

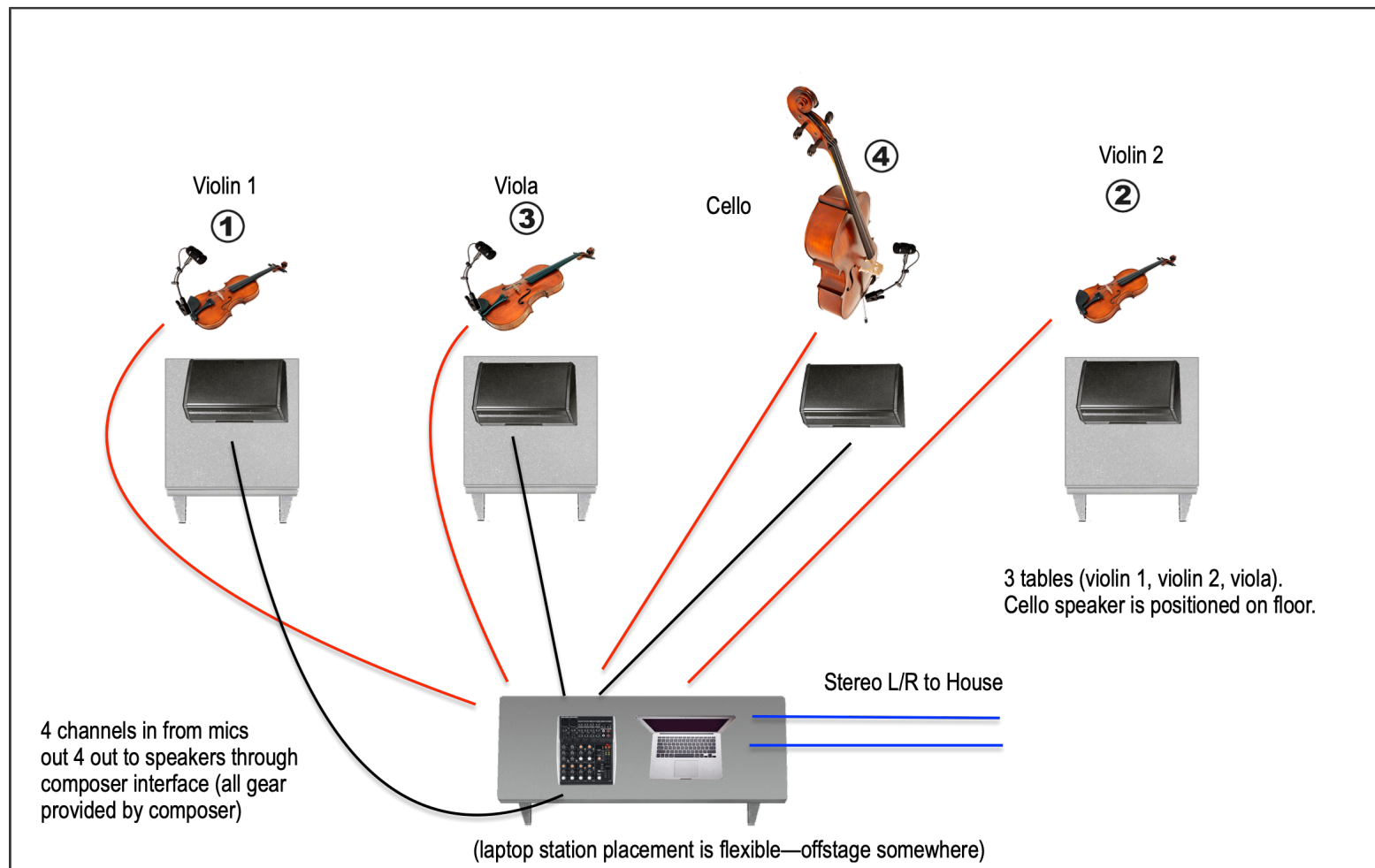
# *inside-outside*

*(outside-inside-outside)*

written for Isaura String Quartet and the LA Philharmonic's Noon To Midnight 2024 Festival

John Eagle, 2024

The quartet is arranged in a line or a slightly convex curve facing the audience. Violins and viola have a stand or table on which is rested a speaker facing upright (a mount allows the back of the speaker to lie with the cable connections on the bottom). Cello has the same speaker setup, but on the ground without a stand. Each instrument is equipped with a small electret microphone clipped inside the F-hole (a standard lavalier clip may be used with rubber or fabric coating to prevent any damage to the instrument). If this is not possible, a standard DPA microphone may be used with the microphone positioned as close to the F-hole as possible.



Field recordings:

1. an outdoor recording made at the cemetery overlooking Salem Covenant Church in Oakland, NE. The microphones were positioned facing directly into mature corn stalks before harvest (early September), which generate a lot of sound in the wind.
2. the ambient sound of the Salem Covenant Church sanctuary.
3. individual piano tones recorded in the same location in the church.

A computer processes the mic signals from the individual instrument mics and either passes the signal back to the same speaker and thus allow audio feedback (with a limiter applied to contain feedback) or a short sample is recorded and analyzed for frequency content which is passed onto a synthesizer which is played back in the main mix.

Performers are asked to operate in two modes beyond conventional playing:

(1) Audio Feedback Mode:

- In this mode the microphones are passing a live signal to the speakers enabling live audio feedback. Players manipulate their instruments and the attached microphone in relation to their speakers to create feedback tones. Movements should be slow, thoughtful, and controlled—seeking long, musical phrases/gestures

(2) Harmonic Feedback Mode:

- In this mode the live signal from the microphone is not passed through to the speakers, but a short sample recording is made when triggered by recorded piano notes being played back (the sample begins 5 seconds after the initial piano attack). Players manipulate their instruments to control the sound recorded in the sample (thus affecting the pitches passed to the synthesizers playing in the main speaker mix). Field recordings are being played back through the individual speakers much of the time. If this is the case when a sample is being recorded, the player should position their instrument mic as close as possible to the speaker to pick up the field recording sound. If a field recording is not being played back through the performer's individual speaker when a sample is being recorded, they should position their instrument mic away from the ensemble to pick up environmental sound.

Other performance notes:

A pure tone (no vibrato) should be used at all times.

Dynamics should be moderate, but audible over the electronic sounds. The doublestops notated in the second half of the piece should stand out dynamically over the other elements.

Helmholtz-Ellis JI Pitch Notation is used for some pitch material. A legend and guide can be found here: <https://heji.plainsound.org/>

Single-line staff notation is used in areas to indicate general activity in one of the two feedback modes.

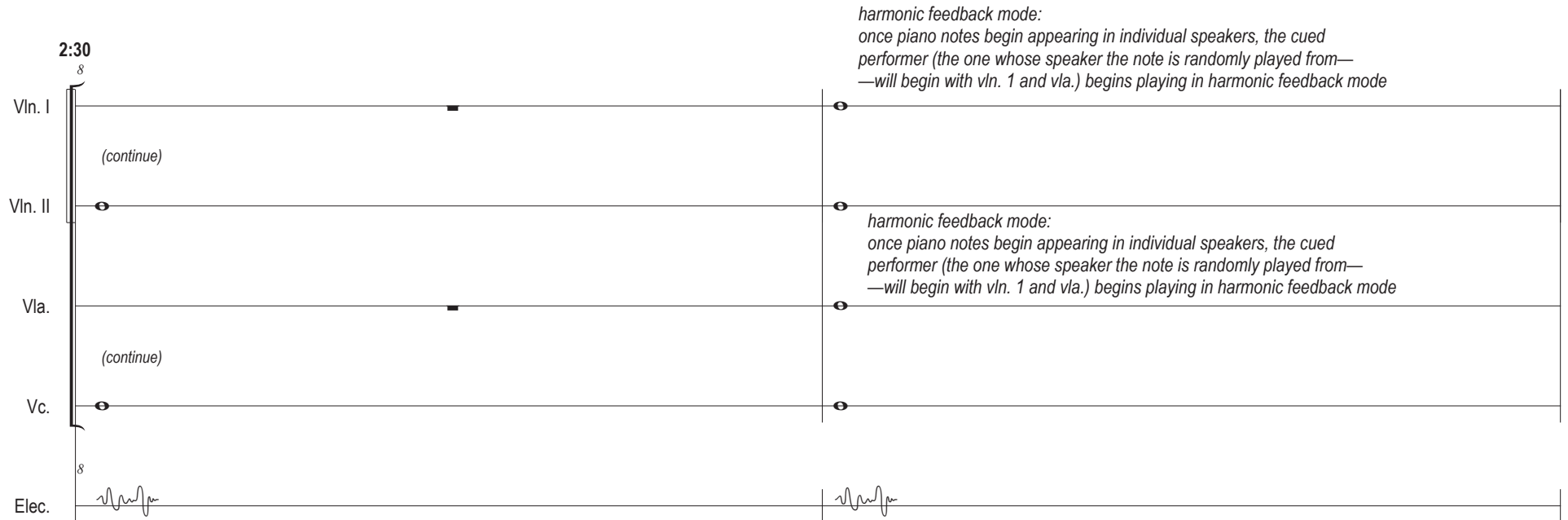
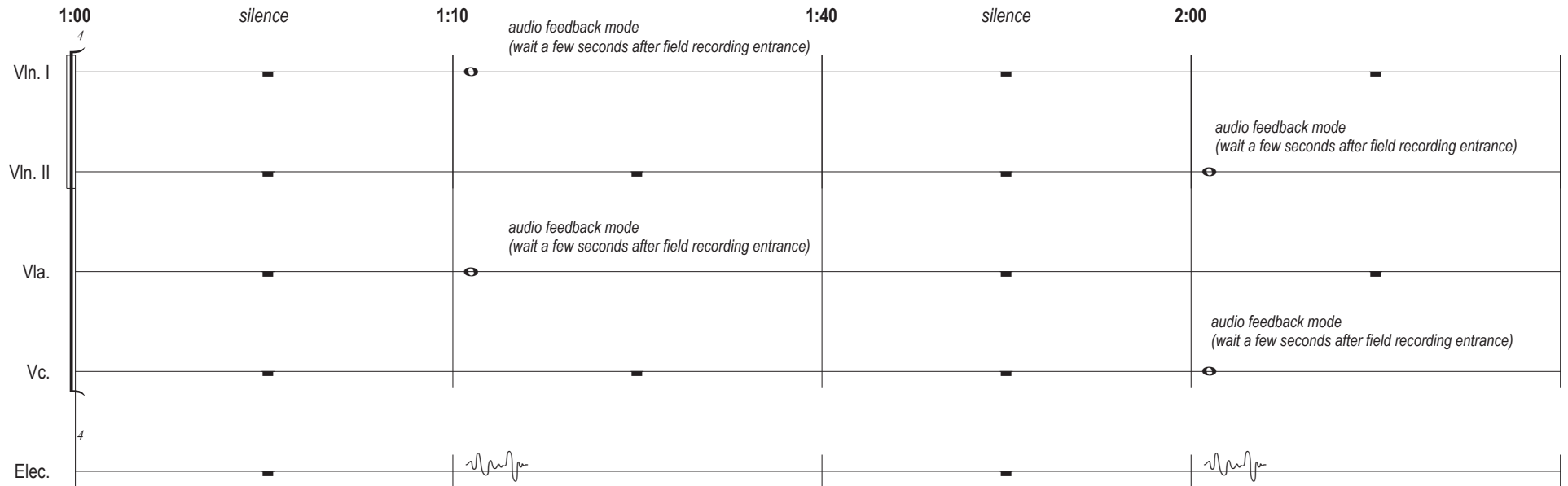
A whole note indicates that the player is active in this section. A rest—inactive.

Soundwaves in the electronics part indicate there are active electronic parts within a section. A rest—inactive.

Score

inside-outside  
(outside-inside-outside)

John Eagle



3:00

10

piano notes begin appearing in all four speakers.  
 players switch into harmonic feedback mode as cued.  
 after 20 seconds, they switch back into audio feedback mode  
 (mics switch modes automatically)

Score for Vln. I, Vln. II, Vla., Vc., and Elec. (Electronic) from 3:00 to 3:10.

Vln. I, Vln. II, Vla., and Vc. are marked with a fermata and a note head, indicating a sustained sound.

Elec. is marked with a waveform, indicating an electronic sound.

5:00

11

(continue)

5:30

continue prior material, but when cued by an F piano note in your speaker,  
 play notated F long tone (4-8 seconds) with a moderate accent and dynamic  
 (return to prior material afterward)

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 play notated F long tone (4-8 seconds) with a moderate accent and dynamic  
 (return to prior material afterward)

enter ad lib. on bowed long tones (3-8 seconds each) anywhere within this semitone of pitch range.  
 change pitch with each new entrance. leave gaps between notes.

continue, but freely alternate between prior mode and very slowly glissing up and down between notes  
 (within same range)

Score for Vln. I, Vln. II, Vla., Vc., and Elec. (Electronic) from 5:00 to 5:30.

Vln. I, Vln. II, and Vla. are marked with a fermata and a note head, indicating a sustained sound.

Vc. is marked with a fermata and a note head, indicating a sustained sound.

Elec. is marked with a waveform, indicating an electronic sound.

At 5:30, Vln. I, Vln. II, and Vla. are marked with a fermata and a note head, indicating a sustained sound.

Vc. is marked with a fermata and a note head, indicating a sustained sound.

Elec. is marked with a waveform, indicating an electronic sound.

**6:00** *very slow gliss up and down (as time allows) in this approx. pitch range, pausing occasionally with short rests*

**6:40** *silence*

**7:00** *instruments silent, field recording layers coming in and out*

Vln. I *13*  
(approx. -31 cents) (approx. -14 c.)  
continue as before, but now include double stop (and long tones may be shorter 2-6 seconds) (still returning to prior material)

Vln. II  
continue as before, but now include double stop (and long tones may be shorter 2-6 seconds) (still returning to prior material)

Vla.  
continue as before, but now include double stop (and long tones may be shorter 2-6 seconds) (still returning to prior material)

Vc.

Elec. *13*

**7:30** *enter ad lib. sustaining/resting/reentering, freely alternating between notes, indefinitely and independently (no short notes)*

**7:45** *continue prior material, but when cued by piano F notes (as before), play (some accent and louder dynamic) either:*  
(1) the first notated doublestop as a long tone (4-8 seconds) or  
(2) both doublestops in sequence (3-6 seconds each)  
(return to prior material afterward)

Vln. I *16*  
*very slow gliss up and down (as time allows) in this approx. pitch range, pausing occasionally with short rests*  
(approx. -31 cents) (approx. -14 c.)

Vln. II  
*very slow gliss up and down (as time allows) in this approx. pitch range, pausing occasionally with short rests*  
(approx. -31 cents) (approx. -14 c.)

Vla.  
*enter ad lib. sustaining/resting/reentering, freely alternating between notes, indefinitely and independently (no short notes)*  
(approx. -31 cents) (approx. -14 c.)

Vc.

Elec. *16*

*continue prior material, but when cued by piano F notes (as before), play (some accent and louder dynamic) either:*  
(1) the first notated doublestop as a long tone (4-8 seconds) or  
(2) both doublestops in sequence (3-6 seconds each)  
(return to prior material afterward)

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(1) the first notated doublestop as a long tone (4-8 seconds) or  
(2) both doublestops in sequence (3-6 seconds each)  
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(1) the first notated doublestop as a long tone (4-8 seconds) or  
(2) both doublestops in sequence (3-6 seconds each)  
(return to prior material afterward)

# inside-outside

8:15 8 8:35 (cutoff together before next sequence)

IV (5th partial)

8:20 (approx.)

8:30 (approx.)

8:25 (approx.) III (7th partial)

Elec. 18

(from silence)

8:45 9:05 (hang over a moment)

20 8:50 (approx.)

8:55 (approx.)

9:00 (approx.) II (5th partial)

(approx. -31 cents) (approx. -14 c.)

(approx. -31 cents) (approx. -14 c.)

(hang over a moment)

20

very slow gliss up and down (as time allows) in this approx. pitch range, pausing occasionally with short rests

very slow gliss up and down (as time allows) in this approx. pitch range, pausing occasionally with short rests



9:10 slow (approx. 55-60 BPM, but not trying to sync with cello)  
pizz. (with occasional Bartok pizz. after first pattern)

continue with similar patterns ad lib.  
grad. speed up to approx. 2x tempo

22

Vln. I

Vln. II

Vla.

Vc.

Elec.

22

slow (approx. 55-60 BPM, but not trying to sync with vln. 1)

(continue ad lib.)

(continue ad lib.)

pizz. (with occasional Bartok pizz. after first pattern)

(grad. speeding up with similar patterns until reaching approx. 2x tempo)

continue prior material, but when cued by piano F notes (as before), play (some accent and louder dynamic) either:  
(1) the first notated doublestop as a long tone (3-6 seconds) or  
(2) the first two doublestops in sequence (2-4 seconds each) or  
(3) all three doublestops in sequence (2-4 seconds each)  
(switch back to prior material afterwards)

9:30

23

Vln. I

Vln. II

Vla.

Vc.

Elec.

23

continue prior material, but when cued by piano F notes (as before), play (some accent and louder dynamic) either:  
(1) the first notated doublestop as a long tone (3-6 seconds) or  
(2) the first two doublestops in sequence (2-4 seconds each) or  
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(2) the first two doublestops in sequence (2-4 seconds each) or  
(3) all three doublestops in sequence (2-4 seconds each)  
(switch back to prior material afterwards)

10:30 <sup>24</sup> immediate silence (no hanging over)

10:45 *f* independently enter anytime within 15 seconds after 10:45, playing full doublestop sequence (2-4 seconds each, but sustaining final dyad longer—ending independently)

Vln. I

Vln. II

Vla.

Vc.

Elec. <sup>24</sup>