

AUDIO FREQUENCY CHART www.deepsonic.ch - 30.10.2009

samplingrate/samples

frequency	numeric	classic	Midi	wave	periode	notes
3.438 Hz	A -3	"" A	-	99.782 m	290.909 ms	
3.642 Hz	A#/Bb -3	"" A#/Bb	-	94.181 m	274.582 ms	
3.858 Hz	B -3	"" B	-	88.895 m	259.171 ms	
4.088 Hz	C -2	"" C	-	83.906 m	244.624 ms	
4.331 Hz	C#/Db -2	"" C#/Db	-	79.197 m	230.895 ms	
4.589 Hz	D -2	"" D	-	74.752 m	217.936 ms	
4.861 Hz	D#/Eb -2	"" D#/Eb	-	70.556 m	205.704 ms	
5.000 Hz	-	-	-	68.600 m	200.000 ms	bottom HiFi-start at 5Hz
5.150 Hz	E -2	"" E	-	66.596 m	194.159 ms	
5.457 Hz	F -2	"" F	-	62.859 m	183.261 ms	
5.781 Hz	F#/Gb -2	"" F#/Gb	-	59.331 m	172.976 ms	
6.125 Hz	G -2	"" G	-	56.001 m	163.267 ms	
6.489 Hz	G#/Ab -2	"" G#/Ab	-	52.858 m	154.104 ms	
6.875 Hz	A -2	"" A	-	49.891 m	145.455 ms	
7.284 Hz	A#/Bb -2	"" A#/Bb	-	47.091 m	137.291 ms	
7.717 Hz	B -2	"" B	-	44.448 m	129.585 ms	
8.176 Hz	C -1	"" C	0	41.953 m	122.312 ms	
8.333 Hz	-	-	-	41.160 m	120.000 ms	human neurotic freq (?)
8.662 Hz	C#/Db -1	"" C#/Db	1	39.598 m	115.447 ms	
9.177 Hz	D -1	"" D	2	37.376 m	108.968 ms	
9.723 Hz	D#/Eb -1	"" D#/Eb	3	35.278 m	102.852 ms	
10.301 Hz	E -1	"" E	4	33.298 m	97.079 ms	
10.913 Hz	F -1	"" F	5	31.429 m	91.631 ms	
11.562 Hz	F#/Gb -1	"" F#/Gb	6	29.665 m	86.488 ms	
12.250 Hz	G -1	"" G	7	28.000 m	81.634 ms	
12.978 Hz	G#/Ab -1	"" G#/Ab	8	26.429 m	77.052 ms	
13.750 Hz	A -1	"" A	9	24.945 m	72.727 ms	
14.568 Hz	A#/Bb -1	"" A#/Bb	10	23.545 m	68.645 ms	
15.434 Hz	B -1	"" B	11	22.224 m	64.793 ms	
16.352 Hz	C 0	"" C	12	20.977 m	61.156 ms	
17.324 Hz	C#/Db 0	"" C#/Db	13	19.799 m	57.724 ms	
18.354 Hz	D 0	"" D	14	18.688 m	54.484 ms	
19.445 Hz	D#/Eb 0	"" D#/Eb	15	17.639 m	51.426 ms	
20.000 Hz	-	-	-	17.150 m	50.000 ms	EQ-31, human bottom freq
20.602 Hz	E 0	"" E	16	16.649 m	48.540 ms	
21.827 Hz	F 0	"" F	17	15.715 m	45.815 ms	
23.125 Hz	F#/Gb 0	"" F#/Gb	18	14.833 m	43.244 ms	
24.500 Hz	G 0	"" G	19	14.000 m	40.817 ms	
25.000 Hz	-	-	-	13.720 m	40.000 ms	EQ-31
25.957 Hz	G#/Ab 0	"" G#/Ab	20	13.214 m	38.526 ms	
27.500 Hz	A 0	"" A	21	12.473 m	36.364 ms	88key-piano bottom
29.135 Hz	A#/Bb 0	"" A#/Bb	22	11.773 m	34.323 ms	
30.868 Hz	B 0	"" B	23	11.112 m	32.396 ms	
31.000 Hz	-	-	-	11.065 m	32.258 ms	EQ-31
32.703 Hz	C 1	"" C	24	10.488 m	30.578 ms	
34.648 Hz	C#/Db 1	"" C#/Db	25	9.900 m	28.862 ms	
36.708 Hz	D 1	"" D	26	9.344 m	27.242 ms	
38.891 Hz	D#/Eb 1	"" D#/Eb	27	8.820 m	25.713 ms	
40.000 Hz	-	-	-	8.575 m	25.000 ms	EQ-31
41.203 Hz	E 1	"" E	28	8.325 m	24.270 ms	
43.654 Hz	F 1	"" F	29	7.857 m	22.908 ms	
46.249 Hz	F#/Gb 1	"" F#/Gb	30	7.416 m	21.622 ms	
48.999 Hz	G 1	"" G	31	7.000 m	20.408 ms	
50.000 Hz	-	-	-	6.860 m	20.000 ms	EQ-31, AC-noise EU
51.913 Hz	G#/Ab 1	"" G#/Ab	32	6.607 m	19.263 ms	
55.000 Hz	A 1	"" A	33	6.236 m	18.182 ms	
58.270 Hz	A#/Bb 1	"" A#/Bb	34	5.886 m	17.161 ms	
60.000 Hz	-	-	-	5.717 m	16.667 ms	AC-noise US
61.735 Hz	B 1	"" B	35	5.556 m	16.198 ms	
63.000 Hz	-	-	-	5.444 m	15.873 ms	EQ-31
65.406 Hz	C 2	"" C	36	5.244 m	15.289 ms	
69.296 Hz	C#/Db 2	"" C#/Db	37	4.950 m	14.431 ms	
73.416 Hz	D 2	"" D	38	4.672 m	13.621 ms	
77.782 Hz	D#/Eb 2	"" D#/Eb	39	4.410 m	12.856 ms	
80.000 Hz	-	-	-	4.288 m	12.500 ms	EQ-31
82.407 Hz	E 2	"" E	40	4.162 m	12.135 ms	Guitar E6
87.307 Hz	F 2	"" F	41	3.929 m	11.454 ms	
92.499 Hz	F#/Gb 2	"" F#/Gb	42	3.708 m	10.811 ms	
97.999 Hz	G 2	"" G	43	3.500 m	10.204 ms	
100.000 Hz	-	-	-	3.430 m	10.000 ms	EQ-31, subnoise HPF
103.826 Hz	G#/Ab 2	"" G#/Ab	44	3.304 m	9.631 ms	
110.000 Hz	A 2	"" A	45	3.118 m	9.091 ms	Guitar A5
116.541 Hz	A#/Bb 2	"" A#/Bb	46	2.943 m	8.581 ms	
123.471 Hz	B 2	"" B	47	2.778 m	8.099 ms	
125.000 Hz	-	-	-	2.744 m	8.000 ms	EQ-31

22050	44100	48000	96000
6414	12829	13963	27927
6054	12109	13179	26359
5714	11429	12440	24880
5393	10787	11741	23483
5091	10182	11082	22165
4805	9610	10460	20921
4535	9071	9873	19747
4410	8820	9600	19200
4281	8562	9319	18639
4040	8081	8796	17593
3814	7628	8302	16605
3600	7200	7836	15673
3397	6795	7396	14793
3207	6414	6981	13963
3027	6054	6589	13179
2857	5714	6220	12440
2696	5393	5870	11741
2646	5292	5760	11520
2545	5091	5541	11082
2402	4805	5230	10460
2267	4535	4936	9873
2140	4281	4659	9319
2020	4040	4398	8796
1907	3814	4151	8302
1800	3600	3918	7836
1698	3397	3698	7396
1603	3207	3490	6981
1513	3027	3294	6589
1428	2857	3110	6220
1348	2696	2935	5870
1272	2545	2770	5541
1201	2402	2615	5230
1133	2267	2468	4936
1102	2205	2400	4800
1070	2140	2329	4659
1010	2020	2199	4398
953	1907	2075	4151
900	1800	1959	3918
882	1764	1920	3840
849	1698	1849	3698
801	1603	1745	3490
756	1513	1647	3294
714	1428	1555	3110
711	1422	1548	3096
674	1348	1467	2935
636	1272	1385	2770
600	1201	1307	2615
566	1133	1234	2468
551	1102	1200	2400
535	1070	1164	2329
505	1010	1099	2199
476	953	1037	2075
450	900	979	1959
441	882	960	1920
424	849	924	1849
400	801	872	1745
378	756	823	1647
367	735	800	1600
357	714	777	1555
350	700	761	1523
337	674	733	1467
318	636	692	1385
300	600	653	1307
283	566	617	1234
275	551	600	1200
267	535	582	1164
252	505	549	1099
238	476	518	1037
225	450	489	979
220	441	480	960
212	424	462	924
200	400	436	872
189	378	411	823
178	357	388	777
176	352	384	768

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samplingrate/samples

frequency	numeric	classic	Midi	wave	periode	notes
130.813 Hz	C 3	c	48	2.622 m	7.645 ms	
138.591 Hz	C#/Db 3	c#/db	49	2.475 m	7.215 ms	
146.832 Hz	D 3	d	50	2.336 m	6.810 ms	Guitar D4
155.563 Hz	D#/Eb 3	d#/eb	51	2.205 m	6.428 ms	
160.000 Hz	-	-	-	2.144 m	6.250 ms	EQ-31
164.814 Hz	E 3	e	52	2.081 m	6.067 ms	
174.614 Hz	F 3	f	53	1.964 m	5.727 ms	
184.997 Hz	F#/Gb 3	f#/gb	54	1.854 m	5.405 ms	
195.998 Hz	G 3	g	55	1.750 m	5.102 ms	Guitar G3
200.000 Hz	-	-	-	1.715 m	5.000 ms	EQ-31, human location bot.
207.652 Hz	G#/Gb 3	g#/ab	56	1.652 m	4.816 ms	
220.000 Hz	A 3	a	57	1.559 m	4.545 ms	
233.082 Hz	A#/Bb 3	b#/bb	58	1.472 m	4.290 ms	
246.942 Hz	B 3	b	59	1.389 m	4.050 ms	Guitar B2
250.000 Hz	-	-	-	1.372 m	4.000 ms	EQ-31
261.626 Hz	C 4	c '	60	1.311 m	3.822 ms	middle C
277.183 Hz	C#/Db 4	c#/db '	61	1.237 m	3.608 ms	
293.665 Hz	D 4	d '	62	1.168 m	3.405 ms	
311.127 Hz	D#/Eb 4	d#/eb '	63	1.102 m	3.214 ms	
315.000 Hz	-	-	-	1.089 m	3.175 ms	EQ-31
329.628 Hz	E 4	e '	64	1.041 m	3.034 ms	Guitar E1
349.228 Hz	F 4	f '	65	98.217 cm	2.863 ms	
369.994 Hz	F#/Gb 4	f#/gb '	66	92.704 cm	2.703 ms	
391.995 Hz	G 4	g '	67	87.501 cm	2.551 ms	
400.000 Hz	-	-	-	85.750 cm	2.500 ms	EQ-31
415.305 Hz	G#/Gb 4	g#/ab '	68	82.590 cm	2.408 ms	
440.000 Hz	A 4	a '	69	77.955 cm	2.273 ms	reference 440Hz
466.164 Hz	A#/Bb 4	b#/bb '	70	73.579 cm	2.145 ms	
493.883 Hz	B 4	b '	71	69.450 cm	2.025 ms	
500.000 Hz	-	-	-	68.600 cm	2.000 ms	EQ-31
523.251 Hz	C 5	c ''	72	65.552 cm	1.911 ms	
554.365 Hz	C#/Db 5	c#/db ''	73	61.873 cm	1.804 ms	
587.330 Hz	D 5	d ''	74	58.400 cm	1.703 ms	
622.254 Hz	D#/Eb 5	d#/eb ''	75	55.122 cm	1.607 ms	
630.000 Hz	-	-	-	54.444 cm	1.587 ms	EQ-31
659.255 Hz	E 5	e ''	76	52.028 cm	1.517 ms	
698.456 Hz	F 5	f ''	77	49.108 cm	1.432 ms	
739.989 Hz	F#/Gb 5	f#/gb ''	78	46.352 cm	1.351 ms	
783.991 Hz	G 5	g ''	79	43.751 cm	1.276 ms	
800.000 Hz	-	-	-	42.875 cm	1.250 ms	EQ-31
830.609 Hz	G#/Gb 5	g#/ab ''	80	41.295 cm	1.204 ms	
880.000 Hz	A 5	a ''	81	38.977 cm	1.136 ms	
932.328 Hz	A#/Bb 5	b#/bb ''	82	36.790 cm	1.073 ms	
987.767 Hz	B 5	b ''	83	34.725 cm	1.012 ms	
1000.000 Hz	-	-	-	34.300 cm	1.000 ms	EQ-31, testsignal 1kHz
1046.502 Hz	C 6	c '''	84	32.776 cm	955.564 ns	
1108.731 Hz	C#/Db 6	c#/db '''	85	30.936 cm	901.932 ns	
1174.659 Hz	D 6	d '''	86	29.200 cm	851.311 ns	
1244.508 Hz	D#/Eb 6	d#/eb '''	87	27.561 cm	803.530 ns	
1250.000 Hz	-	-	-	27.440 cm	800.000 ns	EQ-31
1318.510 Hz	E 6	e '''	88	26.014 cm	758.432 ns	
1396.913 Hz	F 6	f '''	89	24.554 cm	715.864 ns	
1479.978 Hz	F#/Gb 6	f#/gb '''	90	23.176 cm	675.686 ns	
1567.982 Hz	G 6	g '''	91	21.875 cm	637.763 ns	
1600.000 Hz	-	-	-	21.438 cm	625.000 ns	EQ-31
1661.219 Hz	G#/Gb 6	g#/ab '''	92	20.647 cm	601.968 ns	
1760.000 Hz	A 6	a '''	93	19.489 cm	568.182 ns	
1864.655 Hz	A#/Bb 6	b#/bb '''	94	18.395 cm	536.292 ns	
1975.533 Hz	B 6	b '''	95	17.362 cm	506.192 ns	
2000.000 Hz	-	-	-	17.150 cm	500.000 ns	EQ-31
2093.005 Hz	C 7	c ''''	96	16.388 cm	477.782 ns	
2217.461 Hz	C#/Db 7	c#/db ''''	97	15.468 cm	450.966 ns	
2349.318 Hz	D 7	d ''''	98	14.600 cm	425.655 ns	
2489.016 Hz	D#/Eb 7	d#/eb ''''	99	13.781 cm	401.765 ns	
2500.000 Hz	-	-	-	13.720 cm	400.000 ns	EQ-31
2637.020 Hz	E 7	e ''''	100	13.007 cm	379.216 ns	
2793.826 Hz	F 7	f ''''	101	12.277 cm	357.932 ns	
2959.955 Hz	F#/Gb 7	f#/gb ''''	102	11.588 cm	337.843 ns	
3000.000 Hz	-	-	-	11.433 cm	333.333 ns	EQ-31
3135.963 Hz	G 7	g ''''	103	10.938 cm	318.881 ns	
3322.438 Hz	G#/Gb 7	g#/ab ''''	104	10.324 cm	300.984 ns	
3520.000 Hz	A 7	a ''''	105	97.443 mm	284.091 ns	
3729.310 Hz	A#/Bb 7	b#/bb ''''	106	91.974 mm	268.146 ns	
3951.066 Hz	B 7	b ''''	107	86.812 mm	253.096 ns	
4000.000 Hz	-	-	-	85.750 mm	250.000 ns	EQ-31

22050	44100	48000	96000
168	337	366	733
159	318	346	692
150	300	326	653
141	283	308	617
137	275	300	600
133	267	291	582
126	252	274	549
119	238	259	518
112	225	244	489
110	220	240	480
106	212	231	462
100	200	218	436
94	189	205	411
89	178	194	388
88	176	192	384
84	168	183	366
79	159	173	346
75	150	163	326
70	141	154	308
70	140	152	304
66	133	145	291
63	126	137	274
59	119	129	259
56	112	122	244
55	110	120	240
53	106	115	231
50	100	109	218
47	94	102	205
44	89	97	194
44	88	96	192
42	84	91	183
39	79	86	173
37	75	81	163
35	70	77	154
35	70	76	152
33	66	72	145
31	63	68	137
29	59	64	129
28	56	61	122
27	55	60	120
26	53	57	115
25	50	54	109
23	47	51	102
22	44	48	97
22	44	48	96
21	42	45	91
19	39	43	86
18	37	40	81
17	35	38	77
17	35	38	76
16	33	36	72
15	31	34	68
14	29	32	64
14	28	30	61
13	27	30	60
13	26	28	57
12	25	27	54
11	23	25	51
11	22	24	48
11	22	24	48
10	21	22	45
9	19	21	43
9	18	20	40
8	17	19	38
8	17	19	38
8	16	18	36
7	15	17	34
7	14	16	32
7	14	16	32
7	14	15	30
6	13	14	28
6	12	13	27
5	11	12	25
5	11	12	24
5	11	12	24

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frequency	numeric	classic	Midi	wave	periode	notes
4186.009 Hz	C 8	c ''''	108	81.940 mm	238.891 ns	88key-piano top
4434.922 Hz	C#/Db 8	c#/db ''''	109	77.341 mm	225.483 ns	
4698.636 Hz	D 8	d ''''	110	73.000 mm	212.828 ns	
4978.032 Hz	D#/Eb 8	d#/eb ''''	111	68.903 mm	200.883 ns	
5000.000 Hz	-	-	-	68.600 mm	200.000 ns	EQ-31
5274.041 Hz	E 8	e ''''	112	65.036 mm	189.608 ns	
5587.652 Hz	F 8	f ''''	113	61.385 mm	178.966 ns	
5919.911 Hz	F#/Gb 8	f#/gb ''''	114	57.940 mm	168.921 ns	
6271.927 Hz	G 8	g ''''	115	54.688 mm	159.441 ns	
6300.000 Hz	-	-	-	54.444 mm	158.730 ns	EQ-31
6644.875 Hz	G#/Gb 8	g#/ab ''''	116	51.619 mm	150.492 ns	
7040.000 Hz	A 8	a ''''	117	48.722 mm	142.045 ns	
7458.620 Hz	A#/Bb 8	b#/bb ''''	118	45.987 mm	134.073 ns	
7902.133 Hz	B 8	b ''''	119	43.406 mm	126.548 ns	
8000.000 Hz	-	-	-	42.875 mm	125.000 ns	EQ-31
8372.018 Hz	C 9	c ''''''	120	40.970 mm	119.446 ns	
8869.844 Hz	C#/Db 9	c#/db ''''''	121	38.670 mm	112.742 ns	
9397.273 Hz	D 9	d ''''''	122	36.500 mm	106.414 ns	
9956.063 Hz	D#/Eb 9	d#/eb ''''''	123	34.451 mm	100.441 ns	
10000.000 Hz	-	-	-	34.300 mm	100.000 ns	EQ-31, testsignal 10kHz
11025.000 Hz	-	-	-	31.111 mm	90.703 ns	end of 22,05kHz
10548.082 Hz	E 9	e ''''''	124	32.518 mm	94.804 ns	
11175.303 Hz	F 9	f ''''''	125	30.693 mm	89.483 ns	
11839.822 Hz	F#/Gb 9	f#/gb ''''''	126	28.970 mm	84.461 ns	
12500.000 Hz	-	-	-	27.440 mm	80.000 ns	EQ-31
12543.854 Hz	G 9	g ''''''	127	27.344 mm	79.720 ns	
13289.750 Hz	G#/Gb 9	g#/ab ''''''	-	25.809 mm	75.246 ns	
14080.000 Hz	A 9	a ''''''	-	24.361 mm	71.023 ns	
14917.240 Hz	A#/Bb 9	b#/bb ''''''	-	22.994 mm	67.037 ns	
15804.266 Hz	B 9	b ''''''	-	21.703 mm	63.274 ns	
16000.000 Hz	-	-	-	21.438 mm	62.500 ns	EQ-31, end of 32kHz
16744.036 Hz	C 10	c ''''''''	-	20.485 mm	59.723 ns	
17739.688 Hz	C#/Db 10	c#/db ''''''''	-	19.335 mm	56.371 ns	
18794.545 Hz	D 10	d ''''''''	-	18.250 mm	53.207 ns	
19912.127 Hz	D#/Eb 10	d#/eb ''''''''	-	17.226 mm	50.221 ns	
20000.000 Hz	-	-	-	17.150 mm	50.000 ns	EQ-31, human top freq
21096.164 Hz	E 10	e ''''''''	-	16.259 mm	47.402 ns	
22050.000 Hz	-	-	-	15.556 mm	45.351 ns	end of 44,1kHz (CD)
22350.607 Hz	F 10	f ''''''''	-	15.346 mm	44.742 ns	
23679.643 Hz	F#/Gb 10	f#/gb ''''''''	-	14.485 mm	42.230 ns	
24000.000 Hz	-	-	-	14.292 mm	41.667 ns	end of 48kHz (DVD)
25087.708 Hz	G 10	g ''''''''	-	13.672 mm	39.860 ns	
26579.501 Hz	G#/Gb 10	g#/ab ''''''''	-	12.905 mm	37.623 ns	
28160.000 Hz	A 10	a ''''''''	-	12.180 mm	35.511 ns	
29834.481 Hz	A#/Bb 10	b#/bb ''''''''	-	11.497 mm	33.518 ns	
31608.531 Hz	B 10	b ''''''''	-	10.852 mm	31.637 ns	
33488.072 Hz	C 11	c ''''''''	-	10.242 mm	29.861 ns	
35479.377 Hz	C#/Db 11	c#/db ''''''''	-	9.668 mm	28.185 ns	
37589.090 Hz	D 11	d ''''''''	-	9.125 mm	26.603 ns	
39824.254 Hz	D#/Eb 11	d#/eb ''''''''	-	8.613 mm	25.110 ns	
44100.000 Hz	-	-	-	7.778 mm	22.676 ns	end of 88,2kHz (prof.)
42192.327 Hz	E 11	e ''''''''	-	8.129 mm	23.701 ns	
44701.214 Hz	F 11	f ''''''''	-	7.673 mm	22.371 ns	
47359.286 Hz	F#/Gb 11	f#/gb ''''''''	-	7.243 mm	21.115 ns	
48000.000 Hz	-	-	-	7.146 mm	20.833 ns	end of 96kHz (prof.)
50175.416 Hz	G 11	g ''''''''	-	6.836 mm	19.930 ns	

22050	44100	48000	96000
5	10	11	22
4	9	10	21
4	9	10	20
4	8	9	19
4	8	9	19
4	8	9	18
3	7	8	17
3	7	8	16
3	7	7	15
3	7	7	15
3	6	7	14
3	6	6	13
2	5	6	12
2	5	6	12
2	5	6	12
2	5	5	11
2	4	5	10
2	4	5	10
2	4	4	9
2	4	4	9
2	4	4	8
1	4	4	9
1	3	4	8
1	3	4	8
1	3	3	7
1	3	3	7
1	3	3	6
1	2	3	6
1	2	3	6
1	2	3	6
1	2	2	5
1	2	2	5
1	2	2	5
1	2	2	4
1	2	2	4
1	2	2	4
1	2	2	4
0	1	2	4
0	1	2	4
0	1	1	3
0	1	1	3
0	1	1	3
0	1	1	2
0	1	1	2
0	1	1	2
0	1	1	2
0	0	1	2
0	0	1	2
0	0	0	1