

# Twenty chords for Daniel Blitz

composed by Alex Ness,  
for the Daniel Blitz Clavichord Project

## Program note

This piece grew out of my fascination with the tuning systems developed by Renaissance composers such as [Guillaume Costeley](#), [Nicola Vicentino](#), and [Fabio Colonna](#).

Each of these twenty chords decays completely, allowing the listener to appreciate the piquancy of the harmonies, as well as the delicacy of the clavichord.

## Bio

I live in San Francisco, where I tutor for a living and make art for pleasure. I'm interested in a broad range of musical genres and styles, including Renaissance microtonal music, North Indian classical music, and experimental music in its many guises. I enjoy collaborating with friends and strangers.

## Performance notes

### Tuning and notation

- Please refer to the attached charts for tuning instructions. I can provide sound files of the individual frequencies upon request.
- Notes without an accidental are always natural.
- Notated accidentals reflect the underlying tuning scheme: for example, B $\sharp$  is tuned flatter than C $\sharp$ .
- The same keyboard key in different octaves may be tuned to different pitches, but never to a pitch that's not enharmonically related to that key. For example, the black key between D and E is tuned in some octaves as D $\sharp$  and in others as E $\flat$ , but never as C $\sharp$ .

## Tempo

The clavichordist should let each chord should decay completely before playing the subsequent chord. I recommend counting breaths (three or four breaths per chord) to keep the pacing even and relaxed.

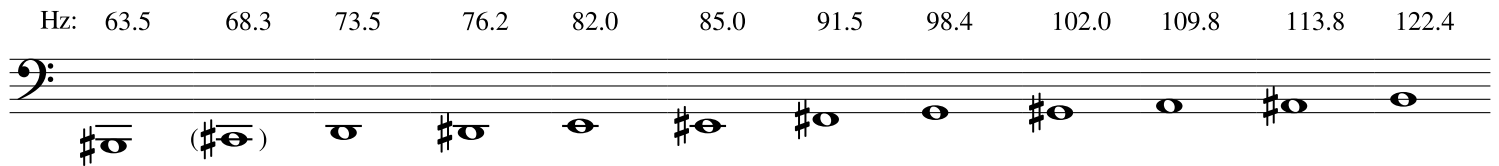
# Twenty chords for Daniel Blitz

19 equal temperament tuning chart,  
for use with an electronic tuner

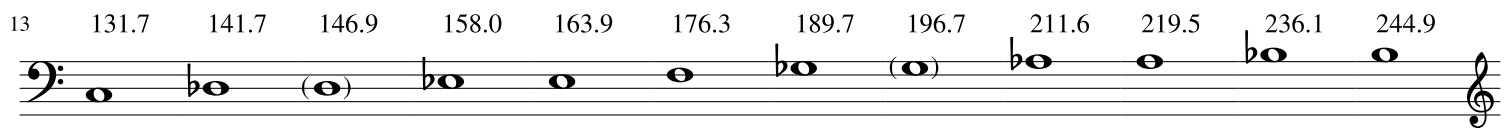
Alex Ness

N.B. Parenthesized notes aren't played in the piece,  
but I've included them in the chart for reference.

C2–B2 octave

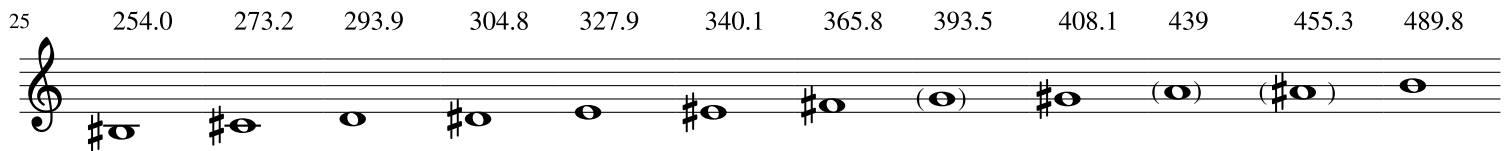


C3–B3 octave



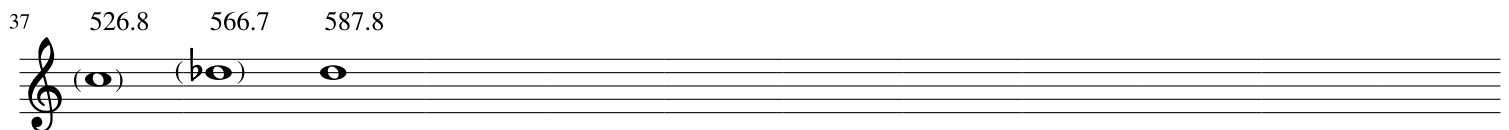
C4–B4 octave

(same tuning as C2–B2, transposed up 2 octaves)



C5–B5 octave

(same tuning as C3–B3, transposed up 2 octaves)



# Twenty chords for Daniel Blitz

19 equal temperament tuning instructions,  
for tuning by ear

Alex Ness

In this tuning system, each whole step (which is smaller than usual)  
is divided into three equal parts, and each half step  
(which is larger than usual) is divided into two equal parts,  
giving 19 equal parts per octave total:

Clavichord

The image shows a musical score for a clavichord exercise. It consists of three staves. The top staff is a single treble clef staff with 19 notes, each marked with a sharp or flat symbol. The middle and bottom staves are grouped by a brace on the left, indicating they are for the left hand. The middle staff is a treble clef staff with 19 notes, and the bottom staff is a bass clef staff with 19 notes. The notes are arranged in a way that demonstrates the 19 equal parts per octave tuning system.

In this system, major thirds are almost perfect,  
so you can use them to tune by ear:

20

The image shows a musical score for a clavichord exercise, starting at measure 20. It consists of three staves. The top staff is a single treble clef staff with 19 notes, each marked with a sharp or flat symbol. The middle and bottom staves are grouped by a brace on the left, indicating they are for the left hand. The middle staff is a treble clef staff with 19 notes, and the bottom staff is a bass clef staff with 19 notes. The notes are arranged in a way that demonstrates the 19 equal parts per octave tuning system, specifically focusing on major thirds.

# Twenty chords for Daniel Blitz

for clavichord in 19 equal temperament

Alex Ness

