

Marc Sabat

AUTOMAT

music scenery for 2 violins and video with field recording

PLAIN SOUND MUSIC EDITION

ACCIDENTALS

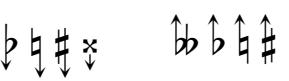
EXTENDED HELMHOLTZ-ELLIS JI PITCH NOTATION

for Just Intonation

designed by Marc Sabat and Wolfgang von Schweinitz

The exact intonation of each pitch may be written out by means of the following harmonically-defined signs:

 Pythagorean series of fifths – the open strings
(... c g d a e ...)

 lowers / raises by a syntonic comma
 $81:80 = \text{circa } 21.5 \text{ cents}$

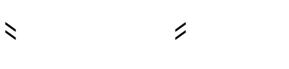
 lowers / raises by two syntonic commas
 $\text{circa } 43 \text{ cents}$

 lowers / raises by a septimal comma
 $64:63 = \text{circa } 27.3 \text{ cents}$

 lowers / raises by two septimal commas
 $\text{circa } 54.5 \text{ cents}$

 raises / lowers by an 11-limit undecimal quarter-tone
 $33:32 = \text{circa } 53.3 \text{ cents}$

 lowers / raises by a 13-limit tridecimal third-tone
 $27:26 = \text{circa } 65.3 \text{ cents}$

 lowers / raises by a 17-limit schisma
 $256:255 = \text{circa } 6.8 \text{ cents}$

 raises / lowers by a 19-limit schisma
 $513:512 = \text{circa } 3.4 \text{ cents}$

 raises / lowers by a 23-limit comma
 $736:729 = \text{circa } 16.5 \text{ cents}$

In addition to the harmonic definition of a pitch by means of its accidentals, it is also possible to indicate its absolute pitch-height as a cents-deviation from the respectively indicated chromatic pitch in the 12-tone system of Equal Temperament.

The attached arrows for alteration by a syntonic comma are transcriptions of the notation that Hermann von Helmholtz used in his book “Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik” (1863). The annotated English translation “On the Sensations of Tone as a Physiological Basis for the Theory of Music” (1875/1885) is by Alexander J. Ellis, who refined the definition of pitch within the 12-tone system of Equal Temperament by introducing a division of the octave into 1200 cents. The sign for a septimal comma was devised by Giuseppe Tartini (1692-1770) – the composer, violinist and researcher who first studied the production of difference tones by means of double stops.

AUTOMAT (*live version for 2 violins and video with stereo field recording*)

music: Marc Sabat
video : Peter Sabat

Cue1

0'04" *con sordino* [35]

events which are connected by dotted lines are to be co-ordinated as indicated, otherwise freely , 0'14"

0'12" ,

0'17" , 0'18" , 0'26" ,

0'31" , 0'35" , 0'42" , 0'45" , 0'52"

0'56" , 0'58" , 1'13" , 1'14" ,

Cue2

1'18" , 1'21" [36] () , 1'30" , , () ,

1'47"

1'43" , 1'56"

2'09" , 2'19"

2'06" 2'12" FIELD RECORDING BEGINS!

2'24" , 2'26" , 2'35" (h)

Cue3 2'37" , , , ,

poco più 2'41" [25] 2'52"

2'58" , 3'00"

3'09" [37] number of repetitions
ad.lib. (sempre)

(25) (12) 3'17"

Cue4

3'32" (22) (5)
 3'29" IV
 III
+15.7 cents
 (37)
 3'41"
 3'57"
 4'06"
 4'13", Cue5 4'16"
 4'23"
 4'32" III
 II
 4'42" 4'49"
 4'45"
 (21) (16)
+11.7 cents
 (37)
 4'54"
 (25) (12)

5'02"

-15.7 cents

(5) (3) (15) 5'14"

5'09"

(22)

(15)

+15.7 cents

5'29"

(37)

5'22"

Cue6 5'34"

asynchron!

(13) (24)

26

5'55"

5'55"

(37)

26

6'17"

Cue7 6'31"

III (10)

II (9)

6'20"

6'26"

38 (19)

, 6'50"

6'54"

6'44"

7'06" 7'16"

7'21", Cue8 II III (15) 7'29" (19)

7'23" (4) 7'36" 7'46"

7'55" 8'01" (13) (6) III

8'16" Cue9 8'25" (1) 8'22" 8'44" Cue10

Sheet music for a three-part composition (Treble, Bass, and Alto) across six staves. The music is in common time and includes various dynamics, articulations, and performance instructions.

Staff 1 (Treble):

- Measures 1-11: Measures 1-11 show a continuous pattern of eighth-note pairs and sixteenth-note chords. Measure 11 ends with a fermata over the bass staff.
- Measure 12: Dynamics (12) and a tempo marking of 8'45" are indicated. Measure 12 ends with a fermata over the bass staff.
- Measure 13: Dynamics (7) and a tempo marking of 9'00" are indicated.
- Measure 14: Dynamics (19) and a tempo marking of 9'09", followed by a fermata over the bass staff.
- Measure 15: Dynamics 9'15" and a fermata over the bass staff.

Staff 2 (Bass):

- Measures 1-11: Measures 1-11 show a continuous pattern of eighth-note pairs and sixteenth-note chords.
- Measure 12: Dynamics 9'02" and the instruction *più calmo*.
- Measure 13: Dynamics 9'09", followed by a fermata over the bass staff.
- Measure 14: Dynamics 9'15" and a fermata over the bass staff.

Staff 3 (Alto):

- Measures 1-11: Measures 1-11 show a continuous pattern of eighth-note pairs and sixteenth-note chords.
- Measure 12: Measure number 39.
- Measure 13: Measure number 40, labeled **Cue11**, with a tempo marking of 9'28".
- Measure 14: Measure number 41, with a tempo marking of 9'31".
- Measure 15: Measure number 42, with a tempo marking of 9'52".
- Measure 16: Measure number 43, with a tempo marking of 10'08".
- Measure 17: Measure number 44, with a tempo marking of 10'14", labeled **Cue12**, and a fermata over the bass staff.
- Measure 18: Measure number 45, with a tempo marking of 10'17" and a fermata over the bass staff.
- Measure 19: Measure number 46, with a tempo marking of 10'19" and a fermata over the bass staff.
- Measure 20: Measure number 47, with a tempo marking of 10'40" and a fermata over the bass staff.

Performance Instructions:

- Measure 11: Fermata over the bass staff.
- Measure 12: Fermata over the bass staff.
- Measure 13: Fermata over the bass staff.
- Measure 14: Fermata over the bass staff.
- Measure 15: Fermata over the bass staff.
- Measure 16: Fermata over the bass staff.
- Measure 17: Fermata over the bass staff.
- Measure 18: Fermata over the bass staff.
- Measure 19: Fermata over the bass staff.
- Measure 20: Fermata over the bass staff.

Musical score for two staves, likely for piano or harpsichord. The score consists of six systems of music, each starting with a treble clef and a key signature of one sharp (F#). The time signature varies throughout the score.

System 1: Measures 1-2. Key signature changes to one sharp (F#) at measure 1. Measure 2 ends with a repeat sign and a double bar line.

System 2: Measures 3-4. Key signature changes to one sharp (F#) at measure 3. Measure 4 ends with a repeat sign and a double bar line.

System 3: Measures 5-6. Key signature changes to one sharp (F#) at measure 5. Measure 6 ends with a repeat sign and a double bar line.

System 4: Measures 7-8. Key signature changes to one sharp (F#) at measure 7. Measure 8 ends with a repeat sign and a double bar line.

System 5: Measures 9-10. Key signature changes to one sharp (F#) at measure 9. Measure 10 ends with a repeat sign and a double bar line.

System 6: Measures 11-12. Key signature changes to one sharp (F#) at measure 11. Measure 12 ends with a repeat sign and a double bar line.

Textual Elements:

- Cue 13:** Located above the first staff in the first system.
- 10'49", Cue 13:** Time code and cue reference above the first staff in the first system.
- 10'50": III** Time code and section reference above the second staff in the first system.
- II** Section reference below the second staff in the first system.
- 11'02", 11'11":** Time codes above the first staff in the second system.
- Cue 14:** Located above the first staff in the third system.
- FIELD RECORDING CUTS OFF ABRUPTLY!** Text above the first staff in the third system.
- 11'32": I** Time code and section reference above the second staff in the third system.
- 11'40":** Time code above the first staff in the fourth system.
- 11'47": II** Time code and section reference above the second staff in the fourth system.
- 12'03", 12'06":** Time codes above the first staff in the fifth system.
- , 11'58":** Time code above the first staff in the sixth system.
- 12'09": I** Time code and section reference above the second staff in the sixth system.
- , 12'26":** Time code above the first staff in the seventh system.
- , 12'20":** Time code above the first staff in the eighth system.

8

Cue15

12'32"

12'36"

12'43",

12'55",

13'03"

12'52",

12'55",

13'03"

Cue16

13'07"

13'05"

, 13'15"

, 13'22"

13'25"

13'31"

13'35"

, 13'40"

13'43",