

Tuning Method Using Harmonics

For harmonic tuning, the starting point is to be able to produce a harmonic tone. To produce a harmonic, very lightly lay the pad of your little finger on one string directly above the 5th, 7th or 12 frets. Then pluck the string the little finger is resting on and as soon as you have plucked the string lift the finger away. You'll be able to tell when you've got it right. Then practice producing harmonics on all the strings at the 12th fret, then at the 7th (these will be a bit weaker in sound and volume) and then at the 5th fret – a bit weaker again. Start with the 12th fret as the 12th fret harmonics are the easiest to produce.

Notes produces by the harmonics on the various strings						
Fret Position	6 th string E	5 th string A	4 th string D	3 rd string G	2 nd string B	1 st string E
5	E	A	D	G	B	E
7	B	E	A	D	F#	B
12	E	A	D	G	B	E

Start by tuning the guitar using the traditional '5th Fret' method. Then fine tune using either of the following 2 harmonic methods. When comparing harmonics, or a harmonic and a fretted note, play both so they sound at the same time, and listen for the 'beats' or 'pulses'. Strings that are out of tune will generate a beating pulse, while those in tune will produce a steady tone.

Assume the 6th string E is in tune (concert pitch)

Method 1

Harmonic		
6 th E String 5 th fret	compare with	Harmonic 5 th string 7 th fret (adjust as necessary)
5 th A string 7 th fret	compare with	Harmonic 4 th string 7 th fret (adjust as necessary)
4 th D string 7 th fret	compare with	Harmonic 3 rd string 7 th fret (adjust as necessary)
6 th E string 7 th fret	compare with	Open 2 nd B string (adjust as necessary)
5 th A string 7 th fret	compare with	Open 1 st E string (adjust as necessary)

Method 2

This is an alternative to the method above, and possibly a little more accurate

Harmonic		
6 th E String 12 th fret	compare with	E fretted on 4 th D string 2 nd fret (adjust as necessary)
5 th A string 12 th fret	compare with	A fretted on 3 rd G string 2 nd fret (adjust as necessary)
4 th D string 12 th fret	compare with	D fretted on 2 nd B string 3 rd fret (adjust as necessary)
3 rd G string 12 th fret	compare with	G fretted on 1 st E string 3 rd fret (adjust as necessary)
2 nd B string 12 th fret	compare with	B fretted on 1 st E string 7 th fret (adjust as necessary)