newex 230 -20 62 1441802 r totalst;  
#P comment 81 30 45 197066776 of;  
#P hidden newex 138 -22 50 1441802 r pstim;  
#P hidden newex 138 1 74 1441802 prepend set;  
#P message 11 61 163 1441812 ff.mid;  
#P hidden connect 28 0 29 0;  
#P hidden fasten 18 0 21 0 445 10 468 10 468 14 339 14;  
#P hidden connect 29 0 24 0;  
#P hidden connect 24 1 26 0;  
#P hidden connect 24 2 27 0;  
#P hidden connect 24 0 25 0;  
#P hidden connect 23 0 28 0;  
#P hidden connect 20 0 21 0;  
#P hidden connect 19 0 17 0;  
#P hidden connect 17 0 18 0;

#P hidden connect 16 0 13 0;  
#P hidden connect 15 0 12 0;  
#P hidden connect 14 0 11 0;  
#P hidden fasten 7 0 6 0 -67 81 2 81 2 19 15 19;  
#P hidden fasten 4 0 5 0 235 28 116 28;  
#P hidden connect 2 0 1 0;  
#P hidden fasten 1 0 0 0 143 25 16 25;  
#P hidden connect 32 0 31 0;  
#P hidden connect 30 0 32 0;  
#P pop 1;  
#P hidden newobj 247 596 98 1441802 patcher counter;  
#P hidden newex 364 512 44 1441802 r freq;  
#P message 656 62 14 1441802 1;  
#N vpreset 1;  
#X append 1 1 22 76 483 hslider int 5 \;;  
#P preset 656 85 47 27;  
#P comment 792 301 45 197066788 of;  
#P hidden newex 912 270 62 1441802 r totalst;  
#P number 841 302 62 36 0 0 36 22;  
#P hidden newex 281 305 62 1441802 s totalst;  
#P hidden message 473 58 14 1441802 0;  
#P comment 874 484 73 197066772 Misses;  
#P comment 799 484 79 197066772 False Alarms;  
#P comment 724 484 47 197066772 Hits;  
#P number 874 439 66 36 0 0 36 22;  
#P number 799 439 62 36 0 0 36 22;  
#P number 722 439 64 36 0 0 36 22;  
#P hidden newex 874 414 73 1441802 r Misscount;  
#P hidden newex 799 414 62 1441802 r FAccount;  
#P hidden newex 722 414 68 1441802 r hitcount;  
#P user ubutton 365 134 99 44 0 0;  
#P comment 721 347 187 197066772 present Position;  
#P number 721 304 62 36 0 0 36 22;  
#P hidden newex 638 337 68 1441802 r position;  
#P hidden newex 303 147 50 1441802 s write;  
#P hidden newex 548 215 50 1441802 s asave;  
#P comment 505 133 128 197066766 autosave on/off;  
#P toggle 482 130 22 0;  
#P hidden newex 272 242 55 1441802 s length;  
#P hidden newex 483 225 44 1441802 s freq;  
#P hidden newex 268 271 68 1441802 s position;  
#P hidden newex 306 551 68 1441802 delay 3000;  
#P hidden button 656 145 15 0;  
#P hidden message 656 166 38 1441802 set 0;  
#P hidden newex 656 122 50 1441802 r start;  
#P comment 721 273 187 197066772 present Stimulus;  
#P message 722 249 163 1441812 ff.mid;  
#P hidden newex 641 222 74 1441802 prepend set;  
#P hidden newex 641 199 50 1441802 r pstim;  
#P hidden newex 720 123 50 1441802 r rtime;  
#P flonum 720 152 103 36 0 0 36 3007;  
#P hidden newex 33 717 50 1441802 s rtime;  
#P hidden button 263 469 15 0;  
#P hidden newex 296 513 50 1441802 s event;  
#P hidden newex 566 311 44 1441802 r play;  
#P hidden message 267 174 14 1441802 1;

#P hidden message 284 173 14 1441802 0;  
#P hidden user GSwitch2 270 197 39 32 0 0;  
#P hidden number 143 212 35 10 0 0 0 22;  
#P hidden newex 254 147 44 1441802 s play;  
#P hidden newex 27 400 50 1441802 s start;  
#P button 720 65 53 0;  
#P hidden newex 253 439 128 1441802 unpack symbol symbol;  
#P hidden newex 371 466 50 1441802 s pstim;  
#P hidden message 197 150 43 1441802 length;  
#P hidden newex 576 267 68 1441802 r loadbang;  
#P hidden newex 483 24 68 1441802 r loadbang;  
#P hidden newex 481 -2 68 1441802 s loadbang;  
#P hidden newex 32 -26 61 1441802 key;  
#P hidden newex 32 10 128 1441802 select 24 18 32 27 8;  
#P user ubutton 32 56 107 72 0 0;  
#P hidden message 32 150 38 1441802 clear;  
#P hidden message 143 148 32 1441802 read;  
#P user ubutton 143 56 110 71 0 0;  
#P user ubutton 363 56 107 71 0 0;  
#P user ubutton 254 56 109 72 0 0;  
#P user fpic 362 55 110 74 stop.pict 0 0;  
#P user fpic 144 55 110 74 read.pict 0 0;  
#P user fpic 255 55 109 74 play2.pict 0 0;  
#P user fpic 32 55 110 74 clear.pict 0 0;  
#P hidden button 41 486 15 0;  
#P hidden newex 41 515 38 1441802 timer;  
#P hidden number 41 543 80 10 0 0 0 22;  
#P hidden message 418 189 14 1441802 1;  
#P hidden message 395 189 14 1441802 0;  
#P hidden toggle 411 205 15 0;  
#P hidden newex 411 226 68 1441802 metro 3000;  
#P hidden newex 172 241 44 1441802 select;  
#P hidden number 204 527 80 10 0 0 0 22;  
#P hidden newex 206 499 38 1441802 timer;  
#P comment 720 206 163 197066772 Reaction time;  
#P hidden number 33 670 50 10 0 0 0 22;  
#P hidden newex 33 695 68 1441802 / 1000.;  
#P hidden newex 33 648 38 1441802 timer;  
#P comment 775 68 100 197066772 Paddle Press;  
#P hidden button 526 273 18 0;  
#P hidden user GSwitch2 127 408 39 32 1 0;  
#P hidden message 594 347 14 1441802 0;  
#P hidden message 616 345 14 1441802 1;  
#P hidden newex 616 316 68 1441802 delay 3000;  
#P hidden newex 651 267 27 1441802 \* 9;  
#P hidden message 74 178 14 1441802 0;  
#P hidden user GSwitch2 75 192 39 32 0 0;  
#P user hslider 483 76 26 144 20 250 250 0;  
#P number 483 103 57 20 0 0 36 22;  
#P hidden newex 482 200 44 1441802 + 1000;  
#P hidden newex 481 -25 55 1441802 loadbang;  
#P hidden message 144 303 97 1441802 ff.mid;  
#P hidden newex 144 264 95 1441802 prepend set;  
#P hidden newex 28 235 128 1441802 unpack symbol symbol;  
#P hidden newex 127 461 27 1441802 seq;  
#P hidden newex 123 528 62 1441802 midiout c;



#P hidden newex 121 502 62 1441802 midiflush;  
#P hidden newex 144 324 103 1441802 prepend set read;  
#P hidden message 59 359 38 1441802 start;  
#P hidden message 144 347 127 1441802 read ff.mid;  
#P hidden button 115 285 15 0;  
#P hidden button 115 313 15 0;  
#P hidden newex 59 334 62 1441802 delay 100;  
#N collX;  
#P hidden newobj 142 171 80 1441802 collx;  
#P comment 499 52 127 197066772 Pause Time;  
#P hidden message 57 178 14 1441802 1;  
#P comment 543 107 100 197066766 milliseconds;  
#P hidden comment 205 545 80 1441802 frequency;  
#P comment 827 154 70 197066788 sec;  
#P comment 365 133 100 197066788 write;  
#P hidden fasten 172 0 169 0 254 -38 254 -38;  
#P hidden fasten 173 0 169 0 203 -40 254 -40;  
#P hidden fasten 168 1 170 0 287 32 219 32 219 -33 240 -33;  
#P hidden fasten 168 1 50 0 287 34 259 34;  
#P hidden connect 55 0 54 0;  
#P hidden fasten 55 0 124 0 37 133 84 133;  
#P hidden connect 52 0 53 0;  
#P hidden connect 52 0 128 0;  
#P hidden fasten 52 0 70 0 148 131 243 131 243 165 272 165;  
#P hidden fasten 162 1 161 0 568 619 669 619;  
#P hidden connect 162 0 163 0;  
#P hidden fasten 162 2 166 0 602 616 817 616;  
#P hidden connect 157 0 153 0;  
#P hidden connect 159 0 158 0;  
#P hidden connect 156 0 157 0;  
#P hidden connect 154 0 153 0;  
#P hidden connect 151 0 64 0;  
#P hidden connect 149 0 72 0;  
#P hidden connect 150 0 144 0;  
#P hidden connect 148 0 140 0;  
#P hidden connect 147 0 32 1;  
#P hidden connect 145 0 146 0;  
#P hidden fasten 135 0 6 0 -20 174;  
#P hidden fasten 122 0 13 0 181 489 126 489;  
#P hidden fasten 119 0 15 0 359 421 175 421 175 456 132 456;  
#P hidden fasten 116 0 15 0 359 335 281 335 281 380 172 380 172 453;  
#P hidden connect 116 0 117 0;  
#P connect 111 0 110 0;  
#P hidden fasten 105 0 125 0 478 153 487 153;  
#P hidden fasten 82 0 75 0 661 188 712 188 712 146 725 146;  
#P hidden fasten 70 0 68 0 272 186 275 186;  
#P hidden fasten 69 0 68 0 289 187 275 187;  
#P hidden connect 61 0 6 0;  
#P hidden fasten 68 1 67 0 304 234 189 234 189 207 148 207;  
#P hidden connect 54 0 6 0;  
#P hidden connect 53 0 6 0;  
#P hidden fasten 42 0 40 0 423 202 416 202;  
#P hidden connect 29 0 15 0;  
#P hidden fasten 141 2 154 0 384 716 631 716 631 483 639 483;  
#P hidden fasten 141 0 142 0 296 762 472 762;  
#P hidden fasten 41 0 40 0 400 202 416 202;

#P hidden connect 110 0 22 0;  
#P hidden fasten 28 0 29 0 599 371 132 371;  
#P hidden fasten 27 0 29 0 621 382 132 382;  
#P hidden connect 24 0 23 0;  
#P hidden connect 18 0 12 0;  
#P hidden connect 11 0 65 0;  
#P hidden connect 11 0 45 0;  
#P hidden connect 11 0 15 0;  
#P hidden connect 11 0 73 0;  
#P hidden fasten 10 0 29 1 149 397 161 397;  
#P hidden connect 10 0 63 0;  
#P hidden connect 4 0 23 0;  
#P hidden fasten 140 1 141 0 459 655 296 655;  
#P hidden fasten 140 3 143 0 489 705 441 705;  
#P hidden fasten 140 2 142 1 474 689 513 689 513 707 551 707;  
#P hidden fasten 140 4 142 1 504 668 551 668;  
#P hidden fasten 140 3 142 1 489 679 551 679;  
#P hidden connect 139 0 135 0;  
#P hidden connect 137 0 136 0;  
#P hidden connect 136 0 138 0;  
#P hidden connect 133 0 13 0;  
#P hidden connect 131 0 51 0;  
#P hidden connect 130 0 116 0;  
#P hidden fasten 129 0 88 0 487 264 468 264 468 131 487 131;  
#P hidden fasten 125 0 129 0 487 186 487 186;  
#P hidden fasten 130 0 13 0 398 302 349 302 349 483 126 483;  
#P hidden fasten 125 0 127 0 485 185;  
#P hidden connect 40 0 39 0;  
#P hidden fasten 88 0 90 0 487 183 553 183;  
#P hidden connect 95 0 91 0;  
#P hidden fasten 158 0 93 0 685 295 726 295;  
#P hidden fasten 158 0 107 0 685 294 846 294;  
#P hidden connect 169 0 168 0;  
#P hidden connect 170 0 168 0;  
#P hidden fasten 117 0 123 0 359 349 289 349 289 382 221 382;  
#P hidden connect 117 0 118 0;  
#P hidden connect 115 0 32 0;  
#P hidden fasten 123 0 122 0 221 455 181 455;  
#P hidden connect 121 0 51 0;  
#P hidden fasten 120 0 13 0 359 288 344 288 344 486 126 486;  
#P hidden connect 120 0 116 0;  
#P hidden connect 118 0 119 0;  
#P hidden connect 83 0 82 0;  
#P hidden connect 114 0 115 0;  
#P hidden connect 112 0 84 1;  
#P hidden fasten 108 0 107 0 917 298 846 298;  
#P hidden fasten 105 0 88 0 478 126 487 126;  
#P hidden connect 98 0 101 0;  
#P hidden connect 97 0 100 0;  
#P hidden connect 96 0 99 0;  
#P hidden fasten 92 0 93 0 643 363 712 363 712 301 726 301;  
#P hidden connect 45 0 44 0;  
#P hidden fasten 78 0 79 0 646 246 727 246;  
#P hidden connect 81 0 83 0;  
#P hidden connect 77 0 78 0;  
#P hidden connect 76 0 75 0;

#P hidden fasten 30 0 13 0 531 374 230 374 230 481 126 481;  
#P hidden fasten 30 0 122 0 531 370 181 370;  
#P hidden fasten 30 0 41 0 531 296 391 296 391 185 400 185;  
#P hidden fasten 30 0 28 0 531 338 599 338;  
#P hidden fasten 30 0 26 0 531 304 621 304;  
#P hidden fasten 71 0 28 0 571 331 599 331;  
#P hidden connect 67 0 38 1;  
#P hidden fasten 67 0 87 0 148 231 182 231 182 237 277 237;  
#P hidden connect 67 0 106 0;  
#P hidden connect 9 0 7 0;  
#P hidden connect 9 0 8 0;  
#P hidden connect 9 0 18 0;  
#P hidden connect 63 1 62 0;  
#P hidden fasten 59 0 105 0 488 55 478 55;  
#P hidden fasten 60 0 26 0 581 298 621 298;  
#P hidden connect 59 0 22 0;  
#P hidden fasten 56 4 167 0 129 35 18 35;  
#P hidden connect 57 0 56 0;  
#P hidden connect 56 1 52 0;  
#P hidden fasten 56 2 168 1 83 33 191 33 191 -66 287 -66;  
#P hidden connect 56 0 55 0;  
#P hidden connect 56 3 51 0;  
#P hidden connect 51 0 132 0;  
#P hidden fasten 51 0 30 0 368 185 531 185 531 248 531 248;  
#P hidden connect 50 0 66 0;  
#P hidden fasten 50 0 69 0 259 133 249 133 249 164 289 164;  
#P hidden fasten 50 0 42 0 259 184 423 184;  
#P hidden connect 8 0 10 0;  
#P hidden connect 44 0 43 0;  
#P hidden fasten 39 0 6 0 416 240 346 240 346 160 147 160;  
#P hidden fasten 39 0 25 0 416 248 416 257 656 257;  
#P hidden fasten 38 0 41 0 177 261 362 261 362 183 400 183;  
#P hidden connect 36 0 37 0;  
#P hidden connect 34 0 33 0;  
#P hidden connect 33 0 74 0;  
#P hidden connect 32 0 34 0;  
#P hidden connect 26 0 27 0;  
#P hidden fasten 25 0 26 1 656 300 679 300;  
#P hidden connect 23 0 16 0;  
#P hidden connect 22 0 21 0;  
#P hidden connect 21 0 20 0;  
#P hidden fasten 20 0 39 1 487 220 474 220;  
#P hidden connect 20 0 86 0;  
#P hidden connect 19 0 58 0;  
#P hidden connect 19 0 111 0;  
#P hidden connect 17 0 18 0;  
#P hidden connect 16 1 17 0;  
#P hidden connect 15 1 44 1;  
#P hidden connect 15 1 13 0;  
#P hidden connect 15 0 13 0;  
#P hidden connect 15 1 36 0;  
#P hidden connect 15 1 36 1;  
#P hidden connect 17 0 9 0;  
#P hidden connect 13 0 14 0;  
#P hidden connect 12 0 10 0;  
#P hidden connect 7 0 11 0;

```
#P hidden connect 6 0 23 1;  
#P hidden connect 6 1 38 0;  
#P hidden fasten 6 2 61 0 217 194 245 194 245 144 202 144;  
#P hidden connect 6 3 134 0;  
#P hidden connect 6 1 85 0;  
#P hidden fasten 6 0 68 1 147 197 304 197;  
#P hidden connect 167 0 13 0;  
#P hidden fasten 73 0 72 0 268 495 301 495;  
#P hidden fasten 73 0 84 0 268 515 286 515 293 535 311 535;  
#P pop;
```