

Viola Natural Harmonics

This document lists the natural harmonics that are possible (up to the 9th partial) on each string of the viola. Pitches and fingerings are notated in 24-tone equal temperament with quarter tones. The sounding pitch is rounded to the nearest quarter tone, with the actual pitch given as a deviation in cents. The fingering, likewise, is given as the nearest quarter-tone, with the actual fingering given as a deviation in cents.

All of the pitches and fingerings given here are theoretical. Some fingerings may be very difficult to find, and the player may need to experiment with the different options.

Sounding Pitch

C String

Fingered Node

2nd partial 3rd partial (+2c) 4th partial 5th partial (-14c)

6th partial (+2c) 7th partial (+19c)

8th partial 9th partial (+4c)

Sounding Pitch

G String

Fingered Node

2nd partial 3rd partial (+2c) 4th partial 5th partial (-14c) 6th partial (+2c)

7th partial (+19c)

8th partial

9th partial (+4c)

Diagram showing the 7th, 8th, and 9th partials of a harmonic series for the 7th partial (+19c). The notation includes treble and bass staves with notes and accidentals, and a list of intervals: +17c, -17c, +19c, +17c, +19c, +19c, -19c, +14c, -2c, +4c, -15c, +19c, +4c, +4c, +4c.

2nd partial

3rd partial (+2c)

4th partial

5th partial (-14c)

6th partial (+2c)

D String

Diagram showing the 2nd, 3rd, 4th, 5th, and 6th partials of a harmonic series for the D string. The notation includes treble and bass staves with notes and accidentals, and a list of intervals: +0c, +2c, +2c, -2c, +0c, -14c, -16c, -14c, -14c, +16c, +2c.

7th partial (+19c)

8th partial

9th partial (+4c)

Diagram showing the 7th, 8th, and 9th partials of a harmonic series for the 7th partial (+19c). The notation includes treble and bass staves with notes and accidentals, and a list of intervals: +17c, -17c, +19c, +17c, +19c, +19c, -19c, +14c, -2c, +4c, -15c, +19c, +4c, +4c, +4c.

2nd partial

3rd partial (+2c)

4th partial

5th partial (-14c)

6th partial (+2c)

A String

Diagram showing the 2nd, 3rd, 4th, 5th, and 6th partials of a harmonic series for the A string. The notation includes treble and bass staves with notes and accidentals, and a list of intervals: +0c, +2c, +2c, -2c, +0c, -14c, -16c, -14c, -14c, +16c, +2c.

7th partial (+19c)

8th partial

9th partial (+4c)

Diagram showing the 7th, 8th, and 9th partials of a harmonic series for the 7th partial (+19c). The notation includes treble and bass staves with notes and accidentals, and a list of intervals: +17c, -17c, +19c, +17c, +19c, +19c, -19c, +14c, -2c, +4c, -15c, +19c, +4c, +4c, +4c.