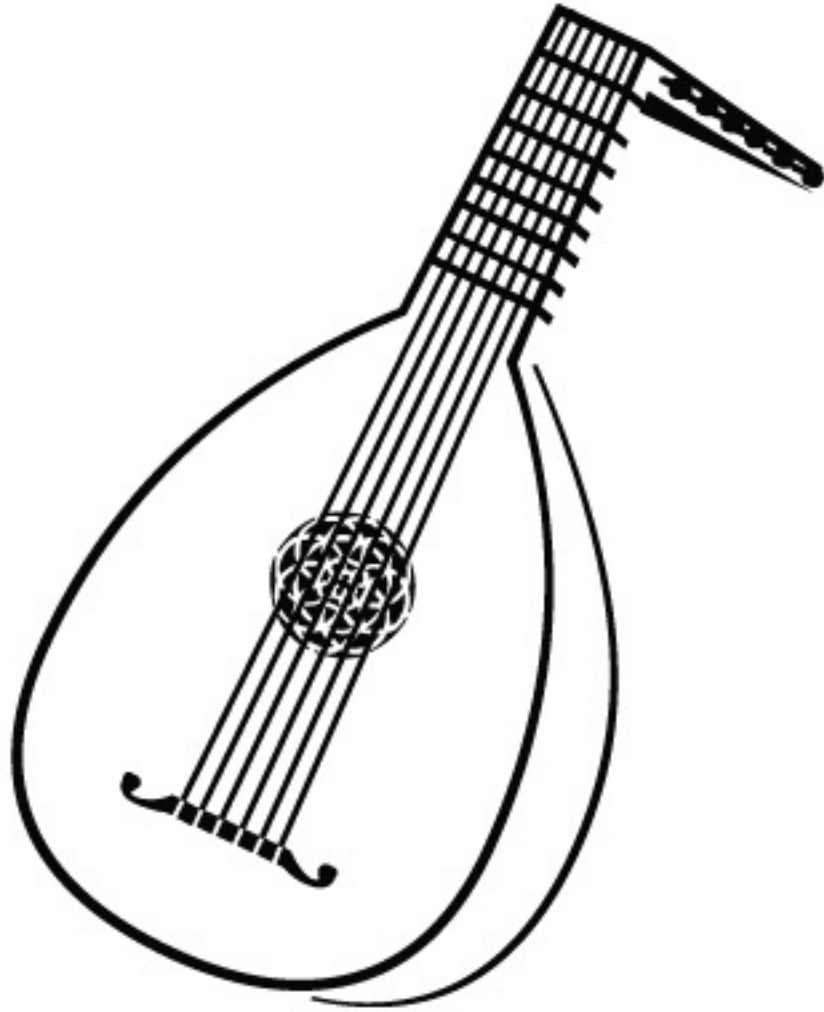


The Arabian Scale in Eagle 53



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Introduction

If you didn't know already Eagle 53 is an alternative musical tuning that I (with some assistance) worked out in 2016. Like regular Western tuning (12 Tone Equal Temperament, or 12 TET), Eagle 53 has 12 tones per octave but some of the notes are higher than usual and others are lower in varying degrees. The notes in Eagle 53 are very close to this just scale (or tuning)...

$1/1, 16/15, 9/8, 6/5, 5/4, 4/3, 7/5, 3/2, 8/5, 5/3, 9/5, 15/8, 2/1$

So if the frequency of the lowest note is 1, the frequency of the next note is very close to 16/15, the next note is very close to 9/8 and so on. Any desired frequency could be chosen for the starting note and the other notes would be scaled up or down accordingly. Here is Eagle 53 in cents (a standard semitone is 100 cents wide)...

0c, 113.2c, 203.8c, 317.0c, 384.9c, 498.1c, 588.7c, 701.9c,
815.1c, 883.0c, 1018.9c, 1086.8c, 1200.0c.

In comparison 12 TET notes are multiples of 100 cents. They look like this...

0c, 100c, 200c, 300c, 400c, 500c etc.

Eagle 53 is a 12 note subset of 53EDO. EDO stands for Equal Divisions of the Octave. With 12 TET the octave is divided into 12 equal divisions. With Eagle 53 the octave is divided into 53 equal divisions and 12 notes (out of the 53) are chosen that are closest to the just tuning near the top of this page.

With Eagle 53 regular major and minor chords are not available on every note, but, where they *do* occur they are more in tune (all intervals are within 1.4 cents of just or pure) than 12 TET major and minor chords. An interval is the distance between two notes.

A justly (perfectly) tuned six-note major chord looks like... 2:3:4:5:6:8. These integers show how the frequencies of the six notes relate to each other. In general, the smaller the numbers the stronger the chord. A six-note minor chord looks like... 10:15:20:24:30:40. These are much bigger numbers than are found in the major chord, and the minor chord indeed sounds much weaker than the major chord. I call these numbers separated by colons IRCs (integer Representation of a Chord). Here are some good chords that can be played on a guitar fretted for Eagle 53...

On 1/1 (E) Major and Minor
On 16/15 (F) Major
On 9/8 (F#) 4:5:8:10
On 6/5 (G) Major
On 5/4 (G#) Minor
On 4/3 (A) Major and Minor
On 7/5 (A#) 7:10:14:20
On 3/2 (B) Major and Minor
On 8/5 (C) Major
On 5/3 (C#) Minor
On 9/5 (D) 4:5:8:10
On 15/8 (D#) Minor

All of the intervals in all of the chords above (except the chord on A#) are within 1.4 cents of just.

I have described thousands of chords that occur in Eagle 53 in some of my other books, I'm just listing a few of the strongest ones here. The chords above on F#, G, A#, C, C#, D and D# do not occur in the Arabian melodic base described later.

Some time around August 2020 I had an idea about selecting notes for a 'melodic base' and then when composing I would use only the notes in the melodic base both for melodies and chords. It seems to me that in Eagle 53 there is a very large number of good melodic intervals and a very small number of sour melodic intervals. I came up with a few 'rules' for choosing notes for the melodic base so as to avoid any sour melodic intervals. For the origin of these rules look at my John's Rules Music book.

If you choose an A, avoid D 7 notes below it and D 19 notes below it.

If you choose an A#, avoid F 7 notes above it and F 19 notes above it.

B is always good.

If you choose a C, avoid C# 1 note above it.

If you choose a C#, avoid C 1 note below it and F# 7 notes below it and F# 19 notes below it.

If you choose a D, avoid D# 1 note above it and A 7 notes above it and A 19 notes above it.

If you choose a D#, avoid D 1 note below it.

E is always good.

If you choose an F, avoid A# 7 notes below it and A# 19 notes below it.

If you choose an F#, avoid C# 7 notes above it and C# 19 notes above it.

If you choose a G, avoid G# 1 note above it.

If you choose a G#, avoid G 1 note below it.

The idea is to make a list of notes over a certain range (say three octaves for a guitar) and then choose the notes you want. When you choose a note draw a circle around it. Look at the list of rules above. If you choose an F# then The C# seven notes above it is out (draw an 'X' over it) and the C# nineteen notes above it is out (draw an 'X' over it). The other C# notes are still good (so far). Obviously you cannot choose a note with an 'X' over it. Keep going until you have all the notes you want or until every note has either a circle around it or an 'X' drawn over it.

Happily, you get all the E and B notes for free. It seems to me that there aren't any notes in Eagle 53 that do not pair nicely, melodically, with any of the E or B notes (assuming 'E' is on 1/1).

It is interesting that going from an A note to the D note just above it is a good melodic interval. But going from a D note to the A note just above it is a sour (to my ears) melodic interval (in Eagle 53).

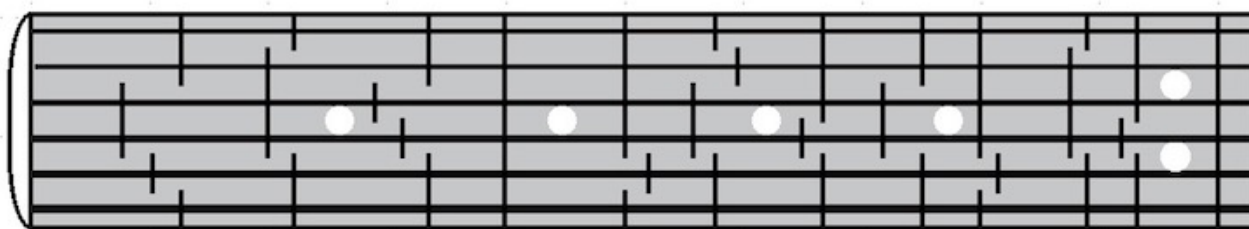
In some of my other books I describe 96 different scales. I wanted to pick just one scale and use that to demonstrate my 'melodic base' idea. The scale I chose was the Arabian Scale which I describe in my Ultimate Tuning book (go to my web site for details). It looks like this...

$1/1, 16/15, 5/4, 4/3, 3/2, 8/5, 15/8, 2/1$

E, F, G#, A, B, C, D#, E

I didn't choose this scale for religious or political reasons. I chose it because to me it sounds very exotic, very different to what you would hear usually in the Western world. A great example of a composition in the Arabian scale is Misirlou which was covered by Dick Dale and His Del-Tones. Misirlou means Egyptian girl. The song is featured on the soundtrack to the film Pulp Fiction. Search "misirlou pulp fiction" on the internet to hear it.

The chords in this book are playable on guitars fretted for Eagle 53 (see the diagram of an Eagle 53 fretboard below) and on pianos or similar keyboard instruments tuned to the Eagle 53 tuning. A few chords listed in this book are very difficult to play on an Eagle 53 fretted guitar but I left them in for completeness.



If you want to modify a guitar fretboard so as to accommodate the Eagle 53 tuning there are specifications for fret placements available free on my web site. I would advise hiring a luthier to do the job if you can afford it.

For electric keyboard players it should be possible to retune your instrument to Eagle 53. You will need a special cable to connect your keyboard to your computer and some software to do the retuning. The program I use is called microsynth-mini by H-Pi Instruments. It is inexpensive and I think there are

versions for both Windows and Mac. For tuning acoustic pianos see my Eagle 53 Pianist book.

Here are the tuning adjustments for each note...

E - leave it alone

F - raise by 13.2 cents

F# - raise by 3.8 cents

G - raise by 17 cents

G# - lower by 15.1 cents

A - lower by 1.9 cents

A# - lower by 11.3 cents

B - raise by 1.9 cents

C - raise by 15.1 cents

C# - lower by 17 cents

D - raise by 18.9 cents

D# - lower by 13.2 cents

The first page of this document shows an instrument that looks like an oud but usually ouds do not have frets. Ouds are associated with the Middle East.

I have more to say in the Afterword at the end of this document.

Chapter One

The Melodic Base

My Eagle 53 guitar is tuned similarly to 12 TET guitars: EADGBE where E corresponds to 1/1 (the first note) in the tuning. I name each note as follows. The lowest note on the lowest (bass) string is E1. Next are F1, F#1, G1 and G#1. The next note is A2 (there is no A1 to D#1). Then A#2, B2 etc. up to G#2. Then A3 up to G#3. Then A4 up to G#4 and so on.

For my melodic base I am just considering the notes between E1 and E4 (a three-octave range). On my Eagle fretted guitar this range covers all the notes from the lowest note on the bottom (bass) E string (E1) to the note on the twelfth fret on the top (treble) E string (E4). Here are the notes in the Arabian Scale...

E, F, G#, A, B, C, D#, E.

If you look at the rules for choosing notes in the introduction you will see that these notes all pair nicely with each other. Better still, these notes, over the full three octave range, all pair nicely with each other.

Can we add more notes? Yes we can! We can include the F# notes and we are still good to go. Including F# gives us a major chord on B. The F# notes don't clash with any of the other notes we have so far. We can't use any G notes because these clash with the G# notes. And we can't use any C# notes because these clash with the C notes and some of the F# notes below them.

Also A#2 and A#3 won't work but A#4 will. Any A# note will clash with the F notes 7 notes above it and 19 notes above it. Over the three octave range here (E1 to E4) there are no F notes above A#4 so A#4 is in. So here is my 'melodic base' for the Arabian scale with a few extra notes added for more variety...

E1, F1, F#1, ____, G#1, A2, ____, B2, C2, ____, D2, D#2,

E2, F2, F#2, ____, G#2, A3, ____, B3, C3, ____, D3, D#3,

E3, F3, F#3, ____, G#3, A4, A#4, B4, C4, ____, D4, D#4, E4

All of the notes in all of the chords listed later in this book belong to the 29-note melodic base above. If I'm right then you could choose any of the chords in this book (as many as you like) and no matter what order you play them the progression will always sound good. I suspect that for resolution, or a point of rest, the E major chord (low or high) would be a suitable chord to end a musical phrase or composition.

Chapter Two

Chords

There are 507 chords listed below. The first 343 chords are Lush chords which means they are clearly rooted and have an overall strength (or periodicity) value of 0.75 or higher. The remaining 164 chords are not lush, they are not clearly rooted and/or have a strength value less than 0.75. All of the chords in this book have a strength value of 0.4 or higher. I won't use a chord with a strength value less than 0.4. I explain these strength values in some of my other books, my Pianist book, my The Eagle 53 Guitarist Lush Chords book and my John's Rules Music book. The non-lush chords can be 'looked' up like you would look up words in a dictionary. The notes are arranged in ascending order: E1 to G#1, A2 to G#2, A3 to G#3 etc. They are grouped in six-note chords, five-note chords and four-note chords.

Note that there are two groups of five-note chords, chords 5-1 to 5-98 are on the EADGB strings and chords 5-99 to 5-220 are on the ADGBE strings.

And there are three groups of four-note chords. 4-1 to 4-146 are on the EADG strings. 4-147 to 4-245 are on the ADGB strings and 4-246 to 4-374 are on the DGBE strings.

Each chord listed has a diagram below it which represents the frets on a right handed guitar fretted for Eagle 53. The vertical lines are frets. N stands for Nut. An 'X' indicates a string that is not to be played. An 'O' indicates a note to be played. The dashes at the bottom of each diagram indicate the 3rd, 5th, 7th, 9th and 12th frets.

The frets in the diagrams line up nicely but on a real Eagle 53 guitar the frets are somewhat staggered, a different arrangement (see the diagram on page 5). Even so, the diagrams should be clear enough to follow so as to play the chords on an Eagle 53 fretted guitar.

Above each diagram is the chord name, the IRC (explained in the introduction), the overall strength value (or periodicity) and the names of each of the notes in the chord.

These chords could also be played on pianos or keyboards tuned to Eagle 53, just look at the note names above each diagram. Some chords contain unisons (two

notes with the same pitch) and obviously these can't be played on a regular piano or keyboard. Omitting one note from a unison in a chord should be okay most of the time but in a few cases the strength of the chord will dip below 0.4 and would therefore be, for me, illegal.

Here are some likely chords to get started with...

E Major

F Major

F# 7:10:14:20 F#1, C2, F#2, C3 (4-45)

G# Minor

A Minor

B Major

C 4:5:8:10 C2, E2, C3, E3 (C2-97)

D# 7:10:12:14 D#2, A3, C3, D#3 (4-205)

E Major (one octave higher than previous E Major)

These should all sound good played in any order and finishing on one of the E Major chords should be a point of rest.

For piano or keyboard players, you need not be confined to the three octave range I have written about here. If you avoid chords containing an A# then you could play almost all of the chords listed below over *any* range (e.g. a grand piano has seven octaves plus a few notes) and the progressions should always be good.

E1-1	1:2:3:4:3:4	5.333	E1,E2,B3,E3,B3,E3
O			
O			
N			
N			
N			
O			
	-	-	-

E1-2	1:2:3:4:3:6	5.167	E1,E2,B3,E3,B3,B4
N			
O			
N			
N			
N			
O			
	-	-	-

E1-3	1:2:3:4:5:4	5.067	E1,E2,B3,E3,G#3,E3
O			
N			
N			
N			
N			
O			
	-	-	-

E1-4	1:2:3:4:5:6	4.9	E1,E2,B3,E3,G#3,B4
N			
N			
N			
N			
N			
O			
	-	-	-

E1-5	2:3:4:5:6:8	3.15	E1,B2,E2,G#2,B3,E3
O			
O			
N			
N			
N			
O			
	-	-	-

E1-6	2:3:4:6:6:8	3.083	E1,B2,E2,B3,B3,E3
O			
O			
N			
N			
N			
O			
	-	-	-

E1-7 2:3:4:6:8:8 3.0 E1,B2,E2,B3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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E1-8 2:3:4:6:8:10 2.95 E1,B2,E2,B3,E3,G#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

E1-9 2:4:5:6:6:8 2.817 E1,E2,G#2,B3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

E1-10 2:3:4:6:8 2.75 E1,B2,E2,B3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

E1-11 2:4:5:6:8:8 2.733 E1,E2,G#2,B3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

E1-12 2:4:5:8:6:8 2.733 E1,E2,G#2,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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E1-13	2:5:6:8:6:8	2.567	E1,G#2,B3,E3,B3,E3
O			
O			
N			O
N			O
N			
O			O

E1-14	4:6:9:12:12	1.389	E1,B2,F#2,B3,B3
X			
O			
N			O
N			O
N	O		
O			

E1-15	4:6:9:12:15	1.356	E1,B2,F#2,B3,D#3
X			
N			O
N			O
N			O
N	O		
O			

E1-16	4:6:9:10	1.256	E1,B2,F#2,G#2
X			
X			
N	O		
N			O
N	O		
O			

E1-17	4:6:9:12	1.222	E1,B2,F#2,B3
X			
X			
N			O
N			O
N	O		
O			

E1-18	4:9:10:15:12	1.222	E1,F#2,G#2,D#3,B3
X			
O			
N			O
N			
N		O	
O			O

E1-19 4:9:12:15:12 1.189 E1,F#2,B3,D#3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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E1-20 4:10:12:15:12 1.167 E1,G#2,B3,D#3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

E1-21 4:8:9:12 1.139 E1,E2,F#2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

E1-22 4:10:12:15 1.0 E1,G#2,B3,D#3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 - - - - -

F1-1 2:3:4:5:6:8 3.15 F1,C2,F2,A3,C3,F3
 N O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | O | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N O | | | | | | | | | | | |
 - - - - -

F1-2 2:3:4:5:6 2.9 F1,C2,F2,A3,C3
 X | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | O | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N O | | | | | | | | | | | |
 - - - - -

F1-3 2:3:4:5:7 2.852 F1,C2,F2,A3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N O | | | | | | | | | | | |
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F1-4 2:3:4:5 2.567 F1,C2,F2,A3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N O | | | | | | | | | | | |
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F1-5 4:5:7:10:12:15 1.686 F1,A2,D#2,A3,C3,E3
 O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 - - - - - - - - - - - -

F1-6 4:5:8:10:12:16 1.642 F1,A2,F2,A3,C3,F3
 N O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
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F1-8 4:5:7:10:12 1.552 F1,A2,D#2,A3,C3
 X | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
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F1-10 4:5:8:10:12 1.517 F1,A2,F2,A3,C3
 X | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
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F1-12 4:5:8:10:14 1.493 F1,A2,F2,A3,D#3

X										
N			o							
N		o								
N			o							
O										
N	o									

F1-15 4:5:7:10 1.386 F1,A2,D#2,A3

X										
X										
N		o								
N	o									
O										
N	o									

F1-17 4:5:8:10 1.35 F1,A2,F2,A3

X										
X										
N		o								
N			o							
O										
N	o									

F1-19 4:6:7:10 1.319 F1,C2,D#2,A3

X										
X										
N		o								
N	o									
N			o							
N	o									

G#1-1 2:3:4:6 2.5 G#1,D#2,G#2,D#3

X										
X										
N							o			
N						o				
N			o							
N										

G#1-2 2:3:4 2.167 G#1,D#2,G#2

X										
X										
N							o			
N						o				
N			o							
N										

A2-1	1:2:3:4:3	4.833	A2,A3,E3,A4,E3
O			
N			
N			
N			
O			
X			

A2-9	2:3:4:6:8	2.75	A2,E2,A3,E3,A4
N			
N			
N			
N			
O			
X			

A2-13	2:3:4:6	2.5	A2,E2,A3,E3
X			
N			
N			
N			
O			
X			

A2-16	3:4:6:8:9:12	2.139	E1,A2,E2,A3,B3,E3
O			
O			
N			
N			
O			
O			

A2-18	3:4:6:9:9:12	2.111	E1,A2,E2,B3,B3,E3
O			
O			
N			
N			
O			
O			

A2-20	3:4:6:9:9:15	2.078	A2,E2,B3,B3,G#3
N			
O			
N			
N			
O			
O			

A2-21 3:4:6:9:12:12 2.056 E1,A2,E2,B3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |

A2-22 3:4:8:9:9:12 2.028 E1,A2,A3,B3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |

A2-23 3:4:6:9:12:15 2.023 A2,E2,B3,E3,G#3
 N | | | | | | | | | | | |
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A2-27 3:4:8:12:9:12 1.972 E1,A2,A3,E3,B3,E3
 O | | | | | | | | | | | |
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A2-28 3:4:8:9:12:12 1.972 E1,A2,A3,B3,E3,E3
 O | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |

A2-31 3:4:9:12:9:12 1.944 E1,A2,B3,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |

A2-34 3:4:6:8:12 1.917 E1,A2,E2,A3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
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A2-36 4:4:8:9:9:12 1.861 A2,A2,A3,B3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
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A2-40 3:4:8:9:12 1.806 E1,A2,A3,B3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 N | | | | | | | | | | | |
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 O | | | | | | | | | | | |
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A2-41 4:4:8:9:12:12 1.806 A2,A2,A3,B3,E3,E3
 O | | | | | | | | | | | |
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A2-44 4:6:8:9:9:12 1.694 A2,E2,A3,B3,B3,E3
 O | | | | | | | | | | | |
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A2-49 4:4:8:9 1.472 A2,A2,A3,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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A2 4:6:8:9:12 1.472 A2,E2,A3,B3,E3
 X | | | | | | | | | | | |
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A2-53 4:6:9:12:15 1.356 A2,E2,B3,E3,G#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 O | | | | | | | | | | | |
 X | | | | | | | | | | | |
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A2-57 4:8:9:12:12 1.306 A2,A3,B3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 O | | | | | | | | | | | |
 X | | | | | | | | | | | |
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A2-58 4:8:12:9:12 1.306 A2,A3,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |
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A2-59 4:6:8:9 1.306 A2,E2,A3,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
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 N | | | | | | | | | | | |
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A2-63 4:6:9:12 1.222 A2,E2,B3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 O | | | | | | | | | | | |
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A2-64 4:9:12:15:12 1.189 A2,B3,E3,G#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

A2-68 9:8:18:24:18:24 0.861 B2,A2,B3,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |

A2-69 9:8:18:24:30:24 0.817 B2,A2,B3,E3,G#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |

A2-70 8:9:12:18 0.75 A2,B2,E2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

B2-1 2:3:4:5:4:8 3.317 B2,F#2,B3,D#3,B3,B4
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

B2-2 2:3:4:5:6:8 3.15 B2,F#2,B3,D#3,F#3,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

B2-3	2:3:4:5:4	3.067	B2, F#2, B3, D#3, B3					
X								
O								
N							O	
N								O
N								O
N							O	

B2-4	2:3:4:4:6	3.0	B2, F#2, B3, B3, F#3					
N	O							
O								
N			O					
N			O					
N	O							
X								

B2-5	2:3:4:5:6	2.9	B2, F#2, B3, D#3, F#3					
N	O							
N			O					
N			O					
N			O					
N	O							
X								

B2-6	2:3:4:5:6	2.9	B2, F#2, B3, D#3, F#3					
X								
N						O		
N							O	
N								O
N								O
N						O		

B2-7	2:3:4:4	B2	2.667	B2, F#2, B3, B3				
X								
O								
N			O					
N			O					
N	O							
X								

B2-8	2:3:4:5	2.567	B2, F#2, B3, D#3					
X								
N			O					
N			O					
N			O					
N	O							
X								

B2-9 2:3:4:5 2.567 B2,F#2,B3,D#3

X												
X												
N								O				
N									O			
N										O		
N							O					

B2-10 3:4:6:8:8:12 2.167 F#1,B2,F#2,B3,B3,F#3

N		O										
O												
N				O								
N				O								
N		O										
N		O										

B2-11 3:4:6:8:10:12 2.117 F#1,B2,F#2,B3,D#3,F#3

N		O										
N				O								
N				O								
N				O								
N		O										
N		O										

B2-12 3:4:5:8:8 2.067 F#1,B2,D#2,B3,B3

X												
O												
N				O								
N	O											
N		O										
N		O										

B2-13 3:4:5:8:10 2.017 F#1,B2,D#2,B3,D#3

X												
N				O								
N				O								
N	O											
N		O										
N		O										

B2-14 3:4:6:8:8 2.0 F#1,B2,F#2,B3,B3

X												
O												
N				O								
N				O								
N		O										
N		O										

B2-15 3:4:6:8:10 1.95 F#1,B2,F#2,B3,D#3

X											
N				O							
N				O							
N				O							
N		O									
N		O									

B2-16 3:4:5:8 1.817 F#1,B2,D#2,B3

X											
X											
N				O							
N	O										
N		O									
N		O									

B2-17 4:5:6:8:10:16 1.808 B2,D#2,F#2,B3,D#3,B4

N							O				
N				O							
N				O							
N				O							
N					O						
N						O					

B2-18 3:4:6:8 1.75 F#1,B2,F#2,B3

X											
X											
N				O							
N				O							
N		O									
N		O									

B2-19 4:5:6:8:10 1.683 B2,D#2,F#2,B3,D#3

X											
N				O							
N				O							
N				O							
N					O						
N						O					

B2-20 4:5:6:8:12 1.65 B2,D#2,F#2,B3,F#3

X											
N							O				
N				O							
N				O							
N					O						
N						O					

C2-97 4:5:8:10 1.35 C2,E2,C3,E3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 N | | | | | | | | | | | |
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C2-112 4:5:8 1.15 C2,E2,C3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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C2-128 5:8:10:16 0.975 E1,C2,E2,C3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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E2-1 2:3:4:3:4 3.333 E2,B3,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
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E2-2 2:3:4:3:6 3.167 E2,B3,E3,B3,B4
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 X | | | | | | | | | | | |
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E2-3 2:3:4:5:4 3.067 E2,B3,E3,G#3,E3
 O | | | | | | | | | | | |
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 X | | | | | | | | | | | |
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E2-4 2:3:4:5:6 2.9 E2,B3,E3,G#3,B4
 N | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-5 2:3:3:4 2.833 E2,B3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-6 2:3:4:3 2.833 E2,B3,E3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-7 2:3:3:5 2.733 E2,B3,B3,G#3
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-8 2:3:4:4 2.667 E2,B3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-9 2:3:4:5 2.567 E2,B3,E3,G#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 X | | | | | | | | | | | |

E2-10 2:3:4:5 2.567 E2,B3,E3,G#3
 N | | | O | | | | | | | |
 N | | | O | O | | | | | | | |
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 N | O | | | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

E2-11 3:4:5:6:6:8 2.483 B2,E2,G#2,B3,B3,E3
 O | | | | | | | | | | | | | |
 O | | | | | | | | | | | | | |
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E2-12 3:4:5:8:6:8 2.4 B2,E2,G#2,E3,B3,E3
 O | | | | | | | | | | | | | |
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 N | | | | | | O | | | | | | | | | | | |
 N | | | | | | O | | | | | | | | | | | |

E2-13 3:4:6:8:6:8 2.333 B2,E2,B3,E3,B3,E3
 O | | | | | | | | | | | | | | | |
 O | | | | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | | | | | | |
 N | | | | | | | | | | | O | | | | | | | |
 N | | | | | | | | | | O | | | | | | | | | |
 N | | | | | | | | | O | | | | | | | | | |

E2-14 3:4:6:8:6:12 2.25 B2,E2,B3,E3,B3,B4
 N | | | | | | | | | | O | | | | | | | | | |
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 N | | | | | | | | | | | | | O | | | | | | | | | |
 N | | | | | | | | | | | | | O | | | | | | | | | |
 N | | | | | | | | | | O | | | | | | | | | | | |
 N | | | | | | | | | O | | | | | | | | | | | |

E2-15 3:4:6:8:9:8 2.222 B2,E2,B3,E3,F#3,E3
 O | | | | | | | | | | | | | | | | | | | |
 N | | | | | | | | | | O | | | | | | | | | | | |
 N | | | | | | | | | | | | | | O | | | | | | | | | |
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 N | | | | | | | | | | O | | | | | | | | | | | |
 N | | | | | | | | | O | | | | | | | | | | | |

E2-16 3:4:6:8:10:8 2.2 B2,E2,B3,E3,G#3,E3

O										
N								O		
N								O		
N								O		
N						O				
N						O				

E2-17 2:3:4 2.167 E2,B3,E3

X										
N				O						
N			O							
N	O									
X										
X										

E2-18 3:4:5:6:8 2.15 B2,E2,G#2,B3,E3

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N	O									
N		O								
N		O								
X										

E2-19 3:4:5:8:6 2.15 B2,E2,G#2,E3,B3

X										
O										
N								O		
N						O				
N							O			
N							O			

E2-20 3:4:6:8:9:12 2.139 B2,E2,B3,E3,F#3,B4

N						O				
N						O				
N								O		
N								O		
N						O				
N						O				

E2-21 3:4:5:6:9 2.122 B2,E2,G#2,B3,F#3

N		O								
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N	O									
N		O								
N		O								
X										

E2-22 3:4:6:8:10:12 2.117 B2,E2,B3,E3,G#3,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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E2-23 3:4:6:6:8 2.083 B2,E2,B3,B3,E3
 O | | | | | | | | | | | |
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E2-24 3:4:6:6:10 2.033 B2,E2,B3,B3,G#3
 N | | | | | | | | | | | |
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E2-25 3:4:5:8:10 2.017 B2,E2,G#2,E3,G#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
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E2-26 3:4:6:8:8 2.0 B2,E2,B3,E3,E3
 O | | | | | | | | | | | |
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E2-27 3:4:6:8:9 1.972 B2,E2,B3,E3,F#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 X | | | | | | | | | | | |
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E2-28 3:4:6:8:10 1.95 B2,E2,B3,E3,G#3

X									
N								O	
N								O	
N								O	
N						O			
N						O			

E2-29 3:4:6:8:10 1.95 B2,E2,B3,E3,G#3

N			O						
N				O					
N			O						
N	O								
N	O								
X									

E2-30 3:4:5:6 1.9p B2,E2,G#2,B3

X									
X									
N			O						
N					O				
N						O			
N						O			

E2-31 4:5:6:6:8 1.817 E2,G#2,B3,B3,E3

O									
O									
N			O						
N					O				
N						O			
X									

E2-32 3:4:6:8 1.75 B2,E2,B3,E3

X				O					
N			O						
N	O								
N	O								
X									

E2-33 4:5:6:8:8 1.733 E2,G#2,B3,E3,E3

O				O					
N			O						
N					O				
N						O			
X						O			

E2-34 4:5:8:6:8 1.733 E2,G#2,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-35 4:5:6:6:12 1.733 E2,G#2,B3,B3,B4
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-36 4:5:6:9:8 1.706 E2,G#2,B3,F#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-37 4:5:6:8:10 1.683 E2,G#2,B3,E3,G#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-38 4:5:6:9:10 1.656 E2,G#2,B3,F#3,G#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-39 4:5:8:9:8 1.622 E2,G#2,E3,F#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-40 4:5:8:10:8 1.6 E2,G#2,E3,G#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-41 4:6:8:9:8 1.556 E2,B3,E3,F#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-42 4:5:6:8 1.483 E2,G#2,B3,E3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-43 4:5:6:9 1.456 E2,G#2,B3,F#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-44 5:6:8:12:12:16 1.442 G#1,B2,E2,B3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-45 4:5:6:10 1.433 E2,G#2,B3,G#3
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-46 4:6:6:9 1.389 E2,B3,B3,F#3
 N | | | | | | | | | |
 O | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

E2-47 4:5:8:9 1.372 E2,G#2,E3,F#3
 X | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |

E2-48 4:5:8:10 1.35 E2,G#2,E3,G#3
 X | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |

E2-49 4:6:8:9 1.306 E2,B3,E3,F#3
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

E2-50 5:8:10:12:16:20 1.242 G#1,E2,G#2,B3,E3,G#3
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |

E2-51 5:8:10:12:18:20 1.228 G#1,E2,G#2,B3,F#3,G#3
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |

E2-52 4:5:8 1.15 E2,G#2,E3,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

E2-53 5:6:8:12 1.15 G#1,B2,E2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-54 5:8:9:12:18 1.15 G#1,E2,F#2,B3,F#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-55 5:8:10:12:16 1.142 G#1,E2,G#2,B3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-56 5:8:10:12:18 1.128 G#1,E2,G#2,B3,F#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-57 5:8:9:12 1.039 G#1,E2,F#2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

E2-58 5:8:10:12 1.017 G#1,E2,G#2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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E2-59 6:8:9:12 0.972 B2,E2,F#2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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E2-60 8:9:12:18 0.75 E2,F#2,B3,F#3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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E2-61 8:9:12:18 0.75 E2,F#2,B3,F#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
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F2-1 2:3:4:5:6 2.9 F2,C3,F3,A4,C4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
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F2-2 2:3:4:5:7 2.852 F2,C3,F3,A4,D#4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
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F2-3	2:3:4:5	2.567	F2,C3,F3,A4						
X									
N									O
N									O
N									O
N									O
X									

F2-4	2:3:4:5	2.567	F2,C3,F3,A4						
N									
N									O
N									O
N									O
X									
X									

F2-6	2:3:4	2.167	F2,C3,F3						
X									
N									O
N									O
N									O
X									
X									

F2-7	3:4:6:7:10:12	2.152	C2,F2,C3,D#3,A4,C4						
N									O
N									O
N									O
N									O
N									O

F2-8	3:4:5:6:8	2.15	C2,F2,A3,C3,F3						
N									O
N									O
N									O
N									O
X									

F2-10	3:4:6:8:10:12	2.117	C2,F2,C3,F3,A4,C4						
N									O
N									O
N									O
N									O
N									O

F2-11	3:4:5:8:10	2.017	C2,F2,A3,F3,A4				
X							
N							o
N							o
N			o				
N				o			
N					o		

F2-14	3:4:6:7:10	1.986	C2,F2,C3,D#3,A4				
X							
N							o
N					o		
N							o
N					o		
N					o		

F2-15	3:4:6:7:10	1.985	C2,F2,C3,D#3,A4				
N			o				
N				o			
N			o				
N			o				
X							

F2-18	3:4:6:8:10	1.95	C2,F2,C3,F3,A4				
N			o				
N				o			
N			o				
N			o				
X							

F2-19	3:4:6:8:10	1.95	C2,F2,C3,F3,A4				
X							
N							o
N							o
N							o
N					o		
N					o		

F2-20	3:4:5:6	1.9	C2,F2,A3,C3				
X							
X							
N			o				
N				o			
N					o		
N					o		

F2-21 3:4:5:6 1.9 C2,F2,A3,C3
 X | | | | | | | | | |
 N O | | | | | | | | | |
 N | O | | | | | | | | | |
 N | | O | | | | | | | | | |
 N | | | O | | | | | | | | | |
 X | | | | | | | | | | | |

F2-22 3:4:5:7 1.852 C2,F2,A3,D#3
 X | | | | | | | | | |
 X | | | | | | | | | |
 N | | | | | | | O | | | |
 N | | | | | | O | | | | | |
 N | | | | | | | O | | | | | |
 N | | | | | | | O | | | | | |

F2-23 3:4:5:7 1.852 C2,F2,A3,D#3
 X | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

F2-24 3:4:5:8 1.817 C2,F2,A3,F3
 X | | | | | | | | | |
 X | | | | | | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |

F2-25 3:4:6:7 1.786 C2,F2,C3,D#3
 X | | | | | | | | | |
 X | | | | | | | | | |
 N | | | | | | | O | | | | | |
 N | | | | | | | | | O | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |

F2-26 3:4:6:7 1.786 C2,F2,C3,D#3
 X | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | | O | | | | | | | | | |
 N | | | O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

F2-27	3:4:6:8	1.75	C2,F2,C3,F3						
X									
X									
N								O	
N								O	
N								O	
N								O	

F2-28	3:4:6:8	1.75	C2,F2,C3,F3						
X									
N									
N									
N									
N									
X									

F2-29	4:5:6:8:10	1.683	F2,A3,C3,F3,A4						
N									
N									
N									
N									
N									
X									

F2-35	4:6:7:10:12	1.486	F2,C3,D#3,A4,C4						
N									
N									
N									
N									
N									
X									

F2-36	4:5:6:8	1.483	F2,A3,C3,F3						
X									
N									
N									
N									
N									
X									

F2-37	4:5:6:8	1.483	F2,A3,C3,F3						
N	O								
N	O								
N		O							
N			O						
X									
X									

F2-39	4:6:7:10:14	1.462	F2,C3,D#3,A4,D#4
N			
N			
N			
N			
N			
X			

F2-42	4:5:7:8	1.436	F2,A3,D#3,F3
X			
N			
N			
N			
N			
X			

F2-43	4:5:7:8	1.436	F2,A3,D#3,F3
N	O		
N		O	
N	O		
N		O	
X			
X			

F2-46	4:5:7:10	1.386	F2,A3,D#3,A4
N			O
N		O	
N	O		
N		O	
X			
X			

F2-47	4:5:7:10	1.386	F2,A3,D#3,A4
X			
N			O
N			O
N		O	
N		O	
X			

F2-50	5:5:8:12:14	1.36	A2,A2,F2,C3,D#3
X			
N		O	
N		O	
N	O		
O			
N		O	

F2-51 4:5:8:10 1.35 F2,A3,F3,A4

X										
N									o	
N									o	
N						o				
N							o			
X										

F2-52 5:5:8:12:16 1.342 A2,A2,F2,C3,F3

X										
N						o				
N					o					
N			o							
O										
N				o						

F2-55 4:6:7:10 1.319 F2,C3,D#3,A4

N				o						
N			o							
N				o						
N		o								
X										
X										

F2-56 4:6:7:10 1.319 F2,C3,D#3,A4

X										
N								o		
N							o			
N								o		
N							o			
X										

F2-59 5:6:8:12:14 1.293 A2,C2,F2,C3,D#3

X										
N			o							
N				o						
N		o								
N		o								
N				o						

F2-60 5:6:8:12:16 1.275 A2,C2,F2,C3,F3

X										
N					o					
N				o						
N		o								
N		o								
N				o						

F2-62 5:8:10:12:16:20 1.242 A2,F2,A3,C3,F3,A4
 N | | | | | O | | | | |
 N | | | | | O | | | | |
 N | | | | | O | | | | |
 N | | | | | O | | | | |
 N | | | | | O | | | | |
 N | | | | | O | | | | |

F2-64 5:5:8:12 1.217 A2,A2,F2,C3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | O | | | | |
 N | | | O | | | | | | |
 O | | | | | | | | | | |
 N | | | | | O | | | | |

F2-68 5:6:8:12 1.15 A2,C2,F2,C3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | O | | | | |
 N | | | O | | | | | | |
 N | | | O | | | | | | |
 N | | | | | O | | | | |

F2-71 5:8:10:12:16 1.142 A2,F2,A3,C3,F3
 N O | | | | | | | | | | |
 N O | | | | | | | | | | |
 N | | O | | | | | | | | |
 N | | | O | | | | | | | |
 O | | | | | | | | | | |
 X | | | | | | | | | | |

F2-72 5:8:10:12:16 1.142 A2,F2,A3,C3,F3
 X | | | | | | | | | | |
 N | | | | | O | | | | | |
 N | | | | | O | | | | | |
 N | | | | | | | O | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | O | | | | | |

F2-74 5:8:10:14:16 1.118 A2,F2,A3,D#3,F3
 X | | | | | | | | | | |
 N | | | | | O | | | | | |
 N | | | | | | | O | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | | | | | O | | | | |
 N | | | | | O | | | | | |

F2-78 5:8:10:14:20 1.093 A2,F2,A3,D#3,A4
 N | | | | O | | | | | |
 N | | | O | | | | | | | |
 N | O | | | | | | | | | |
 N | | O | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

F2-83 5:8:12:14:20 1.059 A2,F2,C3,D#3,A4
 N | | | | O | | | | | |
 N | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | O | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

F2-85 5:8:12:16:20 1.042 A2,F2,C3,F3,A4
 N | | | | O | | | | | |
 N | | | | | O | | | | | |
 N | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

F2-88 5:8:10:12 1.017 A2,F2,A3,C3
 X | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | | O | | | | | | | | | | | |
 O | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

F2-89 5:8:10:12 1.017 A2,F2,A3,C3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | | O | | | | | | | | | |
 N | | | | | | O | | | | | | | | | |
 N | | | | O | | | | | | | | | | | |

F2-91 5:8:10:14 0.993 A2,F2,A3,D#3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | | O | | | | | | | |
 N | | | | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | | | | | |

F2-92 5:8:10:14 0.993 A2,F2,A3,D#3

X										
N			o							
N		o								
N			o							
O										
X										

F2-96 5:8:12:14 0.96 A2,F2,C3,D#3

X										
N			o							
N				o						
N		o								
O										
X										

F2-97 5:8:12:16 0.942 A2,F2,C3,F3

X										
N					o					
N				o						
N		o								
O										
X										

F2-101 7:8:12:16 0.827 D#2,F2,C3,F3

X										
X										
N								o		
N								o		
N							o			
N									o	

F2-102 7:8:12:16 0.827 D#2,F2,C3,F3

X										
N					o					
N				o						
N		o								
N					o					
X										

G#2-1 2:3:4 2.167 G#2,D#3,G#3

X										
N								o		
N							o			
N					o					
X										
X										

G#2-2 2:3:4 2.167 G#2,D#3,G#3

N											
N											
N	O										
X											
X											
X											

G#2-3 3:4:6:8:9 1.972 D#2,G#2,D#3,G#3,A#4

N											
N											
N											
N											
N											
X											

G#2-4 3:4:6:8 1.75 D#2,G#2,D#3,G#3

X											
N											
N											
N											
N											
X											

G#2-5 3:4:6:8 1.75 D#2,G#2,D#3,G#3

N											
N											
N	O										
N	O										
X											
X											

G#2-6 3:4:6 1.5 D#2,G#2,D#3

X											
N											
N	O										
N	O										
X											
X											

G#2-7 4:6:8:9 1.306 G#2,D#3,G#3,A#4

N											
N											
N											
N											
X											
X											

A3-1 2:3:4:3 2.833 A3,E3,A4,E3
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

A3-4 2:3:4 2.167 A3,E3,A4
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

A3-5 2:3:4 2.167 A3,E3,A4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

A3-7 3:4:6:8:6 2.083 E2,A3,E3,A4,E3
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

A3-8 3:4:6:8:9 1.972 E2,A3,E3,A4,B4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

A3-16 3:6:8:9:9:12 1.861 E1,E2,A3,B3,B3,E3
 O | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |

A3-24 3:6:8:12:9:12 1.806 E1,E2,A3,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |

A3-26 3:4:6:8 1.75 E2,A3,E3,A4
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

A3-27 3:4:6:8 1.75 E2,A3,E3,A4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

A3-35 3:4:6 1.5 E2,A3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

A3-38 3:6:8:9 1.472 E1,E2,A3,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |

A3-42 3:6:8:12 1.417 E1,E2,A3,E3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |

A3-45	4:6:8:9	1.306	A3,E3,A4,B4						
N									
N									
N									
N									
X									
X									

A3-46	3:8:9:12	1.306	E1,A3,B3,E3						
X									
X									
N									
N									
N									
O									

A3-51	6:8:9:9:12	1.194	E2,A3,B3,B3,E3						
O									
O									
N									
N									
N									
X									

A3-59	6:8:12:9:12	1.139	E2,A3,E3,B3,E3						
O									
O									
N									
N									
N									
X									

A3-61	6:8:12:9:18	1.083	E2,A3,E3,B3,B4						
N									
O									
N									
N									
N									
X									

A3-68	6:8:12:9	0.972	E2,A3,E3,B3						
X									
O									
N									
N									
N									
X									

A3-69	6:8:9:12	0.972	E2,A3,B3,E3				
O							
O							
N	O						
N	O						
X							
X							

A3-70	8:9:9:12	0.861	A3,B3,B3,E3				
O							
O							
N		O					
N			O				
X							
X							

A3-72	8:12:9:12	0.806	A3,E3,B3,E3				
O							
O							
N						O	
N					O		
X							
X							

A3-73	8:9:12:12	0.806	A3,B3,E3,E3				
O							
N		O					
N			O				
N							
X							
X							

A3-74	8:12:9:12	0.806	A3,E3,B3,E3				
O							
O							
N						O	
N					O		
X							
X							

A3-75	8:9:9:18	0.806	A3,B3,B3,B4				
N					O		
O							
N		O					
N					O		
X							
X							

A3-77 8:9:12:18 0.75 A3,B3,E3,B4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

A3-78 8:12:9:18 0.75 A3,E3,B3,B4
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

B3-1 2:3:2:5 3.067 B3,F#3,B3,D#4
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

B3-2 2:3:4:5 2.567 B3,F#3,B4,D#4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

B3-3 3:4:5:4:8 2.317 F#2,B3,D#3,B3,B4
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

B3-4 3:4:5:4:10 2.267 F#2,B3,D#3,B3,D#4
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

B3-5 3:4:6:4:10 2.2 F#2,B3,F#3,B3,D#4
 N | | | | | | | | | | O | |
 O | | | | | | | | | | O | |
 N | | | | | | | | | | | | |
 N | | | | | | | | | | O | |
 N | | | | | | | | | | O | |
 X | | | | | | | | | | | | |

B3-6 2:3:4 2.167 B3,F#3,B4
 X | | | | | | | | | | | | |
 N | | | | | | | | | | | | O | |
 N | | | | | | | | | | | | O | |
 N | | | | | | | | | | O | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

B3-7 2:3:4 2.167 B3,F#3,B4
 N | | | | | | | | | | O | | | |
 N | | | | | | | | | | O | | | |
 N | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |

B3-8 3:4:5:6:8 2.15 F#2,B3,D#3,F#3,B4
 N | | | | | | | | | | O | | | |
 N | | | | | | | | | | O | | | |
 N | | | | | | | | | | | | | | |
 N | | | | | | | | | | | | | | |
 N | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |

B3-9 3:4:6:4:10 2.2 F#2,B3,F#3,B3,D#4
 N | | | | | | | | | | O | | | |
 O | | | | | | | | | | O | | | |
 N | | | | | | | | | | | | | | |
 N | | | | | | | | | | O | | | |
 N | | | | | | | | | | O | | | |
 X | | | | | | | | | | | | | | |

B3-10 3:4:5:4 2.067 F#2,B3,D#3,B3
 X | | | | | | | | | | | | | | |
 O | | | | | | | | | | | | | | |
 N | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | | | |
 N | | | | | | | | | | O | | | | |
 X | | | | | | | | | | | | | | |

B3-11 3:4:6:4 2.0 F#2,B3,F#3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | O | | |
 N | | | | | | | | | | O | | |
 N | | | | | | | | | | O | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

B3-12 3:4:4:6 2.0 F#2,B3,B3,F#3
 N | O | | | | | | | | | | | |
 O | | | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

B3-13 3:4:6:8:10 1.95 F#2,B3,F#3,B4,D#4
 N | | | | | | | | | | | | O | | |
 N | | | | | | | | | | | | O | | |
 N | | | | | | | | | | | | O | | |
 N | | | | | | | | | | O | | | | |
 N | | | | | | | | | | O | | | | |
 X | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

B3-14 3:4:5:6 1.9 F#2,B3,D#3,F#3
 N | O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 X | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

B3-15 3:4:5:6 1.9 F#2,B3,D#3,F#3
 X | | | | | | | | | | | | | | | |
 N | | | | | | | | | | O | | | | | |
 N | | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | | | O | | |
 N | | | | | | | | | | | | | | O | | |
 X | | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | |

B3-16 3:4:5:8 1.817 F#2,B3,D#3,B4
 N | | | | | | | | | | O | | | | | |
 N | | | | | | | | | | O | | | | | |
 N | | | | | | | | | | O | | | | | |
 N | | | | | | | | | | O | | | | | |
 X | | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | |

B3-17 3:4:6:8 1.75 F#2,B3,F#3,B4
 X | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |

B3-18 3:4:6:8 1.75 F#2,B3,F#3,B4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

B3-19 4:5:4:8 1.65 B3,D#3,B3,B4
 N | | | | | | | | | |
 O | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

B3-20 4:5:4:10 1.6 B3,D#3,B3,D#4
 N | | | | | | | | | |
 O | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

B3-21 4:5:6:8 1.483 B3,D#3,F#3,B4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

B3-22 5:6:8:10:16 1.308 D#2,F#2,B3,D#3,B4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |

B3-23 4:5:6 1.233 B3,D#3,F#3

X										
N							O			
N								O		
N									O	
X										
X										

B3-24 4:5:6 1.233 B3,D#3,F#3

N	O									
N			O							
N			O							
X										
X										
X										

B3-25 5:6:8:8 1.233 D#2,F#2,B3,B3

X										
O										
N			O							
N			O							
N				O						
X										

B3-26 5:6:8:10 1.183 D#2,F#2,B3,D#3

X										
N			O							
N			O							
N			O							
N				O						
X										

B3-27 5:6:8:12 1.15 D#2,F#2,B3,F#3

X										
N							O			
N			O							
N			O							
N				O						
X										

B3-28 5:6:8:12 1.15 D#2,F#2,B3,F#3

X										
X										
N									O	
N								O		
N								O		
N									O	

B3-29 4:5:8 1.15 B3,D#3,B4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

B3-30 5:8:10:8 1.1 D#2,B3,D#3,B3
 X | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

B3-31 5:8:8:12 1.067 D#2,B3,B3,F#3
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

B3-32 5:8:10:12 1.017 D#2,B3,D#3,F#3
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

B3-33 5:6:8 0.983 D#2,F#2,B3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

C3-34 4:5:7:5 1.586 C3,E3,A#4,E3
 O | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

C3-39 4:5:7:8 1.436 C3,E3,A#4,C4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

C3-41 4:5:7:10 1.386 C3,E3,A#4,E4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

C3-55 4:5:7 1.186 C3,E3,A#4
 X | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

C3-56 4:5:7 1.186 C3,E3,A#4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

C3-62 4:5:8 1.15 C3,E3,C4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

C3-73 5:8:10:10 1.05 E2,C3,E3,E3
 O | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

C3-89	5:8:10	0.85	E2,C3,E3					
X								
N			O					
N			O					
N	O							
X								
X								

D#3	2:3:4	2.167	D#3,A#4,D#4					
N								O
N								O
N						O		
X								
X								
X								

E3-1	3:4:3:4	2.333	B3,E3,B3,E3					
O								
O								
N							O	
N							O	
X								
X								

E3-2	3:4:3:6	2.167	B3,E3,B3,B4					
N								
O								
N								O
N								O
X								
X								

E3-3	3:4:3:8	2.083	B3,E3,B3,E4					
N								O
O								
N								O
N								O
X								
X								

E3-4	3:4:5:4	2.067	B3,E3,G#3,E3					
O								
N								O
N								O
N								O
X								
X								

E3-5	3:4:6:4	2.0	B3,E3,B4,E3					
O								
N								O
N							O	
N							O	
X								
X								

E3-6	3:4:5:6	1.9	B3,E3,G#3,B4					
N								
N								
N								
N								
X								
X								

E3-7	3:4:5:8	1.817	B3,E3,G#3,E4					
N								
N								O
N								O
N								O
X								
X								

E3-8	3:4:6:8	1.75	B3,E3,B4,E4					
N								
N								O
N								O
N								
X								
X								

E3-9	5:6:6:8	1.317	G#2,B3,B3,E3					
O								
O								
N								
N								
X								
X								

E3-10	5:6:8:8	1.233	G#2,B3,E3,E3					
O								
N								
N								
N								
X								
X								

E3-11 5:8:6:8 1.233 G#2,E3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-12 5:6:9:8 1.206 G#2,B3,F#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-13 5:6:8:10 1.183 G#2,B3,E3,G#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-14 5:6:8:12 1.15 G#2,B3,E3,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-15 6:9:6:8 1.139 B3,F#3,B3,E3
 O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-16 5:8:9:8 1.122 G#2,E3,F#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-17 5:8:10:8 1.1 G#2,E3,G#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-18 6:8:9:8 1.056 B3,E3,F#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-19 5:8:9:12 1.039 G#2,E3,F#3,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-20 5:8:10:12 1.017 G#2,E3,G#3,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-21 6:9:10:8 1.006 B3,F#3,G#3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-22 6:8:9:12 0.972 B3,E3,F#3,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

E3-23 6:9:12:8 0.972 B3,F#3,B4,E3
 O | | | | | | | | | | |
 N | | | | | | | | | | |
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 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

F3-1 3:4:5:6 1.9 C3,F3,A4,C4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

F3-2 3:4:5:7 1.852 C3,F3,A4,D#4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

F3-3 5:5:10:12:16 1.292 A2,A2,A3,C3,F3
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

F3-4 5:5:10:14:16 1.268 A2,A2,A3,D#3,F3
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

F3-5 6:5:10:14:16 1.201 C2,A2,A3,D#3,F3
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

F3-6 5:6:8:10 1.183 A3,C3,F3,A4
 N | | | | O | | | | | |
 N | | | | O | O | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

F3-7 5:7:10:12:16 1.177 A2,D#2,A3,C3,F3
 X | | | | | | | | | | | |
 N | | | | | | O | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | |
 N | | | | O | O | | | | | |
 N | | | | O | | | | | | | |

F3-8 5:7:10:12:16 1.177 A2,D#2,A3,C3,F3
 N O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

F3-10 6:5:10:16:20 1.158 C2,A2,A3,F3,A4
 X | | | | | | | | | | | |
 N | | | | | | | | | | O | | |
 N | | | | | | | | | | O | | |
 N | | | | | | O | | | | | | | |
 O | | | | | | | | | | | | | |
 N | | | | | | O | | | | | | | |

F3-11 5:6:8:12 1.15 A3,C3,F3,C4
 N | | | | | | | | O | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | | | O | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

F3-13 5:7:8:10 1.136 A3,D#3,F3,A4
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

F3-14 6:5:12:16:20 1.125 C2,A2,C3,F3,A4
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
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F3-15 6:7:10:12:16 1.111 C2,D#2,A3,C3,F3
 N O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 X | | | | | | | | | | | |
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F3-16 5:7:8:12 1.102 A3,D#3,F3,C4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
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F3-17 6:5:10:16 1.058 C2,A2,A3,F3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
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 O | | | | | | | | | | | |
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F3-19 6:5:12:16 1.025 C2,A2,C3,F3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
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 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
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F3-20 5:8:10:12 1.017 A3,F3,A4,C4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
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F3-21 5:10:12:16:20 0.992 A2,A3,C3,F3,A4
 N | | | | | O | | | | | | |
 N | | | | | O | | | | | | |
 N | | | | | O | | | | | | |
 N | | | | | | | | | | | | |
 O | | | | | | | | | | | | |
 X | | | | | | | | | | | | |

F3-22 7:5:12:16 0.977 D#2,A2,C3,F3
 X | | | | | | | | | | | | |
 X | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | |
 N | | | | | | | | | | | O | | |
 O | | | | | | | | | | | | | O | | |
 N | | | | | | | | | | | | | O | | |

F3-24 5:10:14:16:20 0.968 A2,A3,D#3,F3,A4
 N | | | | | O | | | | | | | | |
 N | | | | | O | | | | | | | | |
 N | | | | | | | | | | | O | | |
 N | | | | | | | | | | | O | | |
 O | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |

F3-25 5:10:12:16 0.892 A2,A3,C3,F3
 X | | | | | | | | | | | | |
 N | | | | | O | | | | | | | | |
 N | | | | | O | | | | | | | | |
 N | | | | | | | | | | | O | | |
 O | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |

F3-26 5:10:14:16 0.868 A2,A3,D#3,F3
 X | | | | | | | | | | | | |
 N | | | | | O | | | | | | | | |
 N | | | | | | | | | | | O | | |
 N | | | | | | | | | | | O | | |
 O | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |

F3-28 5:10:16:20 0.825 A2,A3,F3,A4
 X | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | |
 N | | | | | | | | | | | O | | |
 N | | | | | O | | | | | | | | |
 O | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | |

F3-30 5:12:16:20 0.792 A2,C3,F3,A4
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 X | | | | | | | | | | |

F3-31 7:10:12:16 0.777 D#2,A3,C3,F3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |

F3-32 7:10:12:16 0.777 D#2,A3,C3,F3
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

F3-33 7:10:12:16 0.777 D#2,A3,C3,F3
 N O | | | | | | | | | | |
 N O | | | | | | | | | | |
 N | O | | | | | | | | | | |
 N O | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

F3-34 7:10:14:16 0.754 D#2,A3,D#3,F3
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |

G#3-1 3:4:6 1.5 D#3,G#3,D#4
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 X | | | | | | | | | | |

G#3-2 6:8:9 0.806 D#3,G#3,A#4

N										
N										
N										
X										
X										
X										

A3-2 8:9:12 0.639 A3,B3,E3

O										
O										
N										
X										
X										
X										

B3-1 1:1:2 5.0 B3,B3,B4

N										
O										
N										
X										
X										
X										

B3-2 2:2:3 2.667 B3,B3,F#3

N										
O										
N										
X										
X										
X										

B3-3 3:2:5 2.067 F#3,B3,D#4

N										
O										
N										
X										
X										
X										

B3-4 5:4:8 1.15 D#3,B3,B4

N										
O										
N										
X										
X										
X										

Six-note jazz chords

6-3 15:20:30:40:48:60 0.425 E1,A2,E2,A3,C3,E3

O										
N	O									
N		O								
N		O								
O										
O										

6-25 15:24:30:40:48:60 0.408 E1,C2,E2,A3,C3,E3

O										
N	O									
N		O								
N		O								
N			O							
O										

6-56 10:20:25:32:40:40 0.543 E1,E2,G#2,C3,E3,E3

O										
N				O						
N				O						
N					O					
N						O				
O										

6-106 5:7:10:14:14:20 1.271 F1,B2,F2,B3,B3,F3

N	O									
O				O						
N			O							
N		O								
N	O									

6-142 10:15:20:24:30:40 0.63 G#1,D#2,G#2,B3,D#3,G#3

N				O						
N				O						
N				O						
N					O					
N					O					
N			O							

6-143 10:15:20:24:36:40 0.62 G#1,D#2,G#2,B3,F#3,G#3

N				O						
N						O				
N				O						
N					O					
N					O					
N			O							

6-153 5:5:10:12:15:15 1.433 A2,A2,A3,C3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 O | | | | | | | | | | | | | |
 N | | | | | O | | | | | | | |

6-154 5:5:10:12:15:20 1.4 A2,A2,A3,C3,E3,A4
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 O | | | | | | | | | | | | | |
 N | | | | | O | | | | | | | |

6-164 10:15:20:24:30:30 0.65 A2,E2,A3,C3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |

6-165 10:15:20:24:30:40 0.633 A2,E2,A3,C3,E3,A4
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |

6-173 12:15:20:24:30:40 0.6 B2,D#2,G#2,B3,D#3,G#3
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |

6-174 12:15:20:30:36:45 0.57 B2,D#2,G#2,D#3,F#3,A#4
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | | | O | | | | | | | |
 N | | | | | | | | | O | | | | | | | |
 N | | | | | | | | | O | | | | | | | |
 N | | | | | | | | | O | | | | | | | |

6-175 12:15:20:30:40:45 0.56 B2,D#2,G#2,D#3,G#3,A#4

N						O						
N									O			
N								O				
N						O						
N						O						
N							O					

6-196 14:20:28:35:28:56 0.479 B2,F2,B3,D#3,B3,B4

N						O						
O												
N								O				
N								O				
N								O				
N						O						

6-207 6:5:10:12:15:20 1.333 C2,A2,A3,C3,E3,A4

N						O						
N						O						
N						O						
N							O					
O									O			
N								O				

6-210 6:5:10:15:20:15 1.3 C2,A2,A3,E3,A4,E3

O												
N									O			
N								O				
N							O					
O									O			
N								O				

6-213 6:5:12:15:20:15 1.267 C2,A2,C3,E3,A4,E3

O												
N									O			
N								O				
N								O				
O									O			
N							O					

6-216 12:15:20:24:30:40 0.6 C2,E2,A3,C3,E3,A4

N						O						
N						O						
N						O						
N							O					
N							O					
N								O				

6-220 12:15:20:30:40:30 0.583 C2,E2,A3,E3,A4,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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6-221 12:15:20:30:40:45 0.561 C2,E2,A3,E3,A4,B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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6-222 12:15:20:30:40:48 0.558 C2,E2,A3,E3,A4,C4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
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 N | | | | | | | | | | | |
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Five-note Jazz Chords

5-29 15:21:30:35:42 0.4 F1,B2,F2,G#2,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
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5-30 5:7:10:14:14 1.171 F1,B2,F2,B3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
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5-31 10:14:20:28:35 0.571 F1,B2,F2,B3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
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5-41 5:6:9:12:12 1.289 G#1,B2,F#2,B3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | O | | | O | | | | | | | |
 N | | | | O | | | | | | | |

5-42 5:6:9:12:15 1.256 G#1,B2,F#2,B3,D#3
 X | | | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | O | | | O | | | | | | | |
 N | | | | O | | | | | | | |

5-45 10:15:18:24:30 0.594 G#1,D#2,F#2,B3,D#3
 X | | | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | |

5-46 10:15:18:24:36 0.583 G#1,D#2,F#2,B3,F#3
 X | | | | | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | |

5-47 10:15:20:24:24 0.6 G#1,D#2,G#2,B3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | |

5-48 10:15:20:24:30 0.583 G#1,D#2,G#2,B3,D#3
 X | | | | | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | | | O | | | | | | | |
 N | | | | O | | | | | | | |

5-49 10:15:20:24:36 0.572 G#1,D#2,G#2,B3,F#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-52 5:5:10:12:14 1.31 A2,A2,A3,C3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-56 10:12:15:20:30 0.667 A2,C2,E2,A3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-58 5:7:10:12:14 1.195 A2,D#2,A3,C3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-62 10:15:20:24:30 0.583 A2,E2,A3,C3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-71 12:15:20:24:24 0.567 B2,D#2,G#2,B3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-72 12:15:20:24:30 0.55 B2,D#2,G#2,B3,D#3
 X | | | | | | | | | | |
 N | | | | O | | | | | | |
 N | | | | O | | | | | | |
 N | | | | | O | | | | | | |
 N | | | | | O | | | | | | |
 N | | | | | | O | | | | | | |
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5-73 12:15:20:30:24 0.55 B2,D#2,G#2,D#3,B3
 X | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | O | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | | | | | O | | | | |
 N | | | | | | | | | | O | | | | |
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5-74 12:15:20:30:34 0.525 B2,D#2,G#2,D#3,F3
 X | | | | | | | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | | | | | O | | | | |
 N | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | O | | | | |
 - - - - -

5-75 12:15:20:30:36 0.522 B2,D#2,G#2,D#3,F#3
 X | | | | | | | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | | | | | O | | | | |
 N | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | O | | | | |
 - - - - -

5-76 12:15:20:30:40 0.517 B2,D#2,G#2,D#3,G#3
 X | | | | | | | | | | |
 N | | | | | | | | | O | | | | |
 N | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | | O | | | | |
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5-77 12:15:24:30:34 0.509 B2,D#2,B3,D#3,F3
 X | | | | | | | | | | |
 N | | | | | | | | O | | | | |
 N | | | | | | | | | O | | | | |
 N | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | O | | | | |
 - - - - -

5-95 15:21:30:35:42 0.4 C2,F#2,C3,D#3,F#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-96 10:14:20:28:35 0.571 C2,F#2,C3,F#3,A#4
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

5-103 10:15:20:24:30 0.583 A2,E2,A3,C3,E3
 O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

5-106 10:15:24:30:30 0.55 A2,E2,C3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

5-108 10:15:24:30:40 0.533 A2,E2,C3,E3,A4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

5-109 5:8:10:14:16 1.118 A2,F2,A3,D#3,F3
 N | O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

5-120 5:10:12:15:15 1.033 A2,A3,C3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 O | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

5-121 5:10:12:15:20 1.0 A2,A3,C3,E3,A4
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 O | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

5-130 5:12:15:20:15 0.933 A2,C3,E3,A4,E3
 O | | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | | |
 N | | | | | | | | | | | O | | | |
 N | | | | | | | | | | | | | O | | |
 O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-134 12:15:20:24:34 0.542 B2,D#2,G#2,B3,F3
 N O | | | | | | | | | | | | | |
 O | | | | | | | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-135 12:15:20:24:36 0.539 B2,D#2,G#2,B3,F#3
 N | O | | | | | | | | | | | | | |
 O | | | | | | | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-136 12:15:20:30:40 0.517 B2,D#2,G#2,D#3,G#3
 N | | | | | O | | | | | | | | | |
 N | | | | | O | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-137 12:15:24:30:40 0.5 B2,D#2,B3,D#3,G#3
 N | | | O | | | | | | | | | |
 N | | | O | | | | | | | | | |
 N | | | O | | | | | | | | | |
 N O | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-139 12:15:20:24:30 0.55 C2,E2,A3,C3,E3
 O | | | | | | | | | | | | | | | |
 N O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-140 12:15:20:30:30 0.533 C2,E2,A3,E3,E3
 O | | | | | | | | | | | | | | | |
 N | | | | | | | | O | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-142 12:15:20:30:40 0.517 C2,E2,A3,E3,A4
 N | | | | | | | | O | | | | | | | | | |
 N | | | | | | | | O | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-143 12:15:24:30:40 0.5 C2,E2,C3,E3,A4
 N | | | | | | | | O | | | | | | | | | |
 N | | | | | | | | O | | | | | | | | | |
 N | | | | | | | | O | | | | | | | | | |
 N | O | | | | | | | | | | | | | | | |
 N | | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-144 15:21:30:35:42 0.4 C2,F#2,C3,D#3,F#3
 N | | O | | | | | | | | | | | | | | | |
 N | | | | | | O | | | | | | | | | | | |
 N | | | | | | | | O | | | | | | | | | |
 N | | | | | | O | | | | | | | | | | | |
 N | | | O | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

5-163 15:20:30:36:45 0.4 D#2,G#2,D#3,F#3,A#4
 N | | | | | O | | | | |
 N | | | | | | O | | | | |
 N | | | | | | | O | | | | |
 N | | | | | O | | | | |
 N | | | | | O | | | | |
 X | | | | | | | | | | |

5-180 15:20:24:30:30 0.45 E2,A3,C3,E3,E3
 O | | | | | | | | | | |
 N | | | | | O | | | | | | |
 N | | | | | O | | | | | | |
 N | | | | | | | O | | | | | | |
 N | | | | | | | O | | | | | | |
 X | | | | | | | | | | | | |

5-181 15:20:24:30:40 0.433 E2,A3,C3,E3,A4
 N | | | | | O | | | | | | | | |
 N | | | | | O | | | | | | | | |
 N | | | | | O | | | | | | | | |
 N | | | | | | | O | | | | | | | | |
 N | | | | | | | O | | | | | | | | |
 X | | | | | | | | | | | | | | |

5-182 15:20:24:30:48 0.425 E2,A3,C3,E3,C4
 N | | | | | | | | O | | | | | | | | |
 N | | | | | O | | | | | | | | | | | | |
 N | | | | | O | | | | | | | | | | | | |
 N | | | | | | | O | | | | | | | | | | | | |
 N | | | | | | | O | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | | | |

5-197 15:24:30:40:30 0.4 E1,E2,C3,E3,A4,E3
 O | | | | | | | | | | | | | | | | |
 N | | | | | | | | | | | | | O | | | | | | |
 N | | | | | | | | | | | | | O | | | | | | |
 N | | | | | | | | | | | | | | | O | | | | | | |
 N | | | | | | | O | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | | | | | |

5-198 5:7:10:7:14 1.314 F2,B3,F3,B3,B4
 N | | | | | | | O | | | | | | | | | | |
 O | | | | | | | | | | | | | | | | | | | | |
 N | | | | | | | | | | | | | | | | O | | | | | | |
 N | | | | | | | | | | | | | | | | | O | | | | | | |
 N | | | | | | | | | | | | | O | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | | | | | | | |

5-199 10:14:20:14:35 0.643 F2,B3,F3,B3,D#4

N											
O											
N											
N											
N											
X											

5-200 15:21:30:35:42 0.4 F2,B3,F3,G#3,B4

N											
N											
N											
N											
N											
X											

Four-Note Jazz Chords

4-21 10:20:25:32 0.443 E1,E2,G#2,C3

X											
X											
N											
N											
N											
O											

4-23 3:6:8:9 1.27 E1,E2,A3,B3

X											
X											
N											
N											
N											
O											

4-30 5:10:16:20 0.825 E1,E2,C3,E3

X											
X											
N											
N											
N											
O											

4-41 10:25:32:40 0.393 E1,G#2,C3,E3

X											
X											
N											
N											
N											
O											

4-43 5:7:10:14 1.029 F1,B2,F2,B3

X										
X										
N				o						
N			o							
N		o								
N	o									

4-45 7:10:14:20 0.729 F#1,C2,F#2,C3

X										
X										
N				o						
N			o							
N		o								
N										

4-56 5:6:9:12 1.122 G#1,B2,F#2,B3

X										
X										
N				o						
N				o						
N		o								
N				o						

4-57 10:15:18:24 0.528 G#1,D#2,F#2,B3

X										
X										
N				o						
N				o						
N						o				
N				o						

4-58 10:15:20:24 0.517 G#1,D#2,G#2,B3

X										
X										
N				o						
N						o				
N						o				
N				o						

4-59 10:10:15:24 0.617 A2,A2,E2,C3

X										
X										
N						o				
N		o								
O										
N						o				

4-64 5:5:10:12 1.167 A2,A2,A3,C3

X									
X									
N				O					
N					O				
O									
N				O					

4-65 5:5:10:14 1.143 A2,A2,A3,D#3

X									
X									
N							O		
N						O			
O									
N				O					

4-67 10:12:15:20 0.6 A2,C2,E2,A3

X									
X									
N		O							
N		O							
N			O						
N				O					

4-68 10:12:15:24 0.583 A2,C2,E2,C3

X									
X									
N				O					
N		O							
N			O						
N				O					

4-75 5:7:10:12 1.052 A2,D#2,A3,C3

X									
X									
N				O					
N					O				
N						O			
N				O					

4-76 5:7:10:14 1.029 A2,D#2,A3,D#3

X									
X									
N								O	
N						O			
N					O				
N				O					

4-80 10:15:20:24 0.517 A2,E2,A3,C3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-92 12:15:20:24 0.483 B2,D#2,G#2,B3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-93 12:15:20:30 0.467 B2,D#2,G#2,D#3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-98 7:10:14:20 0.729 B2,F2,B3,F3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-100 6:9:10:15 0.889 B2,F#2,G#2,D#3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-105 6:5:10:12 1.1 C2,A2,A3,C3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-106 6:5:10:14 1.076 C2,A2,A3,D#3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

4-107 6:5:10:15 1.067 C2,A2,A3,E3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

4-109 6:5:12:14 1.043 C2,A2,C3,D#3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

4-110 6:5:12:15 1.033 C2,A2,C3,E3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 O | | | | | | | | | | |
 N | | | | | | | | | | |

4-114 6:7:10:12 0.986 C2,D#2,A3,C3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |

4-115 6:7:10:14 0.962 C2,D#2,A3,D#3
 X | | | | | | | | | | |
 X | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |
 N | | | | | | | | | | |

4-120 12:15:20:24 0.483 C2,E2,A3,C3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-121 12:15:20:30 0.467 C2,E2,A3,E3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-122 5:7:10:14 1.029 C2,F#2,C3,F#3
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |

4-148 5:7:10:12 1.052 A2,D#2,A3,C3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-149 5:7:10:14 1.029 A2,D#2,A3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-152 10:15:20:24 0.517 A2,E2,A3,C3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-153 10:15:24:30 0.483 A2,E2,C3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-161 5:10:12:14 0.91 A2,A3,C3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-162 5:10:12:15 0.9 A2,A3,C3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-167 5:10:14:20 0.843 A2,A3,D#3,A4
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-171 5:12:14:20 0.81 A2,C3,D#3,A4
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-173 5:12:15:20 0.8 A2,C3,E3,A4
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-178 12:15:20:24 0.483 B2,D#2,G#2,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-179 7:10:14:14 0.771 B2,F2,B3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | O | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-180 6:9:10:15 0.889 B2,F#2,G#2,D#3
 X | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-182 12:15:20:24 0.483 C2,E2,A3,C3
 X | | | | | | | | | | | |
 N O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-183 12:15:20:30 0.467 C2,E2,A3,E3
 X | | | | | | | | | | | |
 N | | | | | O | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 N | | | O | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-204 15:20:24:24 0.4 D#2,G#2,B3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | | | | O | | | | | | | |
 N | | | | | | | O | | | | | | | |
 X | | | | | | | | | | | |

4-205 7:10:12:14 0.795 D#2,A3,C3,D#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-224 6:8:9:12 0.972 E2,A3,B3,E3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-237 12:14:21:24 0.488 F2,G#2,D#3,F3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-238 12:14:21:28 0.476 F2,G#2,D#3,G#3
 X | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-239 5:7:10:7 1.171 F2,B3,F3,B3
 X | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-271 6:7:9:12 1.008 F2,G#2,C3,F3
 N | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N | O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-272 12:14:21:24 0.488 F2,G#2,D#3,F3
 N O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N O | | | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

4-273 12:14:21:28 0.476 F2,G#2,D#3,G#3
 N | | | | O | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N O | | | | | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

4-274 5:7:7:10 1.171 F2,B3,B3,F3
 N O | | | | | | | | | | | | | |
 O | | | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | O | | | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

4-301 5:6:6:10 1.267 G#2,B3,B3,G#3
 N | | | | O | | | | | | | | | |
 O | | | | | | | | | | | | | |
 N | | | | O | | | | | | | | | |
 N | | | | | | | | O | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

4-302 5:6:6:12 1.233 G#2,B3,B3,B4
 N | | | | | | | | O | | | | | | | |
 O | | | | | | | | | | | | | | | |
 N | | | | O | | | | | | | | | | | |
 N | | | | | | | | O | | | | | | | |
 X | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

4-303 10:12:15:20 0.6 G#2,B3,D#3,G#3
 N | | | | O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | | | |
 N | | | | O | | | | | | | | | | | |
 N | | | | | | | | O | | | | | | | |
 X | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

4-304 10:12:15:24 0.583 G#2, B3, D#3, B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-305 1.156 5:6:9:10 G#2, B3, F#3, G#3
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-306 5:6:9:12 1.122 G#2, B3, F#3, B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-311 10:15:12:24 0.583 G#2, D#3, B3, B4
 N | | | | | | | | | | | |
 O | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-312 10:15:18:24 0.528 G#2, D#3, F#3, B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-313 10:15:20:24 0.517 G#2, D#3, G#3, B4
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 N | | | | | | | | | | | |
 X | | | | | | | | | | | |
 X | | | | | | | | | | | |

4-318 10:12:15:15 0.633 A3,C3,E3,E3
 O | | | | | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

4-319 10:12:15:20 0.6 A3,C3,E3,A4
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | O | | | | | | | |
 N | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | |

4-320 10:12:15:24 0.583 A3,C3,E3,C4
 N | | | | | | | | | | | O | | | |
 N | | | | | O | | | | | | | | | |
 N | | | | | O | | | | | | | | | |
 N | | | | | | | | | | | O | | | |
 X | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | |

4-328 10:15:20:24 0.517 A3,E3,A4,C4
 N | | | | | | | | | | | O | | | |
 N | | | | | | | | | | | | | | | O |
 N | | | | | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | | | |
 X | | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | |

4-354 12:15:20:24 0.483 B3,D#3,G#3,B4
 N | | | | | | | | | | | O | | | |
 N | | | | | | | | | | | | | | | O |
 N | | | | | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | | | |
 X | | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | |

4-355 12:15:20:30 0.467 B3,D#3,G#3,D#4
 N | | | | | | | | | | | | | | | O |
 N | | | | | | | | | | | | | | | | |
 N | | | | | | | | | | | O | | | | |
 N | | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | |
 X | | | | | | | | | | | | | | | | |

4-358 7:10:7:14 0.914 B3,F3,B3,B4
 N | | | | | | | | | |
 O | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

4-359 14:20:14:35 0.443 B3,F3,B3,D#4
 N | | | | | | | | | |
 O | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

4-361 6:9:10:15 0.889 B3,F#3,G#3,D#4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

4-366 6:7:10:12 0.986 C3,D#3,A4,C4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

4-367 6:7:10:14 0.962 C3,D#3,A4,D#4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

4-368 12:14:21:24 0.488 C3,D#3,A#4,C4
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 N | | | | | | | | | |
 X | | | | | | | | | |
 X | | | | | | | | | |

4-369	12:14:21:28	0.476	C3,D#3,A#4,D#4						
N									O
N									O
N						O			
N								O	
X									
X									

4-370	12:15:20:15	0.533	C3,E3,A4,E3						
O									
N								O	
N							O		
N								O	
X									
X									

4-371	12:15:20:24	0.483	C3,E3,A4,C4						
N						O			
N								O	
N							O		
N								O	
X									
X									

4-372	12:15:20:30	0.467	C3,E3,A4,E4						
N									O
N								O	
N							O		
N								O	
X									
X									

Afterword

I have a number of original ideas on tuning theory and I wouldn't be surprised if one or two of them turned out to be inaccurate or wrong. Over the years I have had many conjectures that turned out later to be false. But one thing I am fairly confident of is that, for my intents and purposes, my Eagle 53 tuning is unbeatable. Other people want other things from a tuning, and would therefore look elsewhere, but I know exactly what I want in a tuning and Eagle 53 ticks all the boxes.

I am planning on writing a book about 19 EDO (19 Equal Divisions of the Octave). 19 EDO is my favorite EDO where all the notes (not a subset) have corresponding frets on a guitar (i.e. 19 frets per octave instead of the usual 12). Eagle 53 is still my favorite tuning.

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If you would like a proper professionally printed copy of this document it is available as a paperback book on Amazon and from other booksellers. The ISBN is 9781838121952. The title is... The Arabian Scale in Eagle 53.

If you want to know how I arrived at the Eagle 53 tuning, the mathematics and the rationale behind it check out... Eagle 53 My Ultimate Musical Tuning (Third Edition). ISBN 9780956649294

I have a book about some rules that I follow when I am composing. The book is short. There are only 19 pages of text, the other 80 pages list 96 scales that occur in Eagle 53 and 2196 "legal" harmony and/or melody just intervals over a six octaves range. Many or most of these intervals do *not* occur in Eagle 53. The list is intended as a reference for composing or working out new alternative tunings. The book is called... John's Rules Music. ISBN 9781838121921.

If you play piano or keyboards check out... The Eagle 53 Pianist. ISBN 9781838121907. There are 2,770 chords listed in this book, 2,750 of them are lush (both strong and clearly rooted). That's a lot of chords. They are ordered according to root notes and in descending order of strengths so you can choose just the strongest ones. 96 scales are also listed.

There is a sequel to the Pianist book called Eagle 53 Jazz Chords. ISBN 9781838121914. This lists 2,999 chords that are not lush but acceptable. I call them *jazz* chords. They are ordered in such a way that you can look them up like words in a dictionary. If you have a melodic base for a composition you can look up the chords you want. There is some newer composition theory as well that doesn't appear in the Pianist book.

For guitarists I have two books. The first is... The Eagle 53 Guitarist Lush Chords. Here are diagrams of 940 lush chords for guitars fretted for the Eagle 53 tuning. 96 scales are also listed. There is a chapter on composition. ISBN 9781838121938

The other guitarist book is... The Eagle 53 Guitarist Jazz Chords. Here are diagrams of 823 jazz chords. ISBN 9781838121945

I have an idea for a computer program that will generate a list of suitable chords (for keyboards and/or guitars) when a melodic base is entered. Any programmers out there want to give it a go?

John O'Sullivan

15th February, 2021.

www.johnsmusic7.com