

Battaglian Analysis: Intervals in Simplemint-12 (2/1, 704.0)

T = (T)one, 208 cents; L = (L)imma, 80 cents; A = (A)potome, 128 cents;
 T = 3d17; A = 2d17; L = 1d17

interval	example	cents	ratio	generic	7-specific	12-specific
unison	E4-E4	0	1/1	(0d7, 0d12, 0d17)	-----	-----
min2, limma	E4-F4	80	22/21	(1d7, 1d12, 1d17)	L	L
Zal2S, Aug1, apotome	F4-F#4	128	14/13	(0d7, 1d12, 2d17)	-----	A
Zal2K, dim3	C#4-Eb4	160	56/51	(2d7, 2d12, 2d17)	-----	2L
Maj2, tone	F4-G4	208	9/8	(1d7, 2d12, 3d17)	T	1L + 1A
min3	D4-F4	288	13/11	(2d7, 3d12, 4d17)	1T + 1L	2L + 1A
Zal3S, aug2	Eb4-F#4	336	17/14	(1d7, 3d12, 5d17)	-----	1L + 2A
Zal3K, dim4	F#4-Bb4	368	21/17	(3d7, 4d12, 5d12)	-----	3L + 1A
Maj3	F4-A4	416	14/11	(2d7, 4d12, 6d17)	2T	2L + 2A
Perf4	D4=G4	496	4/3	(3d7, 5d12, 7d17)	2T + 1L	3L + 2A
Aug3, super4	Eb4-G#4	544	196/143	(2d7, 5d12, 8d17)	-----	2L + 3A
dim5	B4=F5	576	39/28	(4d7, 6d12, 8d17)	2T + 2L	4L + 2A
Aug4, tritone	F4-B4	624	56/39	(3d7, 6d12, 9d17)	3T	3L + 3A
dim6, sub5	G#4-Eb5	656	143/98	(5d7, 7d12, 9d17)	-----	5L + 2A
Perf5	D4-A4	704	3/2	(4d7, 7d12, 10d17)	3T + 1L	4L + 3A
min6	D4=Bb4	784	11/7	(5d7, 8d12, 11d17)	3T + 2L	5L + 3A
Zal6S, Aug5	C4-G#4	832	34/21	(4d7, 8d12, 12d17)	-----	4L + 4A
Zal6K, dim7	F#4-Eb5	864	28/17	(6d7, 9d12, 12d17)	-----	6L + 3A
Maj6	G4-E5	912	22/13	(5d7, 9d12, 13d17)	4T + 1L	5L + 4A
min7	G4-F5	992	16/9	(6d7, 10d12, 14d17)	4T + 2L	6L + 4A
Zal7S, Aug6	Eb4-C#5	1040	51/28	(5d7, 10d12, 15d17)	-----	5L + 5A
Zal7K, dim8	B4-Bb5	1072	13/7	(7d7, 11d12, 15d17)	-----	7L + 4A
Maj7	F4-E5	1120	21/11	(6d7, 11d12, 16d17)	5T + 1L	6L + 5A
Perf8	F4-F5	1200	2/1	(7d7, 12d12, 17d17)	5T + 2L	7L + 5A

Battaglian motions or differences in Simplemint-12
 T = tone; L = limma; A = apotome

difference	interval	cents	ratio	5ths	generic	example	operation
diatonic	limma (L)	80	22/21	-5	(1d7, 1d12, 1d17)	Maj2-min3	adds an L
chromatic	apotome (A)	128	14/13	+7	(0d7, 1d12, 2d17)	min3-Maj3	adds an A
enharmonic	enh2 (E)	-48	147/143	-12	(1d7, 0d12, -1d17)	Aug2-min3	1A ---> 1L
zalzalian	Z-contrast (Z)	32	3146/3087	-17	(2d7, 1d12, 0d17)	Aug2-dim4	1A ---> 2L

In Simplemint-12, L and A are present as direct steps. but E and Z as differences only