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Anima

By

Kayla Ann Cashetta

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Music

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Ken Ueno, Chair
Professor Myra Melford
Professor Greg Niemeyer

Fall 2021

Abstract

Anima

by

Kayla Ann Cashetta

Doctor of Philosophy in Music

University of California, Berkeley

Professor Ken Ueno, Chair

Anima ("soul" in Italian) explores drama, space, and intimacy through the relationship between acoustic and electronic sound sources. The orchestral instruments of the ensemble are amplified, allowing them to fuse with the electronic sounds produced by an analog drone pedal in real time.

The sound quality of the drone machine is reminiscent of an organ or bagpipe, with long, sustained tones that are brought to life and warped by a series of guitar effects pedals. The acoustic and electronic parts shift between contrapuntal interactions and coming together to form unified colors and textures. The meditative nature of the drone brings a calm, spiritual element to the piece, but when pushed to its sonic limits, the machine is able to produce sounds that are forceful, powerful and intense, in an exploration of extremes that is mirrored by the other instruments of the ensemble.

Instrumentation :

- Flute
- Clarinet
- Violin
- Percussion (Snare Drum, Gong, Vibraphone)
- Piano
- Electronics (Drone machine and pedals)

Technical Needs :

The electronics for the piece are entirely hardware-based - no computer is necessary.

Each instrument should be recorded through a separate microphone for amplification. If possible, two microphones should be used overhead for the drum setup, and additional mics can be used for the Snare Drum and Gong.

Mics :
- 8 cardioid microphones with 1/4 inch cable connections and stands
- 2 overhead microphones with cables

Monitors :
- 3 monitor speakers should be positioned in front of the ensemble so that the blend of acoustic and electronic instruments can be heard in real time.

An interface or mixer with at least 13 inputs and 5 outputs is required.

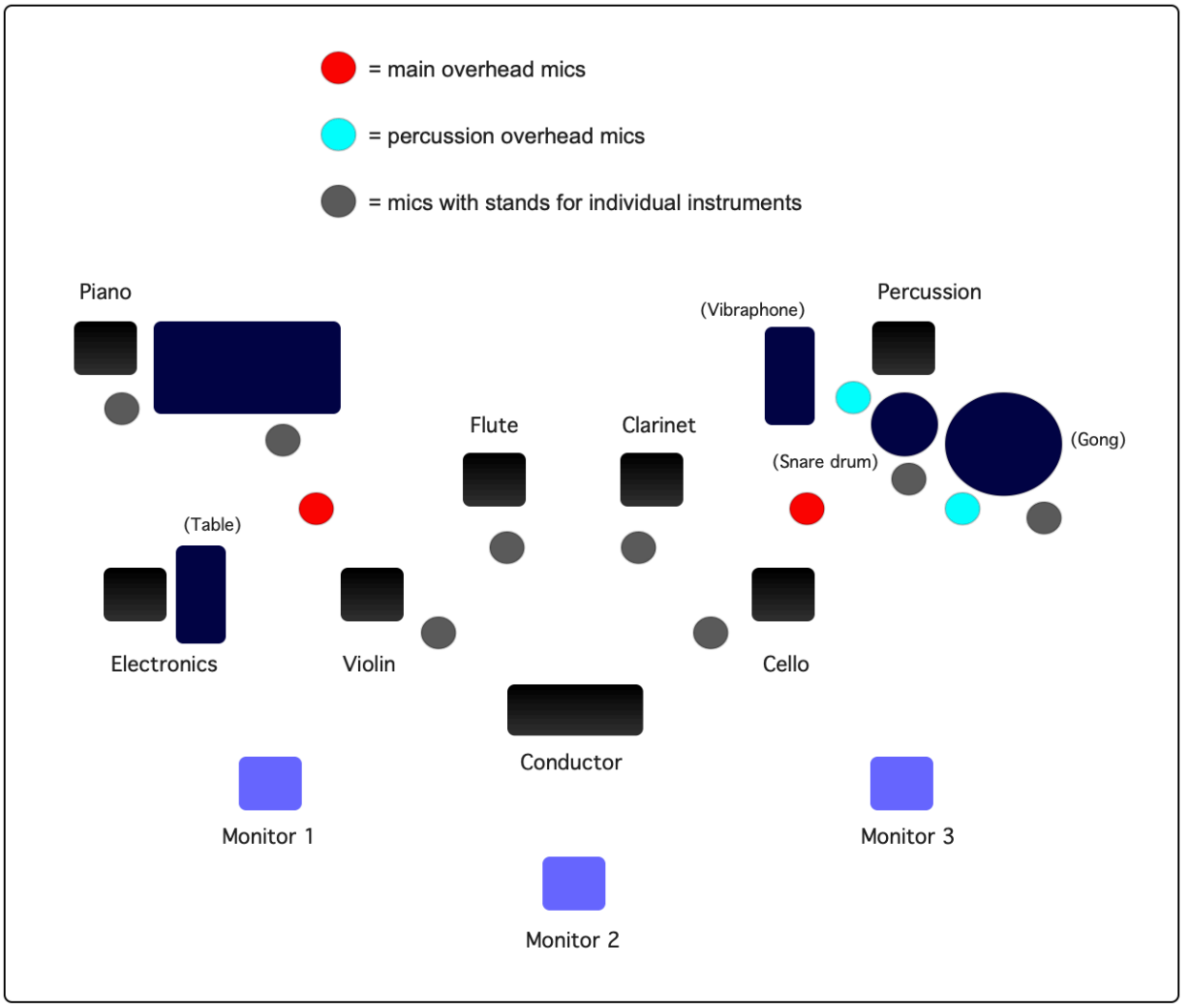
Input Channels (13) :
- 1 for direct input of electronics setup
- 8 mics for instruments
- 2 overhead mics to record entire ensemble
- 2 overhead mics above percussion setup

Output Channels (5) :
- 2 Stereo Mains
- 3 monitors

If possible, a small amount of reverb should be added to the instrument inputs by the sound engineer to allow the mic'ed instruments to blend more naturally with the electronics.

Stage Setup :

Piano should use 2 microphones, one pointed towards the high register and the other pointed towards the low register of the instrument.



STAGE

Performance Notes :

Winds :

= half air, half pitch

= air only

Strings :

= soft pitch-less noise (whispery, airy)

= abrasive pitch-less noise (“scratch tone”)

= natural harmonic, diamond notehead indicates where to place LH finger

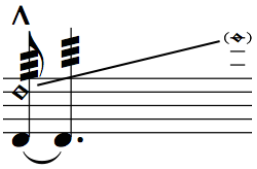
sv = senza vibrato

mv = molto vibrato

msp = molto sul ponticello

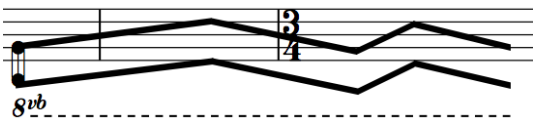
mst = molto sul tasto

HBP = high bow pressure, greater bow pressure than normal playing, so that there are elements of both noise and pitch

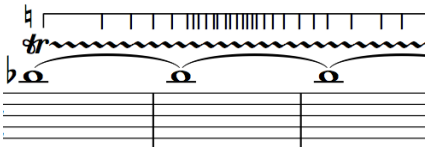


= double-stop, one string playing natural harmonic gliss and the other playing an open string.

Piano :



= tremolo clusters of notes in the lowest register of the piano to produce a low rumble, generally following the given contour.



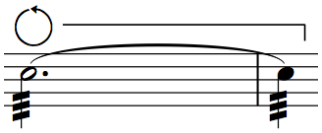
= trill at an aperiodic rhythm, more slowly when notches above trill symbol are spread apart, and faster when they’re closer together.

Percussion :

The percussion setup consists of the following instruments :

1. Vibraphone, with motor on (played with soft mallets and bow)
2. Snare drum (played with sticks and brushes)

3. Gong (with soft mallets)



= at Rehearsal X - with brushes, drag brushes across drum head.

Electronics :

- The electronics are written for the following 5 pedals to be played live in combination as a single instrument :

1. Electro-Faustus Drone Thing (EF109)
2. Mooer Pure Octave Pedal
3. CNZ Audio Tremolo Pedal
4. TC Electronic Flashback Delay and Looper
5. Caline Snake Bite Reverb Pedal

Instruments/pedals should be connected with balanced or unbalances 1/4 inch cables. (4 will be required)

The signal flows from right to left, starting with the Drone machine as the input generator and the output of the reverb pedal as the overall output of the pedal chain.

The pedals have mono outputs, and the output coming out of the last pedal may be plugged directly into the main mixing board/interface. Since all of the pedals require external power sources, a power strip is advised.

Descriptions of each pedal and its function is listed below. Substitutions of different pedals with similar functions can be made.

Electro-Faustus Drone Thing :

This pedal functions as the sound source for the whole electronics setup. All other pedals affect the signal generated by this device.

The switch in the top left corner turns the entire instrument on and off.

The knob directly below it controls the output volume.

The first knob directly above the switches running along the bottom of the instrument is a Low Frequency Oscillator (LFO), which modulates the signal.

The following five knobs above the switches each control the frequency of a different square wave oscillator. When knob is turned counter-clockwise, the frequency gets lower, and when turned in a clockwise direction it gets higher.

The switches along the bottom turn on and off the corresponding oscillators found above them.

A High Pass Filter is controlled by the knob in the top right corner. As the knob gets turned counter-clockwise, the cutoff frequency will get lower.

The knob directly below controls the Power Starve function. This sends less signal to power controls, resulting in a grittier-sounding color and noise when the knob is in its leftmost position.

A 9V power source is required.

Mooer Pure Octave Pedal :

The function of the pedal is to add thickness to the sound by adding additional frequencies either 1 or 2 octaves above or below the frequencies being produced by the drone machine. The main white knob controls the modes, which consist of different combinations of 1 or 2 octaves above/below.

Turning the Sub knob to the right increases the volume of a low, sub bass frequency, adding body to the sound.

The Dry knob controls the mix between the unaffected signal from the drone machine and the octaves generated by the octave pedal.

The Upper knob controls the tone of the high frequency range.

The silver button on the bottom is a Bypass switch. Pressing it down will turn the pedal on, and pressing it again will turn it off and let the unaffected signal pass through to the next pedal.

A 9V power adapter is required.

CNZ Audio Tremolo Pedal :

The purpose of this pedal is to add movement to the sound. The main knob in the middle controls the speed of the tremolo. As the knob moves counter-clockwise, the speed gets slower. The speed gets faster as the knob turns in a clockwise direction.

The depth knob controls the intensity of the tremolo effect. Turning the knob clockwise will increase the intensity.

Turning the Bias knob counter-clockwise will decrease the presence of the effect for a more subtle tone shift, and turning it clockwise will increase the presence of the sound and effect.

The silver button on the bottom is a Bypass switch. Pressing it down will turn the pedal on, and pressing it again will turn it off and let the signal from the previous pedals pass through to the next.

A 9V power adapter is required.

TC Electronic Flashback Delay and Looper :

This is a hybrid pedal that includes both a delay function to add space and dimension and a loop function to record the input signal and play it back as the current signal continues to pass though.

This pedal provides an option of using either a mono or stereo input and output. For this project, the mono input/output should be used.

The Delay knob controls the time of the delay. Turning it counter-clockwise will produce a longer delay time, and turning it clockwise will produce a shorter delay time.

The Feedback knob will fold the affected signal back into itself, increasing the density of the delay signal and altering the timbre of the sound. Turning the knob in a clockwise position will increase the intensity of the feedback effect. Feedback is will not occur when the knob is set to the leftmost position.

The FX Level knob serves as a mix knob to control the balance between the dry signal and signal affected by the pedal. When the pedal is in its leftmost position, the dry signal passes through the output. As the knob turned in the clockwise direction, the percentage of the wet/affected signal mixed in with the dry/unaffected signal increases.

The knob directly to the right sets the mode. Changing the mode will change the behavior and timbre of the delay.

The silver button at the bottom of the pedal serves a dual purpose. In any of the delay modes, it serves as a Bypass button and functions in the same way as the previous pedals in the chain. When the pedal is set to Loop mode, the button controls the record on/off functions.

A 9V power supply is required.

Caline Snake Bite Reverb Pedal :

This pedal adds space and dimension to the sound through the reverb effect by simulating an acoustic space. The top row of knobs control filter parameters. The first controls the resonance, giving a boost in volume to the cutoff frequency. The cutoff

frequency is set by adjusting the middle knob. The rightmost knob is a Low Pass Filter, which alters the timbre of the reverb response.

The bottom-left knob adjusts the time of the pre-delay. Adjusting the knob to the clockwise direction will increase the amount it time it takes for the reverberation to begin to take effect.

The Mix knob adjusts the balance between the dry and wet signals. At its leftmost position, the sound will be completely dry/unaffected. As the knob is turned in the clockwise direction, the percentage of the wet signal relative to the dry will increase.

The Decay knob controls the time of the reverb tail. Turning it in a clockwise direction will increase the duration.

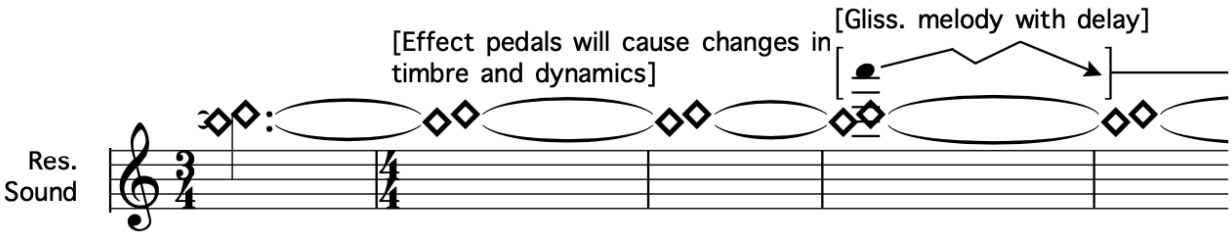
This pedal requires a 9V power supply.

System of Notation :

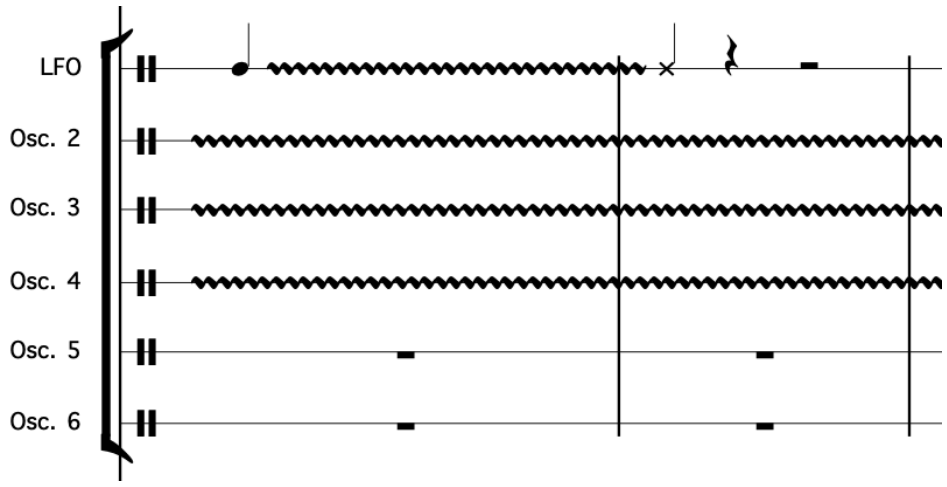
The goal of this system is to include just enough information so that the electronics instrumentalist is not overloaded with instructions, but has enough information to be able to reproduce the interpretation of the piece multiple times in a relatively precise fashion. It includes representations of actions for the instrumentalist to perform and the resulting sonic reactions from the pedals.

The notation of the electronics is divided into the 4 following groups :

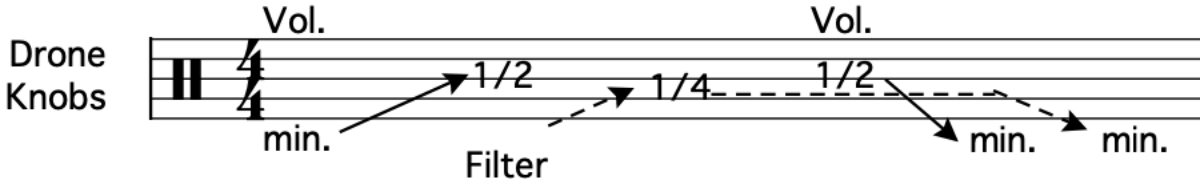
1. “Resulting Sound” - roughly indicates resulting overall sound after effects through both traditional notation/graphic representations and written descriptions.



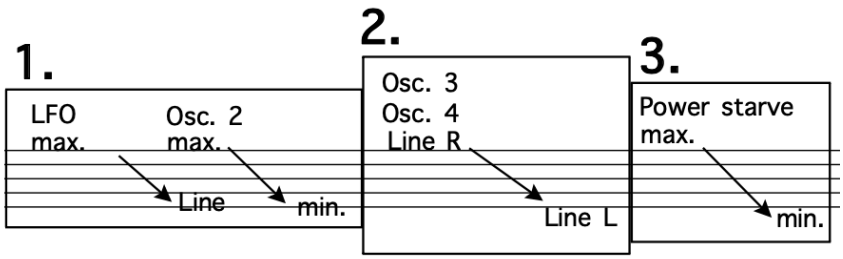
2. “Oscillators” - contains six one-line staves, each corresponding to an oscillator on the drone machine from left to right. The wavy line represents an active oscillator. traditional noteheads indicate the action of turning the oscillator on, and “x” noteheads indicate the action of turning it off. When a staff is blank, the oscillator is currently off/inactive.



3. “Drone Knobs” - indicates changes made to the following effects on the drone machine : Volume, Filter, Power Starve, Oscillator Frequency

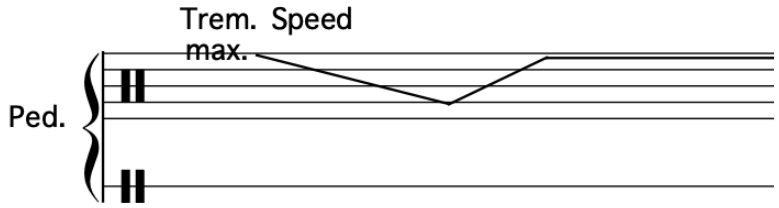


Instructions that are boxed and numbered indicate that each of these changes should be done in separate phases. The order of completing the instructions inside each box is up to the performer.

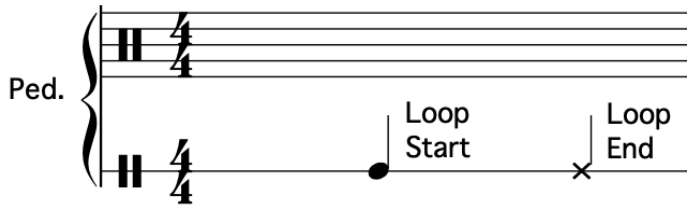


4. “Pedals”- contains two staves:

- The top line (5-line staff) indicates changes made to all other effects pedals.
- The bottom line (1-line staff) represents the on/off settings of the effects pedals. traditional note heads indicate of turning the pedal on, and “x” noteheads indicate the action of turning it off.



= gradual parameter changes



= Pedal Bypass/Record On/Off (for Loop pedal)

Practical Performance Considerations :

- Each of the oscillators on the drone machine have a slightly different range. None of the knobs have specific value markings - in certain areas of the score it is best to adjust parameters by ear, but when moments of precision are necessary, use tape to mark the position of the knobs.

- The Octave pedal produces pitches that are not perfectly in tune. This is not necessarily a drawback in this context - the deviation in frequency by a matter of cents produces beating patterns that add movement and texture to the overall sound.

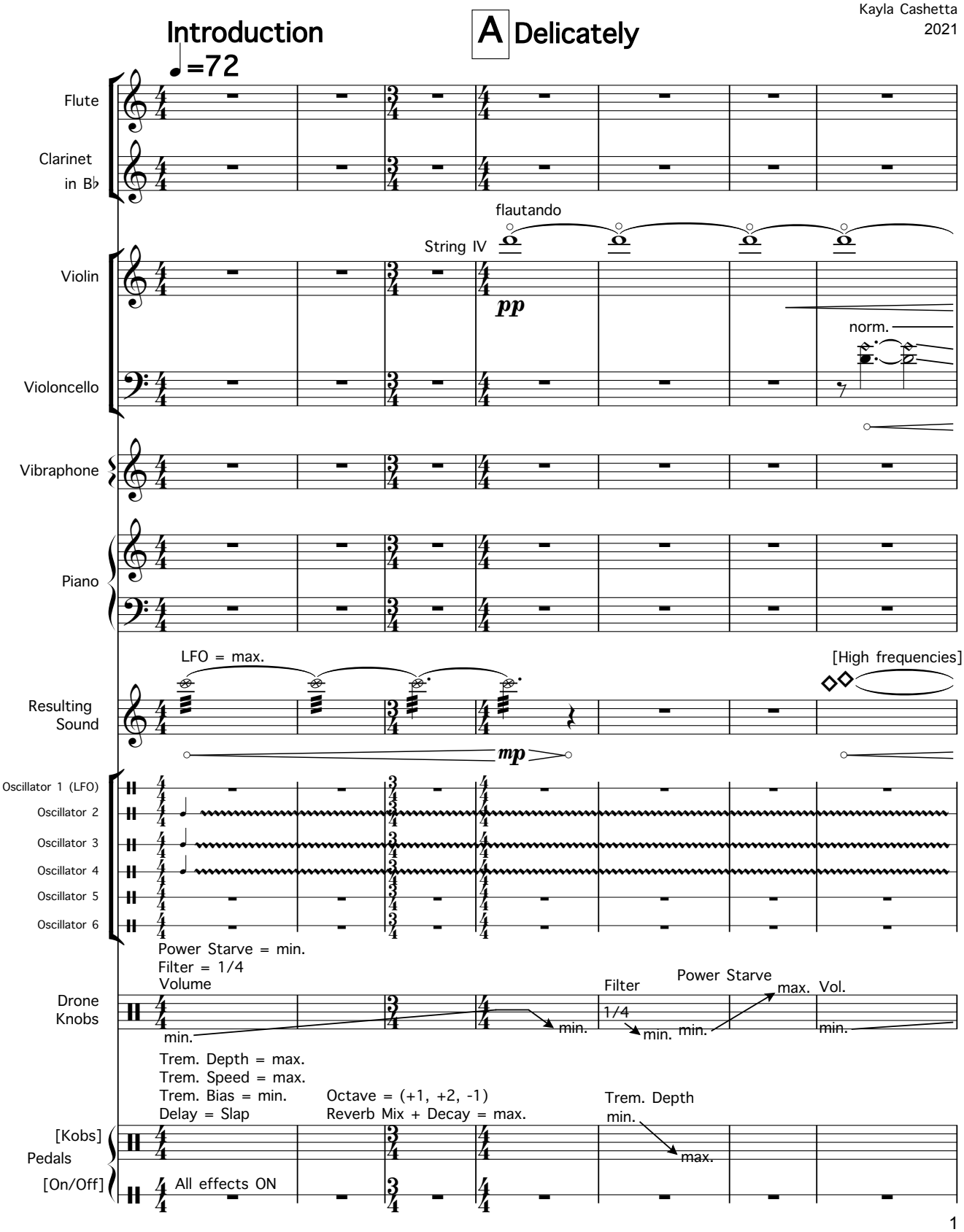
Anima

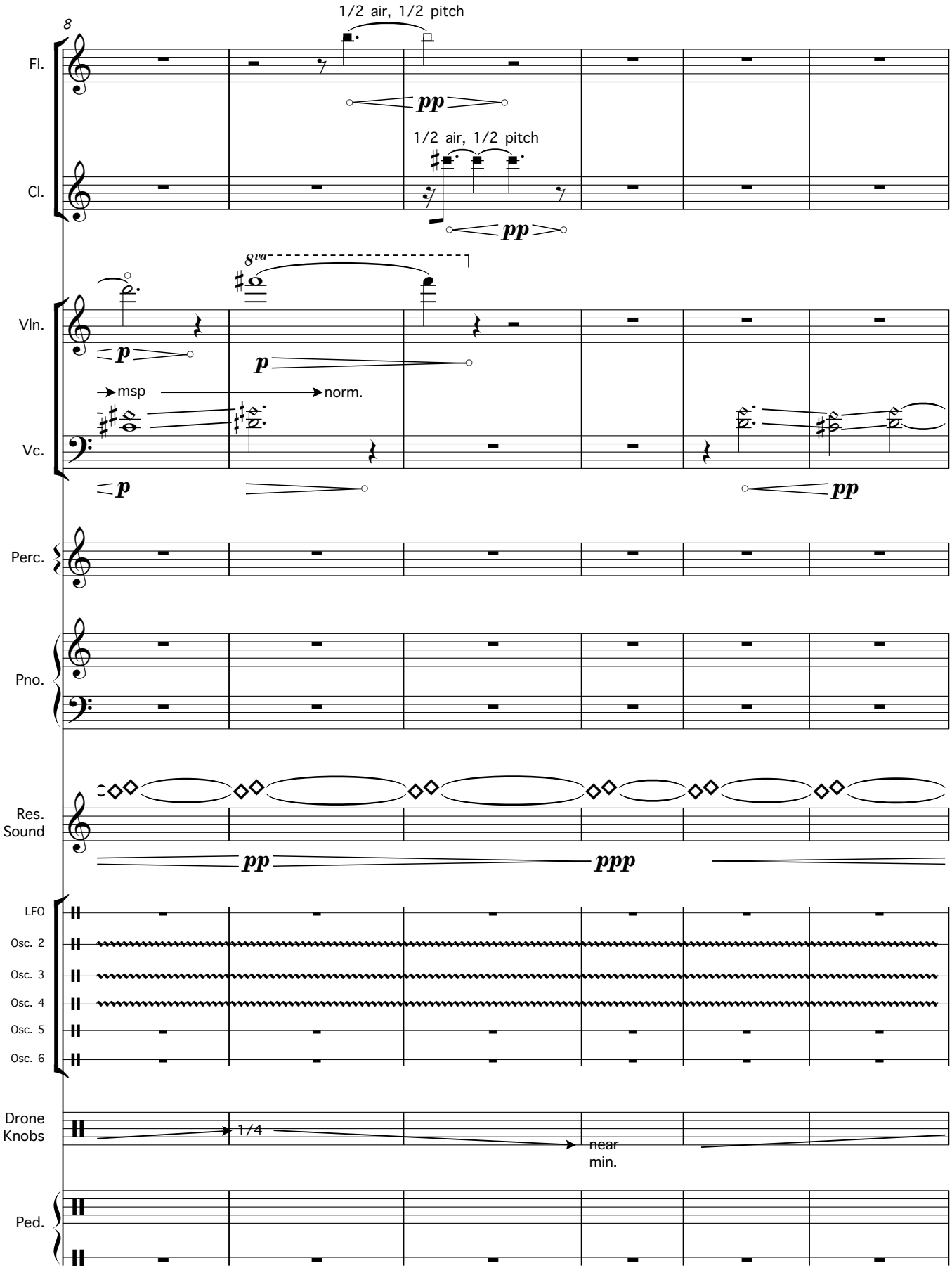
for amplified pierrot ensemble and drone machine

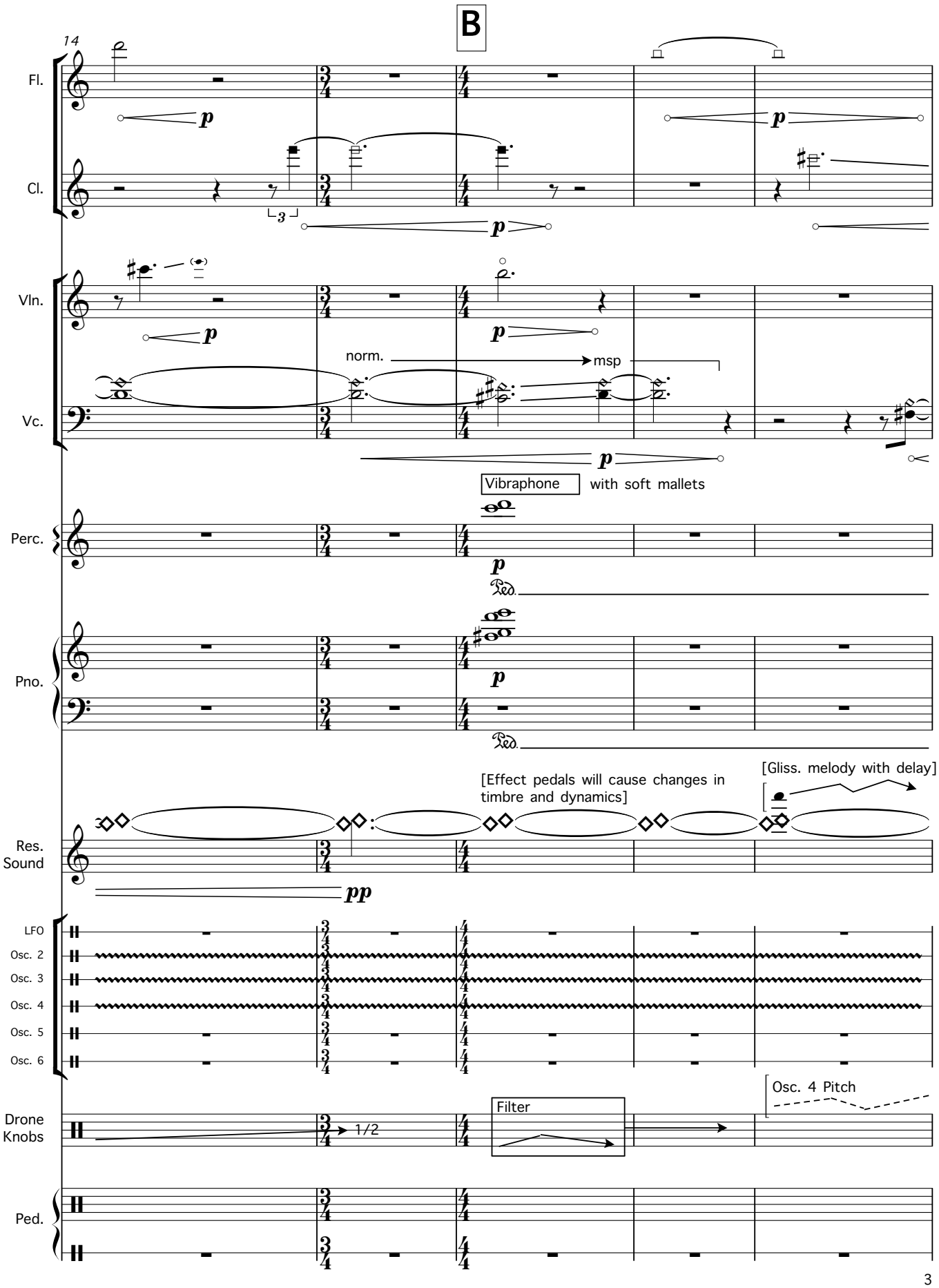
written for the Refugee Orchestra

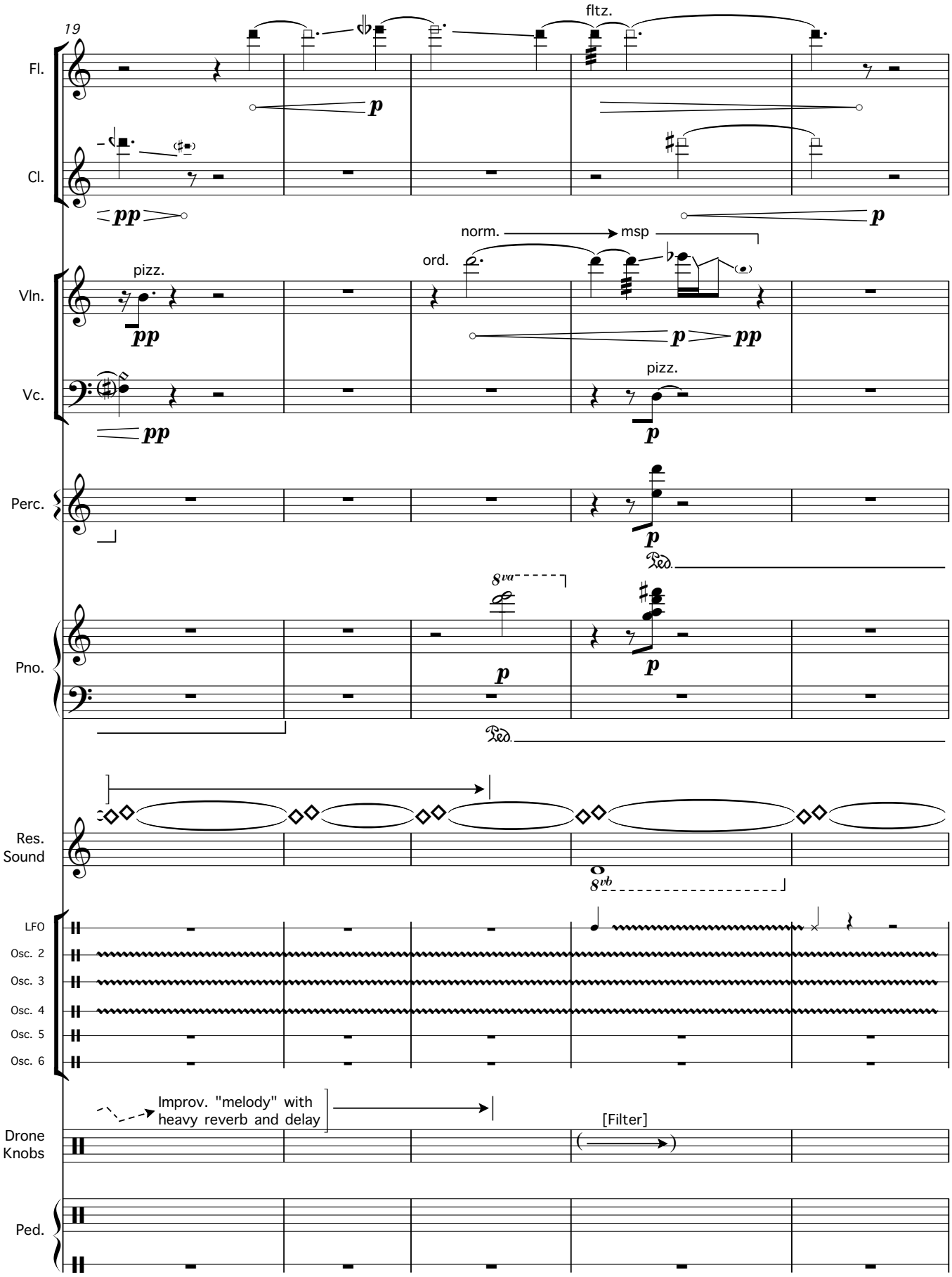
TRANSPOSING SCORE

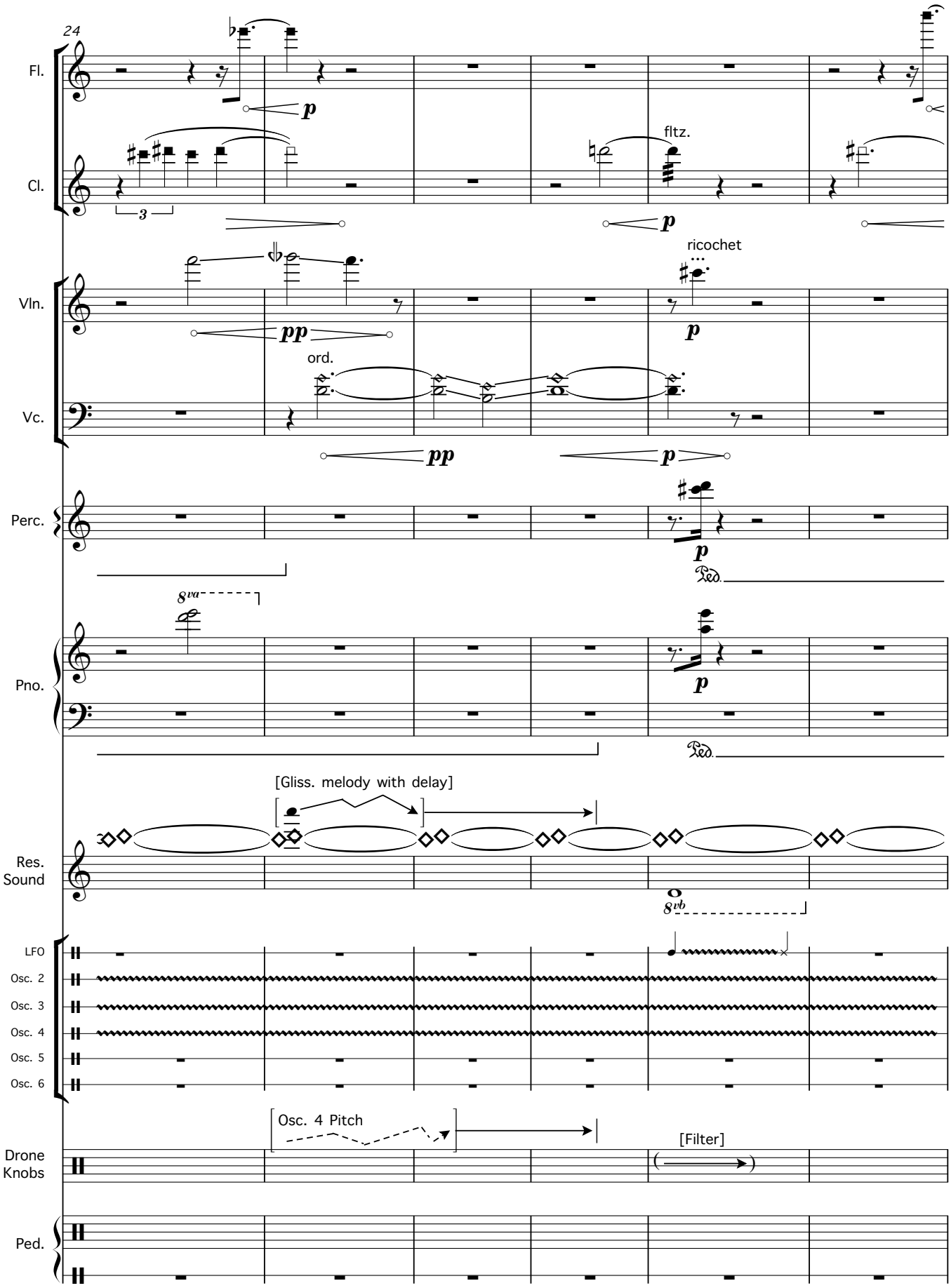
Kayla Cashetta
2021

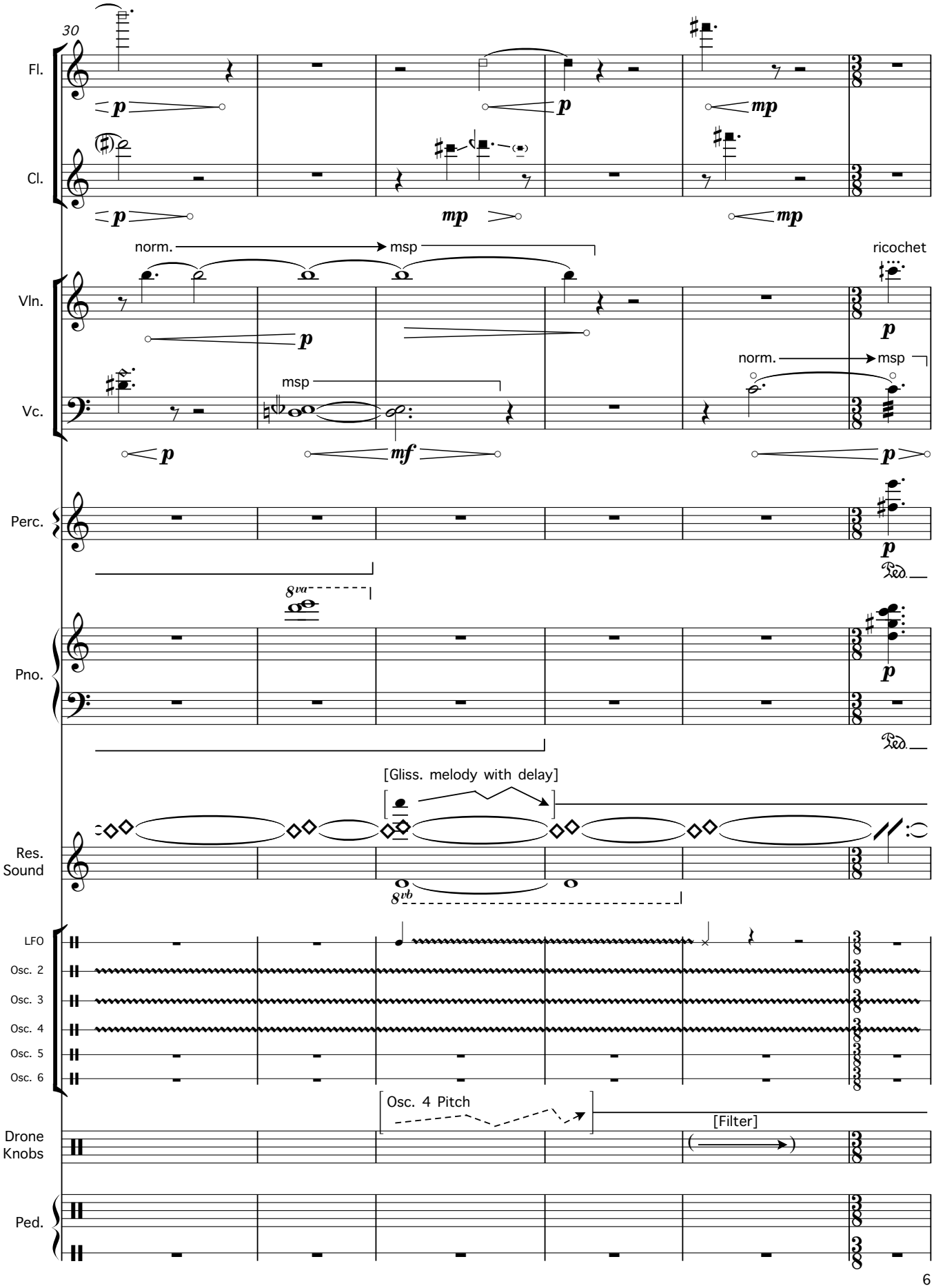


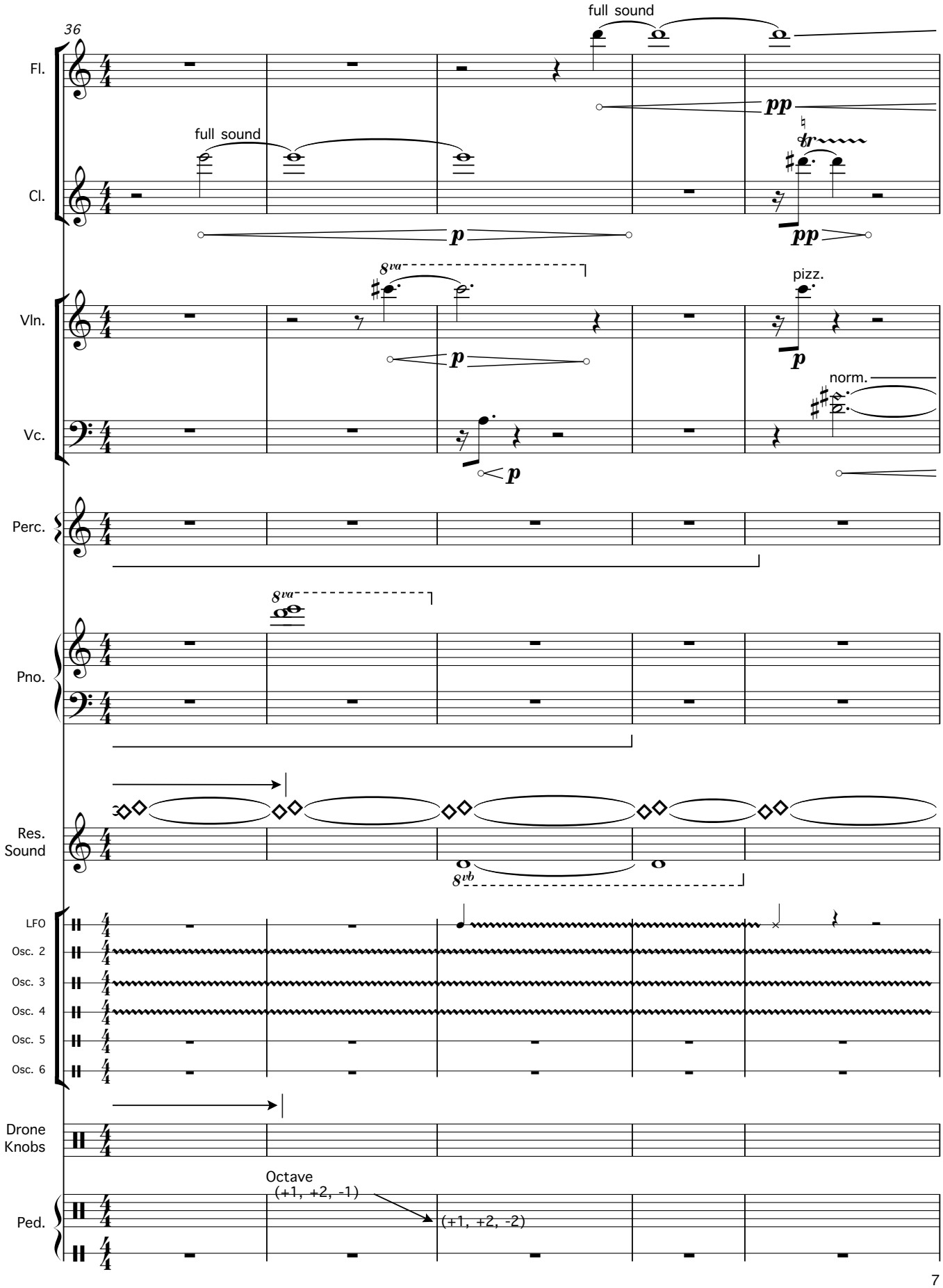

8
Fl.
1/2 air, 1/2 pitch
pp
Cl.
1/2 air, 1/2 pitch
pp
8va
Vln.
p
p
msp
norm.
Vc.
p
pp
Perc.
Pno.
Res.
Sound
pp
ppp
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
1/4
near
min.
Ped.

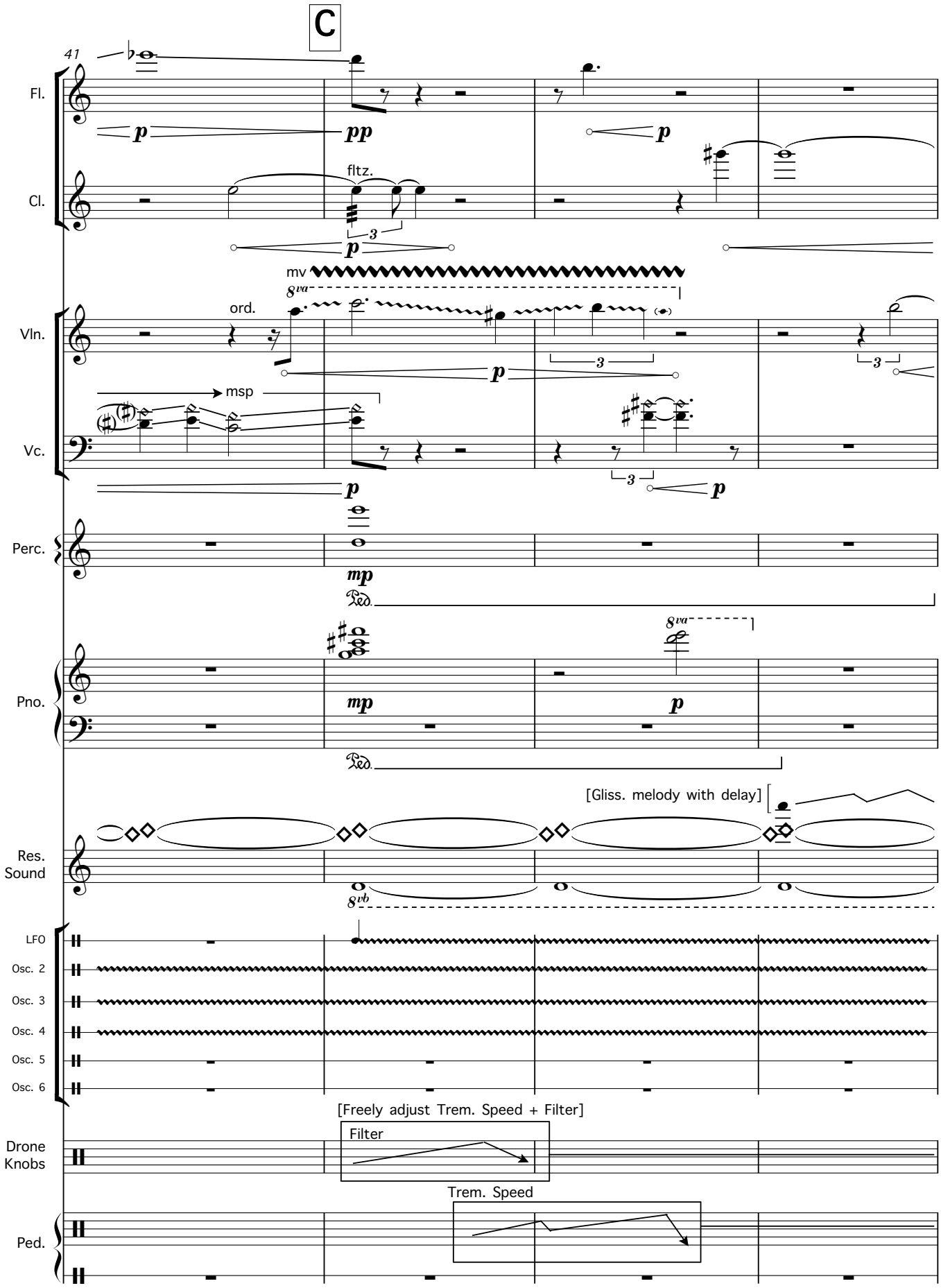

B
14
Fl.
Cl.
Vln.
Vc.
norm.
msp
Vibraphone
with soft mallets
Perc.
Pno.
[Effect pedals will cause changes in timbre and dynamics]
[Gliss. melody with delay]
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Osc. 4 Pitch
Filter
Drone Knobs
1/2
Ped.

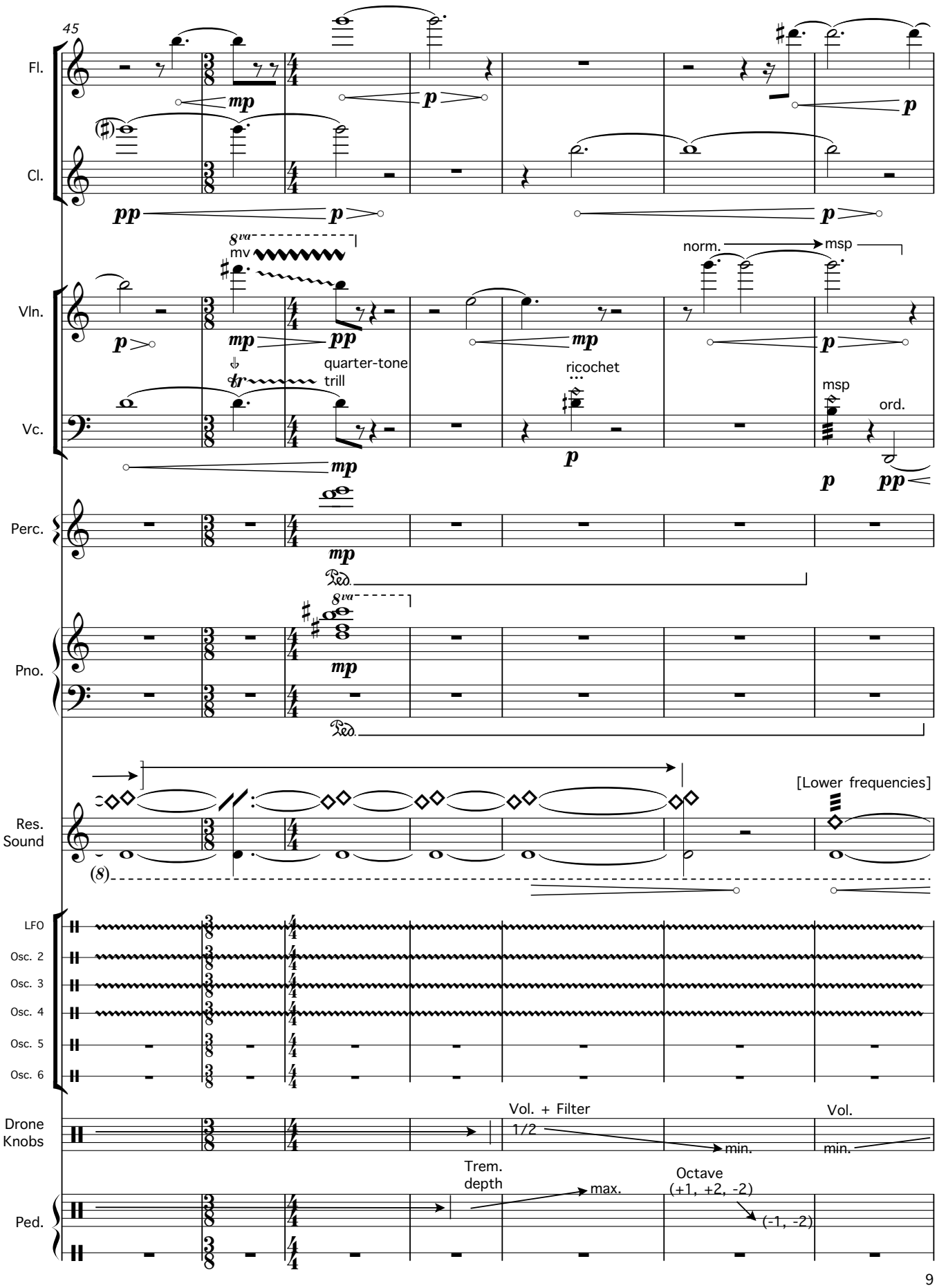

19
fltz.
Fl.
Cl.
pp
p
norm.
msp
ord.
pizz.
Vln.
Vc.
Perc.
Pno.
8va
8vb
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Improv. "melody" with
heavy reverb and delay
[Filter]
Drone
Knobs
Ped.

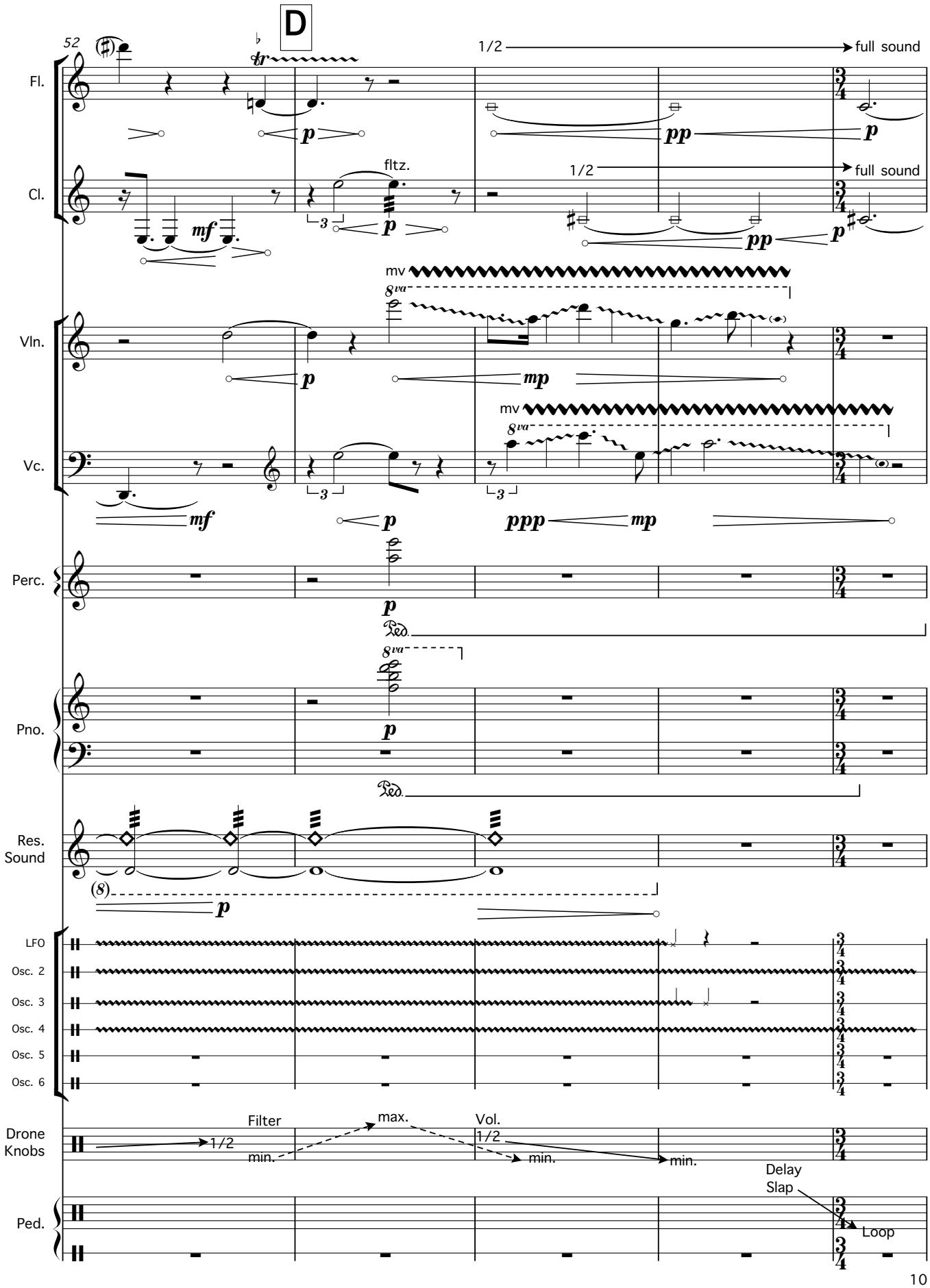

24
Fl.
Cl.
fltz.
Vln.
ricochet
Vc.
ord.
Perc.
Pno.
8va
[Gliss. melody with delay]
Res.
Sound
8vb
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Osc. 4 Pitch
[Filter]
Drone
Knobs
Ped.

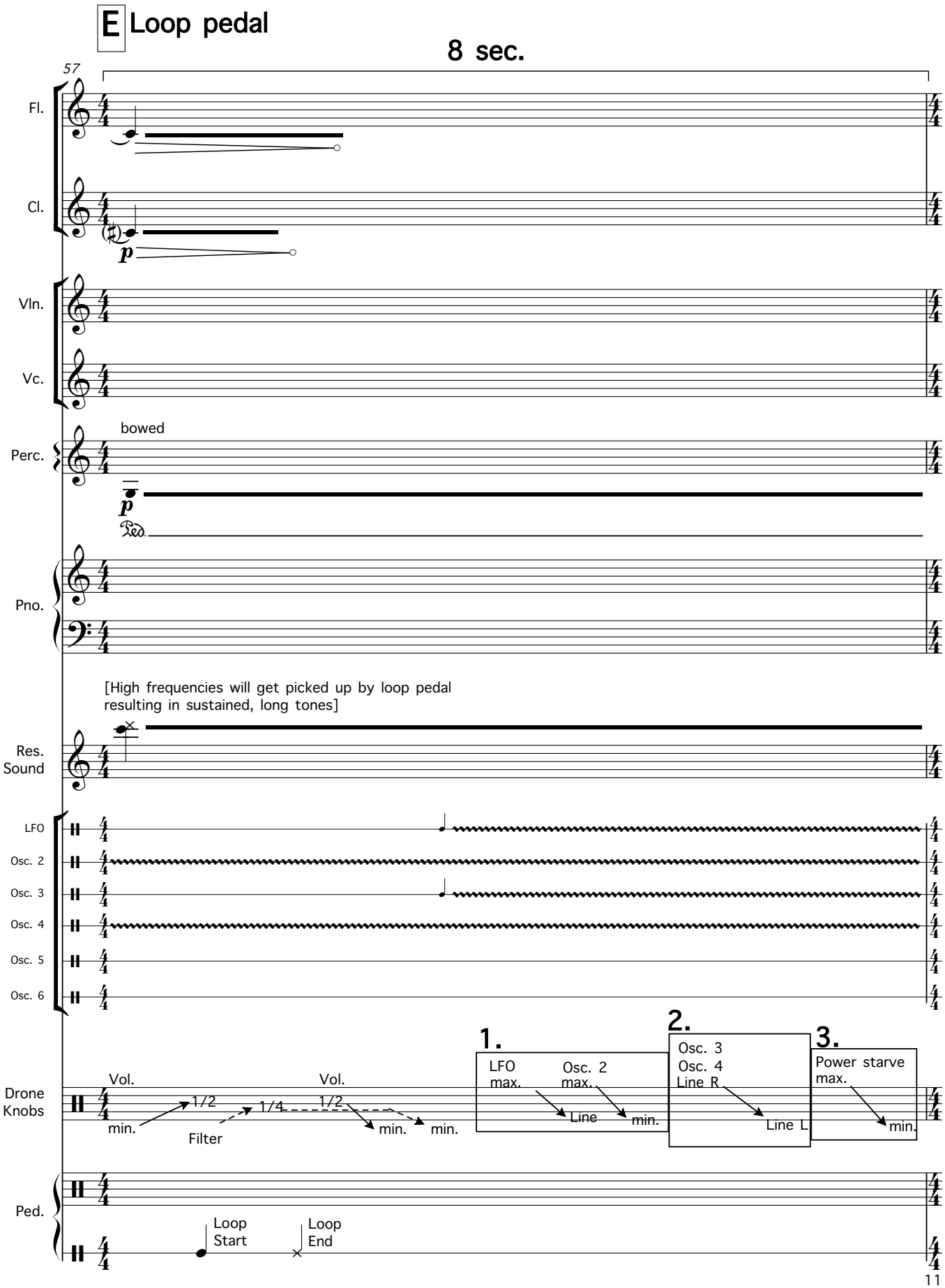

30
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Ped.
p
mp
mf
norm.
msp
ricochet
8va
8vb
Ped.
[Gliss. melody with delay]
Osc. 4 Pitch
[Filter]

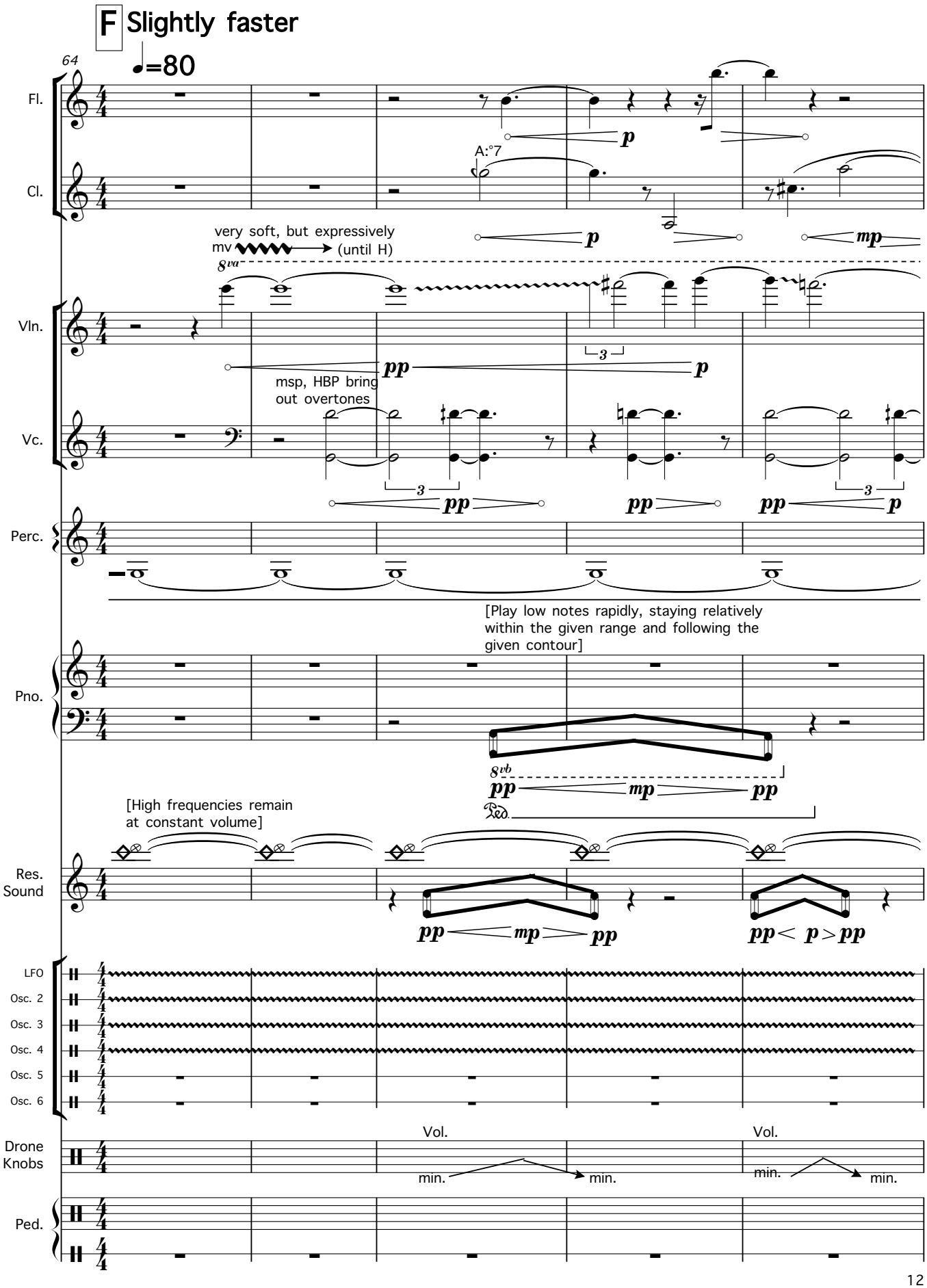

36
Fl.
full sound
full sound
pp
Cl.
p
pp
8va
pizz.
Vln.
p
p
norm.
Vc.
p
Perc.
8va
Pno.
Res.
Sound
8vb
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Octave
(+1, +2, -1)
(+1, +2, -2)
Ped.

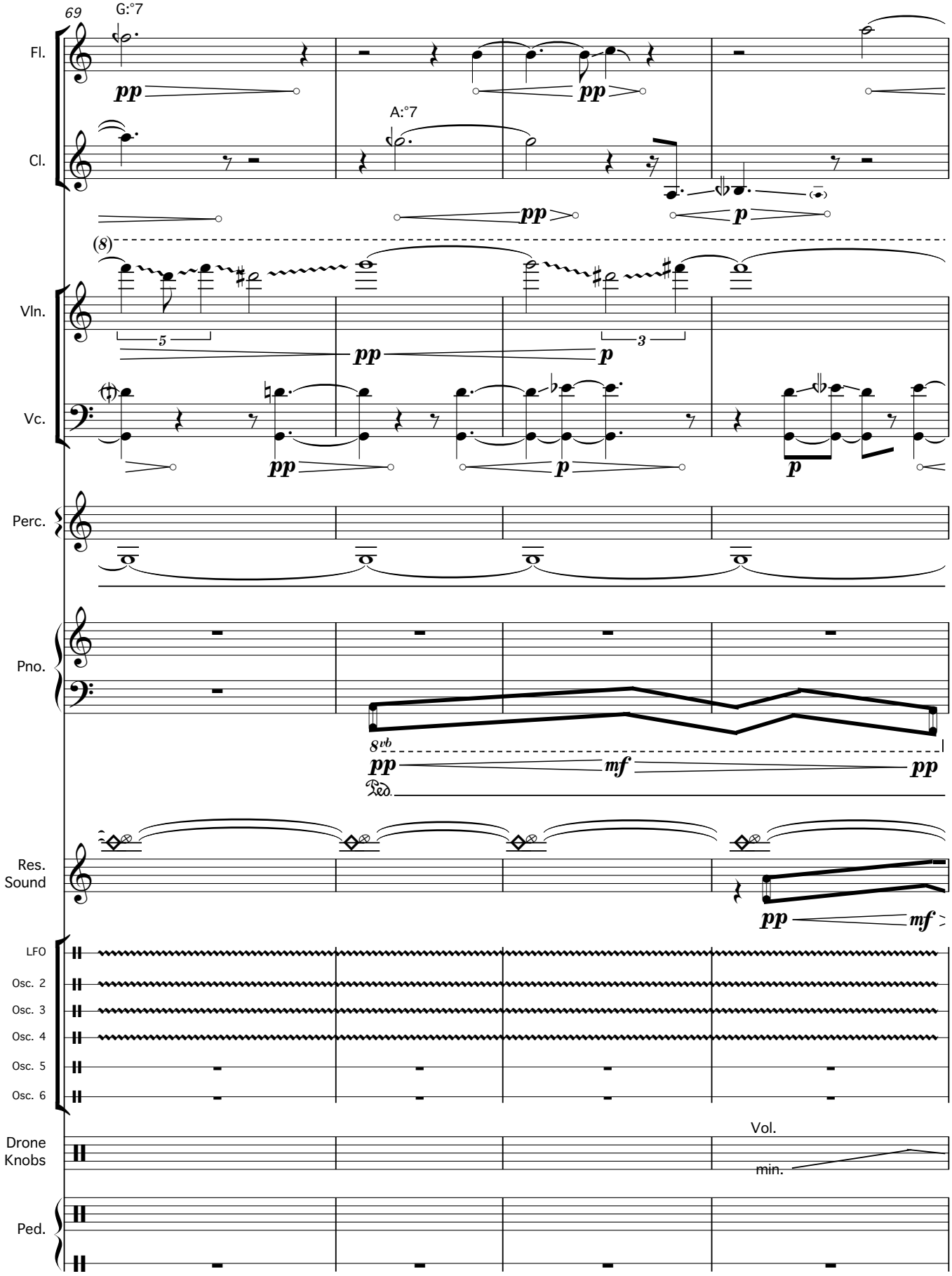

C
41
Fl.
Cl.
fltz.
mv
Vln.
ord.
msp
Vc.
Perc.
Pno.
[Gliss. melody with delay]
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
[Freely adjust Trem. Speed + Filter]
Drone
Knobs
Filter
Trem. Speed
Ped.

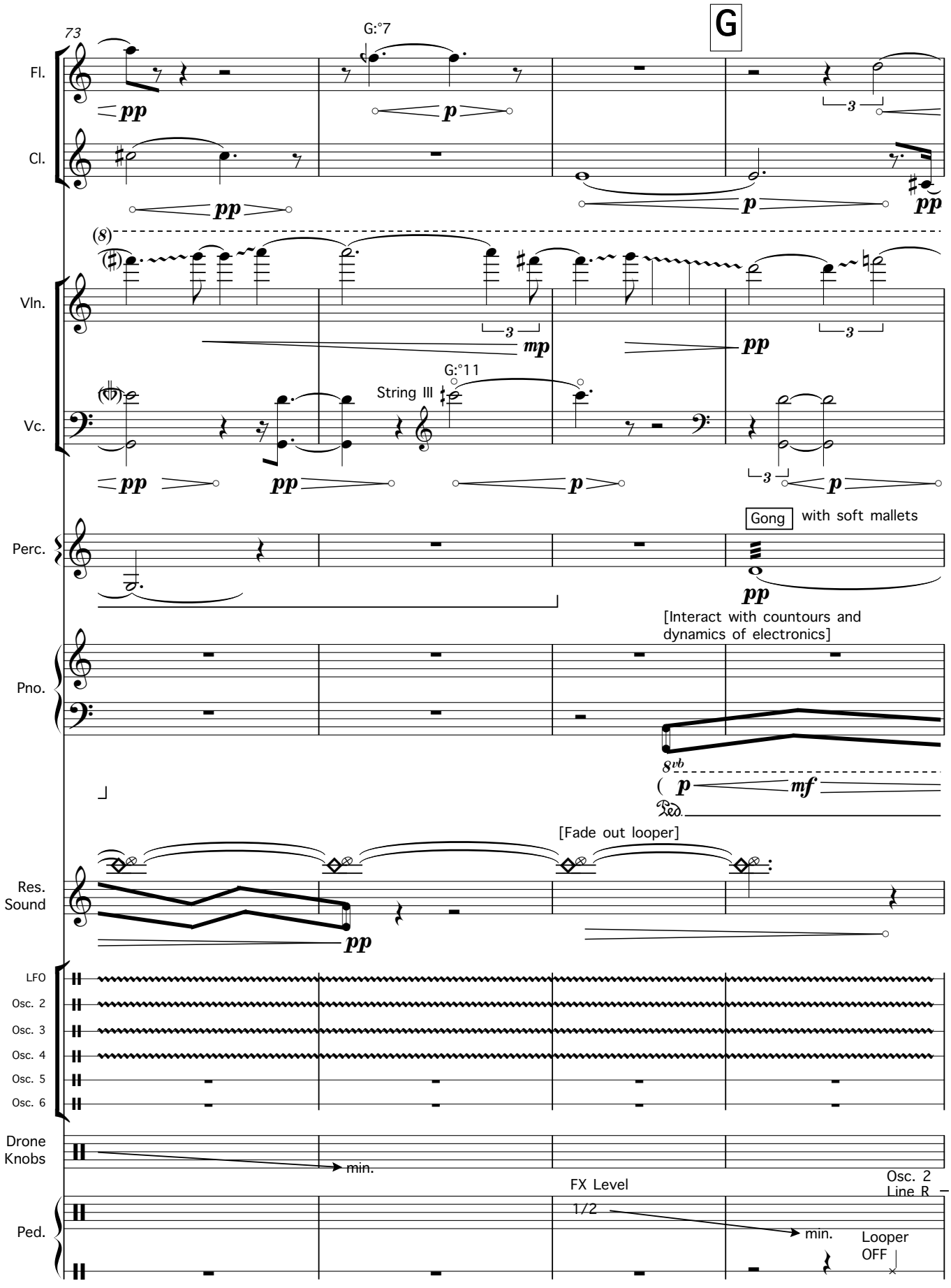

45
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Ped.
8va
mv
norm.
msp
quarter-tone
trill
ricochet
ord.
[Lower frequencies]
Vol. + Filter
1/2
min.
Vol.
min.
Trem.
depth
max.
Octave
(+1, +2, -2)
(-1, -2)

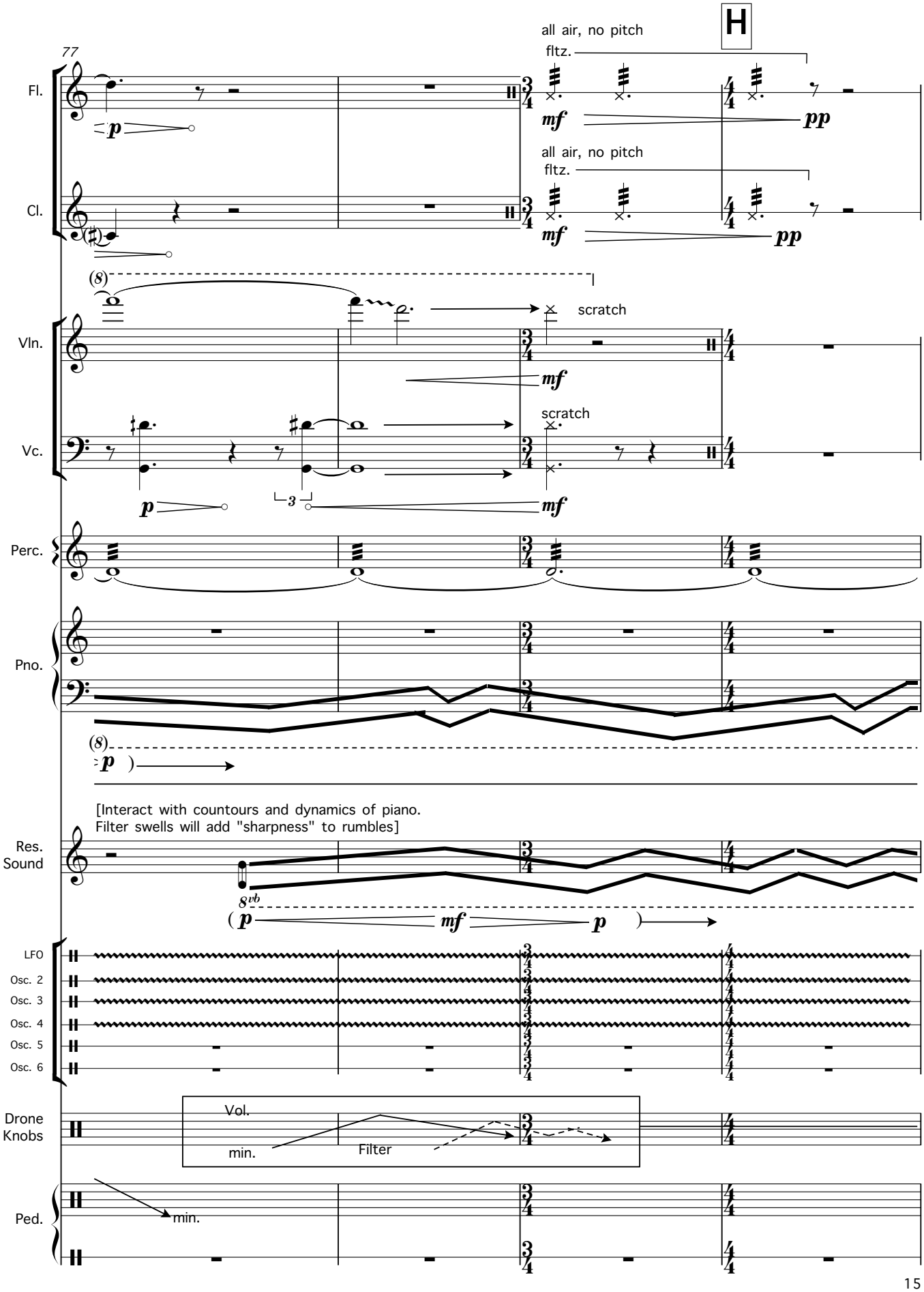

D
52
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Ped.
1/2
full sound
fltz.
mv
Filter
min.
max.
Vol.
Delay
Slap
Loop

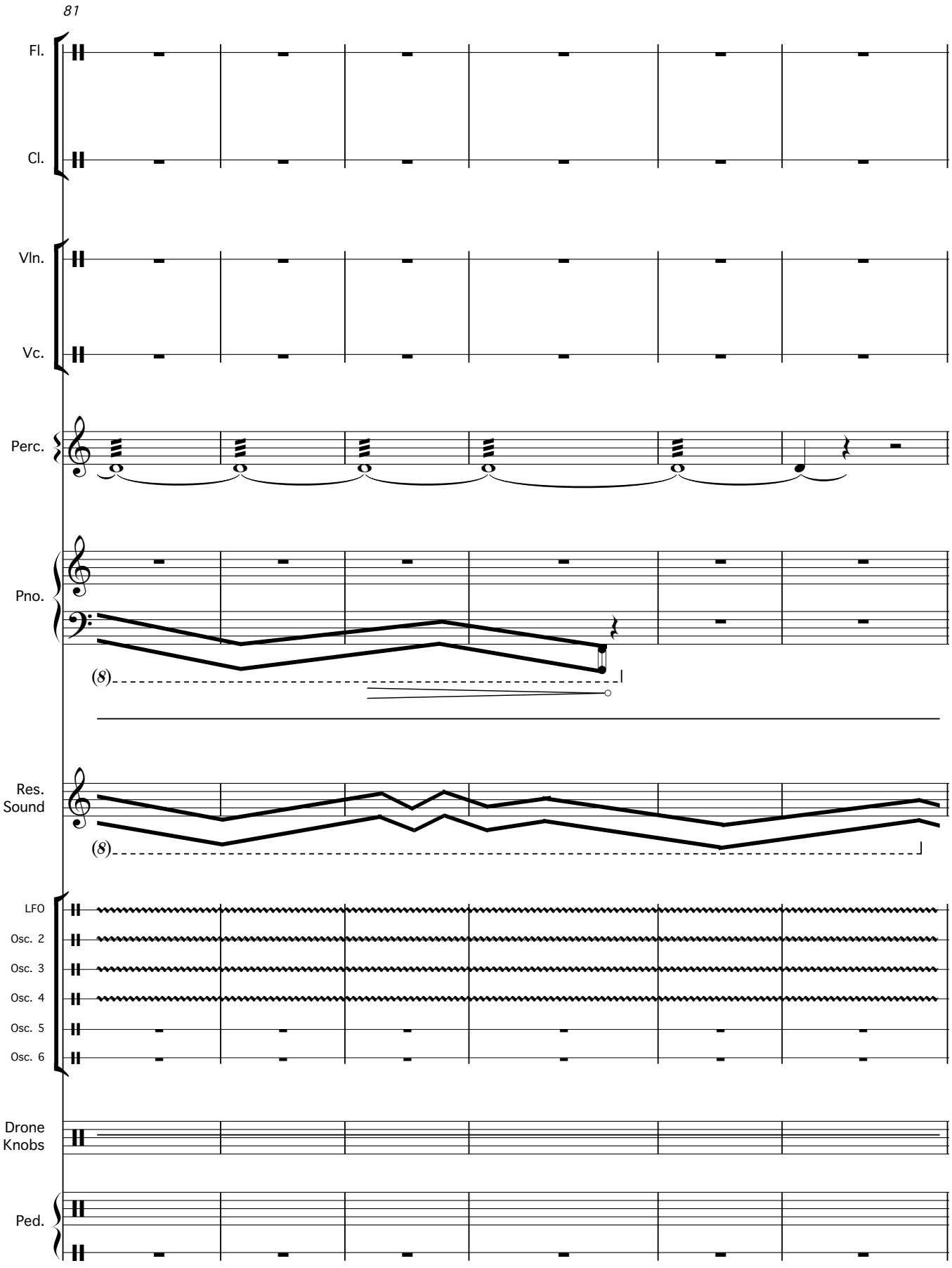

E Loop pedal
8 sec.
57
Fl.
Cl.
p
Vln.
Vc.
bowed
Perc.
p
Ped.
Pno.
[High frequencies will get picked up by loop pedal
resulting in sustained, long tones]
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
1.
2.
3.
Drone
Knobs
Vol.
min.
1/2
Filter
1/4
Vol.
1/2
min.
min.
LFO
max.
Osc. 2
max.
Line
min.
Osc. 3
Osc. 4
Line R
Line L
Power starve
max.
min.
Ped.
Loop
Start
Loop
End
11

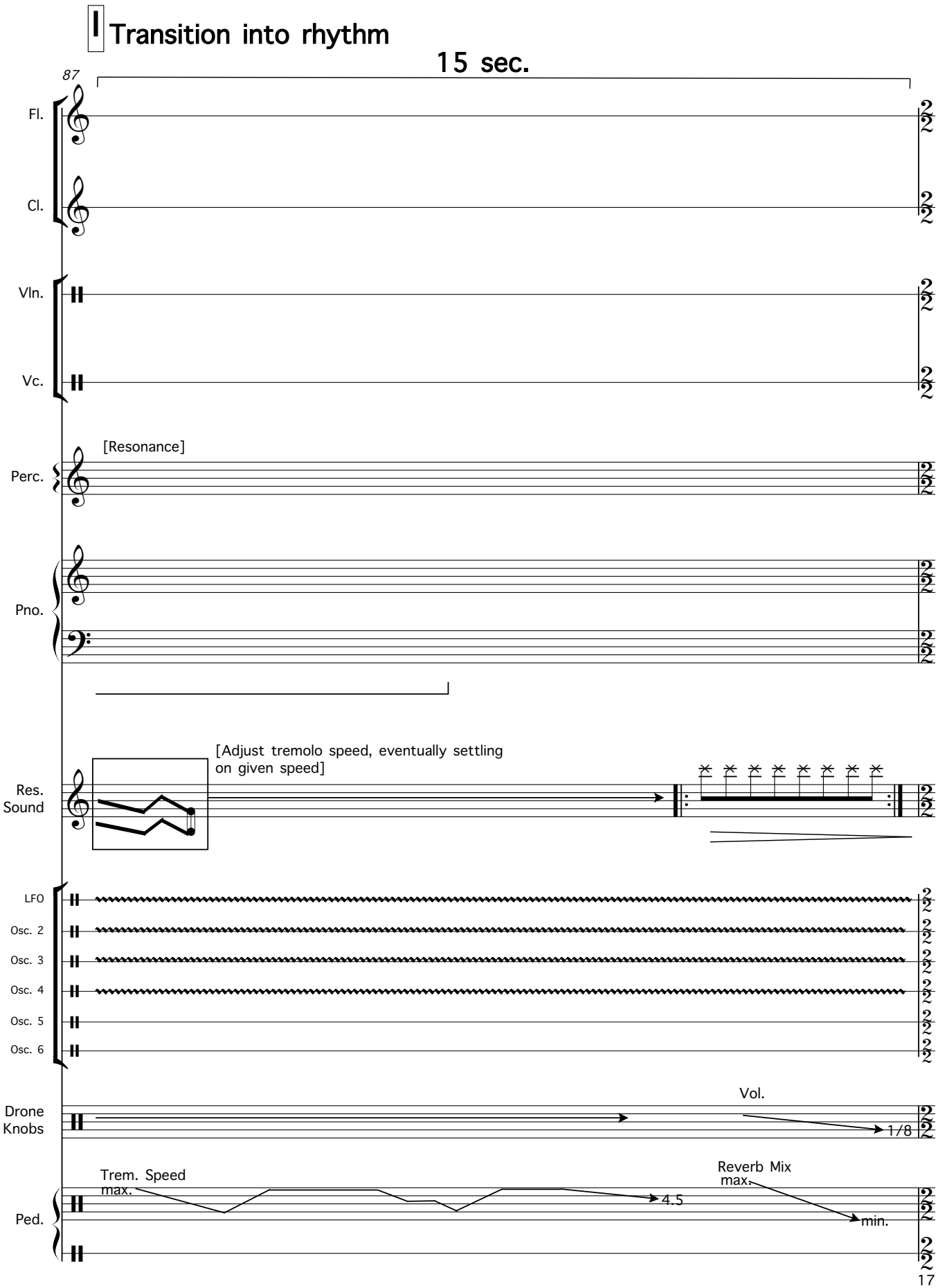

F Slightly faster
♩=80
64
Fl.
Cl.
A:°7
p
very soft, but expressively
mv (until H)
mp
8va
Vln.
pp
3
p
msp, HBP bring
out overtones
Vc.
pp
Perc.
[Play low notes rapidly, staying relatively
within the given range and following the
given contour]
Pno.
8vb
pp
mp
pp
Ped.
[High frequencies remain
at constant volume]
Res.
Sound
pp
mp
pp
pp < p > pp
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Vol.
min.
min.
Vol.
min.
min.
Ped.

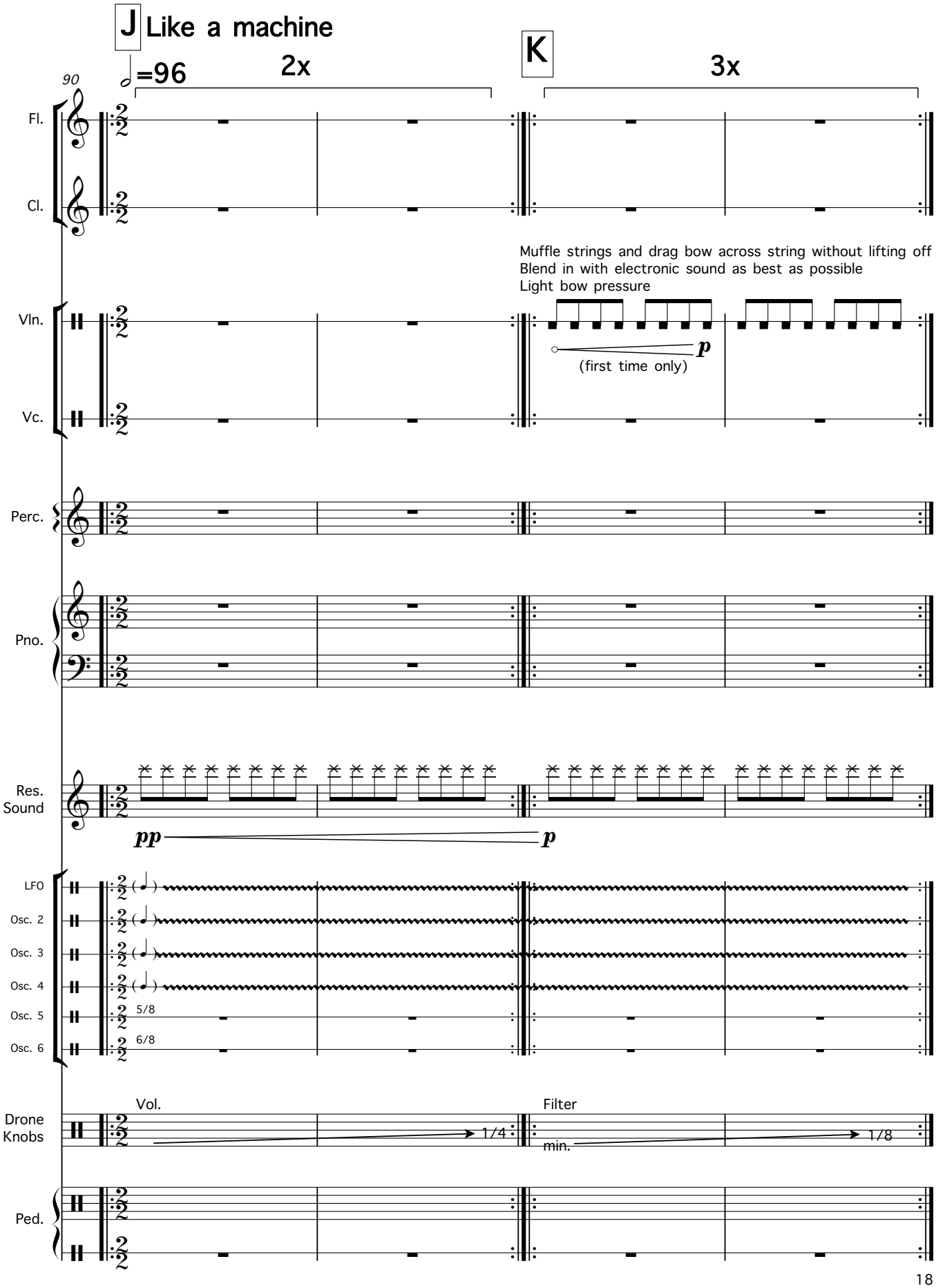

69
G:°7
A:°7
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Vol.
min.
Ped.
pp
p
mf
8vb
Ped.

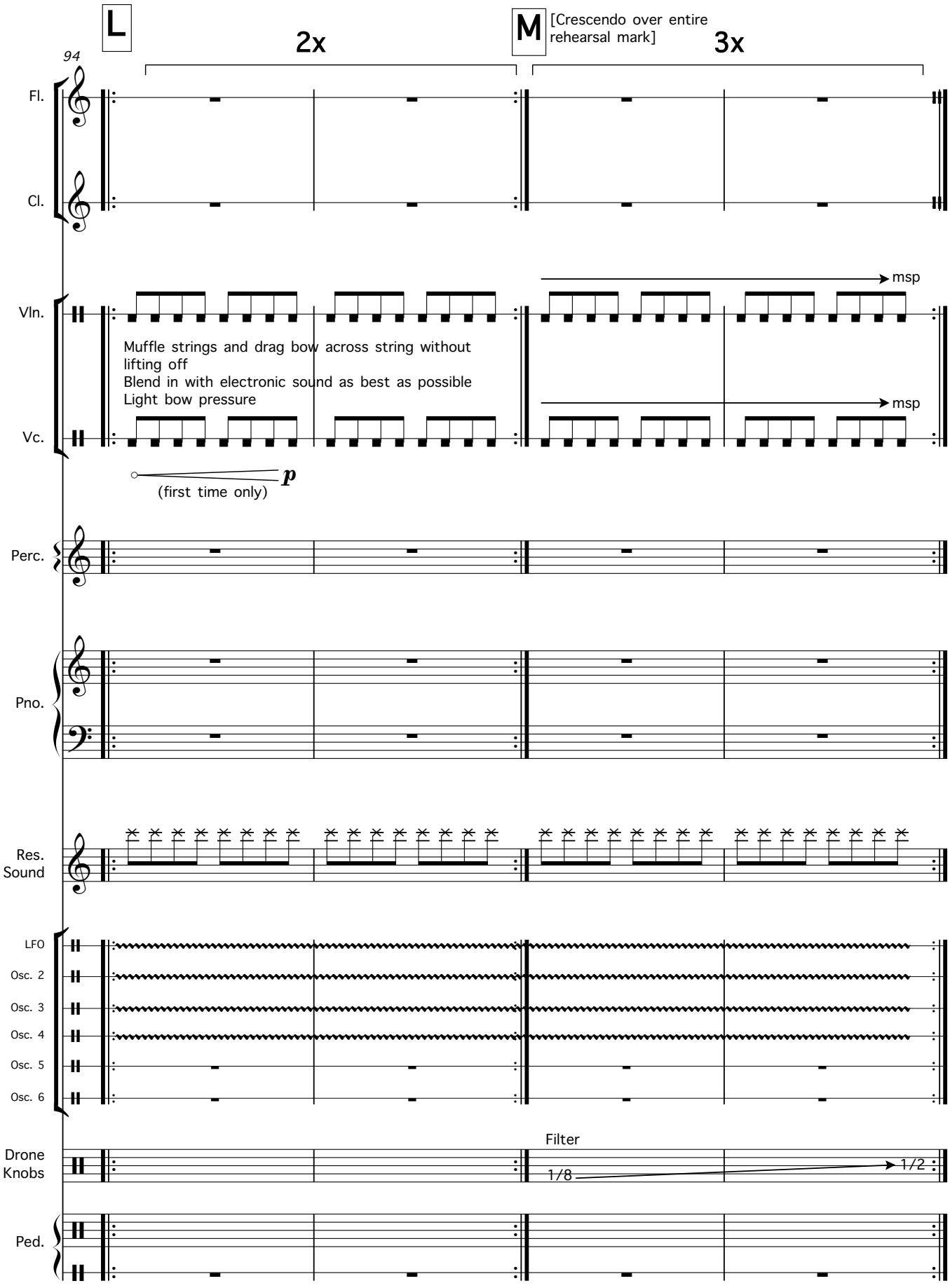

73
G:°7
G
Fl.
Cl.
pp
p
3
(8)
Vln.
mp
Vc.
G:°11
String III
Perc.
Gong
with soft mallets
[Interact with countours and
dynamics of electronics]
Pno.
8vb
mf
Ped.
[Fade out looper]
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
min.
FX Level
1/2
Osc. 2
Line R
Looper
OFF

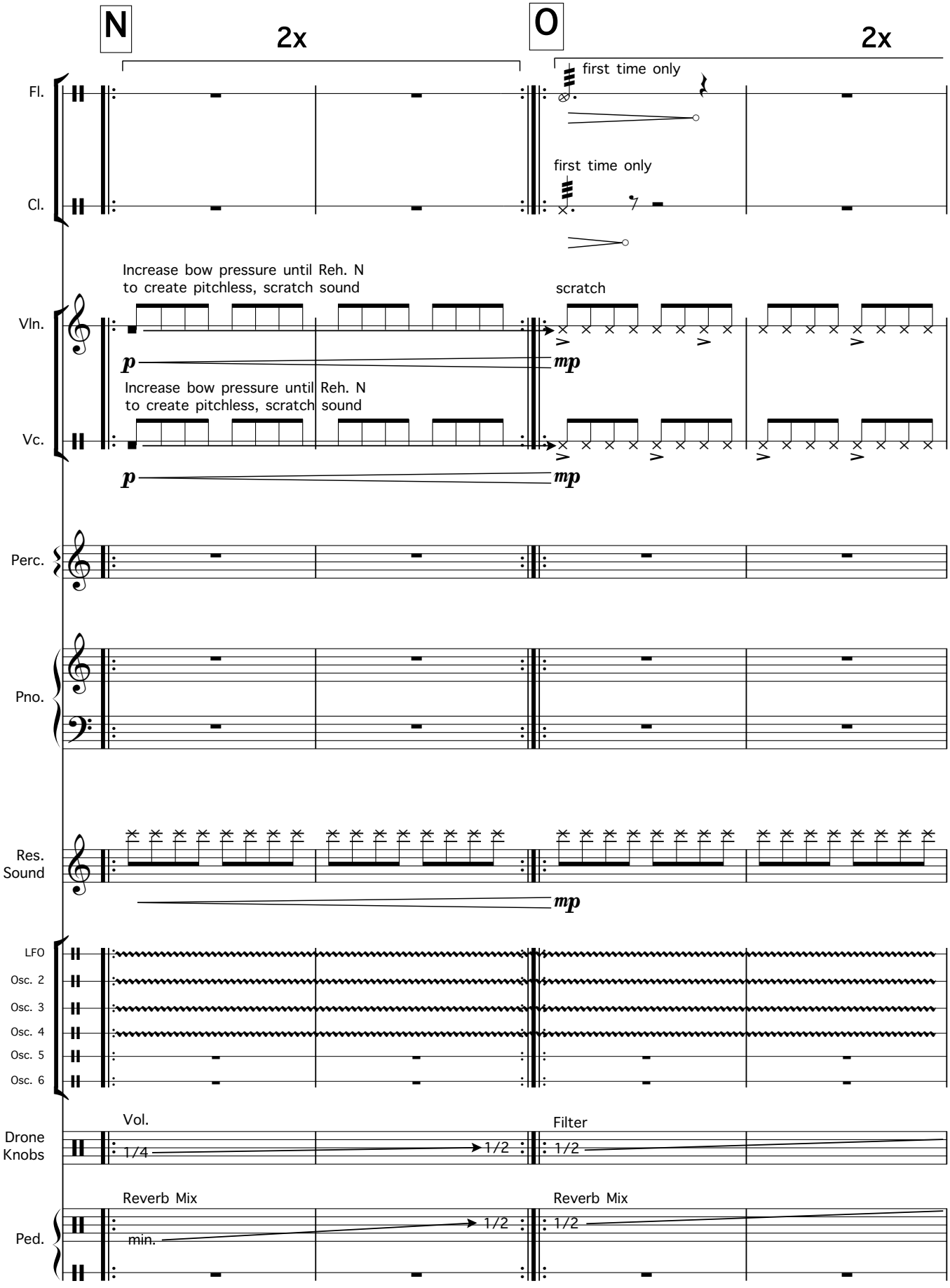

77
H
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Ped.
all air, no pitch
fltz.
mf
pp
scratch
p
3
8vb
[Interact with countours and dynamics of piano.
Filter swells will add "sharpness" to rumbles]
Vol.
min.
Filter

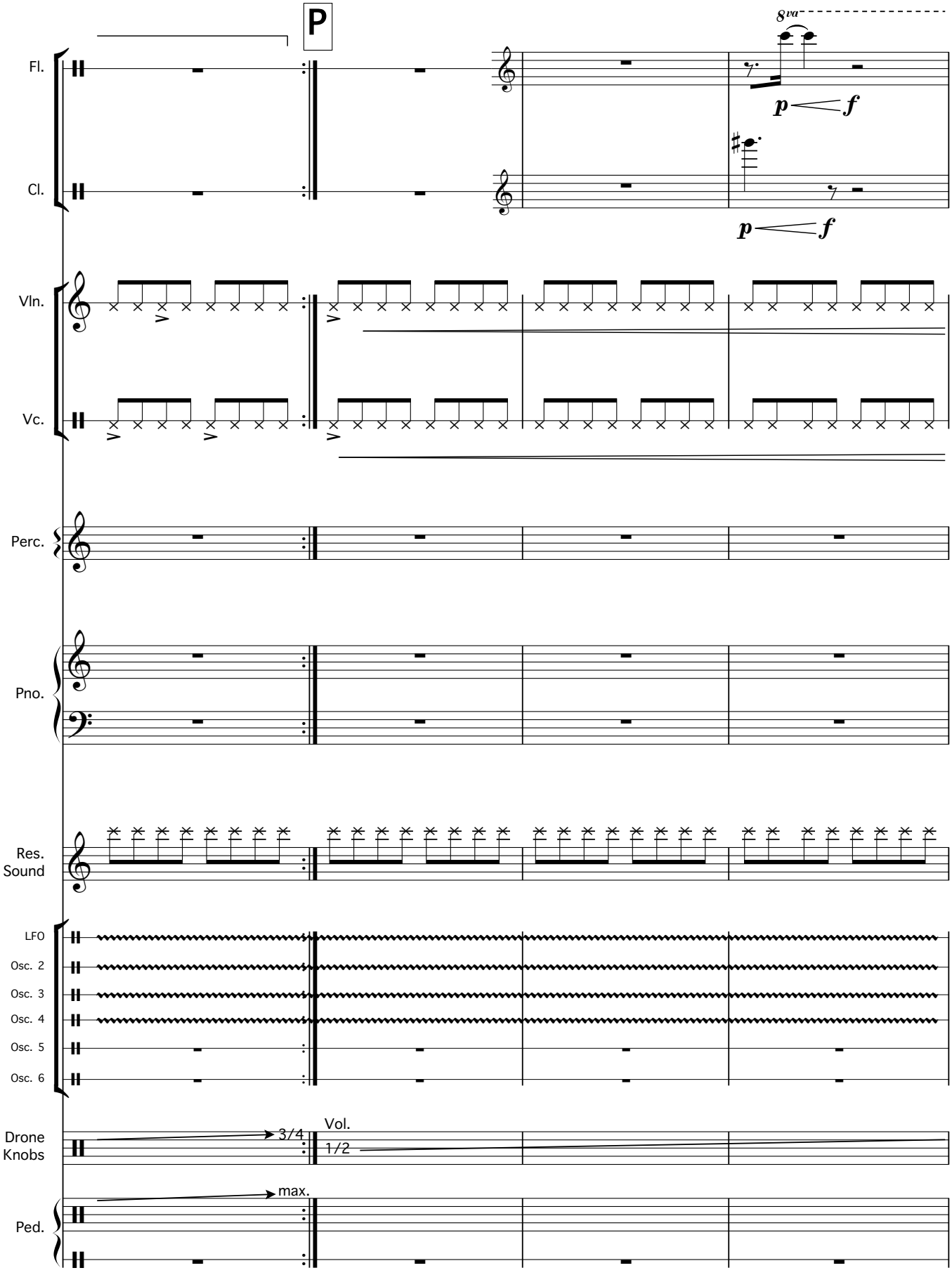

81
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
(8)
Res.
Sound
(8)
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Ped.

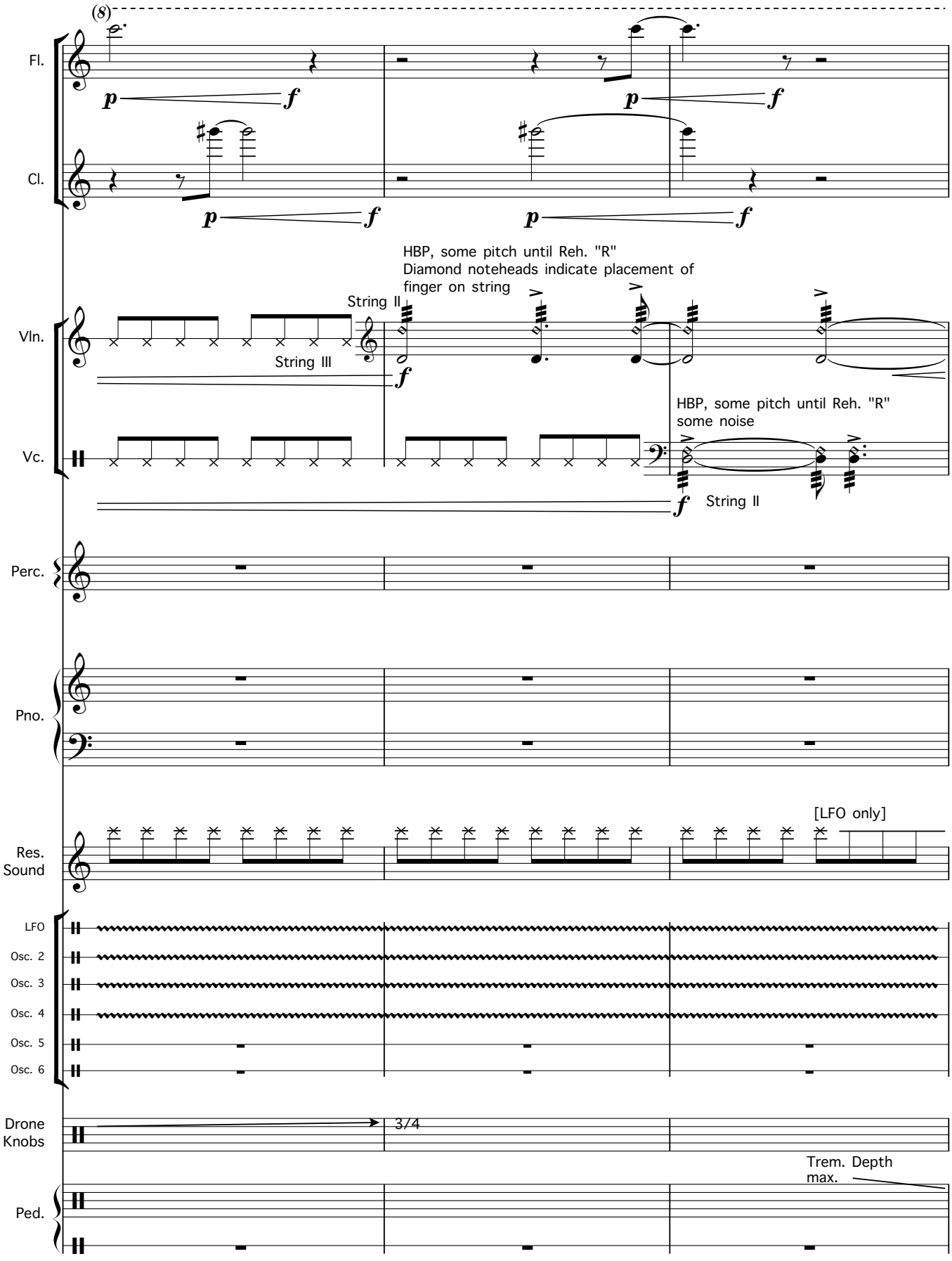

I Transition into rhythm
15 sec.
87
Fl.
Cl.
Vln.
Vc.
[Resonance]
Perc.
Pno.
[Adjust tremolo speed, eventually settling on given speed]
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Vol.
Drone Knobs
1/8
Trem. Speed
max.
4.5
Reverb Mix
max.
min.
Ped.

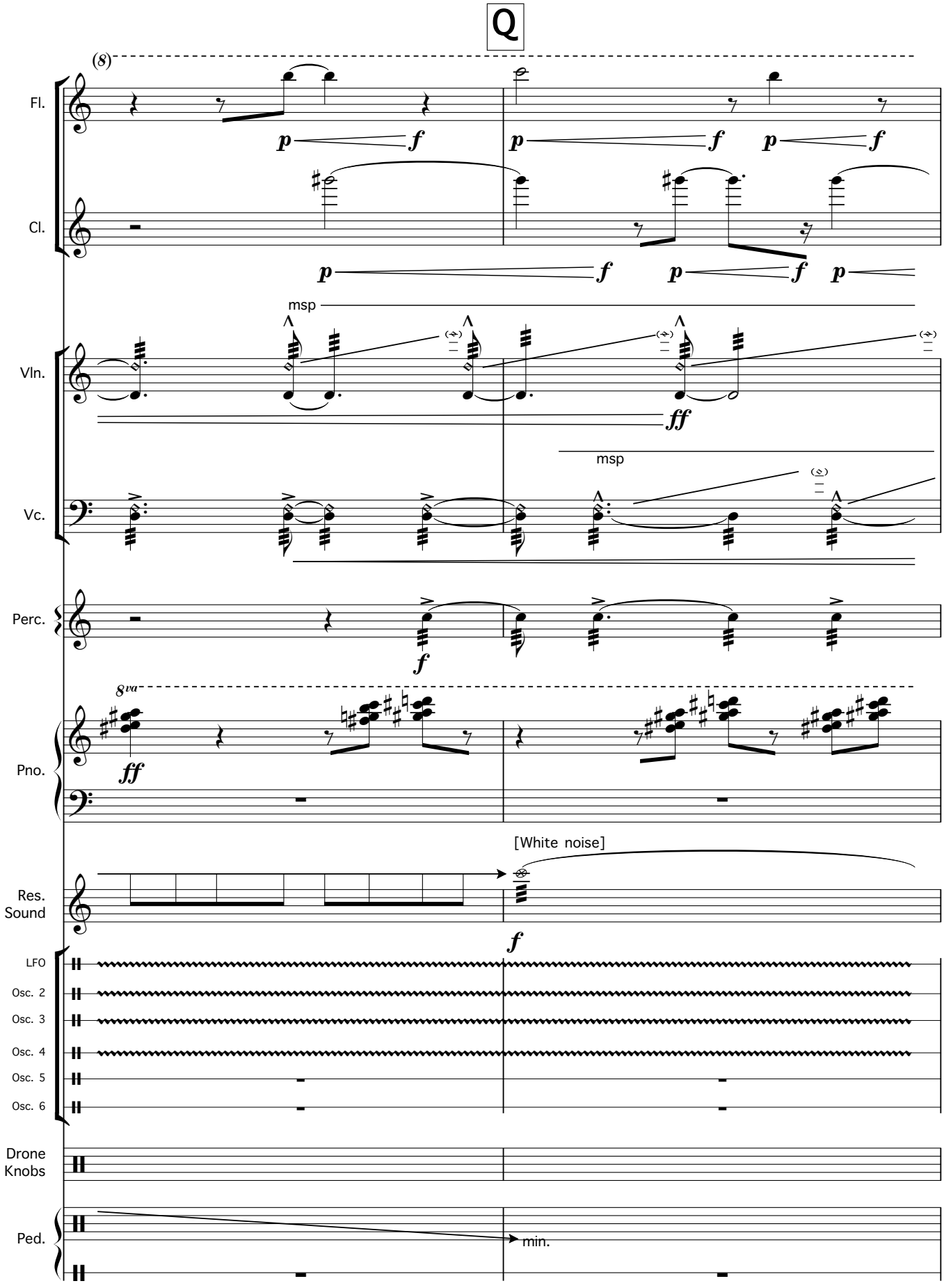

J Like a machine
=96
2x
K
3x
90
Fl.
Cl.
Muffle strings and drag bow across string without lifting off
Blend in with electronic sound as best as possible
Light bow pressure
Vln.
Vc.
p
(first time only)
Perc.
Pno.
Res.
Sound
pp
p
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
5/8
6/8
Drone
Knobs
Vol.
1/4
Filter
min.
1/8
Ped.

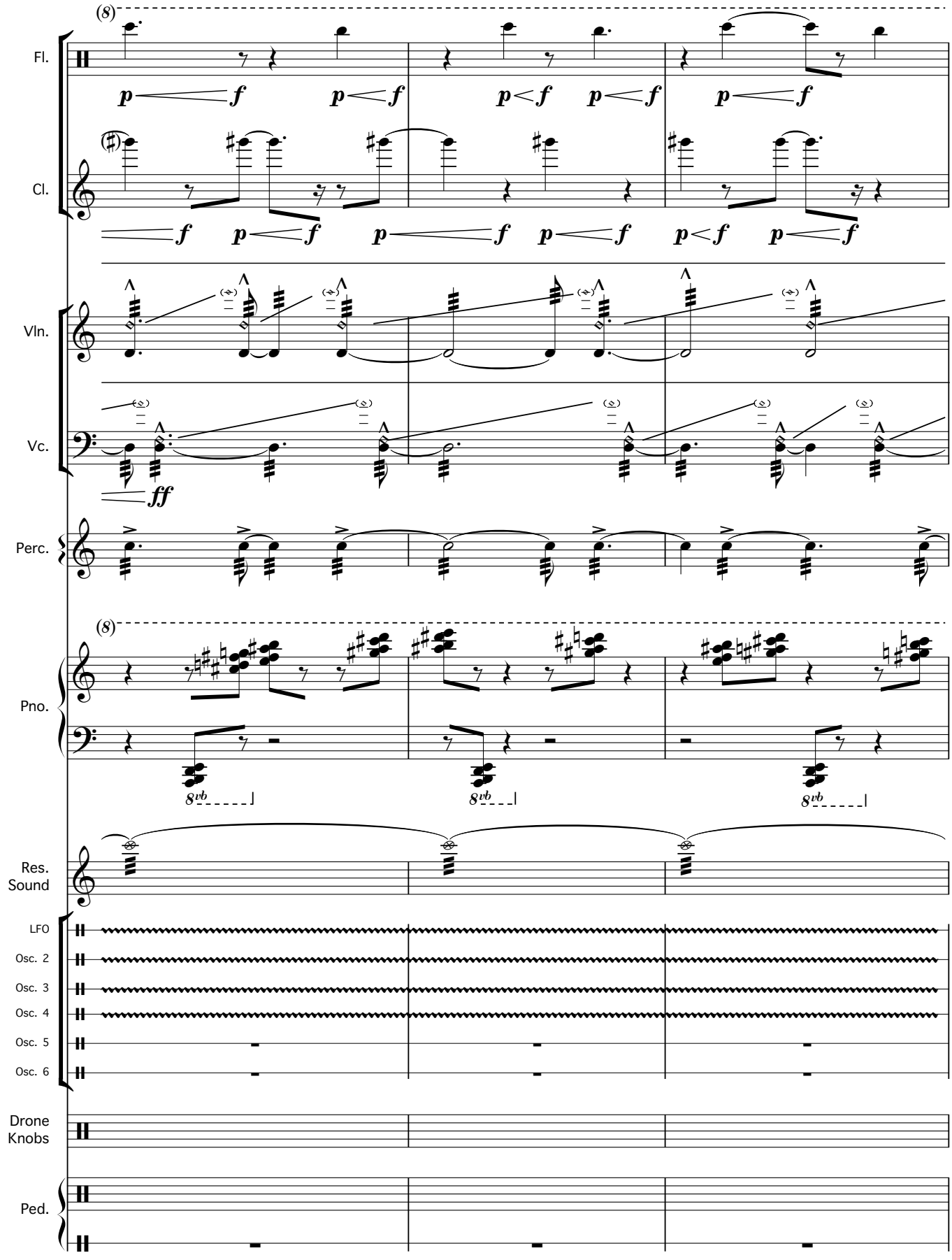

L
2x
M
[Crescendo over entire rehearsal mark]
3x
94
Fl.
Cl.
Vln.
Vc.
msp
msp
Muffle strings and drag bow across string without lifting off
Blend in with electronic sound as best as possible
Light bow pressure
p
(first time only)
Perc.
Pno.
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
Filter
1/8
1/2
Ped.

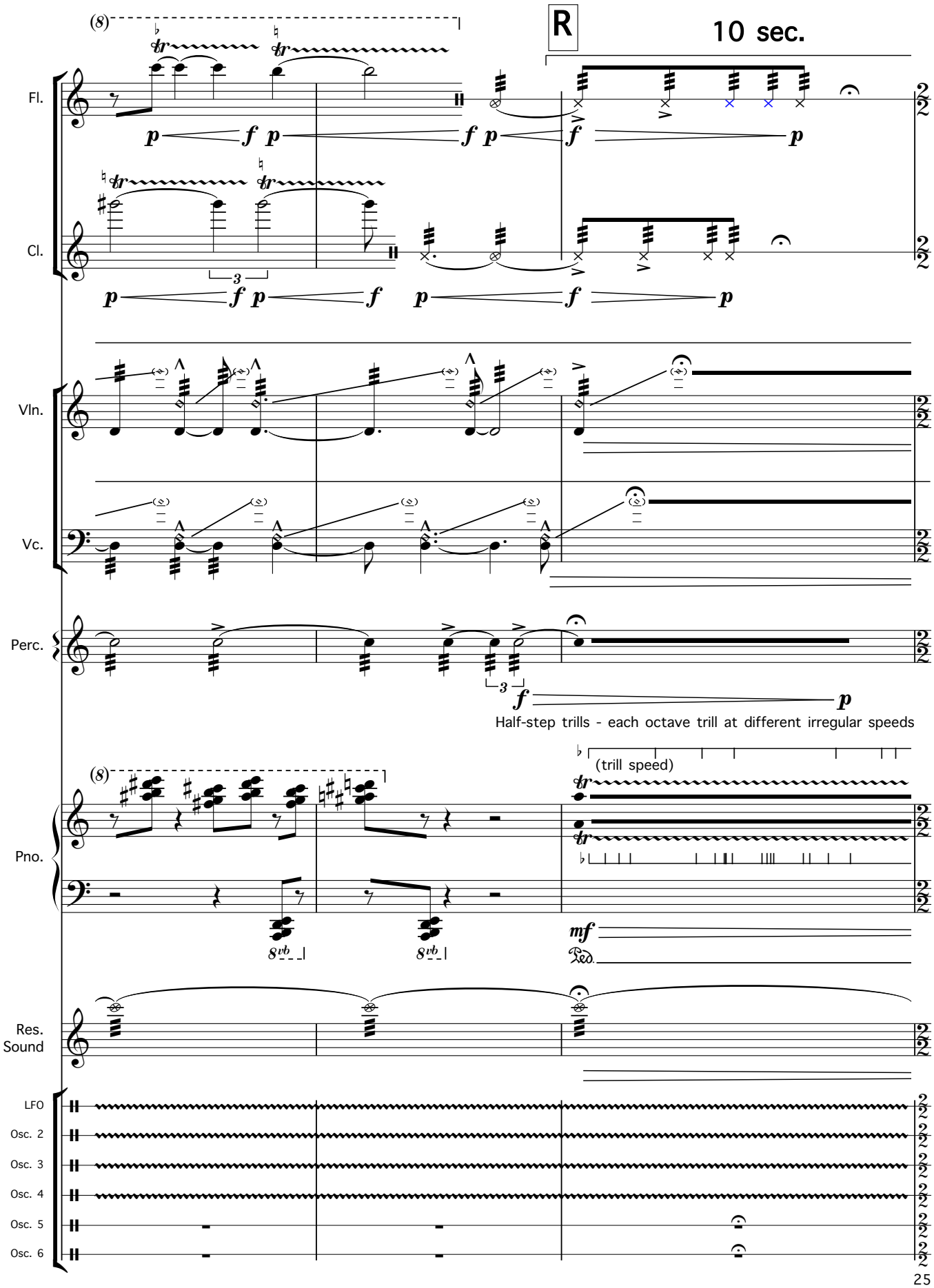

N
2x
O
2x
Fl.
first time only
Cl.
first time only
Increase bow pressure until Reh. N
to create pitchless, scratch sound
scratch
Vln.
p
mp
Increase bow pressure until Reh. N
to create pitchless, scratch sound
Vc.
p
mp
Perc.
Pno.
Res.
Sound
mp
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Vol.
1/4
1/2
Filter
1/2
Reverb Mix
1/2
Reverb Mix
1/2
Ped.
min.

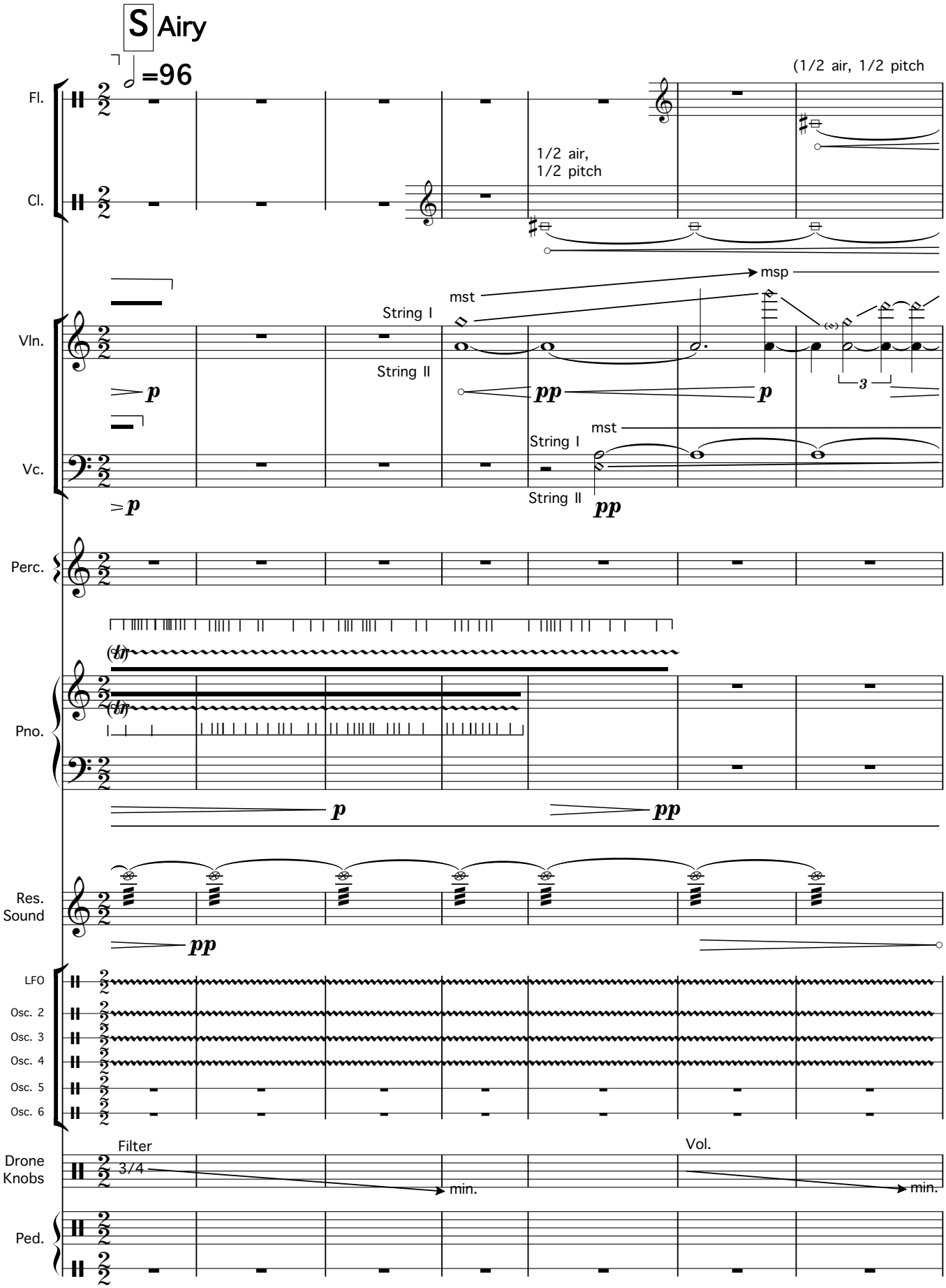

P
8va
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
3/4
Vol.
1/2
Ped.
max.

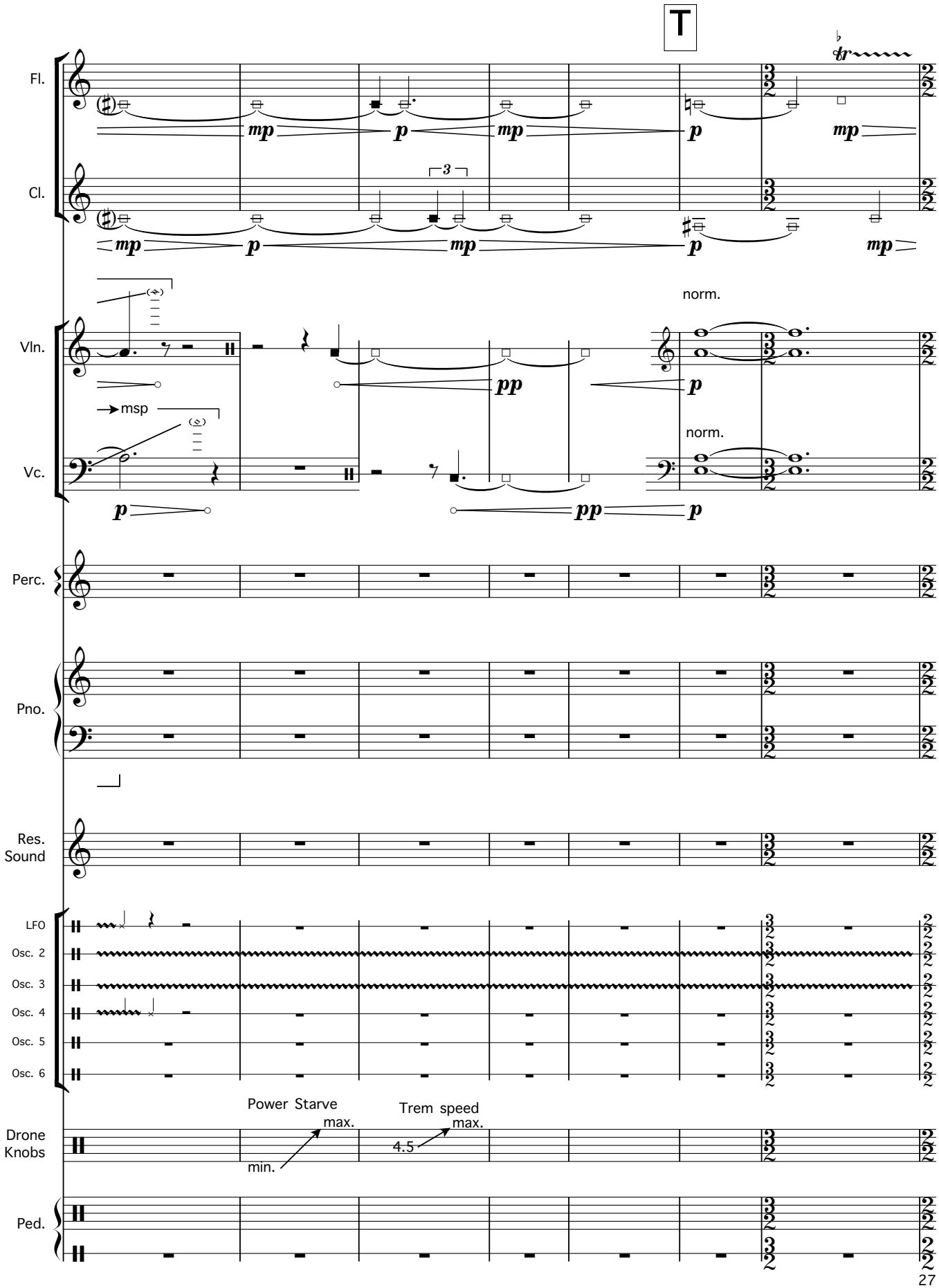

(8)
Fl.
Cl.
HBP, some pitch until Reh. "R"
Diamond noteheads indicate placement of finger on string
String II
Vln.
String III
HBP, some pitch until Reh. "R"
some noise
Vc.
String II
Perc.
Pno.
[LFO only]
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
3/4
Trem. Depth max.
Ped.

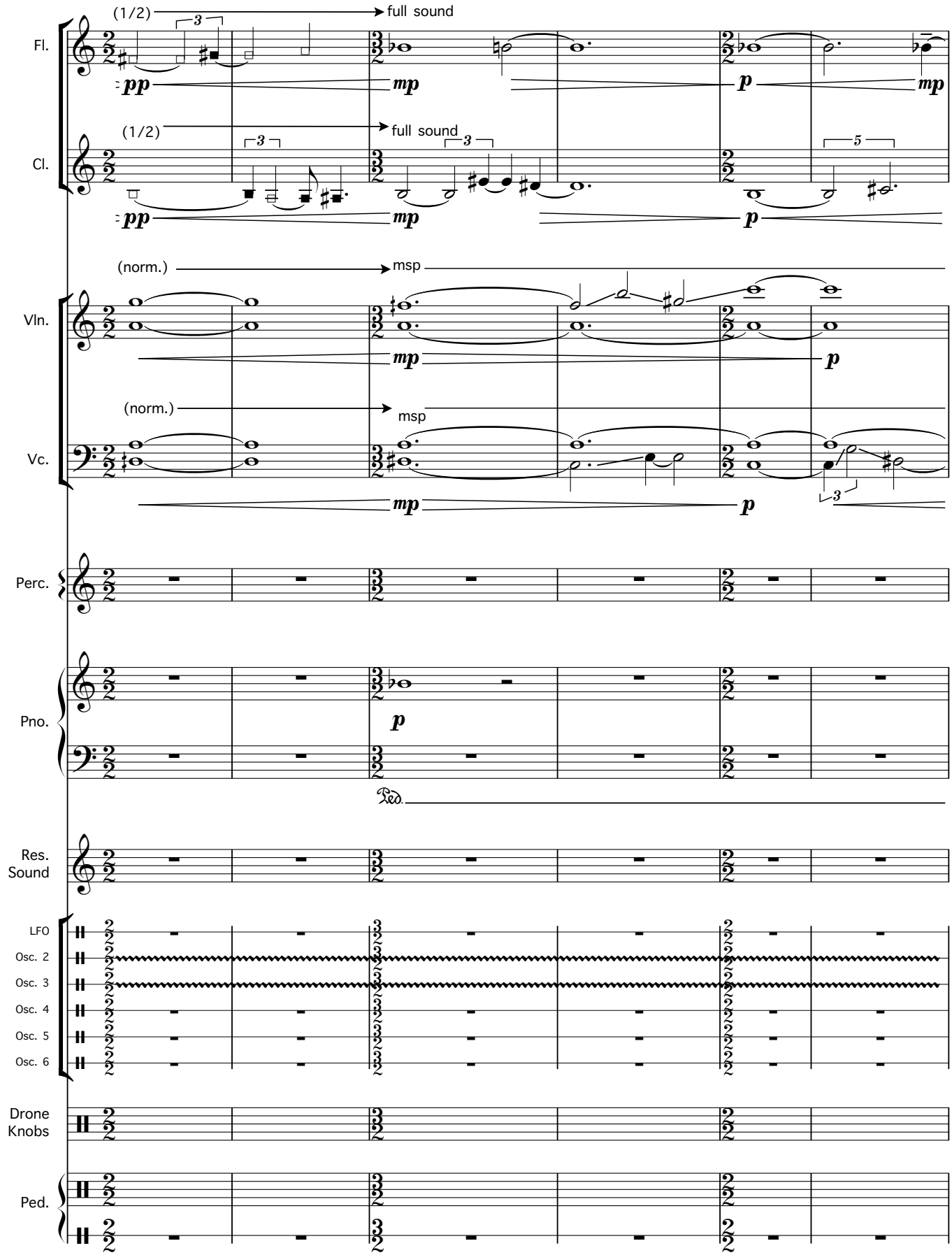

Q
(8)
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
Ped.
p
f
ff
msp
8va
[White noise]
min.

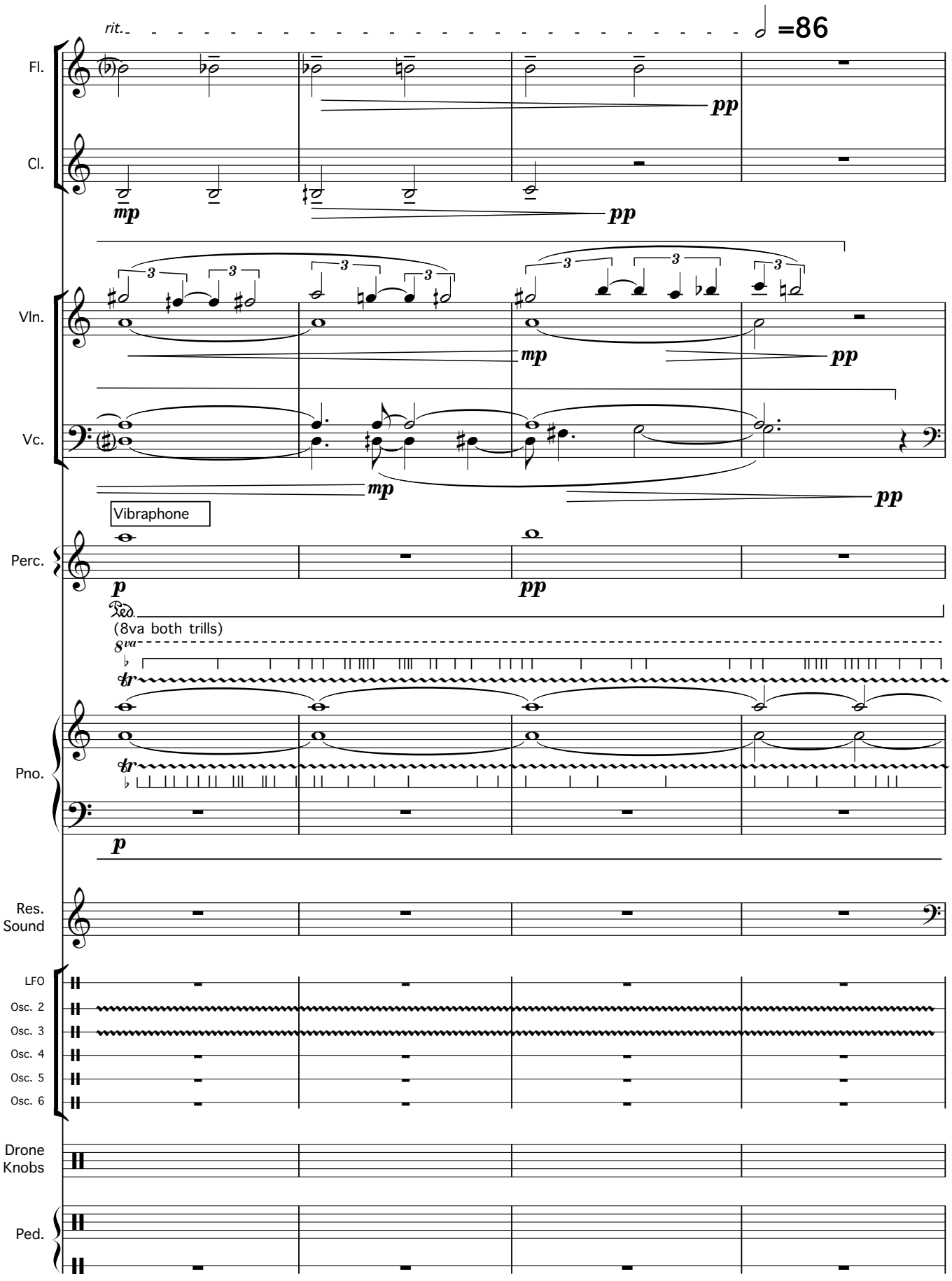

(8)
Fl.
Cl.
Vln.
Vc.
Perc.
(8)
Pno.
8vb
8vb
8vb
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
Ped.

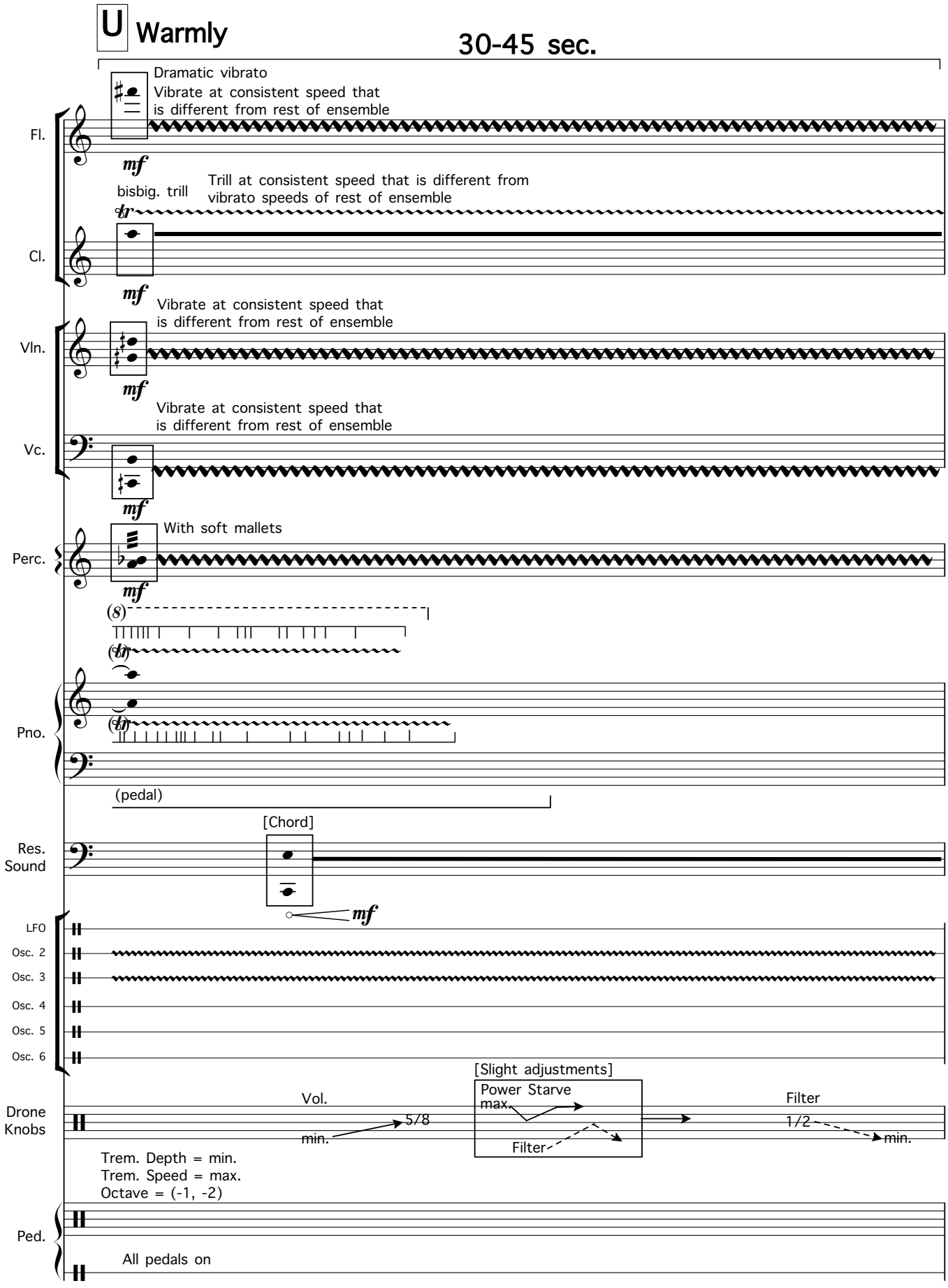

R
10 sec.
Fl.
Cl.
Vln.
Vc.
Perc.
Half-step trills - each octave trill at different irregular speeds
(trill speed)
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6

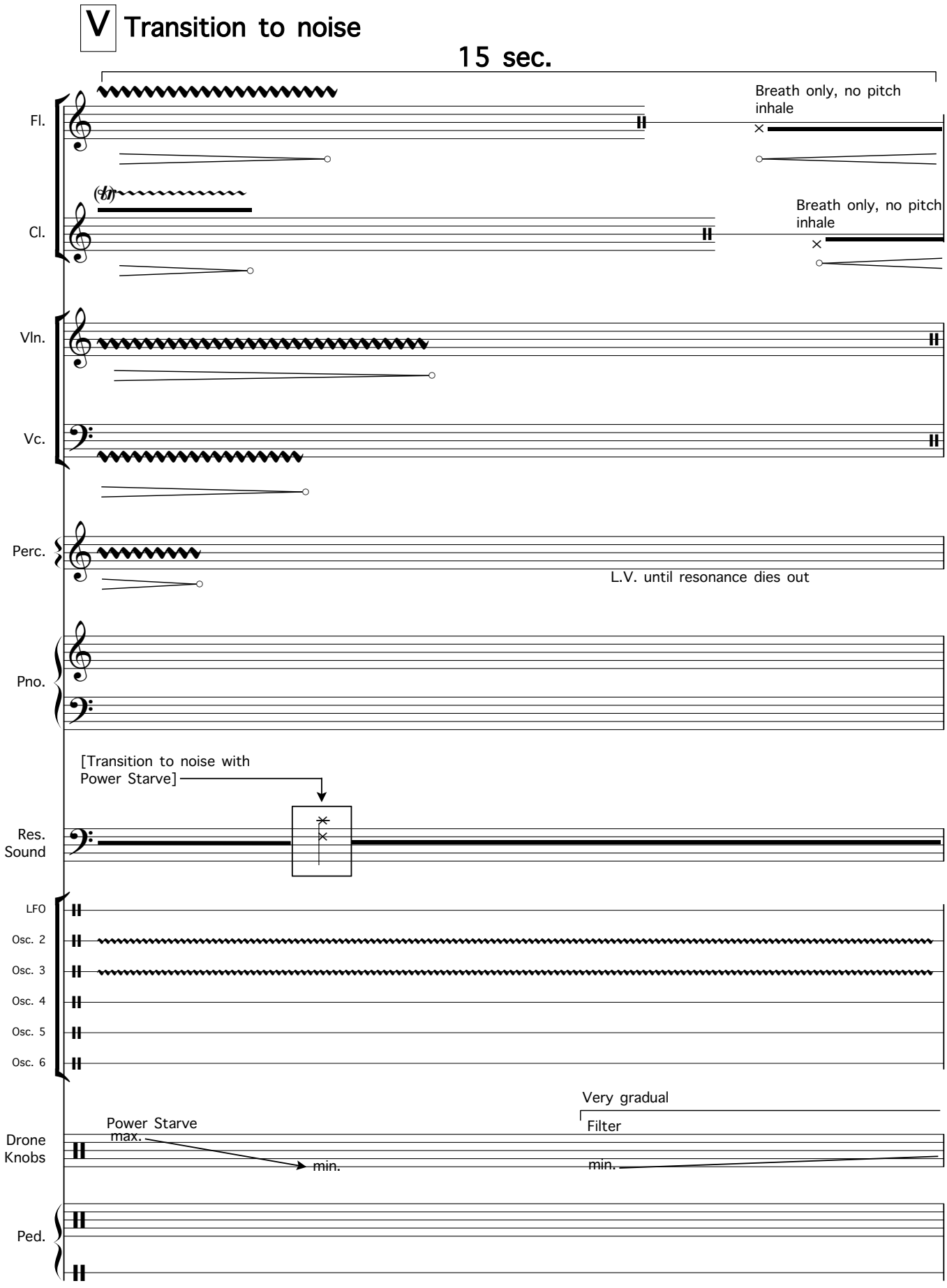

S Airy
=96
(1/2 air, 1/2 pitch
Fl.
Cl.
1/2 air,
1/2 pitch
msp
mst
String I
Vln.
String II
p
pp
p
3
mst
String I
Vc.
String II
p
pp
Perc.
(l.v.)
(l.v.)
Pno.
p
pp
Res.
Sound
pp
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Filter
Vol.
Drone
Knobs
3/4
min.
min.
Ped.

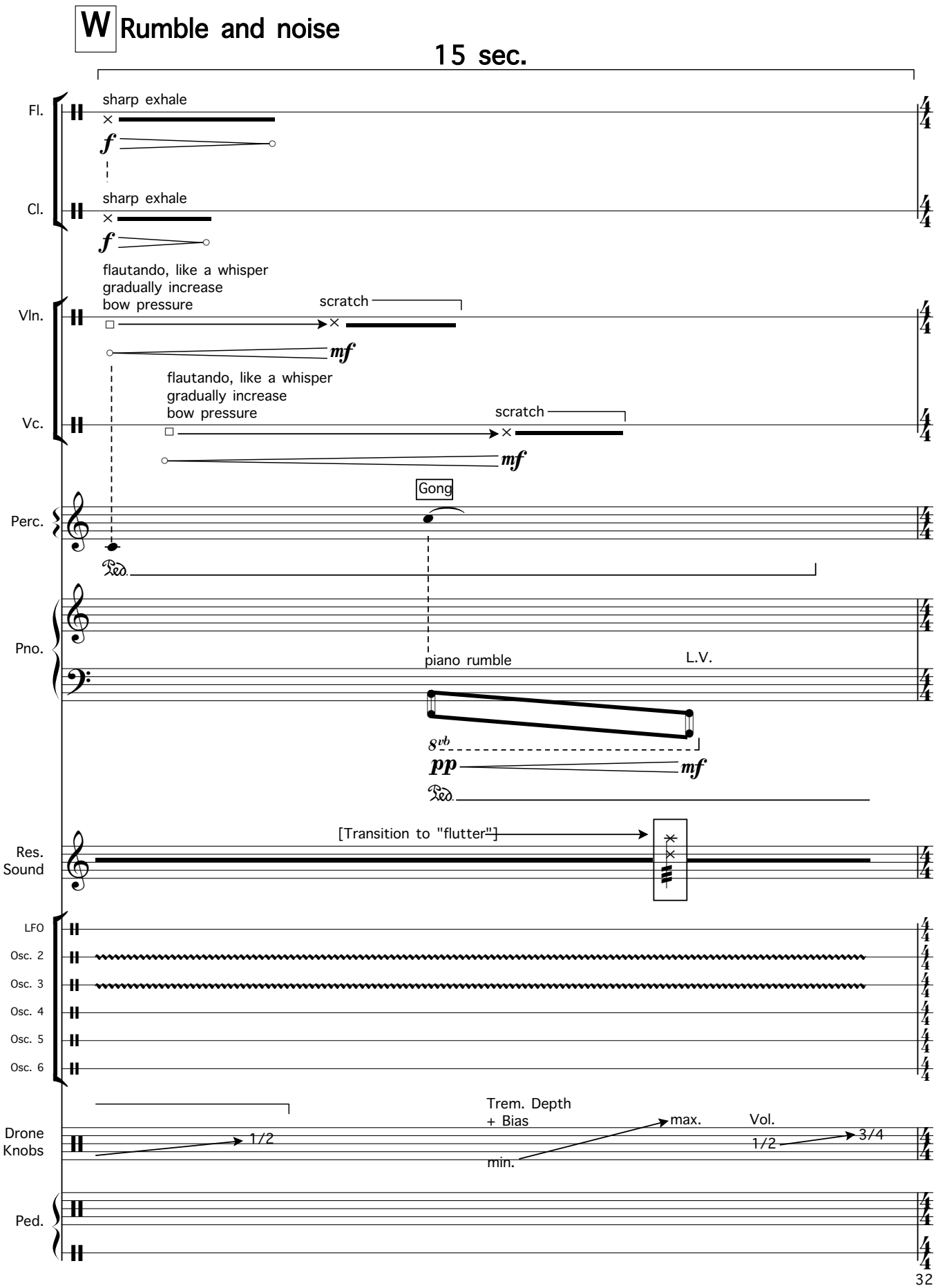

T
Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
Ped.
mp
p
pp
3
norm.
msp
Power Starve
max.
min.
Trem speed
max.
4.5

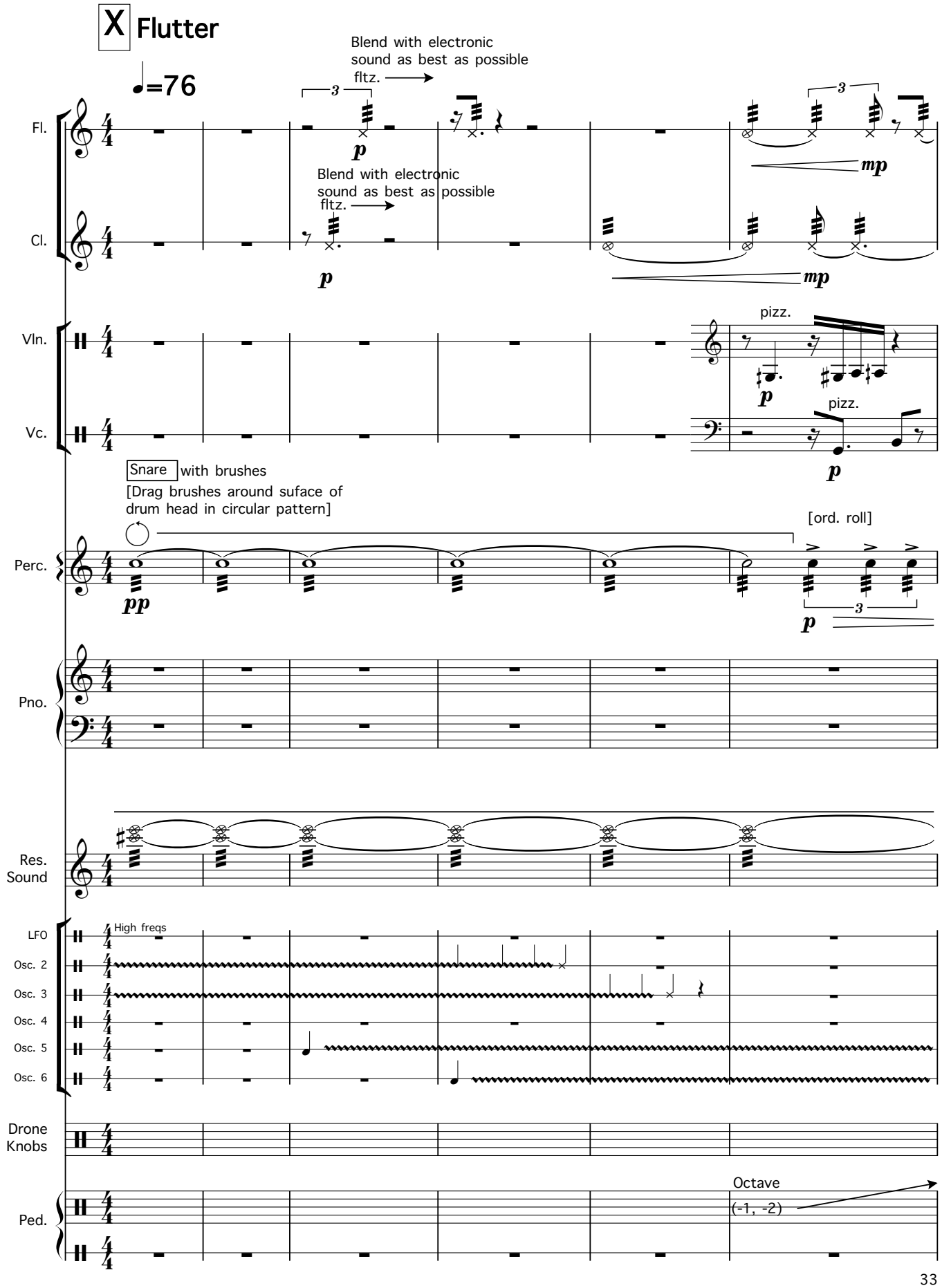

Fl.
Cl.
Vln.
Vc.
Perc.
Pno.
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
Ped.
(1/2)
full sound
(norm.)
msp
pp
mp
p
Ped.

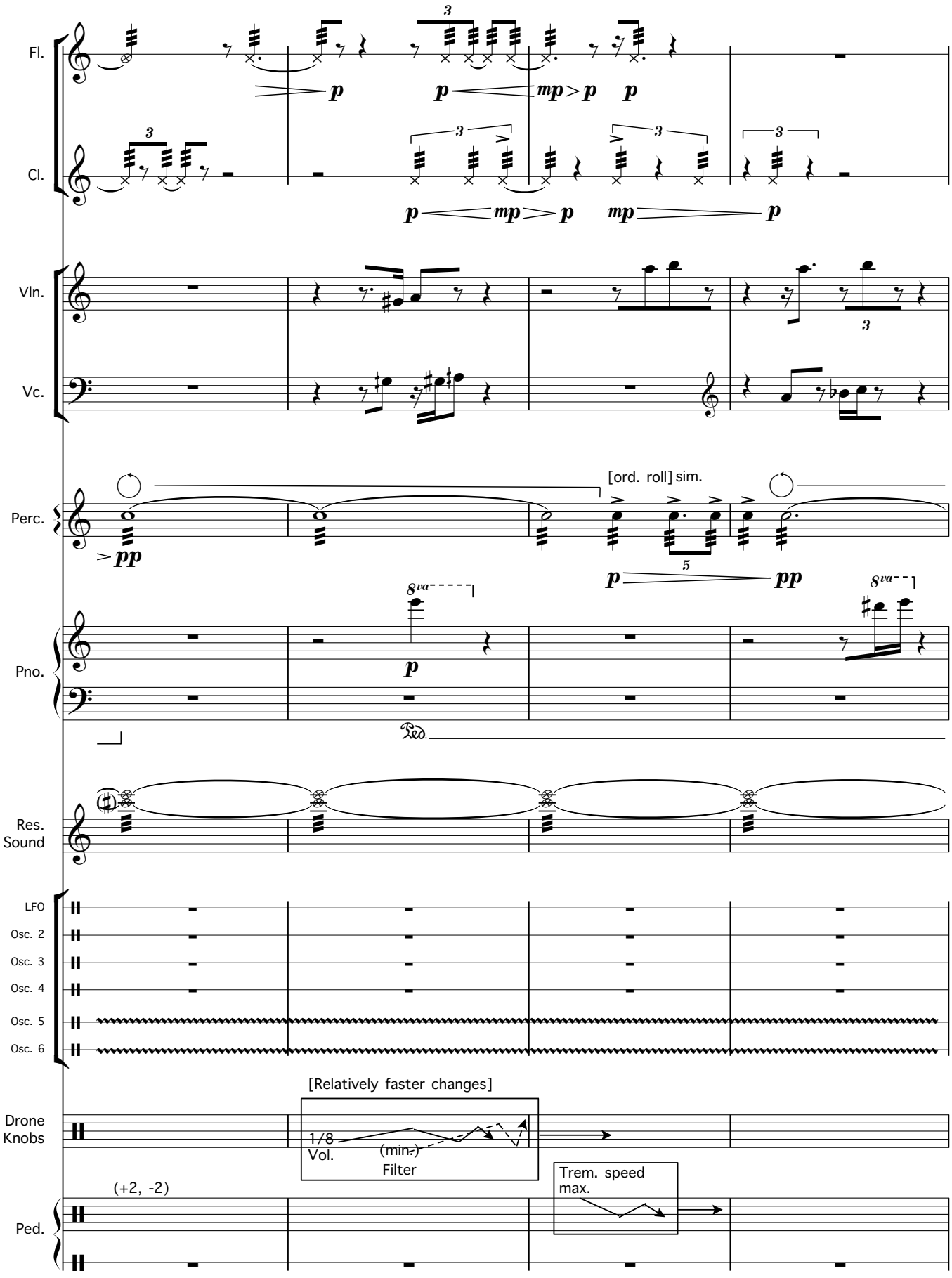

rit.
♩=86
Fl.
Cl.
Vln.
Vc.
Perc.
Vibraphone
Pno.
(8va both trills)
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
Ped.

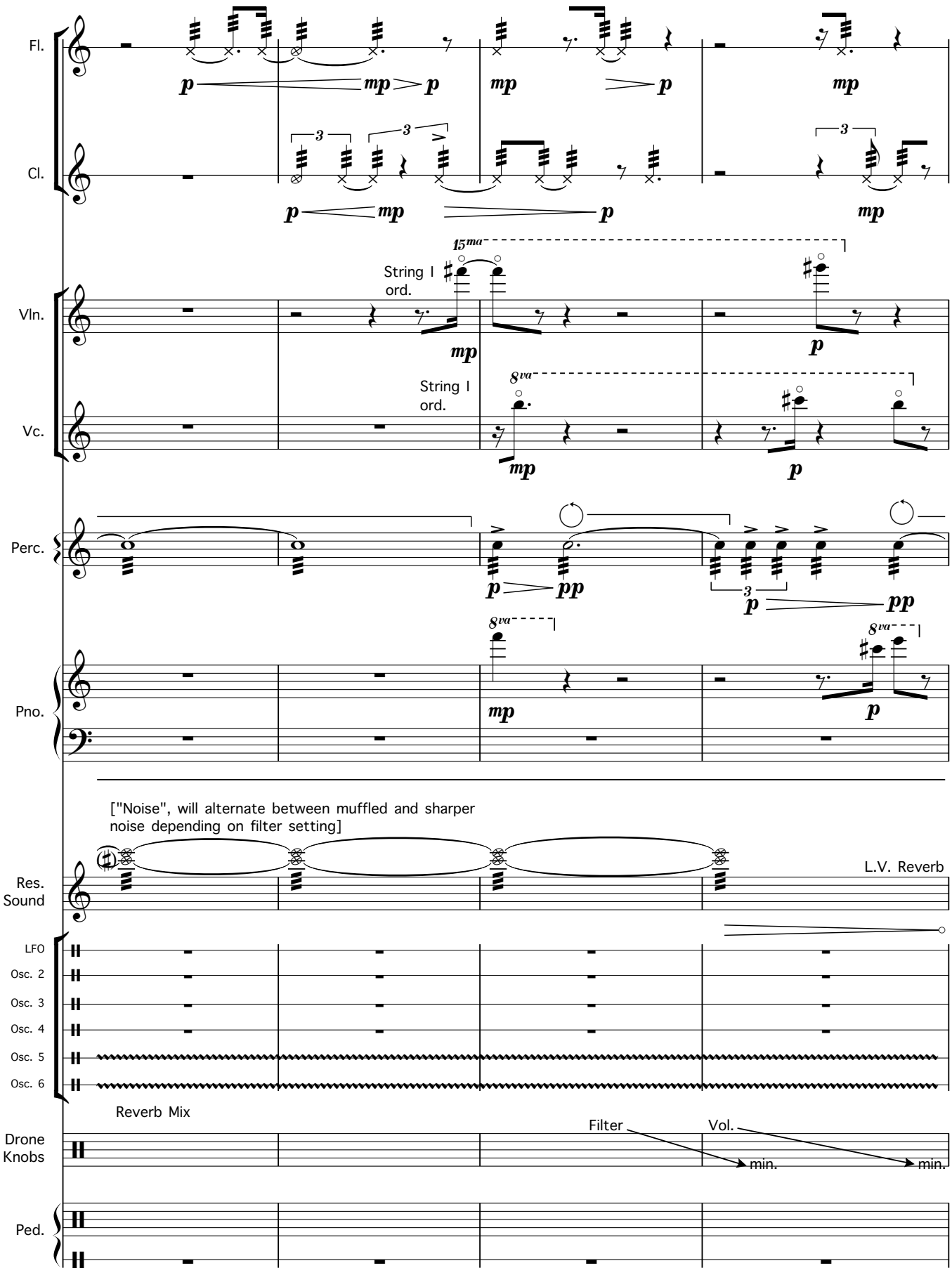

U Warmly
30-45 sec.
Dramatic vibrato
Vibrate at consistent speed that is different from rest of ensemble
Fl.
mf
bisbig. trill
Trill at consistent speed that is different from vibrato speeds of rest of ensemble
Cl.
mf
Vibrate at consistent speed that is different from rest of ensemble
Vln.
mf
Vibrate at consistent speed that is different from rest of ensemble
Vc.
mf
With soft mallets
Perc.
mf
(8)
Pno.
(pedal)
[Chord]
Res. Sound
mf
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
[Slight adjustments]
Drone Knobs
Vol.
min.
5/8
Power Starve
max.
Filter
Filter
1/2
min.
Trem. Depth = min.
Trem. Speed = max.
Octave = (-1, -2)
Ped.
All pedals on

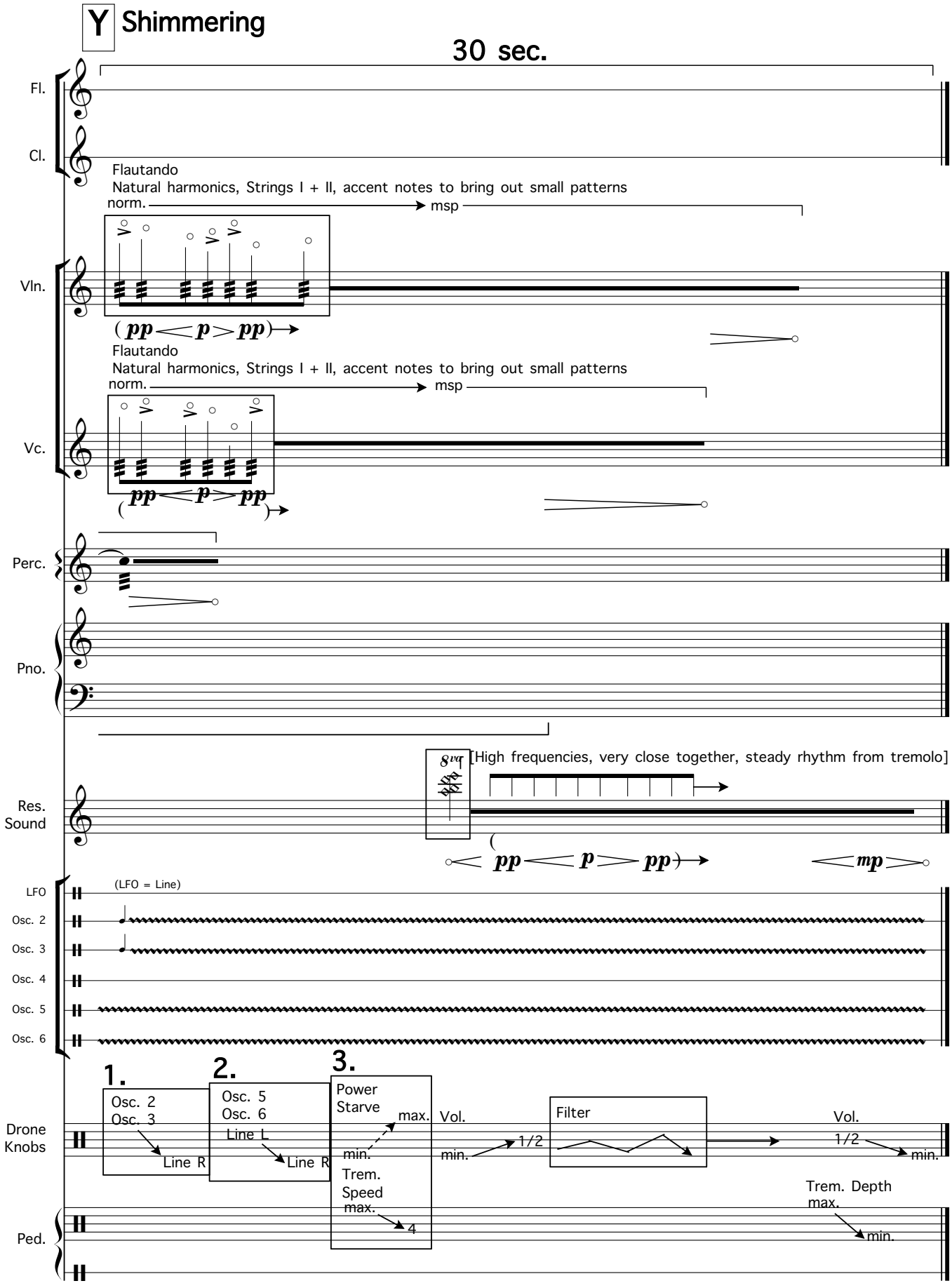

V Transition to noise
15 sec.
Fl.
Breath only, no pitch inhale
Cl.
Breath only, no pitch inhale
Vln.
Vc.
Perc.
L.V. until resonance dies out
Pno.
[Transition to noise with Power Starve]
Res. Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Very gradual
Filter
Power Starve
max.
min.
Drone Knobs
min.
Ped.


W Rumble and noise
15 sec.
Fl.
sharp exhale
f
Cl.
sharp exhale
f
flautando, like a whisper
gradually increase
bow pressure
Vln.
scratch
mf
flautando, like a whisper
gradually increase
bow pressure
Vc.
scratch
mf
Perc.
Gong
Ped.
Pno.
piano rumble
L.V.
8vb
pp
mf
Ped.
Res.
Sound
[Transition to "flutter"]
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone
Knobs
1/2
Trem. Depth
+ Bias
max.
min.
Vol.
1/2
3/4
Ped.


X Flutter
♩=76
Blend with electronic sound as best as possible
fltz.
Fl.
Cl.
p
mp
Vln.
Vc.
pizz.
Snare with brushes
[Drag brushes around suface of drum head in circular pattern]
[ord. roll]
Perc.
pp
Pno.
Res. Sound
LFO
High freqs
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Drone Knobs
Octave
(-1, -2)
Ped.


Fl.
Cl.
Vln.
Vc.
Perc.
[ord. roll] sim.
Pno.
Res.
Sound
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
[Relatively faster changes]
Drone
Knobs
1/8
Vol.
(min.)
Filter
Trem. speed
max.
(+2, -2)
Ped.


Fl.
Cl.
Vln.
String I
ord.
Vc.
String I
ord.
Perc.
Pno.
["Noise", will alternate between muffled and sharper noise depending on filter setting]
Res.
Sound
L.V. Reverb
LFO
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
Reverb Mix
Drone
Knobs
Filter
min.
Vol.
min.
Ped.


Y Shimmering
30 sec.
Fl.
Cl.
Flautando
Natural harmonics, Strings I + II, accent notes to bring out small patterns
norm.
msp
Vln.
(pp < p > pp)
Flautando
Natural harmonics, Strings I + II, accent notes to bring out small patterns
norm.
msp
Vc.
pp < p > pp
Perc.
Pno.
8va
[High frequencies, very close together, steady rhythm from tremolo]
Res. Sound
(pp < p > pp) < mp >
LFO
(LFO = Line)
Osc. 2
Osc. 3
Osc. 4
Osc. 5
Osc. 6
1.
Osc. 2
Osc. 3
Line R
2.
Osc. 5
Osc. 6
Line L
Line R
3.
Power Starve
max.
min.
Trem. Speed
max.
4
Vol.
min.
1/2
Filter
Vol.
1/2
min.
Trem. Depth
max.
min.
Drone Knobs
Ped.