

Journey to the Heart of Music

Philip Perry

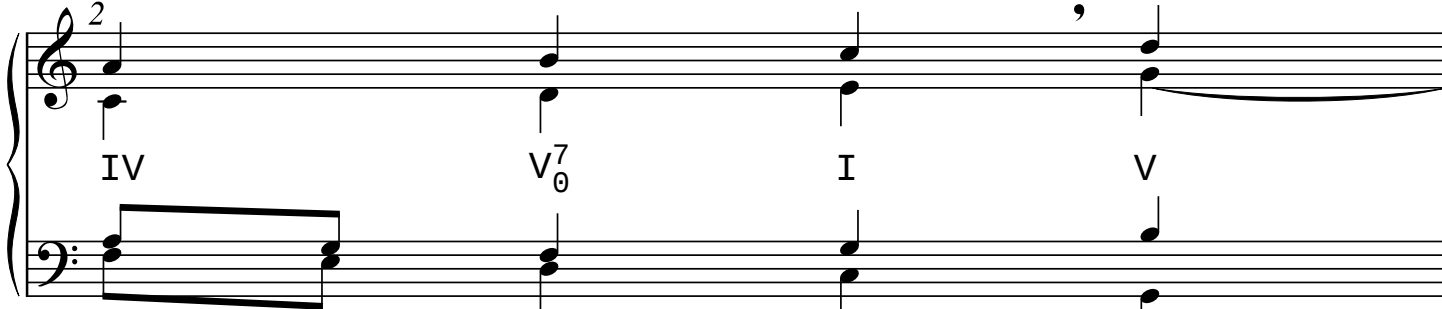
Copyright P.J. Perry © 2003, 2006, 2009. This document may be reproduced and used for non-commercial purposes only. Reproduction must include this copyright notice and the document may not be changed in any way. The right of Philip J. Perry to be identified as the author of this work has been asserted by him in accordance with the UK Copyright, Designs and Patents Act, 1988.

Example T *J.S.Bach – Chorale* *Ach Gott und Herr*

MUTABLE NUMBER ANALYSIS

This MOS analysis was produced with an early version of the *txt2mos* script and the character of the analysis lies part way between that of the old and new styles. Additionally, a resolution of a quarternote (96 ticks) was employed in measure 2 and consequently the detail of the analysis around the passing notes there differs from that given in Appendix F.

$$= 12_2 0_{21} 0_{1.016} \quad 20_2 0_{21} 0_{0.990} = 18_2 0_{24} 0_{0.963} \quad 16_2 0_{24} 0_1 = 12_2 0_{32} 0_1 = 16_2 0_{24} 0_1 \text{ etc.}$$



→ 512:C	832:A	→	832:A	768:G	→	768:G	832:A	→
-----	-----		-----	-----		-----	-----	
12	20		18	16		12	16	
2	2		2	2		2	2	
21	21		24	24		32	24	
1.016	0.990		0.963	1		1	0.963	

*853.3:A-(h40)>

832.0:A-(h39)

*810.7:G#(h38)

789.3:G-(h37)

*768.0:G-(h36)

746.7:G-(h35)

*725.3:F#(h34)

704.0:F-(h33)

*682.7:F-(h32)

661.3:??-(h31)

*640.0:E-(h30)

618.7:??-(h29)

*597.3:D#(h28)

576.0:D-(h27)

*554.7:D-(h26)

533.3:C#(h25)

→ *512.0:C-(h24)

490.7:??-(h23)

*469.3:B-(h22)

448.0:A#(h21)

*426.7:A-(h20)

405.3:G#(h19)

*384.0:G-(h18)

362.7:F#(h17)

*341.3:F-(h16)

320.0:E-(h15)

*298.7:D#(h14)

277.3:D-(h13)

*256.0:C-(h12)

234.7:B-(h11)

*213.3:A-(h10)

192.0:G-(h09)

*170.7:F-(h08)

149.3:D#(h07)

*128.0:C-(h06)

106.7:A-(h05)

*85.3:F-(h04)

64.0:C-(h03)

*42.7:F-(h02)R

21.3:F-(h21)

Bar:002.000

*853.3:A-(h36)

829.6:A-(h35)

*805.9:G#(h34)

782.2:G-(h33)

*758.5:G-(h32)>

734.8:??-(h31)

*711.1:F#(h30)

687.4:??-(h29)

*663.7:F-(h28)

640.0:E-(h27)

*616.3:E-(h26)

592.6:D#(h25)

*568.9:D-(h24)

545.2:??-(h23)

*521.5:C#(h22)

497.8:C-(h21)

*474.1:B-(h20)

450.4:A#(h19)

*426.7:A-(h18)

403.0:G#(h17)

*379.3:G-(h16)

355.6:F#(h15)

*331.9:F-(h14)

308.2:E-(h13)

*284.4:D-(h12)

260.7:C#(h11)

*237.0:B-(h10)

213.3:A-(h09)

*189.6:G-(h08)

165.9:F-(h07)

*142.2:D-(h06)

118.5:B-(h05)

*94.8:G-(h04)

71.1:D-(h03)

*47.4:G-(h02)R

23.7:G-(h24)

Bar:002.250

*758.5:G-(h24)>

726.9:??-(h23)

*695.3:F#(h22)

663.7:F-(h21)

*632.1:E-(h20)

600.5:D#(h19)

*568.9:D-(h18)

537.3:C#(h17)

*505.7:C-(h16)

474.1:B-(h15)

*442.5:A#(h14)

410.9:A-(h13)

*379.3:G-(h12)

347.7:F#(h11)

*316.1:E-(h10)

284.4:D-(h09)

*252.8:C-(h08)

221.2:A#(h07)

*189.6:G-(h06)

158.0:E-(h05)

*126.4:C-(h04)

94.8:G-(h03)

*63.2:C-(h02)R

31.6:C-(h32)

Bar:002.500

*853.3:A-(h36)>

829.6:A-(h35)

*805.9:G#(h34)

782.2:G-(h33)

*758.5:G-(h32)

734.8:??-(h31)

*711.1:F#(h30)

687.4:??-(h29)

*663.7:F-(h28)

640.0:E-(h27)

*616.3:E-(h26)

592.6:D#(h25)

*568.9:D-(h24)

545.2:??-(h23)

*521.5:C#(h22)

497.8:C-(h21)

*474.1:B-(h20)

450.4:A#(h19)

*426.7:A-(h18)

403.0:G#(h17)

*379.3:G-(h16)

355.6:F#(h15)

*331.9:F-(h14)

308.2:E-(h13)

*284.4:D-(h12)

260.7:C#(h11)

*237.0:B-(h10)

213.3:A-(h09)

*189.6:G-(h08)

165.9:F-(h07)

*142.2:D-(h06)

118.5:B-(h05)

*94.8:G-(h04)

71.1:D-(h03)

*47.4:G-(h02)R

23.7:G-(h24)

Bar:002.750

-3:2->(12 groups of 2)

(+8 groups of 2)

(20 groups of 2)

(16 groups of 2) ----3:4----

(-2 groups of 2)

(18 groups of 2)

(12 groups of 2) ----4:3-----

(+2 groups of 2)

(18 groups of 2) -4:3-->

--3:2->(8 x three)

(+16 x one)

(4 x ten)

(8 x four)

(-4 x one)

(4 x nine)

-----3:4-----> (8 x three)

-----4:3-----> (8 x four)

-----4:3-----> (8 x four)

(+4 x one) (12 x three) --4:3-->

832:A → 832:A → 832:A → 832:A →

24
2
18
0.963

18
2
24
0.963

12
2
36
0.963

9
4
24
0.963

→ *853.3:A-(h48)>	*853.3:A-(h36)>	*853.3:A-(h24)>	*853.3:A-(h36)> →
835.6:A-(h47)	829.6:A-(h35)	817.8:?(h23)	829.6:A-(h35)
*817.8:?(h46)	*805.9:G#(h34)	*782.2:G#(h22)	805.9:G#(h34)
800.0:G#(h45)	782.2:G-(h33)	746.7:G-(h21)	782.2:G-(h33)
*782.2:G#(h44)	*758.5:G-(h32)	*711.1:F#(h20)	*758.5:G-(h32)
764.5:G#(h43)	734.8:?(h31)	675.6:F-(h19)	734.8:?(h31)
*746.7:G-(h42)	*711.1:F#(h30)	*640.0:E-(h18)	711.1:F#(h30)
728.9:F#(h41)	687.4:?(h29)	604.5:D#(h17)	687.4:?(h29)
*711.1:F#(h40)	*663.7:F-(h28)	*568.9:D-(h16)	*663.7:F-(h28)
693.3:F#(h39)	640.0:E-(h27)	533.3:C#(h15)	640.0:E-(h27)
*675.6:F-(h38)	*616.3:E-(h26)	*497.8:C-(h14)	*568.9:D-(h24)
657.8:E-(h37)	592.6:D#(h25)	462.2:B-(h13)	545.2:?(h23)
*640.0:E-(h36)	*568.9:D-(h24)	*426.7:A-(h12)	521.5:C#(h22)
622.2:E-(h35)	545.2:?(h23)	391.1:G#(h11)	497.8:C-(h21)
*604.5:D#(h34)	*521.5:C#(h22)	*355.6:F#(h10)	*474.1:B-(h20)
586.7:D-(h33)	497.8:C-(h21)	320.0:E-(h09)	450.4:A#(h19)
*568.9:D-(h32)	*474.1:B-(h20)	*284.4:D-(h08)	426.7:A-(h18)
551.1:?(h31)	450.4:A#(h19)	248.9:C-(h07)	403.0:G#(h17)
*533.3:C#(h30)	*426.7:A-(h18)	*213.3:A-(h06)	*379.3:G-(h16)
515.6:?(h29)	403.0:G#(h17)	177.8:F#(h05)	355.6:F#(h15)
*497.8:C-(h28)	*379.3:G-(h16)	*142.2:D-(h04)	331.9:F-(h14)
480.0:B-(h27)	355.6:F#(h15)	106.7:A-(h03)	308.2:E-(h13)
*462.2:B-(h26)	*331.9:F-(h14)	*71.1:D-(h02)R	*284.4:D-(h12)
444.4:A#(h25)	308.2:E-(h13)	35.6:D-(H36)	260.7:C#(h11)
*426.7:A-(h24)	*284.4:D-(h12)	Bar:003.500	237.0:B-(h10)
408.9:?(h23)	260.7:C#(h11)		213.3:A-(h09)
*391.1:G#(h22)	*237.0:B-(h10)		*189.6:G-(h08)
373.3:G-(h21)	213.3:A-(h09)		165.9:F-(h07)
*355.6:F#(h20)	*189.6:G-(h08)		142.2:D-(h06)
337.8:F-(h19)	165.9:F-(h07)		118.5:B-(h05)
*320.0:E-(h18)	*142.2:D-(h06)		*94.8:G-(h04)R
302.2:D#(h17)	118.5:B-(h05)		71.1:D-(h03)
*284.4:D-(h16)	*94.8:G-(h04)		47.4:G-(h02)
266.7:C#(h15)	71.1:D-(h03)		23.7:G-(H24)
*248.9:C-(h14)	*47.4:G-(h02)R		Bar:003.750
231.1:B-(h13)	23.7:G-(H24)		
*213.3:A-(h12)	Bar:003.250		
195.6:G#(h11)			
*177.8:F#(h10)			
160.0:E-(h09)			
*142.2:D-(h08)			
124.4:C-(h07)			
*106.7:A-(h06)			
88.9:F#(h05)			
*71.1:D-(h04)			
53.3:A-(h03)			
*35.6:D-(h02)R			
17.8:D-(H18)			
Bar:003.000			

-4:3->(24 groups of 2) -----3:4-----> (18 groups of 2) -----2:3----->(12 groups of 2) ----3:4-----> (9 groups of 4) ---8:9-->

-4:3->(12 x four) -----3:4-----> (12 x three) -----2:3-----> (12 x two) -----3:2-----> (12 x three)
(4 x nine) --10:9-->

832:A → 832:A 576:D → 576:D 768:G → 768:G 960:B →

8 5 21 0.990

12 4 18 0.963

8 4 18 1

12 2 24 1

16 2 24 1

24 2 16 1

30 2 16 1

*948.1:B-(h60)> →

→ *853.3:A-(h40)> *853.3:A-(h48)

832.0:A-(h39) 835.6:A-(h47)

810.7:G#(h38) 817.8:?(h46)

789.3:G-(h37) 800.0:G#(h45)

768.0:G-(h36) *782.2:G#(h44)

*746.7:G-(h35) 764.5:G#(h43)

725.3:F#(h34) 746.7:G-(h42)

704.0:F-(h33) 728.9:F#(h41)

682.7:F-(h32) *711.1:F#(h40)

661.3:?(h31) 693.3:F#(h39)

*640.0:E-(h30) 675.6:F-(h38)

618.7:?(h29) 657.8:E-(h37)

597.3:D#(h28) *640.0:E-(h36)

576.0:D-(h27) 622.2:E-(h35)

554.7:D-(h26) 604.5:D#(h34)

*533.3:C#(h25) 586.7:D-(h33)

512.0:C-(h24) *568.9:D-(h32)>

490.7:?(h23) 551.1:?(h31)

469.3:B-(h22) 533.3:C#(h30)

448.0:A#(h21) 515.6:?(h29)

*426.7:A-(h20) *497.8:C-(h28)

405.3:G#(h19) 480.0:B-(h27)

384.0:G-(h18) 462.2:B-(h26)

362.7:F#(h17) 444.4:A#(h25)

341.3:F-(h16) *426.7:A-(h24)

*320.0:E-(h15) 408.9:?(h23)

298.7:D#(h14) 391.1:G#(h22)

277.3:D-(h13) 373.3:G-(h21)

256.0:C-(h12) *355.6:F#(h20)

234.7:B-(h11) 337.8:F-(h19)

*213.3:A-(h10) 320.0:E-(h18)

192.0:G-(h09) 302.2:D#(h17)

170.7:F-(h08) *284.4:D-(h16)

149.3:D#(h07) 266.7:C#(h15)

128.0:C-(h06) 248.9:C-(h14)

*106.7:A-(h05)R 231.1:B-(h13)

85.3:F-(h04) *213.3:A-(h12)

64.0:C-(h03) 195.6:G#(h11)

42.7:F-(h02) 177.8:F#(h10)

21.3:F-(h21) 160.0:E-(h09)

Bar:004.000 *142.2:D-(h08)

124.4:C-(h07)

106.7:A-(h06)

88.9:F#(h05)

*71.1:D-(h04)R

53.3:A-(h03)

35.6:D-(h02)

17.8:D-(h18)

Bar:004.250

*758.5:G-(h32)>

734.8:?(h31)

*711.1:F#(h30)R

687.4:?(h29)

*663.7:F-(h28)

640.0:E-(h27)

*616.3:E-(h26)

592.6:D#(h25)

*568.9:D-(h24)

545.2:?(h23)

*521.5:C#(h22)

497.8:C-(h21)

*474.1:B-(h20)

450.4:A#(h19)

*426.7:A-(h18)

403.0:G#(h17)

*379.3:G-(h16)

355.6:F#(h15)

*331.9:F-(h14)

308.2:E-(h13)

*284.4:D-(h12)

260.7:C#(h11)

*237.0:B-(h10)

213.3:A-(h09)

*189.6:G-(h08)

165.9:F-(h07)

*142.2:D-(h06)

118.5:B-(h05)

*94.8:G-(h04)

71.1:D-(h03)

*47.4:G-(h02)R

23.7:G-(h24)

Bar:004.500

*948.1:B-(h60)>

932.3:B-(h59)

*916.5:?(h58)

900.7:A#(h57)

*884.9:A#(h56)

869.1:A#(h55)

*853.3:A-(h54)

837.5:A-(h53)

*821.7:A-(h52)

805.9:A-(h51)

*790.1:G#(h50)

774.3:G-(h49)

*758.5:G-(h48)

742.7:G-(h47)

*726.9:?(h46)

711.1:F#(h45)

*695.3:F#(h44)

679.5:F#(h43)

*663.7:F-(h42)

647.9:E-(h41)

*632.1:E-(h40)

616.3:E-(h39)

*600.5:D#(h38)

584.7:D-(h37)

*568.9:D-(h36)

553.1:D-(h35)

*537.3:C#(h34)

521.5:C-(h33)

*505.7:C-(h32)

489.9:?(h31)

*474.1:B-(h30)

458.3:?(h29)

*442.5:A#(h28)

426.7:A-(h27)

*410.9:A-(h26)

395.1:G#(h25)

*379.2:G-(h24)

363.4:?(h23)

*347.6:F#(h22)

331.8:F-(h21)

*316.0:E-(h20)

300.2:D#(h19)

*284.4:D-(h18)

268.6:C#(h17)

*252.8:C-(h16)

237.0:B-(h15)

*221.2:A#(h14)

205.4:A-(h13)

*189.6:G-(h12)

173.8:F#(h11)

*158.0:E-(h10)

142.2:D-(h09)

*126.4:C-(h08)

110.6:A#(h07)

*94.8:G-(h06)

79.0:E-(h05)

*63.2:C-(h04)

47.4:G-(h03)

*31.6:C-(h02)R

15.8:C-(h16)

Bar:004.750

-8:9->(8 groups of 5) ---3:2---> (12 groups of 4)

(-4 groups of 4)

(8 groups of 4) -----3:2-----> (12 groups of 2)

(16 groups of 2) -----3:2-----> (24 groups of 2)

(+4 groups of 2)

(12 groups of 2)

(+6 groups of 2)

(30 groups of 2)-2:3->

-10:9-> (4 x ten)

-2:1->(8 x five) -----6:5-----> (8 x six)

(-16 x one)

(8 x four) -----3:4-----> (8 x three)

(16 x two) -----3:2-----> (16 x three)

(+8 x one)

(8 x three)

(+12 x one)

(20 x three)--2:3-->

→ 960:B → 960:B → 960:B → 768:G →

20
2
24
1

15
2
32
1

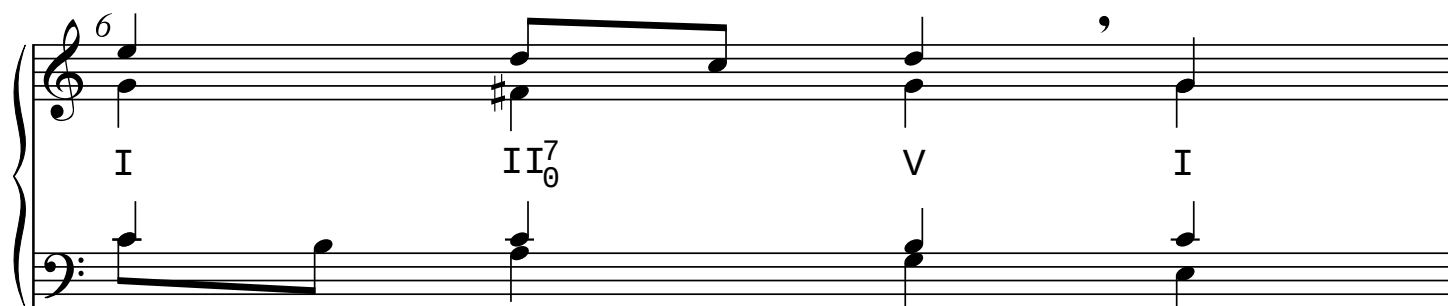
20
2
24
1

16
2
24
1

→ *948.2:B-(h40)>	*948.1:B-(h30)>	*948.2:B-(h40)
924.5:B-(h39)	916.5:?(h29)	924.5:B-(h39)
*900.8:A#(h38)	*884.9:A#(h28)	*900.8:A#(h38)
877.0:A-(h37)	853.3:A-(h27)	877.0:A-(h37)
*853.3:A-(h36)	*821.7:A-(h26)	*853.3:A-(h36)
829.6:A-(h35)	790.1:G#(h25)	829.6:A-(h35)
*805.9:G#(h34)	*758.5:G-(h24)	*805.9:G#(h34)
782.2:G-(h33)	726.9:?(h23)	782.2:G-(h33)
*758.5:G-(h32)	*695.3:F#(h22)	*758.5:G-(h32)>
734.8:?(h31)	663.7:F-(h21)	734.8:?(h31)
*711.1:F#(h30)	*632.1:E-(h20)	*711.1:F#(h30)
687.4:?(h29)	600.5:D#(h19)	687.4:?(h29)
*663.7:F-(h28)	*568.9:D-(h18)	*663.7:F-(h28)
640.0:E-(h27)	537.3:C#(h17)	640.0:E-(h27)
*616.3:E-(h26)	*505.7:C-(h16)	*616.3:E-(h26)
592.6:D#(h25)	474.1:B-(h15)	592.6:D#(h25)
*568.9:D-(h24)	*442.5:A#(h14)	*568.9:D-(h24)
545.2:?(h23)	410.9:A-(h13)	545.2:?(h23)
*521.5:C#(h22)	*379.3:G-(h12)	*521.5:C#(h22)
497.8:C-(h21)	347.7:F#(h11)	497.8:C-(h21)
*474.1:B-(h20)	*316.1:E-(h10)	*474.1:B-(h20)
450.4:A#(h19)	284.4:D-(h09)	450.4:A#(h19)
*426.7:A-(h18)	*252.8:C-(h08)	*426.7:A-(h18)
403.0:G#(h17)	221.2:A#(h07)	403.0:G#(h17)
*379.3:G-(h16)	*189.6:G-(h06)	*379.3:G-(h16)
355.6:F#(h15)	158.0:E-(h05)	355.6:F#(h15)
*331.9:F-(h14)	*126.4:C-(h04)	*331.9:F-(h14)
308.2:E-(h13)	94.8:G-(h03)	308.2:E-(h13)
*284.4:D-(h12)	*63.2:C-(h02)R	*284.4:D-(h12)
260.7:C#(h11)	31.6:C-(H32)	260.7:C#(h11)
*237.0:B-(h10)	Bar:005.250	*237.0:B-(h10)
213.3:A-(h09)		213.3:A-(h09)
*189.6:G-(h08)		*189.6:G-(h08)
165.9:F-(h07)		165.9:F-(h07)
*142.2:D-(h06)		*142.2:D-(h06)
118.5:B-(h05)		118.5:B-(h05)
*94.8:G-(h04)		*94.8:G-(h04)
71.1:D-(h03)		71.1:D-(h03)
*47.4:G-(h02)R		*47.4:G-(h02)R
23.7:G-(H24)		23.7:G-(H24)
Bar:005.000		Bar:005.500

-2:3->(20 groups of 2) -----3:4-----> (15 groups of 2) -----4:3-----> (20 groups of 2)
 (-2 groups of 2)
 (16 groups of 2) -----3:4---->

-2:3->(20 x two)
 -1:2->(10 x four) -----3:4-----> (10 x three) -----4:3-----> (10 x four)
 (-4 x one)
 (8 x four) -----3:4----->



→ 768:G 1024:C → 1024:C 832:A → 832:A 768:G → 768:G 512:C →

12	16	14	12	18	16	24	16
2	2	2	2	2	2	2	2
32	32	36	36	24	24	16	16
1	1	1.016	0.963	0.963	1	1	1

*1011.4:C-(h32)>

979.8:?(h31)

*948.1:B-(h30)

916.5:?(h29)

*884.9:A#(h28)

853.3:A-(h27)

*821.7:A-(h26)

790.1:G#(h25)

→ *758.5:G-(h24)

726.9:?(h23)

*695.3:F#(h22)

663.7:F-(h21)

*632.1:E-(h20)

600.5:D#(h19)

*568.9:D-(h18)

537.3:C#(h17)

*505.7:C-(h16)

474.1:B-(h15)

*442.5:A#(h14)

410.9:A-(h13)

*379.3:G-(h12)

347.7:F#(h11)

*316.1:E-(h10)

284.4:D-(h09)

*252.8:C-(h08)

221.2:A#(h07)

*189.6:G-(h06)

158.0:E-(h05)

*126.4:C-(h04)

94.8:G-(h03)

*63.2:C-(h02)R

31.6:C-(H32)

Bar:006.000

*1011.4:C-(h28)

975.2:B-(h27)

*939.1:B-(h26)

903.0:A#(h25)

*866.9:A-(h24)>

830.8:?(h23)

*794.6:G#(h22)

758.5:G-(h21)

*722.4:F#(h20)

686.3:F-(h19)

*650.2:E-(h18)

614.0:D#(h17)

*577.9:D-(h16)

541.8:C#(h15)

*505.7:C-(h14)

469.6:B-(h13)

*433.4:A-(h12)

397.3:G#(h11)

*361.2:F#(h10)

325.1:E-(h09)

*289.0:D-(h08)

252.8:C-(h07)

*216.7:A-(h06)

180.6:F#(h05)

*144.5:D-(h04)

108.4:A-(h03)

*72.2:D-(h02)R

36.1:D-(H36)

Bar:006.250

*866.9:A-(h36)

842.8:A-(h35)

*818.7:G#(h34)

794.6:G-(h33)

*770.6:G-(h32)>

746.5:?(h31)

*722.4:F#(h30)

698.3:?(h29)

*674.2:F-(h28)

650.2:E-(h27)

*626.1:E-(h26)

602.0:D#(h25)

*577.9:D-(h24)

553.8:?(h23)

*529.8:C#(h22)

505.7:C-(h21)

*481.6:B-(h20)

457.5:A#(h19)

*433.4:A-(h18)

409.4:G#(h17)

*385.3:G-(h16)

361.2:F#(h15)

*337.1:F-(h14)

313.0:E-(h13)

*289.0:D-(h12)

264.9:C#(h11)

*240.8:B-(h10)

216.7:A-(h09)

*192.6:G-(h08)

168.6:F-(h07)

*144.5:D-(h06)

120.4:B-(h05)

*96.3:G-(h04)

72.2:D-(h03)

*48.2:G-(h02)R

24.1:G-(H24)

Bar:006.500

*770.5:G-(h48)

754.5:G-(h47)

*738.4:?(h46)

722.4:F#(h45)

*706.3:F#(h44)

690.3:F#(h43)

*674.2:F-(h42)

658.2:E-(h41)

*642.1:E-(h40)

626.1:E-(h39)

*610.0:D#(h38)

594.0:D-(h37)

*577.9:D-(h36)

561.9:D-(h35)

*545.8:C#(h34)

529.7:C-(h33)

*513.7:C-(h32)>

497.6:?(h31)

*481.6:B-(h30)

465.5:?(h29)

*449.5:A#(h28)

433.4:A-(h27)

*417.4:A-(h26)

401.3:G#(h25)

*385.3:G-(h24)

369.2:?(h23)

*353.2:F#(h22)

337.1:F-(h21)

*321.1:E-(h20)

305.0:D#(h19)

*289.0:D-(h18)

272.9:C#(h17)

*256.8:C-(h16)

240.8:B-(h15)

*224.7:A#(h14)

208.7:A-(h13)

*192.6:G-(h12)

176.6:F#(h11)

*160.5:E-(h10)

144.5:D-(h09)

*128.4:C-(h08)

112.4:A#(h07)

*96.3:G-(h06)

80.3:E-(h05)

*64.2:C-(h04)

48.2:G-(h03)

*32.1:C-(h02)R

16.1:C-(H16)

Bar:006.750

-3:4->(12 groups of 2)

(+4 groups of 2)

(16 groups of 2) -----7:8-----> (14 groups of 2)

(-2 groups of 2)

-3:4->(8 x three)

(+8 x one)

(4 x eight) -----7:8-----> (4 x seven)

(-4 x one)

(12 x two) -----3:2-----> (12 x three)

(-4 x one)

(16 x two) -----3:2-----> (16 x three)

(-16 x one)

(4 x eight) --7:8-->

512:C 576:D 576:D
 14 16 8
 2 2 4
 18 18 18
 1.016 1 1

*1006.5:B-(h48)> *1006.4:B-(h45)
 985.5:B-(h47) 984.1:B-(h44)
 964.5:??-(h46) 961.7:B-(h43)
 943.6:A#(h45) 939.3:A#(h42)
 *922.6:A#(h44) 917.0:A-(h41)
 901.6:A#(h43) *894.6:A-(h40)>
 880.7:A-(h42) 872.2:A-(h39)
 859.7:G#(h41) 849.9:G#(h38)
 *838.7:G#(h40) 827.5:G-(h37)
 817.8:G#(h39) 805.1:G-(h36)
 796.8:G-(h38) *782.8:G-(h35)
 775.8:F#(h37) 760.4:F#(h34)
 *754.8:F#(h36) 738.0:F-(h33)
 733.9:F#(h35) 715.7:F-(h32)
 712.9:F-(h34) 693.3:??-(h31)
 691.9:E-(h33) *670.9:E-(h30)
 *671.0:E-(h32) 648.6:??-(h29)
 650.0:??-(h31) 626.2:D#(h28)
 629.0:D#(h30) 603.9:D-(h27)
 608.1:??-(h29) 581.5:D-(h26)
 *587.1:D-(h32)> *587.1:D-(h28)
 568.8:??-(h31) 566.1:C#(h27)
 *550.4:C#(h30) 545.2:C#(h26)
 532.1:??-(h29) 524.2:C-(h25)
 → *513.7:C-(h28) *503.2:B-(h24)
 495.4:B-(h27) 482.3:??-(h23)
 *477.0:B-(h26) 461.3:A#(h22)
 458.7:A#(h25) 440.3:A-(h21)
 *440.3:A-(h24) *419.4:G#(h20)
 422.0:??-(h23) 398.4:G-(h19)
 *403.6:G#(h22) 377.4:F#(h18)
 385.3:G-(h21) 356.5:F-(h17)
 *366.9:F#(h20) *335.5:E-(h16)
 348.6:B-(h19) 314.5:D#(h15)
 *330.2:E-(h18) 293.6:D-(h14)
 311.9:D#(h17) 272.6:C#(h13)
 *293.6:D-(h16) *251.6:B-(h12)
 275.2:C#(h15) 230.6:A#(h11)
 *256.9:C-(h14) 209.7:G#(h10)
 238.5:B-(h13) 188.7:F#(h09)
 *220.2:A-(h12) *167.7:E-(h08)
 201.8:G#(h11) 146.8:D-(h07)
 *183.5:F#(h10) 125.8:B-(h06)
 165.1:E-(h09) 104.8:G#(h05)
 *146.8:D-(h08) *83.9:E-(h04)R
 128.4:C-(h07) 62.9:B-(h03)
 *110.1:A-(h06) 41.9:E-(h02)
 91.7:F#(h05) 21.0:E-(h20)
 *73.4:D-(h04)R Bar:007.250
 55.0:A-(h03)
 *36.7:D-(h02)R
 18.3:D-(h18)
 Bar:007.000

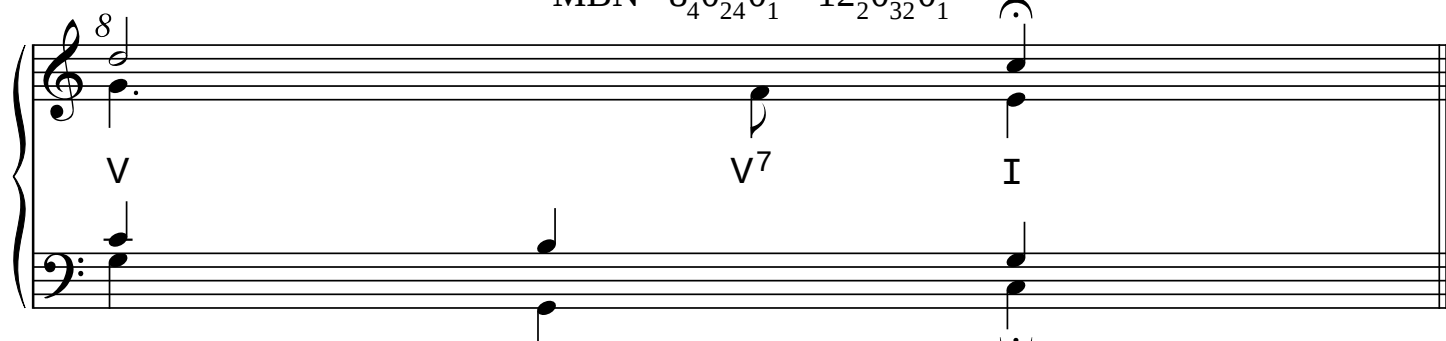
832:A 640:E
 12 9
 5 5
 14 14
 0.990 1.016

*894.6:A-(h60)
 879.7:A-(h59)
 864.8:??-(h58)
 849.9:G#(h57)
 835.0:G#(h56)
 *820.0:G#(h55)
 805.1:G-(h54)
 790.2:G-(h53)
 775.3:G-(h52)
 760.4:G-(h51)
 *745.5:F#(h50)
 730.6:F-(h49)
 715.7:F-(h48)
 700.8:F-(h47)
 685.9:??-(h46)
 *671.0:E-(h45)>
 656.0:E-(h44)
 641.1:E-(h43)
 626.2:D#(h42)
 611.3:D-(h41)
 *596.4:D-(h40)
 581.5:D-(h39)
 566.6:C#(h38)
 551.7:C-(h37)
 536.8:C-(h36)
 *521.9:C-(h35)
 506.9:B-(h34)
 492.0:A#(h33)
 477.1:A#(h32)
 462.2:??-(h31)
 *447.3:A-(h30)
 432.4:??-(h29)
 417.5:G#(h28)
 402.6:G-(h27)
 387.7:G-(h26)
 *372.8:F#(h25)
 357.8:F-(h24)
 342.9:??-(h23)
 328.0:E-(h22)
 313.1:D#(h21)
 *298.2:D-(h20)
 283.3:C#(h19)
 268.4:C-(h18)
 253.5:B-(h17)
 238.6:A#(h16)
 *203.7:G#(h14)
 193.8:G-(h13)
 178.9:F-(h12)
 164.0:E-(h11)
 *149.1:D-(h10)
 134.2:C-(h09)
 119.3:A#(h08)
 104.4:G#(h07)
 89.5:F-(h06)
 *74.5:D-(h05)R
 59.6:A#(h04)
 44.7:F-(h03)
 29.8:A#(h02)
 14.9:A#(h14)
 Bar:007.625

*1073.5:C-(h64)> *1073.5:C-(h48)
 1056.8:??-(h63) 1051.2:C-(h47)
 1040.0:??-(h62) 1028.8:??-(h46)
 1023.2:B-(h61) 1006.4:B-(h45)
 *1006.4:B-(h60) *984.1:B-(h44)
 989.7:B-(h59) 961.7:B-(h43)
 972.9:??-(h58) 939.3:A#(h42)
 956.1:A#(h57) 917.0:A-(h41)
 *939.3:A#(h56) 922.6:A#(h55)
 905.8:A-(h54) *894.6:A-(h40)
 889.0:A-(h53) 872.2:A-(h39)
 *872.2:A-(h52) 849.9:G#(h38)
 855.5:A-(h51) 827.5:G-(h37)
 838.7:G#(h50) *805.1:G-(h36)>
 821.9:G-(h49) 782.8:G-(h35)
 *805.2:G-(h48) 760.4:F#(h34)
 788.4:G-(h47) 738.0:F-(h33)
 771.6:??-(h46) *715.7:F-(h32)
 754.8:F#(h45) 693.3:??-(h31)
 *738.1:F#(h44) 670.9:E-(h30)
 721.3:F#(h43) 648.6:??-(h29)
 704.5:F-(h42) *626.2:D#(h28)
 687.7:E-(h41) 603.9:D-(h27)
 *671.0:E-(h40) 581.5:D-(h26)
 654.2:E-(h44) 559.1:C#(h25)
 637.4:D#(h38) *536.8:C-(h32)
 620.6:D-(h37) 514.4:??-(h23)
 *603.9:D-(h36) 492.0:B-(h22)
 587.1:D-(h35) 469.7:A#(h21)
 570.3:C#(h34) *447.3:A-(h20)
 553.5:C-(h33) 424.9:G#(h19)
 *536.8:C-(h32) 402.6:G-(h18)
 520.0:??-(h31) 380.2:F#(h17)
 503.2:B-(h30) *357.8:F-(h16)
 486.4:??-(h29) 335.5:E-(h15)
 *469.7:A#(h28) 313.1:D#(h14)
 452.9:A-(h27) 290.7:D-(h13)
 436.1:A-(h26) *268.4:C-(h12)
 419.4:G#(h25) 246.0:B-(h11)
 *402.6:G-(h24) 223.6:A-(h10)
 385.8:??-(h23) 201.3:G-(h09)
 369.0:F#(h22) *178.9:F-(h08)
 352.3:F-(h21) 156.6:D#(h07)
 *335.5:E-(h20) 134.2:C-(h06)
 318.7:D#(h19) 111.8:A-(h05)
 301.9:D-(h18) *89.5:F-(h04)R
 285.2:C#(h17) 67.1:C-(h03)
 *268.4:C-(h16) 44.7:F-(h02)
 251.6:B-(h15) 22.4:F-(h21)
 234.8:A#(h14) Bar:007.875
 218.1:A-(h13)
 *201.3:G-(h12)
 184.5:F#(h11)
 167.7:E-(h10)
 151.0:D-(h09)
 *134.2:C-(h08)
 117.4:A#(h07)
 100.6:G-(h06)
 83.9:E-(h05)
 *67.1:C-(h04)R
 50.3:G-(h03)
 33.5:C-(h02)
 16.8:C-(h16)
 Bar:007.750

7:8->(14 groups of 2)
 (+2 groups of 2)
 (16 groups of 2)-7:8->(14 groups of 2)
 -1:2->(5 groups of 4)
 7:8->(4 x seven)
 (+4 x one)
 (4 x eight) ----7:8---->(4 x seven)
 (+20 x one)
 (3 x sixteen) -15:16->(3 x fifteen)
 (-5 x one)
 (20 x two) ---3:2-->(20 x three)
 (-15 x one)
 (5 x nine) ----8:9-->(5 x eight)
 (12 groups of 4)-3:4->(9 groups of 5)
 (-1 groups of 5)
 (8 groups of 5)-3:2->(12 groups of 5)
 (-3 groups of 5)
 (9 groups of 5)10:9(10 groups of 4)
 (16 groups of 4)3:4(12 groups of 4)
 (+6 groups of 4)
 (4 x nine) -8:9->
 (-12 x one)
 (16 x four) --3:4-->(16 x three)

$$\text{MBN } 8_4 0_{24} 0_1 = 12_2 0_{32} 0_1$$



→ 768:G → 768:G → 768:G

-----	-----	-----
8	8	12
4	4	2
24	24	32
1	1	1

→ *805.2:G-(h32)>	*805.2:G-(h32)>	*805.2:G-(h24)
780.0: ?-(h31)	780.0: ?-(h31)	771.6: ?-(h23)
754.8: F#(h30)	754.8: F#(h30)	*738.1: F#(h22)
729.7: ?-(h29)	729.7: ?-(h29)	704.5: F-(h21)
*704.5: F-(h28)	*704.5: F-(h28)	*671.0: E-(h20)
679.3: E-(h27)	679.3: E-(h27)	637.4: D#(h19)
654.2: E-(h26)	654.2: E-(h26)	*603.9: D-(h18)
629.0: D#(h25)	629.0: D#(h25)	570.3: C#(h17)
*603.9: D-(h24)	*603.9: D-(h24)	*536.8: C-(h16)
578.7: ?-(h23)	578.7: ?-(h23)	503.2: B-(h15)
553.5: C#(h22)	553.5: C#(h22)	*469.7: A#(h14)
528.4: C-(h21)	528.4: C-(h21)	436.1: A-(h13)
*503.2: B-(h20)	*503.2: B-(h20)	*402.6: G-(h12)
478.1: A#(h19)	478.1: A#(h19)	369.0: F#(h11)
452.9: A-(h18)	452.9: A-(h18)	*335.5: E-(h10)
427.7: G#(h17)	427.7: G#(h17)	301.9: D-(h09)
*402.6: G-(h16)	*402.6: G-(h16)	*268.4: C-(h08)
377.4: F#(h15)	377.4: F#(h15)	234.8: A#(h07)
352.3: F-(h14)	352.3: F-(h14)	*201.3: G-(h06)
327.1: E-(h13)	327.1: E-(h13)	167.7: E-(h05)
*301.9: D-(h12)	*301.9: D-(h12)	*134.2: C-(h04)
276.8: C#(h11)	276.8: C#(h11)	100.6: G-(h03)
268.4: C-suspn	251.6: B-(h10)	*67.1: C-(h02)R
251.6: B-(h10)	226.4: A-(h09)	33.5: C-(H32)
226.4: A-(h09)	*201.3: G-(h08)	Bar:008.500
*201.3: G-(h08)	176.1: F-(h07)	
176.1: F-(h07)	151.0: D-(h06)	
151.0: D-(h06)	125.8: B-(h05)	
125.8: B-(h05)	*100.6: G-(h04)R	
*100.6: G-(h04)R	75.5: D-(h03)	
75.5: D-(h03)	50.3: G-(h02)	
50.3: G-(h02)	25.2: G-(H24)	
25.2: G-(H24)	Bar:008.250	
Bar:008.000		

-8:9-> (8 groups of 4) -----1:1-----> (8 groups of 4) -----3:2-----> (12 groups of 2)

-8:9-> (4 x eight) -----> (8 x four) -----3:4-----> (8 x three)