



EIKOSANY MTS PACK



This free pack contains new tunings and scales for your Xen-Arts virtual synthesizer.

## Information

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The Eikosany Pack features a family of tunings called Combination Product Sets (CPS). They were studied extensively by Erv Wilson.

*Why CPS?* Well... These scales have very pure harmony, but progressions of chords only weakly imply a tonal center. If you're looking for something dreamy and flighty, this is it. In this pack you'll find 3 kinds of CPS scales: hexanies have 6 notes, dekanies have 10 notes, and eikosanies are rather large at 20.

Needless to say, eikosanies can be unwieldly. It's up to you if you want to jump straight in the deep end, or start with the simpler geometries first and work your way along. The eikosany has many harmonic territories to explore, so you could spend years in this one scale alone (and this is why I need only include 1 eikosany).

*What do the numbers (e.g. "1 3 5 7") mean?* Put simply, there is a recipe which generates CPS scales. The numbers are the starting ingredients. The lower the numbers are, the more familiar the harmony will be for a Western ear. If you're looking for something really out, try something with 11 and/or 13.

## Notes

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The key middle C (MIDI note 60) is actually tuned to F# (369.99Hz), not C (261.63Hz).

The hexany scales are laid out on keys C, D, E, G, A, B.

The dekany scales are laid out on keys C, D, D#, E, F, F#, G, A, A#, B.

The eikosany is laid out linearly, such that every 20 keys span an octave.

## More Information

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Definitely check out *The Sonic Sky* ([thesonicsky.com](http://thesonicsky.com)), a series of documentaries on Erv Wilson, who thought of these amazing musical structures and many more.

The wikipedia page about [Hexany](#).

This [Xenharmonikon article about the Eikosany](#), written by Kraig Grady, is an insightful introduction. Kraig also maintains [The Wilson Archives](#).

## **Pack Contents**

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### **2)4 CPS (Hexanies)**

Hexany 1 3 5 7

Hexany 1 3 5 9

Hexany 1 3 5 11

Hexany 1 3 5 13

Hexany 1 3 7 9

Hexany 1 3 7 11

Hexany 1 3 7 13

Hexany 1 3 9 11

Hexany 1 3 9 13

Hexany 1 3 11 13

### **2)5 CPS (Dekanies)**

Dekany 1 3 5 7 9

Dekany 1 3 5 7 11

Dekany 1 3 5 7 13

Dekany 1 3 5 9 11

Dekany 1 3 5 9 13

Dekany 1 3 5 11 13

Dekany 1 3 7 9 11

Dekany 1 3 9 11 13

Dekany 1 5 7 9 11

Dekany 1 7 9 11 13

### **3)6 CPS (Eikosanies)**

Eikosany 1 3 5 7 9 11

## Pitches of the 1 3 5 7 9 11 Eikosany

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0:	1/1	0.000000 unison, perfect prime
1:	33/32	53.272943 undecimal comma, al-Farabi's 1/4-tone
2:	21/20	84.467193 minor semitone
3:	11/10	165.004228 4/5-tone, Ptolemy's second
4:	9/8	203.910002 major whole tone
5:	7/6	266.870906 septimal minor third
6:	99/80	368.914230
7:	77/60	431.875134
8:	21/16	470.780907 narrow fourth
9:	11/8	551.317942 undecimal semi-augmented fourth
10:	7/5	582.512193 septimal or Huygens' tritone, BP fourth
11:	231/160	635.785136
12:	3/2	701.955001 perfect fifth
13:	63/40	786.422194 narrow minor sixth
14:	77/48	818.188848
15:	33/20	866.959229
16:	7/4	968.825906 harmonic seventh
17:	9/5	1017.596288 just minor seventh, BP seventh
18:	11/6	1049.362941 21/4-tone, undecimal neutral seventh
19:	77/40	1133.830135
20:	2/1	1200.000000 octave

## Thanks

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Kind thanks to Kraig Grady for making so much information about this family of tunings available on the internet.

This pack of microtunings was downloaded from [sevish.com](http://sevish.com) – Head there for more tuning packs and to check out [my microtonal music](#).

**The microtuning files (.mid) are designed to work with the outstanding, free VST synthesizers from [Xen Arts](#). Download them and make some microtonal music!**