

Violin Natural Harmonics

This document lists the natural harmonics that are possible (up to the 9th partial) on each string of the violin. 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.

G String

Sounding Pitch

Fingered Node

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

+0c +2c +2c -2c +0c -14c -16c -14c -14c

6th partial (+2c) 7th partial (+19c) 8th partial

+16c +2c +17c -17c +19c +17c +19c +19c -19c

9th partial (+4c)

+14c -2c +4c -15c +19c +4c +4c +4c +4c

D String

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

+0c +2c +2c -2c +0c -14c -16c -14c -14c +16c +2c

8^{va} 8^{va} 8^{va}

7th partial (+19c) 8th partial 9th partial (+4c)

+17c -17c +19c +17c +19c +19c -19c +14c -2c +4c -15c +19c +4c +4c +4c

A String

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

+0c +2c +2c -2c +0c -14c -16c -14c -14c +16c +2c

15^{ma} 15^{ma} 15^{ma}

7th partial (+19c) 8th partial 9th partial (+4c)

+17c -17c +19c +17c +19c +19c -19c +14c -2c +4c -15c +19c +4c +4c +4c

E String

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

+0c +2c +2c -2c +0c -14c -16c -14c -14c +16c +2c

15^{ma} 15^{ma} 15^{ma}

7th partial (+19c) 8th partial 9th partial (+4c)

+17c -17c +19c +17c +19c +19c -19c +14c -2c +4c -15c +19c +4c +4c +4c