Duet

two different guitars refretted
in 11-limit just intonation

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2019

Tuning

Duet is written for the Lou Harrison Just Intonation Resophonic guitar (LH) and the nylon string Daisy guitar, both refretted in 11-limit just intonation. The open strings and individual tuning systems are listed below:

LH open strings: 6 = D 5 = A 4 = D 3 = G 2 = A 1 = D

Pitch:	D	Eb	E	F	F#	G	G#	A	Bb	B	C	C#
Ratio:	1/1	28/27	9/8	7/6	5/4	4/3	11/8	3/2	14/9	5/3	7/4	11/6
Cents:		63	204	267	386	498	551	702	765	884	969	1049

Daisy open strings: 6 = E 5 = B 4 = D 3 = F# 2 = B 1 = E

Pitch:	E	F	F#	G#	A	A#	B	C	D	D#	Eb
Ratio:	1/1	12/11	9/8	5/4	21/16	15/11	3/2	18/11	7/4	15/8	21/11
Cents:		151	204	386	471	537	702	853	969	1088	1119

Duet uses D as the fundamental of the combined LH and Daisy systems, with the E of the Daisy guitar tuned to the 9/8 E of the LH system, resulting in the composite scale:

* = Daisy

Pitch:	D	Eb	*D#	*Eb	E	F	*F	F#	*F#	G	G#
Ratio:	1/1	28/27	135/128	189/176	**9/8**	7/6	27/22	5/4	81/64	4/3	11/8
Cents:		63	92	123	**204**	267	355	386	408	498	551

Pitch:	*G#	*A	A	*A#	Bb	B	*B	C	C#	*C	*D
Ratio:	45/32	189/128	3/2	135/88	14/9	5/3	27/16	7/4	11/6	81/44	63/32
Cents:	590	675	702	741	765	884	906	969	1049	1057	1173

Performance Notes

Dynamics are left up to the discretion of the performers but should be about the same level.

Tempo is established at the beginning of each phrase but should be relatively slow unless otherwise noted in the score.

Note values are realized individually and roughly in relation to the tempo of any given phrase.

Phrases are segmented with a dotted line. The last note of each phrase should be held until near full decay before the leader of the next phrase moves on.

In any given phrase, one guitar is the leader and the other the follower. Each phrase is led by the guitar with the first notated pitch.

The LH guitar leads up until the first section of arpeggiated chords. The Daisy guitar leads from the end of the first section of arpeggiated chords up until the second section of arpeggiated chords.

The last three phrases are led in this order: LH, together (as strict simultaneities), Daisy.

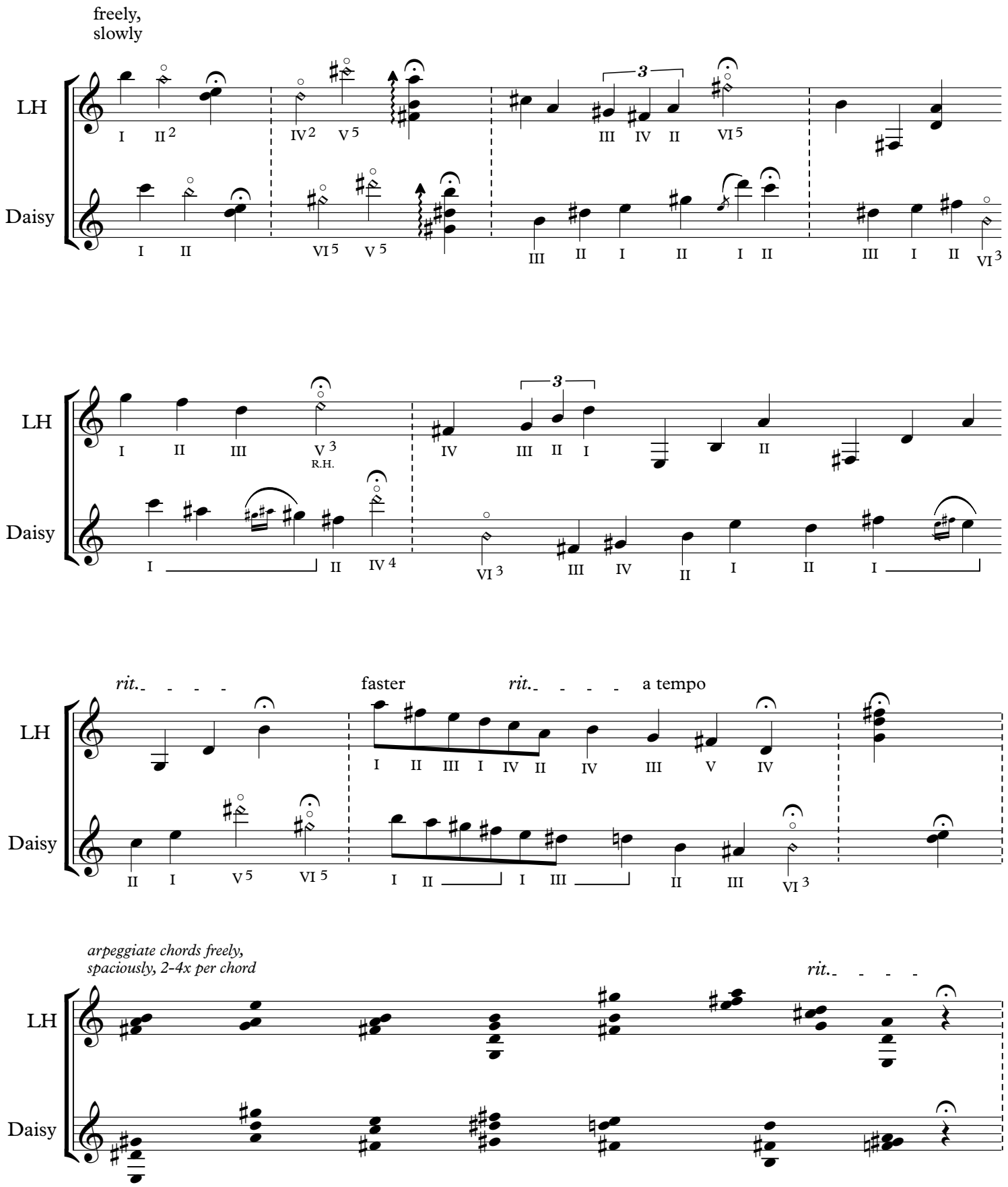
The spatial notation should be interpreted as a loose hocket with the exception of the arpeggiated chords which are executed individually but at the same time.

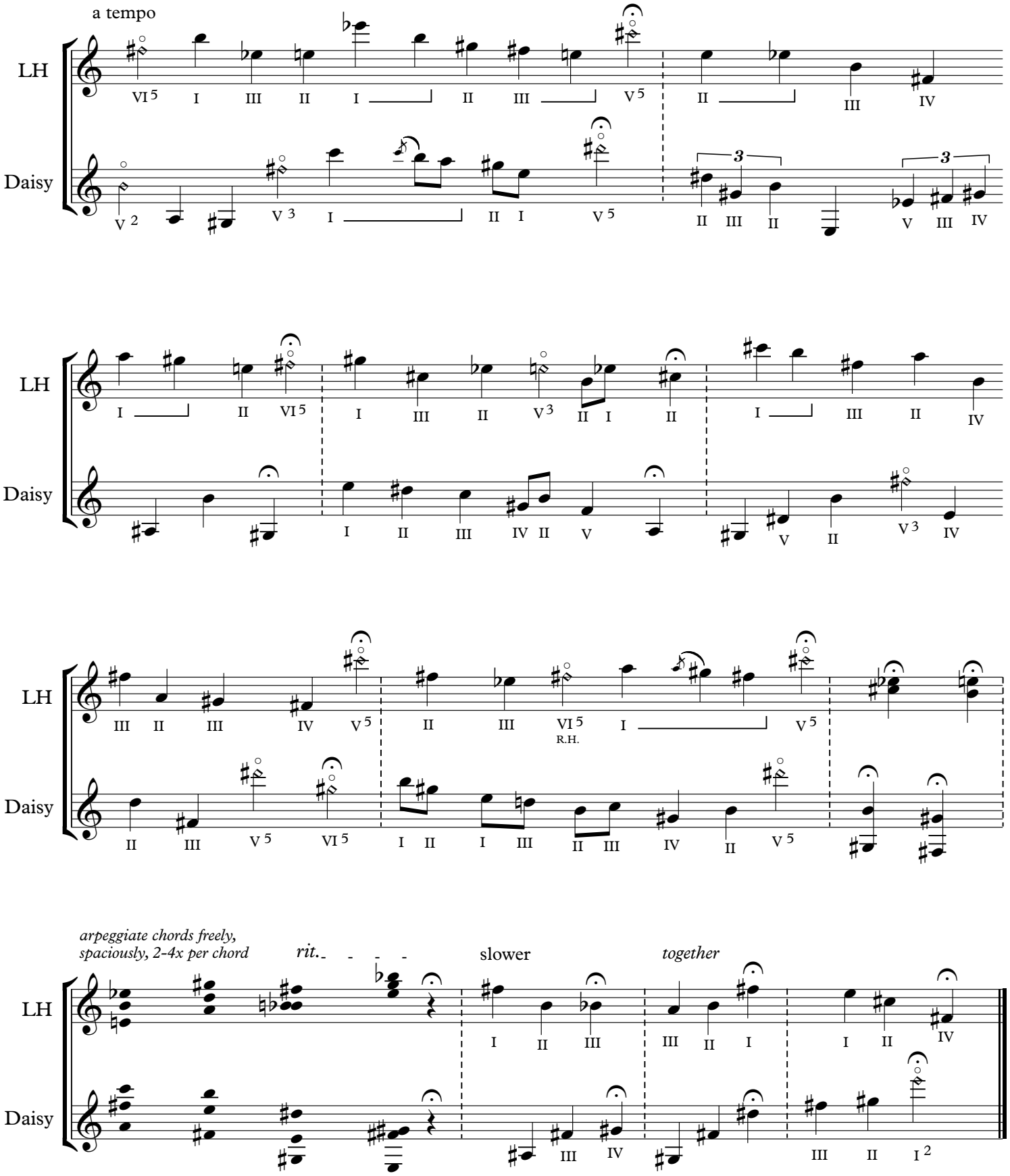
Roman numerals denote which string to use for any given pitch for the purpose of playing pitches across multiple strings as held chords.

Strings are numbered low to high as roman numerals VI – I. All pitches should be held L.V. for as long as possible.

Natural harmonics up to the 5th partial are notated with a combination of Roman and Arabic numerals, which indicate the string number (Roman) and partial number (Arabic) for the given harmonic.

R.H. = right hand pluck harmonic


freely,
slowly
LH
Daisy
3
R.H.
rit.
faster
rit.
a tempo
arpeggiate chords freely,
spaciously, 2-4x per chord
rit.


a tempo
LH
Daisy
VI 5 I III II I II III V 5 II III IV
V 2 V 3 I II I V 5 II III II V III IV
LH
Daisy
I II VI 5 I III II V 3 II I II I III II IV
I II III IV II V V II V 3 IV
LH
Daisy
III II III IV V 5 II III VI 5 R.H. I V 5
II III V 5 VI 5 I II I III II III IV II V 5
arpeggiate chords freely,
spaciously, 2-4x per chord
rit.
slower
together
LH
Daisy
I II III III II I I II IV
III IV III II I 2