Tuning a guitar to the harmonic series
For Primer

Music 150x
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UCSC, Polansky

Tuning is in the D harmonic series.
There are several options. This one is a suggested simple method that should be simple to
do and go very quickly.

VI
Tune the VI (E) low string down to D (matching, say, a piano)
D = +0¢ from 12TET
fundamental

V
Tune the V (A) string normally, but preferably tune it to the 3rd harmonic on the low D
string (node on the 7th fret)
A = +2¢ from 12TET
3rd harmonic

IV
Tune the IV (D) string a ¼-tone high (1/2 a semitone). This will enable you to finger the
11th harmonic on the 5th fret of the IV string (once you’ve tuned). In other words, you’re
simply raising the string a ¼-tone, but using a fretted note on that string to get the Ab
(11th harmonic). There are two ways to do this:
1) find the 11th harmonic on the low D string (very close to the bridge: good luck!)
2) tune the IV string as a D halfway between the D and the Eb played on the A
   string. This is an approximation, but a pretty good and fast way to do it.
Ab = -49¢ from 12TET
11th harmonic

III
Tune the III (G) string to a slightly flat F# by tuning it to the 5th harmonic of the VI
string, which is now a D. The node for the 5th harmonic is available at four places on the
string, but the easiest one to get is probably at the 9th fret.
F# = -14¢ from 12TET
5th harmonic

II
Tune the II (B) string up almost a semitone, to a C that is about 1/6th-tone flat. Use the VI
(D) string to get the 7th harmonic. The 7th harmonic is available at six places on the string,
all of which should sound clearly, but the easiest one is probably right before the 3rd fret
(alternatively, on electrics, it's usually about halfway between the bridge and neck pickups).

C = -31¢ from 12TET

7\text{th} \ harmonic

I

Tune the high (I) E string to E, but as a P5\text{th} to the V string, by sounding the 3\text{rd} harmonic (7\text{th} fret node) on the V string

E = +4 from 12TET

9\text{th} \ harmonic