

Duet

two different guitars refretted
in 11-limit just intonation

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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	E \flat	E	F	F \sharp	G	G \sharp	A	B \flat	B	C	C \sharp
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 \sharp 2 = B 1 = E

Pitch:	E	F	F \sharp	G \sharp	A	A \sharp	B	C	D	D \sharp	E \flat
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	E \flat	*D \sharp	*E \flat	E	F	*F	F \sharp	*F \sharp	G	G \sharp
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 \sharp	*A	A	*A \sharp	B \flat	B	*B	C	C \sharp	*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 hoquet 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

LH
Daisy

rit. *faster* *rit.* *a tempo*

LH
Daisy

*arpeggiate chords freely,
spaciously, 2-4x per chord*

rit.

LH
Daisy

a tempo

LH

Daisy

VI⁵ I III II I II III V⁵ II III IV

V² V³ I II I V⁵ II III II V III IV

Detailed description: This system contains the first two lines of music. The LH part (top staff) starts with a treble clef, a key signature of one sharp (F#), and a common time signature. It features a sequence of chords: VI⁵, I, III, II, I, II, III, V⁵, II, III, IV. The Daisy part (bottom staff) starts with a treble clef and a common time signature. It features a sequence of chords: V², V³, I, II, I, V⁵, II, III, II, V, III, IV. There are trill ornaments above the first notes of the LH part and above the first notes of the Daisy part. A dashed vertical line is placed between the V⁵ and II chords in both parts.

LH

Daisy

I II VI⁵ I III II V³ II I II I III II IV

I II III IV II V V II V³ IV

Detailed description: This system contains the next two lines of music. The LH part (top staff) features a sequence of chords: I, II, VI⁵, I, III, II, V³, II, I, II, I, III, II, IV. The Daisy part (bottom staff) features a sequence of chords: I, II, III, IV, II, V, V, II, V³, IV. There are trill ornaments above the first notes of the LH part and above the first notes of the Daisy part. Dashed vertical lines are placed between the VI⁵ and I chords, and between the V³ and II chords in both parts.

LH

Daisy

III II III IV V⁵ II III VI⁵ I V⁵

II III V⁵ VI⁵ I II I III II III IV II V⁵

R.H.

Detailed description: This system contains the next two lines of music. The LH part (top staff) features a sequence of chords: III, II, III, IV, V⁵, II, III, VI⁵, I, V⁵. The Daisy part (bottom staff) features a sequence of chords: II, III, V⁵, VI⁵, I, II, I, III, II, III, IV, II, V⁵. There are trill ornaments above the first notes of the LH part and above the first notes of the Daisy part. A dashed vertical line is placed between the V⁵ and II chords in both parts. The text "R.H." is written below the LH part.

LH

Daisy

I II III III II I I II IV

III IV III II I²

arpeggiate chords freely, spaciouly, 2-4x per chord rit. slower together

Detailed description: This system contains the final two lines of music. The LH part (top staff) features a sequence of chords: I, II, III, III, II, I, I, II, IV. The Daisy part (bottom staff) features a sequence of chords: III, IV, III, II, I². There are trill ornaments above the first notes of the LH part and above the first notes of the Daisy part. Dashed vertical lines are placed between the III and IV chords, and between the I and II chords in both parts. The text "arpeggiate chords freely, spaciouly, 2-4x per chord" is written above the LH part. The text "rit." is written above the LH part. The text "slower" is written above the LH part. The text "together" is written above the LH part.