

MIDI NOTE NUMBERS AND CENTER FREQUENCIES

The following table summarizes the MIDI note numbers as defined in the MIDI standard and matched to the Middle C (note number 60) as C4.

The formula connecting the MIDI note number and the base frequency - assuming equal tuning based on A4=a'=440 Hz - is:

$$f = 440 \cdot 2^{\{(n-69)/12\}}$$

MIDI note number	Key number (Organ)	Key number (Piano)	Note names (English)	Note names (German)	Frequency (Equal tuning at 440 Hz)
top of MIDI tuning range			G#9/Ab9	gis''''/ges''''	13289.75
127			G9	g''''	12543.85
126			F#9/Gb9	fis''''/ges''''	11839.82
125			F9	f''''	11175.30
124			E9	e''''	10548.08
123			D#9/Eb9	dis''''/es''''	9956.06
122			D9	d''''	9397.27
121			C#9/Db9	cis''''/des''''	8869.84
120			C9	c''''	8372.02
119			B8	h''''	7902.13
118			A#8/Bb8	ais''''/b''''	7458.62
117			A8	a''''	7040.00
116			G#8/Ab8	gis''''/ges''''	6644.88
115			G8	g''''	6271.93
114			F#8/Gb8	fis''''/ges''''	5919.91
113			F8	f''''	5587.65
112			E8	e''''	5274.04
111			D#8/Eb8	dis''''/es''''	4978.03
110			D8	d''''	4698.64
109			C#8/Db8	cis''''/des''''	4434.92
108		88	C8	c''''	4186.01
107		87	B7	h''''	3951.07
106		86	A#7/Bb7	ais''''/b''''	3729.31
105		85	A7	a''''	3520.00
104		84	G#7/Ab7	gis''''/ges''''	3322.44
103		83	G7	g''''	3135.96
102		82	F#7/Gb7	fis''''/ges''''	2959.96
101		81	F7	f''''	2793.83
100		80	E7	e''''	2637.02
99		79	D#7/Eb7	dis''''/es''''	2489.02
98		78	D7	d''''	2349.32
97		77	C#7/Db7	cis''''/des''''	2217.46
96	61	76	C7	c''''	2093.00
95	60	75	B6	h''	1975.53
94	59	74	A#6/Bb6	ais''''/b''	1864.66
93	58	73	A6	a''	1760.00
92	57	72	G#6/Ab6	gis''''/as''	1661.22
91	56	71	G6	g''	1567.98
90	55	70	F#6/Gb6	fis''''/ges''	1479.98
89	54	69	F6	f''	1396.91

88	53	68	E6	e'''	1318.51
87	52	67	D#6/Eb6	dis'''/es'''	1244.51
86	51	66	D6	d'''	1174.66
85	50	65	C#6/Db6	cis'''/des'''	1108.73
84	49	64	C6	c'''	1046.50
83	48	63	B5	h''	987.77
82	47	62	A#5/Bb5	ais''/b''	932.33
81	46	61	A5	a''	880.00
80	45	60	G#5/Ab5	gis''/as''	830.61
79	44	59	G5	g''	783.99
78	43	58	F#5/Gb5	fis''/ges''	739.99
77	42	57	F5	f''	698.46
76	41	56	E5	e''	659.26
75	40	55	D#5/Eb5	dis''/es''	622.25
74	39	54	D5	d''	587.33
73	38	53	C#5/Db5	cis''/des''	554.37
72	37	52	C5	c''	523.25
71	36	51	B4	h'	493.88
70	35	50	A#4/Bb4	ais'/b'	466.16
69	34	49	A4 concert pitch	a' Kammerton	440.00
68	33	48	G#4/Ab4	gis'/as'	415.30
67	32	47	G4	g'	392.00
66	31	46	F#4/Gb4	fis'/ges'	369.99
65	30	45	F4	f'	349.23
64	29	44	E4	e'	329.63
63	28	43	D#4/Eb4	dis'/es'	311.13
62	27	42	D4	d'	293.66
61	26	41	C#4/Db4	cis'/des'	277.18
60	25	40	C4 (middle C)	c' (Schloss- C)	261.63
59	24	39	B3	h	246.94
58	23	38	A#3/Bb3	ais/b	233.08
57	22	37	A3	a	220.00
56	21	36	G#3/Ab3	gis/as	207.65
55	20	35	G3	g	196.00
54	19	34	F#3/Gb3	fis/ges	185.00
53	18	33	F3	f	174.61
52	17	32	E3	e	164.81
51	16	31	D#3/Eb3	dis/es	155.56
50	15	30	D3	d	146.83
49	14	29	C#3/Db3	cis/des	138.59
48	13	28	C3	c	130.81
47	12	27	B2	H	123.47
46	11	26	A#2/Bb2	Ais/B	116.54
45	10	25	A2	A	110.00
44	9	24	G#2/Ab2	Gis/As	103.83
43	8	23	G2	G	98.00
42	7	22	F#2/Gb2	Fis/Ges	92.50
41	6	21	F2	F	87.31
40	5	20	E2	E	82.41

39	4	19	D#2/Eb2	Dis/Es	77.78
38	3	18	D2	D	73.42
37	2	17	C#2/Db2	Cis/Des	69.30
36	1	16	C2	C	65.41
35		15	B1	H1	61.74
34		14	A#1/Bb1	Ais1/b1	58.27
33		13	A1	A1	55.00
32		12	G#1/Ab1	Gis1/As1	51.91
31		11	G1	G1	49.00
30		10	F#1/Gb1	Fis1/Ges1	46.25
29		9	F1	F1	43.65
28		8	E1	E1	41.20
27		7	D#1/Eb1	Dis1/Es1	38.89
26		6	D1	D1	36.71
25		5	C#1/Db1	Cis1/Des1	34.65
24		4	C1	C1	32.70
23		3	B0	H2	30.87
22		2	A#0/Bb0	Ais2/B2	29.14
21		1	A0	A2	27.50
20					25.96
19					24.50
18					23.12
17					21.83
16					20.60
15					19.45
14					18.35
13					17.32
12					16.35
11					15.43
10					14.57
9					13.75
8					12.98
7					12.25
6					11.56
5					10.91
4					10.30
3					9.72
2					9.18
1					8.66
0					8.18