Preview File Only

Collective Memories

for amplified ensemble with live electronics

Mike Vaughan (1990/4)

"Collective Memories ..." was commissioned by E.M.A.S. with funds provided by the Arts Council of Great Britain.

Preview File Only

Collective Memories
(for amplified ensemble with live electronics)

Collective Memories is the final work in a written between 1988 and 1994 for different instrumental ensembles and is the only one of the three which includes an electroacoustic element. All three have certain common elements of which the most obvious is the evolution of linear melodic material from the harmonic development of drones - in *Collective Memories* this pitch 'centre' is based around the A# below middle C.

The instrumentation of trumpet, trombone and french horn along with 'cello, keyboards and percussion suggests certain general relationships between the performers according to models derived from musics where improvisation, in the form of alternating 'solos' and 'tuttis' is a key element (even when fairly loosely defined). In *Collective Memories* continual references are made to these performance 'strategies' both in terms of the constant reconfiguring of the ensemble (as the soloists alternate) and in the cyclic nature of the structural elements.

The electronics perform two major functions. In the case of the synthesizer part certain timbral aspects of the instruments are developed independently (and woven back into the music discourse as separate strands) and in the case of the signal processing functions (reverb etc.) the apparent acoustic 'size' of the ensemble can be expanded and the parts played by each individual transformed.

The work (which lasts for approximately 17 minutes) consists of two outer sections in which the ensemble is amplified only and a large inner section in which the material and performance relationships in these outer sections are developed further using the live electronics. This development is influenced by notions of 'memory' in which the micro and macro elements of performance (from the timbre of individual instruments to large-scale musical structures) are subject to detailed scrutiny.

Collective Memories was commissioned by EMAS (now Sonic Arts Network) with funds provided by the (then) Arts Council of Great Britain.

MV

Preview File Only

"Collective Memories ..." - Performance Notes.

Contents

Section	
1	Performance Notes (General)
2	Electronics/Signal Processing Requirements
3	Voice Programs for Yamaha DX7IIFD

Appendix	
A	Pitch/Key Relationships for Performances notated in Quartertones.

Preview File Only

Section 1 - PERFORMANCE NOTES (GENERAL).

1.1. INSTRUMENTATION

Horn (in F)	*(straight mute required)*
Trumpet in C	*(harmon and plunger mutes required)*
Trombone (Tenor)	*(harmon and plunger mutes required)*
*Piano/Synthesizer	*(Voices programmed for Yamaha DX7IIFD on disc/cartridge*
*Percussion	*4 Tomtoms(low to high)* *Pedal Bass Drum* *3 Suspended Cymbals(different sizes)* *Tamtam*
'Cello	

Signal Processing equipment as detailed in section 2.

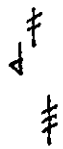
*(see note 2.1 for alternatives)

1.2. DURATION

At the given tempo markings the overall duration is c.17'30". In performance spaces with a difficult acoustic the tempo may be modified *slightly*. as long as any modification is consistent throughout.

1.3. PERFORMANCE NOTES.

1.3.1. Microtones.



quartertone sharp.

quartertone flat.

three quartertones sharp.

1.3.2. Vibrato.

s.v.	senza vibrato.
n.v.	normal vibrato.
m.v.	molto vibrato.

1.3.3. Trills/Tremolos

All trills and tremolos to be played as fast as possible.

Vtr. (Trumpet) indicates "Valve Tremolo". The tremolo is achieved by alternating between two partials of the same pitch of different fundamentals.

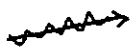
1.3.4. Grace Notes

All grace notes are to be played as fast as possible. The temporal position of main noteheads is always exact.

1.3.5. Glissandi

All glissandi to be regarded as linear with respect to pitch where possible.

Gliss away as high (or low) as possible.

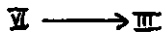


Approximate glissando using a combination of valve and overtone series.

1.3.6 Special Notation(Trombone)

To be played on the inhale

(Exhale)



Continuous transition from one slide position to another.

1.3.7. Timbral Indications('Cello)

s.p	sul ponticello
n.p	'normal' position
s.t	sul tasto

s.p ----------->s.t gradual transition from (e.g.) sul ponticello to sul tasto.

1.3.8 Breath Indications.

During passages of long sustained notes the mark (//) between two notes indicates that a breath may be taken after the first note is completed. (It is not intended that a breath should be taken at all such points.)

Preview File Only

Section 2 - Electronics/Signal Processing Requirements

2.1 General Approach

It is intended that the amplification and signal processing requirements of the work should not be device specific in order that full advantage might be taken of improvements in available products and that equipment obsolescence is not a barrier to performance. The form of processing required in each section is subjectively described in section 2.5. and can usually be achieved with three multi-effects units such as the Yamaha SPX-1000 or similar. As up to three different effects may be in operation at any one time then the mixing desk used for sound diffusion must have at least 6 auxiliary channels if the effects units are connected in this way. For the inner sections (C-L) electronic drum pads may be used in place of amplified tomtoms and bass drum to facilitate sound processing and mixing and to add to the sense of contrast between these and the outer sections.

2.2 Synthesizer Requirements

The synthesizer voices were designed on a Yamaha DX7II and are available from the composer on cartridge or floppy disk. Although voices are specific to this device data along with a recording for sampling is available for reconstruction using a sampler.

2.3 Mixer Requirements

Input Channels

- 14 input channels
  - Horn, Trombone, Trumpet, 'Cello (4)
  - Piano (2)
  - Synthesizer (2)
  - Percussion (6)

Effects Returns (ON INPUT CHANNELS)

- 3 stereo effects units (6)

Auxiliary Channels

- 3 stereo effects units ~~(6)~~ 3

Obviously there are many ways of meeting these minimum requirements and a flexible solution should be found. Changes to signal processing devices settings as well as changes in relative level between instruments often need to be made quite quickly throughout the piece and all such changes should be able to be implemented as easily and as quickly as possible.

2.4 (deleted this version)

Preview File Only

2.5. DESCRIPTION OF SIGNAL PROCESSING

(see note at front of score)

2.5.1 General

A description of the processing requirements at each stage of the work is given below and is summarised and cross-referenced in the score as in the following example:

```
        [12]Pitch-Shift(+/-1) ---------------------------|
          ^                ^                ^
   Patch Number    General Function    Process Duration
```

2.5.2 Section A (Page 1-11)

[1] Horn/Trumpet/Trombone/Piano (SLIGHT AMPLIFICATION)
[1] 'Cello (AMPLIFIED TO LEVEL OF BRASS + LIGHT PHASING)

The level of amplification applied to the brass is to ensure that the introduction of pitch shift at "B" does not appear too incongruous.

The level applied to piano is to ensure that all detail is audible.

The amplification of the 'Cello is in order that it may appear integrated in level with the brass. Phasing is intended to preserve continuity in the noise textures whilst retaining the characteristic granularity of the sound and enhancing the "electronic" white noise quality.

2.5.3 Section B (Page 12-13)

At this point in the work the general breadth of the sound stage should be increased from the "ensemble" form of playing to include a much broader spatialisation of the sound.

[2]Brass/'Cello (PITCH SHIFT +/-1 with REVERB(Short))

At the start of "B" the pitch shift is introduced to create semitone clusters around the (harmonic) chord. The level of the pitch shift signal should be just below the level of the instrument centre pitch and the onset should be delayed as a function of the effect to allow the Sfmp attacks to be uncoloured.

A short reverb is envisaged in order to more fully integrate the various strands if required.

The patch should be gradually faded out over bars 59-61.

2.5.4 Section C (Page 13-15)

[3]Bass Drum (VERY SHORT DELAY + FEEDBACK)
[3]Brass (DELAY c. 0.5 sec(1 delay))

The bass drum delay should be very short in order to create a metallic "spring" effect when sufficient feedback is added. The exact delay may be varied manually during performance in order to alter the frequency of the resonance.

The delay added to the brass should be sufficient in level to create the effect of a greater density of sound but somewhat lower in volume than the (amplified) instrumental sound to create an "antiphonal" effect.

The patch should be faded out over bars 70-71.

[4] Brass (REVERB(long))

This patch should be introduced in order to catch the cluster in the brass in bar 73 and should be audible until around the end of bar 75. The degree of reverb added to the synth is for integration purposes only.

2.5.5 Section D (page 16-19)

[5] Trombone/'Cello (PITCH SHIFT +/-0.5)
[5] Synth (CHORUS + REVERB(medium))

The function of the pitch shift is to thicken the instrumental texture and is and attempt to create an instrumental sound with a strong "synthesized" characteristic. The chorus and reverb applied to the synthesizer is in order to both broaden the overall sound and to disperse it over the sound stage in a "veil-like" manner.

The patch should be faded over bar 87.

2.5.6 Section E (page 19-20)

[6] Cymbals/Tamtam (PHASE)
[6] Tomtoms/Bass Drum (AUTOPAN(FAST))
[6] 'Cello (PHASE)

This section is the first percussion feature in which the general intention is to create two seperate textures; a fused moving mass created from the processing of cymbals and tamtam along with incisive patterns on the drums. Spatialisation of these textures should be apparent and the overall level

Preview File Only

progressively greater than the (integrated) ensemble level. The speed of autopanning may be varied manually if time permits. The overall level should revert to ensemble level over bars 92-93.

The 'Cello sound should be as section "A" providing a focal point at the centre of the sound stage from which the treated percussion diverges and converges.

2.5.7 Section F (page 21-36)

F1 (page 21)

[7] Brass (PITCH SHIFT +/- 1) (SEMITONES)

F2 (page 22)

[8] Brass (PITCH SHIFT +/- 2) (SEMITONES)

F3 (page 25)

[9] Brass (PITCH SHIFT +/- 4) (SEMITONES)

[9] Cymbals (PHASE/CHORUS/REVERB)

F4 (page 28)

[10] Brass (PITCH SHIFT +/- 1) (SEMITONE)

F5 (page 33)

[11] Brass (PITCH SHIFT +/- 7.5) (SEMITONES)

In the sections where the brass are affected by pitch shift there is a common process whereby the overall tessitura of a polyphony increases from a narrow overall bandwidth to a relatively wide one. This aspect is also present in the fineness of interval in the synthesizer which creates the onset to these sections. In this way the upper pitch shifted signal of e.g. the trombone is around the same area as the lower pitchshifted signal of the horn etc. The onset of the pitchshifted signal should be delayed slightly to enhance the polyphonic effect. The brass at page 31 is coloured by pitch shift only and is not part of the overall process.

With the exception of F4 the reverb applied to the synthesizer should be such to form a drone which slightly "covers" the brass entries following the initial flurry. The reverb level should however be initially relatively low in order not to cloud the synthesizer part but may be increased after the part has been played creating a fusion of of the initially granular events. Throughout the synthesizer "solo" at F4 a very "lively" sound should be achieved.

The cymbals from 120-125 should be fused as a single accented strand and the overall sound quality of the percussion during F4 should have a rather "dirty" sound by means of fast phasing on cymbals and relatively strong mid/hi EQ on Tomtoms and Bass drum.

At bar 150 the upper and lower pitch shift members should be widely diffused around the performance space.

2.5.8 Section G (page 36-42)

[12] Cymbals/Tamtam (PHASE) [12] SYNTH. (REVERB(SHORT))
[12] Tomtoms/Bass Drum (AUTOPAN(FAST))
[12] 'Cello (REVERB(SHORT))

This patch is similar to [6] in section (E) and the same general notes apply.

The reverb setting for the 'cello at G2 (page 40) should be sufficient to enhance the overall 'presence' of the sound without in any way detracting from the attack. It is envisaged that the level of amplification of the 'cello at this point should be very high. The overall process of movement from unpitched to pitched sounds should be made clear.

2.5.9 SECTION H (page 42-48)

[13] 'Cello (~~CHORUS/PHASE~~ PITCH SHIFT +/- 0.5)
[13] Brass (PITCH SHIFT +/- 0.5)
[13] Brass (REVERB(MED))
+ Synth.

During this section the continuous line on the 'cello should be very prominent and the granular characteristics of the sound enhanced by treatment. The complexities in the sound should be made audibly clear by a wide dispersion of sound. A very fast (stereo) delay may be considered to further enhance this aspect. Any delay to the onset of effects must be sufficiently short in duration to avoid confusing the melodic gestures within the line or alternatively the level of effects may be attenuated somewhat at the mixing desk at points where this is likely to be problematic.

The level of pitch shift applied to the brass is in order to create additional depth to the sound only and does not serve a specific (harmonic) function. The reverb, which should have sufficient delay at the onset to avoid softening the attack in any way, is in order to integrate the chord complexes.

Preview File Only

2.5.10 Section I (page 49-50)

[14] Cymbals/Tamtam (PHASE)
[14] Tomtoms/Bass Drum (AUTOPAN(FAST))
~~[14] 'Cello REVERB(MED))~~
[14] Brass (REVERB(MED)/PITCH SHIFT - 0.5 - LONG DELAY/FEEDBACK)

With respect to the percussion this patch is similar to [6] in section (E) and the same general notes apply.

The brass gesture at 204 should be "catastrophic" in effect with a perceivable "stepping down" during the (reverberated) decay.

2.5.11 Section J (page 51-57)

J1

[15] Brass (DELAY 0.25(approx))
[15] CYMBALS/TAMTAM (PHASE)
[15] 'CELLO REVERB (MED)

J2

[16] Brass (PITCH SHIFT +/- 1/REVERB(MED))
[16] 'Cello (PITCH SHIFT +/- 1)
[16] CYMBALS/TAMTAM PHASE

Throughout section J a single fused texture evolves. The delay added to the brass throughout J1 aims at a synchronisation point just before J2. During J2 the fusion of all elements into a homogenous evolving texture should be aimed at. Pitch shift added to the brass is in order to broaden the individual strands of the texture and the reverb added to the synthesizer is to integrate the sound more fully.

Throughout J1 the A# drone on the 'cello should always be clear although not too prominent.

At the end of J2 the removal of effects should be quick but without creating an unnecessary discontinuity.

2.5.12 Section K (page 58-59)

[17] 'Cello (AMPLIFIED TO LEVEL OF BRASS + LIGHT PHASING)

This patch is identical to section A and the same general notes apply.

2.5.13 Section L (page 60-63)

[18] Brass (DELAY 0.5(approx))
[18] 'Cello (Pitch Shift +/- 0.5)
[18] Bass Drum (VERY FAST DELAY + FEEDBACK)
[18] Piano (AMPLIFIED TO MATCH BRASS ATTACKS)

The bass drum delay is the same as for section C and the same general notes apply.

The pitch shift applied to the 'Cello is in order to thicken the sound only and should not result in a lack of articulation during the tremolando "onsets".

The delay to the brass should generate one repition only and should be mixed slightly lower than the source to give the effect of "terraced" dynamics.

During this section the brass may be panned from centre at bar 244 to full right, centre and left at bar 252 and back to the centre again at bar 262 in order to enhance the dispersion of register over this section. The delay of each instrument should be placed at the complement of its source if this strategy is adopted.

This patch is to be faded out before the end of 262.

2.5.14 Section M (page 64-70)

[19] Synth. (REVERB(med.))
[19] Brass. (REVERB(short))

This section is essentially to be heard as "untreated". The reverb added to the synthesizer is to artificially extend the decay portion of the sound and also enhance the continuity of the line.

The reverb added to the brass is in order to assist "fusion" of the gestures only.

It may be necessary to use moderate amplification to ensure the clarity of the 'cello line particularly during the harmonics at the end of the section. If this is the case then it should gradually be faded out over the last three bars.

Preview File Only

Section 3 VOICE PROGRAMS FOR YAMAHA DX7II

3.1 General

Voice programs were created using the DXPERT voicing program on an Atari 1040ST. A bank of 32 voices was created and used to create 14 performances using combinations of two voices with the exception of PERF#10 which is a single voice performance. These may be loaded directly into a DX7IIFD using the disc provided, ~~or to the TX802 using a cartridge available on request.~~ Alternatively thje voice data may be loaded via DXPERT using a disc also available on request and the performance data set up using the synthesizer editing facilities. Section 3.2 details the performance settings and section 3.3 the voice data. Appendix A gives key to pitch correspondences for those performances notated in quartertones in the score.

3.2 Performance Data for DX7II.

In all the following combinations "PAN" should be set to the "On" position and "DUAL" mode should be selected.

3.2.1 Voice Configurations

Performance No.	Voice Combination
1	1/2
2	3/4
3	5/6
4	7/8
5	31/32
6	11/12
7	31/32
8	21/30
9	3/4
10	22
11	17/18
12	25/26
13	27/28
14	19/6

3.2.2 Volume/Balance/Dual Detune

With the exceptions detailed below these parameters are set as follows:

Volume = 99
Balance = +0
Dual Detune = 0

Exceptions

Performance	Parameters
2	Balance = +5
8	Balance = +4
9	Balance = -1
9	Dual Detune = 4

3.2.3 Tuning/Note Shift/EG forced damp

With the exceptions detailed below these parameters are set as follows:

Equal Temp	A/B	
EG forced damp	OFF	
Note Shift	+0	+0

Exceptions

Performance	Parameters
3	1/4 tone ON ON
4	1/8 tone ON ON
4	Note Shift -18 -13
5	1/4 tone ON ON
5	Note Shift -14 -18
6	Note Shift 0 +4
10	1/4 tone ON
10	Note Shift +12

3.2.4 Pan Settings

With the following exceptions Range is set to 0 making panning inoperative:

Exceptions

Performance	Parameters
3	Range = 94 /LFO /Mode = 0:(MIX)
4	Range = 99 /Note No. /Mode = 1
5	Range = 99 /Note No. /Mode = 1
6	Range = 99 /Note No. /Mode = 1
10	Range = 41 /LFO /(Single)
11	Range = 55 /LFO /Mode = 0:(MIX)
14	Range = 99 /LFO /Mode = 0:(MIX)

Preview File Only

3.3 Voice Data

The performances described above are compiled from a bank of 32 voices. Some of these voices are used more than once and currently some are not used at all. This latter group are included in order to facilitate future updates of the performance settings. The voices are arranged as follows:

Voice No.	Voice Name
1	Voice#1 C
2	V1/2
3	Voice#2 C2
4	V2/201
5	Voice#302D
6	V3/201
7	PSOLO~14
8	PSOLO~24
9	PSOLO~15
10	PSOLO~25
11	PSOLO~16
12	PSOLO~26
13	PSOLO~1
14	PSOLO~2
15	V7~1
16	V7/2
17	BATH 01
18	BBATH02
19	Voice#14D
20	TEST PIANO
21	BABSE-41
22	CHURCH$ORG
23	WALPNT01
24	WALPNT02
25	V2/WATER.1
26	V2/WATER.2
27	D~beat~02
28	D~beat~01
29	Voice#12J1
30	CHURCH$V8
31	PSOLO~1
32	PSOLO~2

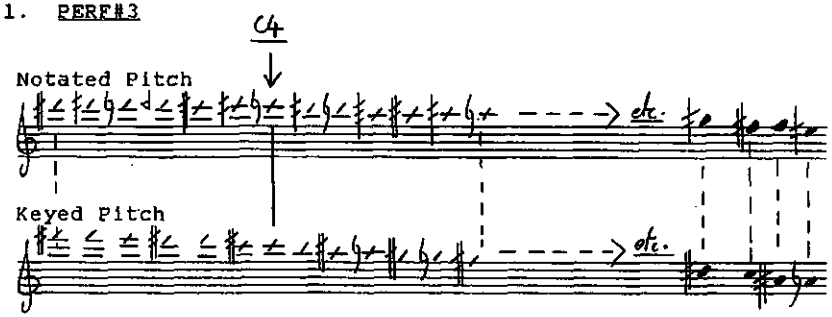
The parameter values for these voices are available on request for the purpose of reconstruction on alternative synthesis equipment for this work only.

Preview File Only

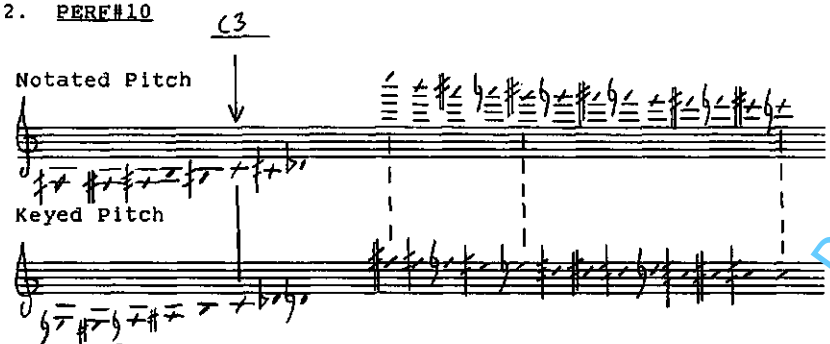
Appendix A Pitch/Key Relationships for Performances notated in Quartertones.

In the case of the following voices the pitches are notated in 1/4 tones. The following tables show how the keys played correspond to the sounding pitch. In other cases where 1/4 or 1/8 tones are used the keyed pitch rather than the notated pitch is shown in the score.

1. PERF#3

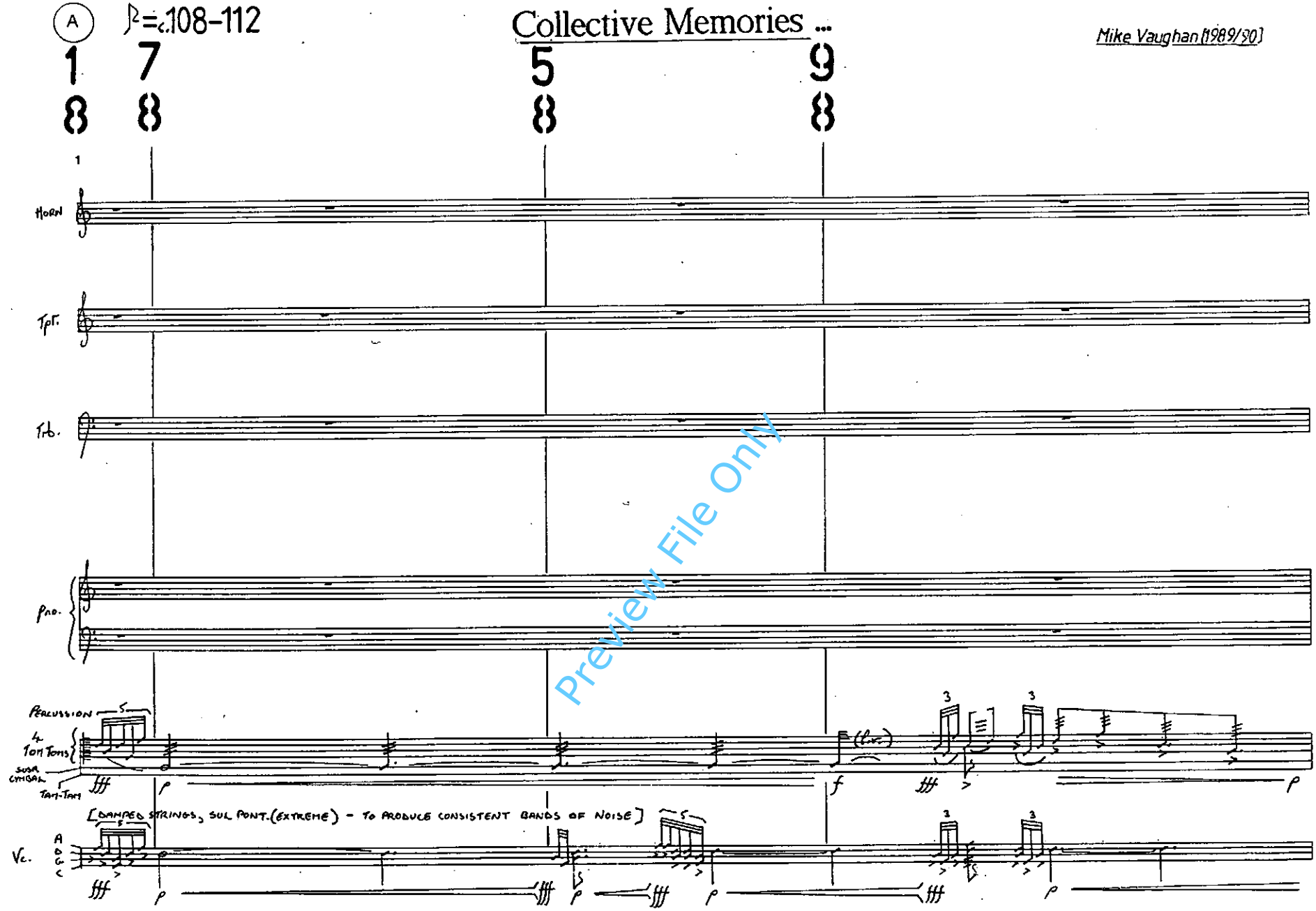


2. PERF#10



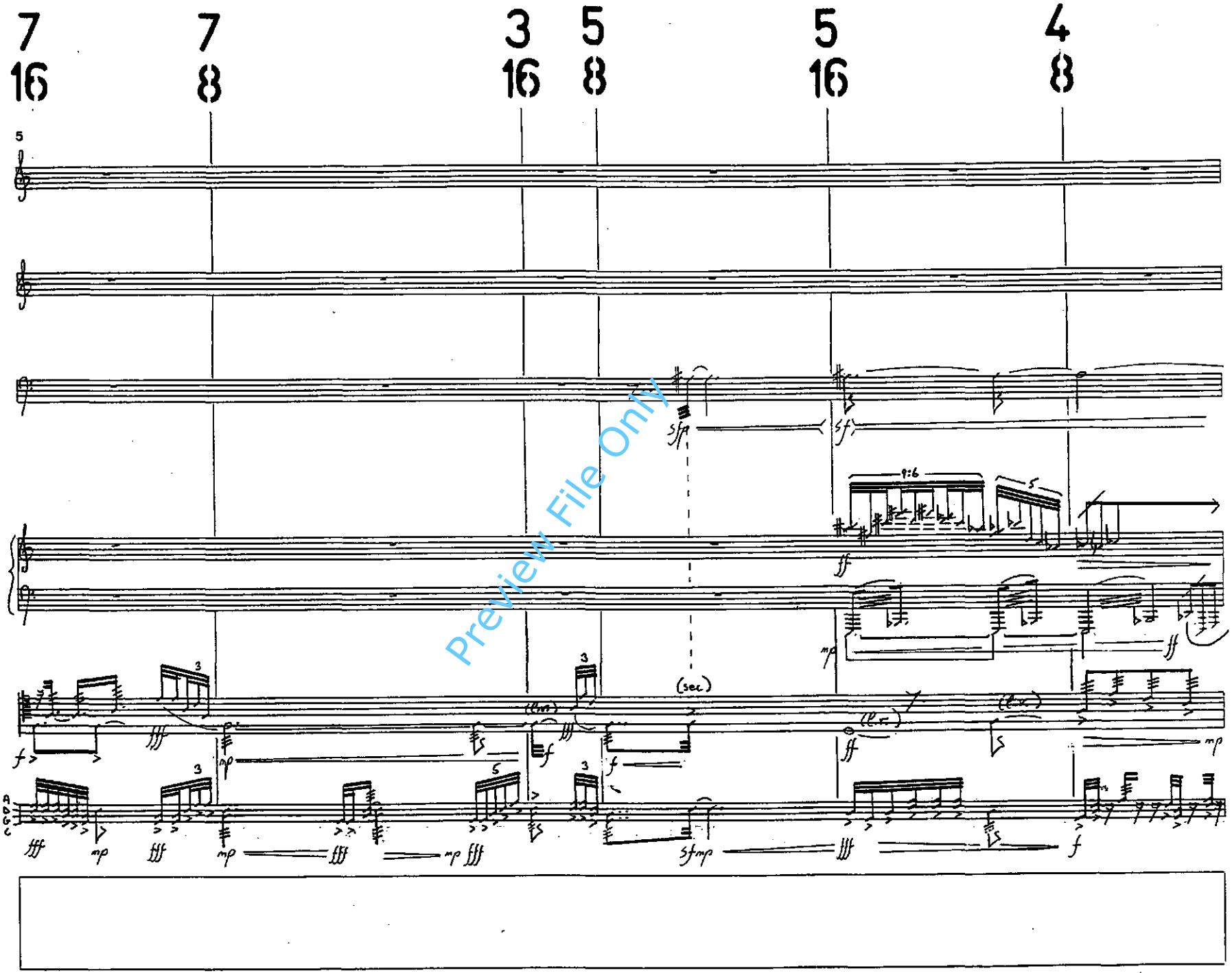
N.B. Voice #10 has components an 8ve higher at a relatively high amplitude ie it can sound an 8ve higher than notated.

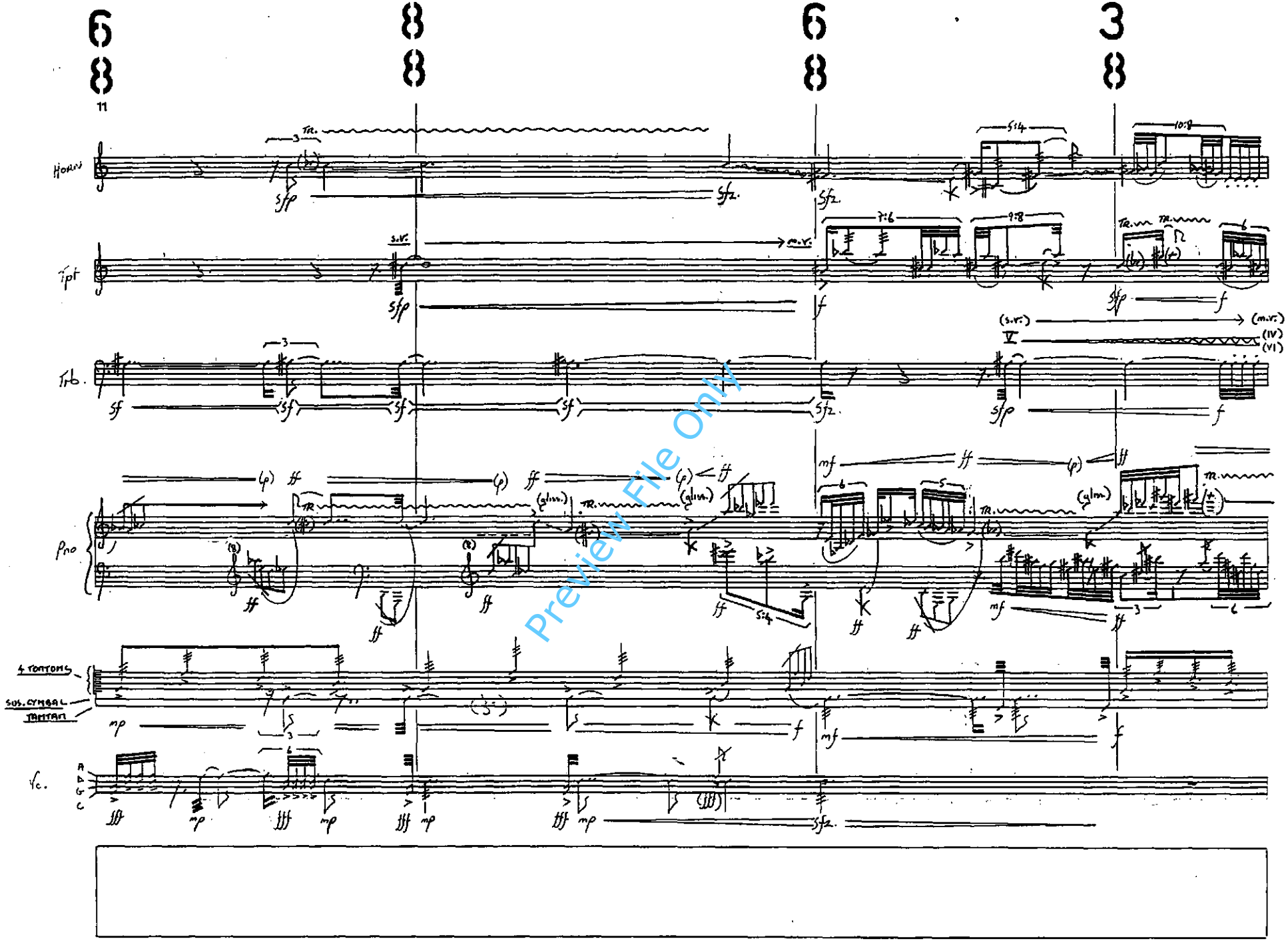
Preview File Only

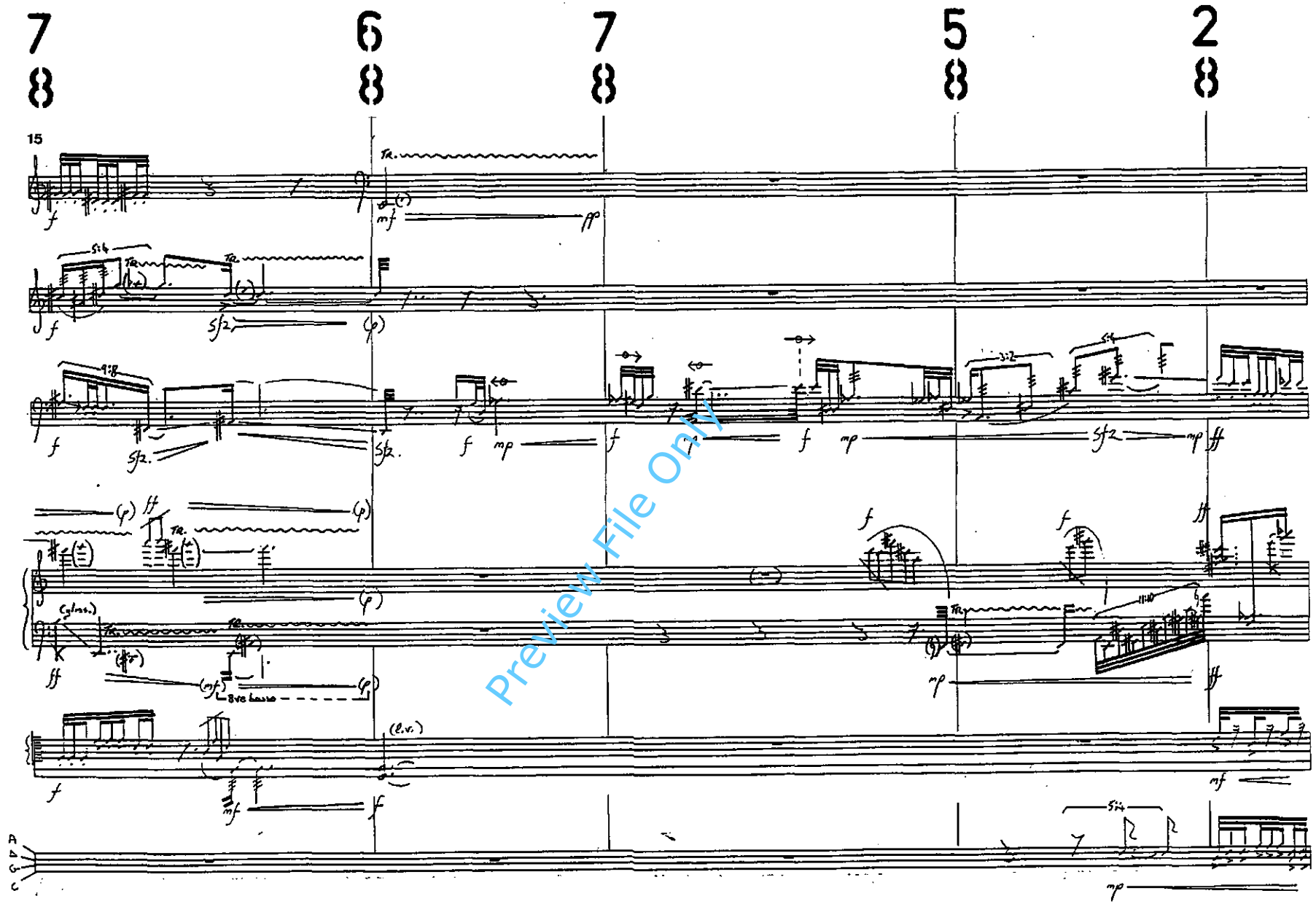


[1] Horn/Trumpet/Trombone/Piano (SLIGHT AMPLIFICATION) (BAR 1–53)
[1] 'Cello (AMPLIFIED TO LEVEL OF BRASS + LIGHT PHASING)
(see section 2.5.2)

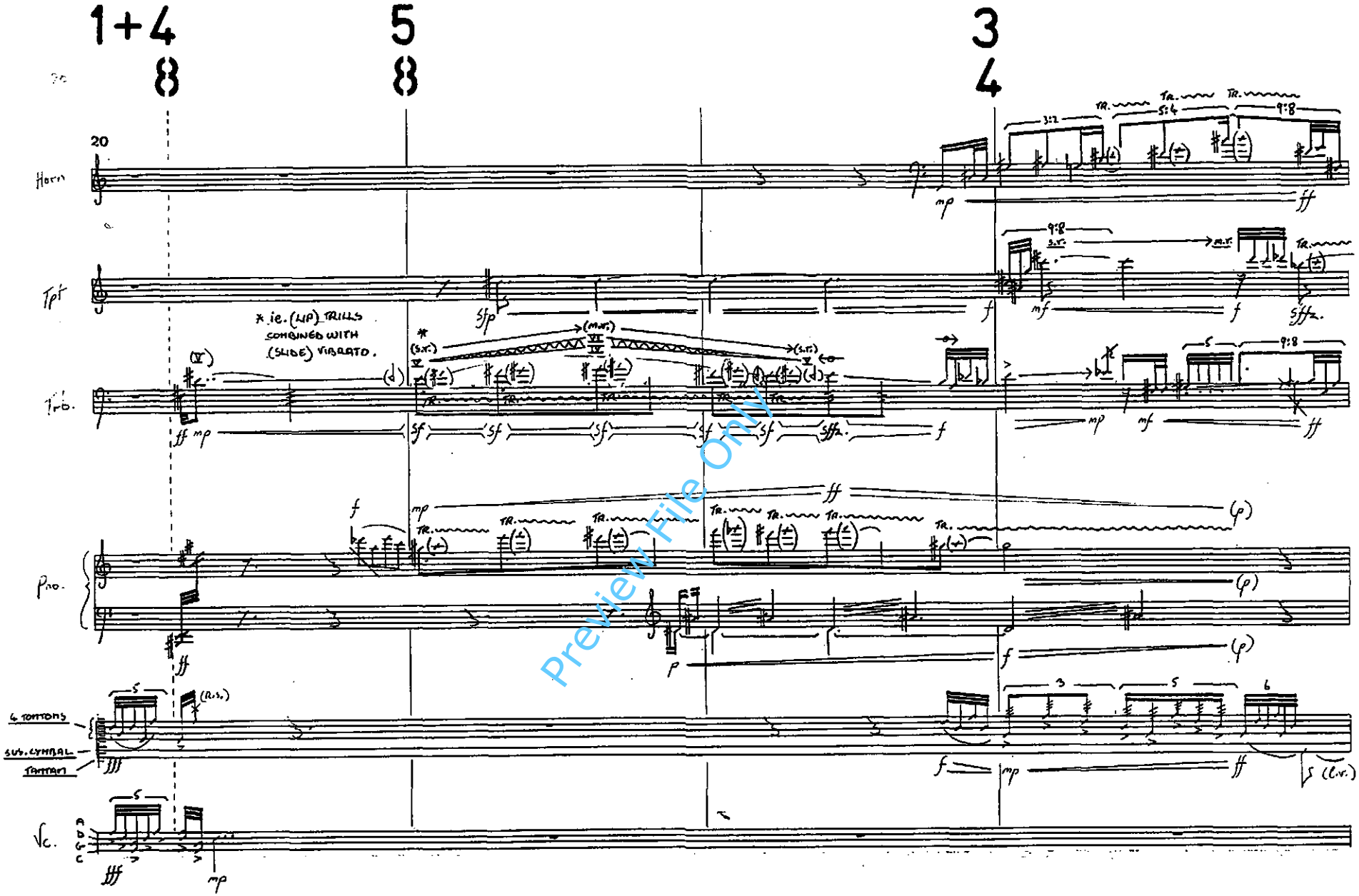
© MIKE VAUGHAN 1989

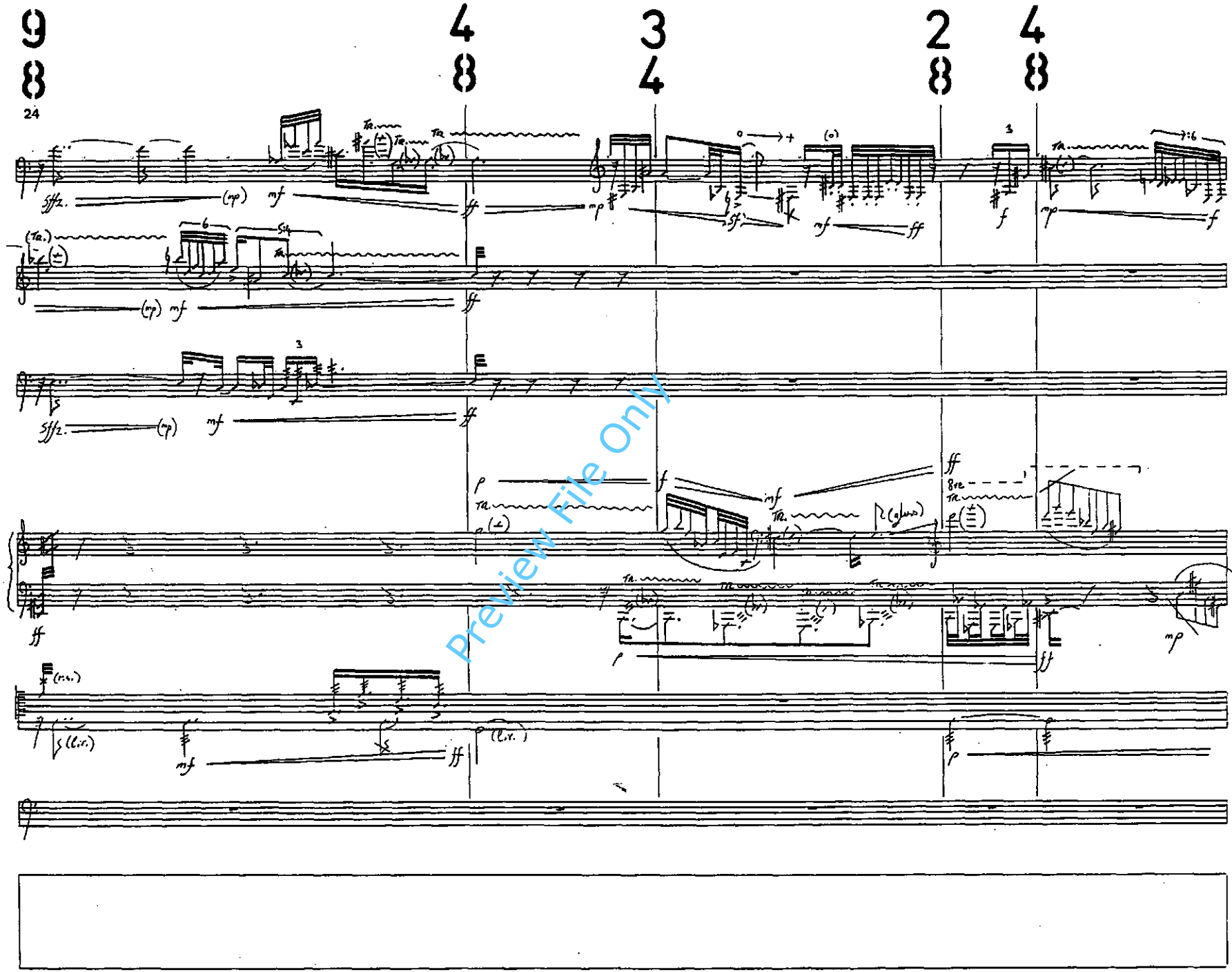

7/16
7/8
3/16
5/8
5/16
4/8
5
9:6
(sec)
(l.v.)
Preview File Only

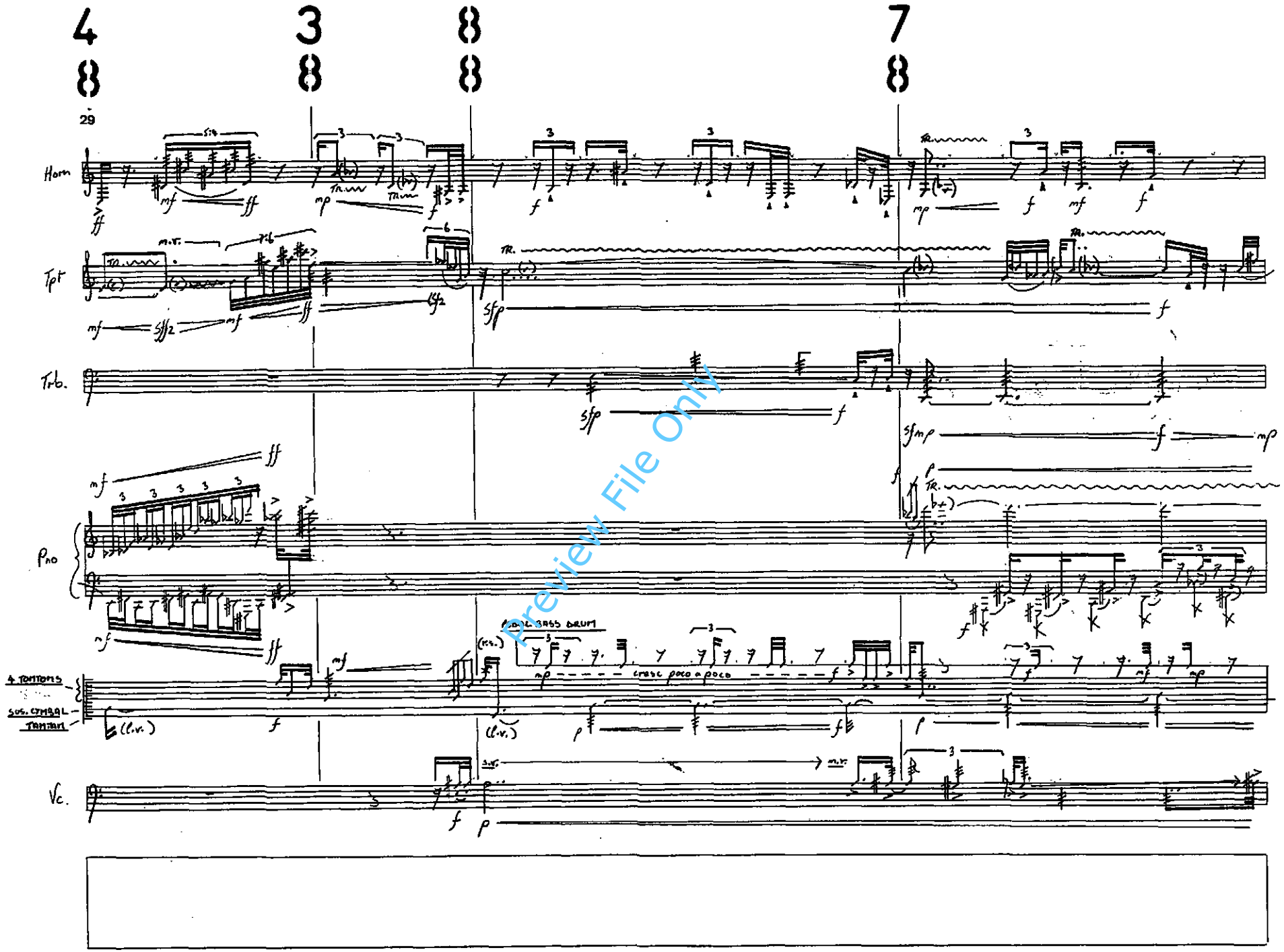

11
Horns
Tpt
Trb.
Pno
4 TOMTOMS
SUS. CYMBAL
TAMTAM
Vc.
Preview File Only



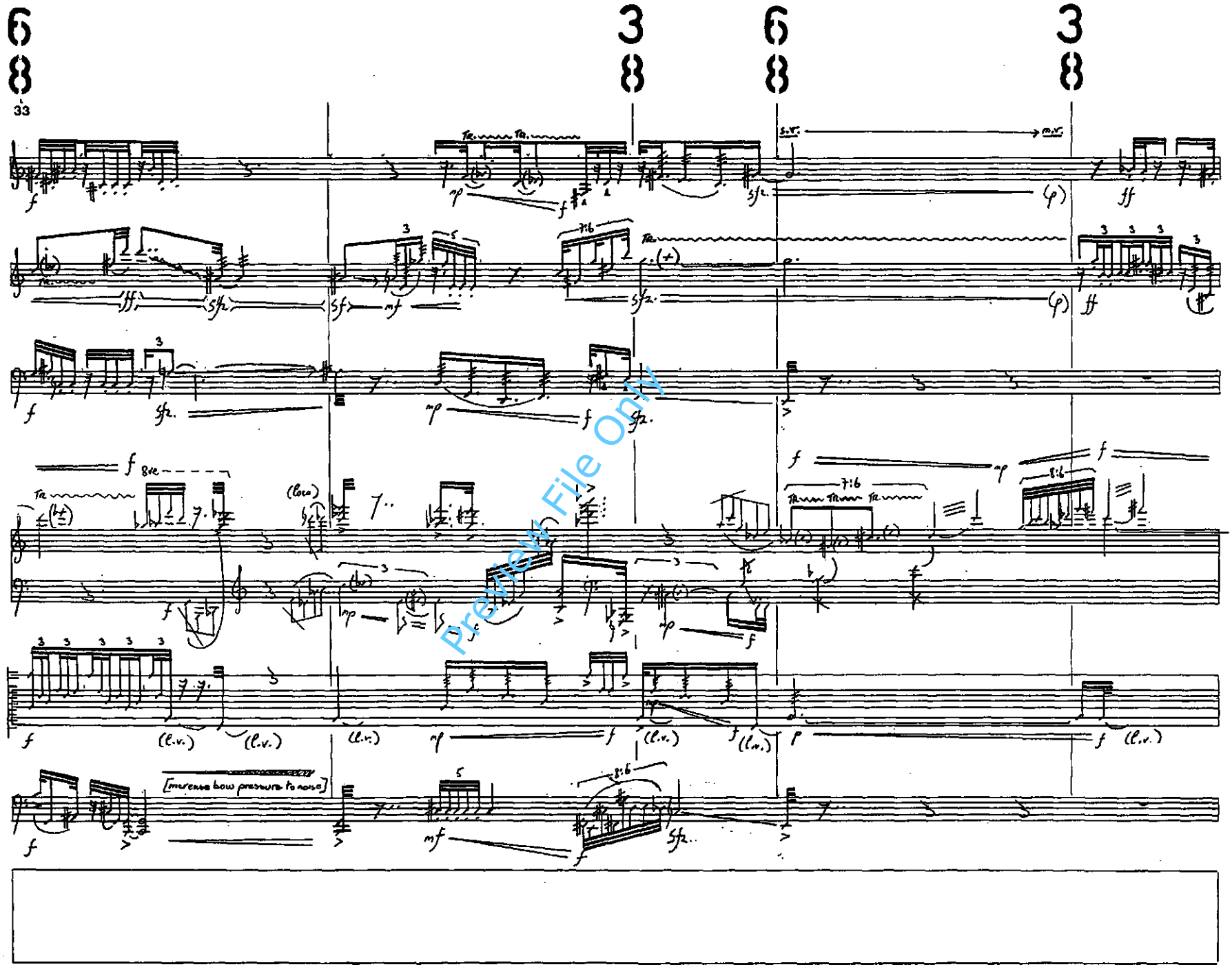
Preview File Only

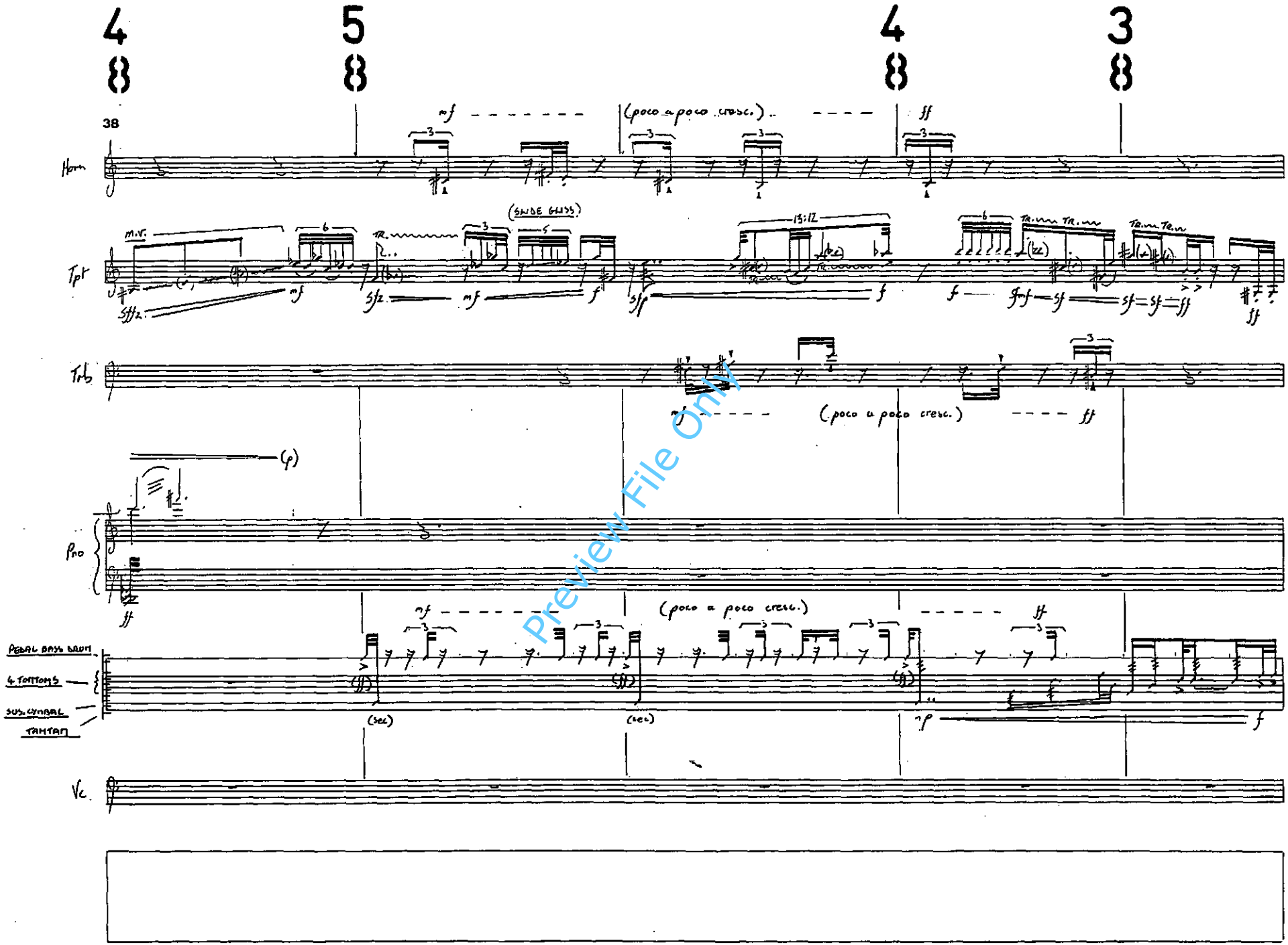

1+4
8
5
8
3
4
20
Horn
Tpt
Trb.
Pno.
4 TOMTOMS
SUS. CYMBAL
TAMTAM
Vc.
A
D
G
C
* ie. (LIP) TRILLS COMBINED WITH (SLIDE) VIBRATO.
Preview File Only


9/8
4/8
3/4
2/8
4/8
24
Preview File Only

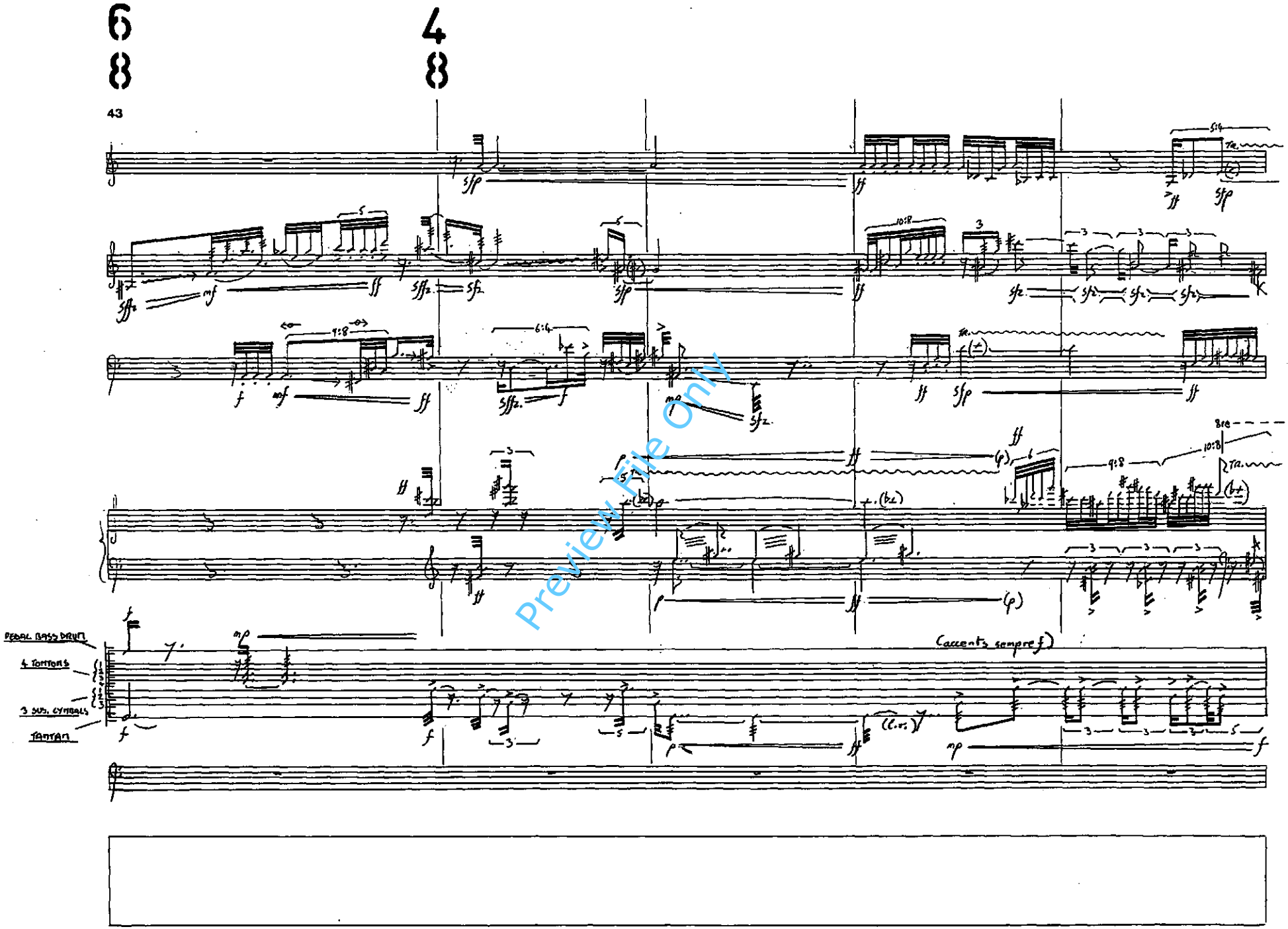


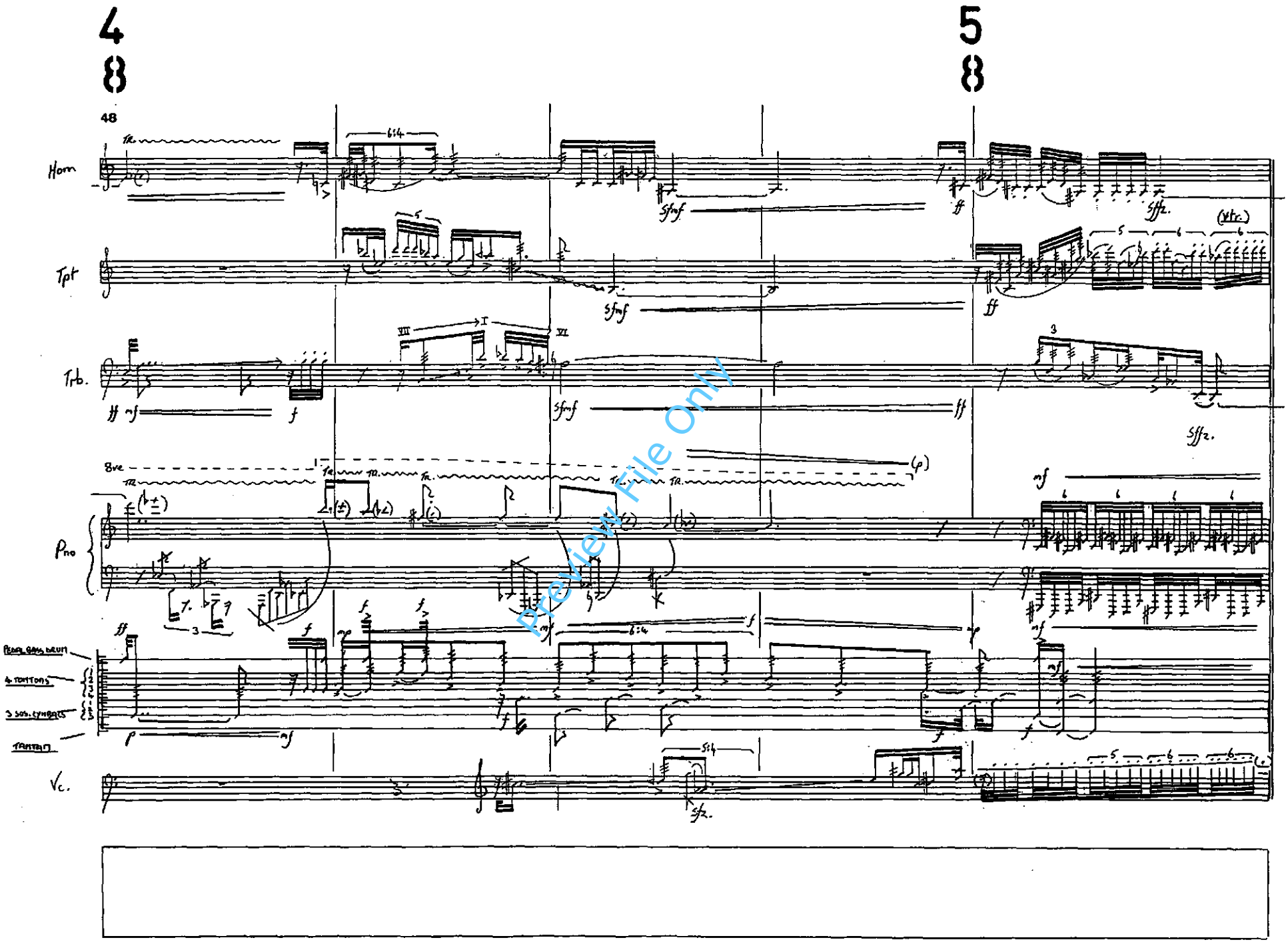
Preview File Only

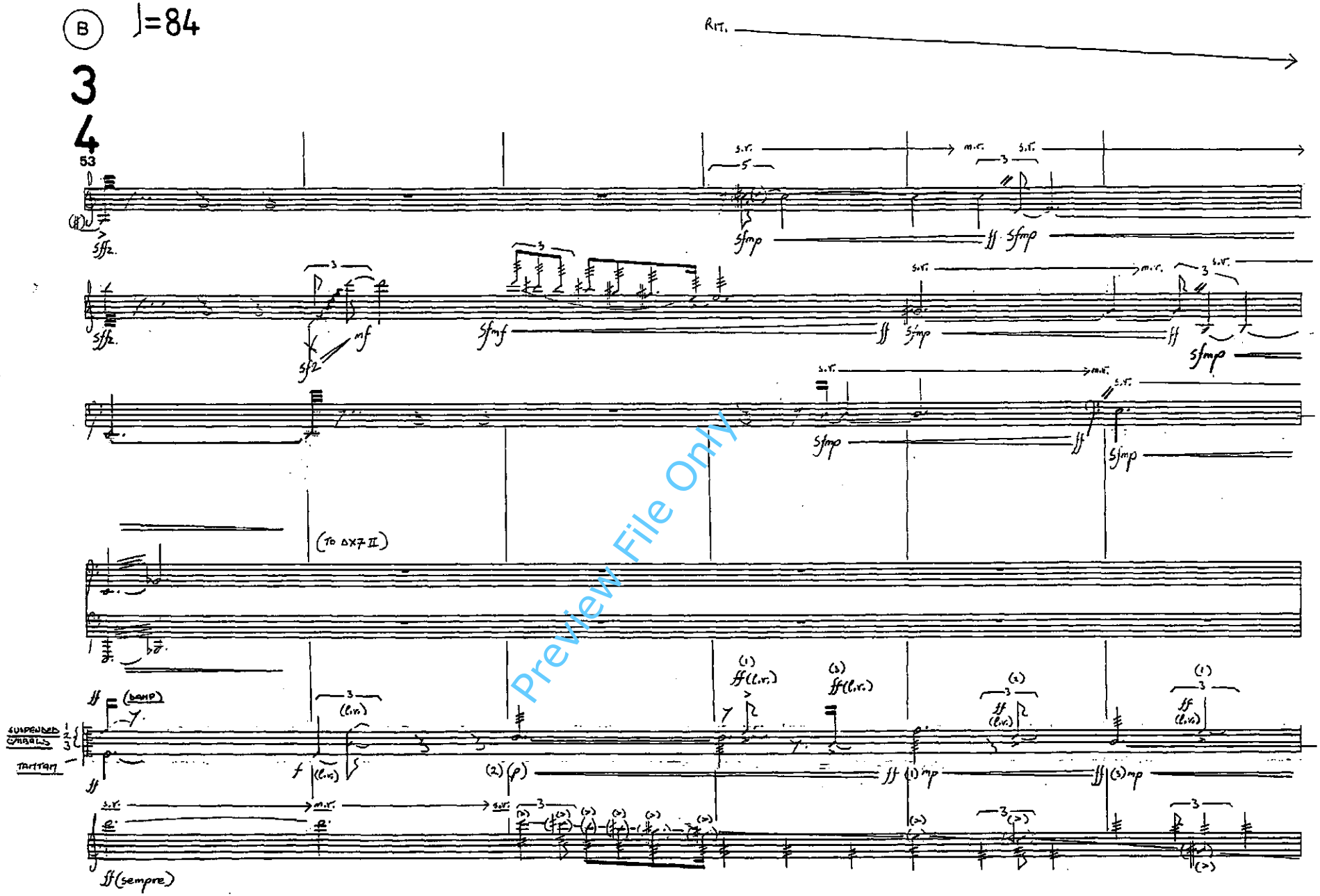

6/8
3/8
6/8
3/8
33
s.v.
m.v.
Increase bow pressure to noise
Preview File Only



Preview File Only


6/8
4/8
43
PEDAL BASS DRUM
4 TOMTOMS
3 SUS. CYMBALS
TAMTAM
(Accents sempre f)
Preview File Only

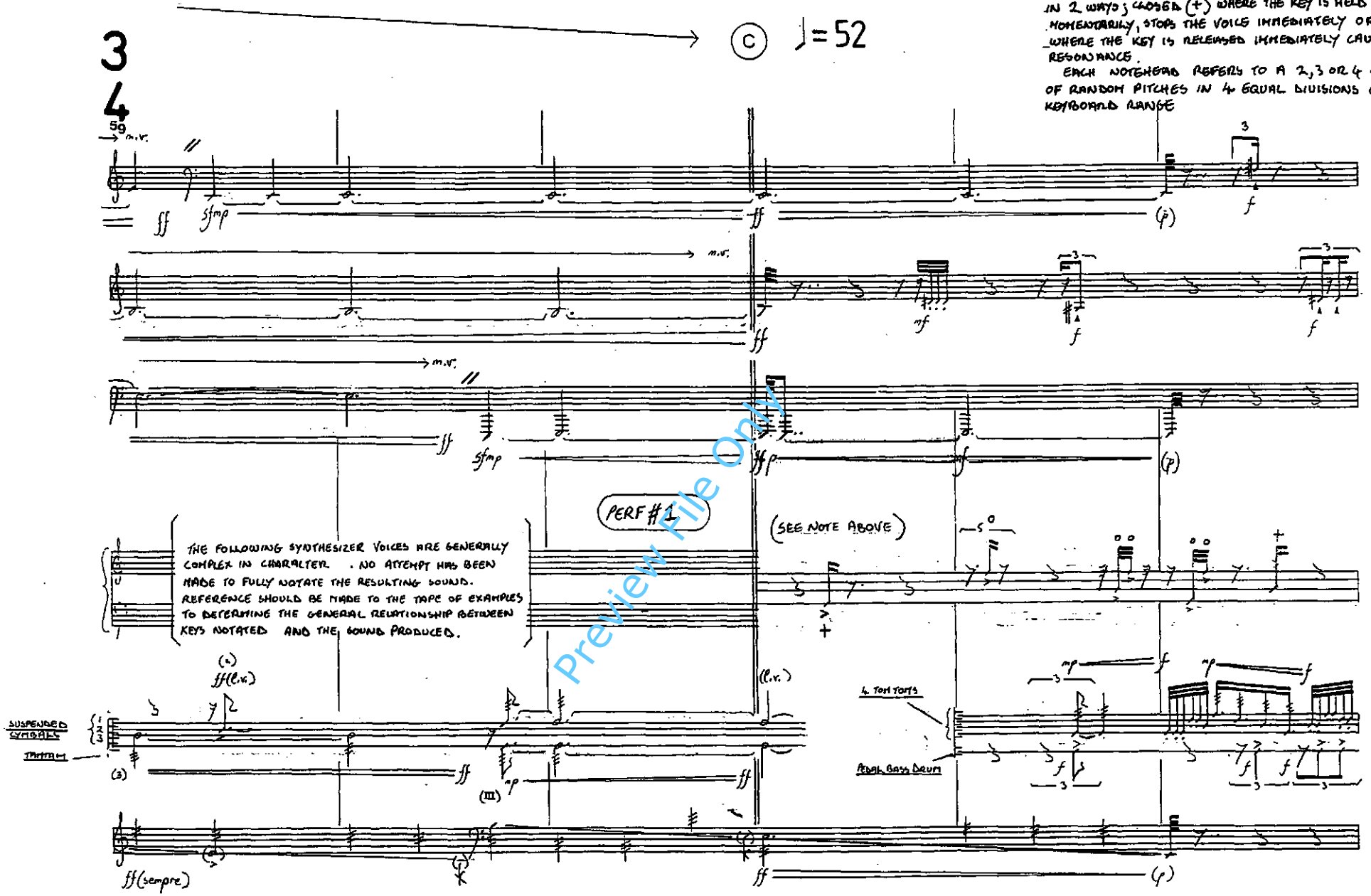

48
Hom
Tpt
Trb.
Pno
Vc.
(Vlc.)
8va
(p)
sfz.
Preview File Only



Preview File Only

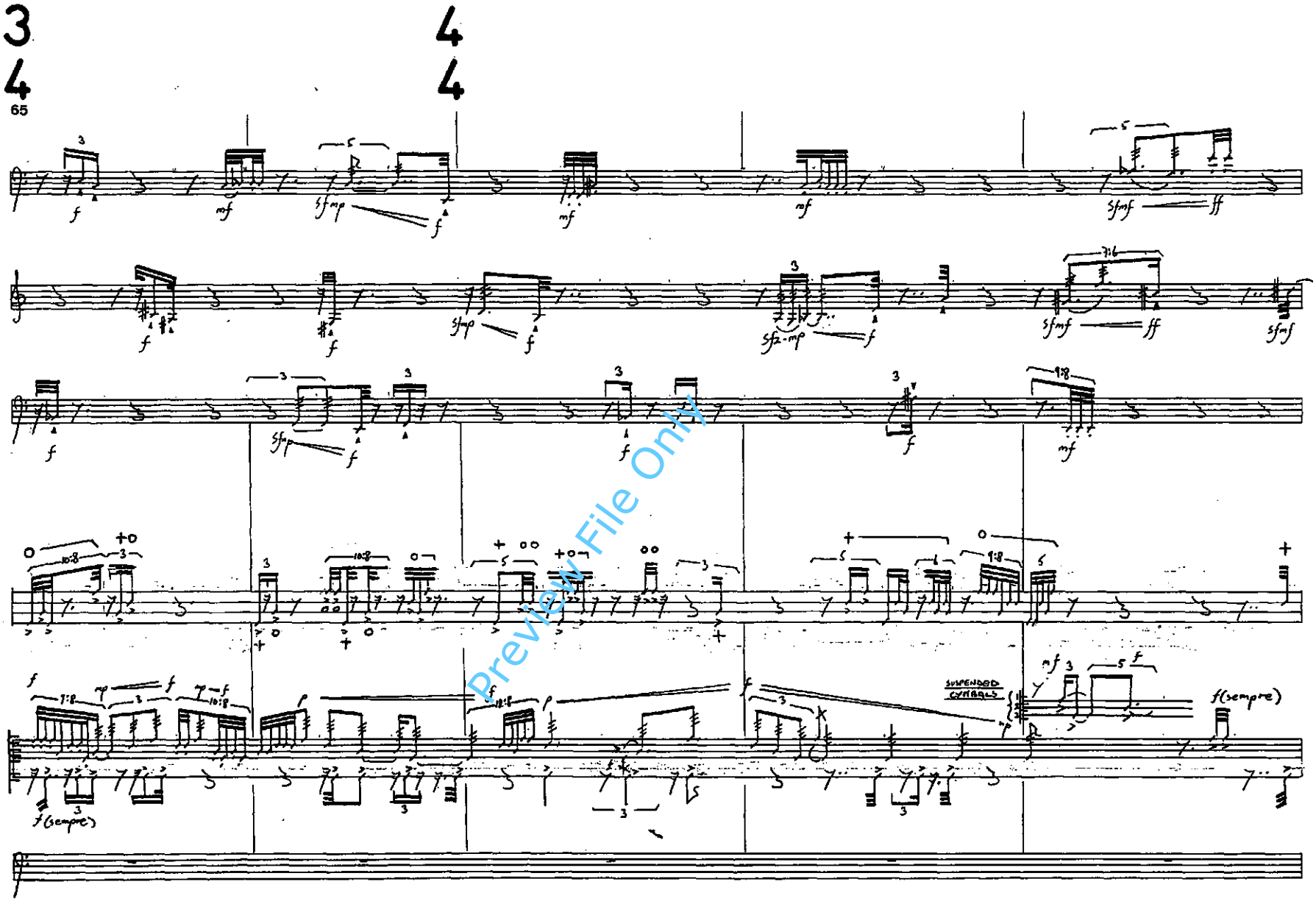
[2] Brass/'Cello (PITCH SHIFT +/-1 with REVERB(Short)) (BAR 53-61)
(see section 2.5.3)

DX7 PERF #1: THIS IS A PERCUSSIVE VOICE TO BE PLAYED IN 2 WAYS; CLOSED (+) WHERE THE KEY IS HELD DOWN MOMENTARILY, STOPS THE VOICE IMMEDIATELY OR OPEN (o) WHERE THE KEY IS RELEASED IMMEDIATELY CAUSING A RESONANCE.
EACH NOTEHEAD REFERS TO A 2, 3 OR 4 NOTE CHORD OF RANDOM PITCHES IN 4 EQUAL DIVISIONS OF THE KEYBOARD RANGE

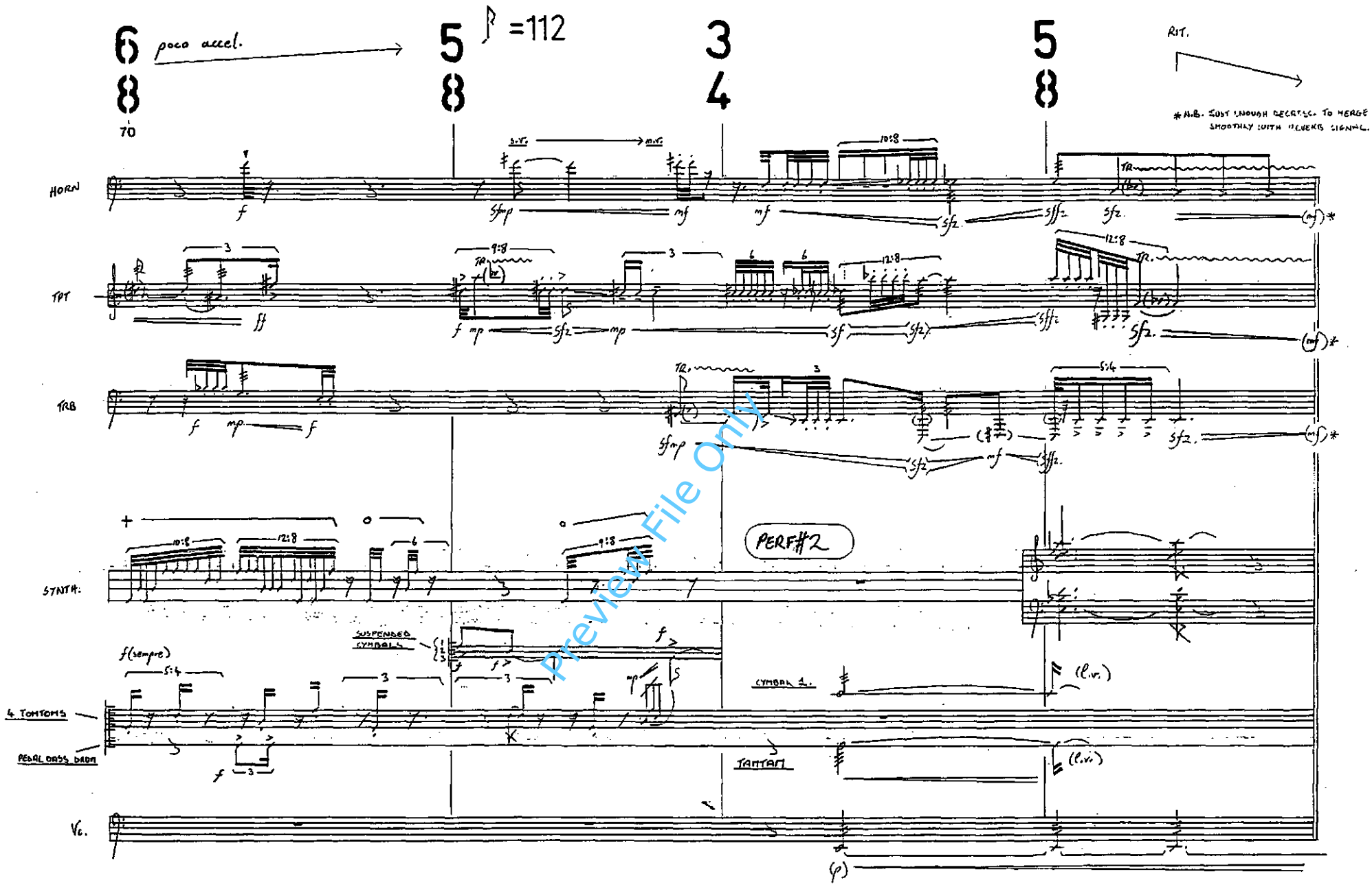


Preview File Only

	[3] Bass Drum (VERY SHORT DELAY + FEEDBACK) BAR 62-71 [3] Brass (DELAY c. 0.5 sec(1 delay)) (see section 2.5.4)



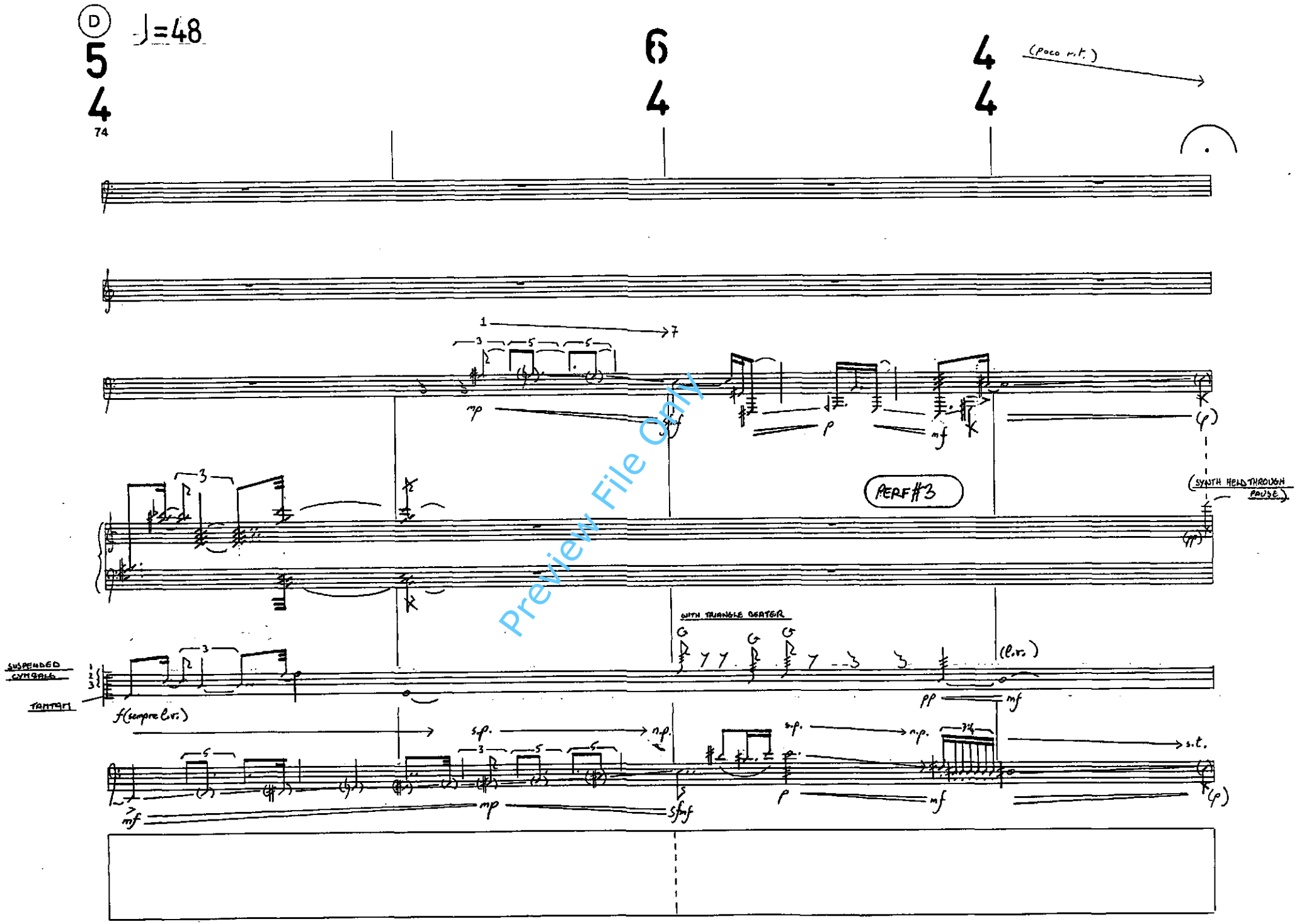
Preview File Only

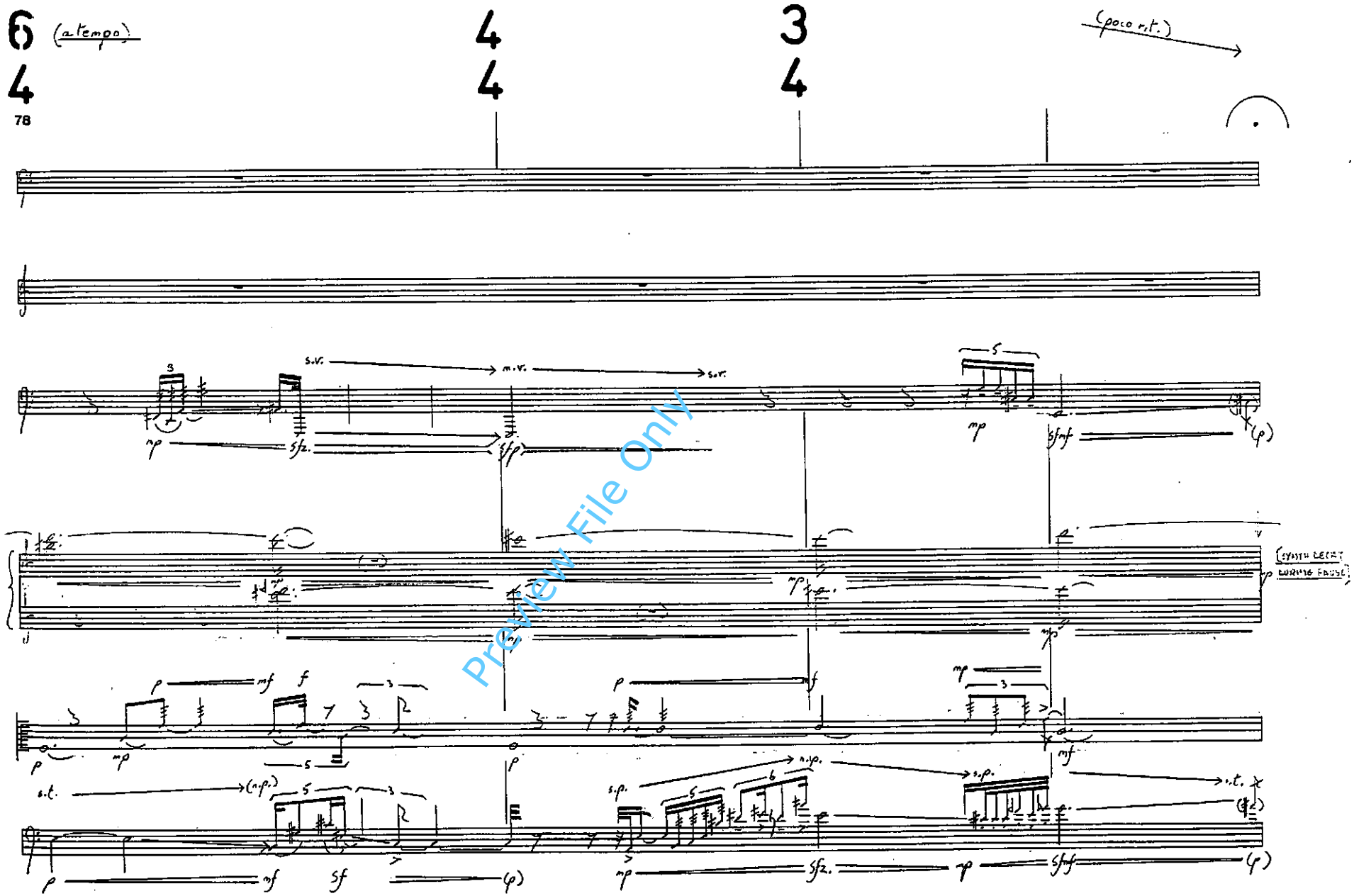


[4] Brass (REVERB(long))

(see section 2.5.4)

BAR 73-75


D
♩=48
5/4
74
6/4
4/4
(poco rit.)
1
7
mp
sfz
p
mf
(p)
PERF #3
(SYNTH HELD THROUGH PAUSE)
(pp)
WITH TRIANGLE BEATER
(l.v.)
pp
mf
SUSPENDED CYMBALS
TAMTAM
f (sempre l.v.)
s.p.
n.p.
s.t.
mf
sfmf
p
Preview File Only

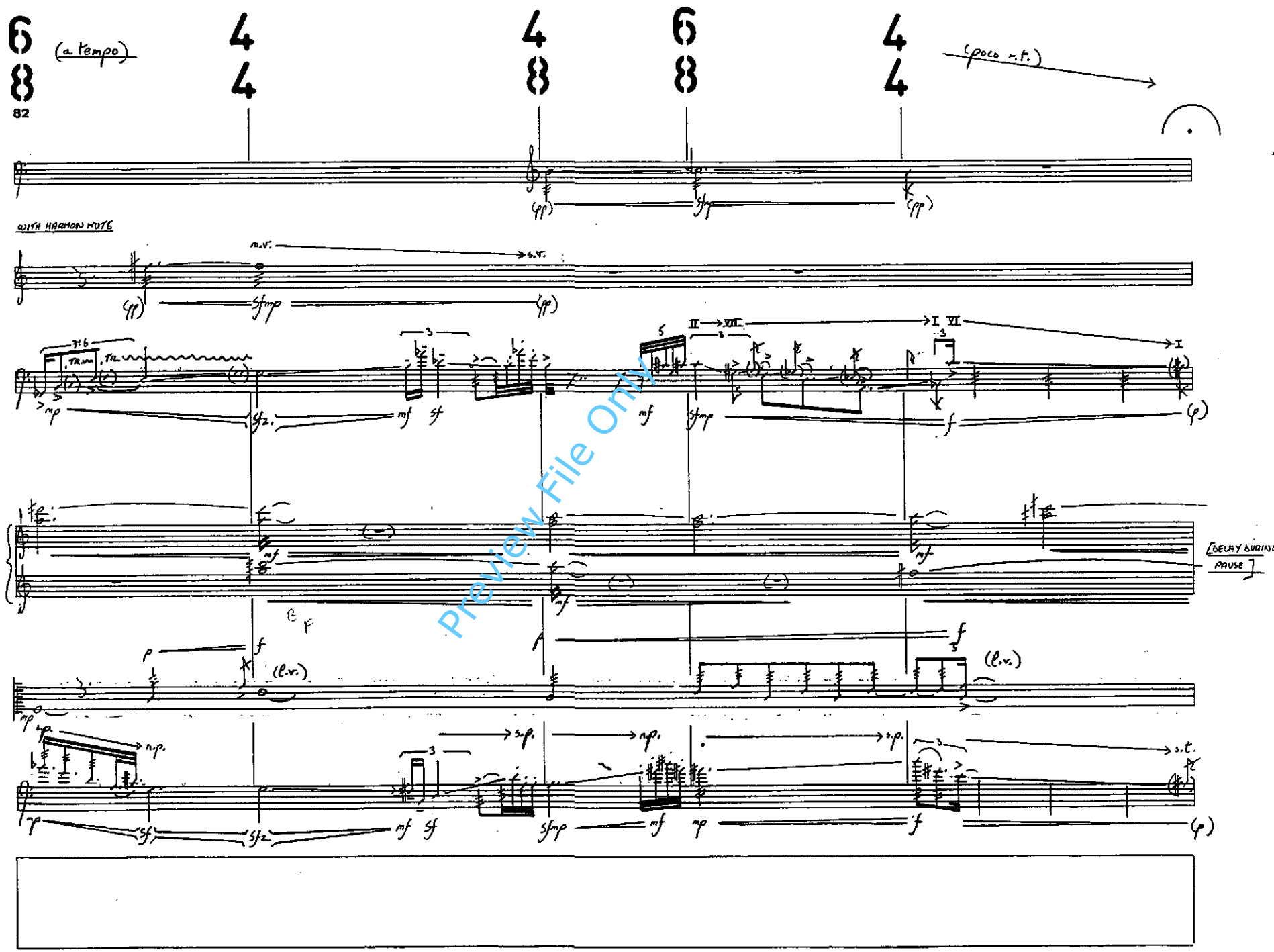


Preview File Only

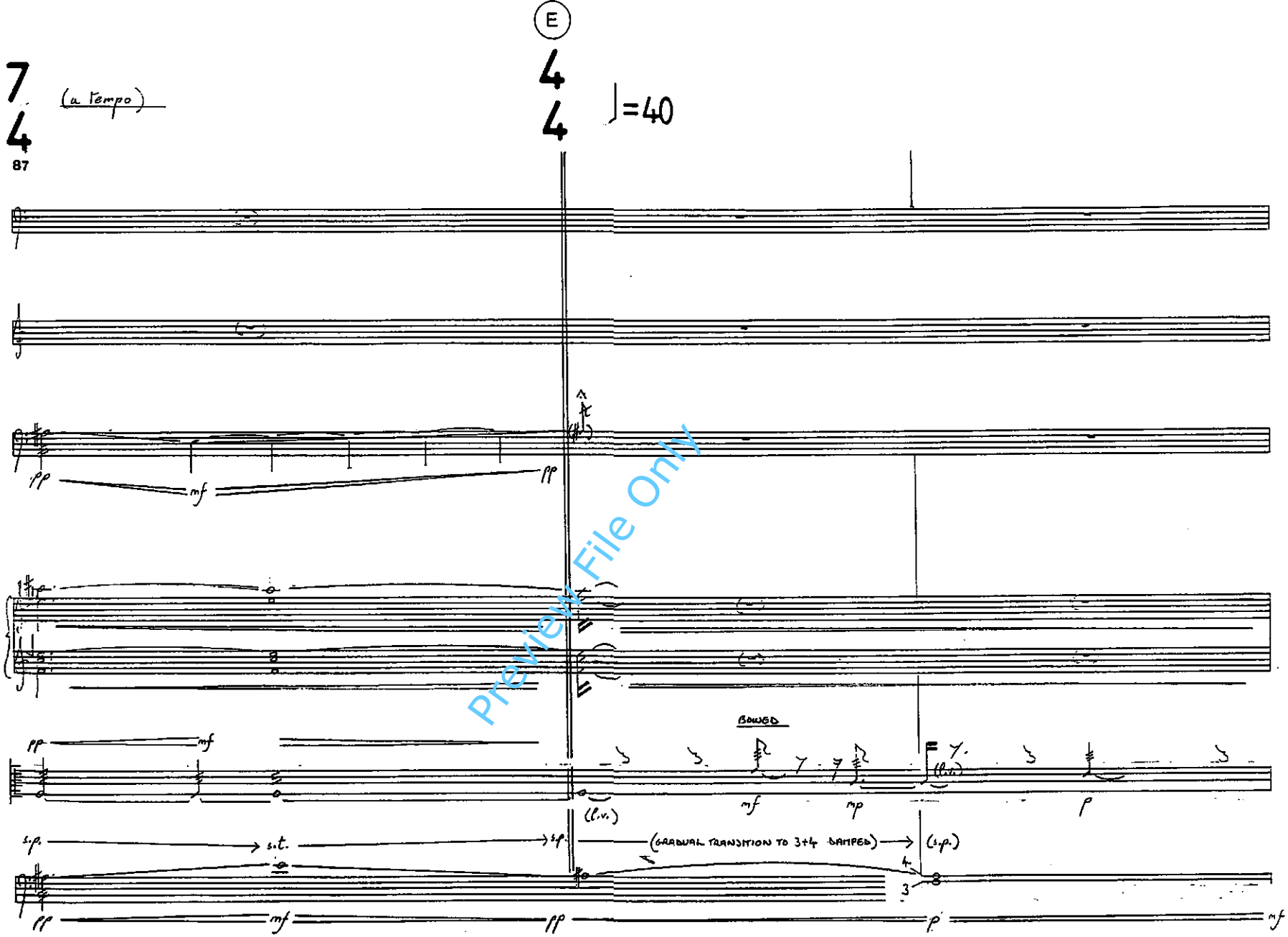
[5] Trombone/'Cello (PITCH SHIFT +/-0.5)
[5] Synth (CHORUS + REVERB(medium))
(see section 2.5.5)

BAR 78-87

(FADE IN OVER 78, OUT OVER 87.

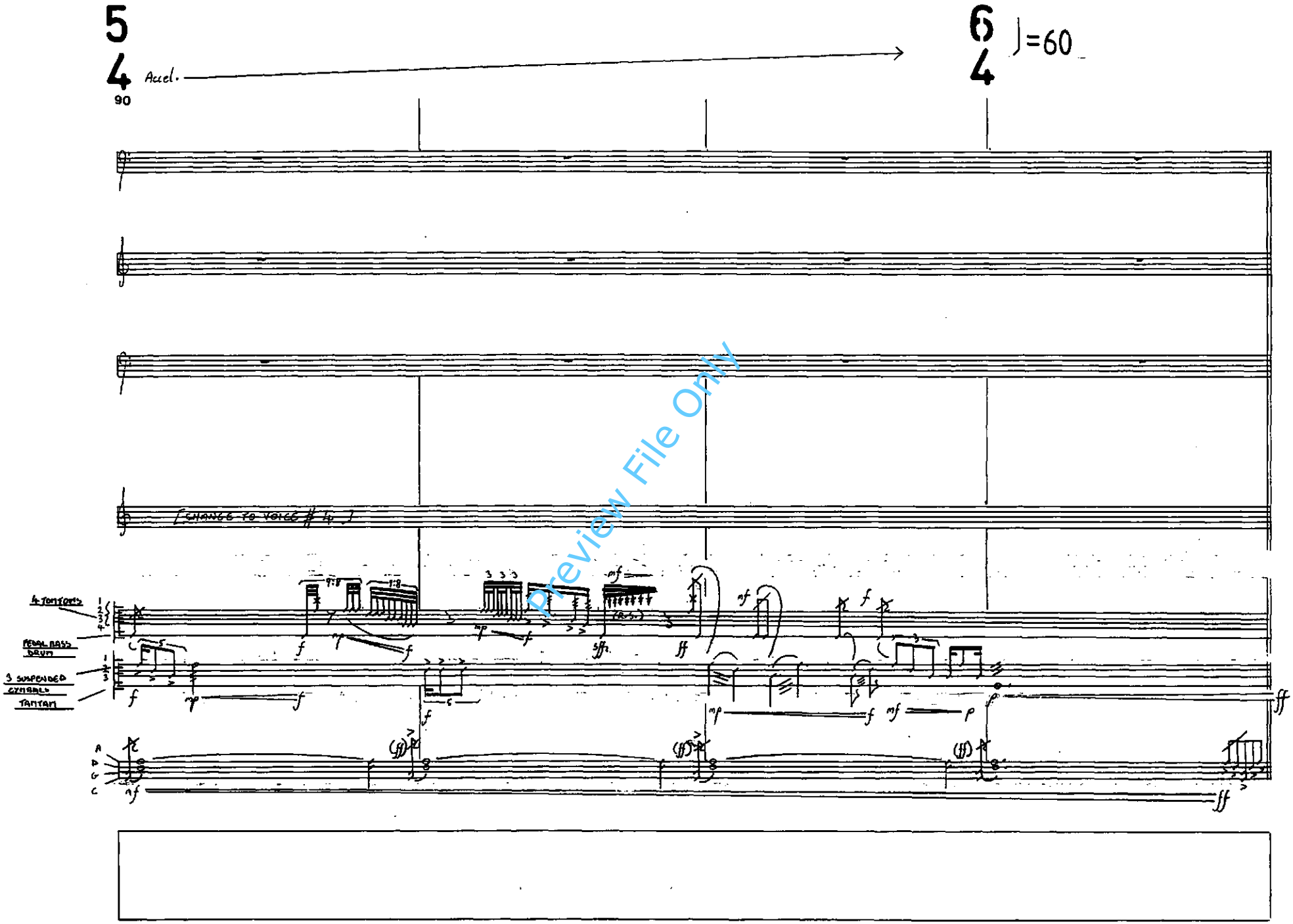


Preview File Only

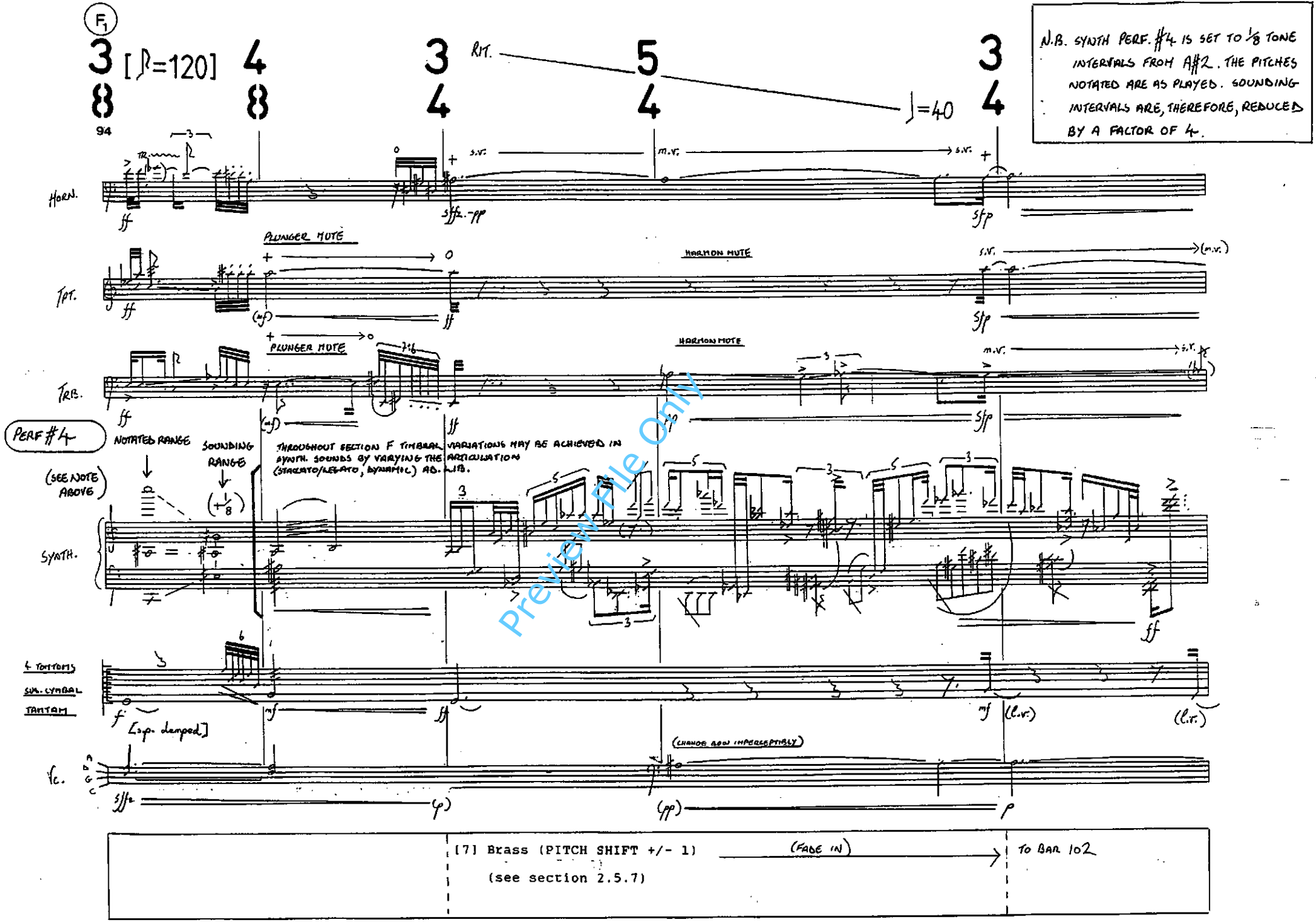


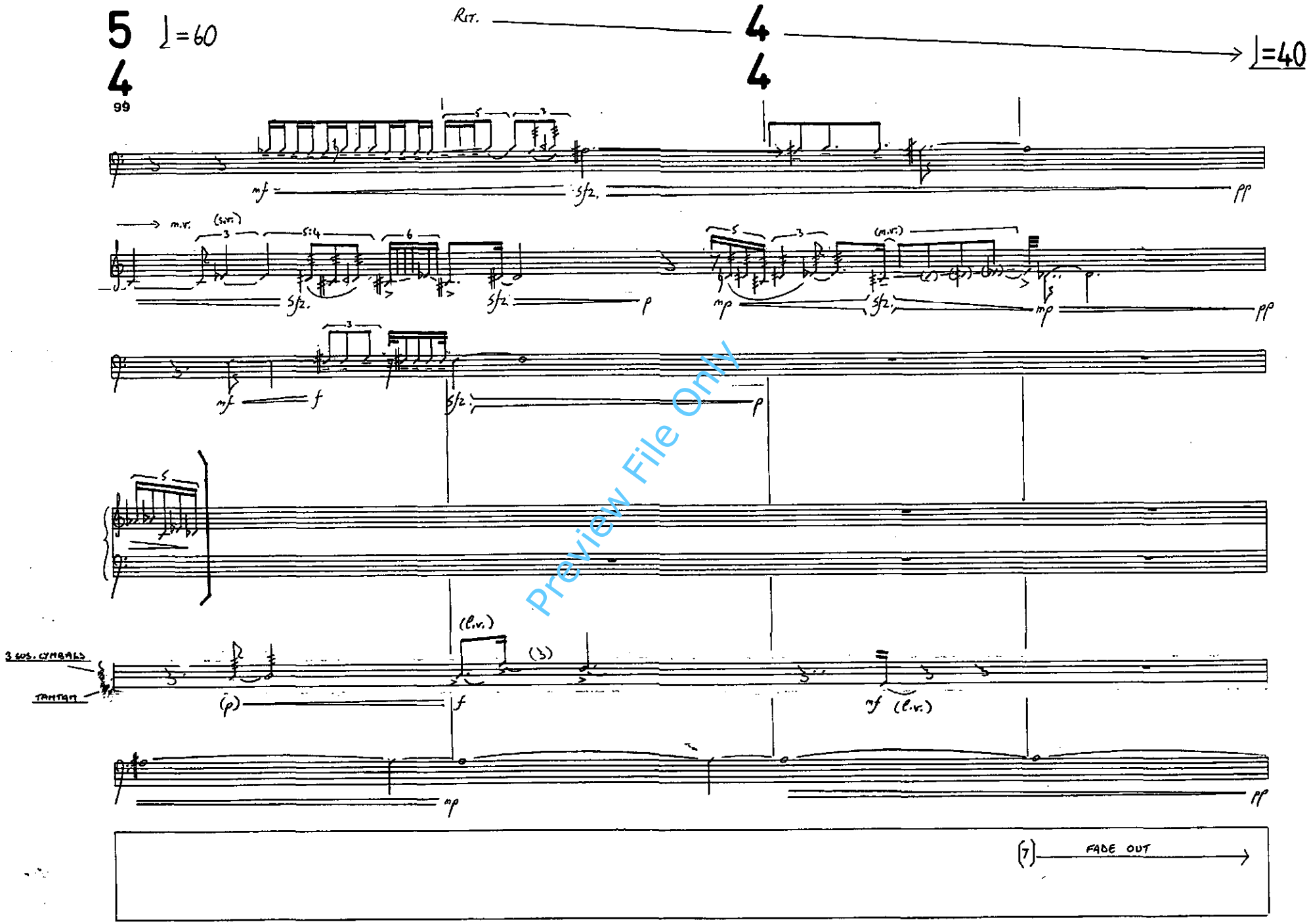
Preview File Only

	[6] Cymbals/Tamtam (PHASE) BAR 88 TO 93 [6] Tomtoms/Bass Drum (AUTOPAN(FAST)) [6] 'Cello (PHASE) (see section 2.5.6)

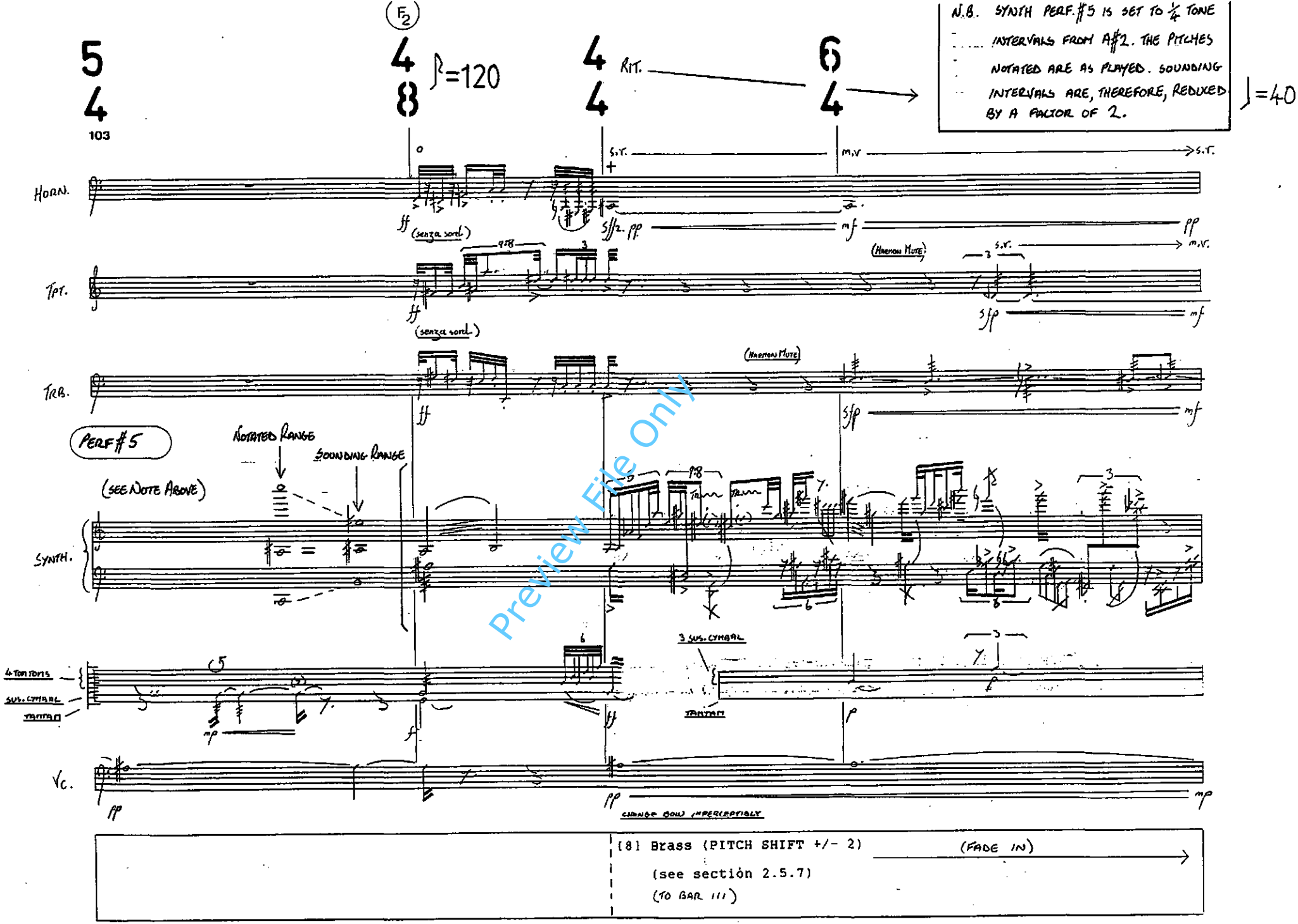


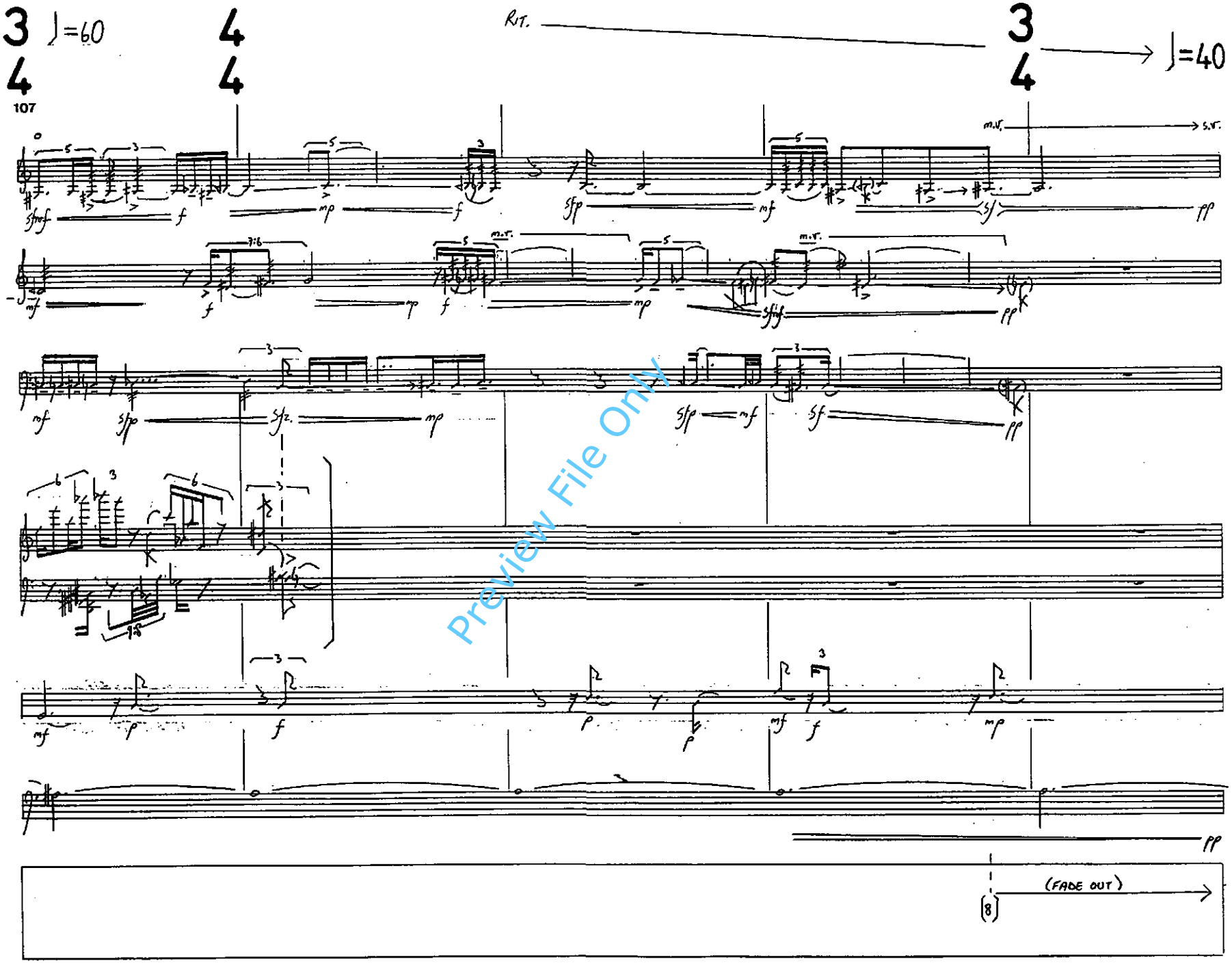
Preview File Only


F1
94
[♪=120]
RIT.
♩=40
N.B. SYNTH PERF. #4 IS SET TO 1/8 TONE INTERVALS FROM A#2. THE PITCHES NOTATED ARE AS PLAYED. SOUNDING INTERVALS ARE, THEREFORE, REDUCED BY A FACTOR OF 4.
HORN.
TPT.
PLUNGER MUTE
HARMON MUTE
TRB.
PERF #4
NOTATED RANGE
SOUNDING RANGE
(SEE NOTE ABOVE)
THROUGHOUT SECTION F TIMBRAL VARIATIONS MAY BE ACHIEVED IN SYNTH. SOUNDS BY VARYING THE ARTICULATION (STACCATO/LEGATO, DYNAMIC) AD. LIB.
SYNTH.
4 TOMTOMS
SUS. CYMBAL
TAMTAM
[sp. damped]
(CHANGE NOW IMPERCEPTIBLY)
VC.
[7] Brass (PITCH SHIFT +/- 1)
(see section 2.5.7)
(FADE IN)
TO BAR 102
Preview File Only

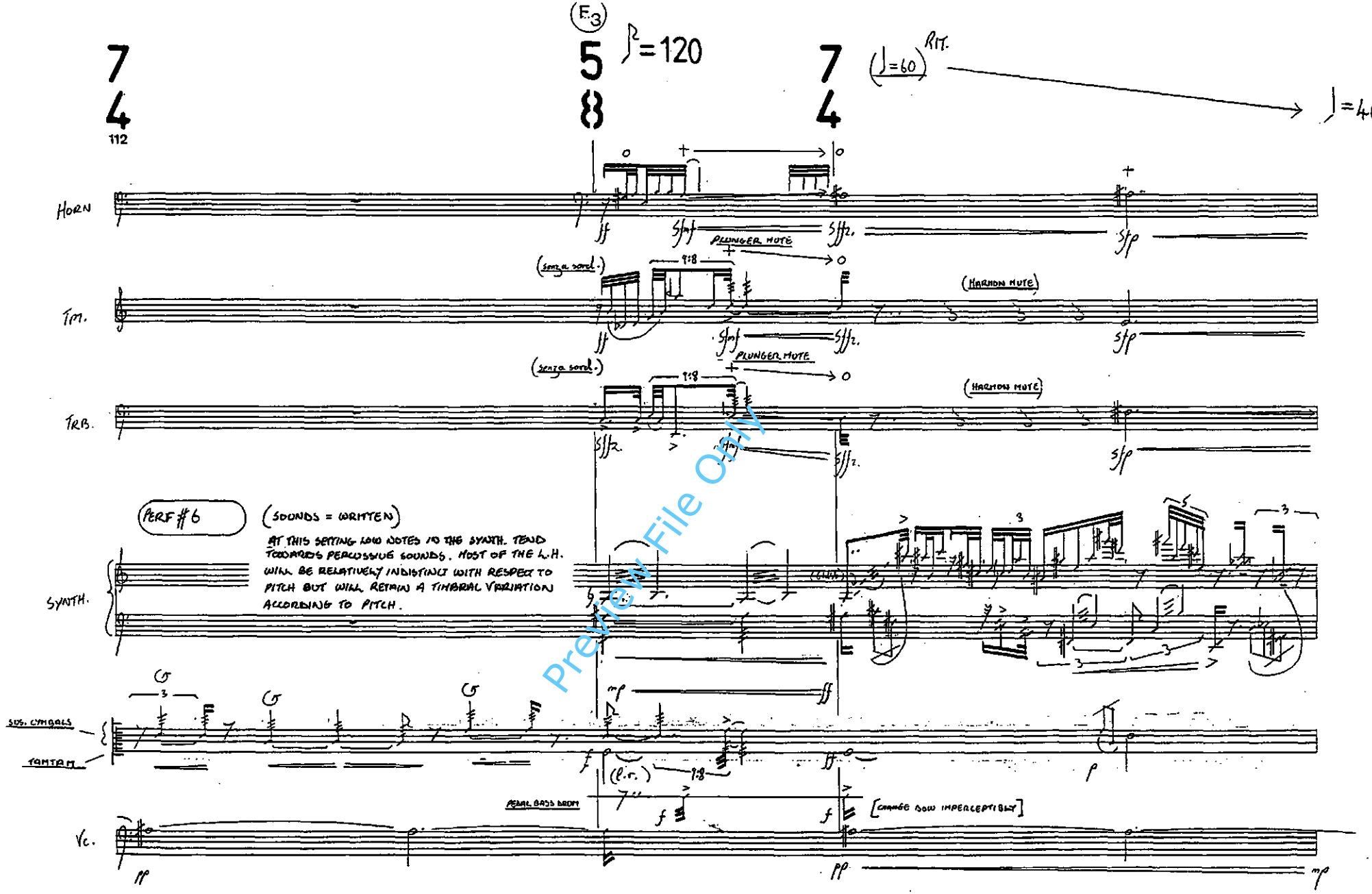


Preview File Only

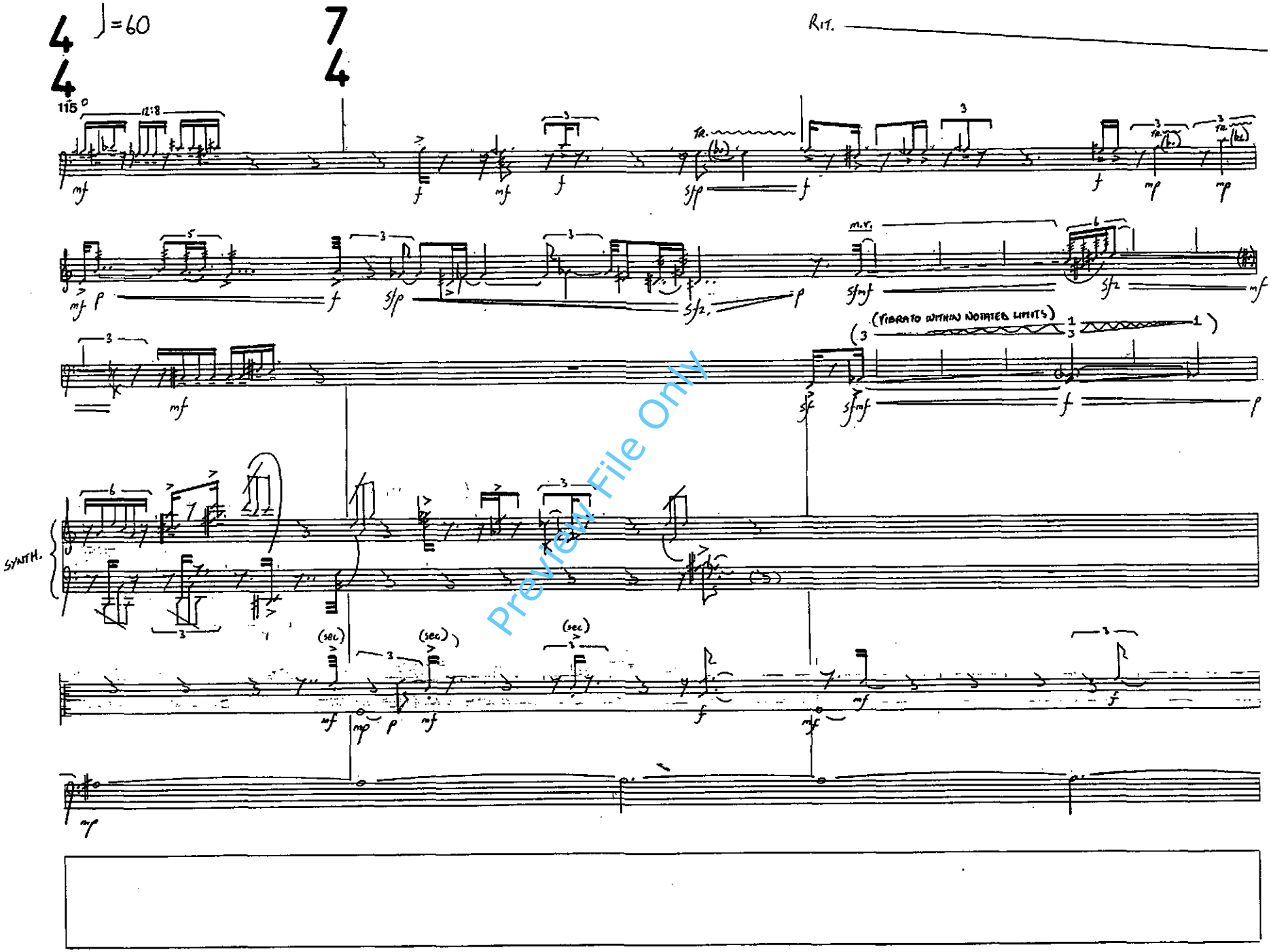

N.B. SYNTH PERF. #5 IS SET TO ¼ TONE INTERVALS FROM A#2. THE PITCHES NOTATED ARE AS PLAYED. SOUNDING INTERVALS ARE, THEREFORE, REDUCED BY A FACTOR OF 2.
103
♪=120
RIT.
♩=40
HORN.
TPT.
TRB.
SYNTH.
PERF #5
(SEE NOTE ABOVE)
NOTATED RANGE
SOUNDING RANGE
4 TOM TOMS
SUS. CYMBAL
TAMTAM
3 SUS. CYMBAL
VC.
CHANGE BOW IMPERCEPTIBLY
[8] Brass (PITCH SHIFT +/- 2)
(see section 2.5.7)
(TO BAR 111)
(FADE IN)
Preview File Only

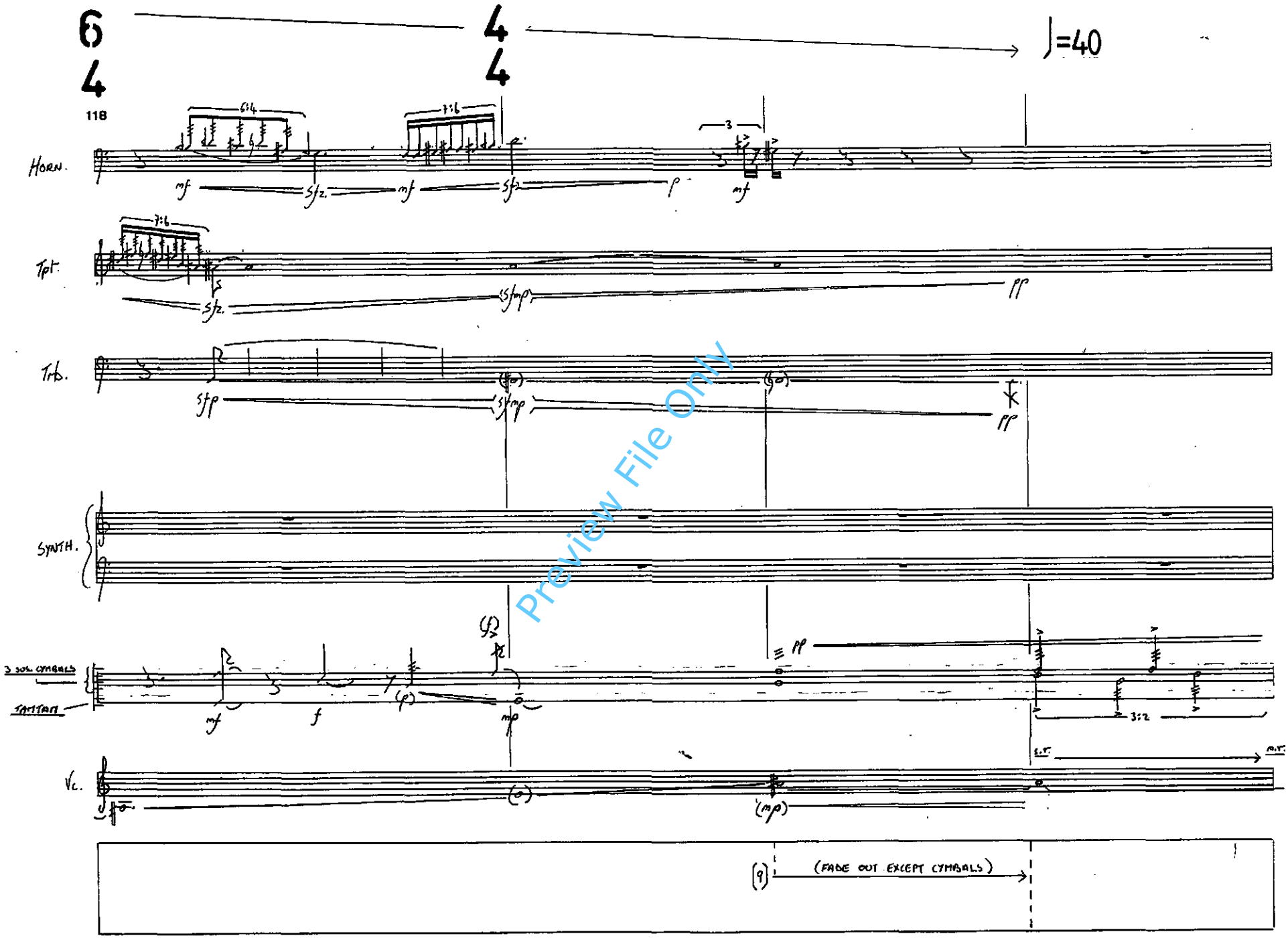


Preview File Only

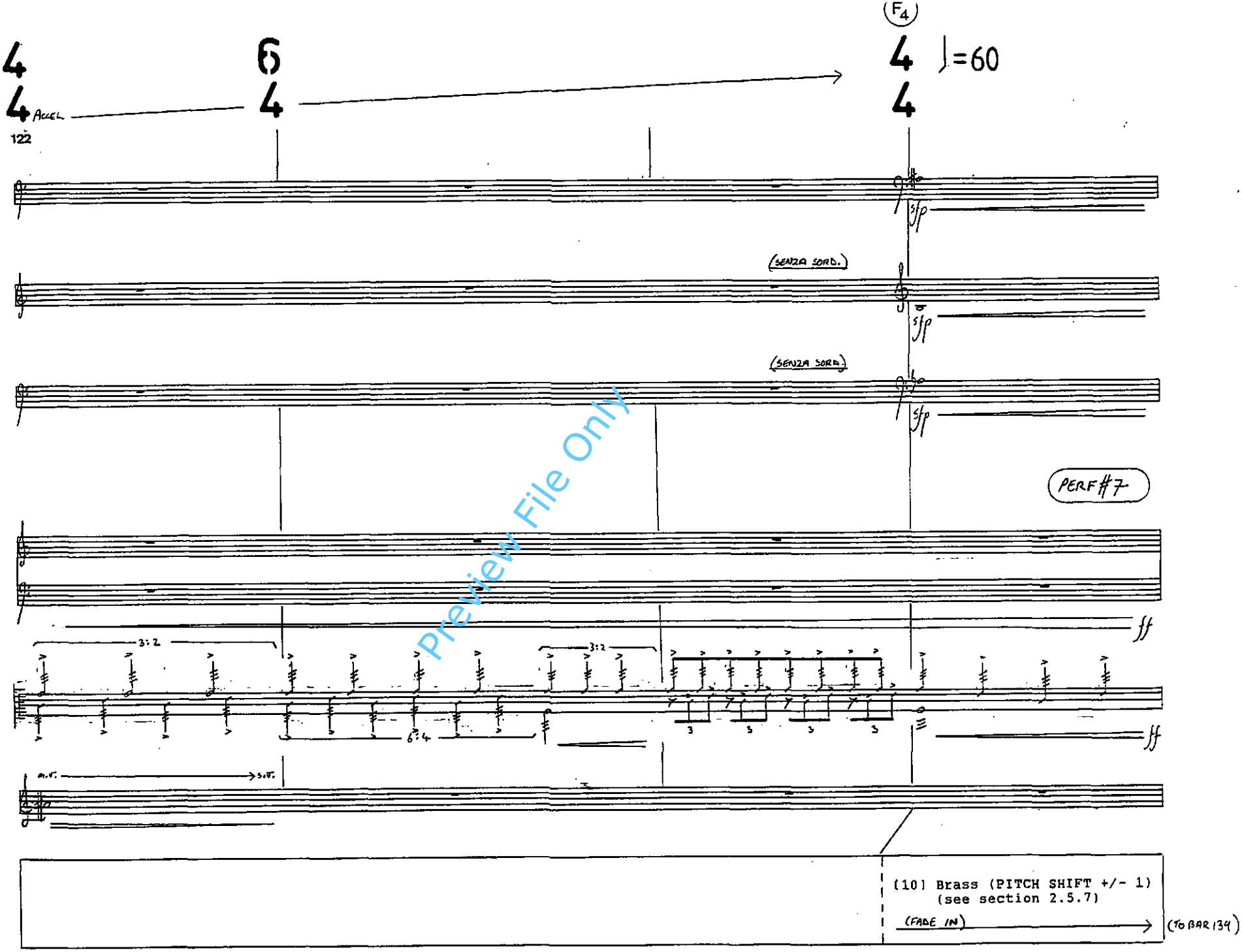


Preview File Only

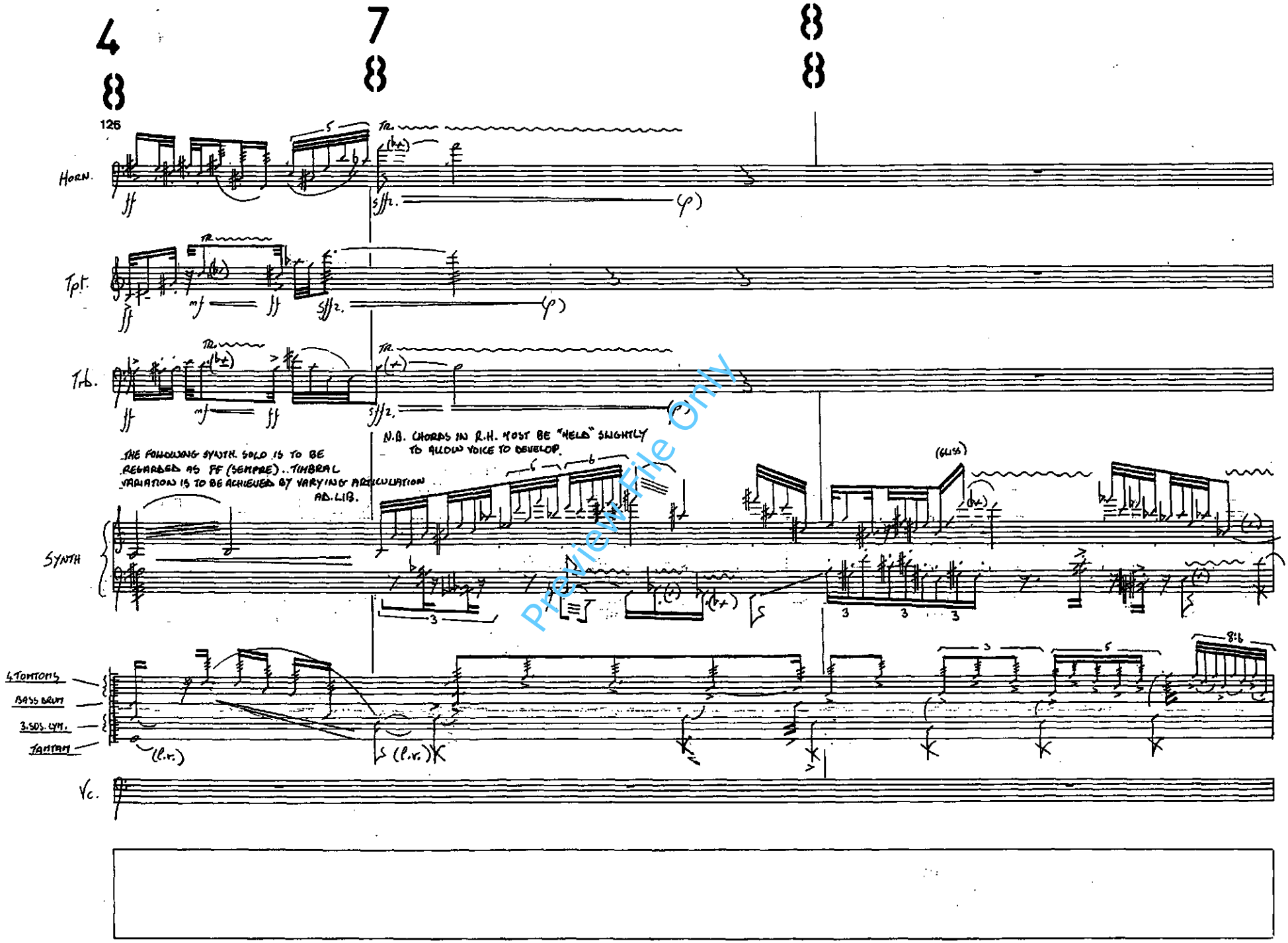

♩=60
RIT.
SYNTH.
(VIBRATO WITHIN NOTATED LIMITS)
M.V.
(sec)
Preview File Only

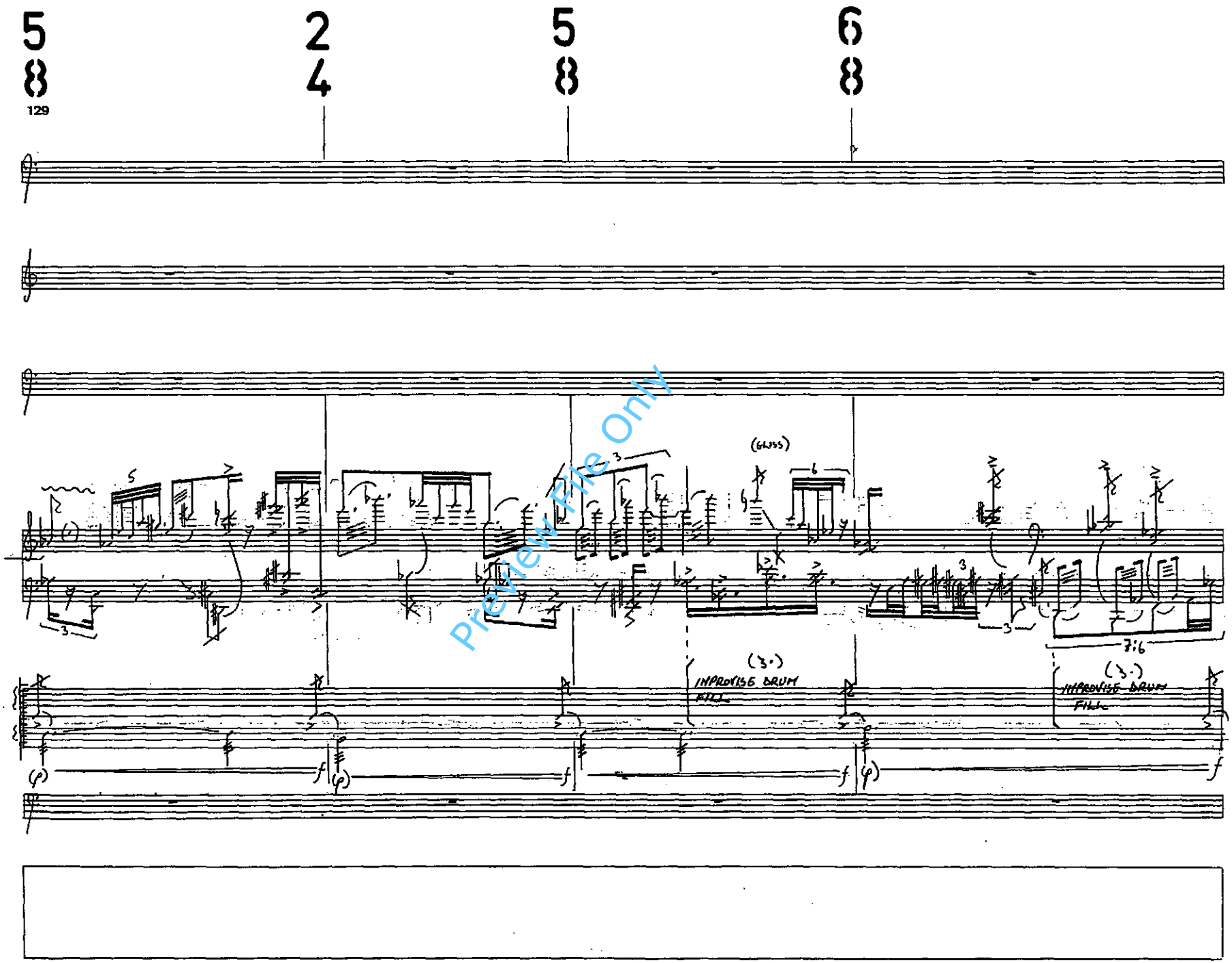


Preview File Only

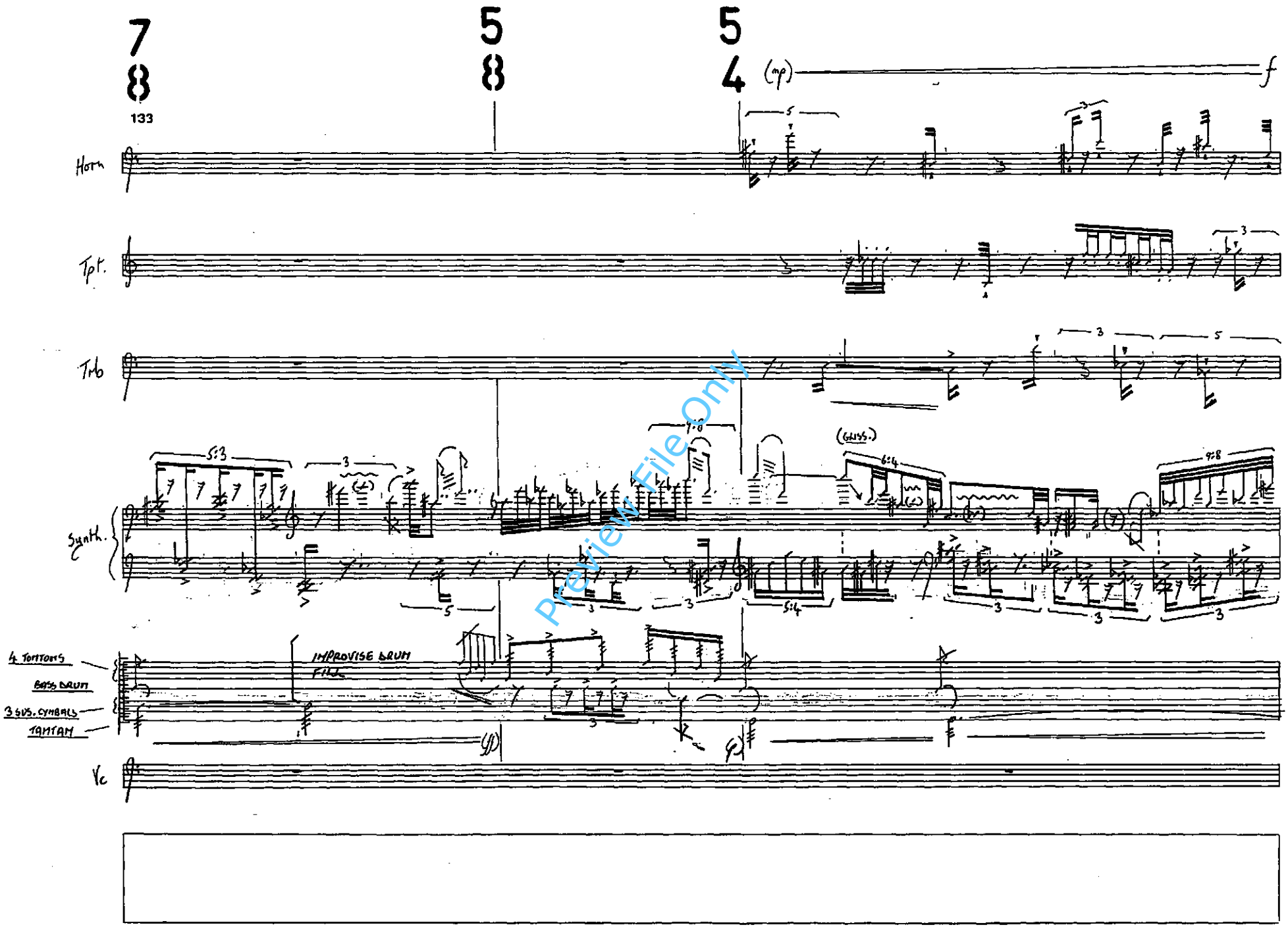


Preview File Only

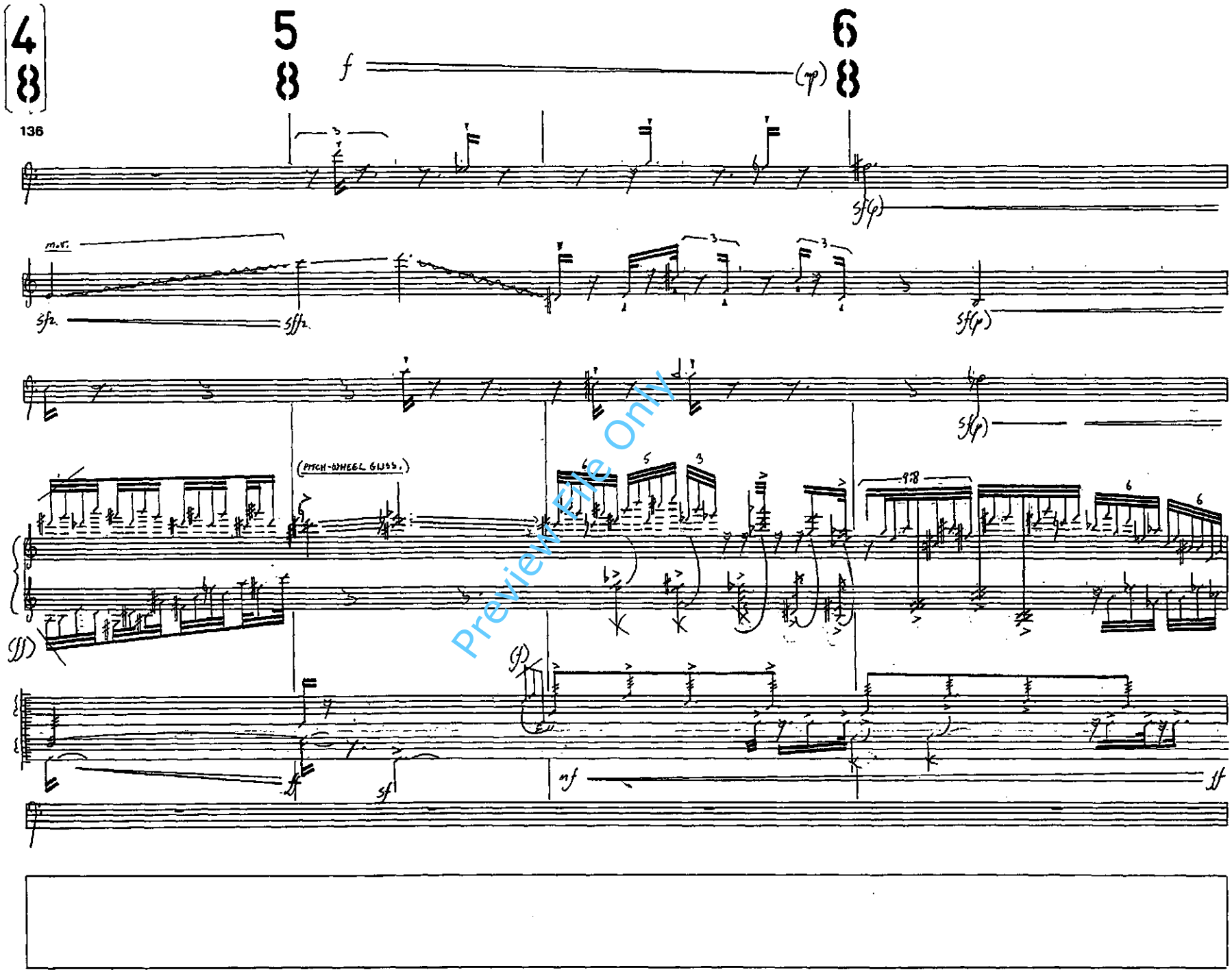

4/8
7/8
8/8
126
Horn.
Tpt.
Tb.
THE FOLLOWING SYNTH. SOLO IS TO BE REGARDED AS FF (SEMPRE)..TIMBRAL VARIATION IS TO BE ACHIEVED BY VARYING ARTICULATION AD.LIB.
N.B. CHORDS IN R.H. MUST BE "HELD" SLIGHTLY TO ALLOW VOICE TO DEVELOP.
(GLISS)
Synth
4 TOMTOMS
BASS DRUM
3 SUS. CYM.
TAMTAM
Vc.
Preview File Only



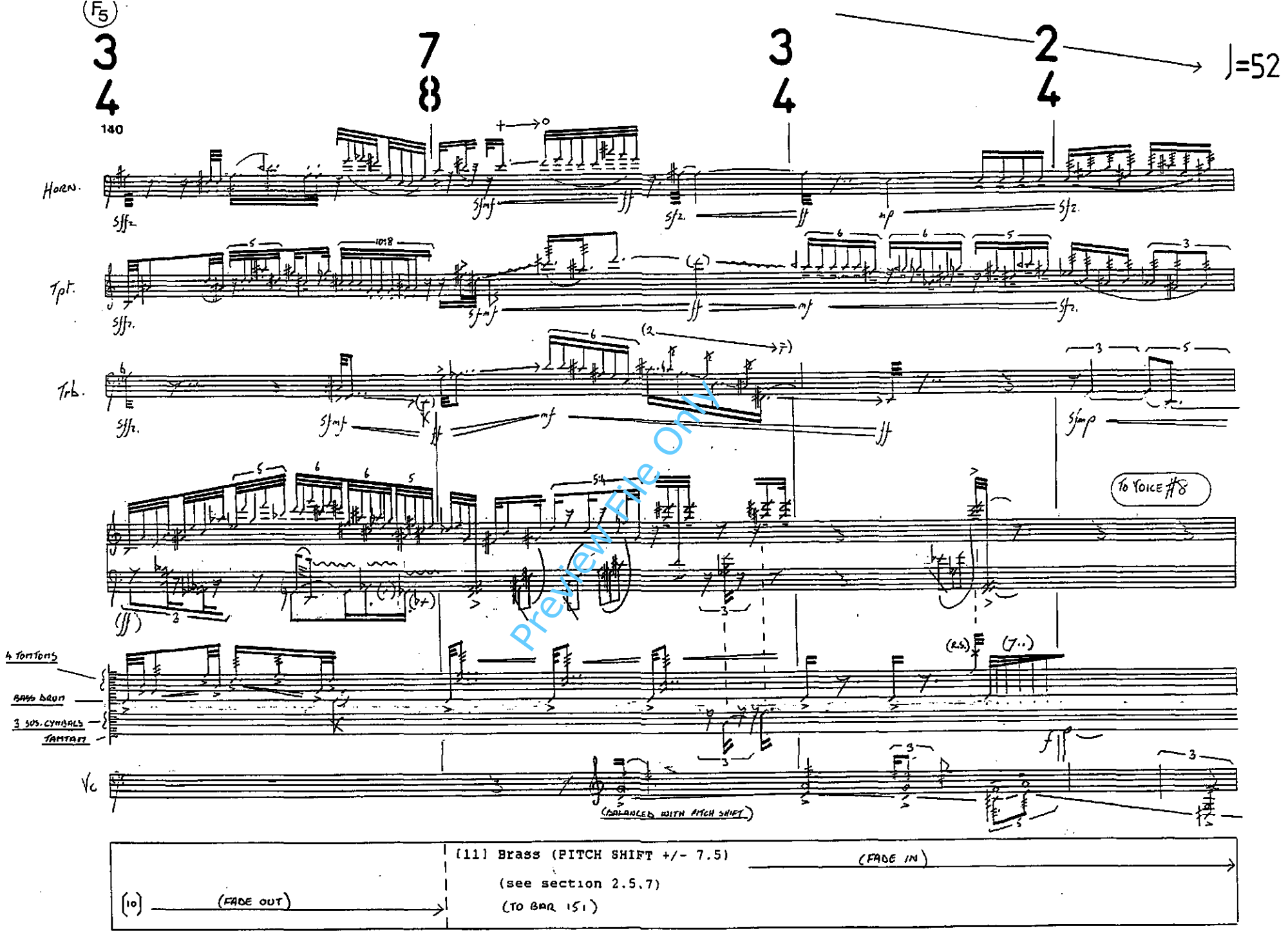
Preview File Only



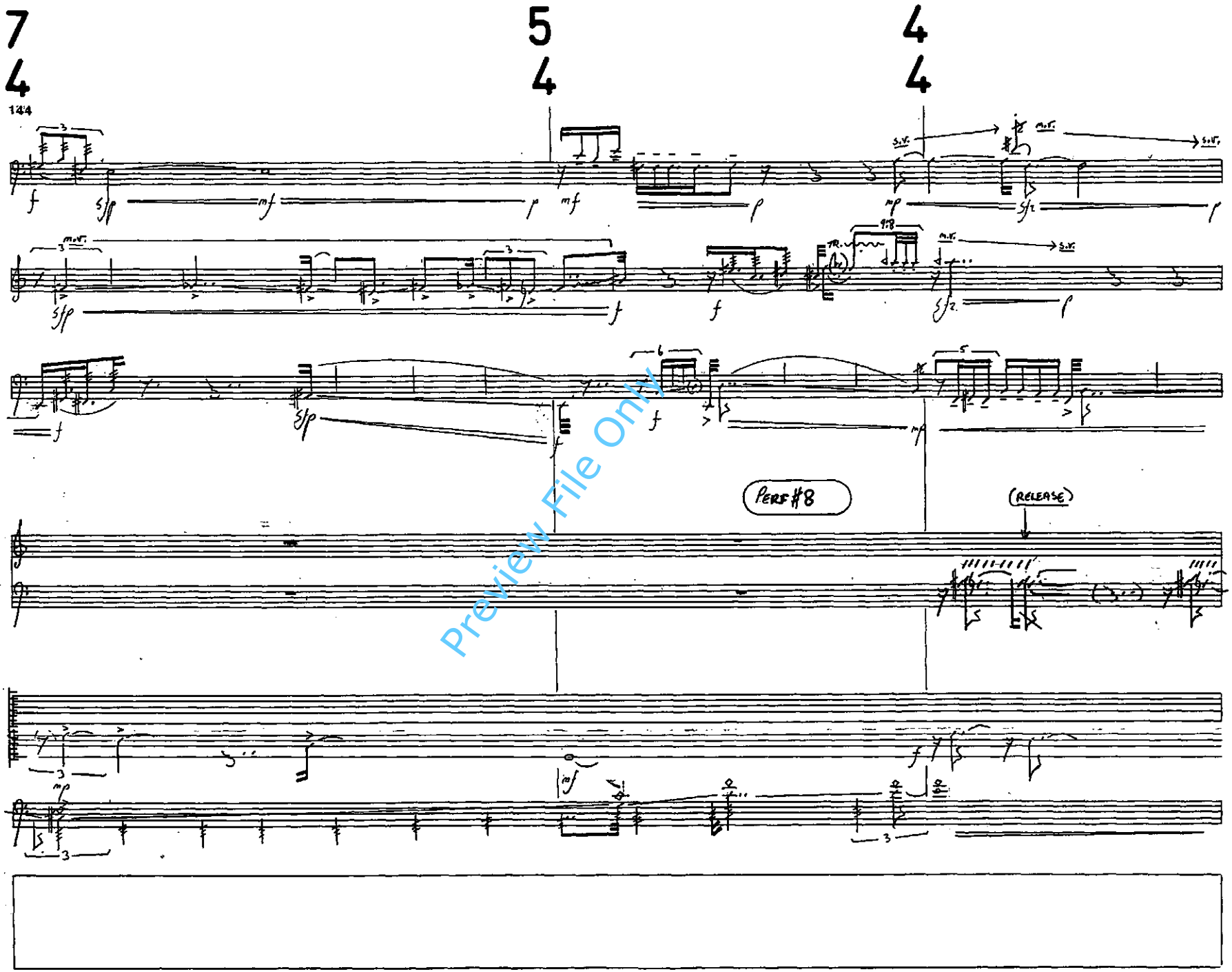
Preview File Only



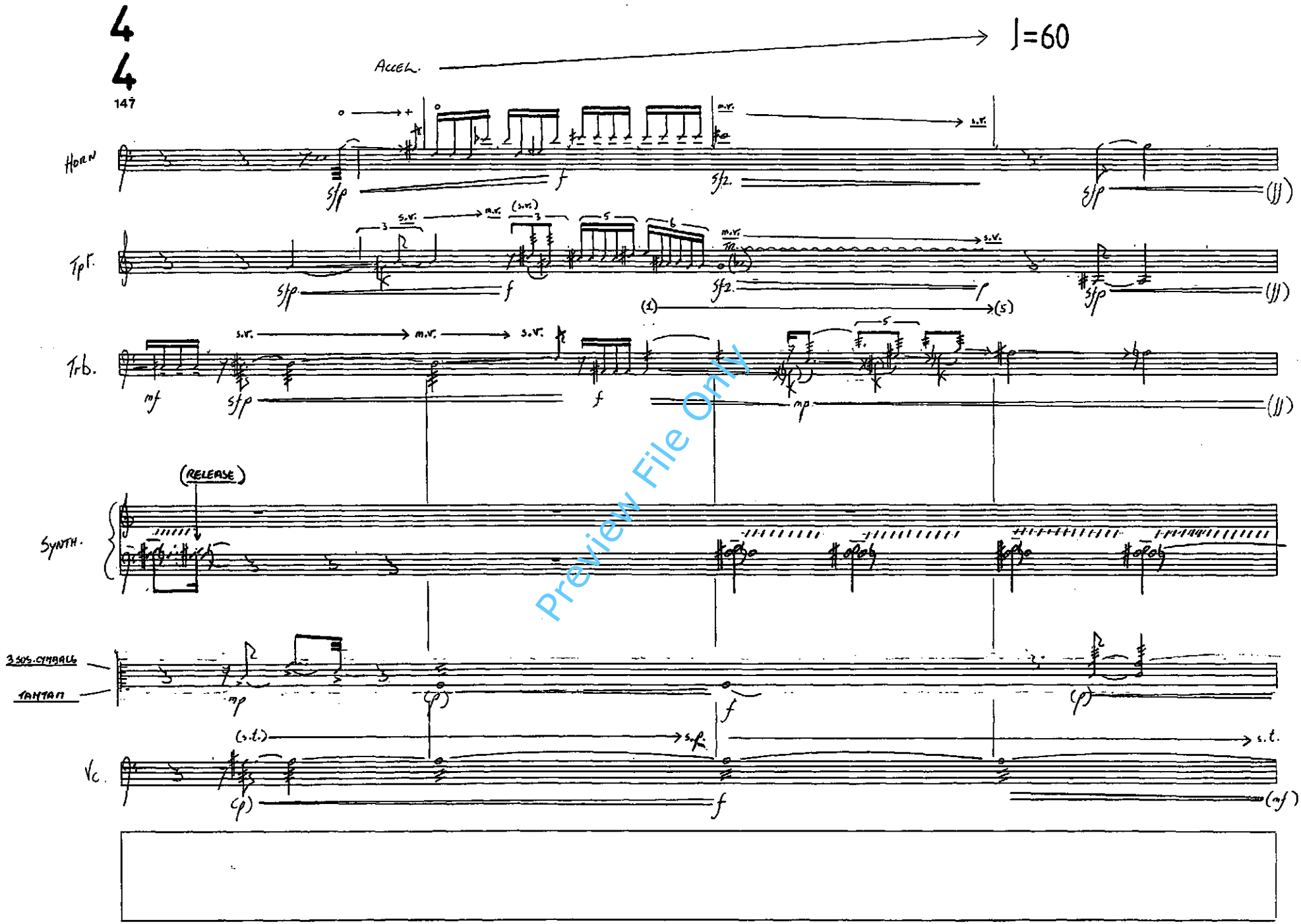
Preview File Only

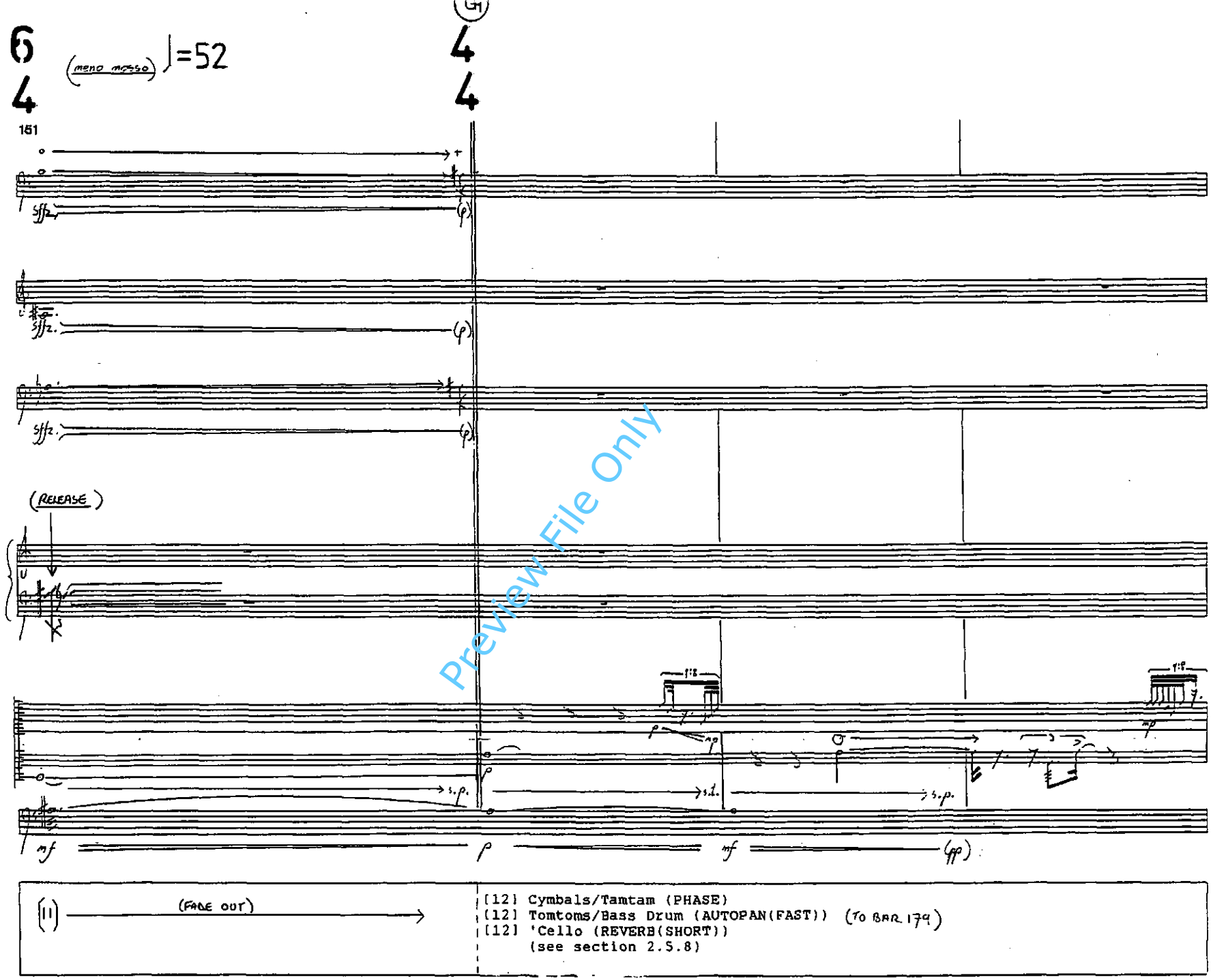


Preview File Only

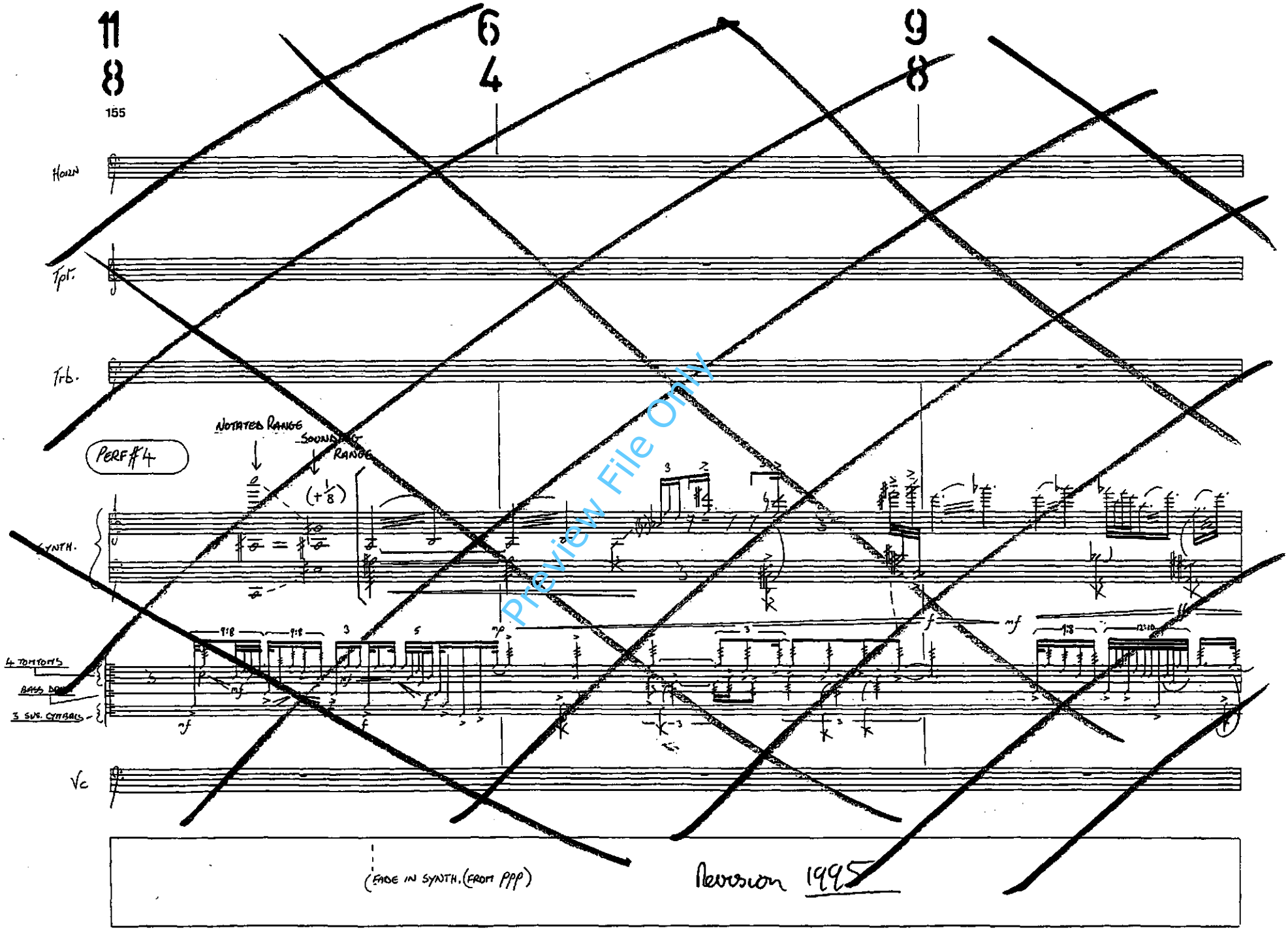


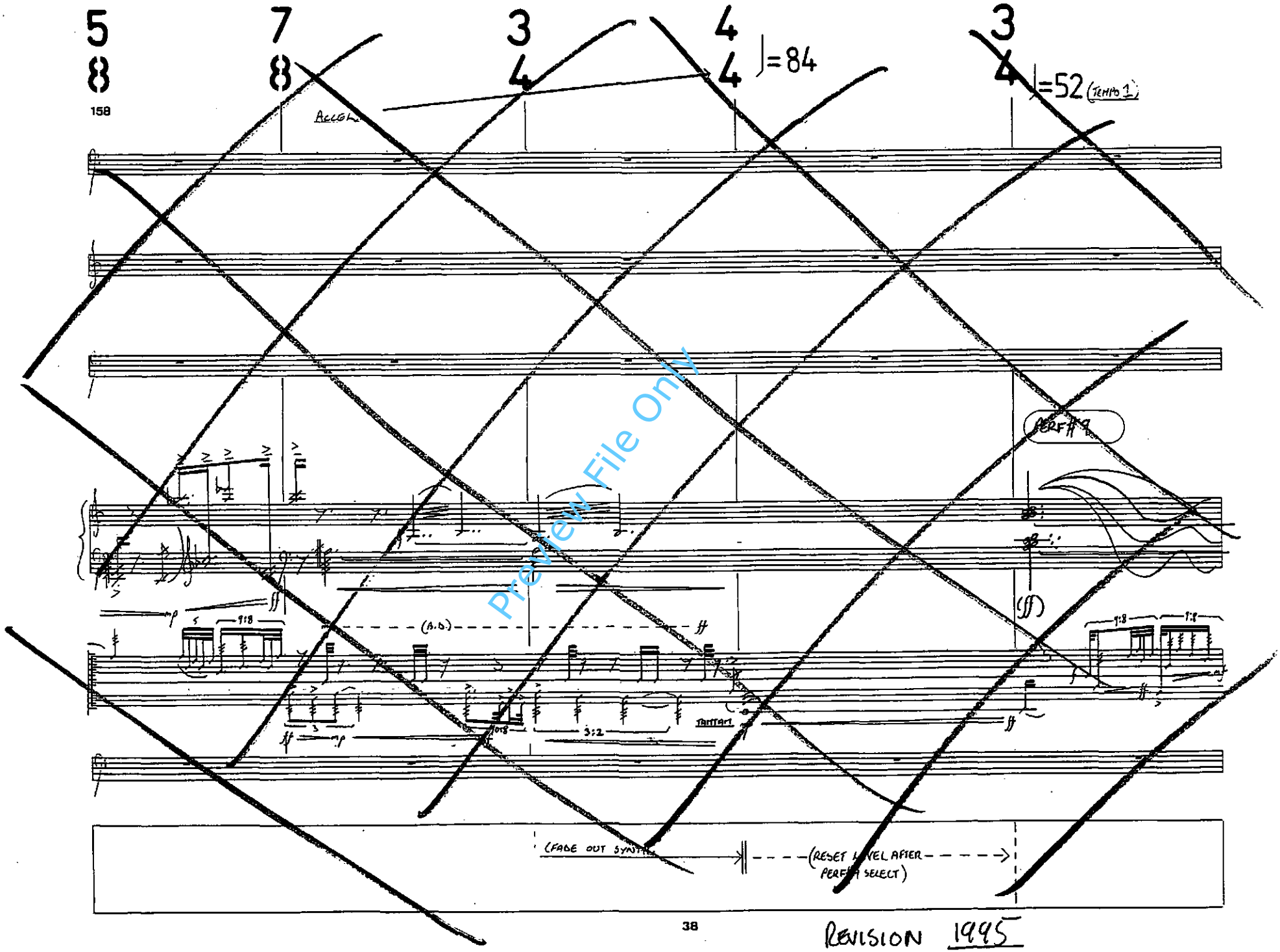
Preview File Only


4
4
147
ACCEL.
♩=60
HORN
TPT.
TRB.
SYNTH.
(RELEASE)
3 SUS. CYMBALS
TAMTAM
VC.
Preview File Only



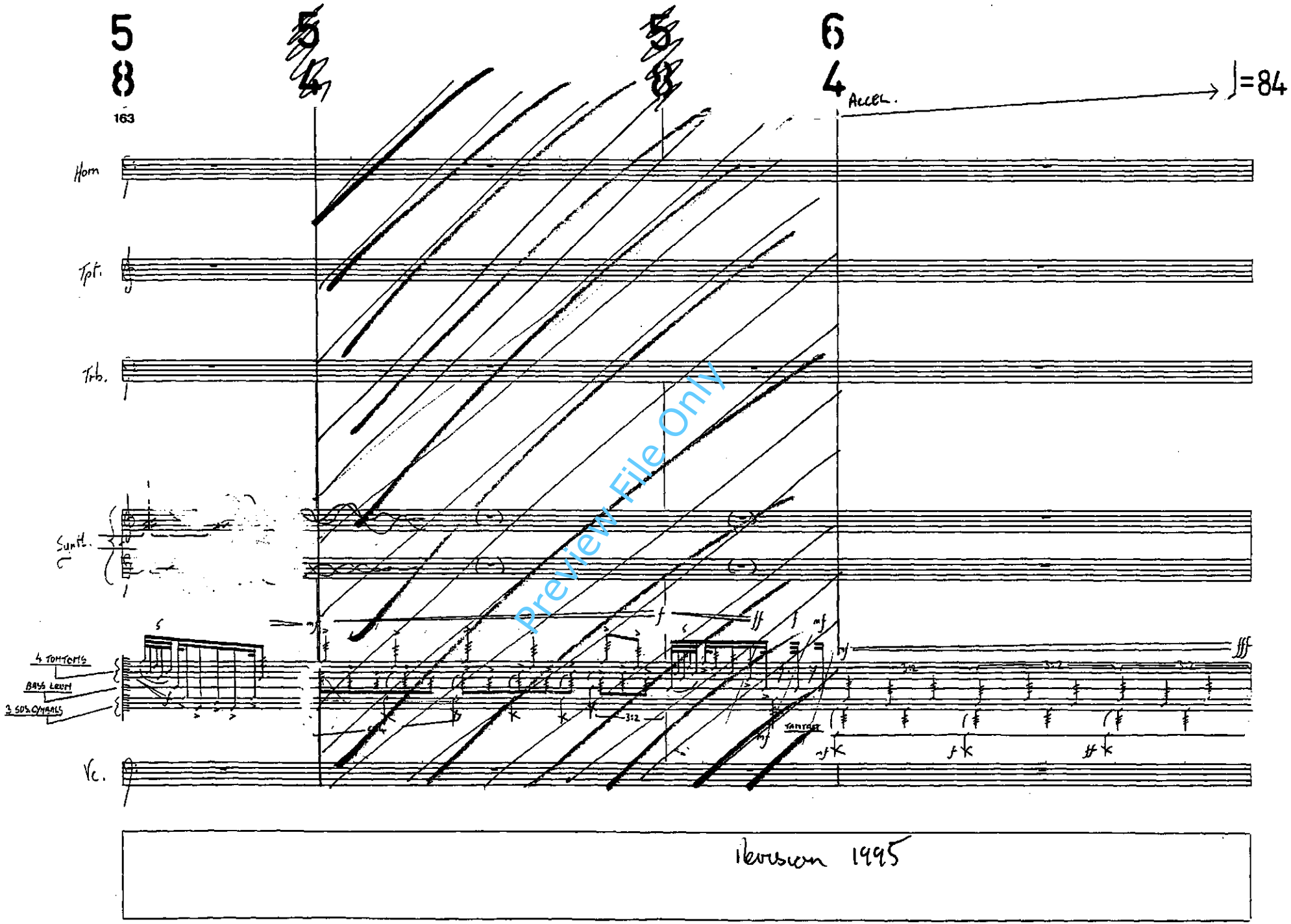
Preview File Only


11
8
6
4
9
8
155
Horn
Tpt.
Trb.
NOTATED RANGE
SOUNDING RANGE
(+1/8)
PERF #4
SYNTH.
4 TOM-TOMS
BASS DRUM
3 SUS. CYMBALS
Vc
(FADE IN SYNTH. (FROM ppp)
Revision 1995
Preview File Only

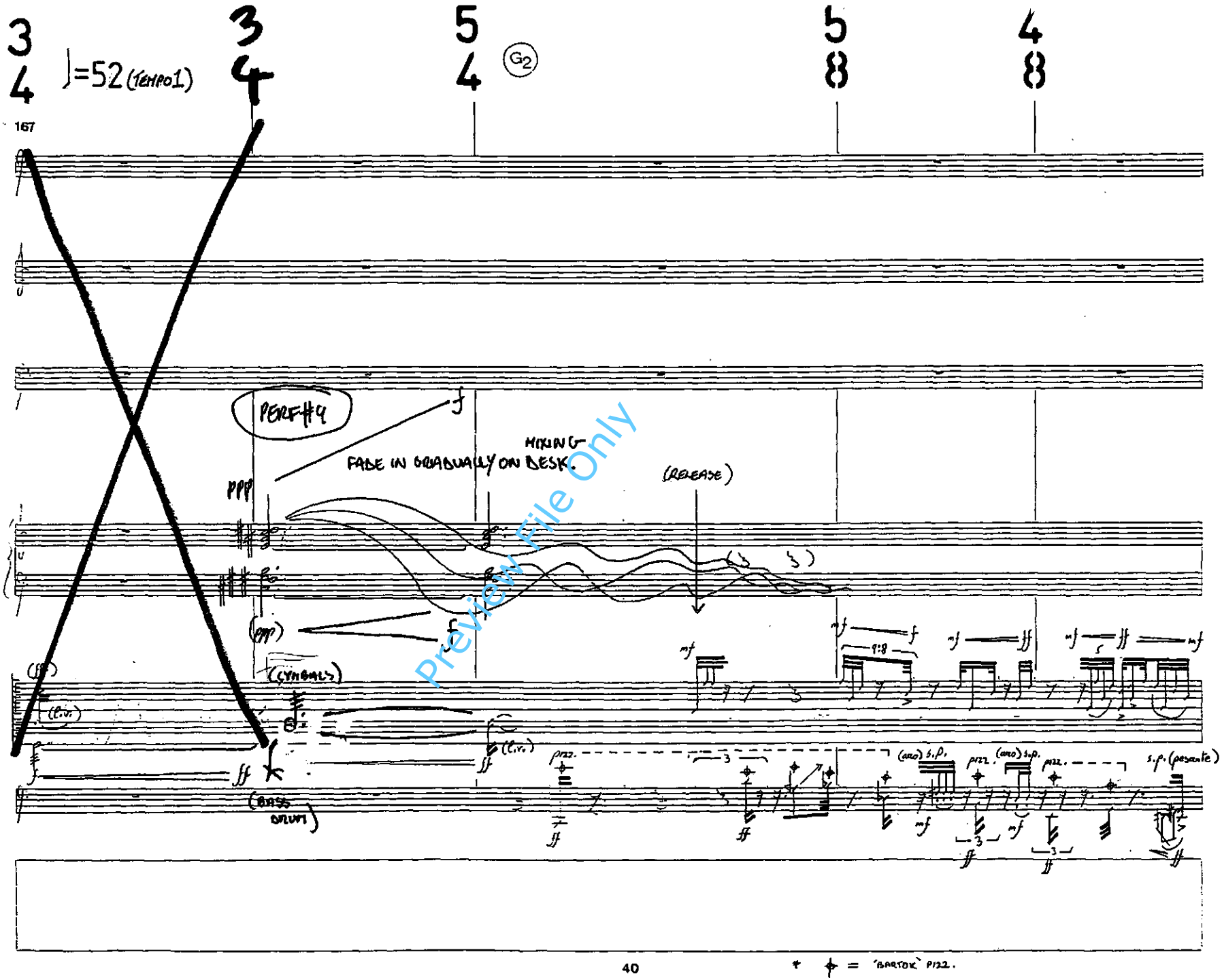


Preview File Only

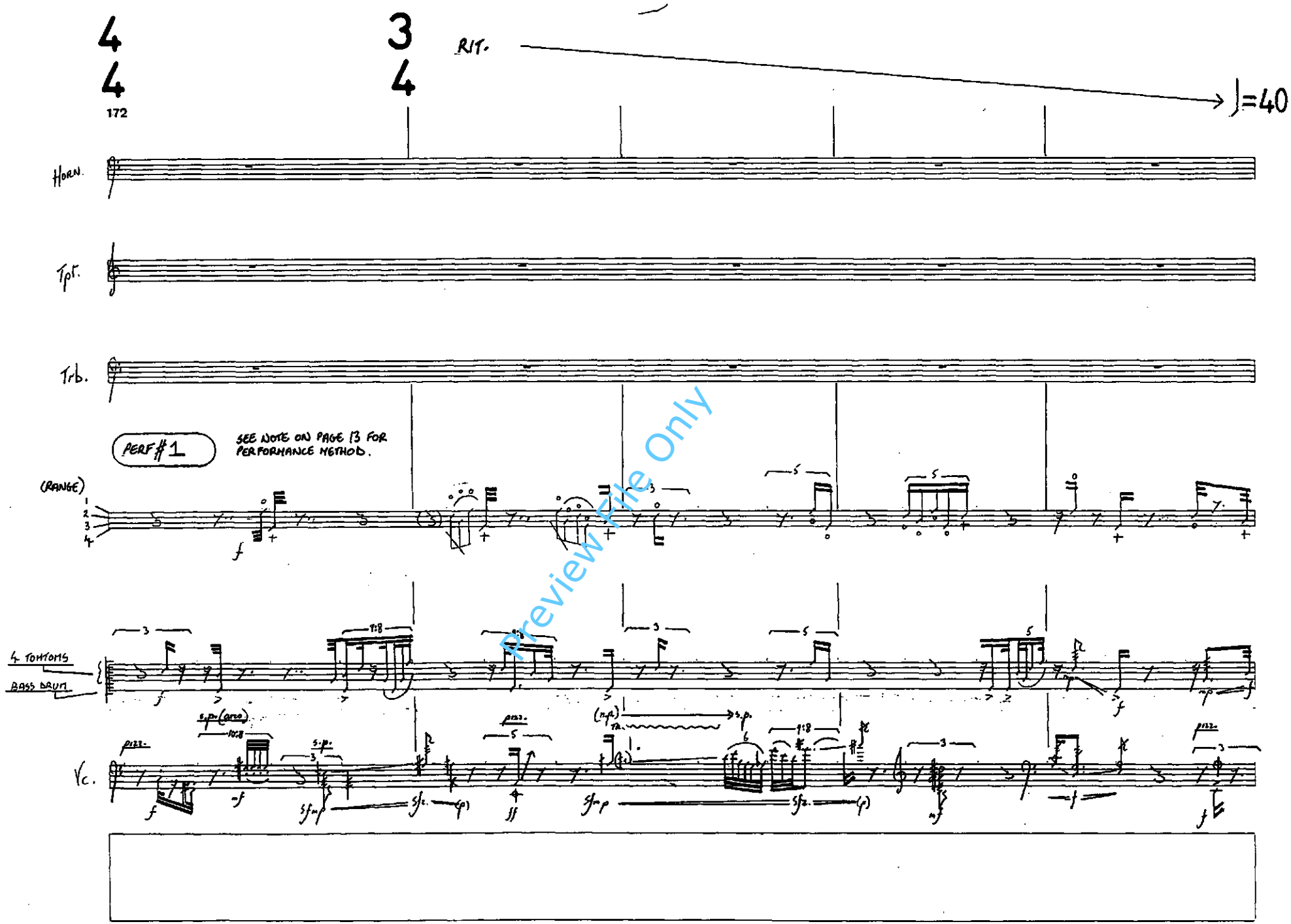
REVISION 1995



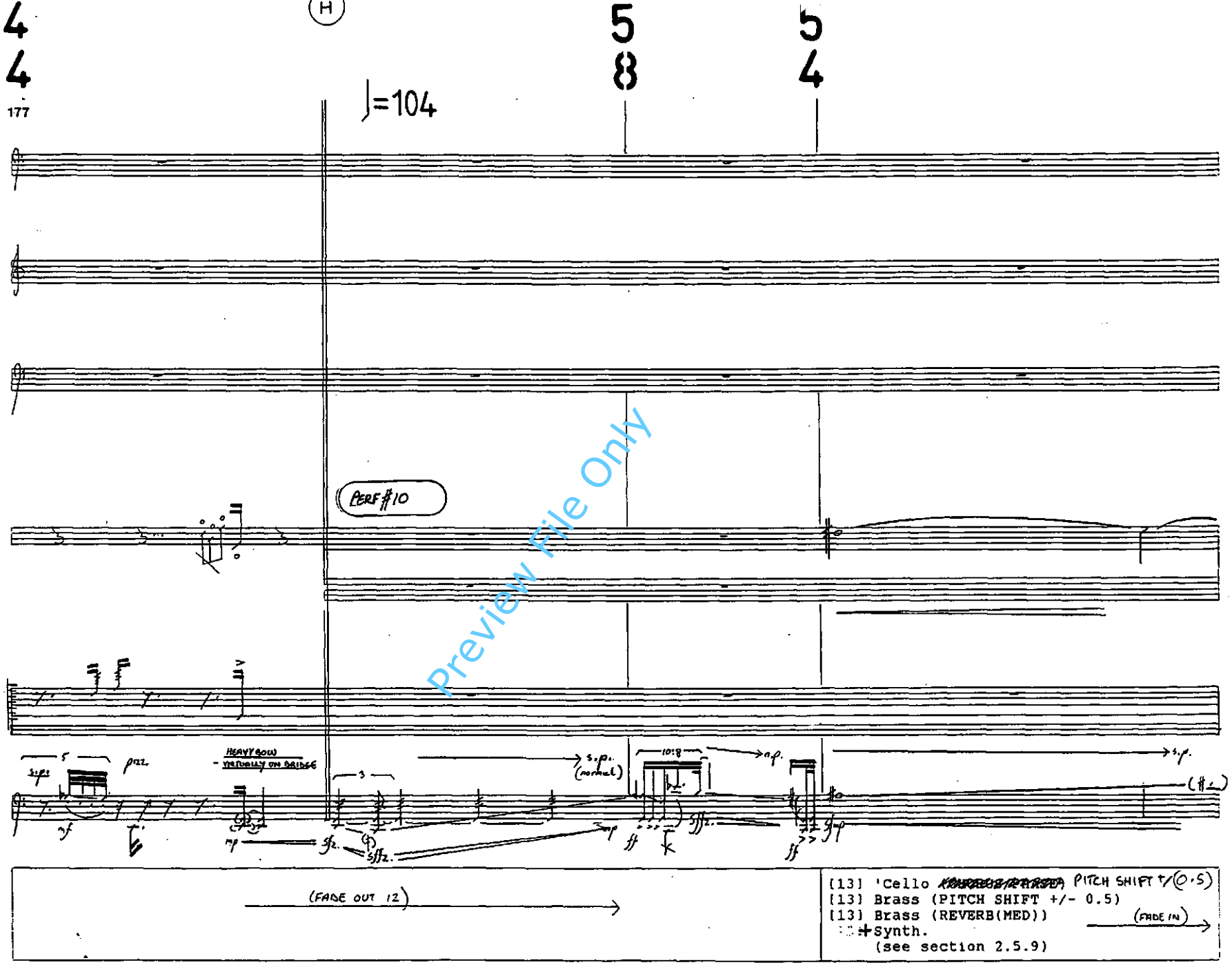
Preview File Only



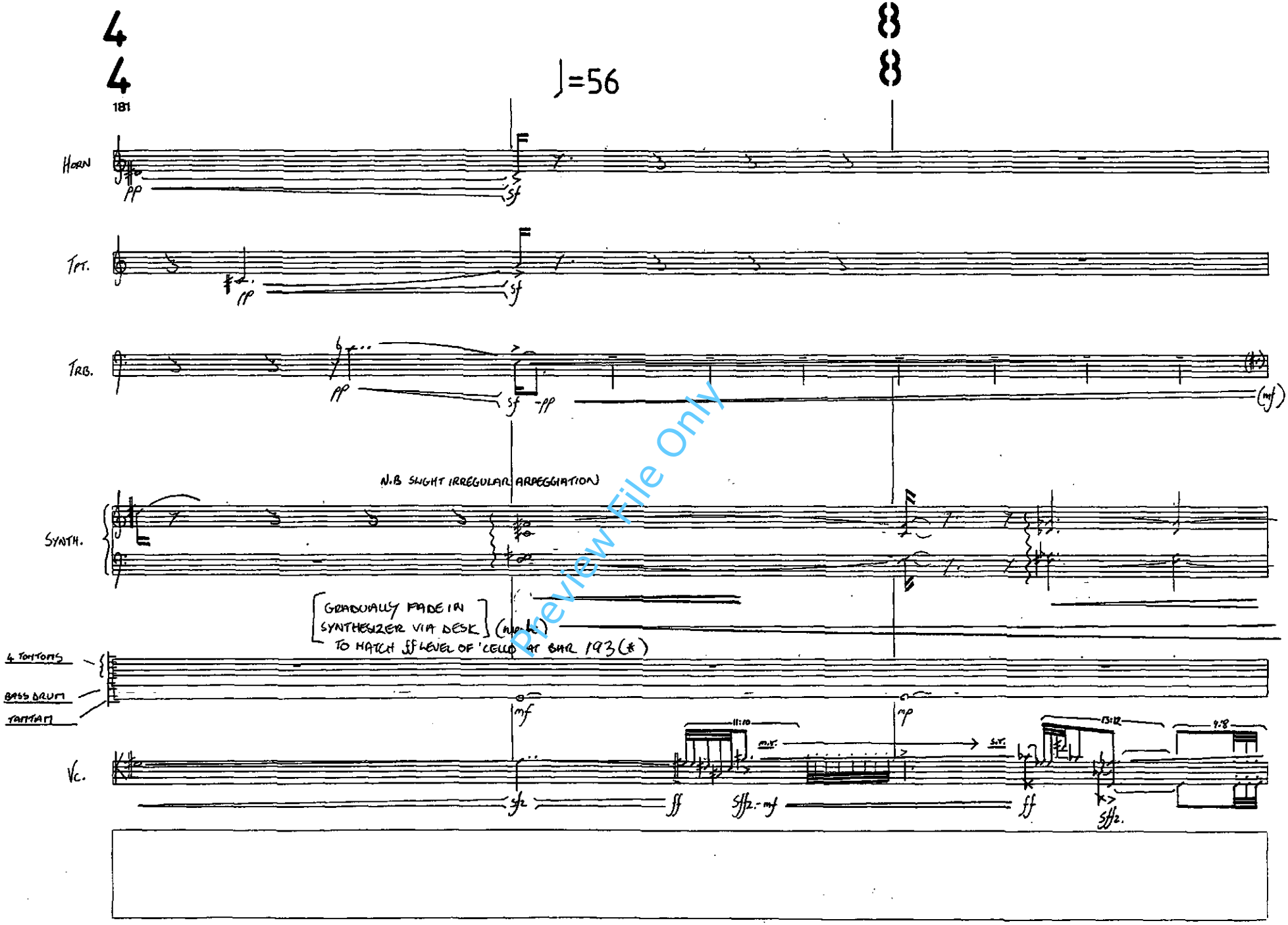
Preview File Only

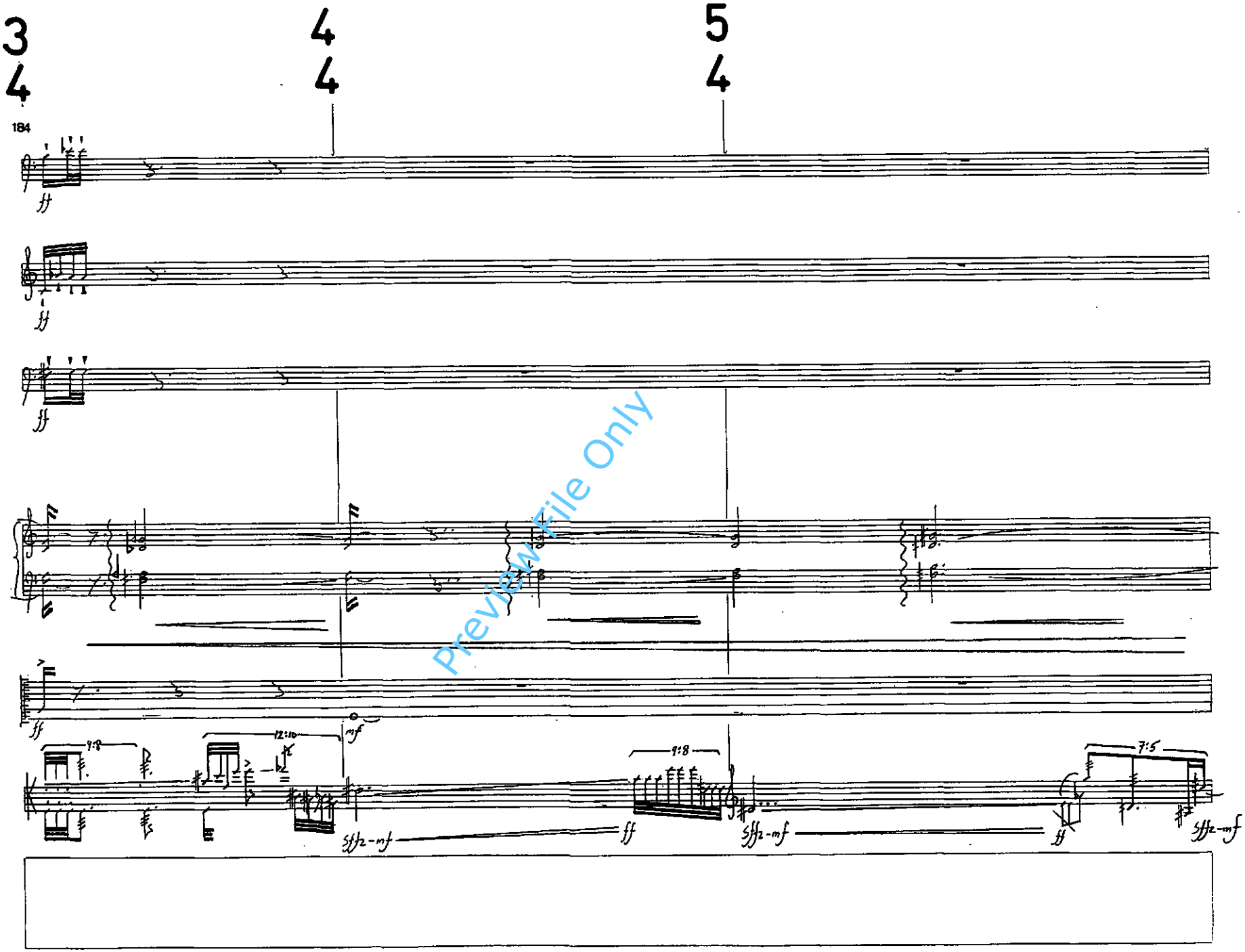


Preview File Only

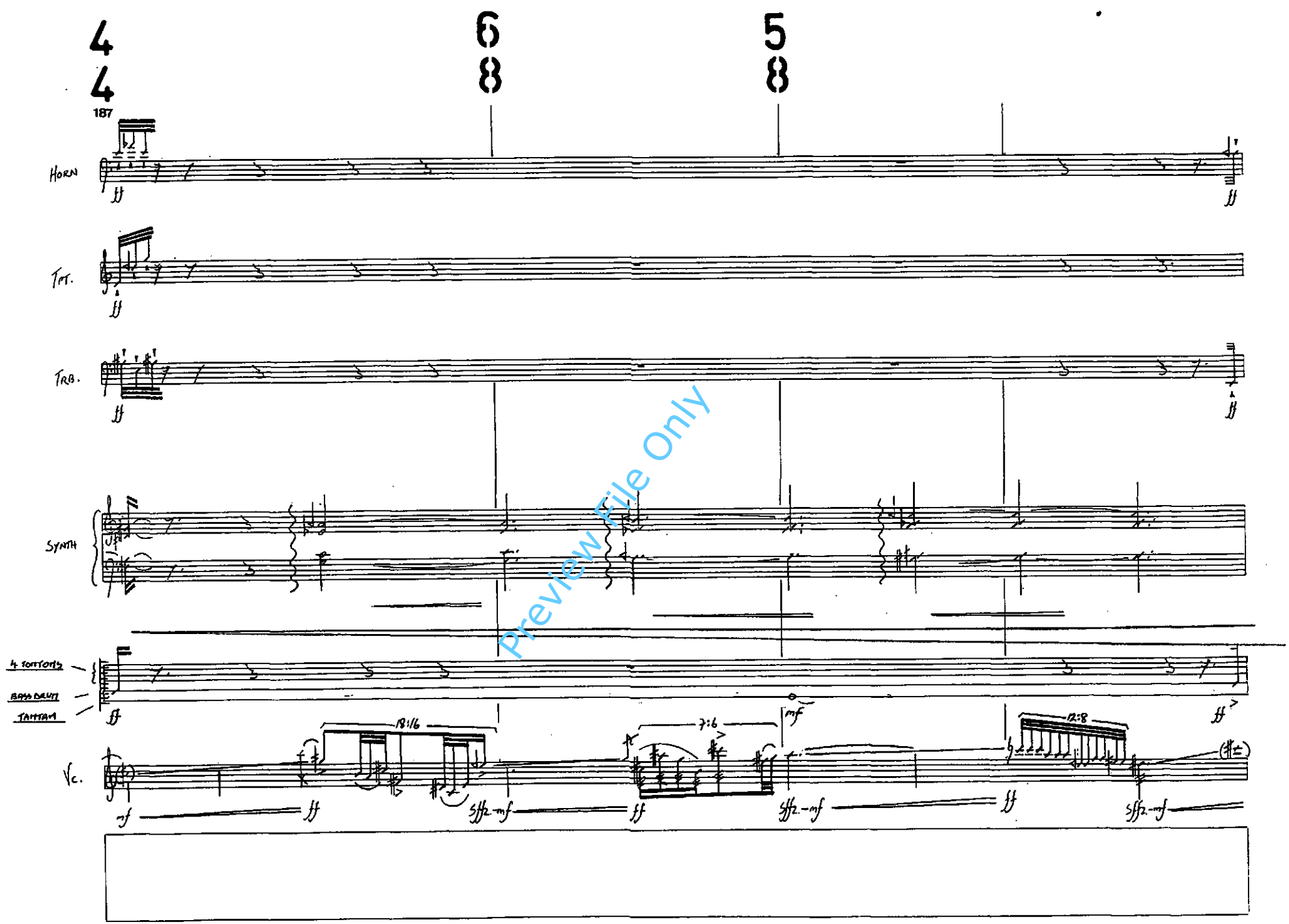


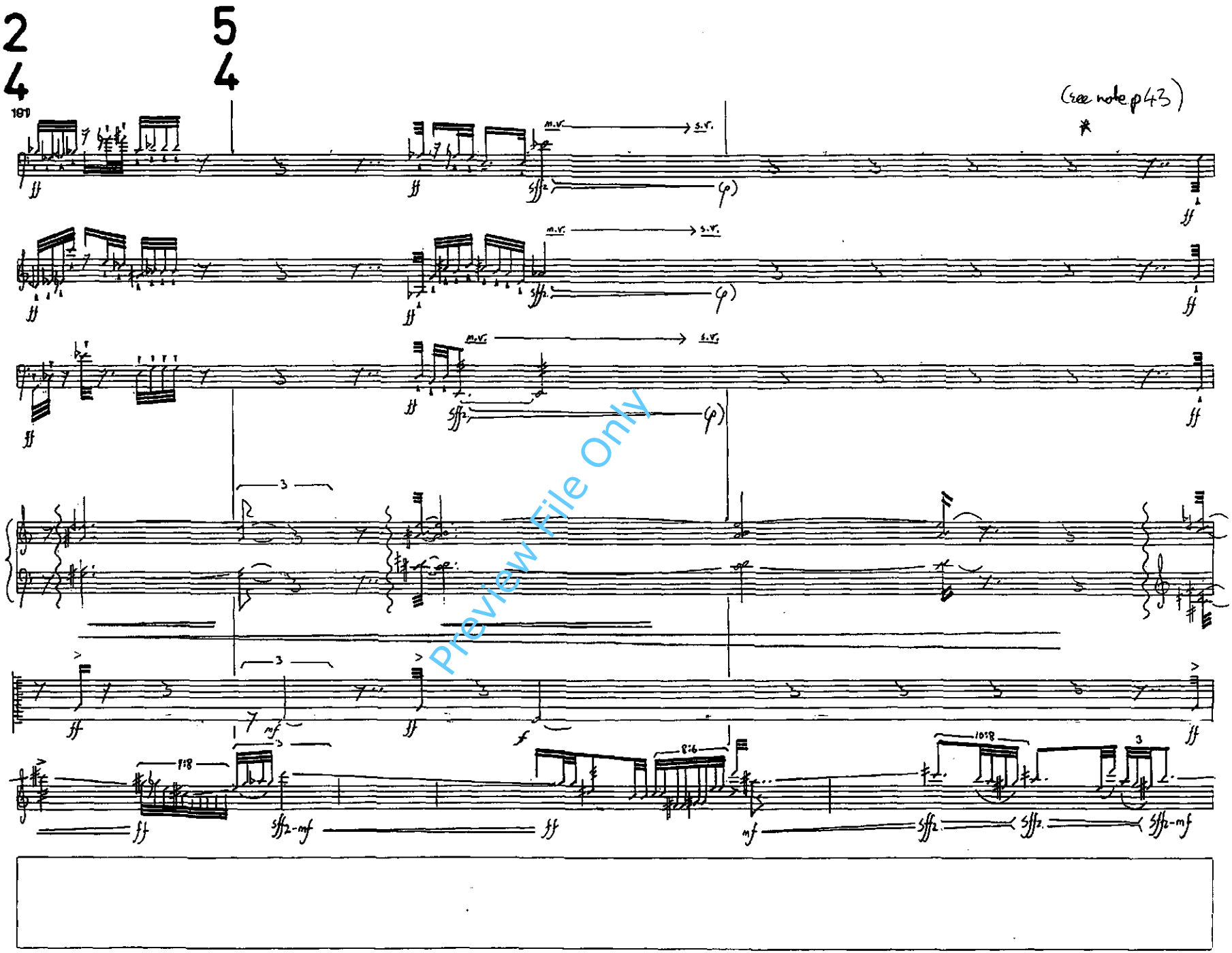
Preview File Only

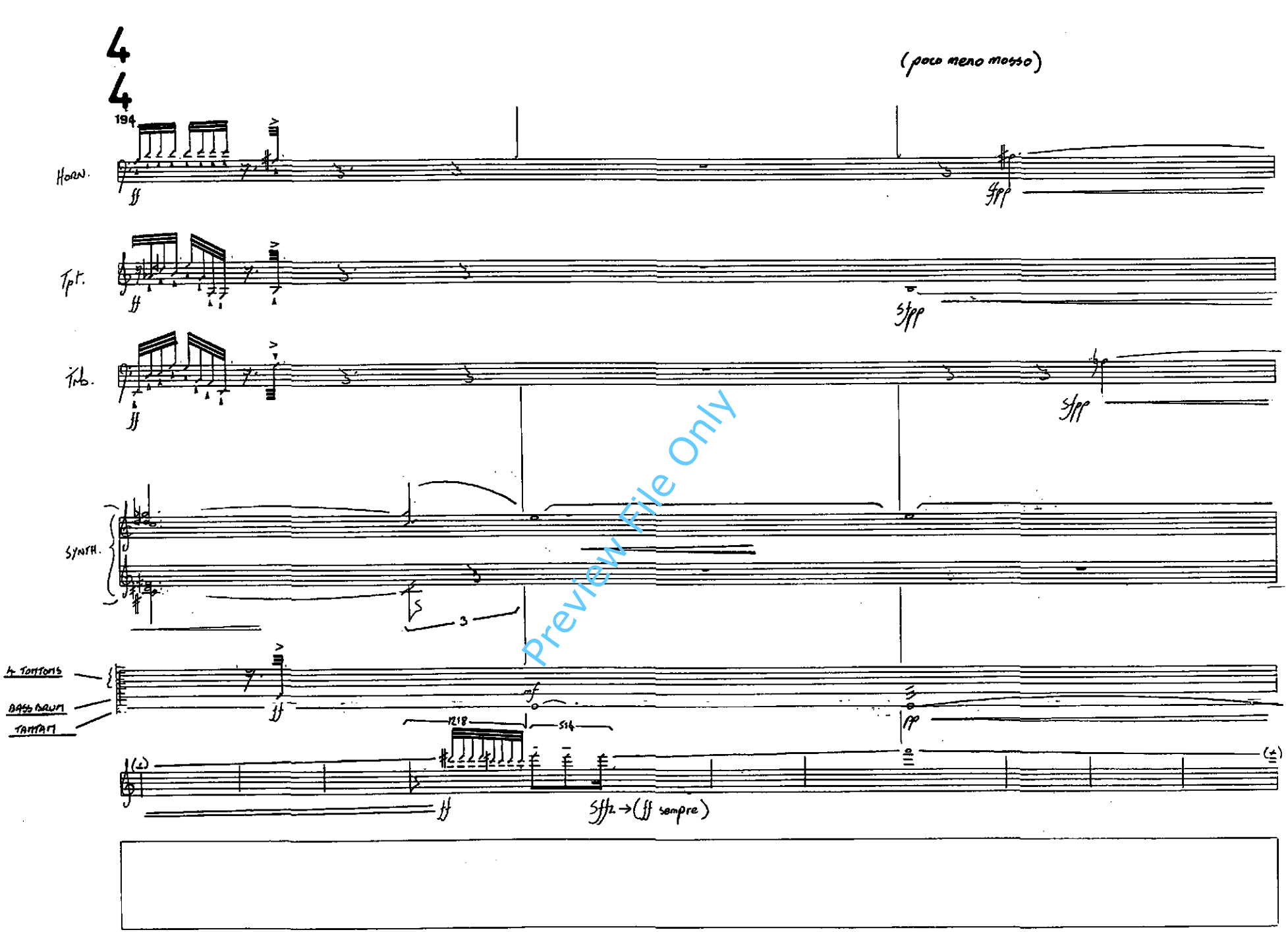

181
♩=56
HORN
TPT.
TRB.
SYNTH.
N.B SLIGHT IRREGULAR ARPEGGIATION)
GRADUALLY FADE IN SYNTHESIZER VIA DESK TO MATCH ff LEVEL OF 'CELLO AT BAR 193(*)
4 TOM-TOMS
BASS DRUM
TAM-TAM
VC.
Preview File Only



Preview File Only

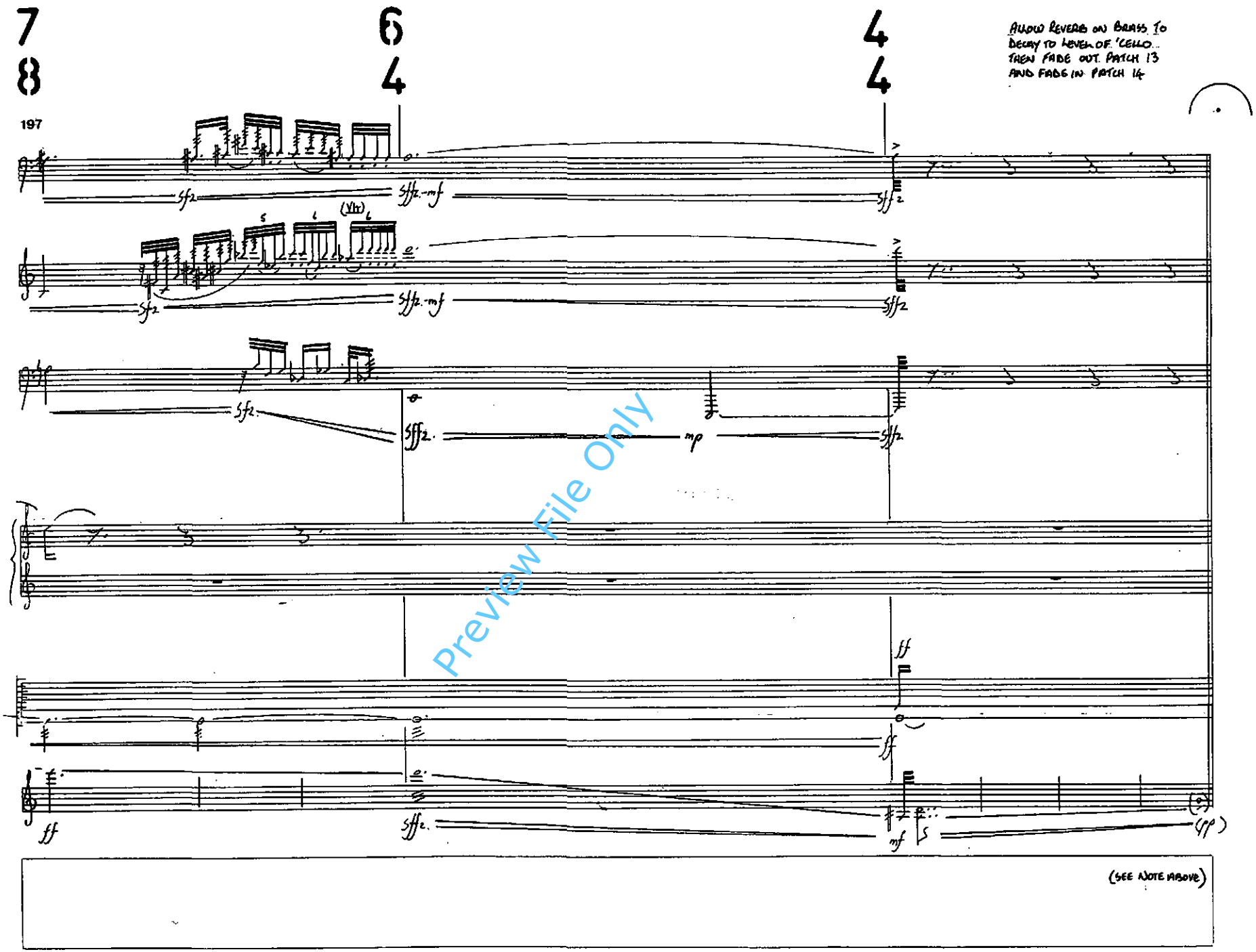

4
4
6
8
5
8
187
Horn
Tpt.
Trb.
Synth
4 TOMTOMS
BASS DRUM
TAMTAM
Vc.
18:16
7:6
12:8
Preview File Only


2
4
5
4
191
(see note p43)
m.v.
s.v.
3
Preview File Only

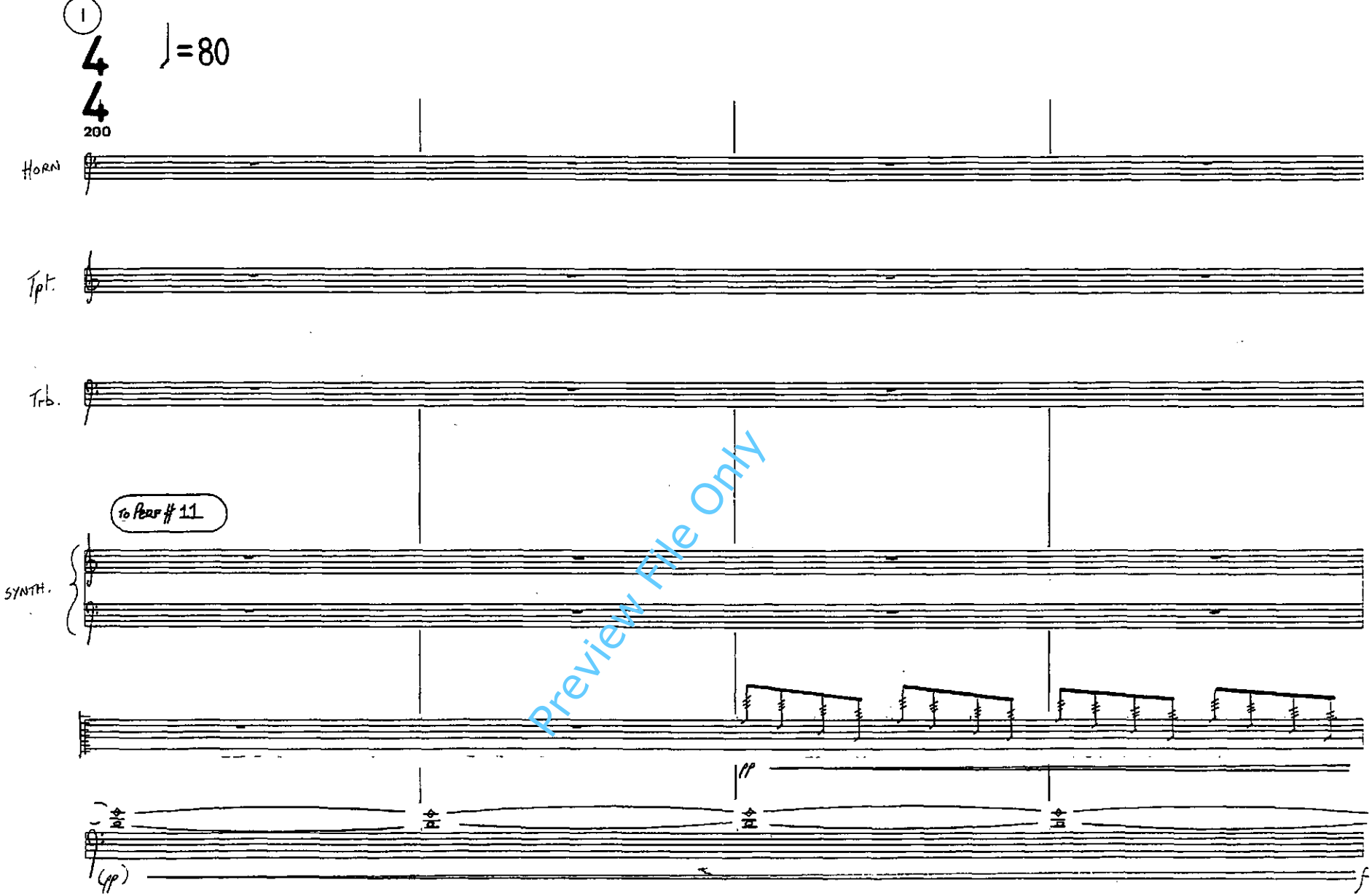


Preview File Only

ALLOW REVERB ON BRASS TO DECAY TO LEVEL OF 'CELLO... THEN FADE OUT. PATCH 13 AND FADE IN PATCH 14



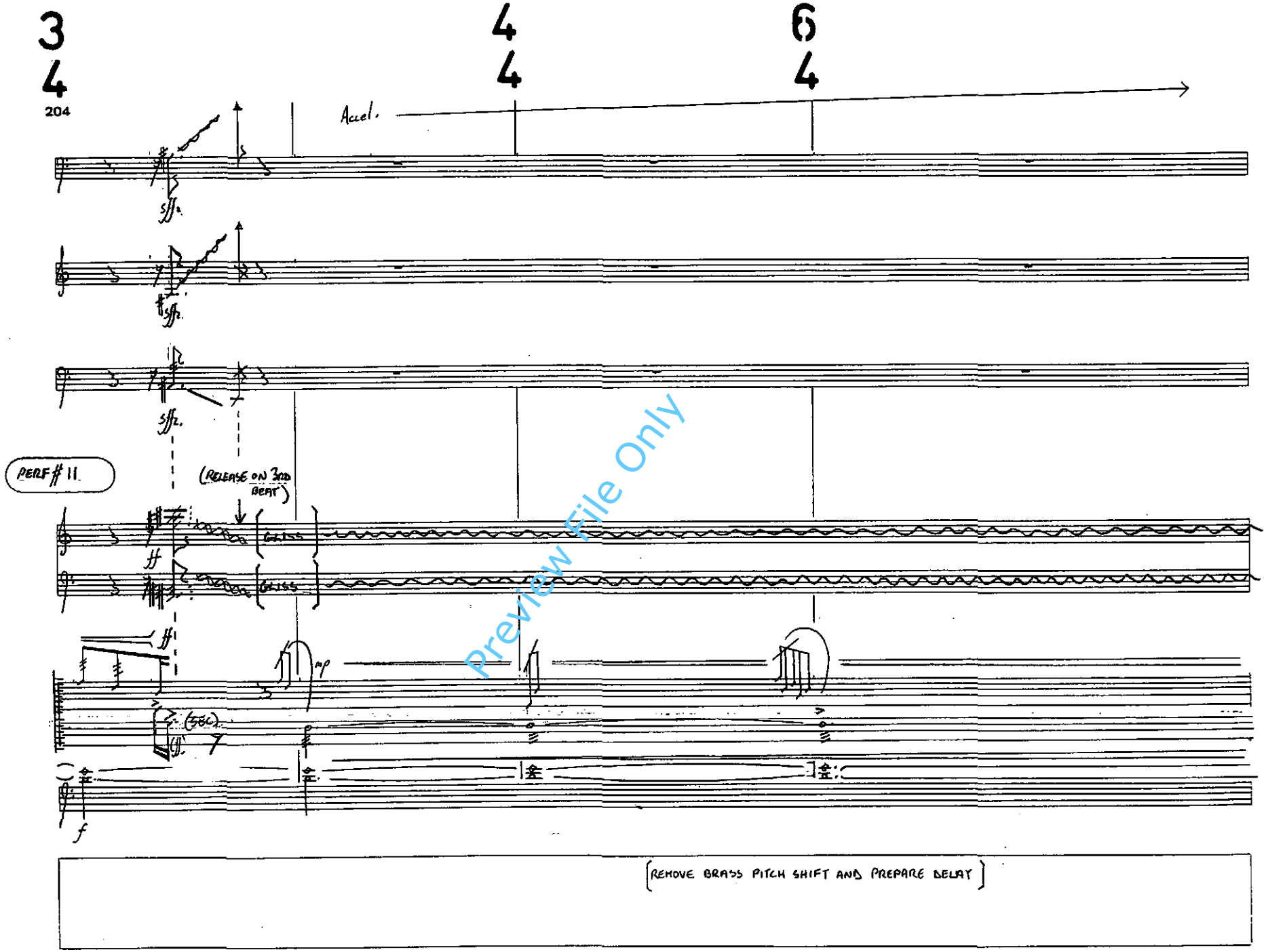
Preview File Only



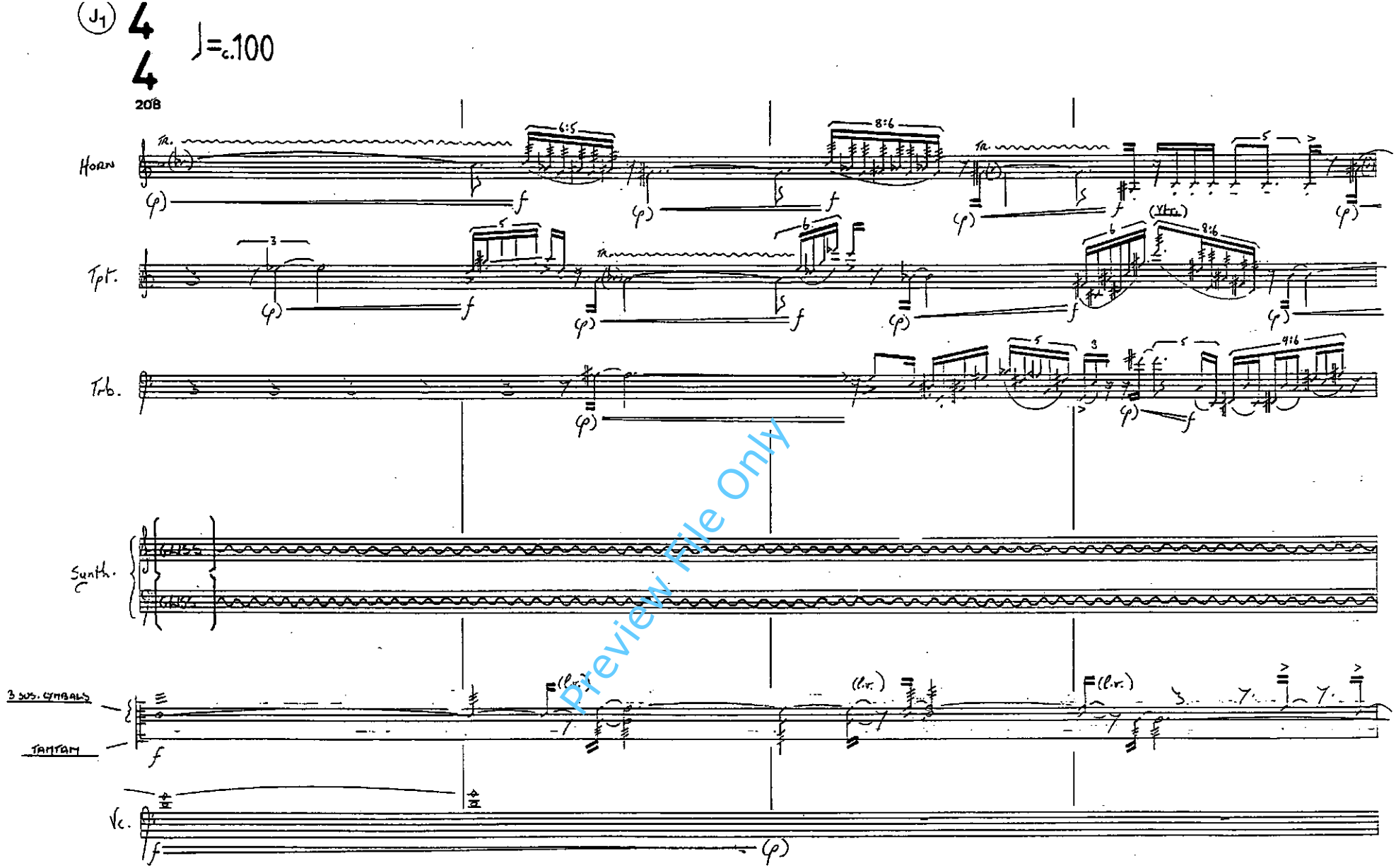
Preview File Only

[14] Cymbals/Tamtam (PHASE)
[14] Tomtoms/Bass Drum (AUTOPAN(FAST))
[14] 'Cello /REVERB(MED)
[14] Brass (REVERB(MED)/PITCH SHIFT - 0.5 - LONG DELAY/FEEDBACK)
(see section 2.5.10)

(TO BAR 207)

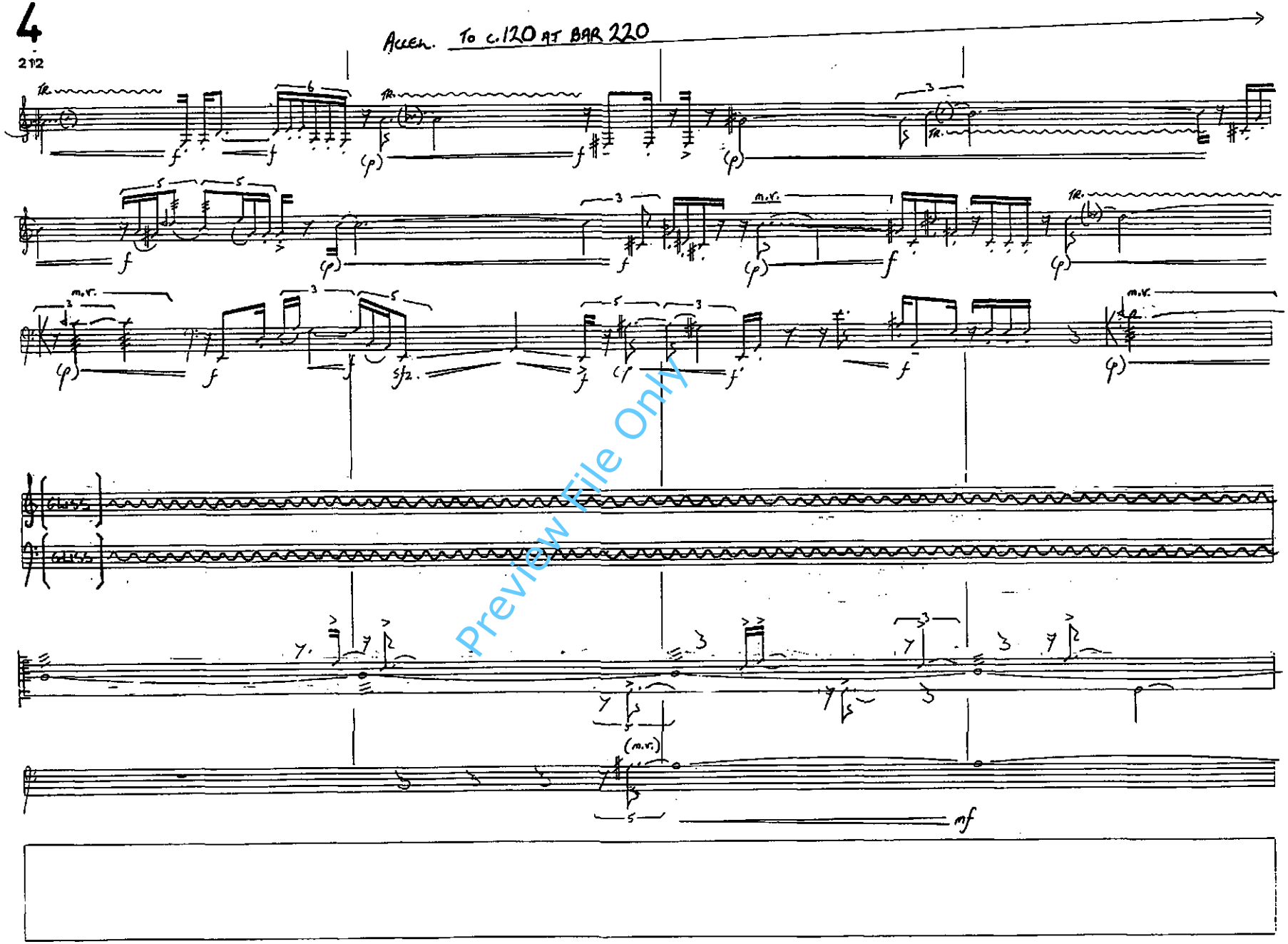


Preview File Only

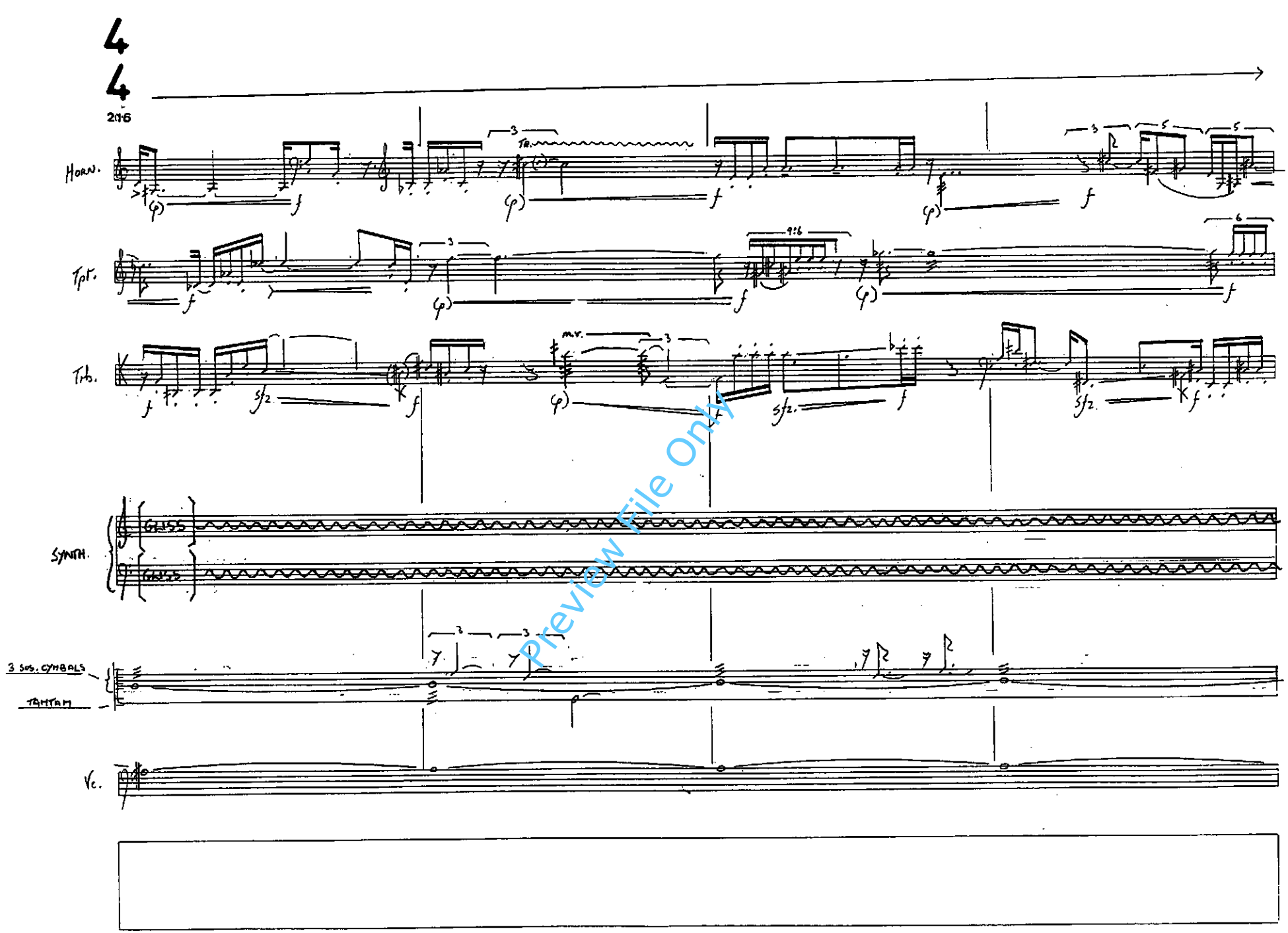


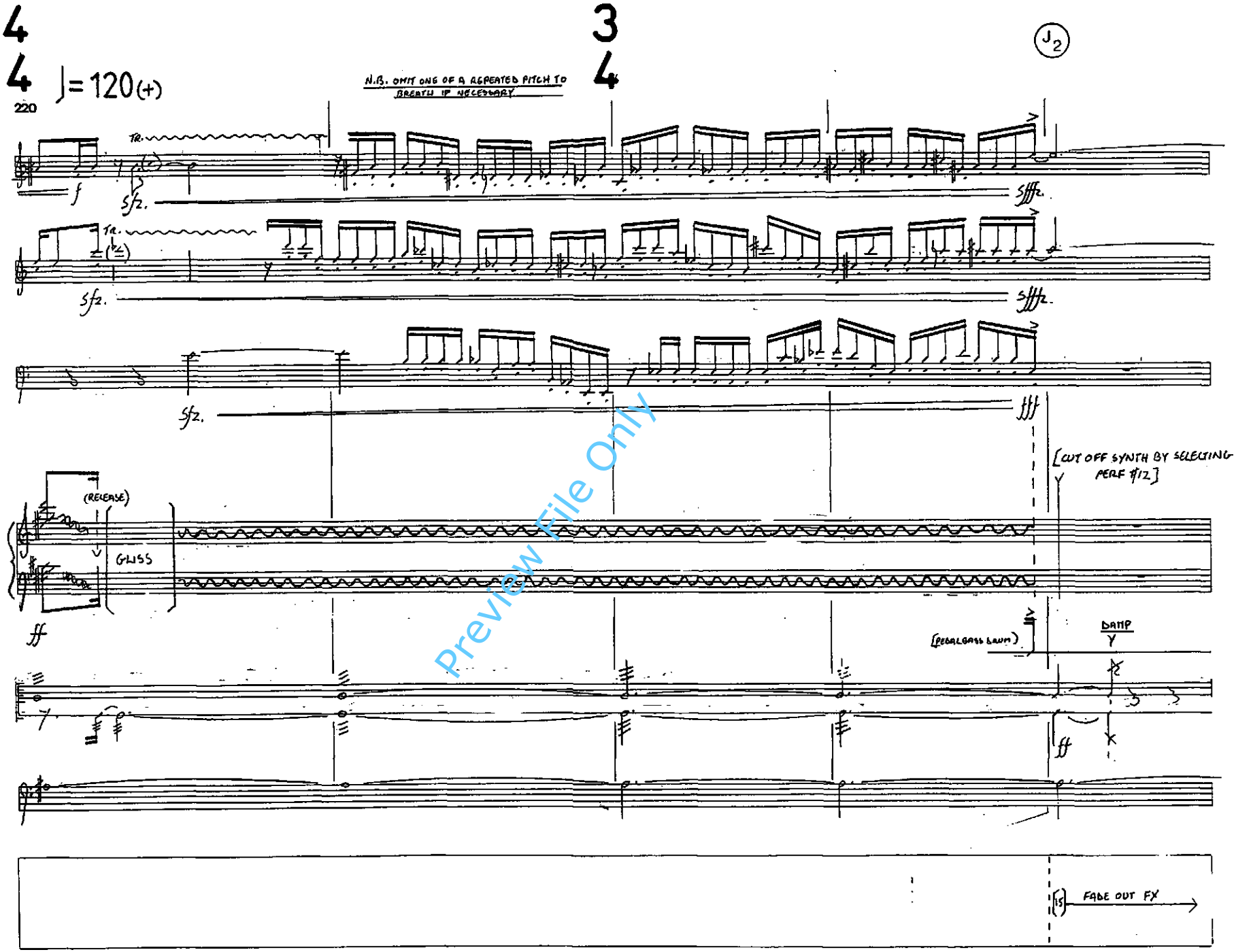
[15] Brass (DELAY 0.25(approx))
[15] CYMBALS/TAMTAM (PHASE)
[15] 'CELLO (REVERB(MED))

(see section 2.5.11)

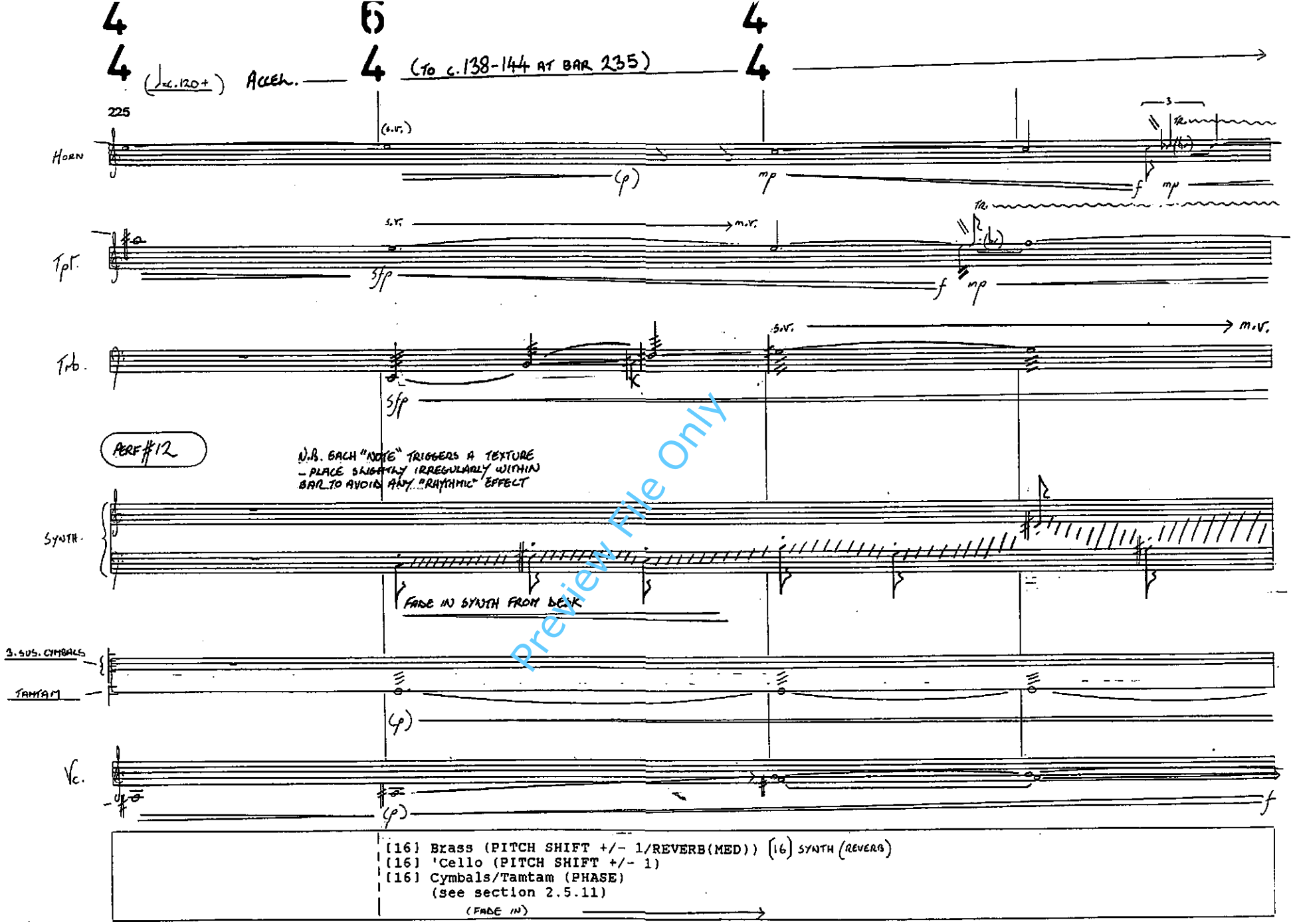


Preview File Only

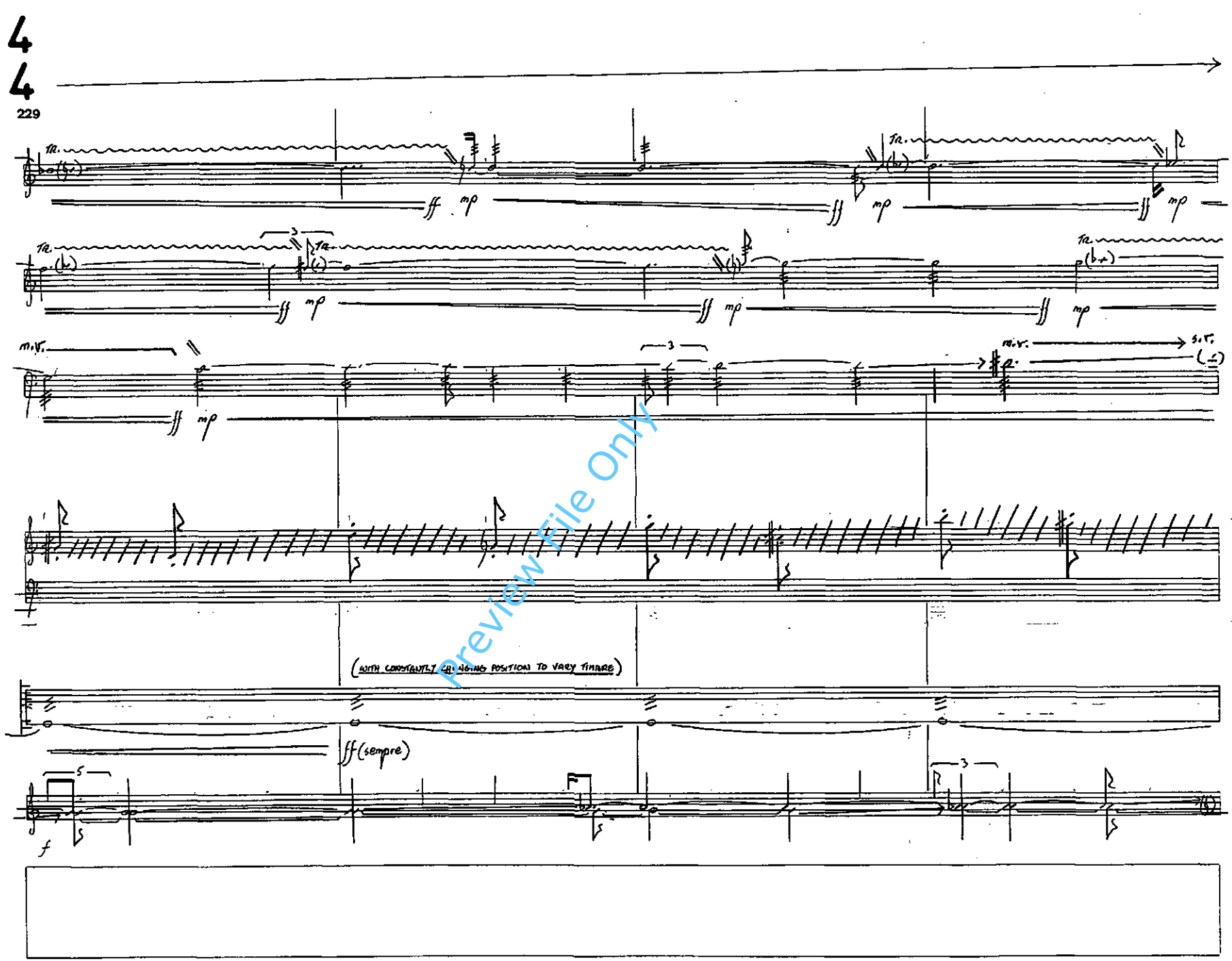

4
4
216
HORN.
Tpt.
Tbn.
SYNTH.
GLISS
GLISS
3 SUS. CYMBALS
TAMTAM
Vc.
m.v.
Preview File Only



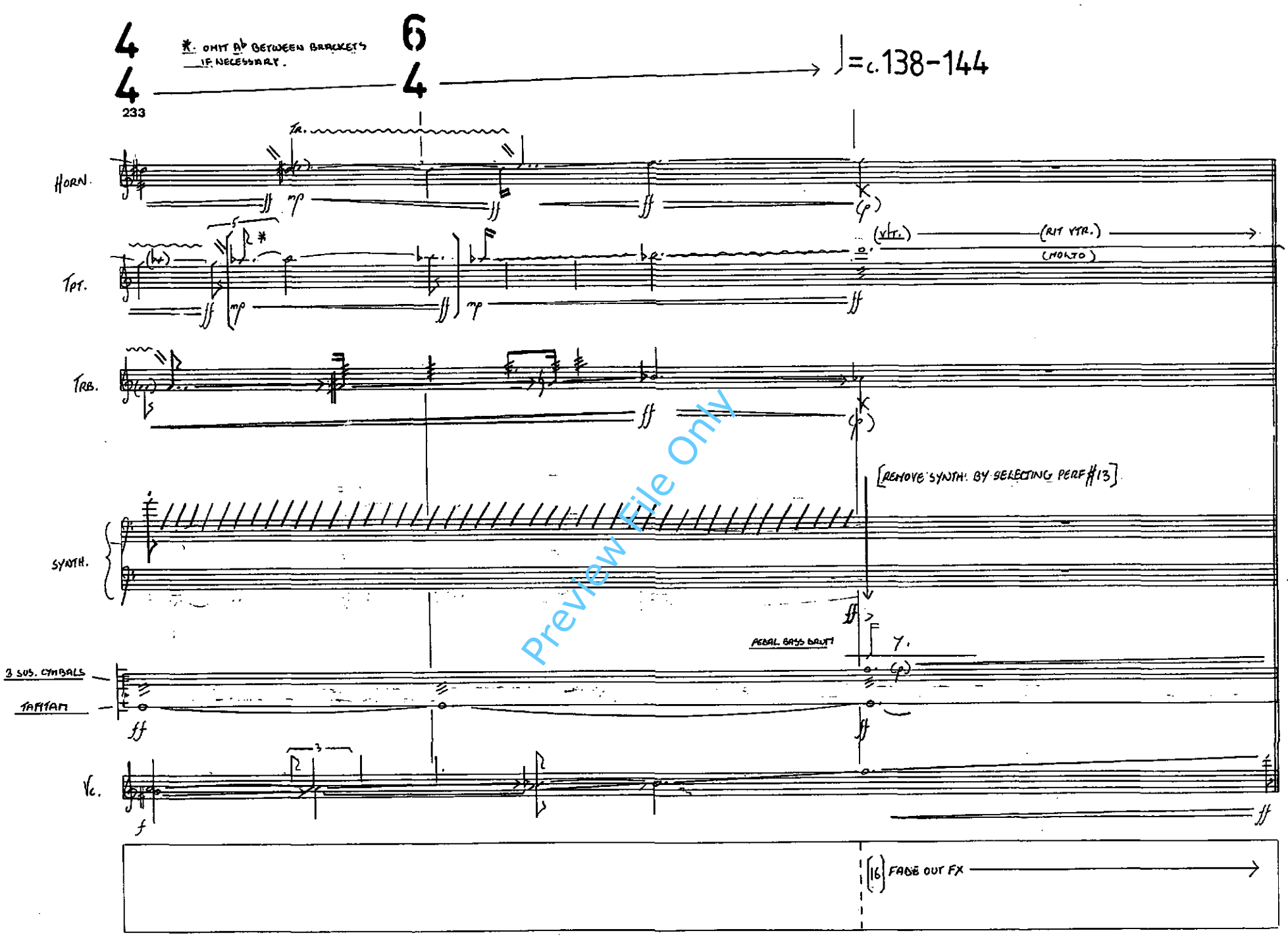
Preview File Only



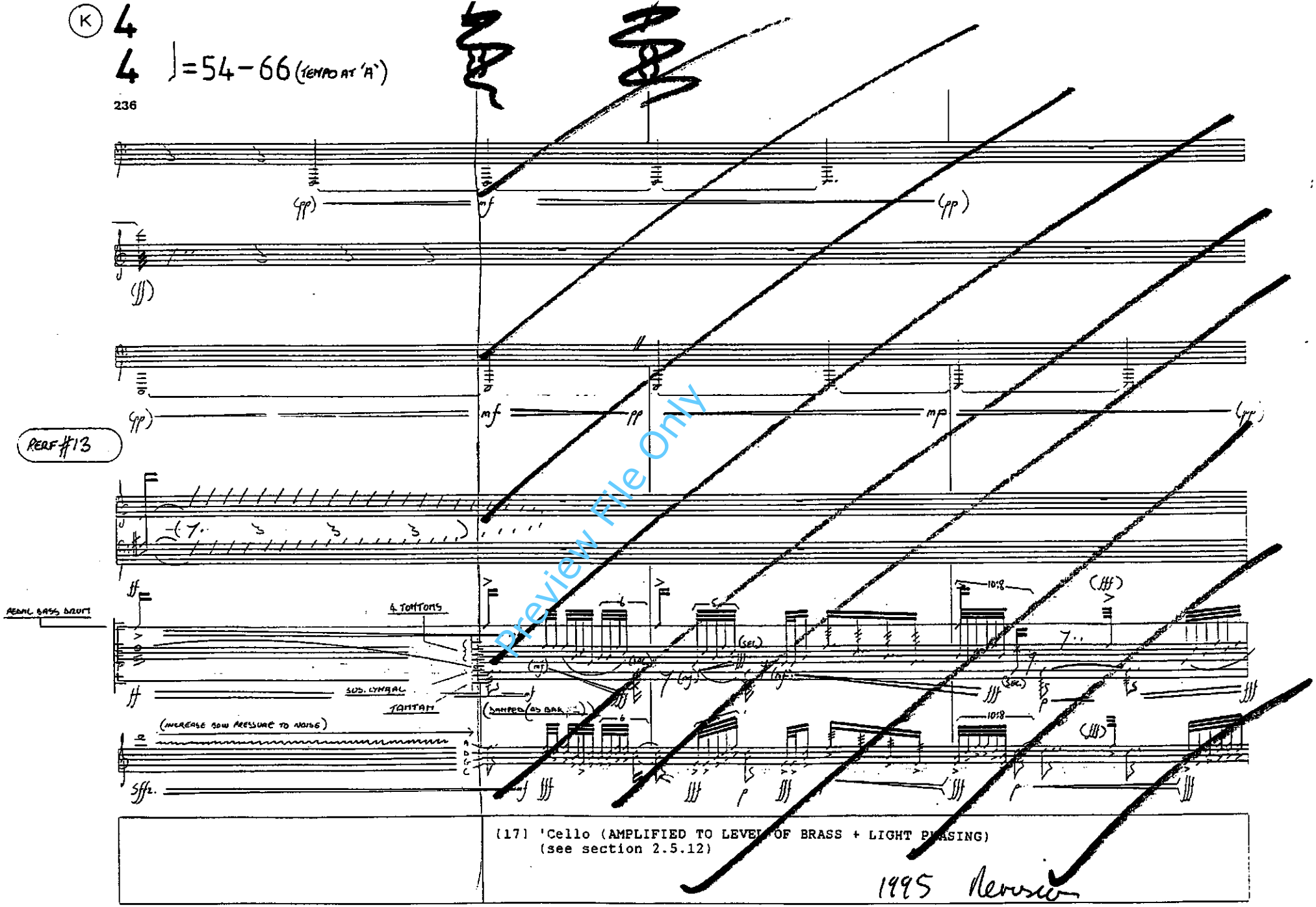
Preview File Only



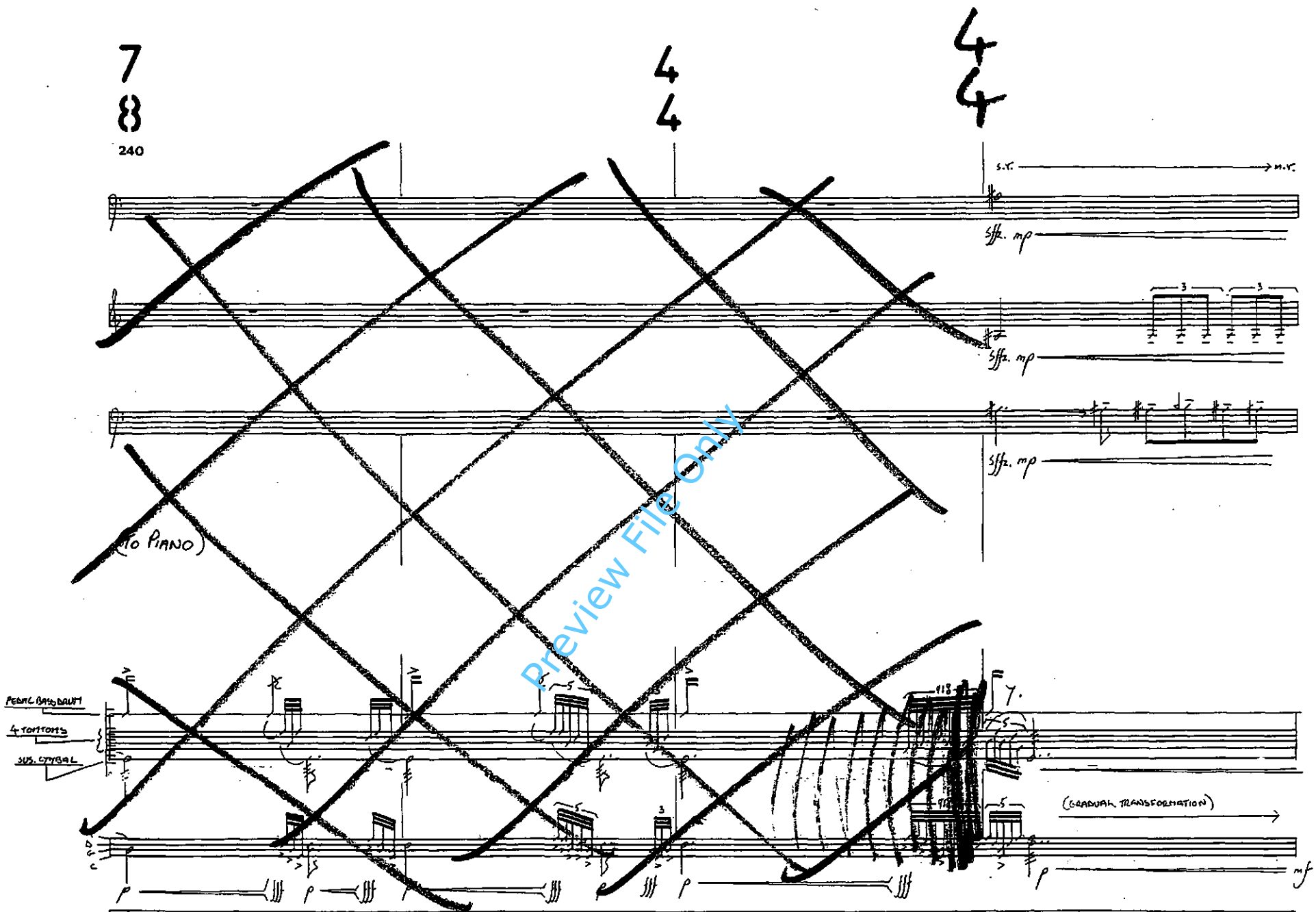
Preview File Only



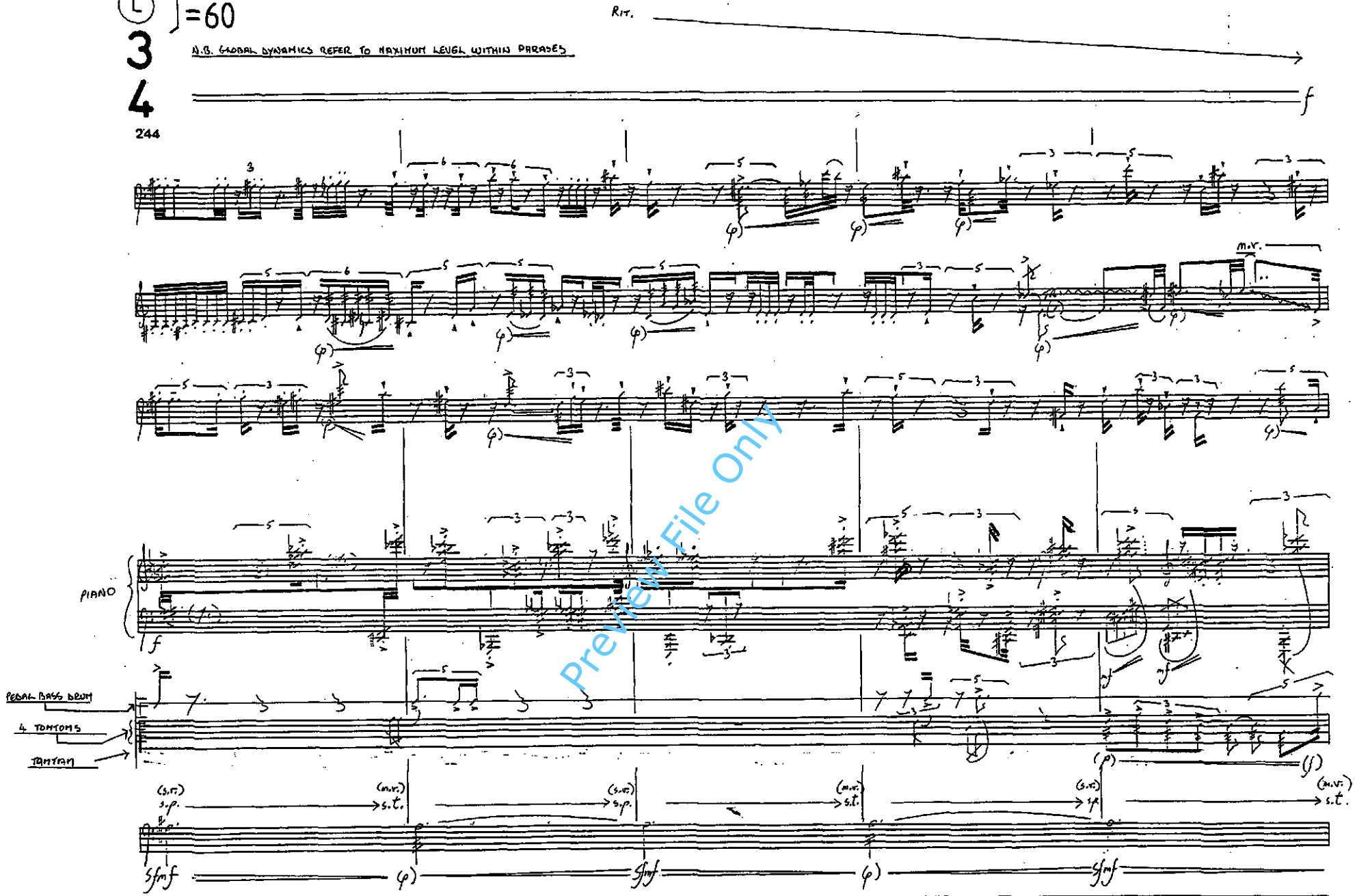
Preview File Only



Preview File Only



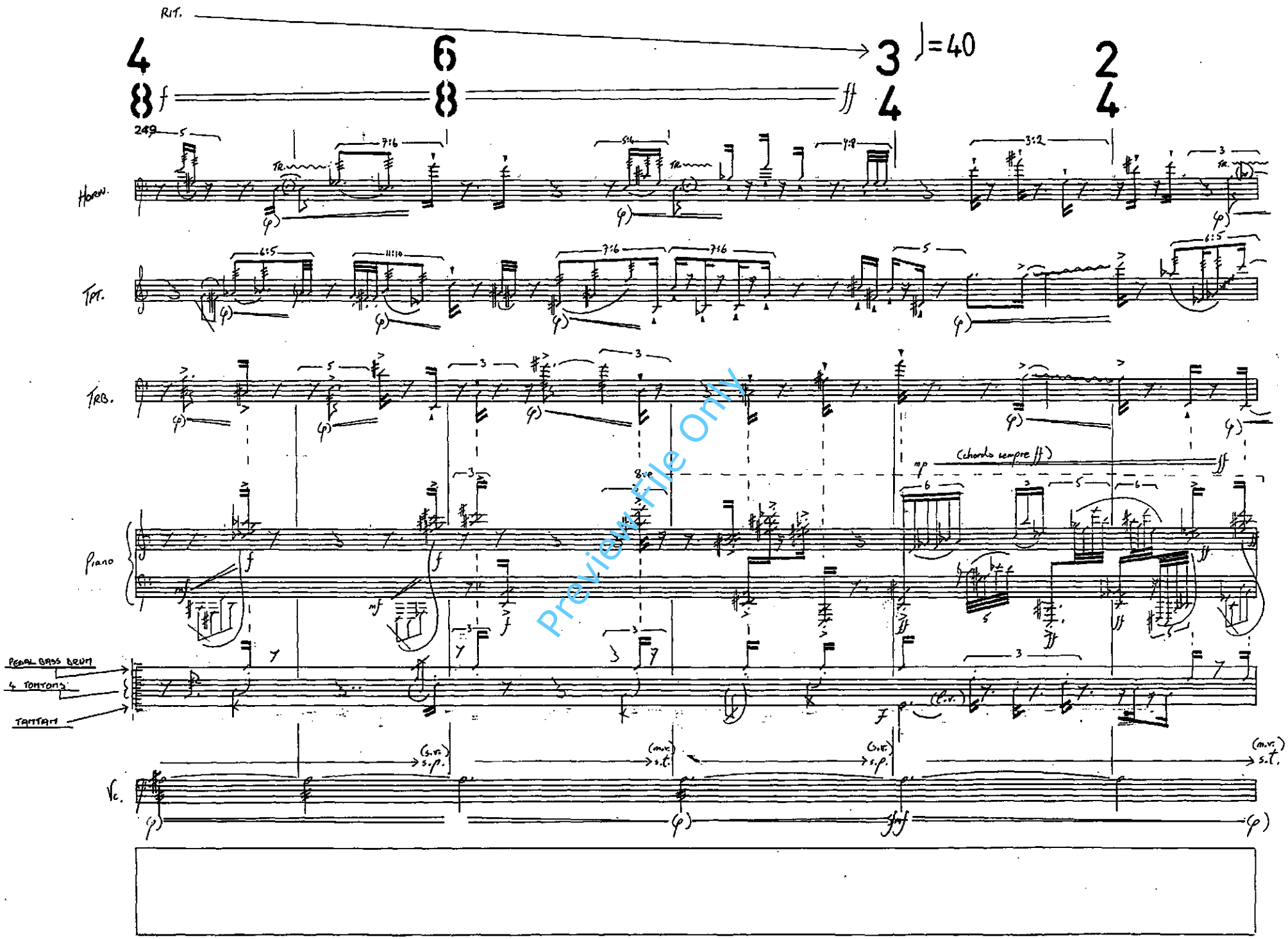
Preview File Only

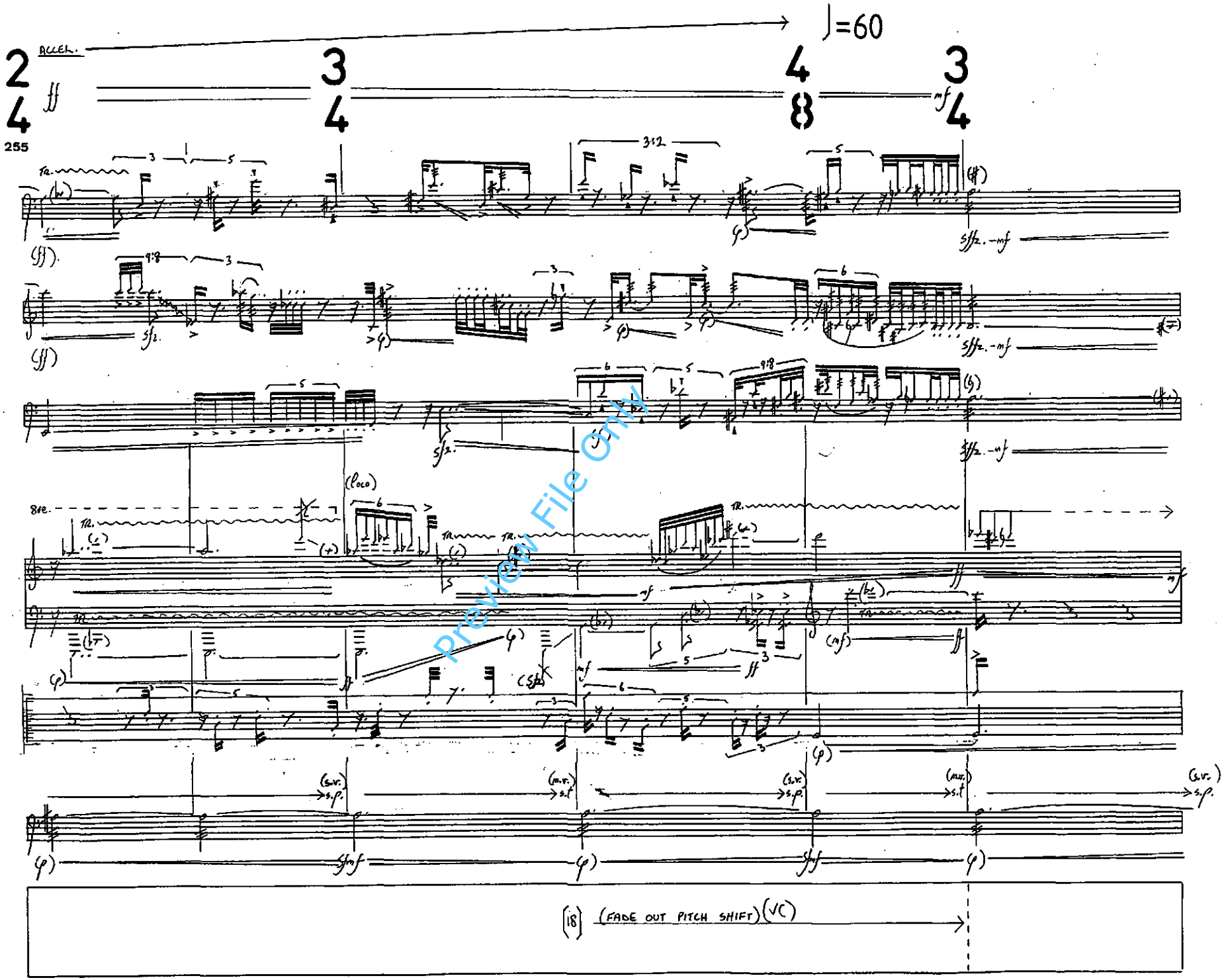


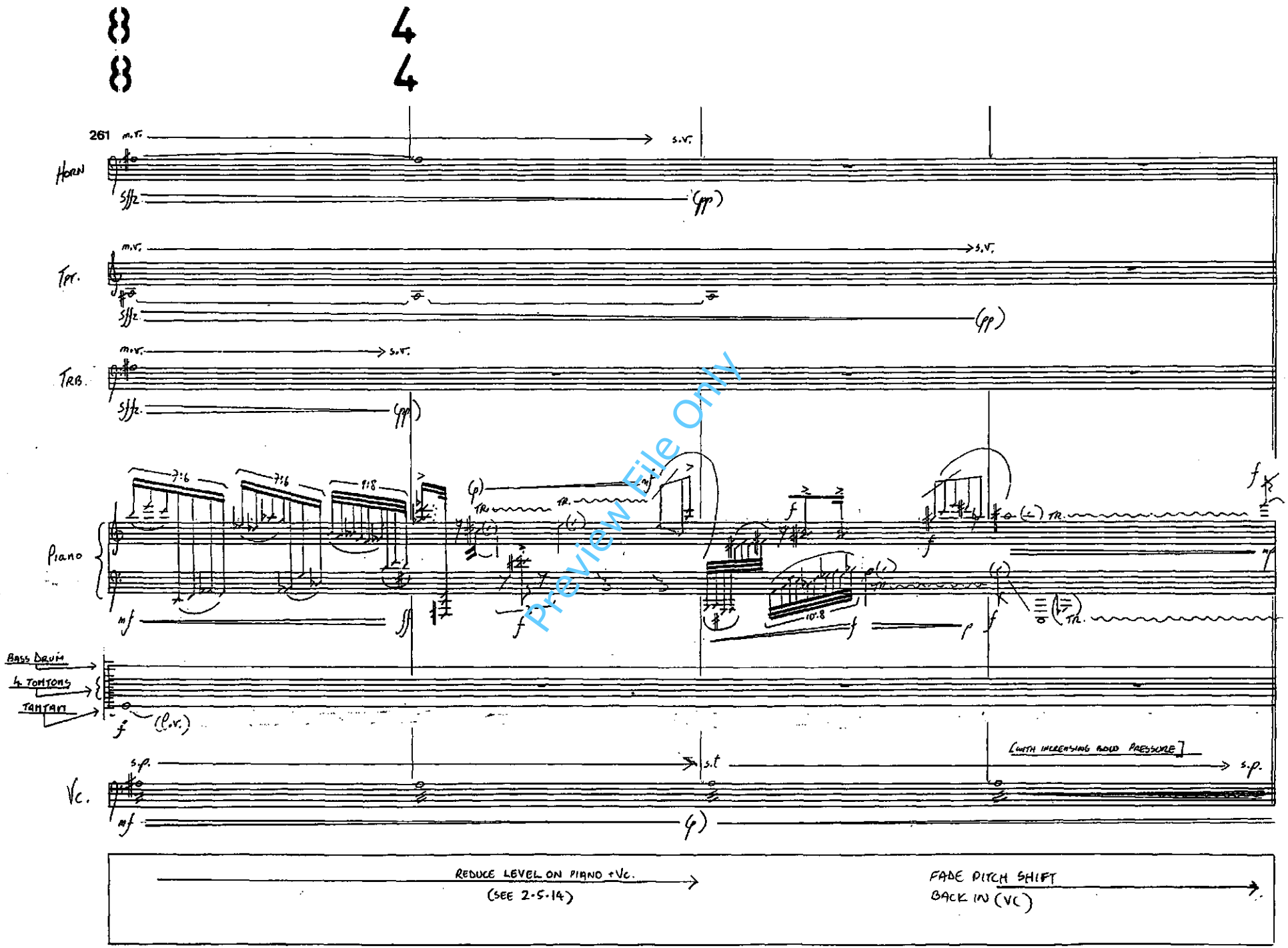
Preview File Only

[18] Brass (DELAY 0.5(approx))
[18] 'Cello (Pitch Shift +/- 0.5)
[18] Bass Drum (VERY SHORT DELAY + FEEDBACK)
[18] Piano (AMPLIFIED TO MATCH BRASS ATTACKS]
(see section 2.5.13)

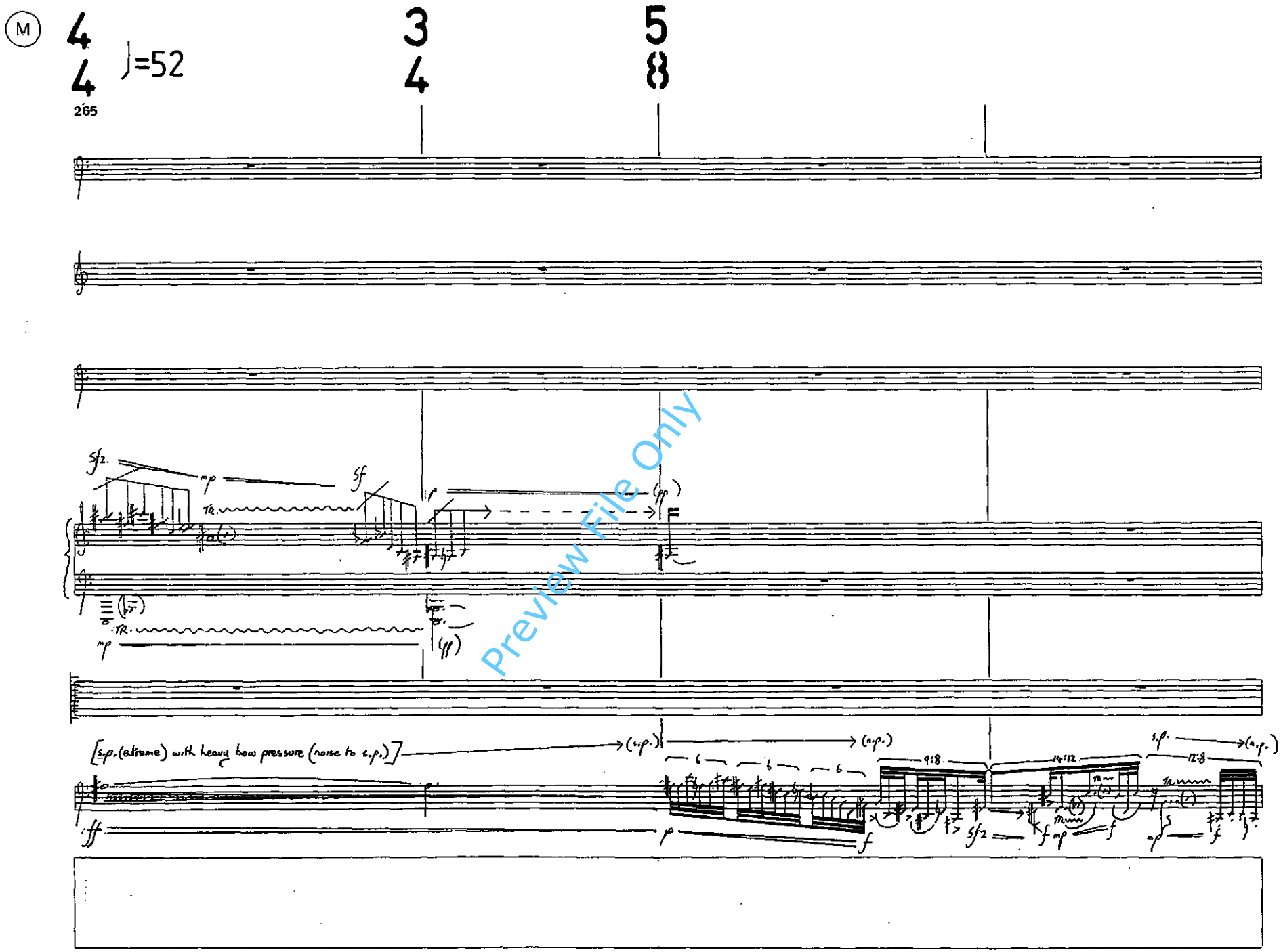
(TO BAR 266)


RIT.
♩=40
Horn
Tpt.
Trb.
Piano
PEDAL BASS DRUM
4 TOMTOMS
TAMTAM
Vc.
(chords sempre ff)
Preview File Only

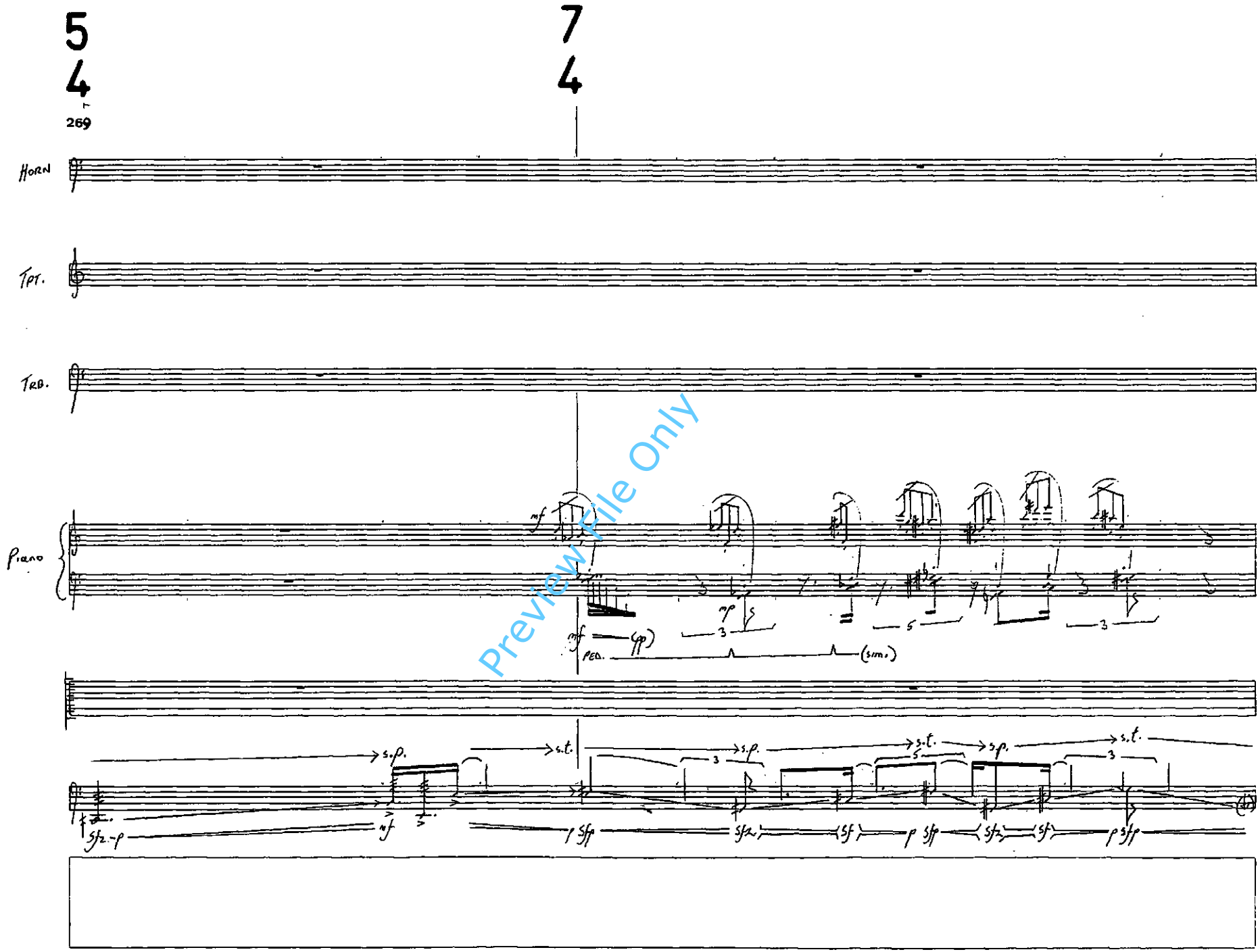

ACCEL.
♩=60
255
(FADE OUT PITCH SHIFT)(VC)
Preview File Only

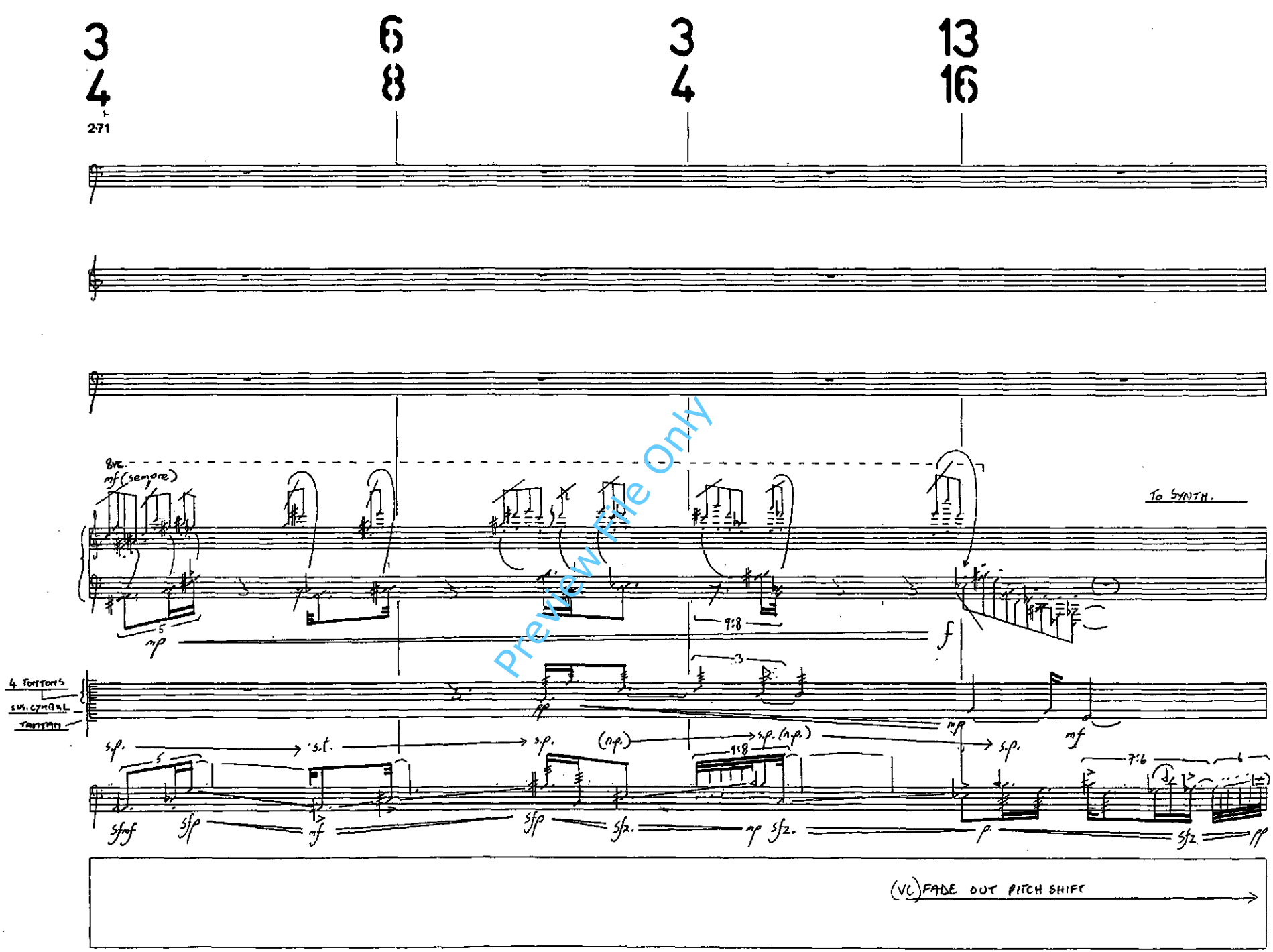


Preview File Only

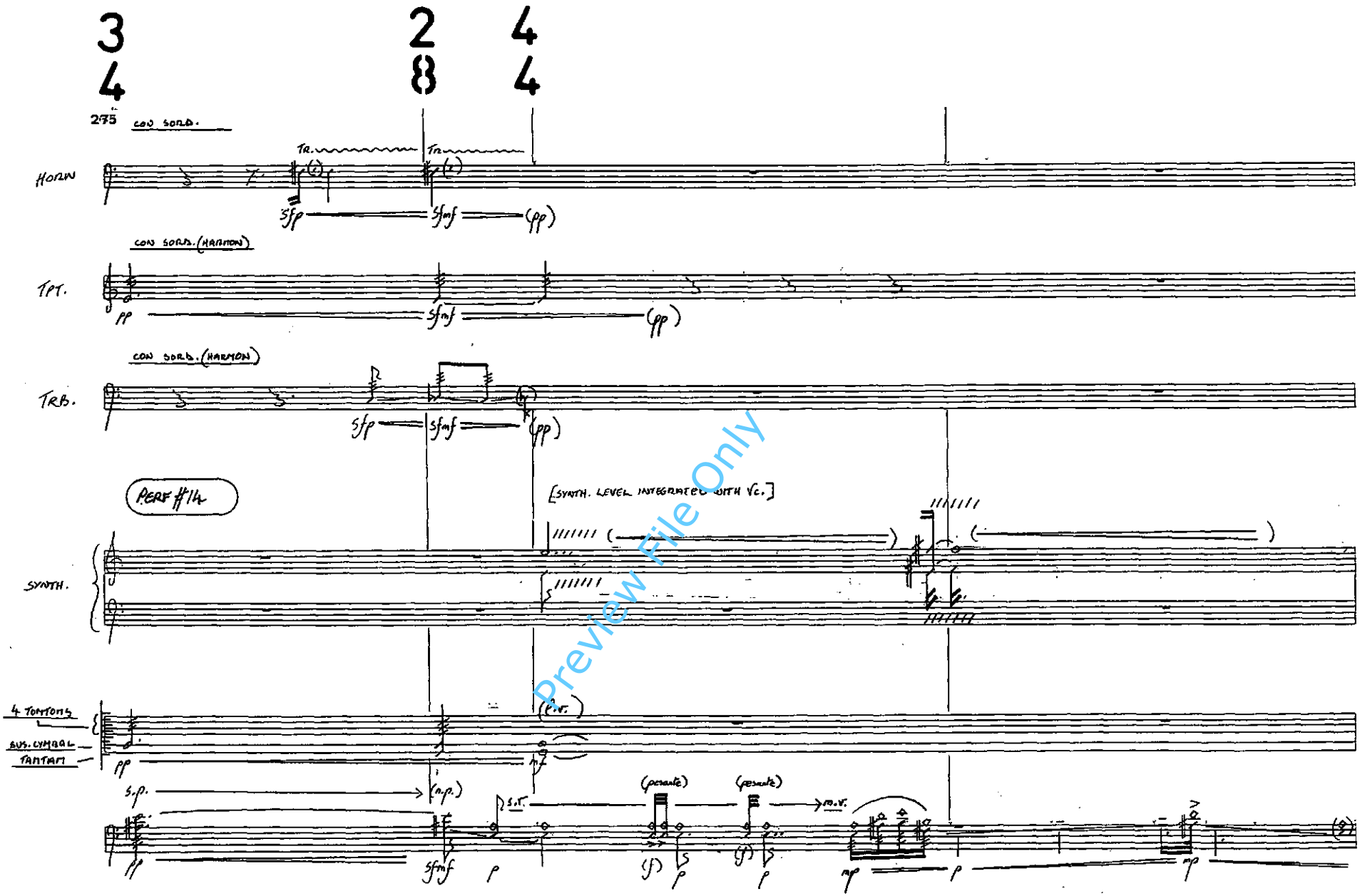


Preview File Only


5
4
7
4
269
Horn
Tpt.
Trb.
Piano
mf
mp
mf
(sp)
ped.
(simo.)
s.p.
s.t.
nf
sfz-p
sfp
sfz
sf
p
Preview File Only

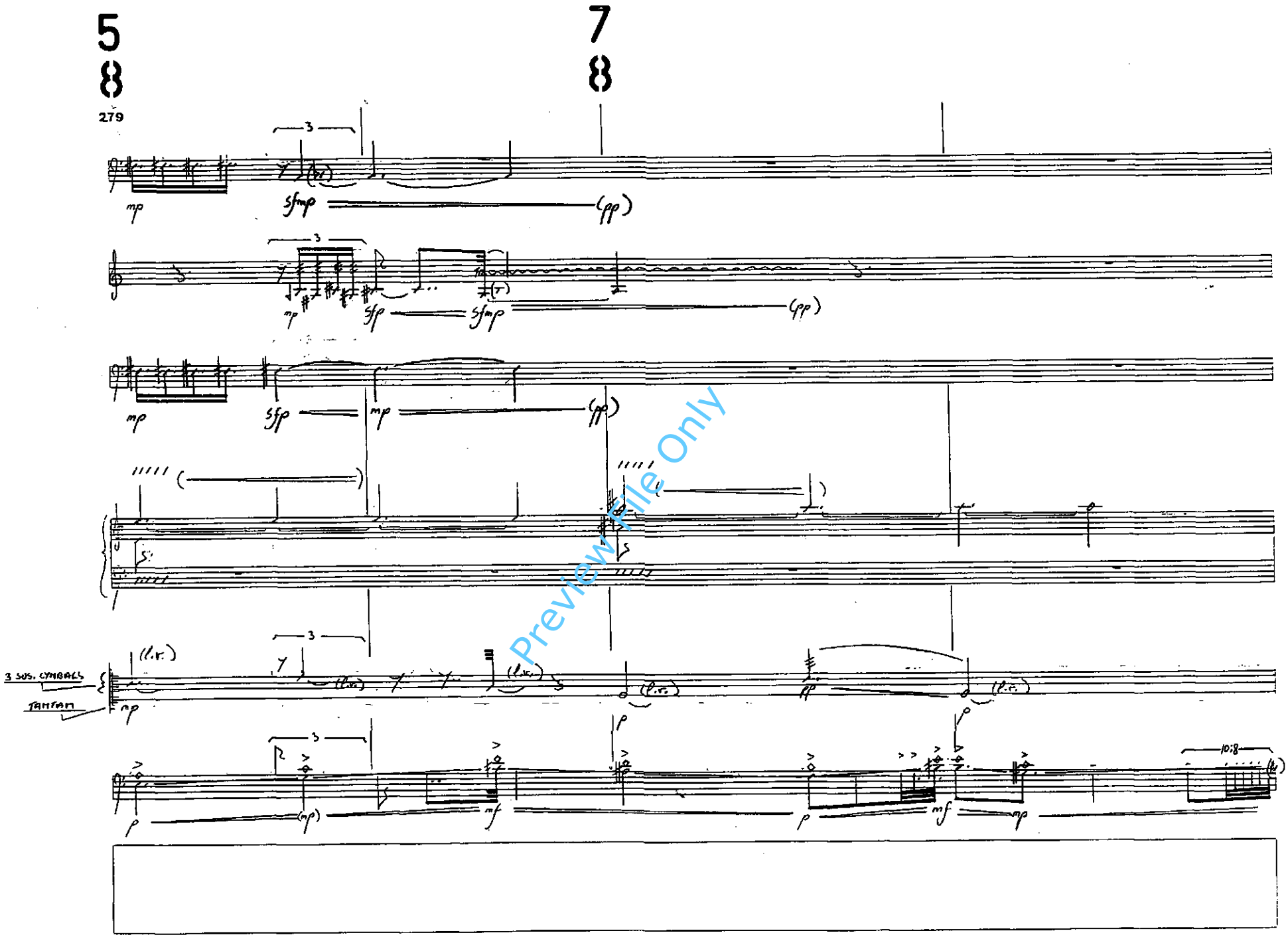


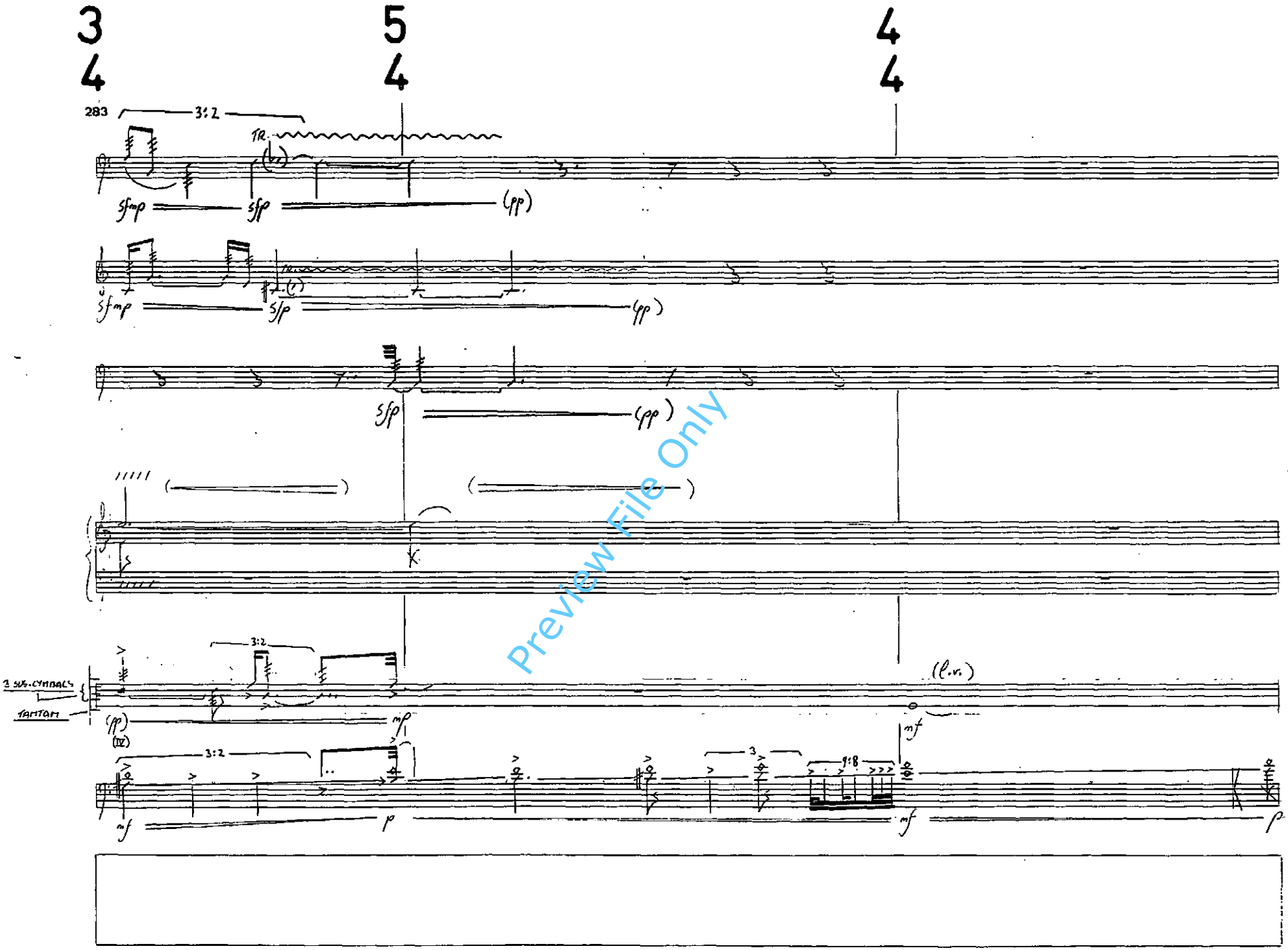
Preview File Only



Preview File Only

[19] Synth. (REVERB(med.))
[19] Brass. (REVERB(short))
(see section 2.5.14)

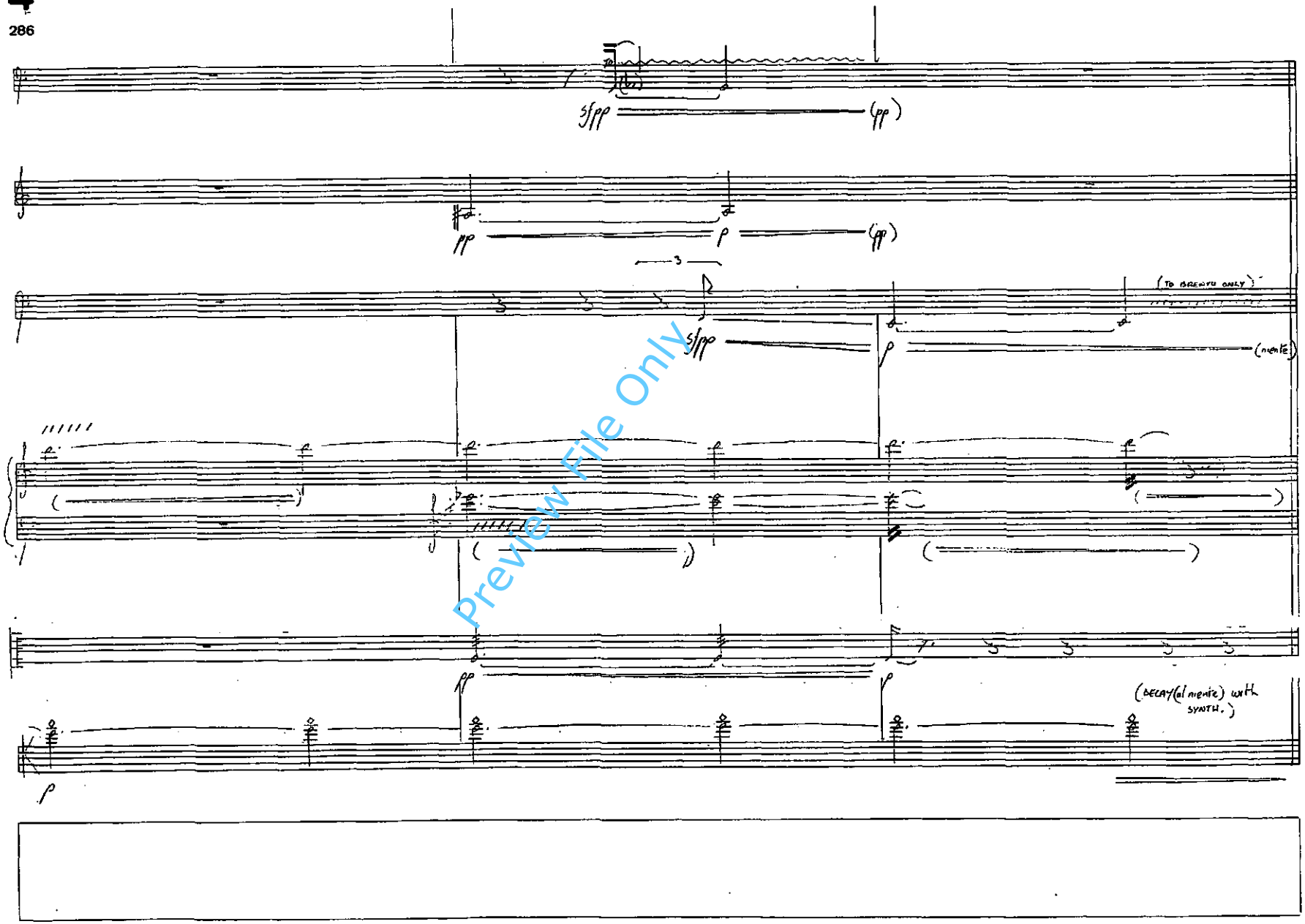

5
8
7
8
279
3 SUS. CYMBALS
TAM-TAM
Preview File Only



Preview File Only

54

286



Preview File Only