How to tune a violin with your phone

Bow one string at a time and match 440.00, 293.66, 196.00 and 659.26 Hz. The full method, and which app to use.

Author: Lubor Šimůnek · Published: October 11, 2026 · Productivity

Online version: https://appstoryo.com/en/blog/how-to-tune-a-violin-with-your-phone



To tune a violin with your phone, open a tuner app, bow the A string alone and turn its peg or fine tuner until the app reads 440.00 Hz, then do D at 293.66, G at 196.00 and E at 659.26. String Tuner: Violin & Cello does this free and offline on iPhone.

Disclosure: AppStoryo is operated by the studio that develops String Tuner: Violin & Cello. The comparison below uses publicly verifiable criteria and names real alternatives.

What do you need before you touch a peg?

Three things, and one of them is the room. A phone tuner reads your microphone, so a television, a second player or a fan will feed it the wrong note. You want a quiet space, the instrument at room temperature, and enough rosin to sustain a note for four or five seconds; a dying note gives the detector nothing to lock onto. Check which adjusters you have before you start: most student violins carry a fine tuner on the E string only, while the other three are turned at the peg. String Tuner: Violin & Cello is a free download on the App Store.

Which string do you tune first, and to what frequency?

Start on A, because that is the string every other reference is built from. At the modern standard the four open strings sit at G3 196.00 Hz, D4 293.66 Hz, A4 440.00 Hz and E5 659.26 Hz. Those are not arbitrary numbers you have to memorise: an octave is a ratio of 2:1 divided into 12 equal semitones, each a ratio of about 1.059, and each string is seven semitones from its neighbour, so dividing or multiplying 440 by 1.059 seven times lands on

every value above. Tune A, then D, then G, then E, and come back to A at the end, because moving three pegs changes the tension on the top plate enough to shift the first one you set.

Why does the reading jump around while you bow?

Because a bowed note is the hardest input a pitch detector gets. The School of Physics at UNSW Sydney puts the difference bluntly: after a pluck the high harmonics fade away quickly, leaving only the fundamental and some weak lower harmonics, while bowing maintains the rich harmonic spectrum. Those extra components are exact multiples, since the nth mode has frequency n times that of the fundamental, so an open G at 196.00 Hz is also sounding 392.00 and 588.00 Hz while you turn the peg. Add vibrato, which slides the pitch continuously, and a cheap detector reports the octave instead of the string. Practical fix: bow steadily near the middle of the bow, no vibrato, and let the note settle before you read the needle.

> A reference tone on every string — hear it, match it, tune by ear the way you do in a lesson.

That line is from the app's own App Store description, and it points at the habit worth building: use the screen to check, and your ear to decide.

How close to the centre is close enough?

Closer than your ear, but not perfect. Deviation is measured in cents, 100 to a semitone. A 2017 study in Scientific Reports tested 918 people and found a median threshold of 8.41 Hz, or 14.50 cents, for telling two pitches apart; listeners with formal music training managed 12.85 cents and the best five per cent reached 6.19 cents. Inside 5 cents is therefore already below what almost anyone in the room can hear, and chasing the last cent on a bowed string wastes the practice time you opened the case for.

How do you turn a peg without snapping the E string?

Push the peg inward as you turn it, in small movements, and always while bowing so you hear where the pitch is going. Turn away from you to raise the pitch, toward you to lower it, and stop the moment the app crosses the centre instead of passing it and coming back; every pass adds a stretch cycle. If the peg slips straight back, the taper is dry and that is a workshop job, not a tuning problem. Use the fine tuner for the E whenever you have one: the E is the thinnest string and the one that breaks, and a fine tuner moves it a few cents per turn instead of a semitone.

Which app should you use to tune a violin?

Choose Violin Tuner - LikeTones if you want one screen that only does violin

- Free, 32 languages, last updated 26 April 2026, and a 4.87 average from 3,738 ratings.
- Its listing describes an algorithm written for violin plus a reference tone per note and

an automatic mode, which is all a beginner needs.
- It wins if you play only violin and want no settings to read.

Choose Tuner T1 if you also tune transposing winds

- Free, last updated 28 September 2026, a 4.46 average from 10,455 ratings, and it requires iOS 17.0.
- Its listing claims accuracy within 0.1 cents, a transpose mode from minus 12 to plus 12 semitones and a three-octave tone generator.
- It is the better pick in a mixed ensemble, though the listing shows a single language.

Choose Simply Tuner - Violin, Cello if a child is doing the tuning

- Free, from Shenzhen Mango Future Technology, with a 4.22 average from 2,549 ratings.
- Its listing is built around step-by-step instructions for violin, viola and cello, aimed at parents and beginners with no musical background.
- Weigh it against the date: the last update was 23 February 2024, and it ships in six languages.

Choose String Tuner: Violin & Cello if tuning is only the start of the session

- Free with nothing locked: 47 instruments, reference pitch from 392 to 466 Hz, a drone, a metronome and an intonation heatmap in the same app.
- Stand mode, an Apple Watch app and a teacher mode that hands a class one setup as a QR code: get String Tuner: Violin & Cello.
- It is iPhone-only and version 1.0, published 29 September 2026 with no ratings yet.

When is a phone tuner not the right tool?

When the problem is not pitch. A string that will not hold overnight, a peg that jumps back, a buzz on one note or a bridge leaning forward are all physical faults, and a tuner will keep telling you the note is fine while the instrument gets worse. Brand-new strings also stretch for several days and will drift flat within an hour whatever the app said. And in a warm-up room with fifteen other players, no microphone tuner can separate your A from theirs; that is what a clip-on contact tuner is built for.

Tuning a violin with a phone — what else do players ask?

Can a phone tuner be accurate enough for a violin?

Yes. The limit in practice is your bowing and the room, not the software: several of the apps above claim resolution of a cent or better, which is finer than the 14.50 cents the median listener in the 2017 Scientific Reports cohort could hear. Treat anything inside 5 cents as in tune.

Should I tune with the bow or with pizzicato?

Bow it. A plucked note decays within a second and its high harmonics vanish first, so the reading has less to work with as it settles. A steady bow gives the detector a constant tone for as long as you need, which is why a tuner built for bowed sound is worth having.

What does Hz mean on the tuner screen?

Hertz counts vibrations per second, so A4 at 440 Hz means the string swings back and forth 440 times a second. The number on screen is what your string is doing now; the number you are aiming at is 440.00, 293.66, 196.00 or 659.26 depending on which string is under the bow.

Why did my violin go flat again an hour later?

Strings stretch and wood moves. New strings settle for several days and drop noticeably in the first hour, and a cold room or a hot car shifts the whole instrument. Re-tune at the start of every session rather than treating one reading as permanent, and expect a new set to need three or four sessions.

Do I use the pegs or the fine tuners?

Pegs for anything more than a few cents, fine tuners for the last stretch. Most student instruments have a fine tuner only on the E string, which is also the string most likely to break, so that is the one place where the small adjuster genuinely saves instruments rather than just time.

Can I tune a viola or cello the same way?

The method is identical, the numbers are not. A cello's open strings are C2 at 65.41 Hz, G2 at 98.00 Hz, D3 at 146.83 Hz and A3 at 220.00 Hz, and the low C is the note phone tuners most often misread, because its second harmonic at 130.81 Hz can be louder than the fundamental.

Does it matter whether I use 440 or 442 Hz?

Only relative to whoever you play with. Alone, 440 is the convention and the safe default. In an ensemble, match the group: apps including String Tuner let you set anything from 392 to 466 Hz, so ask before the rehearsal rather than discovering a 2 Hz gap during the first chord.

Is there an Android version of String Tuner?

Not currently. The studio's Google Play developer listing held 24 apps when it was read on 30 September 2026 and String Tuner was not one of them, so an Android player needs a different app and cannot share the presets or teacher QR codes described here.

Do I need an internet connection to tune?

No, and you should not accept one as a requirement. String Tuner's listing states that everything runs on the device with no account, no sign-in and no servers, and that it works in flight mode. Pitch detection is arithmetic on a microphone signal; nothing about it needs a network, and you can tune offline with String Tuner.

Cite as: Lubor Šimůnek (2026). *How to tune a violin with your phone*. AppStoryo, lapnito.cz s.r.o..
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