MORPHEUS

Custom oscillator for KORG logue SDK synthesizers

Operations Manual

v.1.3-6

Contents

Introduction

Morpheus is a morphing wavetable oscillator inspired by WaveEdit.

The oscillator must be pre populated with wave data using the online constructor (see Quick Start section) before uploading to the synthesizer. For information on how to upload a custom oscillator to the synthesizer and how to activate it, please refer to the Synthesizer Owner's Manual and Sound Librarian Owner's Manual for your KORG synthesizer model.

For the wave data you can use WAV files created with WaveEdit, a huge library of such files is available at WaveEdit Online. Alternatively you can use any 8- or 16-bit PCM WAV file and they will be automatically converted to 8-bit and trimmed to 16384 samples.

All the oscillator customization operations performed by the online constructor are done in JavaScript of your browser, so no actual upload occurs. Online constructor does not store any data, except for the your browser cookie setting for the last selected synthesizer model.

If you find a bug or wish to propose a new feature or improvement, don't hesitate to create a new issue at GitHub or just send me an email to dukesrg@gmail.com.

This custom oscillator is open source and free. However you can support the development via PayPal me.

Quick start

The raw oscillator file has no wave data inside and won't produce any sound. To make the oscillator work you must first populate it with the wave data.

1. Navigate to the online constructor web page.
2. Select your KORG synthesizer model to define the target format of the oscillator file.
3. Locate the Morpheus oscillator row by the column **NAME**
4. Click the **Upload** button located in the **CUSTOM DATA** column of this row.
5. In the file open dialog select one wave file.
6. Check the **CUSTOM NAME** cell in this row. This name is populated from the name of the uploaded wave file and you can alter it now. This name will be displayed by the Librarian and your synthesizer.
7. Click the **Download** button located in the **CUSTOM UNIT** cell of this row.
8. Now you can upload the oscillator file to your KORG synthesizer with the Librarian application.

Advanced features

Oscillator modes

Oscillator can operate in two modes: Grid mode and Linear mode.

In Grid mode, all the 64 waveforms are represented as a grid of 8 x 8 waveforms and the resulting waveform is a bilinear interpolation of 4 source waveforms by a fractional X and Y coordinates as an input. X and Y coordinates can be selected explicitly or modulated by internal LFOs

In Linear mode, all waveforms are just a sequence. The resulting waveform is just a linear interpolation of 2 source waveforms by a fractional X coordinate as an input. X coordinate can be both selected explicitly and modulated by internal LFOs at the same time.

X and Y coordinates will be clipped in case several LFOs and/or depths overflow or underflow the coordinate value.

Oscillator parameters

Control \ Mode	**Grid mode**	**Linear mode**
Shape	LFO X rate / Waveform X position	Waveform X position
Alt (Shift + Shape)	LFO Y rate / Waveform Y position	LFO X rate
Param 1	LFO X mode	
Param 2	LFO Y mode	-
Param 3	LFO X wave	
Param 4	LFO Y wave	-
Param 5	LFO X depth	
Param 6	LFO Y depth	-

LFO modes

#	LFO mode	Description
1	One shot	Note On resets LFO phase to zero and LFO runs one cycle
2	Key trigger	Note On resets LFO phase to zero and LFO runs infinitely
3	Random	Note On resets LFO phase random and LFO runs infinitely
4	Free run	Note On has no effect on LFO that continues to run infinitely
5	One shot + Shape LFO	Same as One shot with Shape LFO from synth added
6	Key trigger + Shape LFO	Same as Key trigger with Shape LFO from synth added
7	Random + Shape LFO	Same as Random with Shape LFO from synth added
8	Free run + Shape LFO	Same as Free run with Shape LFO from synth added
9	Off	LFO Y only special value to activate oscillator Linear mode

LFO waves

#	LFO wave
0	Sawtooth
1	Triangle
2	Square
3	Sine
4	Random sample & hold
5…68	User waves

#	LFO wave
-1…-16	Firmware waves bank A
-17…-32	Firmware waves bank B
-33…-46	Firmware waves bank C
-47…-59	Firmware waves bank D
-60…-74	Firmware waves bank E
-75…-90	Firmware waves bank F

LFO depth

LFO depth represents the amplitude of the LFO span. For Grid mode 100% LFO depth will represent the full span of ±3.5 waveforms. For the Linear mode that will be ±31.5 waveforms. Negative LFO depth inverts the polarity of LFO waveform. Zero LFO depth activates switches Shape control to waveform position in Grid mode only. The following tables map the whole number of waveform span to the closest LFO depth value. For the complete list of precise depth values refer to LFO depth lists.

Grid mode LFO depth waves span:

Waves span	Osc. LFO	Shape LFO
1	14	73
2	29	146
3	43	219
4	57	292
5	71	365
6	86	438
7	100	511

Linear mode LFO depth waves span:

Waves span	Osc. LFO	Shape LFO
1	2	8
2	3	16
3	5	24
4	6	32
5	8	40
6	10	49
7	11	57
8	13	65
9	14	73
10	16	81
11	17	89
12	19	97
13	21	105
14	22	114
15	24	122
16	25	130

Waves span	Osc. LFO	Shape LFO
17	27	138
18	29	146
19	30	154
20	32	162
21	33	170
22	35	178
23	37	187
24	38	195
25	40	203
26	41	211
27	43	219
28	44	227
29	46	235
30	48	243
31	49	251
32	51	260

Waves span	Osc. LFO	Shape LFO
33	52	268
34	54	276
35	56	284
36	57	292
37	59	300
38	60	308
39	62	316
40	63	324
41	65	333
42	67	341
43	68	349
44	70	357
45	71	365
46	73	373
47	75	381
48	76	389

Waves span	Osc. LFO	Shape LFO
49	78	397
50	79	406
51	81	414
52	83	422
53	84	430
54	86	438
55	87	446
56	89	454
57	90	462
58	92	470
59	94	479
60	95	487
61	97	495
62	98	503
63	100	511

Waveform position

The values for Shape and Alt (Shift + Shape) to produce the desired waveform are represented in the following tables. Those just are the closest values, not absolutely precise. For the complete list of precise waveform positions Waveform position list.

Grid mode waveform position:

#	Shape	0	146	292	438	585	731	877	1023
Alt	%	0.0	14.3	28.5	42.8	57.2	71.5	85.7	100.0
0	0.0	1	2	3	4	5	6	7	8
146	14.3	9	10	11	12	13	14	15	16
292	28.5	17	18	19	20	21	22	23	24
438	42.8	25	26	27	28	29	30	31	32
585	57.2	33	34	35	36	37	38	39	40
731	71.5	41	42	43	44	45	46	47	48
877	85.7	49	50	51	52	53	54	55	56
1023	100.0	57	58	59	60	61	62	63	64

Linear mode waveform position:

#	%	Wave	#	%	Wave	#	%	Wave	#	%	Wave
0	0.0	1	**260**	25.4	17	**520**	50.8	33	**779**	76.1	49
16	1.6	2	**276**	27.0	18	**536**	52.4	34	**796**	77.8	50
32	3.1	3	**292**	28.5	19	**552**	54.0	35	**812**	79.4	51
49	4.8	4	**309**	30.2	20	**568**	55.5	36	**828**	80.9	52
65	6.4	5	**325**	31.8	21	**585**	57.2	37	**844**	82.5	53
81	7.9	6	**341**	33.3	22	**601**	58.7	38	**861**	84.2	54
97	9.5	7	**357**	34.9	23	**617**	60.3	39	**877**	85.7	55
114	11.1	8	**373**	36.5	24	**633**	61.9	40	**893**	87.3	56
130	12.7	9	**390**	38.1	25	**650**	63.5	41	**909**	88.9	57
146	14.3	10	**406**	39.7	26	**666**	65.1	42	**926**	90.5	58
162	15.8	11	**422**	41.3	27	**682**	66.7	43	**942**	92.1	59
179	17.5	12	**438**	42.8	28	**698**	68.2	44	**958**	93.6	60
195	19.1	13	**455**	44.5	29	**714**	69.8	45	**974**	95.2	61
211	20.6	14	**471**	46.0	30	**731**	71.5	46	**991**	96.9	62
227	22.2	15	**487**	47.6	31	**747**	73.0	47	**1007**	98.4	63
244	23.9	16	**503**	49.2	32	**763**	74.6	48	**1023**	100.0	64

Tips and tricks

Single sample play:

Parameter	Value	Notes
LFO X rate	vary	refer to LFO rates list for the sample play speed
Waveform X position	50% / 511	refer to Waveform position to alter sample position
LFO X mode	1 (One shot)	
LFO Y mode	9 (Off)	
LFO X wave	0 (Sawtooth)	
LFO Y wave	-	
LFO X depth	100% / 511	refer to LFO depth to alter sample length
LFO Y depth	-	

Ping pong sample play:

Parameter	Value	Notes
LFO X rate	vary	refer to LFO rates list for the sample play speed
Waveform X position	50% / 512	refer to Waveform position to alter sample position
LFO X mode	2 (Key trigger)	
LFO Y mode	9 (Off)	
LFO X wave	1 (Triangle)	negative depth fixes upside down triangle direction
LFO Y wave	-	
LFO X depth	-100% (-511)	refer to LFO depth to alter sample length
LFO Y depth	-	

Vector synthesis:

Parameter	Value	Notes
Waveform X position	vary	control vector X position with Shape
Waveform Y position	vary	control vector Y position with Alt (Shift + Shape)
LFO X mode	-	
LFO Y mode	not Off (≠9)	
LFO X wave	-	
LFO Y wave	-	
LFO X depth	0% (0)	
LFO Y depth	0% (0)	

LFO rates list

#	%	Hz	sec.
0	0.0	0	∞
1	0.1	0.001	892.21
2	0.2	0.002	445.36
3	0.3	0.003	296.41
4	0.4	0.005	221.93
5	0.5	0.006	177.25
6	0.6	0.007	147.46
7	0.7	0.008	126.18
8	0.8	0.009	110.22
9	0.9	0.010	97.809
10	1.0	0.011	87.880
11	1.1	0.013	79.756
12	1.2	0.014	72.986
13	1.3	0.015	67.258
14	1.4	0.016	62.348
15	1.5	0.017	58.093
16	1.6	0.018	54.371
17	1.7	0.020	51.086
18	1.8	0.021	48.166
19	1.9	0.022	45.553
20	2.0	0.023	43.202
21	2.1	0.024	41.075
22	2.2	0.026	39.142
23	2.2	0.027	37.376
24	2.3	0.028	35.758
25	2.4	0.029	34.270
26	2.5	0.030	32.895
27	2.6	0.032	31.623
28	2.7	0.033	30.442
29	2.8	0.034	29.342
30	2.9	0.035	28.316
31	3.0	0.037	27.355
32	3.1	0.038	26.455
33	3.2	0.039	25.610
34	3.3	0.040	24.814
35	3.4	0.042	24.064
36	3.5	0.043	23.356
37	3.6	0.044	22.685
38	3.7	0.045	22.051
39	3.8	0.047	21.448
40	3.9	0.048	20.876

#	%	Hz	sec.
41	4.0	0.049	20.332
42	4.1	0.050	19.814
43	4.2	0.052	19.320
44	4.3	0.053	18.849
45	4.4	0.054	18.398
46	4.5	0.056	17.967
47	4.6	0.057	17.555
48	4.7	0.058	17.159
49	4.8	0.060	16.780
50	4.9	0.061	16.416
51	5.0	0.062	16.067
52	5.1	0.064	15.730
53	5.2	0.065	15.407
54	5.3	0.066	15.096
55	5.4	0.068	14.795
56	5.5	0.069	14.506
57	5.6	0.070	14.227
58	5.7	0.072	13.957
59	5.8	0.073	13.697
60	5.9	0.074	13.446
61	6.0	0.076	13.202
62	6.1	0.077	12.967
63	6.2	0.079	12.739
64	6.3	0.080	12.518
65	6.4	0.081	12.304
66	6.5	0.083	12.096
67	6.5	0.084	11.895
68	6.6	0.085	11.700
69	6.7	0.087	11.510
70	6.8	0.088	11.326
71	6.9	0.090	11.147
72	7.0	0.091	10.973
73	7.1	0.093	10.804
74	7.2	0.094	10.639
75	7.3	0.095	10.479
76	7.4	0.097	10.323
77	7.5	0.098	10.171
78	7.6	0.100	10.023
79	7.7	0.101	9.8790
80	7.7	0.103	9.7385
81	7.9	0.104	9.6014

#	%	Hz	sec.
82	8.0	0.106	9.4677
83	8.1	0.107	9.3372
84	8.2	0.109	9.2098
85	8.3	0.110	9.0855
86	8.4	0.112	8.9641
87	8.5	0.113	8.8455
88	8.6	0.115	8.7296
89	8.7	0.116	8.6163
90	8.8	0.118	8.5056
91	8.9	0.119	8.3973
92	9.0	0.121	8.2914
93	9.1	0.122	8.1877
94	9.2	0.124	8.0863
95	9.3	0.125	7.9871
96	9.4	0.127	7.8899
97	9.5	0.128	7.7948
98	9.6	0.130	7.7016
99	9.7	0.131	7.6103
100	9.8	0.133	7.5209
101	9.9	0.135	7.4332
102	10.0	0.136	7.3473
103	10.1	0.138	7.2631
104	10.2	0.139	7.1805
105	10.3	0.141	7.0995
106	10.4	0.142	7.0200
107	10.5	0.144	6.9421
108	10.6	0.146	6.8656
109	10.7	0.147	6.7905
110	10.8	0.149	6.7168
111	10.9	0.151	6.6444
112	10.9	0.152	6.5734
113	11.0	0.154	6.5036
114	11.1	0.155	6.4350
115	11.2	0.157	6.3677
116	11.3	0.159	6.3015
117	11.4	0.160	6.2365
118	11.5	0.162	6.1726
119	11.6	0.164	6.1098
120	11.7	0.165	6.0480
121	11.8	0.167	5.9873
122	11.9	0.169	5.9276

#	%	Hz	sec.
123	12.0	0.170	5.8689
124	12.1	0.172	5.8111
125	12.2	0.174	5.7543
126	12.3	0.175	5.6984
127	12.4	0.177	5.6434
128	12.5	0.179	5.5892
129	12.6	0.181	5.5359
130	12.7	0.182	5.4835
131	12.8	0.184	5.4318
132	12.9	0.186	5.3810
133	13.0	0.188	5.3309
134	13.1	0.189	5.2816
135	13.2	0.191	5.2330
136	13.3	0.193	5.1852
137	13.4	0.195	5.1380
138	13.5	0.196	5.0916
139	13.6	0.198	5.0458
140	13.7	0.200	5.0007
141	13.8	0.202	4.9563
142	13.9	0.204	4.9125
143	14.0	0.205	4.8693
144	14.1	0.207	4.8267
145	14.2	0.209	4.7847
146	14.3	0.211	4.7434
147	14.4	0.213	4.7025
148	14.5	0.214	4.6623
149	14.6	0.216	4.6226
150	14.7	0.218	4.5834
151	14.8	0.220	4.5448
152	14.9	0.222	4.5067
153	15.0	0.224	4.4691
154	15.1	0.226	4.4320
155	15.2	0.228	4.3954
156	15.2	0.229	4.3593
157	15.3	0.231	4.3236
158	15.4	0.233	4.2884
159	15.5	0.235	4.2536
160	15.6	0.237	4.2193
161	15.7	0.239	4.1855
162	15.8	0.241	4.1520
163	15.9	0.243	4.1190
164	16.0	0.245	4.0864
165	16.1	0.247	4.0542
166	16.2	0.249	4.0224
167	16.3	0.251	3.9910
168	16.4	0.253	3.9600
169	16.5	0.254	3.9293
170	16.6	0.256	3.8990
171	16.7	0.258	3.8691
172	16.8	0.260	3.8396
173	16.9	0.262	3.8103
174	17.0	0.264	3.7815
175	17.1	0.266	3.7530
176	17.2	0.268	3.7248
177	17.3	0.270	3.6969
178	17.4	0.273	3.6694
179	17.5	0.275	3.6421
180	17.6	0.277	3.6152
181	17.7	0.279	3.5886
182	17.8	0.281	3.5623
183	17.9	0.283	3.5363
184	18.0	0.285	3.5106
185	18.1	0.287	3.4851
186	18.2	0.289	3.4600
187	18.3	0.291	3.4351
188	18.4	0.293	3.4105
189	18.5	0.295	3.3862
190	18.6	0.297	3.3621
191	18.7	0.300	3.3383
192	18.8	0.302	3.3148
193	18.9	0.304	3.2915
194	19.0	0.306	3.2684
195	19.1	0.308	3.2456
196	19.2	0.310	3.2231
197	19.3	0.312	3.2007
198	19.4	0.315	3.1787
199	19.5	0.317	3.1568
200	19.6	0.319	3.1352
201	19.6	0.321	3.1137
202	19.7	0.323	3.0926
203	19.8	0.326	3.0716
204	19.9	0.328	3.0508
205	20.0	0.330	3.0303
206	20.1	0.332	3.0099
207	20.2	0.334	2.9898
208	20.3	0.337	2.9698
209	20.4	0.339	2.9501
210	20.5	0.341	2.9306
211	20.6	0.343	2.9112
212	20.7	0.346	2.8921
213	20.8	0.348	2.8731
214	20.9	0.350	2.8543
215	21.0	0.353	2.8357
216	21.1	0.355	2.8173
217	21.2	0.357	2.7990
218	21.3	0.360	2.7809
219	21.4	0.362	2.7630
220	21.5	0.364	2.7453
221	21.6	0.367	2.7277
222	21.7	0.369	2.7103
223	21.8	0.371	2.6931
224	21.9	0.374	2.6760
225	22.0	0.376	2.6591
226	22.1	0.378	2.6423
227	22.2	0.381	2.6257
228	22.3	0.383	2.6093
229	22.4	0.386	2.5930
230	22.5	0.388	2.5768
231	22.6	0.390	2.5608
232	22.7	0.393	2.5450
233	22.8	0.395	2.5292
234	22.9	0.398	2.5137
235	23.0	0.400	2.4982
236	23.1	0.403	2.4829
237	23.2	0.405	2.4678
238	23.3	0.408	2.4527
239	23.4	0.410	2.4378
240	23.5	0.413	2.4231
241	23.6	0.415	2.4084
242	23.7	0.418	2.3939
243	23.8	0.420	2.3795
244	23.9	0.423	2.3653
245	23.9	0.425	2.3511
246	24.0	0.428	2.3371
247	24.1	0.430	2.3232
248	24.2	0.433	2.3094
249	24.3	0.436	2.2958
250	24.4	0.438	2.2822
251	24.5	0.441	2.2688

#	%	Hz	sec.
252	24.6	0.443	2.2555
253	24.7	0.446	2.2423
254	24.8	0.449	2.2292
255	24.9	0.451	2.2162
256	25.0	0.454	2.2033
257	25.1	0.457	2.1905
258	25.2	0.459	2.1779
259	25.3	0.462	2.1653
260	25.4	0.465	2.1528
261	25.5	0.467	2.1405
262	25.6	0.470	2.1282
263	25.7	0.473	2.1160
264	25.8	0.475	2.1040
265	25.9	0.478	2.0920
266	26.0	0.481	2.0801
267	26.1	0.483	2.0684
268	26.2	0.486	2.0567
269	26.3	0.489	2.0451
270	26.4	0.492	2.0336
271	26.5	0.495	2.0222
272	26.6	0.497	2.0109
273	26.7	0.500	1.9996
274	26.8	0.503	1.9885
275	26.9	0.506	1.9774
276	27.0	0.509	1.9665
277	27.1	0.511	1.9556
278	27.2	0.514	1.9448
279	27.3	0.517	1.9341
280	27.4	0.520	1.9234
281	27.5	0.523	1.9129
282	27.6	0.526	1.9024
283	27.7	0.529	1.8920
284	27.8	0.531	1.8817
285	27.9	0.534	1.8714
286	28.0	0.537	1.8613
287	28.1	0.540	1.8512
288	28.2	0.543	1.8412
289	28.3	0.546	1.8312
290	28.3	0.549	1.8214
291	28.4	0.552	1.8116
292	28.5	0.555	1.8019
293	28.6	0.558	1.7922
294	28.7	0.561	1.7827
295	28.8	0.564	1.7731
296	28.9	0.567	1.7637
297	29.0	0.570	1.7543
298	29.1	0.573	1.7450
299	29.2	0.576	1.7358
300	29.3	0.579	1.7266
301	29.4	0.582	1.7175
302	29.5	0.585	1.7085
303	29.6	0.588	1.6995
304	29.7	0.591	1.6906
305	29.8	0.595	1.6818
306	29.9	0.598	1.6730
307	30.0	0.601	1.6643
308	30.1	0.604	1.6556
309	30.2	0.607	1.6471
310	30.3	0.610	1.6385
311	30.4	0.613	1.6300
312	30.5	0.617	1.6216
313	30.6	0.620	1.6133
314	30.7	0.623	1.6050
315	30.8	0.626	1.5967
316	30.9	0.630	1.5885
317	31.0	0.633	1.5804
318	31.1	0.636	1.5723
319	31.2	0.639	1.5643
320	31.3	0.643	1.5564
321	31.4	0.646	1.5485
322	31.5	0.649	1.5406
323	31.6	0.652	1.5328
324	31.7	0.656	1.5251
325	31.8	0.659	1.5174
326	31.9	0.662	1.5097
327	32.0	0.666	1.5021
328	32.1	0.669	1.4946
329	32.2	0.672	1.4871
330	32.3	0.676	1.4797
331	32.4	0.679	1.4723
332	32.5	0.683	1.4649
333	32.6	0.686	1.4576
334	32.6	0.689	1.4504
335	32.7	0.693	1.4432
336	32.8	0.696	1.4360
337	32.9	0.700	1.4289
338	33.0	0.703	1.4219
339	33.1	0.707	1.4149
340	33.2	0.710	1.4079
341	33.3	0.714	1.4010
342	33.4	0.717	1.3941
343	33.5	0.721	1.3873
344	33.6	0.724	1.3805
345	33.7	0.728	1.3737
346	33.8	0.732	1.3670
347	33.9	0.735	1.3604
348	34.0	0.739	1.3537
349	34.1	0.742	1.3472
350	34.2	0.746	1.3406
351	34.3	0.750	1.3342
352	34.4	0.753	1.3277
353	34.5	0.757	1.3213
354	34.6	0.760	1.3149
355	34.7	0.764	1.3086
356	34.8	0.768	1.3023
357	34.9	0.772	1.2961
358	35.0	0.775	1.2898
359	35.1	0.779	1.2837
360	35.2	0.783	1.2775
361	35.3	0.787	1.2714
362	35.4	0.790	1.2654
363	35.5	0.794	1.2594
364	35.6	0.798	1.2534
365	35.7	0.802	1.2474
366	35.8	0.805	1.2415
367	35.9	0.809	1.2357
368	36.0	0.813	1.2298
369	36.1	0.817	1.2240
370	36.2	0.821	1.2182
371	36.3	0.825	1.2125
372	36.4	0.829	1.2068
373	36.5	0.833	1.2011
374	36.6	0.836	1.1955
375	36.7	0.840	1.1899
376	36.8	0.844	1.1844
377	36.9	0.848	1.1788
378	37.0	0.852	1.1733
379	37.0	0.856	1.1679
380	37.1	0.860	1.1624

#	%	Hz	sec.
381	37.2	0.864	1.1570
382	37.3	0.868	1.1517
383	37.4	0.872	1.1463
384	37.5	0.876	1.1410
385	37.6	0.880	1.1358
386	37.7	0.885	1.1305
387	37.8	0.889	1.1253
388	37.9	0.893	1.1201
389	38.0	0.897	1.1150
390	38.1	0.901	1.1099
391	38.2	0.905	1.1048
392	38.3	0.909	1.0997
393	38.4	0.913	1.0947
394	38.5	0.918	1.0897
395	38.6	0.922	1.0847
396	38.7	0.926	1.0798
397	38.8	0.930	1.0749
398	38.9	0.935	1.0700
399	39.0	0.939	1.0651
400	39.1	0.943	1.0603
401	39.2	0.947	1.0555
402	39.3	0.952	1.0507
403	39.4	0.956	1.0460
404	39.5	0.960	1.0412
405	39.6	0.965	1.0365
406	39.7	0.969	1.0319
407	39.8	0.973	1.0272
408	39.9	0.978	1.0226
409	40.0	0.982	1.0180
410	40.1	0.987	1.0135
411	40.2	0.991	1.0089
412	40.3	0.996	1.0044
413	40.4	1.000	0.9999
414	40.5	1.005	0.9955
415	40.6	1.009	0.9910
416	40.7	1.014	0.9866
417	40.8	1.018	0.9822
418	40.9	1.023	0.9779
419	41.0	1.027	0.9735
420	41.1	1.032	0.9692
421	41.2	1.036	0.9649
422	41.3	1.041	0.9606
423	41.3	1.046	0.9564
424	41.4	1.050	0.9522
425	41.5	1.055	0.9480
426	41.6	1.060	0.9438
427	41.7	1.064	0.9396
428	41.8	1.069	0.9355
429	41.9	1.074	0.9314
430	42.0	1.078	0.9273
431	42.1	1.083	0.9233
432	42.2	1.088	0.9192
433	42.3	1.093	0.9152
434	42.4	1.097	0.9112
435	42.5	1.102	0.9072
436	42.6	1.107	0.9033
437	42.7	1.112	0.8993
438	42.8	1.117	0.8954
439	42.9	1.122	0.8915
440	43.0	1.127	0.8876
441	43.1	1.131	0.8838
442	43.2	1.136	0.8800
443	43.3	1.141	0.8762
444	43.4	1.146	0.8724
445	43.5	1.151	0.8686
446	43.6	1.156	0.8648
447	43.7	1.161	0.8611
448	43.8	1.166	0.8574
449	43.9	1.171	0.8537
450	44.0	1.176	0.8500
451	44.1	1.181	0.8464
452	44.2	1.187	0.8428
453	44.3	1.192	0.8391
454	44.4	1.197	0.8355
455	44.5	1.202	0.8320
456	44.6	1.207	0.8284
457	44.7	1.212	0.8249
458	44.8	1.218	0.8214
459	44.9	1.223	0.8179
460	45.0	1.228	0.8144
461	45.1	1.233	0.8109
462	45.2	1.238	0.8075
463	45.3	1.244	0.8040
464	45.4	1.249	0.8006
465	45.5	1.254	0.7972
466	45.6	1.260	0.7938
467	45.7	1.265	0.7905
468	45.7	1.270	0.7871
469	45.8	1.276	0.7838
470	45.9	1.281	0.7805
471	46.0	1.287	0.7772
472	46.1	1.292	0.7739
473	46.2	1.298	0.7707
474	46.3	1.303	0.7674
475	46.4	1.309	0.7642
476	46.5	1.314	0.7610
477	46.6	1.320	0.7578
478	46.7	1.325	0.7546
479	46.8	1.331	0.7514
480	46.9	1.336	0.7483
481	47.0	1.342	0.7452
482	47.1	1.348	0.7421
483	47.2	1.353	0.7390
484	47.3	1.359	0.7359
485	47.4	1.365	0.7328
486	47.5	1.370	0.7297
487	47.6	1.376	0.7267
488	47.7	1.382	0.7237
489	47.8	1.388	0.7207
490	47.9	1.393	0.7177
491	48.0	1.399	0.7147
492	48.1	1.405	0.7117
493	48.2	1.411	0.7088
494	48.3	1.417	0.7059
495	48.4	1.423	0.7029
496	48.5	1.428	0.7000
497	48.6	1.434	0.6971
498	48.7	1.440	0.6943
499	48.8	1.446	0.6914
500	48.9	1.452	0.6886
501	49.0	1.458	0.6857
502	49.1	1.464	0.6829
503	49.2	1.470	0.6801
504	49.3	1.476	0.6773
505	49.4	1.483	0.6745
506	49.5	1.489	0.6718
507	49.6	1.495	0.6690
508	49.7	1.501	0.6663
509	49.8	1.507	0.6635

#	%	Hz	sec.
510	49.9	1.513	0.6608
511	50.0	1.519	0.6581
512	50.0	1.526	0.6554
513	50.1	1.532	0.6528
514	50.2	1.538	0.6501
515	50.3	1.545	0.6474
516	50.4	1.551	0.6448
517	50.5	1.557	0.6422
518	50.6	1.564	0.6396
519	50.7	1.570	0.6370
520	50.8	1.576	0.6344
521	50.9	1.583	0.6318
522	51.0	1.589	0.6293
523	51.1	1.596	0.6267
524	51.2	1.602	0.6242
525	51.3	1.609	0.6216
526	51.4	1.615	0.6191
527	51.5	1.622	0.6166
528	51.6	1.628	0.6141
529	51.7	1.635	0.6117
530	51.8	1.641	0.6092
531	51.9	1.648	0.6067
532	52.0	1.655	0.6043
533	52.1	1.661	0.6019
534	52.2	1.668	0.5995
535	52.3	1.675	0.5970
536	52.4	1.682	0.5946
537	52.5	1.688	0.5923
538	52.6	1.695	0.5899
539	52.7	1.702	0.5875
540	52.8	1.709	0.5852
541	52.9	1.716	0.5828
542	53.0	1.723	0.5805
543	53.1	1.730	0.5782
544	53.2	1.737	0.5759
545	53.3	1.743	0.5736
546	53.4	1.750	0.5713
547	53.5	1.757	0.5690
548	53.6	1.764	0.5667
549	53.7	1.772	0.5645
550	53.8	1.779	0.5622
551	53.9	1.786	0.5600
552	54.0	1.793	0.5578
553	54.1	1.800	0.5556
554	54.2	1.807	0.5533
555	54.3	1.814	0.5512
556	54.3	1.822	0.5490
557	54.4	1.829	0.5468
558	54.5	1.836	0.5446
559	54.6	1.843	0.5425
560	54.7	1.851	0.5403
561	54.8	1.858	0.5382
562	54.9	1.865	0.5361
563	55.0	1.873	0.5340
564	55.1	1.880	0.5318
565	55.2	1.888	0.5297
566	55.3	1.895	0.5277
567	55.4	1.903	0.5256
568	55.5	1.910	0.5235
569	55.6	1.918	0.5215
570	55.7	1.925	0.5194
571	55.8	1.933	0.5174
572	55.9	1.940	0.5153
573	56.0	1.948	0.5133
574	56.1	1.956	0.5113
575	56.2	1.964	0.5093
576	56.3	1.971	0.5073
577	56.4	1.979	0.5053
578	56.5	1.987	0.5033
579	56.6	1.995	0.5014
580	56.7	2.002	0.4994
581	56.8	2.010	0.4975
582	56.9	2.018	0.4955
583	57.0	2.026	0.4936
584	57.1	2.034	0.4917
585	57.2	2.042	0.4897
586	57.3	2.050	0.4878
587	57.4	2.058	0.4859
588	57.5	2.066	0.4840
589	57.6	2.074	0.4822
590	57.7	2.082	0.4803
591	57.8	2.090	0.4784
592	57.9	2.098	0.4766
593	58.0	2.107	0.4747
594	58.1	2.115	0.4729
595	58.2	2.123	0.4710
596	58.3	2.131	0.4692
597	58.4	2.140	0.4674
598	58.5	2.148	0.4656
599	58.6	2.156	0.4638
600	58.7	2.165	0.4620
601	58.7	2.173	0.4602
602	58.8	2.181	0.4584
603	58.9	2.190	0.4566
604	59.0	2.198	0.4549
605	59.1	2.207	0.4531
606	59.2	2.215	0.4514
607	59.3	2.224	0.4496
608	59.4	2.233	0.4479
609	59.5	2.241	0.4462
610	59.6	2.250	0.4445
611	59.7	2.259	0.4428
612	59.8	2.267	0.4411
613	59.9	2.276	0.4394
614	60.0	2.285	0.4377
615	60.1	2.294	0.4360
616	60.2	2.302	0.4343
617	60.3	2.311	0.4327
618	60.4	2.320	0.4310
619	60.5	2.329	0.4294
620	60.6	2.338	0.4277
621	60.7	2.347	0.4261
622	60.8	2.356	0.4244
623	60.9	2.365	0.4228
624	61.0	2.374	0.4212
625	61.1	2.383	0.4196
626	61.2	2.392	0.4180
627	61.3	2.402	0.4164
628	61.4	2.411	0.4148
629	61.5	2.420	0.4132
630	61.6	2.429	0.4117
631	61.7	2.439	0.4101
632	61.8	2.448	0.4085
633	61.9	2.457	0.4070
634	62.0	2.467	0.4054
635	62.1	2.476	0.4039
636	62.2	2.485	0.4023
637	62.3	2.495	0.4008
638	62.4	2.504	0.3993

#	%	Hz	sec.
639	62.5	2.514	0.3978
640	62.6	2.524	0.3963
641	62.7	2.533	0.3948
642	62.8	2.543	0.3933
643	62.9	2.552	0.3918
644	63.0	2.562	0.3903
645	63.0	2.572	0.3888
646	63.1	2.582	0.3873
647	63.2	2.591	0.3859
648	63.3	2.601	0.3844
649	63.4	2.611	0.3830
650	63.5	2.621	0.3815
651	63.6	2.631	0.3801
652	63.7	2.641	0.3786
653	63.8	2.651	0.3772
654	63.9	2.661	0.3758
655	64.0	2.671	0.3744
656	64.1	2.681	0.3730
657	64.2	2.691	0.3716
658	64.3	2.701	0.3702
659	64.4	2.712	0.3688
660	64.5	2.722	0.3674
661	64.6	2.732	0.3660
662	64.7	2.743	0.3646
663	64.8	2.753	0.3633
664	64.9	2.763	0.3619
665	65.0	2.774	0.3605
666	65.1	2.784	0.3592
667	65.2	2.795	0.3578
668	65.3	2.805	0.3565
669	65.4	2.816	0.3552
670	65.5	2.826	0.3538
671	65.6	2.837	0.3525
672	65.7	2.848	0.3512
673	65.8	2.858	0.3499
674	65.9	2.869	0.3486
675	66.0	2.880	0.3473
676	66.1	2.891	0.3460
677	66.2	2.901	0.3447
678	66.3	2.912	0.3434
679	66.4	2.923	0.3421
680	66.5	2.934	0.3408
681	66.6	2.945	0.3396
682	66.7	2.956	0.3383
683	66.8	2.967	0.3370
684	66.9	2.978	0.3358
685	67.0	2.989	0.3345
686	67.1	3.001	0.3333
687	67.2	3.012	0.3320
688	67.3	3.023	0.3308
689	67.4	3.034	0.3296
690	67.4	3.046	0.3283
691	67.5	3.057	0.3271
692	67.6	3.068	0.3259
693	67.7	3.080	0.3247
694	67.8	3.091	0.3235
695	67.9	3.103	0.3223
696	68.0	3.114	0.3211
697	68.1	3.126	0.3199
698	68.2	3.138	0.3187
699	68.3	3.149	0.3175
700	68.4	3.161	0.3164
701	68.5	3.173	0.3152
702	68.6	3.185	0.3140
703	68.7	3.196	0.3129
704	68.8	3.208	0.3117
705	68.9	3.220	0.3105
706	69.0	3.232	0.3094
707	69.1	3.244	0.3083
708	69.2	3.256	0.3071
709	69.3	3.268	0.3060
710	69.4	3.280	0.3049
711	69.5	3.292	0.3037
712	69.6	3.305	0.3026
713	69.7	3.317	0.3015
714	69.8	3.329	0.3004
715	69.9	3.341	0.2993
716	70.0	3.354	0.2982
717	70.1	3.366	0.2971
718	70.2	3.379	0.2960
719	70.3	3.391	0.2949
720	70.4	3.404	0.2938
721	70.5	3.416	0.2927
722	70.6	3.429	0.2916
723	70.7	3.441	0.2906
724	70.8	3.454	0.2895
725	70.9	3.467	0.2884
726	71.0	3.480	0.2874
727	71.1	3.492	0.2863
728	71.2	3.505	0.2853
729	71.3	3.518	0.2842
730	71.4	3.531	0.2832
731	71.5	3.544	0.2822
732	71.6	3.557	0.2811
733	71.7	3.570	0.2801
734	71.7	3.583	0.2791
735	71.8	3.597	0.2780
736	71.9	3.610	0.2770
737	72.0	3.623	0.2760
738	72.1	3.636	0.2750
739	72.2	3.650	0.2740
740	72.3	3.663	0.2730
741	72.4	3.677	0.2720
742	72.5	3.690	0.2710
743	72.6	3.704	0.2700
744	72.7	3.717	0.2690
745	72.8	3.731	0.2680
746	72.9	3.744	0.2671
747	73.0	3.758	0.2661
748	73.1	3.772	0.2651
749	73.2	3.786	0.2642
750	73.3	3.800	0.2632
751	73.4	3.813	0.2622
752	73.5	3.827	0.2613
753	73.6	3.841	0.2603
754	73.7	3.855	0.2594
755	73.8	3.869	0.2584
756	73.9	3.884	0.2575
757	74.0	3.898	0.2566
758	74.1	3.912	0.2556
759	74.2	3.926	0.2547
760	74.3	3.941	0.2538
761	74.4	3.955	0.2528
762	74.5	3.969	0.2519
763	74.6	3.984	0.2510
764	74.7	3.998	0.2501
765	74.8	4.013	0.2492
766	74.9	4.028	0.2483
767	75.0	4.042	0.2474

#	%	Hz	sec.
768	75.1	4.057	0.2465
769	75.2	4.072	0.2456
770	75.3	4.087	0.2447
771	75.4	4.101	0.2438
772	75.5	4.116	0.2429
773	75.6	4.131	0.2421
774	75.7	4.146	0.2412
775	75.8	4.161	0.2403
776	75.9	4.176	0.2394
777	76.0	4.192	0.2386
778	76.1	4.207	0.2377
779	76.1	4.222	0.2368
780	76.2	4.237	0.2360
781	76.3	4.253	0.2351
782	76.4	4.268	0.2343
783	76.5	4.284	0.2334
784	76.6	4.299	0.2326
785	76.7	4.315	0.2318
786	76.8	4.330	0.2309
787	76.9	4.346	0.2301
788	77.0	4.362	0.2293
789	77.1	4.378	0.2284
790	77.2	4.393	0.2276
791	77.3	4.409	0.2268
792	77.4	4.425	0.2260
793	77.5	4.441	0.2252
794	77.6	4.457	0.2243
795	77.7	4.473	0.2235
796	77.8	4.490	0.2227
797	77.9	4.506	0.2219
798	78.0	4.522	0.2211
799	78.1	4.538	0.2203
800	78.2	4.555	0.2195
801	78.3	4.571	0.2188
802	78.4	4.588	0.2180
803	78.5	4.604	0.2172
804	78.6	4.621	0.2164
805	78.7	4.638	0.2156
806	78.8	4.654	0.2149
807	78.9	4.671	0.2141
808	79.0	4.688	0.2133
809	79.1	4.705	0.2126
810	79.2	4.722	0.2118
811	79.3	4.739	0.2110
812	79.4	4.756	0.2103
813	79.5	4.773	0.2095
814	79.6	4.790	0.2088
815	79.7	4.807	0.2080
816	79.8	4.825	0.2073
817	79.9	4.842	0.2065
818	80.0	4.859	0.2058
819	80.1	4.877	0.2051
820	80.2	4.894	0.2043
821	80.3	4.912	0.2036
822	80.4	4.929	0.2029
823	80.4	4.947	0.2021
824	80.5	4.965	0.2014
825	80.6	4.983	0.2007
826	80.7	5.001	0.2000
827	80.8	5.019	0.1993
828	80.9	5.037	0.1985
829	81.0	5.055	0.1978
830	81.1	5.073	0.1971
831	81.2	5.091	0.1964
832	81.3	5.109	0.1957
833	81.4	5.127	0.1950
834	81.5	5.146	0.1943
835	81.6	5.164	0.1936
836	81.7	5.183	0.1930
837	81.8	5.201	0.1923
838	81.9	5.220	0.1916
839	82.0	5.239	0.1909
840	82.1	5.257	0.1902
841	82.2	5.276	0.1895
842	82.3	5.295	0.1889
843	82.4	5.314	0.1882
844	82.5	5.333	0.1875
845	82.6	5.352	0.1869
846	82.7	5.371	0.1862
847	82.8	5.390	0.1855
848	82.9	5.409	0.1849
849	83.0	5.429	0.1842
850	83.1	5.448	0.1836
851	83.2	5.468	0.1829
852	83.3	5.487	0.1822
853	83.4	5.507	0.1816
854	83.5	5.526	0.1810
855	83.6	5.546	0.1803
856	83.7	5.566	0.1797
857	83.8	5.586	0.1790
858	83.9	5.605	0.1784
859	84.0	5.625	0.1778
860	84.1	5.645	0.1771
861	84.2	5.666	0.1765
862	84.3	5.686	0.1759
863	84.4	5.706	0.1753
864	84.5	5.726	0.1746
865	84.6	5.747	0.1740
866	84.7	5.767	0.1734
867	84.8	5.788	0.1728
868	84.8	5.808	0.1722
869	84.9	5.829	0.1716
870	85.0	5.850	0.1710
871	85.1	5.870	0.1703
872	85.2	5.891	0.1697
873	85.3	5.912	0.1691
874	85.4	5.933	0.1685
875	85.5	5.954	0.1679
876	85.6	5.975	0.1674
877	85.7	5.997	0.1668
878	85.8	6.018	0.1662
879	85.9	6.039	0.1656
880	86.0	6.061	0.1650
881	86.1	6.082	0.1644
882	86.2	6.104	0.1638
883	86.3	6.125	0.1633
884	86.4	6.147	0.1627
885	86.5	6.169	0.1621
886	86.6	6.191	0.1615
887	86.7	6.213	0.1610
888	86.8	6.235	0.1604
889	86.9	6.257	0.1598
890	87.0	6.279	0.1593
891	87.1	6.301	0.1587
892	87.2	6.323	0.1581
893	87.3	6.346	0.1576
894	87.4	6.368	0.1570
895	87.5	6.391	0.1565
896	87.6	6.413	0.1559

#	%	Hz	sec.
897	87.7	6.436	0.1554
898	87.8	6.459	0.1548
899	87.9	6.482	0.1543
900	88.0	6.505	0.1537
901	88.1	6.528	0.1532
902	88.2	6.551	0.1527
903	88.3	6.574	0.1521
904	88.4	6.597	0.1516
905	88.5	6.620	0.1510
906	88.6	6.644	0.1505
907	88.7	6.667	0.1500
908	88.8	6.691	0.1495
909	88.9	6.714	0.1489
910	89.0	6.738	0.1484
911	89.1	6.762	0.1479
912	89.1	6.786	0.1474
913	89.2	6.810	0.1469
914	89.3	6.834	0.1463
915	89.4	6.858	0.1458
916	89.5	6.882	0.1453
917	89.6	6.906	0.1448
918	89.7	6.931	0.1443
919	89.8	6.955	0.1438
920	89.9	6.979	0.1433
921	90.0	7.004	0.1428
922	90.1	7.029	0.1423
923	90.2	7.053	0.1418
924	90.3	7.078	0.1413
925	90.4	7.103	0.1408
926	90.5	7.128	0.1403
927	90.6	7.153	0.1398
928	90.7	7.179	0.1393
929	90.8	7.204	0.1388
930	90.9	7.229	0.1383
931	91.0	7.255	0.1378
932	91.1	7.280	0.1374
933	91.2	7.306	0.1369
934	91.3	7.331	0.1364
935	91.4	7.357	0.1359
936	91.5	7.383	0.1354
937	91.6	7.409	0.1350
938	91.7	7.435	0.1345
939	91.8	7.461	0.1340
940	91.9	7.487	0.1336
941	92.0	7.514	0.1331
942	92.1	7.540	0.1326
943	92.2	7.566	0.1322
944	92.3	7.593	0.1317
945	92.4	7.620	0.1312
946	92.5	7.646	0.1308
947	92.6	7.673	0.1303
948	92.7	7.700	0.1299
949	92.8	7.727	0.1294
950	92.9	7.754	0.1290
951	93.0	7.781	0.1285
952	93.1	7.809	0.1281
953	93.2	7.836	0.1276
954	93.3	7.864	0.1272
955	93.4	7.891	0.1267
956	93.5	7.919	0.1263
957	93.5	7.947	0.1258
958	93.6	7.974	0.1254
959	93.7	8.002	0.1250
960	93.8	8.030	0.1245
961	93.9	8.058	0.1241
962	94.0	8.087	0.1237
963	94.1	8.115	0.1232
964	94.2	8.143	0.1228
965	94.3	8.172	0.1224
966	94.4	8.200	0.1219
967	94.5	8.229	0.1215
968	94.6	8.258	0.1211
969	94.7	8.287	0.1207
970	94.8	8.316	0.1203
971	94.9	8.345	0.1198
972	95.0	8.374	0.1194
973	95.1	8.403	0.1190
974	95.2	8.433	0.1186
975	95.3	8.462	0.1182
976	95.4	8.492	0.1178
977	95.5	8.521	0.1174
978	95.6	8.551	0.1169
979	95.7	8.581	0.1165
980	95.8	8.611	0.1161
981	95.9	8.641	0.1157
982	96.0	8.671	0.1153
983	96.1	8.702	0.1149
984	96.2	8.732	0.1145
985	96.3	8.763	0.1141
986	96.4	8.793	0.1137
987	96.5	8.824	0.1133
988	96.6	8.855	0.1129
999	97.7	9.200	0.1087
1000	97.8	9.232	0.1083
1001	97.8	9.264	0.1079
1002	97.9	9.297	0.1076
1003	98.0	9.329	0.1072
1004	98.1	9.362	0.1068
1005	98.2	9.394	0.1064
1006	98.3	9.427	0.1061
1007	98.4	9.460	0.1057
1008	98.5	9.493	0.1053
1009	98.6	9.526	0.1050
1010	98.7	9.559	0.1046
1011	98.8	9.592	0.1043
1012	98.9	9.625	0.1039
1013	99.0	9.659	0.1035
1014	99.1	9.692	0.1032
1015	99.2	9.726	0.1028
1016	99.3	9.760	0.1025
989	96.7	8.885	0.1125
990	96.8	8.916	0.1122
991	96.9	8.948	0.1118
992	97.0	8.979	0.1114
993	97.1	9.010	0.1110
994	97.2	9.041	0.1106
995	97.3	9.073	0.1102
996	97.4	9.105	0.1098
997	97.5	9.136	0.1095
998	97.6	9.168	0.1091
1017	99.4	9.794	0.1021
1018	99.5	9.828	0.1017
1019	99.6	9.862	0.1014
1020	99.7	9.896	0.1010
1021	99.8	9.931	0.1007
1022	99.9	9.965	0.1003
1023	100.0	10.00	0.1000

LFO depth lists

Oscillator LFO depth list

Depth	Waves span	
	Grid	Linear
1	0.63	0.07
2	1.26	0.14
3	1.89	0.21
4	2.52	0.28
5	3.15	0.35
6	3.78	0.42
7	4.41	0.49
8	5.04	0.56
9	5.67	0.63
10	6.30	0.70
11	6.93	0.77
12	7.56	0.84
13	8.19	0.91
14	8.82	0.98
15	9.45	1.05
16	10.08	1.12
17	10.71	1.19
18	11.34	1.26
19	11.97	1.33
20	12.60	1.40
21	13.23	1.47
22	13.86	1.54
23	14.49	1.61
24	15.12	1.68
25	15.75	1.75

Depth	Waves span	
	Grid	Linear
26	16.38	1.82
27	17.01	1.89
28	17.64	1.96
29	18.27	2.03
30	18.90	2.10
31	19.53	2.17
32	20.16	2.24
33	20.79	2.31
34	21.42	2.38
35	22.05	2.45
36	22.68	2.52
37	23.31	2.59
38	23.94	2.66
39	24.57	2.73
40	25.20	2.80
41	25.83	2.87
42	26.46	2.94
43	27.09	3.01
44	27.72	3.08
45	28.35	3.15
46	28.98	3.22
47	29.61	3.29
48	30.24	3.36
49	30.87	3.43
50	31.50	3.50

Depth	Waves span	
	Grid	Linear
51	32.13	3.57
52	32.76	3.64
53	33.39	3.71
54	34.02	3.78
55	34.65	3.85
56	35.28	3.92
57	35.91	3.99
58	36.54	4.06
59	37.17	4.13
60	37.80	4.20
61	38.43	4.27
62	39.06	4.34
63	39.69	4.41
64	40.32	4.48
65	40.95	4.55
66	41.58	4.62
67	42.21	4.69
68	42.84	4.76
69	43.47	4.83
70	44.10	4.90
71	44.73	4.97
72	45.36	5.04
73	45.99	5.11
74	46.62	5.18
75	47.25	5.25

Depth	Waves span	
	Grid	Linear
76	47.88	5.32
77	48.51	5.39
78	5.46	49.14
79	5.53	49.77
80	5.60	50.40
81	5.67	51.03
82	5.74	51.66
83	5.81	52.29
84	5.88	52.92
85	5.95	53.55
86	6.02	54.18
87	6.09	54.81
88	6.16	55.44
89	6.23	56.07
90	6.30	56.70
91	6.37	57.33
92	6.44	57.96
93	6.51	58.59
94	6.58	59.22
95	6.65	59.85
96	6.72	60.48
97	6.79	61.11
98	6.86	61.74
99	6.93	62.37
100	7.00	63.00

Shape LFO depth list

Depth	Waves span	
	Grid	Linear
0	0	0
1	0.01	0.12
2	0.03	0.25
3	0.04	0.37
4	0.05	0.49
5	0.07	0.62
6	0.08	0.74
7	0.10	0.86
8	0.11	0.99
9	0.12	1.11
10	0.14	1.23
11	0.15	1.36
12	0.16	1.48
13	0.18	1.60
14	0.19	1.73
15	0.21	1.85
16	0.22	1.97
17	0.23	2.10
18	0.25	2.22
19	0.26	2.34
20	0.27	2.47
21	0.29	2.59
22	0.30	2.71
23	0.32	2.84
24	0.33	2.96
25	0.34	3.08
26	0.36	3.21
27	0.37	3.33
28	0.38	3.45
29	0.40	3.58
30	0.41	3.70
31	0.42	3.82
32	0.44	3.95

Depth	Waves span	
	Grid	Linear
33	0.45	4.07
34	0.47	4.19
35	0.48	4.32
36	0.49	4.44
37	0.51	4.56
38	0.52	4.68
39	0.53	4.81
40	0.55	4.93
41	0.56	5.05
42	0.58	5.18
43	0.59	5.30
44	0.60	5.42
45	0.62	5.55
46	0.63	5.67
47	0.64	5.79
48	0.66	5.92
49	0.67	6.04
50	0.68	6.16
51	0.70	6.29
52	0.71	6.41
53	0.73	6.53
54	0.74	6.66
55	0.75	6.78
56	0.77	6.90
57	0.78	7.03
58	0.79	7.15
59	0.81	7.27
60	0.82	7.40
61	0.84	7.52
62	0.85	7.64
63	0.86	7.77
64	0.88	7.89
65	0.89	8.01

Depth	Waves span	
	Grid	Linear
66	0.90	8.14
67	0.92	8.26
68	0.93	8.38
69	0.95	8.51
70	0.96	8.63
71	0.97	8.75
72	0.99	8.88
73	1.00	9.00
74	1.01	9.12
75	1.03	9.25
76	1.04	9.37
77	1.05	9.49
78	1.07	9.62
79	1.08	9.74
80	1.10	9.86
81	1.11	9.99
82	1.12	10.11
83	1.14	10.23
84	1.15	10.36
85	1.16	10.48
86	1.18	10.60
87	1.19	10.73
88	1.21	10.85
89	1.22	10.97
90	1.23	11.10
91	1.25	11.22
92	1.26	11.34
93	1.27	11.47
94	1.29	11.59
95	1.30	11.71
96	1.32	11.84
97	1.33	11.96
98	1.34	12.08

Depth	Waves span	
	Grid	Linear
99	1.36	12.21
100	1.37	12.33
101	1.38	12.45
102	1.40	12.58
103	1.41	12.70
104	1.42	12.82
105	1.44	12.95
106	1.45	13.07
107	1.47	13.19
108	1.48	13.32
109	1.49	13.44
110	1.51	13.56
111	1.52	13.68
112	1.53	13.81
113	1.55	13.93
114	1.56	14.05
115	1.58	14.18
116	1.59	14.30
117	1.60	14.42
118	1.62	14.55
119	1.63	14.67
120	1.64	14.79
121	1.66	14.92
122	1.67	15.04
123	1.68	15.16
124	1.70	15.29
125	1.71	15.41
126	1.73	15.53
127	1.74	15.66
128	1.75	15.78
129	1.77	15.90
130	1.78	16.03
131	1.79	16.15

Depth	Waves span	
	Grid	Linear
132	1.81	16.27
133	1.82	16.40
134	1.84	16.52
135	1.85	16.64
136	1.86	16.77
137	1.88	16.89
138	1.89	17.01
139	1.90	17.14
140	1.92	17.26
141	1.93	17.38
142	1.95	17.51
143	1.96	17.63
144	1.97	17.75
145	1.99	17.88
146	2.00	18.00
147	2.01	18.12
148	2.03	18.25
149	2.04	18.37
150	2.05	18.49
151	2.07	18.62
152	2.08	18.74
153	2.10	18.86
154	2.11	18.99
155	2.12	19.11
156	2.14	19.23
157	2.15	19.36
158	2.16	19.48
159	2.18	19.60
160	2.19	19.73
161	2.21	19.85
162	2.22	19.97
163	2.23	20.10
164	2.25	20.22
165	2.26	20.34
166	2.27	20.47

Depth	Waves span	
	Grid	Linear
167	2.29	20.59
168	2.30	20.71
169	2.32	20.84
170	2.33	20.96
171	2.34	21.08
172	2.36	21.21
173	2.37	21.33
174	2.38	21.45
175	2.40	21.58
176	2.41	21.70
177	2.42	21.82
178	2.44	21.95
179	2.45	22.07
180	2.47	22.19
181	2.48	22.32
182	2.49	22.44
183	2.51	22.56
184	2.52	22.68
185	2.53	22.81
186	2.55	22.93
187	2.56	23.05
188	2.58	23.18
189	2.59	23.30
190	2.60	23.42
191	2.62	23.55
192	2.63	23.67
193	2.64	23.79
194	2.66	23.92
195	2.67	24.04
196	2.68	24.16
197	2.70	24.29
198	2.71	24.41
199	2.73	24.53
200	2.74	24.66
201	2.75	24.78

Depth	Waves span	
	Grid	Linear
202	2.77	24.90
203	2.78	25.03
204	2.79	25.15
205	2.81	25.27
206	2.82	25.40
207	2.84	25.52
208	2.85	25.64
209	2.86	25.77
210	2.88	25.89
211	2.89	26.01
212	2.90	26.14
213	2.92	26.26
214	2.93	26.38
215	2.95	26.51
216	2.96	26.63
217	2.97	26.75
218	2.99	26.88
219	3.00	27.00
220	3.01	27.12
221	3.03	27.25
222	3.04	27.37
223	3.05	27.49
224	3.07	27.62
225	3.08	27.74
226	3.10	27.86
227	3.11	27.99
228	3.12	28.11
229	3.14	28.23
230	3.15	28.36
231	3.16	28.48
232	3.18	28.60
233	3.19	28.73
234	3.21	28.85
235	3.22	28.97
236	3.23	29.10

Depth	Waves span	
	Grid	Linear
237	3.25	29.22
238	3.26	29.34
239	3.27	29.47
240	3.29	29.59
241	3.30	29.71
242	3.32	29.84
243	3.33	29.96
244	3.34	30.08
245	3.36	30.21
246	3.37	30.33
247	3.38	30.45
248	3.40	30.58
249	3.41	30.70
250	3.42	30.82
251	3.44	30.95
252	3.45	31.07
253	3.47	31.19
254	3.48	31.32
255	3.49	31.44
256	3.51	31.56
257	3.52	31.68
258	3.53	31.81
259	3.55	31.93
260	3.56	32.05
261	3.58	32.18
262	3.59	32.30
263	3.60	32.42
264	3.62	32.55
265	3.63	32.67
266	3.64	32.79
267	3.66	32.92
268	3.67	33.04
269	3.68	33.16
270	3.70	33.29
271	3.71	33.41

Depth	Waves span	
	Grid	Linear
272	3.73	33.53
273	3.74	33.66
274	3.75	33.78
275	3.77	33.90
276	3.78	34.03
277	3.79	34.15
278	3.81	34.27
279	3.82	34.40
280	3.84	34.52
281	3.85	34.64
282	3.86	34.77
283	3.88	34.89
284	3.89	35.01
285	3.90	35.14
286	3.92	35.26
287	3.93	35.38
288	3.95	35.51
289	3.96	35.63
290	3.97	35.75
291	3.99	35.88
292	4.00	36.00
293	4.01	36.12
294	4.03	36.25
295	4.04	36.37
296	4.05	36.49
297	4.07	36.62
298	4.08	36.74
299	4.10	36.86
300	4.11	36.99
301	4.12	37.11
302	4.14	37.23
303	4.15	37.36
304	4.16	37.48
305	4.18	37.60
306	4.19	37.73

Depth	Waves span	
	Grid	Linear
307	4.21	37.85
308	4.22	37.97
309	4.23	38.10
310	4.25	38.22
311	4.26	38.34
312	4.27	38.47
313	4.29	38.59
314	4.30	38.71
315	4.32	38.84
316	4.33	38.96
317	4.34	39.08
318	4.36	39.21
319	4.37	39.33
320	4.38	39.45
321	4.40	39.58
322	4.41	39.70
323	4.42	39.82
324	4.44	39.95
325	4.45	40.07
326	4.47	40.19
327	4.48	40.32
328	4.49	40.44
329	4.51	40.56
330	4.52	40.68
331	4.53	40.81
332	4.55	40.93
333	4.56	41.05
334	4.58	41.18
335	4.59	41.30
336	4.60	41.42
337	4.62	41.55
338	4.63	41.67
339	4.64	41.79
340	4.66	41.92
341	4.67	42.04

Depth	Waves span	
	Grid	Linear
342	4.68	42.16
343	4.70	42.29
344	4.71	42.41
345	4.73	42.53
346	4.74	42.66
347	4.75	42.78
348	4.77	42.90
349	4.78	43.03
350	4.79	43.15
351	4.81	43.27
352	4.82	43.40
353	4.84	43.52
354	4.85	43.64
355	4.86	43.77
356	4.88	43.89
357	4.89	44.01
358	4.90	44.14
359	4.92	44.26
360	4.93	44.38
361	4.95	44.51
362	4.96	44.63
363	4.97	44.75
364	4.99	44.88
365	5.00	45.00
366	5.01	45.12
367	5.03	45.25
368	5.04	45.37
369	5.05	45.49
370	5.07	45.62
371	5.08	45.74
372	5.10	45.86
373	5.11	45.99
374	5.12	46.11
375	5.14	46.23
376	5.15	46.36

Depth	Waves span	
	Grid	Linear
377	5.16	46.48
378	5.18	46.60
379	5.19	46.73
380	5.21	46.85
381	5.22	46.97
382	5.23	47.10
383	5.25	47.22
384	5.26	47.34
385	5.27	47.47
386	5.29	47.59
387	5.30	47.71
388	5.32	47.84
389	5.33	47.96
390	5.34	48.08
391	5.36	48.21
392	5.37	48.33
393	5.38	48.45
394	5.40	48.58
395	5.41	48.70
396	5.42	48.82
397	5.44	48.95
398	5.45	49.07
399	5.47	49.19
400	5.48	49.32
401	5.49	49.44
402	5.51	49.56
403	5.52	49.68
404	5.53	49.81
405	5.55	49.93
406	5.56	50.05
407	5.58	50.18
408	5.59	50.30
409	5.60	50.42
410	5.62	50.55
411	5.63	50.67

Depth	Waves span	
	Grid	Linear
412	5.64	50.79
413	5.66	50.92
414	5.67	51.04
415	5.68	51.16
416	5.70	51.29
417	5.71	51.41
418	5.73	51.53
419	5.74	51.66
420	5.75	51.78
421	5.77	51.90
422	5.78	52.03
423	5.79	52.15
424	5.81	52.27
425	5.82	52.40
426	5.84	52.52
427	5.85	52.64
428	5.86	52.77
429	5.88	52.89
430	5.89	53.01
431	5.90	53.14
432	5.92	53.26
433	5.93	53.38
434	5.95	53.51
435	5.96	53.63
436	5.97	53.75

Depth	Waves span	
	Grid	Linear
437	5.99	53.88
438	6.00	54.00
439	6.01	54.12
440	6.03	54.25
441	6.04	54.37
442	6.05	54.49
443	6.07	54.62
444	6.08	54.74
445	6.10	54.86
446	6.11	54.99
447	6.12	55.11
448	6.14	55.23
449	6.15	55.36
450	6.16	55.48
451	6.18	55.60
452	6.19	55.73
453	6.21	55.85
454	6.22	55.97
455	6.23	56.10
456	6.25	56.22
457	6.26	56.34
458	6.27	56.47
459	6.29	56.59
460	6.30	56.71
461	6.32	56.84

Depth	Waves span	
	Grid	Linear
462	6.33	56.96
463	6.34	57.08
464	6.36	57.21
465	6.37	57.33
466	6.38	57.45
467	6.40	57.58
468	6.41	57.70
469	6.42	57.82
470	6.44	57.95
471	6.45	58.07
472	6.47	58.19
473	6.48	58.32
474	6.49	58.44
475	6.51	58.56
476	6.52	58.68
477	6.53	58.81
478	6.55	58.93
479	6.56	59.05
480	6.58	59.18
481	6.59	59.30
482	6.60	59.42
483	6.62	59.55
484	6.63	59.67
485	6.64	59.79
486	6.66	59.92

Depth	Waves span	
	Grid	Linear
487	6.67	60.04
488	6.68	60.16
489	6.70	60.29
490	6.71	60.41
491	6.73	60.53
492	6.74	60.66
493	6.75	60.78
494	6.77	60.90
495	6.78	61.03
496	6.79	61.15
497	6.81	61.27
498	6.82	61.40
499	6.84	61.52
500	6.85	61.64
501	6.86	61.77
502	6.88	61.89
503	6.89	62.01
504	6.90	62.14
505	6.92	62.26
506	6.93	62.38
507	6.95	62.51
508	6.96	62.63
509	6.97	62.75
510	6.99	62.88
511	7.00	63.00

Waveform position list

#	%	Grid	Linear
0	0.0	0	0
1	0.1	0.007	0.06
2	0.2	0.014	0.12
3	0.3	0.021	0.18
4	0.4	0.027	0.25
5	0.5	0.034	0.31
6	0.6	0.041	0.37
7	0.7	0.048	0.43
8	0.8	0.055	0.49
9	0.9	0.062	0.55
10	1.0	0.068	0.62
11	1.1	0.075	0.68
12	1.2	0.082	0.74
13	1.3	0.089	0.80
14	1.4	0.096	0.86
15	1.5	0.103	0.92
16	1.6	0.109	0.99
17	1.7	0.116	1.05
18	1.8	0.123	1.11
19	1.9	0.130	1.17
20	2.0	0.137	1.23
21	2.1	0.144	1.29
22	2.2	0.151	1.35
23	2.2	0.157	1.42
24	2.3	0.164	1.48
25	2.4	0.171	1.54
26	2.5	0.178	1.60
27	2.6	0.185	1.66
28	2.7	0.192	1.72
29	2.8	0.198	1.79
30	2.9	0.205	1.85
31	3.0	0.212	1.91
32	3.1	0.219	1.97
33	3.2	0.226	2.03
34	3.3	0.233	2.09
35	3.4	0.239	2.16
36	3.5	0.246	2.22
37	3.6	0.253	2.28
38	3.7	0.260	2.34
39	3.8	0.267	2.40
40	3.9	0.274	2.46
41	4.0	0.281	2.52
42	4.1	0.287	2.59
43	4.2	0.294	2.65
44	4.3	0.301	2.71
45	4.4	0.308	2.77
46	4.5	0.315	2.83
47	4.6	0.322	2.89
48	4.7	0.328	2.96
49	4.8	0.335	3.02
50	4.9	0.342	3.08
51	5.0	0.349	3.14
52	5.1	0.356	3.20
53	5.2	0.363	3.26
54	5.3	0.370	3.33
55	5.4	0.376	3.39
56	5.5	0.383	3.45
57	5.6	0.390	3.51
58	5.7	0.397	3.57
59	5.8	0.404	3.63
60	5.9	0.411	3.70
61	6.0	0.417	3.76
62	6.1	0.424	3.82
63	6.2	0.431	3.88
64	6.3	0.438	3.94
65	6.4	0.445	4.00
66	6.5	0.452	4.06
67	6.5	0.458	4.13
68	6.6	0.465	4.19
69	6.7	0.472	4.25
70	6.8	0.479	4.31
71	6.9	0.486	4.37
72	7.0	0.493	4.43
73	7.1	0.500	4.50
74	7.2	0.506	4.56
75	7.3	0.513	4.62
76	7.4	0.520	4.68
77	7.5	0.527	4.74
78	7.6	0.534	4.80
79	7.7	0.541	4.87
80	7.7	0.547	4.93
81	7.9	0.554	4.99
82	8.0	0.561	5.05
83	8.1	0.568	5.11
84	8.2	0.575	5.17
85	8.3	0.582	5.23
86	8.4	0.588	5.30
87	8.5	0.595	5.36
88	8.6	0.602	5.42
89	8.7	0.609	5.48
90	8.8	0.616	5.54
91	8.9	0.623	5.60
92	9.0	0.630	5.67
93	9.1	0.636	5.73
94	9.2	0.643	5.79
95	9.3	0.650	5.85
96	9.4	0.657	5.91
97	9.5	0.664	5.97
98	9.6	0.671	6.04
99	9.7	0.677	6.10
100	9.8	0.684	6.16
101	9.9	0.691	6.22
102	10.0	0.698	6.28
103	10.1	0.705	6.34
104	10.2	0.712	6.40
105	10.3	0.718	6.47
106	10.4	0.725	6.53
107	10.5	0.732	6.59
108	10.6	0.739	6.65
109	10.7	0.746	6.71
110	10.8	0.753	6.77
111	10.9	0.760	6.84
112	10.9	0.766	6.90
113	11.0	0.773	6.96
114	11.1	0.780	7.02
115	11.2	0.787	7.08
116	11.3	0.794	7.14
117	11.4	0.801	7.21
118	11.5	0.807	7.27
119	11.6	0.814	7.33
120	11.7	0.821	7.39
121	11.8	0.828	7.45
122	11.9	0.835	7.51

#	%	Grid	Linear
123	12.0	0.842	7.57
124	12.1	0.848	7.64
125	12.2	0.855	7.70
126	12.3	0.862	7.76
127	12.4	0.869	7.82
128	12.5	0.876	7.88
129	12.6	0.883	7.94
130	12.7	0.890	8.01
131	12.8	0.896	8.07
132	12.9	0.903	8.13
133	13.0	0.910	8.19
134	13.1	0.917	8.25
135	13.2	0.924	8.31
136	13.3	0.931	8.38
137	13.4	0.937	8.44
138	13.5	0.944	8.50
139	13.6	0.951	8.56
140	13.7	0.958	8.62
141	13.8	0.965	8.68
142	13.9	0.972	8.74
143	14.0	0.978	8.81
144	14.1	0.985	8.87
145	14.2	0.992	8.93
146	14.3	0.999	8.99
147	14.4	1.006	9.05
148	14.5	1.013	9.11
149	14.6	1.020	9.18
150	14.7	1.026	9.24
151	14.8	1.033	9.30
152	14.9	1.040	9.36
153	15.0	1.047	9.42
154	15.1	1.054	9.48
155	15.2	1.061	9.55
156	15.2	1.067	9.61
157	15.3	1.074	9.67
158	15.4	1.081	9.73
159	15.5	1.088	9.79
160	15.6	1.095	9.85
161	15.7	1.102	9.91
162	15.8	1.109	9.98
163	15.9	1.115	10.04
164	16.0	1.122	10.10
165	16.1	1.129	10.16
166	16.2	1.136	10.22
167	16.3	1.143	10.28
168	16.4	1.150	10.35
169	16.5	1.156	10.41
170	16.6	1.163	10.47
171	16.7	1.170	10.53
172	16.8	1.177	10.59
173	16.9	1.184	10.65
174	17.0	1.191	10.72
175	17.1	1.197	10.78
176	17.2	1.204	10.84
177	17.3	1.211	10.90
178	17.4	1.218	10.96
179	17.5	1.225	11.02
180	17.6	1.232	11.09
181	17.7	1.239	11.15
182	17.8	1.245	11.21
183	17.9	1.252	11.27
184	18.0	1.259	11.33
185	18.1	1.266	11.39
186	18.2	1.273	11.45
187	18.3	1.280	11.52
188	18.4	1.286	11.58
189	18.5	1.293	11.64
190	18.6	1.300	11.70
191	18.7	1.307	11.76
192	18.8	1.314	11.82
193	18.9	1.321	11.89
194	19.0	1.327	11.95
195	19.1	1.334	12.01
196	19.2	1.341	12.07
197	19.3	1.348	12.13
198	19.4	1.355	12.19
199	19.5	1.362	12.26
200	19.6	1.369	12.32
201	19.6	1.375	12.38
202	19.7	1.382	12.44
203	19.8	1.389	12.50
204	19.9	1.396	12.56
205	20.0	1.403	12.62
206	20.1	1.410	12.69
207	20.2	1.416	12.75
208	20.3	1.423	12.81
209	20.4	1.430	12.87
210	20.5	1.437	12.93
211	20.6	1.444	12.99
212	20.7	1.451	13.06
213	20.8	1.457	13.12
214	20.9	1.464	13.18
215	21.0	1.471	13.24
216	21.1	1.478	13.30
217	21.2	1.485	13.36
218	21.3	1.492	13.43
219	21.4	1.499	13.49
220	21.5	1.505	13.55
221	21.6	1.512	13.61
222	21.7	1.519	13.67
223	21.8	1.526	13.73
224	21.9	1.533	13.79
225	22.0	1.540	13.86
226	22.1	1.546	13.92
227	22.2	1.553	13.98
228	22.3	1.560	14.04
229	22.4	1.567	14.10
230	22.5	1.574	14.16
231	22.6	1.581	14.23
232	22.7	1.587	14.29
233	22.8	1.594	14.35
234	22.9	1.601	14.41
235	23.0	1.608	14.47
236	23.1	1.615	14.53
237	23.2	1.622	14.60
238	23.3	1.629	14.66
239	23.4	1.635	14.72
240	23.5	1.642	14.78
241	23.6	1.649	14.84
242	23.7	1.656	14.90
243	23.8	1.663	14.96
244	23.9	1.670	15.03
245	23.9	1.676	15.09
246	24.0	1.683	15.15
247	24.1	1.690	15.21
248	24.2	1.697	15.27
249	24.3	1.704	15.33
250	24.4	1.711	15.40
251	24.5	1.717	15.46

#	%	Grid	Linear
252	24.6	1.724	15.52
253	24.7	1.731	15.58
254	24.8	1.738	15.64
255	24.9	1.745	15.70
256	25.0	1.752	15.77
257	25.1	1.759	15.83
258	25.2	1.765	15.89
259	25.3	1.772	15.95
260	25.4	1.779	16.01
261	25.5	1.786	16.07
262	25.6	1.793	16.13
263	25.7	1.800	16.20
264	25.8	1.806	16.26
265	25.9	1.813	16.32
266	26.0	1.820	16.38
267	26.1	1.827	16.44
268	26.2	1.834	16.50
269	26.3	1.841	16.57
270	26.4	1.848	16.63
271	26.5	1.854	16.69
272	26.6	1.861	16.75
273	26.7	1.868	16.81
274	26.8	1.875	16.87
275	26.9	1.882	16.94
276	27.0	1.889	17.00
277	27.1	1.895	17.06
278	27.2	1.902	17.12
279	27.3	1.909	17.18
280	27.4	1.916	17.24
281	27.5	1.923	17.30
282	27.6	1.930	17.37
283	27.7	1.936	17.43
284	27.8	1.943	17.49
285	27.9	1.950	17.55
286	28.0	1.957	17.61
287	28.1	1.964	17.67
288	28.2	1.971	17.74
289	28.3	1.978	17.80
290	28.3	1.984	17.86
291	28.4	1.991	17.92
292	28.5	1.998	17.98
293	28.6	2.005	18.04
294	28.7	2.012	18.11
295	28.8	2.019	18.17
296	28.9	2.025	18.23
297	29.0	2.032	18.29
298	29.1	2.039	18.35
299	29.2	2.046	18.41
300	29.3	2.053	18.48
301	29.4	2.060	18.54
302	29.5	2.066	18.60
303	29.6	2.073	18.66
304	29.7	2.080	18.72
305	29.8	2.087	18.78
306	29.9	2.094	18.84
307	30.0	2.101	18.91
308	30.1	2.108	18.97
309	30.2	2.114	19.03
310	30.3	2.121	19.09
311	30.4	2.128	19.15
312	30.5	2.135	19.21
313	30.6	2.142	19.28
314	30.7	2.149	19.34
315	30.8	2.155	19.40
316	30.9	2.162	19.46
317	31.0	2.169	19.52
318	31.1	2.176	19.58
319	31.2	2.183	19.65
320	31.3	2.190	19.71
321	31.4	2.196	19.77
322	31.5	2.203	19.83
323	31.6	2.210	19.89
324	31.7	2.217	19.95
325	31.8	2.224	20.01
326	31.9	2.231	20.08
327	32.0	2.238	20.14
328	32.1	2.244	20.20
329	32.2	2.251	20.26
330	32.3	2.258	20.32
331	32.4	2.265	20.38
332	32.5	2.272	20.45
333	32.6	2.279	20.51
334	32.6	2.285	20.57
335	32.7	2.292	20.63
336	32.8	2.299	20.69
337	32.9	2.306	20.75
338	33.0	2.313	20.82
339	33.1	2.320	20.88
340	33.2	2.326	20.94
341	33.3	2.333	21.00
342	33.4	2.340	21.06
343	33.5	2.347	21.12
344	33.6	2.354	21.18
345	33.7	2.361	21.25
346	33.8	2.368	21.31
347	33.9	2.374	21.37
348	34.0	2.381	21.43
349	34.1	2.388	21.49
350	34.2	2.395	21.55
351	34.3	2.402	21.62
352	34.4	2.409	21.68
353	34.5	2.415	21.74
354	34.6	2.422	21.80
355	34.7	2.429	21.86
356	34.8	2.436	21.92
357	34.9	2.443	21.99
358	35.0	2.450	22.05
359	35.1	2.457	22.11
360	35.2	2.463	22.17
361	35.3	2.470	22.23
362	35.4	2.477	22.29
363	35.5	2.484	22.35
364	35.6	2.491	22.42
365	35.7	2.498	22.48
366	35.8	2.504	22.54
367	35.9	2.511	22.60
368	36.0	2.518	22.66
369	36.1	2.525	22.72
370	36.2	2.532	22.79
371	36.3	2.539	22.85
372	36.4	2.545	22.91
373	36.5	2.552	22.97
374	36.6	2.559	23.03
375	36.7	2.566	23.09
376	36.8	2.573	23.16
377	36.9	2.580	23.22
378	37.0	2.587	23.28
379	37.0	2.593	23.34
380	37.1	2.600	23.40

#	%	Grid	Linear
381	37.2	2.607	23.46
382	37.3	2.614	23.52
383	37.4	2.621	23.59
384	37.5	2.628	23.65
385	37.6	2.634	23.71
386	37.7	2.641	23.77
387	37.8	2.648	23.83
388	37.9	2.655	23.89
389	38.0	2.662	23.96
390	38.1	2.669	24.02
391	38.2	2.675	24.08
392	38.3	2.682	24.14
393	38.4	2.689	24.20
394	38.5	2.696	24.26
395	38.6	2.703	24.33
396	38.7	2.710	24.39
397	38.8	2.717	24.45
398	38.9	2.723	24.51
399	39.0	2.730	24.57
400	39.1	2.737	24.63
401	39.2	2.744	24.70
402	39.3	2.751	24.76
403	39.4	2.758	24.82
404	39.5	2.764	24.88
405	39.6	2.771	24.94
406	39.7	2.778	25.00
407	39.8	2.785	25.06
408	39.9	2.792	25.13
409	40.0	2.799	25.19
410	40.1	2.805	25.25
411	40.2	2.812	25.31
412	40.3	2.819	25.37
413	40.4	2.826	25.43
414	40.5	2.833	25.50
415	40.6	2.840	25.56
416	40.7	2.847	25.62
417	40.8	2.853	25.68
418	40.9	2.860	25.74
419	41.0	2.867	25.80
420	41.1	2.874	25.87
421	41.2	2.881	25.93
422	41.3	2.888	25.99
423	41.3	2.894	26.05
424	41.4	2.901	26.11
425	41.5	2.908	26.17
426	41.6	2.915	26.23
427	41.7	2.922	26.30
428	41.8	2.929	26.36
429	41.9	2.935	26.42
430	42.0	2.942	26.48
431	42.1	2.949	26.54
432	42.2	2.956	26.60
433	42.3	2.963	26.67
434	42.4	2.970	26.73
435	42.5	2.977	26.79
436	42.6	2.983	26.85
437	42.7	2.990	26.91
438	42.8	2.997	26.97
439	42.9	3.004	27.04
440	43.0	3.011	27.10
441	43.1	3.018	27.16
442	43.2	3.024	27.22
443	43.3	3.031	27.28
444	43.4	3.038	27.34
445	43.5	3.045	27.40
446	43.6	3.052	27.47
447	43.7	3.059	27.53
448	43.8	3.065	27.59
449	43.9	3.072	27.65
450	44.0	3.079	27.71
451	44.1	3.086	27.77
452	44.2	3.093	27.84
453	44.3	3.100	27.90
454	44.4	3.107	27.96
455	44.5	3.113	28.02
456	44.6	3.120	28.08
457	44.7	3.127	28.14
458	44.8	3.134	28.21
459	44.9	3.141	28.27
460	45.0	3.148	28.33
461	45.1	3.154	28.39
462	45.2	3.161	28.45
463	45.3	3.168	28.51
464	45.4	3.175	28.57
465	45.5	3.182	28.64
466	45.6	3.189	28.70
467	45.7	3.196	28.76
468	45.7	3.202	28.82
469	45.8	3.209	28.88
470	45.9	3.216	28.94
471	46.0	3.223	29.01
472	46.1	3.230	29.07
473	46.2	3.237	29.13
474	46.3	3.243	29.19
475	46.4	3.250	29.25
476	46.5	3.257	29.31
477	46.6	3.264	29.38
478	46.7	3.271	29.44
479	46.8	3.278	29.50
480	46.9	3.284	29.56
481	47.0	3.291	29.62
482	47.1	3.298	29.68
483	47.2	3.305	29.74
484	47.3	3.312	29.81
485	47.4	3.319	29.87
486	47.5	3.326	29.93
487	47.6	3.332	29.99
488	47.7	3.339	30.05
489	47.8	3.346	30.11
490	47.9	3.353	30.18
491	48.0	3.360	30.24
492	48.1	3.367	30.30
493	48.2	3.373	30.36
494	48.3	3.380	30.42
495	48.4	3.387	30.48
496	48.5	3.394	30.55
497	48.6	3.401	30.61
498	48.7	3.408	30.67
499	48.8	3.414	30.73
500	48.9	3.421	30.79
501	49.0	3.428	30.85
502	49.1	3.435	30.91
503	49.2	3.442	30.98
504	49.3	3.449	31.04
505	49.4	3.456	31.10
506	49.5	3.462	31.16
507	49.6	3.469	31.22
508	49.7	3.476	31.28
509	49.8	3.483	31.35

#	%	Grid	Linear
510	49.9	3.490	31.41
511	50.0	3.497	31.47
512	50.0	3.503	31.53
513	50.1	3.510	31.59
514	50.2	3.517	31.65
515	50.3	3.524	31.72
516	50.4	3.531	31.78
517	50.5	3.538	31.84
518	50.6	3.544	31.90
519	50.7	3.551	31.96
520	50.8	3.558	32.02
521	50.9	3.565	32.09
522	51.0	3.572	32.15
523	51.1	3.579	32.21
524	51.2	3.586	32.27
525	51.3	3.592	32.33
526	51.4	3.599	32.39
527	51.5	3.606	32.45
528	51.6	3.613	32.52
529	51.7	3.620	32.58
530	51.8	3.627	32.64
531	51.9	3.633	32.70
532	52.0	3.640	32.76
533	52.1	3.647	32.82
534	52.2	3.654	32.89
535	52.3	3.661	32.95
536	52.4	3.668	33.01
537	52.5	3.674	33.07
538	52.6	3.681	33.13
539	52.7	3.688	33.19
540	52.8	3.695	33.26
541	52.9	3.702	33.32
542	53.0	3.709	33.38
543	53.1	3.716	33.44
544	53.2	3.722	33.50
545	53.3	3.729	33.56
546	53.4	3.736	33.62
547	53.5	3.743	33.69
548	53.6	3.750	33.75
549	53.7	3.757	33.81
550	53.8	3.763	33.87
551	53.9	3.770	33.93
552	54.0	3.777	33.99
553	54.1	3.784	34.06
554	54.2	3.791	34.12
555	54.3	3.798	34.18
556	54.3	3.804	34.24
557	54.4	3.811	34.30
558	54.5	3.818	34.36
559	54.6	3.825	34.43
560	54.7	3.832	34.49
561	54.8	3.839	34.55
562	54.9	3.846	34.61
563	55.0	3.852	34.67
564	55.1	3.859	34.73
565	55.2	3.866	34.79
566	55.3	3.873	34.86
567	55.4	3.880	34.92
568	55.5	3.887	34.98
569	55.6	3.893	35.04
570	55.7	3.900	35.10
571	55.8	3.907	35.16
572	55.9	3.914	35.23
573	56.0	3.921	35.29
574	56.1	3.928	35.35
575	56.2	3.935	35.41
576	56.3	3.941	35.47
577	56.4	3.948	35.53
578	56.5	3.955	35.60
579	56.6	3.962	35.66
580	56.7	3.969	35.72
581	56.8	3.976	35.78
582	56.9	3.982	35.84
583	57.0	3.989	35.90
584	57.1	3.996	35.96
585	57.2	4.003	36.03
586	57.3	4.010	36.09
587	57.4	4.017	36.15
588	57.5	4.023	36.21
589	57.6	4.030	36.27
590	57.7	4.037	36.33
591	57.8	4.044	36.40
592	57.9	4.051	36.46
593	58.0	4.058	36.52
594	58.1	4.065	36.58
595	58.2	4.071	36.64
596	58.3	4.078	36.70
597	58.4	4.085	36.77
598	58.5	4.092	36.83
599	58.6	4.099	36.89
600	58.7	4.106	36.95
601	58.7	4.112	37.01
602	58.8	4.119	37.07
603	58.9	4.126	37.13
604	59.0	4.133	37.20
605	59.1	4.140	37.26
606	59.2	4.147	37.32
607	59.3	4.153	37.38
608	59.4	4.160	37.44
609	59.5	4.167	37.50
610	59.6	4.174	37.57
611	59.7	4.181	37.63
612	59.8	4.188	37.69
613	59.9	4.195	37.75
614	60.0	4.201	37.81
615	60.1	4.208	37.87
616	60.2	4.215	37.94
617	60.3	4.222	38.00
618	60.4	4.229	38.06
619	60.5	4.236	38.12
620	60.6	4.242	38.18
621	60.7	4.249	38.24
622	60.8	4.256	38.30
623	60.9	4.263	38.37
624	61.0	4.270	38.43
625	61.1	4.277	38.49
626	61.2	4.283	38.55
627	61.3	4.290	38.61
628	61.4	4.297	38.67
629	61.5	4.304	38.74
630	61.6	4.311	38.80
631	61.7	4.318	38.86
632	61.8	4.325	38.92
633	61.9	4.331	38.98
634	62.0	4.338	39.04
635	62.1	4.345	39.11
636	62.2	4.352	39.17
637	62.3	4.359	39.23
638	62.4	4.366	39.29

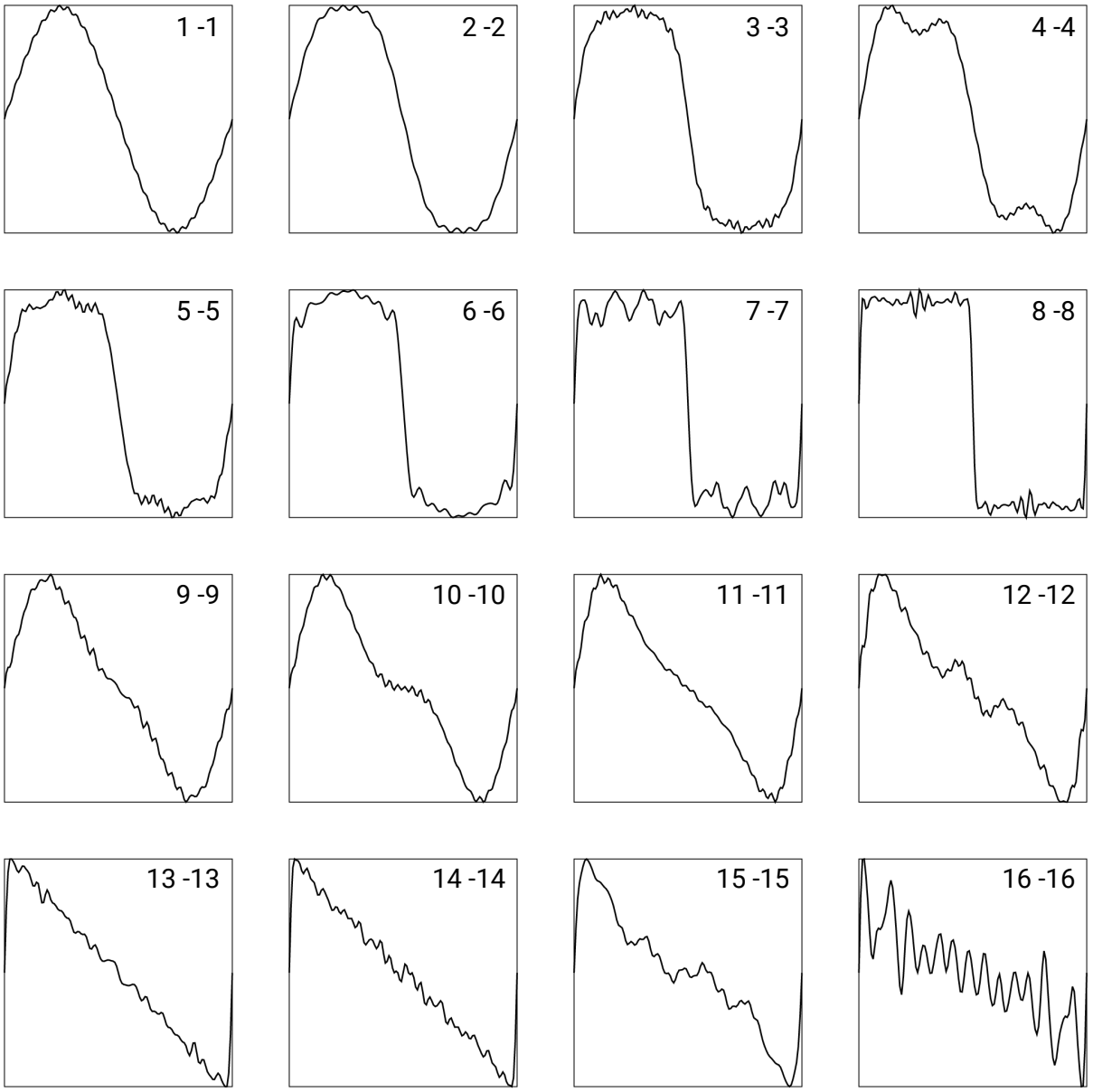
#	%	Grid	Linear
639	62.5	4.372	39.35
640	62.6	4.379	39.41
641	62.7	4.386	39.48
642	62.8	4.393	39.54
643	62.9	4.400	39.60
644	63.0	4.407	39.66
645	63.0	4.413	39.72
646	63.1	4.420	39.78
647	63.2	4.427	39.84
648	63.3	4.434	39.91
649	63.4	4.441	39.97
650	63.5	4.448	40.03
651	63.6	4.455	40.09
652	63.7	4.461	40.15
653	63.8	4.468	40.21
654	63.9	4.475	40.28
655	64.0	4.482	40.34
656	64.1	4.489	40.40
657	64.2	4.496	40.46
658	64.3	4.502	40.52
659	64.4	4.509	40.58
660	64.5	4.516	40.65
661	64.6	4.523	40.71
662	64.7	4.530	40.77
663	64.8	4.537	40.83
664	64.9	4.543	40.89
665	65.0	4.550	40.95
666	65.1	4.557	41.01
667	65.2	4.564	41.08
668	65.3	4.571	41.14
669	65.4	4.578	41.20
670	65.5	4.585	41.26
671	65.6	4.591	41.32
672	65.7	4.598	41.38
673	65.8	4.605	41.45
674	65.9	4.612	41.51
675	66.0	4.619	41.57
676	66.1	4.626	41.63
677	66.2	4.632	41.69
678	66.3	4.639	41.75
679	66.4	4.646	41.82
680	66.5	4.653	41.88
681	66.6	4.660	41.94
682	66.7	4.667	42.00
683	66.8	4.674	42.06
684	66.9	4.680	42.12
685	67.0	4.687	42.18
686	67.1	4.694	42.25
687	67.2	4.701	42.31
688	67.3	4.708	42.37
689	67.4	4.715	42.43
690	67.4	4.721	42.49
691	67.5	4.728	42.55
692	67.6	4.735	42.62
693	67.7	4.742	42.68
694	67.8	4.749	42.74
695	67.9	4.756	42.80
696	68.0	4.762	42.86
697	68.1	4.769	42.92
698	68.2	4.776	42.99
699	68.3	4.783	43.05
700	68.4	4.790	43.11
701	68.5	4.797	43.17
702	68.6	4.804	43.23
703	68.7	4.810	43.29
704	68.8	4.817	43.35
705	68.9	4.824	43.42
706	69.0	4.831	43.48
707	69.1	4.838	43.54
708	69.2	4.845	43.60
709	69.3	4.851	43.66
710	69.4	4.858	43.72
711	69.5	4.865	43.79
712	69.6	4.872	43.85
713	69.7	4.879	43.91
714	69.8	4.886	43.97
715	69.9	4.892	44.03
716	70.0	4.899	44.09
717	70.1	4.906	44.16
718	70.2	4.913	44.22
719	70.3	4.920	44.28
720	70.4	4.927	44.34
721	70.5	4.934	44.40
722	70.6	4.940	44.46
723	70.7	4.947	44.52
724	70.8	4.954	44.59
725	70.9	4.961	44.65
726	71.0	4.968	44.71
727	71.1	4.975	44.77
728	71.2	4.981	44.83
729	71.3	4.988	44.89
730	71.4	4.995	44.96
731	71.5	5.002	45.02
732	71.6	5.009	45.08
733	71.7	5.016	45.14
734	71.7	5.022	45.20
735	71.8	5.029	45.26
736	71.9	5.036	45.33
737	72.0	5.043	45.39
738	72.1	5.050	45.45
739	72.2	5.057	45.51
740	72.3	5.064	45.57
741	72.4	5.070	45.63
742	72.5	5.077	45.70
743	72.6	5.084	45.76
744	72.7	5.091	45.82
745	72.8	5.098	45.88
746	72.9	5.105	45.94
747	73.0	5.111	46.00
748	73.1	5.118	46.06
749	73.2	5.125	46.13
750	73.3	5.132	46.19
751	73.4	5.139	46.25
752	73.5	5.146	46.31
753	73.6	5.152	46.37
754	73.7	5.159	46.43
755	73.8	5.166	46.50
756	73.9	5.173	46.56
757	74.0	5.180	46.62
758	74.1	5.187	46.68
759	74.2	5.194	46.74
760	74.3	5.200	46.80
761	74.4	5.207	46.87
762	74.5	5.214	46.93
763	74.6	5.221	46.99
764	74.7	5.228	47.05
765	74.8	5.235	47.11
766	74.9	5.241	47.17
767	75.0	5.248	47.23

#	%	Grid	Linear
768	75.1	5.255	47.30
769	75.2	5.262	47.36
770	75.3	5.269	47.42
771	75.4	5.276	47.48
772	75.5	5.283	47.54
773	75.6	5.289	47.60
774	75.7	5.296	47.67
775	75.8	5.303	47.73
776	75.9	5.310	47.79
777	76.0	5.317	47.85
778	76.1	5.324	47.91
779	76.1	5.330	47.97
780	76.2	5.337	48.04
781	76.3	5.344	48.10
782	76.4	5.351	48.16
783	76.5	5.358	48.22
784	76.6	5.365	48.28
785	76.7	5.371	48.34
786	76.8	5.378	48.40
787	76.9	5.385	48.47
788	77.0	5.392	48.53
789	77.1	5.399	48.59
790	77.2	5.406	48.65
791	77.3	5.413	48.71
792	77.4	5.419	48.77
793	77.5	5.426	48.84
794	77.6	5.433	48.90
795	77.7	5.440	48.96
796	77.8	5.447	49.02
797	77.9	5.454	49.08
798	78.0	5.460	49.14
799	78.1	5.467	49.21
800	78.2	5.474	49.27
801	78.3	5.481	49.33
802	78.4	5.488	49.39
803	78.5	5.495	49.45
804	78.6	5.501	49.51
805	78.7	5.508	49.57
806	78.8	5.515	49.64
807	78.9	5.522	49.70
808	79.0	5.529	49.76
809	79.1	5.536	49.82
810	79.2	5.543	49.88
811	79.3	5.549	49.94
812	79.4	5.556	50.01
813	79.5	5.563	50.07
814	79.6	5.570	50.13
815	79.7	5.577	50.19
816	79.8	5.584	50.25
817	79.9	5.590	50.31
818	80.0	5.597	50.38
819	80.1	5.604	50.44
820	80.2	5.611	50.50
821	80.3	5.618	50.56
822	80.4	5.625	50.62
823	80.4	5.631	50.68
824	80.5	5.638	50.74
825	80.6	5.645	50.81
826	80.7	5.652	50.87
827	80.8	5.659	50.93
828	80.9	5.666	50.99
829	81.0	5.673	51.05
830	81.1	5.679	51.11
831	81.2	5.686	51.18
832	81.3	5.693	51.24
833	81.4	5.700	51.30
834	81.5	5.707	51.36
835	81.6	5.714	51.42
836	81.7	5.720	51.48
837	81.8	5.727	51.55
838	81.9	5.734	51.61
839	82.0	5.741	51.67
840	82.1	5.748	51.73
841	82.2	5.755	51.79
842	82.3	5.761	51.85
843	82.4	5.768	51.91
844	82.5	5.775	51.98
845	82.6	5.782	52.04
846	82.7	5.789	52.10
847	82.8	5.796	52.16
848	82.9	5.803	52.22
849	83.0	5.809	52.28
850	83.1	5.816	52.35
851	83.2	5.823	52.41
852	83.3	5.830	52.47
853	83.4	5.837	52.53
854	83.5	5.844	52.59
855	83.6	5.850	52.65
856	83.7	5.857	52.72
857	83.8	5.864	52.78
858	83.9	5.871	52.84
859	84.0	5.878	52.90
860	84.1	5.885	52.96
861	84.2	5.891	53.02
862	84.3	5.898	53.09
863	84.4	5.905	53.15
864	84.5	5.912	53.21
865	84.6	5.919	53.27
866	84.7	5.926	53.33
867	84.8	5.933	53.39
868	84.8	5.939	53.45
869	84.9	5.946	53.52
870	85.0	5.953	53.58
871	85.1	5.960	53.64
872	85.2	5.967	53.70
873	85.3	5.974	53.76
874	85.4	5.980	53.82
875	85.5	5.987	53.89
876	85.6	5.994	53.95
877	85.7	6.001	54.01
878	85.8	6.008	54.07
879	85.9	6.015	54.13
880	86.0	6.022	54.19
881	86.1	6.028	54.26
882	86.2	6.035	54.32
883	86.3	6.042	54.38
884	86.4	6.049	54.44
885	86.5	6.056	54.50
886	86.6	6.063	54.56
887	86.7	6.069	54.62
888	86.8	6.076	54.69
889	86.9	6.083	54.75
890	87.0	6.090	54.81
891	87.1	6.097	54.87
892	87.2	6.104	54.93
893	87.3	6.110	54.99
894	87.4	6.117	55.06
895	87.5	6.124	55.12
896	87.6	6.131	55.18

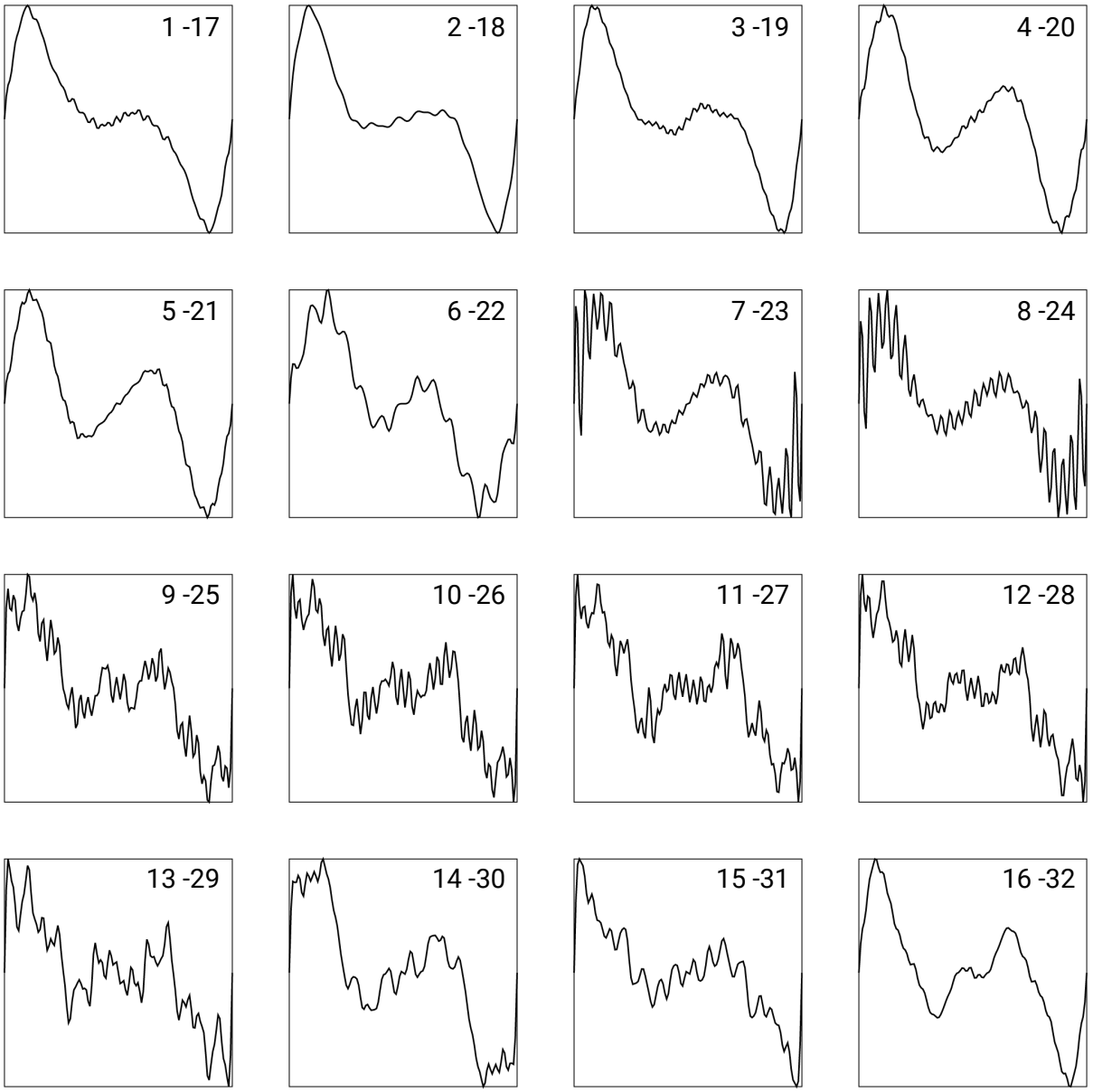
#	%	Grid	Linear
897	87.7	6.138	55.24
898	87.8	6.145	55.30
899	87.9	6.152	55.36
900	88.0	6.158	55.43
901	88.1	6.165	55.49
902	88.2	6.172	55.55
903	88.3	6.179	55.61
904	88.4	6.186	55.67
905	88.5	6.193	55.73
906	88.6	6.199	55.79
907	88.7	6.206	55.86
908	88.8	6.213	55.92
909	88.9	6.220	55.98
910	89.0	6.227	56.04
911	89.1	6.234	56.10
912	89.1	6.240	56.16
913	89.2	6.247	56.23
914	89.3	6.254	56.29
915	89.4	6.261	56.35
916	89.5	6.268	56.41
917	89.6	6.275	56.47
918	89.7	6.282	56.53
919	89.8	6.288	56.60
920	89.9	6.295	56.66
921	90.0	6.302	56.72
922	90.1	6.309	56.78
923	90.2	6.316	56.84
924	90.3	6.323	56.90
925	90.4	6.329	56.96
926	90.5	6.336	57.03
927	90.6	6.343	57.09
928	90.7	6.350	57.15
929	90.8	6.357	57.21
930	90.9	6.364	57.27
931	91.0	6.370	57.33
932	91.1	6.377	57.40
933	91.2	6.384	57.46
934	91.3	6.391	57.52
935	91.4	6.398	57.58
936	91.5	6.405	57.64
937	91.6	6.412	57.70
938	91.7	6.418	57.77
939	91.8	6.425	57.83
940	91.9	6.432	57.89
941	92.0	6.439	57.95
942	92.1	6.446	58.01
943	92.2	6.453	58.07
944	92.3	6.459	58.13
945	92.4	6.466	58.20
946	92.5	6.473	58.26
947	92.6	6.480	58.32
948	92.7	6.487	58.38
949	92.8	6.494	58.44
950	92.9	6.500	58.50
951	93.0	6.507	58.57
952	93.1	6.514	58.63
953	93.2	6.521	58.69
954	93.3	6.528	58.75
955	93.4	6.535	58.81
956	93.5	6.542	58.87
957	93.5	6.548	58.94
958	93.6	6.555	59.00
959	93.7	6.562	59.06
960	93.8	6.569	59.12
961	93.9	6.576	59.18
962	94.0	6.583	59.24
963	94.1	6.589	59.30
964	94.2	6.596	59.37
965	94.3	6.603	59.43
966	94.4	6.610	59.49
967	94.5	6.617	59.55
968	94.6	6.624	59.61
969	94.7	6.630	59.67
970	94.8	6.637	59.74
971	94.9	6.644	59.80
972	95.0	6.651	59.86
973	95.1	6.658	59.92
974	95.2	6.665	59.98
975	95.3	6.672	60.04
976	95.4	6.678	60.11
977	95.5	6.685	60.17
978	95.6	6.692	60.23
979	95.7	6.699	60.29
980	95.8	6.706	60.35
981	95.9	6.713	60.41
982	96.0	6.719	60.48
983	96.1	6.726	60.54
984	96.2	6.733	60.60
985	96.3	6.740	60.66
986	96.4	6.747	60.72
987	96.5	6.754	60.78
988	96.6	6.761	60.84
999	97.7	6.767	60.91
1000	97.8	6.774	60.97
1001	97.8	6.781	61.03
1002	97.9	6.788	61.09
1003	98.0	6.795	61.15
1004	98.1	6.802	61.21
1005	98.2	6.808	61.28
1006	98.3	6.815	61.34
1007	98.4	6.822	61.40
1008	98.5	6.829	61.46
1009	98.6	6.836	61.52
1010	98.7	6.843	61.58
1011	98.8	6.849	61.65
1012	98.9	6.856	61.71
1013	99.0	6.863	61.77
1014	99.1	6.870	61.83
1015	99.2	6.877	61.89
1016	99.3	6.884	61.95
989	96.7	6.891	62.01
990	96.8	6.897	62.08
991	96.9	6.904	62.14
992	97.0	6.911	62.20
993	97.1	6.918	62.26
994	97.2	6.925	62.32
995	97.3	6.932	62.38
996	97.4	6.938	62.45
997	97.5	6.945	62.51
998	97.6	6.952	62.57
1017	99.4	6.959	62.63
1018	99.5	6.966	62.69
1019	99.6	6.973	62.75
1020	99.7	6.979	62.82
1021	99.8	6.986	62.88
1022	99.9	6.993	62.94
1023	100.0	7.000	63.00

Firmware waves banks list

Waves bank A



Waves bank B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6 -22
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9 -25
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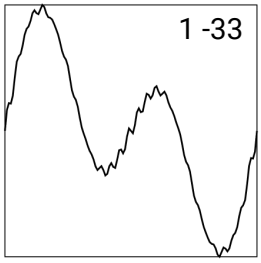
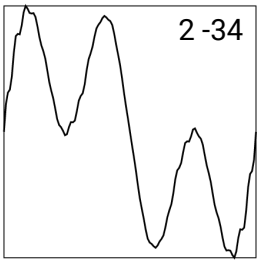
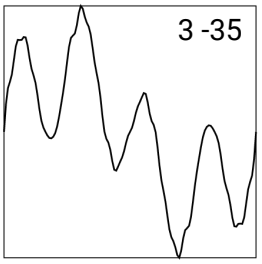
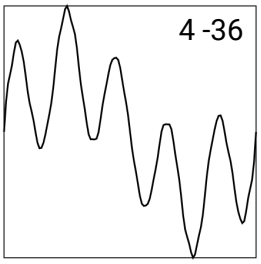
11 -27
12 -28
13 -29
14 -30
15 -31
16 -32

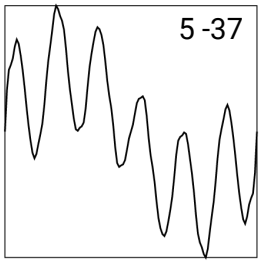
Waves bank C

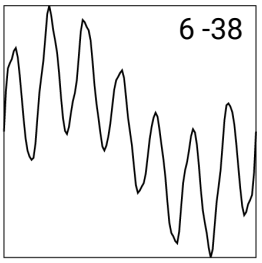


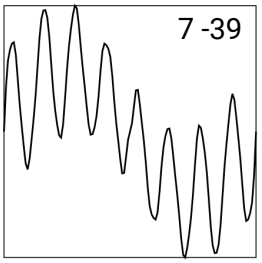


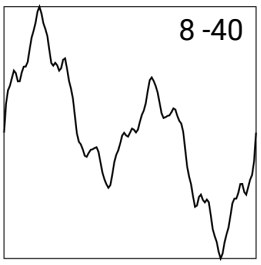


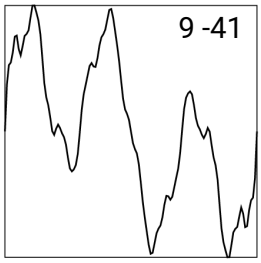


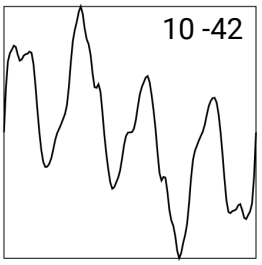


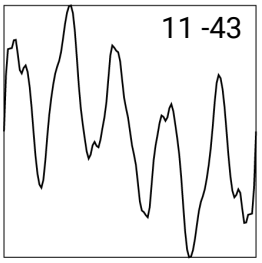


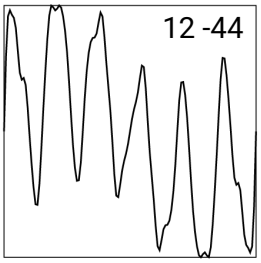


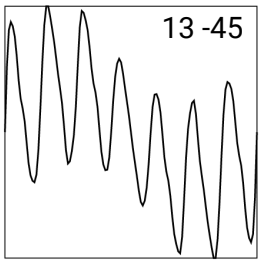


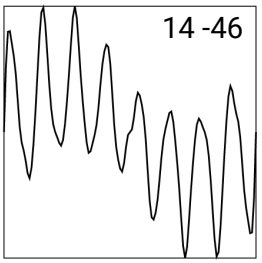




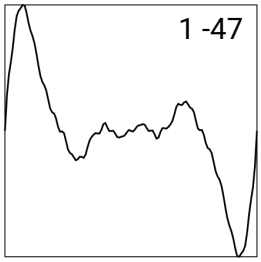


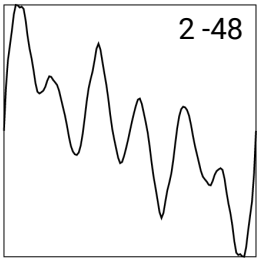


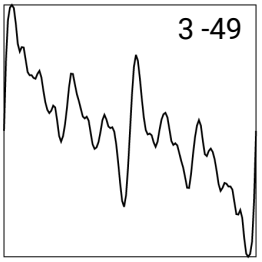


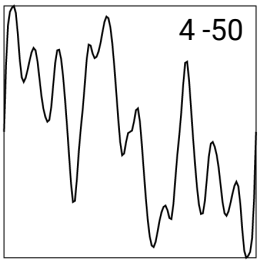


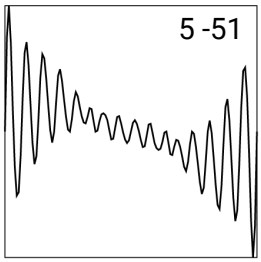
Waves bank D

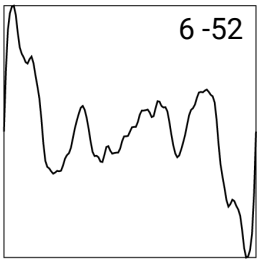


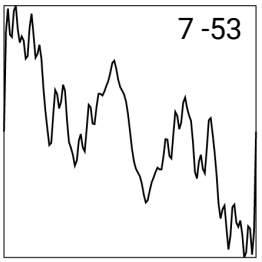


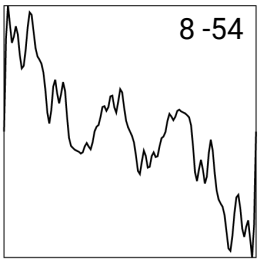


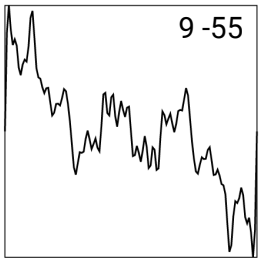


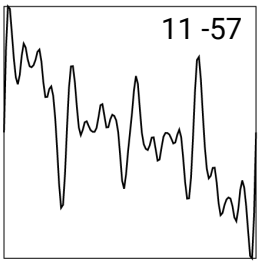


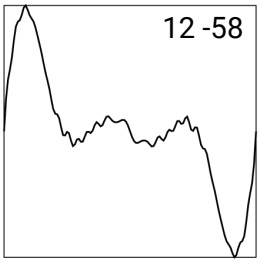


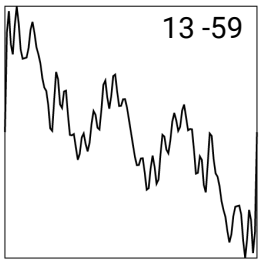




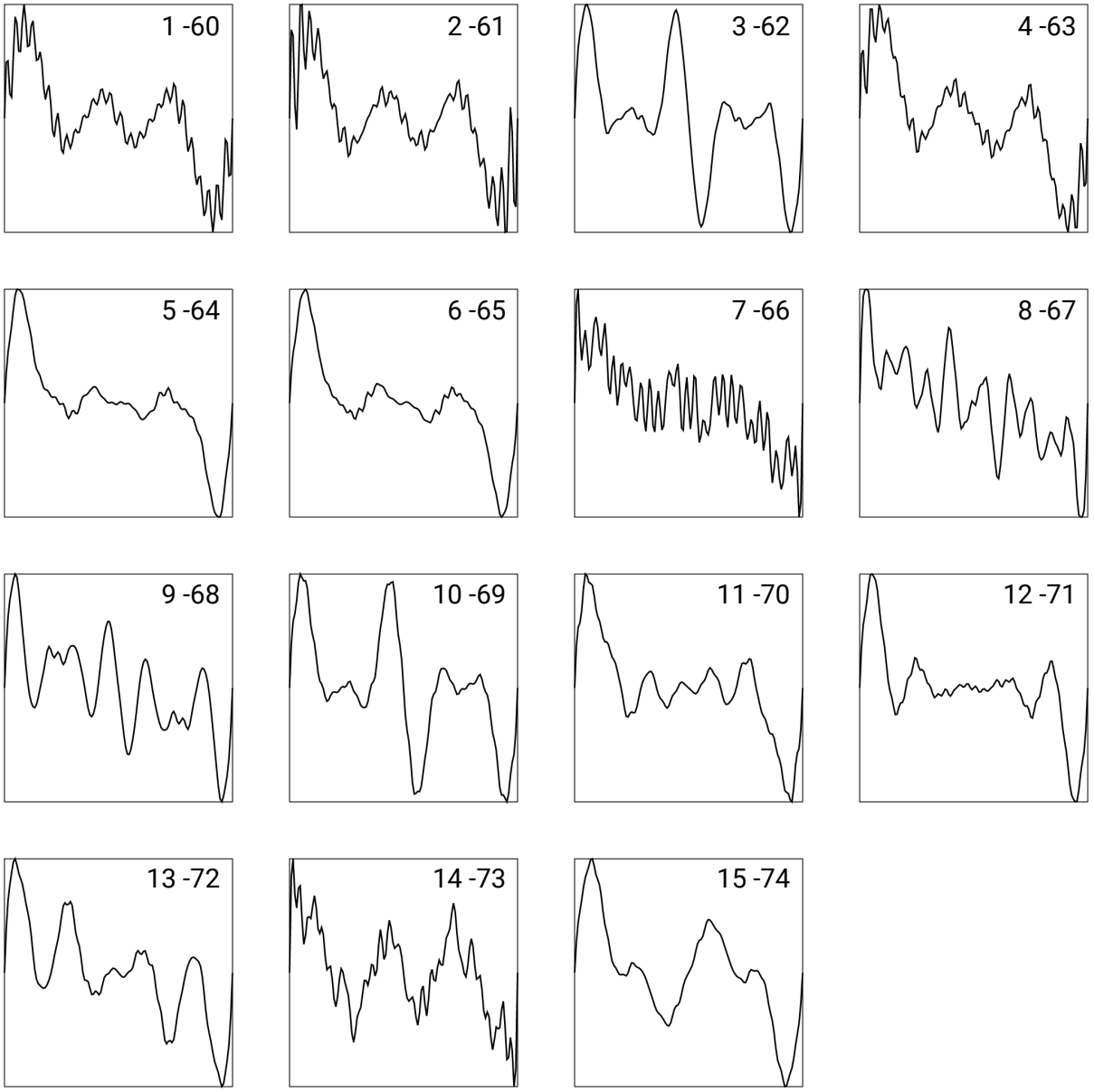








Waves bank E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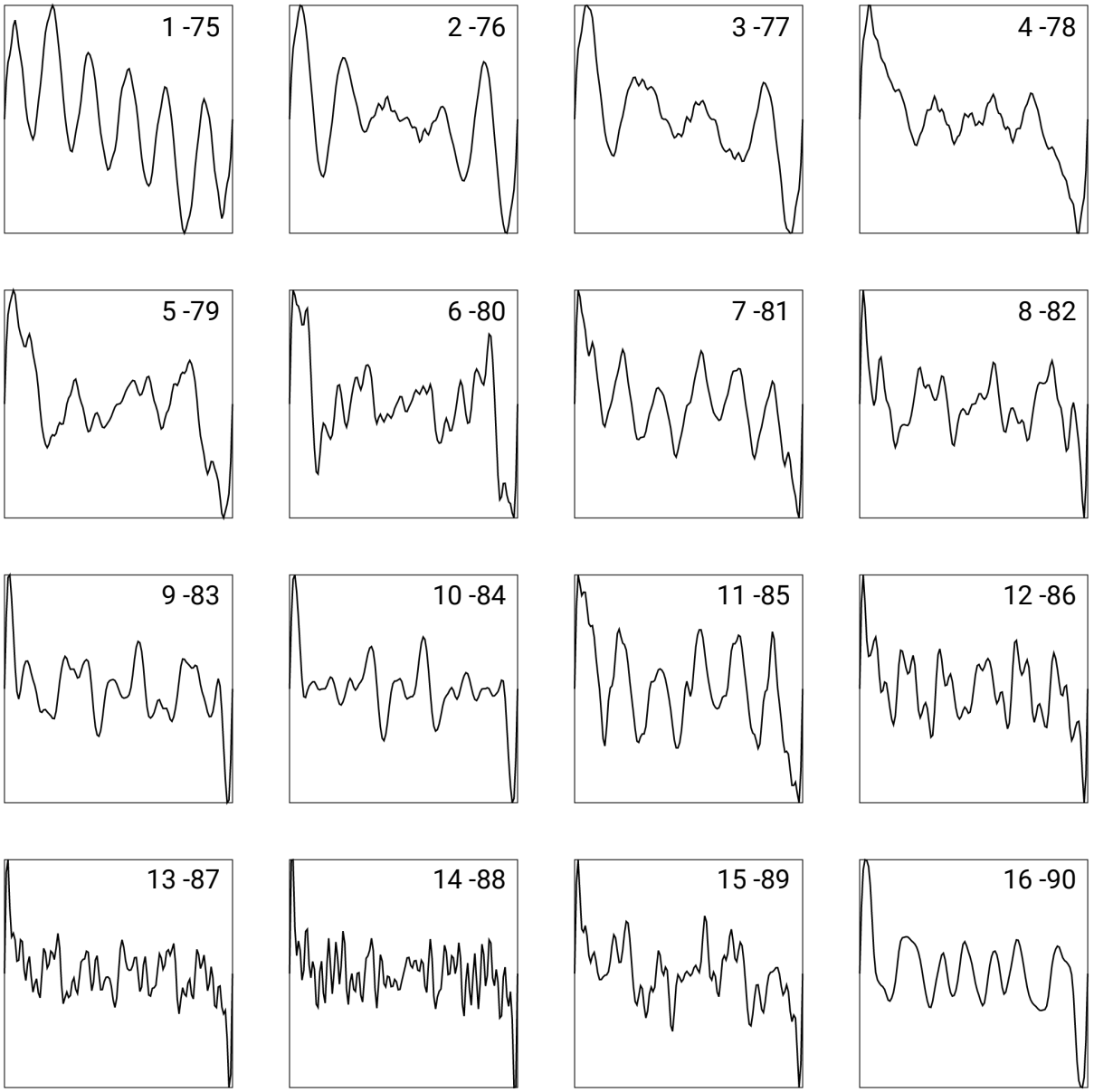
14 -73
15 -74

Waves bank F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11 -85
12 -86
13 -87
14 -88
15 -89
16 -90

Known issues

- prologue and minilogue XD synthesizers can produce distorted sound or hang when LFO is routed to the Shape. This is due to high CPU utilization of the oscillator and additional CPU load produced by the firmware code for the Shape LFO. To restore normal operation the synthesizer power cycle is needed.
- NTS-1 can produce distorted sound when more than 2 effects are enabled. This is due to high CPU utilization of the oscillator and shared CPU architecture of the NTS-1. Disable excessive effects to get normal sound from the oscillator.
- Due to the issue in current prologue and minilogue XD firmwares, LFO depth parameter is initialized at -100% value when the oscillator is selected for the first time. That does not affect program recall with saved parameter value.
- Due to the different LFO implementation in NTS-1 that provides only positive values, the effect of LFO modes that use Shape LFO differs from prologue and minilogue XD.