

Table of correspondence between the Fokker organ (31-TET) and the Carrillo piano (96-TET)

This table shows which keys on the 16th-tone Carrillo piano most closely match the pitches of the Fokker organ (the Fokker organ being tuned at $a_1 = 443$ Hz, and the Carrillo piano at $a_1 = 442$ Hz). The top staff uses the 31-TET notation of the Fokker organ. The lower staves are notated using the Carrillo piano keyboard notation. The large notes on the lower staves represent the closest matching notes, whereby the amount of out-of-tuneness with the Fokker organ varies between 0 and 6.2 cents (but is never more than 1.7 Hz). The small notes on the lower staves are usable alternatives, only slightly more out of tune than their neighbors (but no more than 1.7 Hz, or 7.8 cents out of tune), which may be preferable in some situations where a better vertical sonority (e.g. a just 3rd, 4th or 5th) within the Carrillo piano part is desired.

The image displays two musical examples comparing the Fokker organ (31-TET) and the Carrillo piano (96-TET). Each example consists of two staves: the top staff for the Fokker organ and the bottom staff for the Carrillo piano. The Carrillo piano staff is split into two parts: a treble clef staff and a bass clef staff. In the first example, the Fokker organ staff shows a sequence of 16 notes. The Carrillo piano staff shows corresponding notes, with large notes indicating the closest match and smaller notes indicating alternatives. A dashed line labeled '8va' is positioned below the bass clef staff. In the second example, the Fokker organ staff shows a sequence of 16 notes. The Carrillo piano staff shows corresponding notes, with large notes indicating the closest match and smaller notes indicating alternatives. A dashed line labeled '8va' is positioned above the treble clef staff.

Carrillo piano / 96-TET					Fokker organ / 31-TET					Carrillo piano compared to Fokker organ		
a1 = 442.0 Hz					a1 = 443.0 Hz					Closest matching notes are in bold		
										Usable alternatives are in <i>italics</i>		
key #	sounding pitch	written note	Hz	cents	closest 31-t scale degree	closest 31-t note name	Hz	cents	difference in Hz	difference in cents		
0	c1	CCC	262.81	0.00	1	c1	264.89	13.59	-2.07	-13.59		
1	c1 + 1/16	CCC#	264.72	12.50	1	c1	264.89	13.59	-0.17	-1.09		
2	c1 + 2/16	DDD	266.64	25.00	1	c1	264.89	13.59	1.75	11.41		
3	c1 + 3/16	DDD#	268.57	37.50	2	c+1	270.88	52.30	-2.31	-14.80		
4	c1 + 4/16	EEE	270.52	50.00	2	c+1	270.88	52.30	-0.36	-2.30		
5	c1 + 5/16	FFF	272.48	62.50	2	c+1	270.88	52.30	1.60	10.20		
6	c1 + 6/16	FFF#	274.45	75.00	3	c#1	277.00	91.01	-2.55	-16.01		
7	c1 + 7/16	GGG	276.44	87.50	3	c#1	277.00	91.01	-0.56	-3.51		
8	c#1	GGG#	278.44	100.00	3	c#1	277.00	91.01	1.44	8.99		
9	c#1 + 1/16	AAA	280.46	112.50	4	db1	283.26	129.72	-2.80	-17.22		
10	c#1 + 2/16	AAA#	282.49	125.00	4	db1	283.26	129.72	-0.77	-4.72		
11	c#1 + 3/16	BBB	284.54	137.50	4	db1	283.26	129.72	1.28	7.78		
12	c#1 + 4/16	CC	286.60	150.00	5	d-1	289.67	168.43	-3.07	-18.43		
13	c#1 + 5/16	CC#	288.68	162.50	5	d-1	289.67	168.43	-0.99	-5.93		
14	c#1 + 6/16	DD	290.77	175.00	5	d-1	289.67	168.43	1.10	6.57		
15	c#1 + 7/16	DD#	292.88	187.50	5	d-1	289.67	168.43	3.21	19.07		
16	d1	EE	295.00	200.00	6	d1	296.22	207.14	-1.22	-7.14		
17	d1 + 1/16	FF	297.14	212.50	6	d1	296.22	207.14	0.92	5.36		
18	d1 + 2/16	FF#	299.29	225.00	6	d1	296.22	207.14	3.07	17.86		
19	d1 + 3/16	GG	301.46	237.50	7	d+1	302.92	245.85	-1.46	-8.35		
20	d1 + 4/16	GG#	303.64	250.00	7	d+1	302.92	245.85	0.73	4.15		
21	d1 + 5/16	AA	305.84	262.50	7	d+1	302.92	245.85	2.93	16.65		
22	d1 + 6/16	AA#	308.06	275.00	8	d#1	309.77	284.56	-1.71	-9.56		
23	d1 + 7/16	BB	310.29	287.50	8	d#1	309.77	284.56	0.53	2.94		
24	d#1	C	312.54	300.00	8	d#1	309.77	284.56	2.78	15.44		
25	d#1 + 1/16	C#	314.81	312.50	9	eb1	316.77	323.27	-1.96	-10.77		
26	d#1 + 2/16	D	317.09	325.00	9	eb1	316.77	323.27	0.32	1.73		
27	d#1 + 3/16	D#	319.39	337.50	9	eb1	316.77	323.27	2.62	14.23		
28	d#1 + 4/16	E	321.70	350.00	10	e-1	323.93	361.98	-2.23	-11.98		
29	d#1 + 5/16	F	324.03	362.50	10	e-1	323.93	361.98	0.10	0.52		
30	d#1 + 6/16	F#	326.38	375.00	10	e-1	323.93	361.98	2.45	13.02		
31	d#1 + 7/16	G	328.74	387.50	11	e1	331.26	400.69	-2.51	-13.19		
32	e1	G#	331.13	400.00	11	e1	331.26	400.69	-0.13	-0.69		
33	e1 + 1/16	A	333.53	412.50	11	e1	331.26	400.69	2.27	11.81		
34	e1 + 2/16	A#	335.94	425.00	12	e+1	338.75	439.40	-2.81	-14.40		
35	e1 + 3/16	B	338.38	437.50	12	e+1	338.75	439.40	-0.37	-1.90		
36	e1 + 4/16	c	340.83	450.00	12	e+1	338.75	439.40	2.08	10.60		
37	e1 + 5/16	c#	343.30	462.50	13	f-1	346.41	478.11	-3.11	-15.61		
38	e1 + 6/16	d	345.79	475.00	13	f-1	346.41	478.11	-0.62	-3.11		
39	e1 + 7/16	d#	348.29	487.50	13	f-1	346.41	478.11	1.88	9.39		
40	f1	e	350.82	500.00	14	f1	354.24	516.82	-3.42	-16.82		
41	f1 + 1/16	f	353.36	512.50	14	f1	354.24	516.82	-0.88	-4.32		
42	f1 + 2/16	f#	355.92	525.00	14	f1	354.24	516.82	1.68	8.18	Ere Lievonen 2013	

43	f1 + 3/16	g	358.50	537.50		15	f+1	362.25	555.52		-3.75	-18.02
44	f1 + 4/16	g#	361.10	550.00		15	f+1	362.25	555.52		-1.15	-5.52
45	f1 + 5/16	a	363.71	562.50		15	f+1	362.25	555.52		1.46	6.98
46	f1 + 6/16	a#	366.35	575.00		16	f#1	370.44	594.23		-4.09	-19.23
47	f1 + 7/16	b	369.00	587.50		16	f#1	370.44	594.23		-1.44	-6.73
48	f#1	c1	371.68	600.00		16	f#1	370.44	594.23		1.24	5.77
49	f#1 + 1/16	c#1	374.37	612.50		16	f#1	370.44	594.23		3.93	18.27
50	f#1 + 2/16	d1	377.08	625.00		17	gb1	378.82	632.94		-1.73	-7.94
51	f#1 + 3/16	d#1	379.81	637.50		17	gb1	378.82	632.94		1.00	4.56
52	f#1 + 4/16	e1	382.57	650.00		17	gb1	378.82	632.94		3.75	17.06
53	f#1 + 5/16	f1	385.34	662.50		18	g-1	387.38	671.65		-2.04	-9.15
54	f#1 + 6/16	f#1	388.13	675.00		18	g-1	387.38	671.65		0.75	3.35
55	f#1 + 7/16	g1	390.94	687.50		18	g-1	387.38	671.65		3.56	15.85
56	g1	g#1	393.78	700.00		19	g1	396.14	710.36		-2.36	-10.36
57	g1 + 1/16	a1	396.63	712.50		19	g1	396.14	710.36		0.49	2.14
58	g1 + 2/16	a#1	399.50	725.00		19	g1	396.14	710.36		3.36	14.64
59	g1 + 3/16	b1	402.40	737.50		20	g+1	405.10	749.07		-2.70	-11.57
60	g1 + 4/16	c2	405.32	750.00		20	g+1	405.10	749.07		0.22	0.93
61	g1 + 5/16	c#2	408.25	762.50		20	g+1	405.10	749.07		3.15	13.43
62	g1 + 6/16	d2	411.21	775.00		21	g#1	414.26	787.78		-3.05	-12.78
63	g1 + 7/16	d#2	414.19	787.50		21	g#1	414.26	787.78		-0.07	-0.28
64	g#1	e2	417.19	800.00		21	g#1	414.26	787.78		2.93	12.22
65	g#1 + 1/16	f2	420.22	812.50		22	ab1	423.63	826.49		-3.41	-13.99
66	g#1 + 2/16	f#2	423.26	825.00		22	ab1	423.63	826.49		-0.37	-1.49
67	g#1 + 3/16	g2	426.33	837.50		22	ab1	423.63	826.49		2.70	11.01
68	g#1 + 4/16	g#2	429.42	850.00		23	a-1	433.20	865.20		-3.79	-15.20
69	g#1 + 5/16	a2	432.53	862.50		23	a-1	433.20	865.20		-0.68	-2.70
70	g#1 + 6/16	a#2	435.66	875.00		23	a-1	433.20	865.20		2.46	9.80
71	g#1 + 7/16	b2	438.82	887.50		24	a1	443.00	903.91		-4.18	-16.41
72	a1	c3	442.00	900.00		24	a1	443.00	903.91		-1.00	-3.91
73	a1 + 1/16	c#3	445.20	912.50		24	a1	443.00	903.91		2.20	8.59
74	a1 + 2/16	d3	448.43	925.00		25	a+1	453.02	942.62		-4.59	-17.62
75	a1 + 3/16	d#3	451.68	937.50		25	a+1	453.02	942.62		-1.34	-5.12
76	a1 + 4/16	e3	454.95	950.00		25	a+1	453.02	942.62		1.93	7.38
77	a1 + 5/16	f3	458.25	962.50		26	a#1	463.26	981.33		-5.01	-18.83
78	a1 + 6/16	f#3	461.57	975.00		26	a#1	463.26	981.33		-1.69	-6.33
79	a1 + 7/16	g3	464.91	987.50		26	a#1	463.26	981.33		1.65	6.17
80	a#1	g#3	468.28	1000.00		26	a#1	463.26	981.33		5.02	18.67
81	a#1 + 1/16	a3	471.68	1012.50		27	bb1	473.74	1020.04		-2.06	-7.54
82	a#1 + 2/16	a#3	475.09	1025.00		27	bb1	473.74	1020.04		1.36	4.96
83	a#1 + 3/16	b3	478.54	1037.50		27	bb1	473.74	1020.04		4.80	17.46
84	a#1 + 4/16	c4	482.00	1050.00		28	b-1	484.45	1058.75		-2.44	-8.75
85	a#1 + 5/16	c#4	485.50	1062.50		28	b-1	484.45	1058.75		1.05	3.75
86	a#1 + 6/16	d4	489.02	1075.00		28	b-1	484.45	1058.75		4.57	16.25
87	a#1 + 7/16	d#4	492.56	1087.50		29	b1	495.40	1097.46		-2.84	-9.96
88	b1	e4	496.13	1100.00		29	b1	495.40	1097.46		0.73	2.54
89	b1 + 1/16	f4	499.72	1112.50		29	b1	495.40	1097.46		4.32	15.04
90	b1 + 2/16	f#4	503.34	1125.00		30	b+1	506.60	1136.17		-3.26	-11.17
91	b1 + 3/16	g4	506.99	1137.50		30	b+1	506.60	1136.17		0.39	1.33
92	b1 + 4/16	g#4	510.67	1150.00		30	b+1	506.60	1136.17		4.06	13.83
93	b1 + 5/16	a4	514.37	1162.50		31	c-2	518.06	1174.88		-3.69	-12.38
94	b1 + 6/16	a#4	518.09	1175.00		31	c-2	518.06	1174.88		0.04	0.12
95	b1 + 7/16	b4	521.85	1187.50		31	c-2	518.06	1174.88		3.79	12.62
96	c2	c5	525.63	1200.00		1	c2	529.77	1213.59		-4.14	-13.59