

## B.P.M./Delay Chart

BPM	Quarter	Eighth	Sixteenth	3 Sixteenth	4 Triplet	8-Triplet	Sec/Bar(4)	Frame/Beat
30	2000.0	1000.0	500.0	1500.0	1333.3	666.7	8.000	50.000
31	1935.5	967.7	483.9	1451.6	1290.3	645.2	7.742	48.387
32	1875.0	937.5	468.8	1406.3	1250.0	625.0	7.500	46.875
33	1818.2	909.1	454.5	1363.6	1212.1	606.1	7.273	45.455
34	1764.7	882.4	441.2	1323.5	1176.5	588.2	7.059	44.118
35	1714.3	857.1	428.6	1285.7	1142.9	571.4	6.857	42.857
36	1666.7	833.3	416.7	1250.0	1111.1	555.6	6.667	41.667
37	1621.6	810.8	405.4	1216.2	1081.1	540.5	6.486	40.541
38	1578.9	789.5	394.7	1184.2	1052.6	526.3	6.316	39.474
39	1538.5	769.2	384.6	1153.8	1025.6	512.8	6.154	38.462
40	1500.0	750.0	375.0	1125.0	1000.0	500.0	6.000	37.500
41	1463.4	731.7	365.9	1097.6	975.6	487.8	5.854	36.585
42	1428.6	714.3	357.1	1071.4	952.4	476.2	5.714	35.714
43	1395.3	697.7	348.8	1046.5	930.2	465.1	5.581	34.884
44	1363.6	681.8	340.9	1022.7	909.1	454.5	5.455	34.091
45	1333.3	666.7	333.3	1000.0	888.9	444.4	5.333	33.333
46	1304.3	652.2	326.1	978.3	869.6	434.8	5.217	32.609
47	1276.6	638.3	319.1	957.4	851.1	425.5	5.106	31.915
48	1250.0	625.0	312.5	937.5	833.3	416.7	5.000	31.250
49	1224.5	612.2	306.1	918.4	816.3	408.2	4.898	30.612
50	1200.0	600.0	300.0	900.0	800.0	400.0	4.800	30.000
51	1176.5	588.2	294.1	882.4	784.3	392.2	4.706	29.412
52	1153.8	576.9	288.5	865.4	769.2	384.6	4.615	28.846
53	1132.1	566.0	283.0	849.1	754.7	377.4	4.528	28.302
54	1111.1	555.6	277.8	833.3	740.7	370.4	4.444	27.778
55	1090.9	545.5	272.7	818.2	727.3	363.6	4.364	27.273
56	1071.4	535.7	267.9	803.6	714.3	357.1	4.286	26.786
57	1052.6	526.3	263.2	789.5	701.8	350.9	4.211	26.316
58	1034.5	517.2	258.6	775.9	689.7	344.8	4.138	25.862
59	1016.9	508.5	254.2	762.7	678.0	339.0	4.068	25.424
60	1000.0	500.0	250.0	750.0	666.7	333.3	4.000	25.000
61	983.6	491.8	245.9	737.7	655.7	327.9	3.934	24.590
62	967.7	483.9	241.9	725.8	645.2	322.6	3.871	24.194
63	952.4	476.2	238.1	714.3	634.9	317.5	3.810	23.810
64	937.5	468.8	234.4	703.1	625.0	312.5	3.750	23.438
65	923.1	461.5	230.8	692.3	615.4	307.7	3.692	23.077
66	909.1	454.5	227.3	681.8	606.1	303.0	3.636	22.727
67	895.5	447.8	223.9	671.6	597.0	298.5	3.582	22.388
68	882.4	441.2	220.6	661.8	588.2	294.1	3.529	22.059
69	869.6	434.8	217.4	652.2	579.7	289.9	3.478	21.739
70	857.1	428.6	214.3	642.9	571.4	285.7	3.429	21.429
71	845.1	422.5	211.3	633.8	563.4	281.7	3.380	21.127
72	833.3	416.7	208.3	625.0	555.6	277.8	3.333	20.833
73	821.9	411.0	205.5	616.4	547.9	274.0	3.288	20.548
74	810.8	405.4	202.7	608.1	540.5	270.3	3.243	20.270
75	800.0	400.0	200.0	600.0	533.3	266.7	3.200	20.000
76	789.5	394.7	197.4	592.1	526.3	263.2	3.158	19.737
77	779.2	389.6	194.8	584.4	519.5	259.7	3.117	19.481
78	769.2	384.6	192.3	576.9	512.8	256.4	3.077	19.231
79	759.5	379.7	189.9	569.6	506.3	253.2	3.038	18.987
80	750.0	375.0	187.5	562.5	500.0	250.0	3.000	18.750
81	740.7	370.4	185.2	555.6	493.8	246.9	2.963	18.519
82	731.7	365.9	182.9	548.8	487.8	243.9	2.927	18.293
83	722.9	361.4	180.7	542.2	481.9	241.0	2.892	18.072
84	714.3	357.1	178.6	535.7	476.2	238.1	2.857	17.857
85	705.9	352.9	176.5	529.4	470.6	235.3	2.824	17.647
86	697.7	348.8	174.4	523.3	465.1	232.6	2.791	17.442
87	689.7	344.8	172.4	517.2	459.8	229.9	2.759	17.241
88	681.8	340.9	170.5	511.4	454.5	227.3	2.727	17.045
89	674.2	337.1	168.5	505.6	449.4	224.7	2.697	16.854
90	666.7	333.3	166.7	500.0	444.4	222.2	2.667	16.667
91	659.3	329.7	164.8	494.5	439.6	219.8	2.637	16.484
92	652.2	326.1	163.0	489.1	434.8	217.4	2.609	16.304
93	645.2	322.6	161.3	483.9	430.1	215.1	2.581	16.129
94	638.3	319.1	159.6	478.7	425.5	212.8	2.553	15.957
95	631.6	315.8	157.9	473.7	421.1	210.5	2.526	15.789
96	625.0	312.5	156.3	468.8	416.7	208.3	2.500	15.625
97	618.6	309.3	154.6	463.9	412.4	206.2	2.474	15.464
98	612.2	306.1	153.1	459.2	408.2	204.1	2.449	15.306
99	606.1	303.0	151.5	454.5	404.0	202.0	2.424	15.152

## B.P.M./Delay Chart

BPM	Quarter	Eighth	Sixteenth	3 Sixteenth	4 Triplet	8-Triplet	Sec/Bar(4)	Frame/Beat
100	600.0	300.0	150.0	450.0	400.0	200.0	2.400	15.000
101	594.1	297.0	148.5	445.5	396.0	198.0	2.376	14.851
102	588.2	294.1	147.1	441.2	392.2	196.1	2.353	14.706
103	582.5	291.3	145.6	436.9	388.3	194.2	2.330	14.563
104	576.9	288.5	144.2	432.7	384.6	192.3	2.308	14.423
105	571.4	285.7	142.9	428.6	381.0	190.5	2.286	14.286
106	566.0	283.0	141.5	424.5	377.4	188.7	2.264	14.151
107	560.7	280.4	140.2	420.6	373.8	186.9	2.243	14.019
108	555.6	277.8	138.9	416.7	370.4	185.2	2.222	13.889
109	550.5	275.2	137.6	412.8	367.0	183.5	2.202	13.761
110	545.5	272.7	136.4	409.1	363.6	181.8	2.182	13.636
111	540.5	270.3	135.1	405.4	360.4	180.2	2.162	13.514
112	535.7	267.9	133.9	401.8	357.1	178.6	2.143	13.393
113	531.0	265.5	132.7	398.2	354.0	177.0	2.124	13.274
114	526.3	263.2	131.6	394.7	350.9	175.4	2.105	13.158
115	521.7	260.9	130.4	391.3	347.8	173.9	2.087	13.043
116	517.2	258.6	129.3	387.9	344.8	172.4	2.069	12.931
117	512.8	256.4	128.2	384.6	341.9	170.9	2.051	12.821
118	508.5	254.2	127.1	381.4	339.0	169.5	2.034	12.712
119	504.2	252.1	126.1	378.2	336.1	168.1	2.017	12.605
120	500.0	250.0	125.0	375.0	333.3	166.7	2.000	12.500
121	495.9	247.9	124.0	371.9	330.6	165.3	1.983	12.397
122	491.8	245.9	123.0	368.9	327.9	163.9	1.967	12.295
123	487.8	243.9	122.0	365.9	325.2	162.6	1.951	12.195
124	483.9	241.9	121.0	362.9	322.6	161.3	1.935	12.097
125	480.0	240.0	120.0	360.0	320.0	160.0	1.920	12.000
126	476.2	238.1	119.0	357.1	317.5	158.7	1.905	11.905
127	472.4	236.2	118.1	354.3	315.0	157.5	1.890	11.811
128	468.8	234.4	117.2	351.6	312.5	156.3	1.875	11.719
129	465.1	232.6	116.3	348.8	310.1	155.0	1.860	11.628
130	461.5	230.8	115.4	346.2	307.7	153.8	1.846	11.538
131	458.0	229.0	114.5	343.5	305.3	152.7	1.832	11.450
132	454.5	227.3	113.6	340.9	303.0	151.5	1.818	11.364
133	451.1	225.6	112.8	338.3	300.8	150.4	1.805	11.278
134	447.8	223.9	111.9	335.8	298.5	149.3	1.791	11.194
135	444.4	222.2	111.1	333.3	296.3	148.1	1.778	11.111
136	441.2	220.6	110.3	330.9	294.1	147.1	1.765	11.029
137	438.0	219.0	109.5	328.5	292.0	146.0	1.752	10.949
138	434.8	217.4	108.7	326.1	289.9	144.9	1.739	10.870
139	431.7	215.8	107.9	323.7	287.8	143.9	1.727	10.791
140	428.6	214.3	107.1	321.4	285.7	142.9	1.714	10.714
141	425.5	212.8	106.4	319.1	283.7	141.8	1.702	10.638
142	422.5	211.3	105.6	316.9	281.7	140.8	1.690	10.563
143	419.6	209.8	104.9	314.7	279.7	139.9	1.678	10.490
144	416.7	208.3	104.2	312.5	277.8	138.9	1.667	10.417
145	413.8	206.9	103.4	310.3	275.9	137.9	1.655	10.345
146	411.0	205.5	102.7	308.2	274.0	137.0	1.644	10.274
147	408.2	204.1	102.0	306.1	272.1	136.1	1.633	10.204
148	405.4	202.7	101.4	304.1	270.3	135.1	1.622	10.135
149	402.7	201.3	100.7	302.0	268.5	134.2	1.611	10.067
150	400.0	200.0	100.0	300.0	266.7	133.3	1.600	10.000
151	397.4	198.7	99.3	298.0	264.9	132.5	1.589	9.934
152	394.7	197.4	98.7	296.1	263.2	131.6	1.579	9.868
153	392.2	196.1	98.0	294.1	261.4	130.7	1.569	9.804
154	389.6	194.8	97.4	292.2	259.7	129.9	1.558	9.740
155	387.1	193.5	96.8	290.3	258.1	129.0	1.548	9.677
156	384.6	192.3	96.2	288.5	256.4	128.2	1.538	9.615
157	382.2	191.1	95.5	286.6	254.8	127.4	1.529	9.554
158	379.7	189.9	94.9	284.8	253.2	126.6	1.519	9.494
159	377.4	188.7	94.3	283.0	251.6	125.8	1.509	9.434
160	375.0	187.5	93.8	281.3	250.0	125.0	1.500	9.375
161	372.7	186.3	93.2	279.5	248.4	124.2	1.491	9.317
162	370.4	185.2	92.6	277.8	246.9	123.5	1.481	9.259
163	368.1	184.0	92.0	276.1	245.4	122.7	1.472	9.202
164	365.9	182.9	91.5	274.4	243.9	122.0	1.463	9.146
165	363.6	181.8	90.9	272.7	242.4	121.2	1.455	9.091
166	361.4	180.7	90.4	271.1	241.0	120.5	1.446	9.036
167	359.3	179.6	89.8	269.5	239.5	119.8	1.437	8.982
168	357.1	178.6	89.3	267.9	238.1	119.0	1.429	8.929
169	355.0	177.5	88.8	266.3	236.7	118.3	1.420	8.876

## B.P.M./Delay Chart

BPM	Quarter	Eighth	Sixteenth	3 Sixteenth	4 Triplet	8-Triplet	Sec/Bar(4)	Frame/Beat
170	352.9	176.5	88.2	264.7	235.3	117.6	1.412	8.824
171	350.9	175.4	87.7	263.2	233.9	117.0	1.404	8.772
172	348.8	174.4	87.2	261.6	232.6	116.3	1.395	8.721
173	346.8	173.4	86.7	260.1	231.2	115.6	1.387	8.671
174	344.8	172.4	86.2	258.6	229.9	114.9	1.379	8.621
175	342.9	171.4	85.7	257.1	228.6	114.3	1.371	8.571
176	340.9	170.5	85.2	255.7	227.3	113.6	1.364	8.523
177	339.0	169.5	84.7	254.2	226.0	113.0	1.356	8.475
178	337.1	168.5	84.3	252.8	224.7	112.4	1.348	8.427
179	335.2	167.6	83.8	251.4	223.5	111.7	1.341	8.380
180	333.3	166.7	83.3	250.0	222.2	111.1	1.333	8.333
181	331.5	165.7	82.9	248.6	221.0	110.5	1.326	8.287
182	329.7	164.8	82.4	247.3	219.8	109.9	1.319	8.242
183	327.9	163.9	82.0	245.9	218.6	109.3	1.311	8.197
184	326.1	163.0	81.5	244.6	217.4	108.7	1.304	8.152
185	324.3	162.2	81.1	243.2	216.2	108.1	1.297	8.108
186	322.6	161.3	80.6	241.9	215.1	107.5	1.290	8.065
187	320.9	160.4	80.2	240.6	213.9	107.0	1.283	8.021
188	319.1	159.6	79.8	239.4	212.8	106.4	1.277	7.979
189	317.5	158.7	79.4	238.1	211.6	105.8	1.270	7.937
190	315.8	157.9	78.9	236.8	210.5	105.3	1.263	7.895
191	314.1	157.1	78.5	235.6	209.4	104.7	1.257	7.853
192	312.5	156.3	78.1	234.4	208.3	104.2	1.250	7.813
193	310.9	155.4	77.7	233.2	207.3	103.6	1.244	7.772
194	309.3	154.6	77.3	232.0	206.2	103.1	1.237	7.732
195	307.7	153.8	76.9	230.8	205.1	102.6	1.231	7.692
196	306.1	153.1	76.5	229.6	204.1	102.0	1.224	7.653
197	304.6	152.3	76.1	228.4	203.0	101.5	1.218	7.614
198	303.0	151.5	75.8	227.3	202.0	101.0	1.212	7.576
199	301.5	150.8	75.4	226.1	201.0	100.5	1.206	7.538
200	300.0	150.0	75.0	225.0	200.0	100.0	1.200	7.500
201	298.5	149.3	74.6	223.9	199.0	99.5	1.194	7.463
202	297.0	148.5	74.3	222.8	198.0	99.0	1.188	7.426
203	295.6	147.8	73.9	221.7	197.0	98.5	1.182	7.389
204	294.1	147.1	73.5	220.6	196.1	98.0	1.176	7.353
205	292.7	146.3	73.2	219.5	195.1	97.6	1.171	7.317
206	291.3	145.6	72.8	218.4	194.2	97.1	1.165	7.282
207	289.9	144.9	72.5	217.4	193.2	96.6	1.159	7.246
208	288.5	144.2	72.1	216.3	192.3	96.2	1.154	7.212
209	287.1	143.5	71.8	215.3	191.4	95.7	1.148	7.177
210	285.7	142.9	71.4	214.3	190.5	95.2	1.143	7.143
211	284.4	142.2	71.1	213.3	189.6	94.8	1.137	7.109
212	283.0	141.5	70.8	212.3	188.7	94.3	1.132	7.075
213	281.7	140.8	70.4	211.3	187.8	93.9	1.127	7.042
214	280.4	140.2	70.1	210.3	186.9	93.5	1.121	7.009
215	279.1	139.5	69.8	209.3	186.0	93.0	1.116	6.977
216	277.8	138.9	69.4	208.3	185.2	92.6	1.111	6.944
217	276.5	138.2	69.1	207.4	184.3	92.2	1.106	6.912
218	275.2	137.6	68.8	206.4	183.5	91.7	1.101	6.881
219	274.0	137.0	68.5	205.5	182.6	91.3	1.096	6.849
220	272.7	136.4	68.2	204.5	181.8	90.9	1.091	6.818
221	271.5	135.7	67.9	203.6	181.0	90.5	1.086	6.787
222	270.3	135.1	67.6	202.7	180.2	90.1	1.081	6.757
223	269.1	134.5	67.3	201.8	179.4	89.7	1.076	6.726
224	267.9	133.9	67.0	200.9	178.6	89.3	1.071	6.696
225	266.7	133.3	66.7	200.0	177.8	88.9	1.067	6.667
226	265.5	132.7	66.4	199.1	177.0	88.5	1.062	6.637
227	264.3	132.2	66.1	198.2	176.2	88.1	1.057	6.608
228	263.2	131.6	65.8	197.4	175.4	87.7	1.053	6.579
229	262.0	131.0	65.5	196.5	174.7	87.3	1.048	6.550
230	260.9	130.4	65.2	195.7	173.9	87.0	1.043	6.522
231	259.7	129.9	64.9	194.8	173.2	86.6	1.039	6.494
232	258.6	129.3	64.7	194.0	172.4	86.2	1.034	6.466
233	257.5	128.8	64.4	193.1	171.7	85.8	1.030	6.438
234	256.4	128.2	64.1	192.3	170.9	85.5	1.026	6.410
235	255.3	127.7	63.8	191.5	170.2	85.1	1.021	6.383
236	254.2	127.1	63.6	190.7	169.5	84.7	1.017	6.356
237	253.2	126.6	63.3	189.9	168.8	84.4	1.013	6.329
238	252.1	126.1	63.0	189.1	168.1	84.0	1.008	6.303
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!