

Jan 23, 2021

## 16-Step Quintadecimal Scale Generator and Analyzer Report

=====

Generates 16-elementary scales that span two octaves, with additional properties. Here, the 16th element of the scale is the repeated root note transposed up by two octaves. This 16th step corresponds to the eight step of the prototypical C major scale: C D E F G A B \*--> C <--\*

We require that each consecutive 3 step intervals have at least one and at most 2 semi-tone steps; all 15 intervals must add up to 24 semi-tone steps. This should somehow evenly distribute the small steps.

Candidate count: 1215

Filtering out candidates that have three consecutive semi-tone steps.

Candidate count: 945

Filtering out all candidates that also contain the octave of the root.

Candidate count: 351

Filtering out all candidates with more than three steps that do not have their octave in the scale.

Candidate count: 31

Filtering out all candidates where two consecutive steps do not have their octave in the scale.

Candidate count: 23

Filtering out all candidates that have a diatonic modal scale as a sub-scale with possible additional steps inserted between them.

Candidate count: 15

Generated scales with the desired properties, up to rotation

=====

#	ID	Code	Steps	Has 8a?	xABCDEF
I	0	BFACA	FhFFhFFhFFhFFhF	.++++.++.+++++	2323212
II	1	CACDB	hFFFFhFFhFFhF	.+++++.++.++++	2323212
III	2	ECABA	hFhhFFFFhFhFFhF	.+.+++++.+++++	3222222
IV	3	BDACA	FhFhhFFFFhFFhF	.+++..+++..+++++	3222222
V	5	CBCAE	hFFFhFhFFFFhFhF	.+++++.+++++.+	3222222
VI	7	CACFB	hFFFFhFFhFFhF	.+++++.+++..+++	3222222
VII	8	CDACA	hFFhFFFFhFFhF	.+++..+++..+++++	3303303
VIII	9	CFACA	hFFFhFFhFFhF	.++++.+++..+++++	3303303
IX	12	ECACA	hFhhFFFFhFFhF	.++.+++++.+++++	4202313

I - 0

FhFFhFFhFFhFFh

Intervals:

```

8      .++++.++.+++++
3-     ++.+.+.+.+.+.+
8+3-   ++...+++..+.+.+
5      ++..+...+.+.+.
8+5    ++.+++..+.+.+.
7      ..+++..++++.+++
8+7    .+.+.+.+.+.+.+
3      ..+++..+++..+.
8+3    ..++++.++.+++++
maj7   +++..+.+.+.+.+.
8+maj7 +.+.+.+.+.+.+.
6-     +.+++..+++..+.+.
8+6-   ..+.+.+++..+++++
6      ++.+.+.+.+++..+.
8+6    ++++.+.+.+.+.+.
4      +++..+.+.+.+.+.
8+4    ++..+.+.+.+.+.+.
b5     .+++++++..+.+.+
8+b5   ..+.+.+++++++

```

Root-Notes:

		C	D	D#	F	G	G#	A	B	C#	D	D#	F	G	A	B	C
		*	-	-	-	-	*	-	-	*	-	-	-	-	-	-	*
Chord	[#roots]	J	K#`L	M#	N#`O`P	Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 7]	X	X	.	.	X	X	.	.	.	X	.	X	X	.	.	X
5+8	[ 5]	.	X	.	.	X	.	.	.	.	X	.	X	X	.	.	.
4	[ 8]	X	X	X	.	.	X	X	.	.	X	.	.	X	X	.	X
3m	[ 4]	X	X	.	.	.	X	.	.	.	X	.	.	.	.	.	X
3+	[ 3]	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.
min7	[ 1]	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
b7	[ 6]	.	X	.	X	.	X	.	X	.	.	.	.	.	X	X	.
maj7-5	[ 3]	.	.	X	.	.	.	.	.	X	.	X	.	.	.	.	.
dom7-5	[ 9]	.	.	X	X	X	.	X	X	X	.	.	X	X	.	X	.
min7-5	[ 5]	.	.	.	X	.	.	.	X	.	X	.	.	.	X	X	.
8+5	[ 5]	.	X	.	X	X	.	.	.	.	X	.	.	X	.	.	.
8+4	[ 6]	.	X	.	.	X	.	X	.	.	X	X	.	.	X	.	.
8+3m	[ 2]	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.
8+min7	[ 1]	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 5]	.	.	.	.	.	.	X	X	.	X	.	X	.	.	X	.
8+maj7-5	[ 2]	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.
8+dom7-5	[ 8]	.	.	.	X	X	.	.	X	.	.	X	X	X	X	X	.
8+min7-5	[ 5]	.	X	.	.	.	.	X	X	.	.	.	X	.	.	X	.

I - 1

hFFhhFFFFhFhFFh

Intervals:

```

8      .++.+++++.++++
3-     +.+.+.+.+++++.
8+3-   ++++.+.+.++++.
5      +...+.++.+++++.
8+5    +...+.+.+++++.
7      .++++.++++.+++
8+7    .++++.+++++.+.
3      .++++.++++.+++
8+3    +.++.+++++.+++
maj7   +...+.+.+.++++.
8+maj7 ++...+.+.+.+.+.
6-     .++++.+.++++.+++
8+6-   .++++.+++++.+.+
6      +...++++.++++.
8+6    +.+.+.+.+.++++.
4      ++...+.+.++++.
8+4    .+...+.+.+.+.+.
b5     +++++.++.++.++++
8+b5   +++++++++.++.

```

Root-Notes:

	C	C#	D#	F	F#	G	A	B	C#	D#	E	F#	G	A	B	C
Chord [#roots]	J`K		L	M#`N`Ob		P	Q	R	S`T	U`Vb	X	Y`J				
5 [7]	X	.	.	X	.	X	X	.	.	X	X	.	.	X	X	.
5+8 [5]	.	.	.	X	.	X	X	.	.	.	X	.	.	X	.	.
4 [8]	X	X	.	X	.	.	X	X	.	X	X	X	.	.	X	.
3m [4]	X	.	.	X	.	.	.	.	.	X	X	.	.	.	.	X
3+ [3]	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.
maj7 [0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7 [3]	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.
min7 [1]	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
b7 [6]	X	.	X	.	.	.	.	X	X	.	X	.	X	.	X	.
maj7-5 [3]	.	.	X	.	X	.	.	.	.	.	X	.	.	.	.	.
dom7-5 [9]	.	X	X	X	.	X	X	.	X	.	.	X	X	X	.	.
min7-5 [5]	.	.	X	X	.	.	.	X	X	.	.	.	X	.	.	.
8+5 [5]	.	.	.	X	.	.	X	.	.	.	X	.	X	X	.	.
8+4 [6]	.	X	.	X	X	.	.	X	.	.	X	.	.	X	.	.
8+3m [2]	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.
8+3+ [3]	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.
8+maj7 [0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7 [3]	.	.	.	.	.	.	X	.	.	.	.	.	X	X	.	.
8+min7 [1]	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
8+b7 [5]	.	X	X	X	X	X	.	.	X	.	.	.	.	.	.	.
8+maj7-5 [2]	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.
8+dom7-5 [8]	.	.	X	.	X	X	X	X	X	.	.	.	X	X	.	.
8+min7-5 [5]	.	X	X	.	.	X	.	.	X	.	X	.	.	.	.	.

## Intervals:

8	.+++++.++++.++
3-	.+...+++++.+.+
8+3-	.+.+.++++.+++
5	.+.+.+.+.+.+
8+5	++.+.+.++++.
7	++.++++.++++.++
8+7	+.+++++.++++.++
3	+.+++++.++++.++
8+3	+.+++++.++++.+
maj7	+.+.+.++++.+.+
8+maj7	.++.+.+.++++.
6-	+.+.++++.++++.++
8+6-	+.+++++.+.++++.
6	.+++..++++.+.+
8+6	.+.+.++++.+.+
4	.+..+.++++.++++.
8+4	.++..+.++++.+.+
b5	+.++.+.+++++++
8+b5	+++++++..+.+++

## Root-Notes:

	C	C#	D	E	F#	G#	A#	B	C#	D	E	F#	G	G#	A#	C
	*	-	-	-	-	-	-	*	-	-	-	-	*	-	-	*
Chord [#roots]	J`K`Lb	M	N	O	P#`Q	R`Sb	T	U`Vb`Xb	Yb	J						
5 [7]	. X .	X X .	. . X	X . .	X X .	X . .	X X .	X . .	. . .	.						
5+8 [5]	. X .	X X .	. . X	X . .	X X .	X . .	X X .	X . .	. . .	.						
4 [8]	. X .	. . X	X . .	X X .	X X .	X . .	X X .	X . .	. . .	.						
3m [4]	. X .	. . .	. . .	. . .	. . .	X X .	X X .	. . .	. . .	.						
3+ [3]	. . .	. X X	. . .	. . .	. . .	. . .	. . .	. . .	. . .	.						
maj7 [0]	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	.						
dom7 [3]	. . .	. X X	. . .	. . .	. . .	. . .	. . .	. . .	. . .	.						
min7 [1]	. X .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	.						
b7 [6]	. . .	. . .	. . .	. . .	X X .	X X .	X . .	X . .	X . .	.						
maj7-5 [3]	X . X	. . .	. . .	. . .	. . .	. . .	X . .	. . .	. . .	X						X
dom7-5 [9]	X . .	. X X	. . .	. . .	. . .	X . .	X X X	. . .	X X X	.						X
min7-5 [5]	. X .	. . .	. . .	. . .	X X .	X X .	. . .	. . .	. . .	X					X	.
8+5 [5]	. X .	. . .	. . .	. . .	X . .	X . .	X . .	X . .	X . .	.						.
8+4 [6]	. X X	. . .	. . .	. . .	X . .	X . .	X . .	X . .	X . .	.				X	.	.
8+3m [2]	. X .	. . .	. . .	. . .	. . .	. . .	X . .	. . .	. . .	.				. . .	.	.
8+3+ [3]	. . .	. . .	. . .	. . .	X . .	X . .	. . .	. . .	. . .	X		X	X	. . .	.	.
8+maj7 [0]	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	.		. . .	. . .	. . .	.	.
8+dom7 [3]	. . .	. . .	. . .	. . .	X . .	X . .	. . .	. . .	. . .	X		X	X	. . .	.	.
8+min7 [1]	. . .	. . .	. . .	. . .	. . .	. . .	X . .	. . .	. . .	.		. . .	. . .	. . .	.	.
8+b7 [5]	. X .	. X .	. . .	. . .	X . .	X . .	. . .	. . .	. . .	.		. . .	. . .	X X .	X	.
8+maj7-5 [2]	. . X	. . .	. . .	. . .	. . .	. . .	. . .	X . .	. . .	.		. . .	. . .	. . .	.	.
8+dom7-5 [8]	. . X	X X X	X X X	X X X	X X X	X X X	. . .	. . .	. . .	X		X	X	. . .	X	.
8+min7-5 [5]	. . .	. . .	. . .	X . .	. . .	X . .	. . .	X . .	. . .	.		. . .	. . .	X X .	X	.

# II - 0

hFFFFhFFhFFhF

Intervals:

8	.+++++.++.++++
3-	+...+.+.+.+++
8+3-	++...+++...+.+.+
5	+...+.+.+.+.+
8+5	+...+.+.+.+.+
7	+++++.+.+.+++.
8+7	+...+.+.+.+.+
3	.+++++.+++..+.+
8+3	++++.+.++++.+++.
maj7	+...+.++++.+.+.+
8+maj7	+...+.++++.+.+.+
6-	.+++++.++.++++.
8+6-	.+.++++.+++..+++.
6	++...+.+.++++...+
8+6	+++...+.+.+.+.+
4	+...+.+.+.++++.+
8+4	+...+.+.+.++++.+
b5	.+++++.++++.+++.
8+b5	.++.++.++++.++++

Root-Notes:

Root-Notes:		C	C#	D#	F	G	A	A#	B	C#	D#	E	F	G	A	A#	C
		*	-	-	-	-	-	-	*	-	-	*	-	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#	O#`P#`Q	R	S`T`Ub	Vb	X`Yb	J						
5	[ 7]	X	.	X	.	X	X	.	.	X	.	X	.	.	X	X	
5+8	[ 6]	.	.	X	.	X	X	.	.	X	.	X	.	.	X	.	
4	[ 8]	X	.	.	X	.	X	X	.	.	X	X	X	.	X	X	
3m	[ 3]	X	.	.	.	.	X	.	.	.	.	.	.	.	X	X	
3+	[ 4]	.	.	X	.	X	.	.	X	.	X	.	.	.	.	.	
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
dom7	[ 4]	.	.	X	.	X	.	.	X	.	X	.	X	.	.	.	
min7	[ 1]	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	
b7	[ 6]	.	.	.	.	X	.	X	.	X	.	X	.	X	.	.	
maj7-5	[ 3]	.	.	.	X	.	.	X	X	.	.	.	.	.	.	.	
dom7-5	[ 9]	.	X	X	X	X	X	.	X	.	X	.	X	.	X	.	
min7-5	[ 4]	X	.	.	.	X	.	.	.	.	.	.	X	X	.	X	
8+5	[ 6]	.	.	X	X	.	X	.	.	X	.	.	.	X	X	.	
8+4	[ 5]	.	.	.	X	X	.	X	.	.	.	X	.	.	X	.	
8+3m	[ 2]	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	
8+3+	[ 4]	.	.	X	X	.	.	.	.	X	.	.	.	X	.	.	
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
8+dom7	[ 4]	.	.	X	X	.	.	.	.	X	.	.	.	X	.	.	
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
8+b7	[ 5]	.	X	.	.	X	X	.	.	.	.	.	X	.	X	.	
8+maj7-5	[ 2]	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	
8+dom7-5	[ 8]	.	.	X	X	.	X	.	X	X	.	X	X	X	.	.	
8+min7-5	[ 3]	.	.	.	.	X	X	.	.	.	.	.	X	.	.	.	

# II - 1

FFhhFFhFhFFFFhh

Intervals:

```

8      .++.++++.++++++
3-     .+.+.++++.+.+.
8+3-   ...+.+.++++.+++
5      ..+.+.+++.+.++
8+5     ..++..+++.++..+
7      +.+.+++..+++++.
8+7     +++..+++..++++.
3      +++..+.+.+++++.
8+3     +++..+++..+++++.
maj7    ++.+.+++..+++++.
8+maj7  +..++..+.+.+++
6-     ++.++++..+++++.
8+6-    +++..+++..++++.
6      .+++..+++..+.+.
8+6     .+.+.+.++++.+.
4      +..+++..+.+.+.
8+4     ...++..+++..+++
b5      ++++.++..++++++
8+b5    ++++++++..++..

```

Root-Notes:

	C	D	E	F	F#	G#	A#	B	C#	D	E	F#	G#	A#	B	C
	*	-	-	*	-	-	-	-	*	-	-	-	-	-	-	*
Chord [#roots]	J	K#	L#`M#`N	O	P#`Q	R`Sb	T	U	V	X#`Y`J						
5 [ 7]	.	.	X	.	X	.	.	X	X	.	X	.	.	X	X	.
5+8 [ 6]	.	.	X	.	X	.	.	X	.	.	X	.	.	X	X	.
4 [ 8]	X	.	.	X	X	X	.	X	X	.	.	X	.	.	X	X
3m [ 3]	.	.	.	.	.	.	.	X	X	.	.	.	.	.	X	.
3+ [ 4]	.	.	X	.	X	.	.	.	.	.	X	.	.	X	.	.
maj7 [ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7 [ 4]	.	.	X	.	X	.	.	.	.	.	X	.	.	X	.	.
min7 [ 1]	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.
b7 [ 6]	.	X	.	X	.	X	X	.	.	.	.	.	X	.	X	.
maj7-5 [ 3]	X	X	.	.	.	.	.	.	.	.	X	.	.	.	.	X
dom7-5 [ 9]	X	.	X	.	X	.	X	.	.	X	X	X	X	X	.	X
min7-5 [ 4]	.	.	.	.	.	X	X	.	X	.	.	.	X	.	.	.
8+5 [ 6]	.	.	X	.	.	.	X	X	.	.	X	X	.	.	X	.
8+4 [ 5]	.	.	.	.	X	.	.	X	.	.	.	X	X	.	X	.
8+3m [ 2]	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.
8+3+ [ 4]	.	.	X	.	.	.	X	.	.	.	X	X	.	.	.	.
8+maj7 [ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7 [ 4]	.	.	X	.	.	.	X	.	.	.	X	X	.	.	.	.
8+min7 [ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7 [ 5]	.	.	.	.	.	X	.	X	.	X	.	.	X	X	.	.
8+maj7-5 [ 2]	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.
8+dom7-5 [ 8]	.	X	X	.	X	X	X	.	.	.	X	X	.	X	.	.
8+min7-5 [ 3]	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.

Intervals:

8	.++++.+++++.++
3-	+.++++...+.+.+
8+3-	+.+.+++...+++...
5	.+...++.+.+++..+
8+5	+...+++..+...+..+
7	.+++..+++++.+.+
8+7	.+++..+.++++.+++
3	.+.+.+++++.+++
8+3	.+++..+++++.+++
maj7	+...+...+...+++.
8+maj7	++..+.+.+++..
6-	++++..+++++.++.
8+6-	.+++..+.+++..+++
6	+...+++..+.+.++
8+6	+.+.++++..+.+.+
4	+++..+...+...++..
8+4	++..+...+...+...
b5	+.++..+++++++
8+b5	+++++.++.++..+++

Root-Notes:

		C	C#	D#	F	F#	G#	A	B	C#	D#	F	F#	G	A	B	C
		*	-	-	-	-	*	-	-	-	-	-	-	*	-	-	*
Chord	[#roots]	J`K	L	M#`N	O`P	Q	R	S	T#`U`Vb	X	Y`J						
5	[ 7]	.	X	.	.	X	X	.	X	.	.	X	X	.	.	X	.
5+8	[ 6]	.	X	.	.	X	.	.	X	.	.	X	X	.	.	X	.
4	[ 8]	X	X	X	.	X	X	.	.	X	.	.	X	X	.	.	X
3m	[ 3]	.	.	.	.	X	X	.	.	.	.	.	X	.	.	.	.
3+	[ 4]	.	X	.	.	.	.	.	X	.	.	X	.	.	.	X	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 4]	.	X	.	.	.	.	.	X	.	.	X	.	.	.	X	.
min7	[ 1]	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
b7	[ 6]	X	.	X	X	.	.	.	.	X	.	X	.	X	.	X	.
maj7-5	[ 3]	.	.	.	.	.	.	.	X	.	.	.	.	X	X	.	.
dom7-5	[ 9]	.	X	.	X	.	.	X	X	X	X	X	.	X	.	X	.
min7-5	[ 4]	.	.	X	X	.	X	.	.	.	X	.	.	.	.	.	.
8+5	[ 6]	.	.	.	X	X	.	.	X	X	.	.	X	.	.	X	.
8+4	[ 5]	.	X	.	.	X	.	.	.	X	X	.	X	.	.	.	.
8+3m	[ 2]	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.
8+3+	[ 4]	.	.	.	X	.	.	.	X	X	.	.	.	.	.	X	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 4]	.	.	.	X	.	.	.	X	X	.	.	.	.	.	X	.
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 5]	.	.	X	.	X	.	X	.	.	X	X	.	.	.	.	.
8+maj7-5	[ 2]	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8+dom7-5	[ 8]	.	X	X	X	.	.	.	X	X	.	X	.	.	X	X	.
8+min7-5	[ 3]	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.	.



III - 0

hFhhFFFFhFhFFFh

Intervals:

```

8      .+.+++++.+++++
3-     ++.+. . . .++++.+.
8+3-   .+.+. . . .++++.+.
5      +. .+.+. . . .+++++.
8+5     +. .++.+. . . .++++.
7      .+++ .+++++.+++++
8+7     .++.+++++.+.+++
3      +++ .+++ .+.+++++
8+3     +++ .+++++. . .+++
maj7    +.+.+. . . .++++. .
8+maj7  ++.++. . . .+.+. .
6-     .++.+. .+++ .+++++
8+6-    .+++++++ .+.++
6      +. .+++ . . .+.+. .
8+6     +.++.+. . . .++++. .
4      +. .+. . . .++.+.+.+
8+4     +. .+.+.+.+.+.+.+
b5      .++.++.+. . . .+++++
8+b5    .++.+++++. . .+.+

```

Root-Notes:

		C	C#	D#	E	F	G	A	B	C#	D	E	F	G	A	B	C
		*	-	*	-	-	-	-	-	-	*	-	-	-	-	-	*
Chord	[#roots]	J`K	L`M`Nb	Ob	P	Q	R`Sb	T`Ub	Vb	X	Y`J						
5	[ 8]	X	.	.	X	.	X	X	.	.	X	X	X	.	X	.	X
5+8	[ 6]	.	.	.	X	.	X	X	.	.	.	X	X	.	X	.	.
4	[ 8]	X	.	.	X	.	.	X	X	.	X	X	.	X	.	X	X
3m	[ 5]	X	.	.	X	.	.	.	.	.	X	X	.	.	X	.	X
3+	[ 5]	X	.	.	.	.	X	X	.	.	.	.	X	.	X	.	X
maj7	[ 2]	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X
dom7	[ 4]	.	.	.	.	.	X	X	.	.	.	.	X	.	X	.	.
min7	[ 3]	.	.	.	X	.	.	.	.	.	X	.	.	.	X	.	.
b7	[ 4]	.	X	.	.	.	.	.	X	X	.	.	.	.	X	.	.
maj7-5	[ 5]	X	.	X	.	X	.	.	.	X	.	.	X	.	.	.	X
dom7-5	[ 9]	.	X	X	.	.	X	X	.	X	.	.	X	X	X	X	.
min7-5	[ 6]	.	X	.	X	.	.	.	X	X	X	.	.	.	X	.	.
8+5	[ 6]	.	.	.	X	X	.	X	.	.	.	X	.	X	X	.	.
8+4	[ 6]	.	.	.	X	.	X	.	X	.	.	X	.	.	X	X	.
8+3m	[ 3]	.	.	.	X	.	.	X	.	.	.	X	.	.	.	.	.
8+3+	[ 4]	.	.	.	.	X	.	X	.	.	.	.	.	X	X	.	.
8+maj7	[ 1]	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 4]	.	.	.	.	X	.	X	.	.	.	.	.	X	X	.	.
8+min7	[ 2]	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.
8+b7	[ 4]	.	X	.	.	.	.	X	.	X	.	.	.	.	.	X	.
8+maj7-5	[ 3]	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	.
8+dom7-5	[ 8]	.	X	.	.	X	X	X	X	X	.	.	.	X	X	.	.
8+min7-5	[ 5]	.	X	.	.	.	.	X	.	X	.	X	.	.	.	X	.

Intervals:

8	.+++++.++++.+
3-	.+...++++..+.++
8+3-	.+...+.++++..+.+
5	.+.++..++++.+.+
8+5	.++.+.++.+++.+
7	++.+++++.++++.+
8+7	+.+++++.+.++++.+
3	+.++++.+.++++++
8+3	+.+++++.++++.++
maj7	+.+.+.++++.+.+
8+maj7	.++.+.+.+.+.++
6-	+.+.++++.+++++.+
8+6-	+++++++.+.++++.+
6	.+++...++.+.+.+
8+6	++.+.+.++++.+.+
4	.+...++.++.+.+++.
8+4	.+.+.+.++.+.++++.
b5	+.++.++..++++.+
8+b5	+.+++++.++.+.+.+

Root-Notes:

	C	C#	D	E	F#	G#	A#	B	C#	D	E	F#	G#	A	A#	C
	*	-	-	-	-	-	-	*	-	-	-	-	-	*	-	*
Chord [#roots]	J`K`Lb	M	N	O	P#`Q	R`Sb	T	U	V`X`Yb	J						
5 [8]	. X .	X X .	. . X	X X .	. . X	X X .	. X .	X . .	X . .	. . .						
5+8 [6]	. X .	X X .	. . X	X X .	. . X	X X .	. X .	X . .	X . .	. . .						
4 [8]	. X .	. . X	X X .	. . X	X X .	. X .	X . .	X . .	X . .	. . .						
3m [5]	. X .	. . .	. . .	. . .	. . .	X X .	. . .	X . .	X . .	. . .						
3+ [5]	. . .	X X .	. . .	. . .	. . .	. . .	X . .	X . .	X . .	. . .						
maj7 [2]	. . .	. . .	. . .	. . .	. . .	. . .	X . .	. . .	. . .	X . .						
dom7 [4]	. . .	X X .	. . .	. . .	. . .	. . .	X . .	X . .	. . .	. . .						
min7 [3]	. X .	. . .	. . .	. . .	. . .	X . .	. . .	X . .	. . .	. . .						
b7 [4]	. . .	. . .	. . .	. . .	X X .	. . .	. . .	X . .	. . .	X . .				X . .		
maj7-5 [5]	X . X	. . .	. . .	. . .	X . .	. . .	X . .	. . .	X . .	. . .	X . .			X . .	X . .	
dom7-5 [9]	X . .	X X .	. . .	. . .	X . .	. . .	X X X	X X X	. . .	X X X				X . .	X . .	X . .
min7-5 [6]	. X .	. . .	. . .	X X X	. . .	. . .	. . .	. . .	. . .	. . .	X . .			X . .	. . .	
8+5 [6]	. X X	. . .	. . .	. . .	. . .	. . .	X . .	X . .	X . .	. . .	. . .			. . .	. . .	
8+4 [6]	. X .	X . .	. . .	X . .	. . .	. . .	X . .	. . .	X . .	X . .	. . .			. . .	. . .	
8+3m [3]	. X .	. . .	X . .	. . .	. . .	. . .	X . .	. . .	. . .	. . .	. . .			. . .	. . .	
8+3+ [4]	. . X	. . .	X . .	. . .	. . .	. . .	. . .	X . .	X . .	. . .	. . .			. . .	. . .	
8+maj7 [1]	. . X	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .			. . .	. . .	
8+dom7 [4]	. . X	. . .	X . .	. . .	. . .	. . .	. . .	X . .	X . .	. . .	. . .			. . .	. . .	
8+min7 [2]	. . .	. . .	. . .	X . .	. . .	. . .	X . .	. . .	. . .	. . .	. . .			. . .	. . .	
8+b7 [4]	. . .	. . .	. . .	X . .	. . .	X . .	. . .	. . .	. . .	. . .	X . .			X . .	X . .	
8+maj7-5 [3]	. . X	. . .	. . .	. . .	. . .	. . .	. . .	X . .	. . .	. . .	. . .			X . .	. . .	
8+dom7-5 [8]	. . X	X X X	X X X	. . .	. . .	. . .	. . .	. . .	X X X	X X X	. . .			X . .	X . .	
8+min7-5 [5]	. . .	. . .	X . .	. . .	X . .	. . .	X . .	X . .	. . .	. . .	X . .			X . .	X . .	

Intervals:

8	.+++++.+.+++++
3-	++..+.++.+.++
8+3-	++..+.++.+.++
5	+++..+.+.+.++
8+5	++..+.++.+.++
7	+.++++.+++.
8+7	.+.+++.
3	..+++++.+++.
8+3	..++++.+++.
maj7	+++..+.+.+.++
8+maj7	+.+.+++.
6-	.+++++.+++.
8+6-	..+.+++.
6	++.+.+++.
8+6	++++.+++.
4	++.+.+++.
8+4	++.+++.
b5	..++++.+++.
8+b5	..+.+++.

Root-Notes:

		C	D	D#	F	G	A	A#	B	C#	D	D#	F	G	A	B	C
		*	-	-	-	-	-	*	-	*	-	-	-	-	-	-	*
Chord	[#roots]	J	K#`L	M#	N#	0#`P#`Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 8]	X	X	X	.	X	.	X	.	.	X	.	X	X	.	.	X
5+8	[ 6]	.	X	X	.	X	.	.	.	.	X	.	X	X	.	.	.
4	[ 8]	X	X	.	X	.	X	X	.	.	X	.	.	X	X	.	X
3m	[ 5]	X	X	.	.	X	.	X	.	.	X	.	.	.	.	.	X
3+	[ 5]	.	.	X	.	X	.	X	.	.	.	.	X	X	.	.	.
maj7	[ 2]	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.
dom7	[ 4]	.	.	X	.	X	.	.	.	.	.	.	X	X	.	.	.
min7	[ 3]	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X
b7	[ 4]	.	.	.	.	X	.	.	X	.	.	.	.	.	X	X	.
maj7-5	[ 5]	.	.	X	.	.	.	X	.	X	.	X	.	.	.	X	.
dom7-5	[ 9]	.	.	X	X	X	X	.	X	X	.	.	X	X	.	X	.
min7-5	[ 6]	X	.	.	.	X	.	.	X	.	X	.	.	.	X	X	X
8+5	[ 6]	.	X	.	X	X	.	.	.	.	X	X	.	X	.	.	.
8+4	[ 6]	.	X	.	.	X	X	.	.	.	X	.	X	.	X	.	.
8+3m	[ 3]	.	X	.	.	.	.	.	.	.	X	.	.	X	.	.	.
8+3+	[ 4]	.	.	.	X	X	.	.	.	.	.	X	.	X	.	.	.
8+maj7	[ 1]	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
8+dom7	[ 4]	.	.	.	X	X	.	.	.	.	.	X	.	X	.	.	.
8+min7	[ 2]	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.
8+b7	[ 4]	.	.	.	.	.	X	.	X	.	.	.	.	X	.	X	.
8+maj7-5	[ 3]	.	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.
8+dom7-5	[ 8]	.	.	.	X	X	.	.	X	.	.	X	X	X	X	X	.
8+min7-5	[ 5]	.	X	.	.	.	X	.	X	.	.	.	.	X	.	X	.

IV - 0

FhFhhFFFhhFFFFh

Intervals:

```

8      .+++ .+++ .+++++
3-     ++++.+.+.+.+.+.
8+3-   ++.+.+.+.+.+.+.
5      ++.+.+.+.+.+.+.
8+5    ++.+.+.+.+.+.+.
7      ..++.+++++.++++
8+7    .+.+.+++++.++++
3      .+++ .+++ .++++.
8+3    ..++.+.+++++++
maj7   ++++.+.+.+.+.+.
8+maj7 +.+.+.+.+.+.+.
6-     ..++++++++.+++
8+6-   ..+.+++++.++++
6      ++.+.+.+.+.+.+.
8+6    ++++++.+.+.+.+.
4      ++.+.+.+.+.+.+.
8+4    ++.+.+.+.+.+.+.
b5     +.++.+++++.++.++
8+b5   ..++++.++++.++++

```

Root-Notes:

		C	D	D#	F	F#	G	A	B	C#	D	D#	F	G	A	B	C
		*	-	-	-	*	-	-	-	*	-	-	-	-	-	-	*
Chord	[#roots]	J	K#`L	M#`N`Ob	P	Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 8]	X	X	.	.	X	X	.	.	.	X	.	X	X	.	X	X
5+8	[ 6]	.	X	.	.	.	X	.	.	.	X	.	X	X	.	X	.
4	[ 7]	X	X	.	.	X	.	X	.	.	X	.	.	X	X	.	X
3m	[ 5]	X	X	.	.	X	.	.	.	.	X	.	.	.	.	X	X
3+	[ 5]	.	X	.	.	.	X	.	.	.	.	.	X	X	.	X	.
maj7	[ 2]	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.
dom7	[ 4]	.	.	.	.	.	X	.	.	.	.	.	X	X	.	X	.
min7	[ 2]	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.
b7	[ 5]	X	.	X	.	.	.	.	X	.	.	.	.	.	X	X	X
maj7-5	[ 5]	.	X	X	.	.	.	.	.	X	.	X	.	X	.	.	.
dom7-5	[ 9]	.	.	X	X	.	X	X	X	X	.	.	X	X	.	X	.
min7-5	[ 5]	.	.	X	.	.	.	.	X	.	X	.	.	.	X	X	.
8+5	[ 6]	.	X	.	X	.	X	.	X	.	X	.	.	X	.	.	.
8+4	[ 5]	.	X	.	.	.	X	X	.	.	X	.	.	.	X	.	.
8+3m	[ 3]	.	X	.	.	.	.	.	X	.	X	.	.	.	.	.	.
8+3+	[ 5]	.	.	.	X	.	X	.	X	.	X	.	.	X	.	.	.
8+maj7	[ 2]	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.
8+dom7	[ 4]	.	.	.	X	.	X	.	X	.	.	.	.	X	.	.	.
8+min7	[ 2]	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.	.
8+b7	[ 4]	.	.	.	.	.	.	X	X	.	.	X	.	.	.	X	.
8+maj7-5	[ 4]	.	.	X	.	.	X	.	.	.	X	X	.	.	.	.	.
8+dom7-5	[ 8]	.	.	.	X	.	X	.	X	.	.	X	X	X	X	X	.
8+min7-5	[ 5]	.	X	.	.	.	.	X	X	.	.	X	.	.	.	X	.

## IV - 1

hFFFhhFFFFhFhFh

Intervals:

```

8      .+++ .+++++ .+++
3-     +. .+. .+. .++++.
8+3-   +. .+. .+. .++++.
5      ++. .+. .+. .+++
8+5     .+. .+. .+. .+++
7      .+++++ .++++. .++
8+7     .+++++ .++++. .+.
3      .+++++ .+++ .+++
8+3     .+. .+++++ .+++
maj7    +. .+. .+. .++++.
8+maj7  ++. .+. .+. .+++
6-     ++++++ .+. .+++
8+6-    ++++++ .++++. .+.
6      +. .+. .+. .+++
8+6     +. .+. .+. .++++
4      +. .+. .+. .+++
8+4     +++. .+. .+++
b5      .+++++ .+++
8+b5    +. .+++++ .+++

```

Root-Notes:

		C	C#	D#	F	G	G#	A	B	C#	D#	F	F#	G#	A	B	C
		*	-	-	-	*	-	-	-	-	-	-	*	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#`O`P	Q	R	S	T#`U	V`X	Y`J						
5	[ 8]	X	X	.	.	X	.	X	X	.	X	X	X	.	.	X	
5+8	[ 6]	.	X	.	.	X	.	X	X	.	X	.	X	.	.	.	
4	[ 7]	X	.	X	.	X	.	.	X	X	.	X	X	.	.	X	
3m	[ 5]	X	.	.	.	X	.	.	.	.	X	X	X	.	.	X	
3+	[ 5]	.	X	.	.	.	.	X	X	.	X	.	X	.	.	.	
maj7	[ 2]	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	
dom7	[ 4]	.	X	.	.	.	.	X	X	.	X	.	.	.	.	.	
min7	[ 2]	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	
b7	[ 5]	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	
maj7-5	[ 5]	.	.	.	.	X	.	X	.	X	.	.	.	X	X	.	
dom7-5	[ 9]	.	X	X	X	X	.	.	X	X	.	X	.	.	X	X	.
min7-5	[ 5]	.	.	.	X	.	X	.	.	X	X	.	.	X	.	.	
8+5	[ 6]	.	X	.	X	.	X	.	.	X	.	.	.	X	.	X	.
8+4	[ 5]	.	X	X	.	.	X	.	.	.	X	.	.	X	.	.	
8+3m	[ 3]	.	.	.	X	.	X	.	.	.	.	.	.	X	.	.	
8+3+	[ 5]	.	X	.	X	.	X	.	.	X	.	.	.	.	.	X	.
8+maj7	[ 2]	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	
8+dom7	[ 4]	.	X	.	X	.	.	.	X	.	.	.	.	.	.	X	.
8+min7	[ 2]	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	
8+b7	[ 4]	.	.	X	X	.	.	X	.	.	.	X	.	.	.	.	
8+maj7-5	[ 4]	.	X	.	.	.	X	X	.	.	.	.	.	.	X	.	
8+dom7-5	[ 8]	.	X	.	X	.	.	X	X	X	X	X	.	.	.	X	.
8+min7-5	[ 5]	.	.	X	X	.	.	X	.	.	.	X	.	X	.	.	

## IV - 2

hhFFFFhFhFhhFFF

Intervals:

8	.+++++.+++.
3-	.+...+++++.+.+
8+3-	.++...+++..+.+
5	.+.+.+++..++..
8+5	.+...+.+++..+.+
7	++.++++.++.+++
8+7	+.+++++.+.+++
3	+.++++.+++.
8+3	+++++++..++..+
maj7	+.+.+.+++..+
8+maj7	.++...+.+++.
6-	+.+.+++..+++++
8+6-	+.+++++.+.++++
6	.++++.+++..
8+6	.+.+.+++..+.+
4	.+...+.+++..+
8+4	++...+.+++.
b5	+.++.+++..+++
8+b5	+.+++++.+++.

Root-Notes:

	C	C#	D	E	F#	G#	A#	B	C#	D	E	F	F#	G#	A#	C
	*	-	-	-	-	-	-	*	-	-	-	*	-	-	-	*
Chord [#roots]	J`K`Lb	M	N	O	P#`Q	R`Sb	T`T#`U	V	X#	J						
5 [ 8]	.	X	.	X	X	.	X	X	X	.	.	X	X	.	.	.
5+8 [ 6]	.	X	.	X	X	.	X	.	X	.	.	.	X	.	.	.
4 [ 7]	.	X	.	.	X	X	.	X	X	.	.	X	.	X	.	.
3m [ 5]	.	X	.	.	.	.	X	X	X	.	.	X	.	.	.	.
3+ [ 5]	.	.	.	X	X	.	X	.	X	.	.	.	X	.	.	.
maj7 [ 2]	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.
dom7 [ 4]	.	.	.	X	X	.	X	.	.	.	.	.	X	.	.	.
min7 [ 2]	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.
b7 [ 5]	.	.	.	.	.	X	X	X	.	X	.	.	.	.	X	.
maj7-5 [ 5]	X	.	X	.	X	.	.	.	X	X	.	.	.	.	.	X
dom7-5 [ 9]	X	.	.	X	X	.	X	.	.	X	X	.	X	X	X	X
min7-5 [ 5]	.	X	.	.	.	X	X	.	.	X	.	.	.	.	X	.
8+5 [ 6]	.	X	.	.	X	.	.	.	X	.	X	.	X	.	X	.
8+4 [ 5]	.	X	.	.	.	X	.	.	X	.	.	.	X	X	.	.
8+3m [ 3]	.	X	.	.	.	.	.	.	X	.	.	.	.	.	X	.
8+3+ [ 5]	.	X	.	.	X	.	.	.	.	.	X	.	X	.	X	.
8+maj7 [ 2]	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.
8+dom7 [ 4]	.	.	.	.	X	.	.	.	.	.	X	.	X	.	X	.
8+min7 [ 2]	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	.
8+b7 [ 4]	.	.	X	.	.	.	X	.	.	.	.	.	.	X	X	.
8+maj7-5 [ 4]	.	X	X	.	.	.	.	.	.	X	.	.	X	.	.	.
8+dom7-5 [ 8]	.	.	X	X	X	X	X	.	.	.	X	.	X	.	X	.
8+min7-5 [ 5]	.	.	X	.	.	.	X	.	X	.	.	.	.	X	X	.

V - 0

hFFFhFhFFFFhhFh

Intervals:

```

8      .+++++.+++++.+
3-     +..++++...+.++.
8+3-   +..+.++...+++..
5      +++..+++.+.+.+.
8+5     ++.+.+++.++..+.
7      +++++.+++++.+.
8+7     .+++++.+.++++.++
3      .++.+.+++++++
8+3     .+++++.++++.++.
maj7    +....+++.+++
8+maj7  ++...+.+.+++
6-     +.+++..+++++.++
8+6-   +++++..+.++++.++
6      .+...++++.+.+.+
8+6     +.+.+++++.+.+.+
4      +.++.++..+.+++..
8+4     +.+.+++..+++.+.
b5      .+.+++..+++++.++
8+b5    .++++..+.+++.
```

Root-Notes:

		C	C#	D#	F	G	G#	A#	B	C#	D#	F	G	G#	A	B	C
		*	-	-	-	-	-	*	-	-	-	-	-	-	*	-	*
Chord	[#roots]	J`K	L	M#	N#`O	P#`Q	R	S	T#	U#`V`X	Y`J						
5	[ 8]	X	X	X	.	.	X	X	.	X	.	X	.	X	.	.	X
5+8	[ 6]	.	X	X	.	.	X	.	.	X	.	X	.	X	.	.	.
4	[ 8]	X	.	X	X	.	X	X	.	.	X	.	X	X	.	.	X
3m	[ 5]	X	.	.	.	.	X	X	.	.	.	X	.	X	.	.	X
3+	[ 5]	.	X	X	.	.	.	.	.	X	.	X	.	X	.	.	.
maj7	[ 2]	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.
dom7	[ 4]	.	X	X	.	.	.	.	.	X	.	X	.	.	.	.	.
min7	[ 3]	X	.	.	.	.	.	X	.	.	.	X	.	.	.	.	X
b7	[ 4]	.	.	.	X	X	.	.	.	.	.	X	.	.	X	.	.
maj7-5	[ 4]	.	.	.	.	.	.	.	.	X	.	.	.	X	X	X	.
dom7-5	[ 9]	.	X	X	.	X	.	.	X	X	X	X	X	.	X	.	.
min7-5	[ 6]	X	.	.	X	X	.	X	.	.	.	X	.	.	X	.	X
8+5	[ 6]	.	X	.	X	.	X	.	.	X	X	.	.	X	.	.	.
8+4	[ 6]	.	.	X	.	X	X	.	.	.	X	X	.	X	.	.	.
8+3m	[ 3]	.	.	.	X	.	X	.	.	.	.	.	.	X	.	.	.
8+3+	[ 5]	.	X	.	X	.	X	.	.	X	X	.	.	.	.	.	.
8+maj7	[ 2]	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 4]	.	X	.	X	.	.	.	.	X	X	.	.	.	.	.	.
8+min7	[ 1]	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.
8+maj7-5	[ 3]	.	X	.	.	.	X	.	X	.	.	.	.	.	.	.	.
8+dom7-5	[ 8]	.	X	X	X	X	.	.	.	X	X	.	X	.	.	X	.
8+min7-5	[ 3]	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.

V - 1

hFFFFhFhFhFhF

Intervals:

```

8      .+++++.+.+++++
3-     +...+.++.+.+++
8+3-   +...+++...+.+.
5      +.+.+.+.+++++.
8+5    +.++.+.+++++.
7      ++++++.+.+++++.
8+7    +.++++.++.+++++.
3      .+++++.++.+.
8+3    .++++.++.+++++
maj7   +.+...+++++.
8+maj7 .+...+.+.+.
6-     .+++++.+++..
8+6-   .+.+++..+++++.
6      ++.+.+.+.+.
8+6    +++...+.+.+.
4      +..+.++.+.+.
8+4    +..+.+.+.+.
b5     .+++++.++.+.
8+b5   .++.++.+.+++++.

```

Root-Notes:

Root-Notes:		C	C#	D#	F	G	A	A#	B	C#	D	D#	F	G	A	A#	C
		*	-	-	-	-	-	-	*	-	*	-	-	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#	0#`P#`Q	R`Sb`Tb	Ub	Vb	X`Yb	J						
5	[ 8]	X	.	X	.	X	.	X	.	X	X	X	.	.	X	X	
5+8	[ 6]	.	.	X	.	X	.	X	.	.	X	X	.	.	X	.	
4	[ 8]	X	.	.	X	.	X	X	.	.	X	.	X	X	.	X	X
3m	[ 5]	X	.	.	.	X	.	X	.	.	X	.	.	.	.	X	X
3+	[ 5]	.	.	X	.	X	.	X	.	.	.	X	X	.	.	.	.
maj7	[ 2]	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.
dom7	[ 4]	.	.	X	.	X	.	.	.	.	X	X	.	.	.	.	.
min7	[ 3]	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X
b7	[ 4]	.	.	.	.	X	.	.	X	.	.	.	.	X	X	.	.
maj7-5	[ 4]	.	.	X	.	.	.	X	X	X	.	.	.	.	.	.	.
dom7-5	[ 9]	.	X	X	X	X	X	.	X	.	.	X	X	.	X	.	.
min7-5	[ 6]	X	.	.	.	X	.	.	X	.	X	.	.	X	X	.	X
8+5	[ 6]	.	.	X	X	.	.	X	.	.	.	X	.	X	.	X	.
8+4	[ 6]	.	.	.	X	X	.	X	.	.	.	.	X	.	X	X	.
8+3m	[ 3]	.	.	.	.	.	.	X	.	.	.	.	.	X	.	X	.
8+3+	[ 5]	.	.	X	X	.	.	.	.	.	.	X	.	X	.	X	.
8+maj7	[ 2]	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.
8+dom7	[ 4]	.	.	X	X	.	.	.	.	.	.	X	.	X	.	.	.
8+min7	[ 1]	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
8+b7	[ 3]	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.
8+maj7-5	[ 3]	.	X	.	.	.	.	.	.	.	.	X	.	.	.	X	.
8+dom7-5	[ 8]	.	.	X	X	.	X	.	.	X	.	X	X	X	X	.	.
8+min7-5	[ 3]	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.



V - 2

FhhFFFhFhFFFFhh

Intervals:

```

8      .+.+++++.+++++
3-     +.+.+++++.+.+
8+3-   ..+.+.++....+++
5      ..+++..+++.+.+
8+5     ..+++.+++.+++.+
7      +.+++++.+++++.
8+7     ++.+++++.+++++.
3      ++.++.+.+++++.
8+3     ++.+++++.++++.
maj7    +++.....+++.+.+
8+maj7  +.++....+.+.+.+
6-     ++++.+++..+++++.
8+6-    ++++++++..+.++++.
6      .+.+.++++.+.+
8+6     .+++.++++.+.+
4      ..+.++.+++.+.++
8+4     ..+.+.++++.++++.
b5      ++.+.+++..+++++.
8+b5    ++.+++++.++++.

```

Root-Notes:

	C	D	D#	E	F#	G#	A#	B	C#	D	E	F#	G#	A#	B	C
	*	-	*	-	-	-	-	-	*	-	-	-	-	-	-	*
Chord [#roots]	J	K#`	L`	M`	N	O	P#`	Q`	R`	Sb	T	U	V	X#`	Y`	J
5 [ 8]	.	.	X	X	X	.	.	X	X	.	X	.	X	.	X	.
5+8 [ 6]	.	.	.	X	X	.	.	X	.	.	X	.	X	.	X	.
4 [ 8]	.	.	X	.	X	X	.	X	X	.	.	X	.	X	X	.
3m [ 5]	.	.	X	.	.	.	.	X	X	.	.	.	X	.	X	.
3+ [ 5]	.	.	.	X	X	.	.	.	.	.	X	.	X	.	X	.
maj7 [ 2]	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.
dom7 [ 4]	.	.	.	X	X	.	.	.	.	.	X	.	X	.	.	.
min7 [ 3]	.	.	X	.	.	.	.	.	X	.	.	.	X	.	.	.
b7 [ 4]	X	.	.	.	.	X	X	.	.	.	.	.	X	.	.	X
maj7-5 [ 4]	X	X	.	.	.	.	.	.	.	.	X	.	.	.	X	X
dom7-5 [ 9]	X	.	.	X	X	.	X	.	.	X	X	X	X	X	.	X
min7-5 [ 6]	X	.	X	.	.	X	X	.	X	.	.	.	X	.	.	X
8+5 [ 6]	.	.	.	X	.	X	.	X	.	.	X	X	.	.	X	.
8+4 [ 6]	.	.	.	.	X	.	X	X	.	.	.	X	X	.	X	.
8+3m [ 3]	.	.	.	.	.	X	.	X	.	.	.	.	.	.	X	.
8+3+ [ 5]	.	.	.	X	.	X	.	X	.	.	X	X	.	.	.	.
8+maj7 [ 2]	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.
8+dom7 [ 4]	.	.	.	X	.	X	.	.	.	.	X	X	.	.	.	.
8+min7 [ 1]	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
8+b7 [ 3]	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.
8+maj7-5 [ 3]	.	.	.	X	.	.	.	X	.	X	.	.	.	.	.	.
8+dom7-5 [ 8]	.	X	.	X	X	X	X	.	.	.	X	X	.	X	.	.
8+min7-5 [ 3]	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.

VI - 0

hFFFFhhFFFhhFhF

Intervals:

```

8      .+++++.+++.+
3-     +...+.+...+.+++
8+3-   +.+.+++...+.+.
5      +.+....+.+++..+
8+5    +.++..+.+.+.+.+
7      ++++++.+.+.+.
8+7    +.++++.++++.+.
3      .+++++.+++++.+
8+3    .++++.+++++++
maj7   +...+.+++..+.+.
8+maj7 .+.....+.+.+.+
6-     .++++++++.+.+.
8+6-   .+.+++..++++.+++
6      ++...+.+.+.+.+
8+6    +++...+.+.+.+.+
4      +..+.+.+.+.+.+
8+4    ++.++.+.+.+.+.+
b5     .+++++.+++..+.
8+b5   +++..+.++++.+.

```

Root-Notes:

Root-Notes:			C	C#	D#	F	G	A	A#	B	C#	D#	F	F#	G	A	A#	C	
			*	-	-	-	-	-	-	*	-	-	-	*	-	-	-	-	*
Chord	[#roots]		J`K	L	M#	N#	0#`P#`Q	R	S	T#`U`Vb	X`Yb	J							
5	[ 8]		X	.	X	.	.	X	X	.	X	X	X	.	.	X	X		
5+8	[ 5]		.	.	X	.	.	X	.	.	X	X	.	.	.	X	.		
4	[ 7]		X	.	.	X	.	.	X	.	X	.	X	.	X	X	X		
3m	[ 5]		X	.	.	.	.	.	X	.	.	X	.	X	.	X	X		
3+	[ 5]		.	.	X	.	.	.	X	.	X	X	X	.	.	.	.		
maj7	[ 2]		.	.	.	.	.	.	X	.	.	.	X	.	.	.	.		
dom7	[ 4]		.	.	X	.	.	.	X	.	X	X	.	.	.	.	.		
min7	[ 2]		X	.	.	.	.	.	.	.	X	.	.	.	.	.	X		
b7	[ 5]		.	.	.	.	X	.	.	.	X	.	X	X	X	.	.		
maj7-5	[ 4]		.	.	.	.	X	.	X	X	.	.	X	.	.	.	.		
dom7-5	[ 9]		.	X	X	X	X	X	.	X	.	X	X	.	.	X	.		
min7-5	[ 5]		X	.	.	.	X	.	.	.	X	.	.	.	X	X	.		
8+5	[ 5]		.	.	X	X	.	X	.	.	X	.	.	.	.	X	.		
8+4	[ 6]		.	X	.	X	X	.	X	.	.	.	X	.	.	X	.		
8+3m	[ 3]		.	.	X	.	.	.	X	.	.	.	.	.	.	X	.		
8+3+	[ 3]		.	.	X	X	.	.	.	.	X	.	.	.	.	.	.		
8+maj7	[ 0]		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
8+dom7	[ 3]		.	.	X	X	.	.	.	.	X	.	.	.	.	.	.		
8+min7	[ 1]		.	.	X	.	.	.	.	.	.	.	.	.	.	.	.		
8+b7	[ 4]		.	.	X	.	X	X	.	.	.	.	.	.	X	.	.		
8+maj7-5	[ 2]		.	X	.	.	.	.	.	.	.	.	.	.	X	.	.		
8+dom7-5	[ 8]		.	.	X	X	.	X	.	.	X	X	X	.	X	X	.		
8+min7-5	[ 4]		.	.	X	.	X	X	.	.	.	.	.	.	X	.	.		

Intervals:

8	.+++ .+++ .+++++
3-	..+.+++++...+.+
8+3-	....++ .++ .+++
5	+.+++ .++ .+++
8+5	..+.+ .++ .+++
7	+.++ .++ .+++++
8+7	++++ .++ .+++
3	++++ .+ .+++++
8+3	+++++ .++ .+
maj7	++ .+ .++ .+++
8+maj7	+ .++ .+ .+++
6-	++ .+ .++ .+++++
8+6-	++++ .+++ .+++
6	.++ .+ .+++ .+++
8+6	.+ .+ .+++ .+++
4	.+ .+ .+ .+++ .+++
8+4	...++ .+++ .+++
b5	+++ .+++ .+++++
8+b5	++++ .++ .+++ .++

Root-Notes:

		C	D	E	F#	G	G#	A#	B	C#	D	E	F#	G#	A#	B	C
		*	-	-	-	*	-	-	-	*	-	-	-	-	-	-	*
Chord	[#roots]	J	K#	M	N`N#`	O	P#`	Q	R`Sb	T	U	V	X#`	Y`	Z`		
5	[ 8]	X	.	X	X	X	.	.	X	X	.	X	.	.	.	X	X
5+8	[ 5]	.	.	X	X	.	.	.	X	.	.	X	.	.	.	X	.
4	[ 7]	.	X	.	X	.	X	.	X	X	.	.	X	.	.	X	.
3m	[ 5]	.	.	X	.	X	.	.	X	X	.	.	.	.	.	X	.
3+	[ 5]	X	.	X	X	X	.	.	.	.	.	X	.	.	.	.	X
maj7	[ 2]	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X
dom7	[ 4]	X	.	X	X	.	.	.	.	.	.	X	.	.	.	.	X
min7	[ 2]	.	.	X	.	.	.	.	.	X	.	.	.	.	.	.	.
b7	[ 5]	.	.	X	.	X	X	X	.	.	.	.	.	X	.	.	.
maj7-5	[ 4]	X	X	.	.	X	.	.	.	.	.	.	.	X	.	.	X
dom7-5	[ 9]	X	.	X	X	.	.	X	.	.	X	X	X	X	X	.	X
min7-5	[ 5]	.	.	X	.	.	X	X	.	X	.	.	.	X	.	.	.
8+5	[ 5]	.	.	X	.	.	.	.	X	.	.	X	X	.	.	X	.
8+4	[ 6]	.	.	.	X	.	.	.	X	.	X	.	X	X	.	X	.
8+3m	[ 3]	.	.	.	.	.	.	.	X	.	.	X	.	.	.	X	.
8+3+	[ 3]	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	.
8+min7	[ 1]	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
8+b7	[ 4]	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.
8+maj7-5	[ 2]	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.
8+dom7-5	[ 8]	.	X	X	X	.	X	X	.	.	.	X	X	.	X	.	.
8+min7-5	[ 4]	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.

Intervals:

8	.+++ .+++++ .+++
3-	+++++ . . . + . . . +
8+3-	++ .++ .+ .+++ . . .
5	+ . . ++ .+ . . . ++ .++
8+5	+ . . ++ .++ . . . + .
7	.++ .+++++ .+ .++
8+7	.++ .+ .++++ .++++
3	+ .+ . .++++ .++++
8+3	+++ . . +++ .+ .++++
maj7	+ . . ++ . . . + .+++ .
8+maj7	++ .+ .+ . . . ++ . . .
6-	.++ . .+++++ .++
8+6-	.+++ .+ .+++ .++++
6	+ . . +++ . . . ++ .++
8+6	+ .+++++ . . . + . .
4	.+ .++ . . . + .+ .+ .
8+4	+ . . +++ .++ .+ . . . +
b5	+++ . .+++++ .+++
8+b5	.++ .+++ .++ .++++

Root-Notes:

		C	C#	D#	E	F#	G	A	B	C#	D#	E	F	G	A	B	C
		*	-	-	-	*	-	-	-	-	-	-	*	-	-	-	*
Chord	[#roots]	J`K	L`M	N`Ob	P	Q	R	S`T`Ub	Vb	X	Y`J						
5	[ 8]	X	.	.	X	X	.	X	.	.	.	X	X	.	X	X	X
5+8	[ 5]	.	.	.	X	.	.	X	.	.	.	X	.	.	X	X	.
4	[ 7]	.	X	.	X	X	.	.	X	.	.	X	.	X	.	X	.
3m	[ 5]	X	.	.	X	X	.	.	.	.	.	X	.	.	X	.	X
3+	[ 5]	X	.	.	.	.	.	X	.	.	.	.	X	.	X	X	X
maj7	[ 2]	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X
dom7	[ 4]	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.
min7	[ 2]	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.
b7	[ 5]	X	X	X	.	.	.	.	.	X	.	.	.	.	X	.	X
maj7-5	[ 4]	X	.	.	.	.	.	.	.	X	.	.	X	X	.	.	X
dom7-5	[ 9]	.	.	X	.	.	X	X	X	X	X	.	X	.	X	X	.
min7-5	[ 5]	.	X	X	.	X	.	.	.	X	.	.	.	.	X	.	.
8+5	[ 5]	.	.	.	X	.	.	X	X	.	.	X	.	.	X	.	.
8+4	[ 6]	.	.	.	X	.	X	.	X	X	.	X	.	.	.	X	.
8+3m	[ 3]	.	.	.	X	.	.	X	.	.	.	X	.	.	.	.	.
8+3+	[ 3]	.	.	.	.	.	.	X	X	.	.	.	.	.	X	.	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	.	.	.	X	X	.	.	.	.	.	X	.	.
8+min7	[ 1]	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8+b7	[ 4]	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.
8+maj7-5	[ 2]	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
8+dom7-5	[ 8]	.	X	X	.	.	.	X	X	.	X	.	.	X	X	X	.
8+min7-5	[ 4]	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.

Intervals:

8	.+++ .++++ .+++++
3-	+ .+ .+ .+ .+ .+ .+ .+
8+3-	+ .+ .+ .+ .+ .+ .+ .+
5	+ .+ .+ .+ .+ .+ .+ .+
8+5	+ .+ .+ .+ .+ .+ .+ .+
7	.+++ .++++ .+++++
8+7	.+++ .++++ .+++++
3	.+++ .++++ .+++++
8+3	.+++ .++++ .+++++
maj7	+ .+ .+ .+ .+ .+ .+ .+
8+maj7	+ .+ .+ .+ .+ .+ .+ .+
6-	.++++ .++++ .+++++
8+6-	.+++ .++++ .+++++
6	+ .+ .+ .+ .+ .+ .+ .+
8+6	+ .+ .+ .+ .+ .+ .+ .+
4	+ .+ .+ .+ .+ .+ .+ .+
8+4	+ .+ .+ .+ .+ .+ .+ .+
b5	.+++ .++++ .+++++
8+b5	.+++ .++++ .+++++

Root-Notes:

		C	C#	D#	F	F#	G	A	B	C#	D	D#	F	G	A	B	C
		*	-	-	-	*	-	-	-	-	*	-	-	-	-	-	*
Chord	[#roots]	J`K	L	M#`N`Ob	P	Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 6]	X	.	.	.	X	X	.	.	.	X	.	X	.	.	X	X
5+8	[ 3]	.	.	.	.	.	X	.	.	.	.	.	X	.	.	X	.
4	[ 6]	X	X	.	.	X	.	X	.	.	X	.	.	X	.	.	X
3m	[ 3]	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X
3+	[ 3]	.	.	.	.	.	X	.	.	.	.	.	X	.	.	X	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	.	.	.	.	X	.	.	.	.	.	X	.	.	X	.
min7	[ 1]	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
b7	[ 4]	X	.	X	.	.	.	.	X	.	.	.	.	.	X	.	X
maj7-5	[ 3]	.	.	X	.	.	.	.	.	X	.	.	.	X	.	.	.
dom7-5	[12]	.	X	X	X	.	X	X	X	X	.	X	X	X	X	X	.
min7-5	[ 4]	.	.	X	.	.	.	.	X	.	X	.	.	.	X	.	.
8+5	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.
8+4	[ 3]	.	.	.	.	.	X	.	.	X	.	.	.	.	X	.	.
8+3m	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	.
8+maj7-5	[ 3]	.	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.
8+dom7-5	[12]	.	X	X	X	.	X	X	X	X	.	X	X	X	X	X	.
8+min7-5	[ 3]	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	.

Intervals:

8	.++++.++++.+++
3-	+..+.+.+.+.+.+
8+3-	+..+.+.+.+.+.+
5	++...+.+.+.+.+
8+5	+..+.+.+.+.+.+
7	.++++.++++.+++
8+7	.++++.++++.+++
3	.++++.++++.+++
8+3	.++++.++++.+++
maj7	+...+.+.+.+.+.+
8+maj7	++...+.+.+.+.+.+
6-	+++++.++++.+++
8+6-	.++++.++++.+++
6	+...+.+.+.+.+.+
8+6	+..+.+.+.+.+.+
4	+..+.+.+.+.+.+
8+4	++...+.+.+.+.+.+
b5	.++++.++++.+++
8+b5	+++++.++++.+++

Root-Notes:

		C	C#	D#	F	G	G#	A	B	C#	D#	F	F#	G	A	B	C
		*	-	-	-	*	-	-	-	-	-	-	*	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#`O`P	Q	R	S	T#`U`Vb	X	Y`J						
5	[ 6]	X	X	.	.	X	.	X	.	X	X	.	.	.	.	.	X
5+8	[ 3]	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.
4	[ 6]	X	.	X	.	.	X	.	.	X	.	.	X	X	.	.	X
3m	[ 3]	X	.	.	.	.	X	.	.	.	.	.	X	.	.	.	X
3+	[ 3]	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.
min7	[ 1]	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
b7	[ 4]	.	.	.	X	.	.	.	.	X	.	X	.	X	.	.	.
maj7-5	[ 3]	.	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.
dom7-5	[12]	.	X	X	X	X	.	X	X	X	X	X	.	X	X	X	.
min7-5	[ 4]	.	.	.	X	.	X	.	.	.	X	.	.	.	X	.	.
8+5	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.
8+4	[ 3]	.	X	.	.	X	.	.	.	.	X	.	.	.	.	.	.
8+3m	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	.	X	.	.	.	X	.	.	.	X	.	.	.	.	.
8+maj7-5	[ 3]	.	X	.	.	.	.	X	.	.	.	.	.	X	.	.	.
8+dom7-5	[12]	.	X	X	X	X	.	X	X	X	X	X	.	X	X	X	.
8+min7-5	[ 3]	.	.	X	.	.	.	X	.	.	.	X	.	.	.	.	.

Intervals:

8	.+++++.+++.
3-	+...+.+.+.+.+
8+3-	++...++...+.+. .
5	+...+.+.+.+. .
8+5	+...+.+.+.+.+. .
7	+++++++.+++.
8+7	.+++++.+++.
3	.+++++.+++.
8+3	+++++++.+++.
maj7	+...+.+.+.+.+. .
8+maj7	++...+.+.+.+. .
6-	.+++++.++++++
8+6-	.+++++.+++.
6	++...+.+.+.+. .
8+6	+...+.+.+.+.+. .
4	+...+.+.+.+.+. .
8+4	+...+.+.+.+.+. .
b5	.+++++++.++++
8+b5	.+++++.++++++

Root-Notes:

Root-Notes:			C	C#	D#	F	G	A	A#	B	C#	D#	E	F	G	A	B	C
			*	-	-	-	-	-	*	-	-	-	*	-	-	-	-	*
Chord	[#roots]		J`K	L	M#	N#	0#	P#`	Q	R	S`	T`	Ub	Vb	X	Y`	J	
5	[ 6]		X	.	X	.	.	X	X	.	.	.	X	X	.	.	.	X
5+8	[ 3]		.	.	X	.	.	X	.	.	.	.	X	X	.	.	.	X
4	[ 6]		X	.	.	X	.	.	X	X	.	.	X	.	X	.	.	X
3m	[ 3]		X	.	.	.	.	.	X	.	.	.	X	.	.	.	.	X
3+	[ 3]		.	.	X	.	.	X	.	.	.	.	.	X	.	.	.	.
maj7	[ 0]		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]		.	.	X	.	.	X	.	.	.	.	.	X	.	.	.	.
min7	[ 1]		X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X
b7	[ 4]		.	.	.	.	X	.	X	.	X	.	.	.	.	X	.	.
maj7-5	[ 3]		.	.	.	X	.	.	.	X	.	.	.	.	.	.	X	.
dom7-5	[12]		.	X	X	X	X	X	.	X	X	X	.	X	X	X	X	.
min7-5	[ 4]		X	.	.	.	X	.	.	X	.	.	.	.	X	.	.	X
8+5	[ 3]		.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.
8+4	[ 3]		.	.	.	.	X	.	.	.	.	.	X	.	.	X	.	.
8+3m	[ 0]		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+3+	[ 3]		.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.
8+maj7	[ 0]		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]		.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.
8+min7	[ 0]		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]		.	X	.	.	.	X	.	.	.	.	.	.	X	.	.	.
8+maj7-5	[ 3]		.	X	.	.	.	.	X	.	.	.	X	.	.	.	.	.
8+dom7-5	[12]		.	X	X	X	X	X	.	X	X	X	.	X	X	X	X	.
8+min7-5	[ 3]		.	X	.	.	.	X	.	.	.	.	.	X	.	.	.	.

## VIII - 0

hFFFhhFFhhFFFFh

Intervals:

```

8      .+++++.++++.+++++
3-     +..+.+.+.+.+.+.
8+3-   +.....++..+.+.+.+
5      ++..++..+.+.+.+.
8+5    +..+.+.+.+.+.+.
7      .+++++.+++++
8+7    .+++++.++++.+++++
3      .+++++.++++.+++++
8+3    .+++++.....+++++
maj7   +.+.+.+.+.+.+.+.
8+maj7 ++..+.+.+.+.+.+.
6-     ++++++.++++.+++++
8+6-   .+++++.++++.+++++
6      +..+.+.+.+.+.+.
8+6    +.+.+.+.+.+.+.+.
4      +.+.+.+.+.+.+.+.
8+4    +...+.+.+.+.+.+.
b5     .+++++.....+++++
8+b5   .+++++.+++++

```

Root-Notes:

		C	C#	D#	F	G	G#	A	B	C#	D	D#	F	G	A	B	C
		*	-	-	-	-	*	-	-	-	*	-	-	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#`O`P	Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 6]	X	X	.	.	X	X	.	.	.	X	.	X	.	.	.	X
5+8	[ 3]	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	.
4	[ 6]	X	.	X	.	.	X	X	.	.	X	.	.	X	.	.	X
3m	[ 3]	X	.	.	.	.	X	.	.	.	X	.	.	.	.	.	X
3+	[ 3]	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.	.
min7	[ 1]	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
b7	[ 4]	.	.	.	X	.	X	.	X	.	.	.	.	.	X	.	.
maj7-5	[ 3]	.	.	X	.	.	.	.	.	X	.	.	.	.	X	.	.
dom7-5	[12]	.	X	X	X	X	.	X	X	X	.	X	X	X	X	X	.
min7-5	[ 4]	.	.	.	X	.	.	.	X	.	X	.	.	.	X	.	.
8+5	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.
8+4	[ 3]	.	.	.	.	X	.	.	.	.	.	X	.	.	X	.	.
8+3m	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.
8+maj7-5	[ 3]	.	X	.	.	.	.	X	.	.	.	X	.	.	.	.	.
8+dom7-5	[12]	.	X	X	X	X	.	X	X	X	.	X	X	X	X	X	.
8+min7-5	[ 3]	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.



Intervals:

8	.+++ .++++ .++++
3-	+.+.+.+.+.+.+.+
8+3-	++..+.+.+.+.+.+
5	+...+.+.+.+.+.+
8+5	+...+.+.+.+.+.+
7	.+++++.++++.++++
8+7	.+++ .++++ .++++
3	.+++ .++++ .++++
8+3	++++.++++.++++
maj7	+...+.+.+.+.+.+
8+maj7	++..+.+.+.+.+.+
6-	.+++ .+++++.++++
8+6-	.+++ .++++.++++
6	+...+.+.+.+.+.+
8+6	+.+.+.+.+.+.+.+
4	++..+.+.+.+.+.+
8+4	+...+.+.+.+.+.+
b5	++++.++++.++++
8+b5	.+++++.++++.++++

Root-Notes:

		C	C#	D#	F	F#	G	A	B	C#	D#	E	F	G	A	B	C
		*	-	-	-	*	-	-	-	-	-	*	-	-	-	-	*
Chord	[#roots]	J`K	L	M#`N`Ob	P	Q	R	S`T`Ub	Vb	X	Y`J						
5	[ 6]	X	.	.	.	X	.	X	.	.	.	X	X	.	.	X	X
5+8	[ 3]	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.
4	[ 6]	X	X	.	.	X	.	.	X	.	.	X	.	X	.	.	X
3m	[ 3]	X	.	.	.	X	.	.	.	.	.	X	.	.	.	.	X
3+	[ 3]	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.
min7	[ 1]	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.
b7	[ 4]	X	.	X	.	.	.	.	X	.	.	.	.	.	X	.	X
maj7-5	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.
dom7-5	[12]	.	X	X	X	.	X	X	X	X	X	.	X	X	X	X	.
min7-5	[ 4]	.	.	X	.	X	.	.	.	X	.	.	.	.	X	.	.
8+5	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	.	X	.	.
8+4	[ 3]	.	.	.	.	.	X	.	.	X	.	.	.	.	.	X	.
8+3m	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	.	X	.	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	.	.	.	X	.	.	.	.	.	X	.	.
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.
8+maj7-5	[ 3]	.	X	.	.	.	X	.	.	.	.	.	X	.	.	.	.
8+dom7-5	[12]	.	X	X	X	.	X	X	X	X	X	.	X	X	X	X	.
8+min7-5	[ 3]	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.

Intervals:

8	.+++++.++++.+++
3-	+...+.+...+.+..
8+3-	+...++...++...
5	+...++...++...
8+5	+...+.+...+.+..
7	+++++++.++++.+++
8+7	.+++++.++++.+++
3	.+++++.++++.+++
8+3	.+++++.+++++++
maj7	+...+.+...+.+..
8+maj7	++...++...++...
6-	.+++++++.++++.+++
8+6-	.+++++.++++.+++
6	++...++...+.+..
8+6	+...+.+...+.+..
4	+...+.+...++...
8+4	++...+.+...++...
b5	.+++++.+++++++
8+b5	+++++++.++++.+++

Root-Notes:

		C	C#	D#	F	G	A	A#	B	C#	D#	F	F#	G	A	B	C
		*	-	-	-	-	-	*	-	-	-	-	*	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#	0#`P#`Q	R	S	T#`U`Vb	X	Y`J						
5	[ 6]	X	.	X	.	.	X	X	.	.	X	X	.	.	.	.	X
5+8	[ 3]	.	.	X	.	.	.	X	.	.	X	.	.	.	.	.	.
4	[ 6]	X	.	.	X	.	.	X	.	X	.	.	X	X	.	.	X
3m	[ 3]	X	.	.	.	.	.	X	.	.	.	.	X	.	.	.	X
3+	[ 3]	.	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.
maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.
min7	[ 1]	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X
b7	[ 4]	.	.	.	.	X	.	.	.	X	.	X	.	X	.	.	.
maj7-5	[ 3]	.	.	.	.	X	.	.	.	X	.	.	.	.	.	X	.
dom7-5	[12]	.	X	X	X	X	X	.	X	X	X	X	.	X	X	X	.
min7-5	[ 4]	X	.	.	.	X	.	.	.	X	.	.	.	.	X	.	X
8+5	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.
8+4	[ 3]	.	X	.	.	X	.	.	.	.	.	X	.	.	.	.	.
8+3m	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.
8+maj7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.
8+min7	[ 0]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.
8+maj7-5	[ 3]	.	X	.	.	.	.	.	X	.	.	.	.	X	.	.	.
8+dom7-5	[12]	.	X	X	X	X	X	.	X	X	X	X	.	X	X	X	.
8+min7-5	[ 3]	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.	.

IX - 0

hFhhFFFFhhFFFFh

Intervals:

```

8      .++.+++++.+++++
3-     ++.+.+.+.+.+.+.
8+3-   +.+.+.+.+.+.+.
5      +.+.+.+.+.+.+.
8+5    +.++.+.+.+.+.+.
7      .+++++
8+7    .++.+++++.+++++
3      +++.+++++.+++++
8+3    .++.+++++.+++++
maj7   +.++.+.+.+.+.+.
8+maj7 ++.++.+.+.+.+.+.
6-     .++.+++++.+++++
8+6-   .+++++
6      +.+.+.+.+.+.+.
8+6    +.++.+.+.+.+.+.
4      +.+.+.+.+.+.+.
8+4    +.+.+.+.+.+.+.
b5     .++.+++++.+++++
8+b5   .++.+++++.+++++

```

Root-Notes:

		C	C#	D#	E	F	G	A	B	C#	D	D#	F	G	A	B	C
		*	-	-	*	-	-	-	-	-	*	-	-	-	-	-	*
Chord	[#roots]	J`K	L`M`Nb	Ob	P	Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 6]	X	.	.	X	.	X	.	.	.	X	.	X	.	X	.	X
5+8	[ 3]	.	.	.	.	.	X	.	.	.	.	.	X	.	X	.	.
4	[ 6]	X	.	.	X	.	.	X	.	.	X	.	.	X	.	X	X
3m	[ 4]	X	.	.	X	.	.	.	.	.	X	.	.	.	X	.	X
3+	[ 4]	X	.	.	.	.	X	.	.	.	.	.	X	.	X	.	X
maj7	[ 2]	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X
dom7	[ 3]	.	.	.	.	.	X	.	.	.	.	.	X	.	X	.	.
min7	[ 3]	.	.	.	X	.	.	.	.	.	X	.	.	.	X	.	.
b7	[ 3]	.	X	.	.	.	.	.	X	.	.	.	.	.	X	.	.
maj7-5	[ 4]	X	.	X	.	.	.	.	.	X	.	.	X	.	.	.	X
dom7-5	[12]	.	X	X	.	X	X	X	X	X	.	X	X	X	X	X	.
min7-5	[ 5]	.	X	.	X	.	.	.	X	.	X	.	.	.	X	.	.
8+5	[ 3]	.	.	.	.	X	.	X	.	.	.	.	.	X	.	.	.
8+4	[ 3]	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.
8+3m	[ 1]	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8+3+	[ 3]	.	.	.	.	X	.	X	.	.	.	.	.	X	.	.	.
8+maj7	[ 1]	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.
8+dom7	[ 3]	.	.	.	.	X	.	X	.	.	.	.	.	X	.	.	.
8+min7	[ 1]	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8+b7	[ 3]	.	.	.	.	.	.	X	.	X	.	.	.	.	.	X	.
8+maj7-5	[ 3]	.	X	.	.	X	.	.	.	.	.	X	.	.	.	.	.
8+dom7-5	[12]	.	X	X	.	X	X	X	X	X	.	X	X	X	X	X	.
8+min7-5	[ 3]	.	.	.	.	.	.	X	.	X	.	.	.	.	.	X	.

Intervals:

8	.+++++.+++++.++
3-	+...+.+...+.++.
8+3-	+...+.++...++..
5	+...+.+.+.+.+
8+5	++.+.+.+.+.+.+
7	+++++...++++.++
8+7	.+++++.+++++.++
3	.+++++.+++++...
8+3	.+++++.+++++.++
maj7	+...+.+.+.+.+
8+maj7	++.+.+.+.+.+.+
6-	.+++++.+++++.++
8+6-	+++++...++++.++
6	++.+.+.+.+.+.+
8+6	+...+.+.+.+.+.+
4	+...+.+.+.+.+.+
8+4	+...+.+.+.+.+.+
b5	.+++++.+++++.++
8+b5	.+++++.+++++.++

Root-Notes:

		C	C#	D#	F	G	A	A#	B	C#	D#	F	G	G#	A	B	C
		*	-	-	-	-	*	-	-	-	-	-	-	*	-	-	*
Chord	[#roots]	J`K	L	M#	N#	O#	P#	Q	R	S	T#	U#	V`	X	Y`	J	
5	[ 6]	X	.	X	.	.	X	.	X	.	X	.	X	.	.	X	
5+8	[ 3]	.	.	X	.	.	.	.	X	.	X	.	.	.	.	.	
4	[ 6]	X	.	.	X	.	X	.	.	X	.	X	X	.	.	X	
3m	[ 4]	X	.	.	.	.	X	.	.	.	X	.	X	.	.	X	
3+	[ 4]	.	.	X	.	.	.	.	X	.	X	.	X	.	.	.	
maj7	[ 2]	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	
dom7	[ 3]	.	.	X	.	.	.	.	X	.	X	.	.	.	.	.	
min7	[ 3]	X	.	.	.	.	X	.	.	.	X	.	.	.	.	X	
b7	[ 3]	.	.	.	.	X	.	.	.	.	X	.	.	X	.	.	
maj7-5	[ 4]	.	.	.	.	X	.	.	X	.	.	.	X	.	X	.	
dom7-5	[12]	.	X	X	X	X	X	.	X	X	X	X	X	.	X	X	.
min7-5	[ 5]	X	.	.	.	X	.	X	.	.	X	.	.	X	.	X	
8+5	[ 3]	.	X	.	X	.	.	.	.	X	.	.	.	.	.	.	
8+4	[ 3]	.	.	X	.	X	.	.	.	.	X	.	.	.	.	.	
8+3m	[ 1]	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	
8+3+	[ 3]	.	X	.	X	.	.	.	.	X	.	.	.	.	.	.	
8+maj7	[ 1]	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	
8+dom7	[ 3]	.	X	.	X	.	.	.	.	X	.	.	.	.	.	.	
8+min7	[ 1]	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	
8+b7	[ 3]	.	.	.	X	.	X	.	.	.	.	X	.	.	.	.	
8+maj7-5	[ 3]	.	X	.	.	.	.	X	.	.	.	.	.	X	.	.	
8+dom7-5	[12]	.	X	X	X	X	X	.	X	X	X	X	X	.	X	X	.
8+min7-5	[ 3]	.	.	.	X	.	X	.	.	.	.	X	.	.	.	.	

Intervals:

8	.+++++.++.+++++
3-	+...+.++.+...+.
8+3-	+...+.++.+...+.
5	+.+.+.+.+.+.+.+.+
8+5	+.+.+.+.+.+.+.+.+
7	++++++.+++++++
8+7	.+++++.++.+++++
3	.+++++++.+++++
8+3	.+++++.++.+++++
maj7	+.+.+.+.+.+.+.+.+
8+maj7	++.+.+.+.+.+.+.+.+
6-	.+++++.++.+++++
8+6-	.+++++.+++++++
6	++.+.+.+.+.+.+.+.+
8+6	+.+.+.+.+.+.+.+.+
4	+.+.+.+.+.+.+.+.+
8+4	+.+.+.+.+.+.+.+.+
b5	.+++++.++.+++++
8+b5	.+++++.++.+++++

Root-Notes:

		C	C#	D#	F	G	A	A#	B	C#	D	D#	F	G	A	B	C
		*	-	-	-	-	-	*	-	-	*	-	-	-	-	-	*
Chord	[#roots]	J`K	L	M#	N#	0#`P#`Q	R`Sb`Tb	Ub	Vb	X	Y`J						
5	[ 6]	X	.	X	.	X	.	X	.	.	X	.	X	.	.	.	X
5+8	[ 3]	.	.	X	.	X	.	.	.	.	.	.	X	.	.	.	.
4	[ 6]	X	.	.	X	.	X	X	.	.	X	.	.	X	.	.	X
3m	[ 4]	X	.	.	.	X	.	X	.	.	X	.	.	.	.	.	X
3+	[ 4]	.	.	X	.	X	.	X	.	.	.	.	X	.	.	.	.
maj7	[ 2]	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.
dom7	[ 3]	.	.	X	.	X	.	.	.	.	.	.	X	.	.	.	.
min7	[ 3]	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X
b7	[ 3]	.	.	.	.	X	.	.	X	.	.	.	.	.	X	.	.
maj7-5	[ 4]	.	.	X	.	.	.	X	.	X	.	.	.	.	.	X	.
dom7-5	[12]	.	X	X	X	X	X	.	X	X	.	X	X	X	X	X	.
min7-5	[ 5]	X	.	.	.	X	.	.	X	.	X	.	.	.	X	.	X
8+5	[ 3]	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.	.
8+4	[ 3]	.	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.
8+3m	[ 1]	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
8+3+	[ 3]	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.	.
8+maj7	[ 1]	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
8+dom7	[ 3]	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.	.
8+min7	[ 1]	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
8+b7	[ 3]	.	.	.	.	.	X	.	.	.	.	.	.	X	.	X	.
8+maj7-5	[ 3]	.	X	.	.	.	.	.	X	.	.	X	.	.	.	.	.
8+dom7-5	[12]	.	X	X	X	X	X	.	X	X	.	X	X	X	X	X	.
8+min7-5	[ 3]	.	.	.	.	.	X	.	.	.	.	.	.	X	.	X	.

# Classical Mode Representants:

- I - 0: C-G#-C#|C#- A- D| D-A#-D#|D#- B- E| E- C- F| F-C#-F#  
F#- D- G| G-D#-G#|G#- E- A| A- F-A#|A#-F#- B| B- G- C
- I - 1: C- F- E|C#-F#- F| D- G-F#|D#-G#- G| E- A-G#| F-A#- A  
F#- B-A#| G- C- B|G#-C#- C| A- D-C#|A#-D#- D| B- E-D#
- I - 2: C- B- G|C#- C-G#| D-C#- A|D#- D-A#| E-D#- B| F- E- C  
F#- F-C#| G-F#- D|G#- G-D#| A-G#- E|A#- A- F| B-A#-F#
- II - 0: C- B- E|C#- C- F| D-C#-F#|D#- D- G| E-D#-G#| F- E- A  
F#- F-A#| G-F#- B|G#- G- C| A-G#-C#|A#- A- D| B-A#-D#
- II - 1: C- F-C#|C#-F#- D| D- G-D#|D#-G#- E| E- A- F| F-A#-F#  
F#- B- G| G- C-G#|G#-C#- A| A- D-A#|A#-D#- B| B- E- C
- II - 2: C-G#- G|C#- A-G#| D-A#- A|D#- B-A#| E- C- B| F-C#- C  
F#- D-C#| G-D#- D|G#- E-D#| A- F- E|A#-F#- F| B- G-F#
- III - 0: C-D#- D|C#- E-D#| D- F- E|D#-F#- F| E- G-F#| F-G#- G  
F#- A-G#| G-A#- A|G#- B-A#| A- C- B|A#-C#- C| B- D-C#
- III - 1: C- B- A|C#- C-A#| D-C#- B|D#- D- C| E-D#-C#| F- E- D  
F#- F-D#| G-F#- E|G#- G- F| A-G#-F#|A#- A- G| B-A#-G#
- III - 2: C-A#-C#|C#- B- D| D- C-D#|D#-C#- E| E- D- F| F-D#-F#  
F#- E- G| G- F-G#|G#-F#- A| A- G-A#|A#-G#- B| B- A- C
- IV - 0: C-F#-C#|C#- G- D| D-G#-D#|D#- A- E| E-A#- F| F- B-F#  
F#- C- G| G-C#-G#|G#- D- A| A-D#-A#|A#- E- B| B- F- C
- IV - 1: C- G-F#|C#-G#- G| D- A-G#|D#-A#- A| E- B-A#| F- C- B  
F#-C#- C| G- D-C#|G#-D#- D| A- E-D#|A#- F- E| B-F#- F
- IV - 2: C- B- F|C#- C-F#| D-C#- G|D#- D-G#| E-D#- A| F- E-A#  
F#- F- B| G-F#- C|G#- G-C#| A-G#- D|A#- A-D#| B-A#- E
- V - 0: C-A#- A|C#- B-A#| D- C- B|D#-C#- C| E- D-C#| F-D#- D  
F#- E-D#| G- F- E|G#-F#- F| A- G-F#|A#-G#- G| B- A-G#
- V - 1: C- B- D|C#- C-D#| D-C#- E|D#- D- F| E-D#-F#| F- E- G  
F#- F-G#| G-F#- A|G#- G-A#| A-G#- B|A#- A- C| B-A#-C#
- V - 2: C-D#-C#|C#- E- D| D- F-D#|D#-F#- E| E- G- F| F-G#-F#  
F#- A- G| G-A#-G#|G#- B- A| A- C-A#|A#-C#- B| B- D- C

# Classical Mode Representants:

VI - 0:	C- B-F# C#- C- G  D-C#-G# D#- D- A  E-D#-A#  F- E- B F#- F- C  G-F#-C# G#- G- D  A-G#-D# A#- A- E  B-A#- F
VI - 1:	C- G-C# C#-G#- D  D- A-D# D#-A#- E  E- B- F  F- C-F# F#-C#- G  G- D-G# G#-D#- A  A- E-A# A#- F- B  B-F#- C
VI - 2:	C-F#- F C#- G-F#  D-G#- G D#- A-G#  E-A#- A  F- B-A# F#- C- B  G-C#- C G#- D-C#  A-D#- D A#- E-D#  B- F- E
VII - 0:	C-F#- D C#- G-D#  D-G#- E D#- A- F  E-A#-F#  F- B- G F#- C-G#  G-C#- A G#- D-A#  A-D#- B A#- E- C  B- F-C#
VII - 1:	C-G#-F# C#- A- G  D-A#-G# D#- B- A  E- C-A#  F-C#- B F#- D- C  G-D#-C# G#- E- D  A- F-D# A#-F#- E  B- G- F
VII - 2:	C-A#- E C#- B- F  D- C-F# D#-C#- G  E- D-G#  F-D#- A F#- E-A#  G- F- B G#-F#- C  A- G-C# A#-G#- D  B- A-D#
VIII - 0:	C-G#- D C#- A-D#  D-A#- E D#- B- F  E- C-F#  F-C#- G F#- D-G#  G-D#- A G#- E-A#  A- F- B A#-F#- C  B- G-C#
VIII - 1:	C-F#- E C#- G- F  D-G#-F# D#- A- G  E-A#-G#  F- B- A F#- C-A#  G-C#- B G#- D- C  A-D#-C# A#- E- D  B- F-D#
VIII - 2:	C-A#-F# C#- B- G  D- C-G# D#-C#- A  E- D-A#  F-D#- B F#- E- C  G- F-C# G#-F#- D  A- G-D# A#-G#- E  B- A- F
IX - 0:	C- E- D C#- F-D#  D-F#- E D#- G- F  E-G#-F#  F- A- G F#-A#-G#  G- B- A G#- C-A#  A-C#- B A#- D- C  B-D#-C#
IX - 1:	C-A#-G# C#- B- A  D- C-A# D#-C#- B  E- D- C  F-D#-C# F#- E- D  G- F-D# G#-F#- E  A- G- F A#-G#-F#  B- A- G
IX - 2:	C-A#- D C#- B-D#  D- C- E D#-C#- F  E- D-F#  F-D#- G F#- E-G#  G- F- A G#-F#-A#  A- G- B A#-G#- C  B- A-C#

# Classical Representant to Type and Mode Conversion Chart:

1	A- C- B is of form III - 0
2	A- C-A# is of form V - 2
3	A- D-A# is of form II - 1
4	A- D-C# is of form I - 1
5	A- E-A# is of form VI - 1
6	A- E-D# is of form IV - 1
7	A- F- B is of form VIII - 0
8	A- F- E is of form II - 2
9	A- F-A# is of form I - 0
10	A- F-D# is of form VII - 1
11	A- G- B is of form IX - 2
12	A- G- F is of form IX - 1
13	A- G-A# is of form III - 2
14	A- G-C# is of form VII - 2
15	A- G-D# is of form VIII - 2
16	A- G-F# is of form V - 0
17	A-C#- B is of form IX - 0
18	A-D#- B is of form VII - 0
19	A-D#- D is of form VI - 2
20	A-D#-A# is of form IV - 0
21	A-D#-C# is of form VIII - 1
22	A-G#- B is of form V - 1
23	A-G#- D is of form IV - 2
24	A-G#- E is of form I - 2
25	A-G#-C# is of form II - 0
26	A-G#-D# is of form VI - 0
27	A-G#-F# is of form III - 1
28	B- A- C is of form III - 2
29	B- A- F is of form VIII - 2
30	B- A- G is of form IX - 1
31	B- A-C# is of form IX - 2
32	B- A-D# is of form VII - 2
33	B- A-G# is of form V - 0
34	B- D- C is of form V - 2
35	B- D-C# is of form III - 0
36	B- E- C is of form II - 1
37	B- E-D# is of form I - 1
38	B- F- C is of form IV - 0
39	B- F- E is of form VI - 2
40	B- F-C# is of form VII - 0
41	B- F-D# is of form VIII - 1
42	B- G- C is of form I - 0
43	B- G- F is of form VII - 1
44	B- G-C# is of form VIII - 0
45	B- G-F# is of form II - 2
46	B-A#- E is of form IV - 2
47	B-A#- F is of form VI - 0
48	B-A#-C# is of form V - 1



# Classical Representant to Type and Mode Conversion Chart:

49	B-A#-D# is of form II - 0
50	B-A#-F# is of form I - 2
51	B-A#-G# is of form III - 1
52	B-D#-C# is of form IX - 0
53	B-F#- C is of form VI - 1
54	B-F#- F is of form IV - 1
55	C- B- A is of form III - 1
56	C- B- D is of form V - 1
57	C- B- E is of form II - 0
58	C- B- F is of form IV - 2
59	C- B- G is of form I - 2
60	C- B-F# is of form VI - 0
61	C- E- D is of form IX - 0
62	C- F- E is of form I - 1
63	C- F-C# is of form II - 1
64	C- G-C# is of form VI - 1
65	C- G-F# is of form IV - 1
66	C-A#- A is of form V - 0
67	C-A#- D is of form IX - 2
68	C-A#- E is of form VII - 2
69	C-A#-C# is of form III - 2
70	C-A#-F# is of form VIII - 2
71	C-A#-G# is of form IX - 1
72	C-D#- D is of form III - 0
73	C-D#-C# is of form V - 2
74	C-F#- D is of form VII - 0
75	C-F#- E is of form VIII - 1
76	C-F#- F is of form VI - 2
77	C-F#-C# is of form IV - 0
78	C-G#- D is of form VIII - 0
79	C-G#- G is of form II - 2
80	C-G#-C# is of form I - 0
81	C-G#-F# is of form VII - 1
82	D- A-D# is of form VI - 1
83	D- A-G# is of form IV - 1
84	D- C- B is of form V - 0
85	D- C- E is of form IX - 2
86	D- C-A# is of form IX - 1
87	D- C-D# is of form III - 2
88	D- C-F# is of form VII - 2
89	D- C-G# is of form VIII - 2
90	D- F- E is of form III - 0
91	D- F-D# is of form V - 2
92	D- G-D# is of form II - 1
93	D- G-F# is of form I - 1
94	D-A#- A is of form II - 2
95	D-A#- E is of form VIII - 0
96	D-A#-D# is of form I - 0

# Classical Representant to Type and Mode Conversion Chart:

97	D-A#-G# is of form VII - 1
98	D-C#- A is of form I - 2
99	D-C#- B is of form III - 1
100	D-C#- E is of form V - 1
101	D-C#- G is of form IV - 2
102	D-C#-F# is of form II - 0
103	D-C#-G# is of form VI - 0
104	D-F#- E is of form IX - 0
105	D-G#- E is of form VII - 0
106	D-G#- G is of form VI - 2
107	D-G#-D# is of form IV - 0
108	D-G#-F# is of form VIII - 1
109	E- A- F is of form II - 1
110	E- A-G# is of form I - 1
111	E- B- F is of form VI - 1
112	E- B-A# is of form IV - 1
113	E- C- B is of form II - 2
114	E- C- F is of form I - 0
115	E- C-A# is of form VII - 1
116	E- C-F# is of form VIII - 0
117	E- D- C is of form IX - 1
118	E- D- F is of form III - 2
119	E- D-A# is of form VIII - 2
120	E- D-C# is of form V - 0
121	E- D-F# is of form IX - 2
122	E- D-G# is of form VII - 2
123	E- G- F is of form V - 2
124	E- G-F# is of form III - 0
125	E-A#- A is of form VI - 2
126	E-A#- F is of form IV - 0
127	E-A#-F# is of form VII - 0
128	E-A#-G# is of form VIII - 1
129	E-D#- A is of form IV - 2
130	E-D#- B is of form I - 2
131	E-D#-A# is of form VI - 0
132	E-D#-C# is of form III - 1
133	E-D#-F# is of form V - 1
134	E-D#-G# is of form II - 0
135	E-G#-F# is of form IX - 0
136	F- A- G is of form IX - 0
137	F- B- A is of form VIII - 1
138	F- B- G is of form VII - 0
139	F- B-A# is of form VI - 2
140	F- B-F# is of form IV - 0
141	F- C- B is of form IV - 1
142	F- C-F# is of form VI - 1
143	F- E- A is of form II - 0
144	F- E- B is of form VI - 0

# Classical Representant to Type and Mode Conversion Chart:

145	F- E- C is of form I - 2
146	F- E- D is of form III - 1
147	F- E- G is of form V - 1
148	F- E-A# is of form IV - 2
149	F-A#- A is of form I - 1
150	F-A#-F# is of form II - 1
151	F-C#- B is of form VII - 1
152	F-C#- C is of form II - 2
153	F-C#- G is of form VIII - 0
154	F-C#-F# is of form I - 0
155	F-D#- A is of form VII - 2
156	F-D#- B is of form VIII - 2
157	F-D#- D is of form V - 0
158	F-D#- G is of form IX - 2
159	F-D#-C# is of form IX - 1
160	F-D#-F# is of form III - 2
161	F-G#- G is of form III - 0
162	F-G#-F# is of form V - 2
163	G- B- A is of form IX - 0
164	G- C- B is of form I - 1
165	G- C-G# is of form II - 1
166	G- D-C# is of form IV - 1
167	G- D-G# is of form VI - 1
168	G- F- A is of form IX - 2
169	G- F- B is of form VII - 2
170	G- F- E is of form V - 0
171	G- F-C# is of form VIII - 2
172	G- F-D# is of form IX - 1
173	G- F-G# is of form III - 2
174	G-A#- A is of form III - 0
175	G-A#-G# is of form V - 2
176	G-C#- A is of form VII - 0
177	G-C#- B is of form VIII - 1
178	G-C#- C is of form VI - 2
179	G-C#-G# is of form IV - 0
180	G-D#- A is of form VIII - 0
181	G-D#- D is of form II - 2
182	G-D#-C# is of form VII - 1
183	G-D#-G# is of form I - 0
184	G-F#- A is of form V - 1
185	G-F#- B is of form II - 0
186	G-F#- C is of form IV - 2
187	G-F#- D is of form I - 2
188	G-F#- E is of form III - 1
189	G-F#-C# is of form VI - 0
190	A#- A- C is of form V - 1
191	A#- A- D is of form II - 0
192	A#- A- E is of form VI - 0

# Classical Representant to Type and Mode Conversion Chart:

193	A#- A- F is of form I - 2
194	A#- A- G is of form III - 1
195	A#- A-D# is of form IV - 2
196	A#- D- C is of form IX - 0
197	A#- E- B is of form IV - 0
198	A#- E- C is of form VII - 0
199	A#- E- D is of form VIII - 1
200	A#- E-D# is of form VI - 2
201	A#- F- B is of form VI - 1
202	A#- F- E is of form IV - 1
203	A#-C#- B is of form V - 2
204	A#-C#- C is of form III - 0
205	A#-D#- B is of form II - 1
206	A#-D#- D is of form I - 1
207	A#-F#- B is of form I - 0
208	A#-F#- C is of form VIII - 0
209	A#-F#- E is of form VII - 1
210	A#-F#- F is of form II - 2
211	A#-G#- B is of form III - 2
212	A#-G#- C is of form IX - 2
213	A#-G#- D is of form VII - 2
214	A#-G#- E is of form VIII - 2
215	A#-G#- G is of form V - 0
216	A#-G#-F# is of form IX - 1
217	C#- A- D is of form I - 0
218	C#- A- G is of form VII - 1
219	C#- A-D# is of form VIII - 0
220	C#- A-G# is of form II - 2
221	C#- B- A is of form IX - 1
222	C#- B- D is of form III - 2
223	C#- B- F is of form VII - 2
224	C#- B- G is of form VIII - 2
225	C#- B-A# is of form V - 0
226	C#- B-D# is of form IX - 2
227	C#- C- F is of form II - 0
228	C#- C- G is of form VI - 0
229	C#- C-A# is of form III - 1
230	C#- C-D# is of form V - 1
231	C#- C-F# is of form IV - 2
232	C#- C-G# is of form I - 2
233	C#- E- D is of form V - 2
234	C#- E-D# is of form III - 0
235	C#- F-D# is of form IX - 0
236	C#- G- D is of form IV - 0
237	C#- G- F is of form VIII - 1
238	C#- G-D# is of form VII - 0
239	C#- G-F# is of form VI - 2
240	C#-F#- D is of form II - 1

# Classical Representant to Type and Mode Conversion Chart:

241	C#-F#- F is of form I - 1
242	C#-G#- D is of form VI - 1
243	C#-G#- G is of form IV - 1
244	D#- A- E is of form IV - 0
245	D#- A- F is of form VII - 0
246	D#- A- G is of form VIII - 1
247	D#- A-G# is of form VI - 2
248	D#- B- A is of form VII - 1
249	D#- B- E is of form I - 0
250	D#- B- F is of form VIII - 0
251	D#- B-A# is of form II - 2
252	D#- D- A is of form VI - 0
253	D#- D- C is of form III - 1
254	D#- D- F is of form V - 1
255	D#- D- G is of form II - 0
256	D#- D-A# is of form I - 2
257	D#- D-G# is of form IV - 2
258	D#- G- F is of form IX - 0
259	D#-A#- A is of form IV - 1
260	D#-A#- E is of form VI - 1
261	D#-C#- A is of form VIII - 2
262	D#-C#- B is of form IX - 1
263	D#-C#- C is of form V - 0
264	D#-C#- E is of form III - 2
265	D#-C#- F is of form IX - 2
266	D#-C#- G is of form VII - 2
267	D#-F#- E is of form V - 2
268	D#-F#- F is of form III - 0
269	D#-G#- E is of form II - 1
270	D#-G#- G is of form I - 1
271	F#- A- G is of form V - 2
272	F#- A-G# is of form III - 0
273	F#- B- G is of form II - 1
274	F#- B-A# is of form I - 1
275	F#- C- B is of form VI - 2
276	F#- C- G is of form IV - 0
277	F#- C-A# is of form VIII - 1
278	F#- C-G# is of form VII - 0
279	F#- D- C is of form VII - 1
280	F#- D- G is of form I - 0
281	F#- D-C# is of form II - 2
282	F#- D-G# is of form VIII - 0
283	F#- E- C is of form VIII - 2
284	F#- E- D is of form IX - 1
285	F#- E- G is of form III - 2
286	F#- E-A# is of form VII - 2
287	F#- E-D# is of form V - 0
288	F#- E-G# is of form IX - 2

# Classical Representant to Type and Mode Conversion Chart:

289	F#- F- B is of form IV - 2
290	F#- F- C is of form VI - 0
291	F#- F-A# is of form II - 0
292	F#- F-C# is of form I - 2
293	F#- F-D# is of form III - 1
294	F#- F-G# is of form V - 1
295	F#-A#-G# is of form IX - 0
296	F#-C#- C is of form IV - 1
297	F#-C#- G is of form VI - 1
298	G#- B- A is of form V - 2
299	G#- B-A# is of form III - 0
300	G#- C-A# is of form IX - 0
301	G#- D- A is of form IV - 0
302	G#- D- C is of form VIII - 1
303	G#- D-A# is of form VII - 0
304	G#- D-C# is of form VI - 2
305	G#- E- A is of form I - 0
306	G#- E- D is of form VII - 1
307	G#- E-A# is of form VIII - 0
308	G#- E-D# is of form II - 2
309	G#- G- C is of form II - 0
310	G#- G- D is of form VI - 0
311	G#- G- F is of form III - 1
312	G#- G-A# is of form V - 1
313	G#- G-C# is of form IV - 2
314	G#- G-D# is of form I - 2
315	G#-C#- A is of form II - 1
316	G#-C#- C is of form I - 1
317	G#-D#- A is of form VI - 1
318	G#-D#- D is of form IV - 1
319	G#-F#- A is of form III - 2
320	G#-F#- C is of form VII - 2
321	G#-F#- D is of form VIII - 2
322	G#-F#- E is of form IX - 1
323	G#-F#- F is of form V - 0
324	G#-F#-A# is of form IX - 2

# Quintadecimal Mode Representants:

I - 0	J- 0- R  K- P-R# K#-P#- S  L- Q- T  M-Q#-T# M#- R- U N-R#-U# Ob- S- V  0- T- X  P-T#-X# P#- U- Y  Q-Vb- J Q#- V-J#  R- X-K# Sb-Yb- L  S- Y-L#  T- J-M# Ub- K- N U-K#-N# Vb- L- 0  V- M- P  X-M#-P# Yb- N- Q  Y-N#-Q#
I - 1	J-M#- T  K- N-Ub K#-N#- U  L- 0-Vb  M- P- V M#-P#- X N- Q-Yb N#-Q#- Y  0- R- J  P-R#- K P#- S-K#  Q- T- L Q#-T#- M  R- U-M# R#-U#- N  S- V-0b  T- X- 0 T#-X#- P U- Y-P# Vb- J- Q  V-J#-Q#  X-K#- R Yb- L-Sb  Y-L#- S
I - 2	J- Q-Vb J#-Q#- V K#- R- X  L-Sb-Yb L#- S- Y M#- T- J N-Ub- K N#- U-K#  0-Vb- L  P- V- M P#- X-M#  Q-Yb- N Q#- Y-N#  R- J- 0 R#- K- P  S-K#-P#  T- L- Q T#- M-Q# U-M#- R U#- N-R#  V-0b- S  X- 0- T X#- P-T#  Y-P#- U
II - 0	J- Q- T  K-Rb-T# K#- R- U  L-Sb-Vb  M- S- V M#- T- X N-Ub-Yb N#- U- Y  0-Vb- J  P-Xb- K P#- X-K#  Q-Yb- L Q#- Y- M  R- J-M# Sb- K- N  S-Lb-N#  T- L- 0 T#- M- P U-Nb-P# Vb- N- Q  V-0b-Q#  X- 0- R Yb- P-Sb  Y-P#- S
II - 1	J-M#- R  K- N-Sb Lb-N#- S  L- 0- T  M- P-T# Nb-P#- U N- Q-Vb Ob-Q#- V  0- R- X  P-Sb-Yb P#- S- Y  Q- T- J Rb-T#- K  R- U-K# Sb-Vb- L  S- V- M  T- X-M# Ub-Yb- N U- Y-N# Vb- J- 0 Xb- K- P  X-K#-P# Yb- L- Q  Y- M-Q#
II - 2	J- 0-Vb  K- P-Xb K#-P#- X  L- Q-Yb  M-Q#- Y M#- R- J N-Sb- K N#- S-Lb  0- T- L  P-T#- M P#- U-Nb  Q-Vb- N Q#- V-0b  R- X- 0 Sb-Yb- P  S- Y-P#  T- J- Q T#- K-Rb U-K#- R Vb- L-Sb  V- M- S  X-M#- T Yb- N-Ub  Y-N#- U
III - 0	J- L-Sb J#-L#- S K#-M#- T  L- N-Ub  M-N#- U M#- 0-Vb N- P- V N#-P#- X  0- Q-Yb  P-Q#- Y P#- R- J  Q-R#- K Q#- S-Lb  R- T- L R#-T#- M  S- U-M#  T-U#- N T#- V-0b U- X- 0 Vb-Yb- P  V- Y-P#  X- J- Q Yb- K-Rb  Y-K#- R
III - 1	J- Q- X  K-Rb-Yb K#- R- Y  L-Sb- J L#- S-J# M#- T-K# N-Ub- L N#- U- M  0-Vb-M#  P- V- N P#- X-N#  Q-Yb- 0 Q#- Y- P  R- J-P# R#- K- Q  S-Lb-Q#  T- L- R T#- M-R# U-M#- S U#- N- T  V-0b-T#  X- 0- U Yb- P-Vb  Y-P#- V
III - 2	J-P#- R  K- Q-R# Lb-Q#- S  L- R- T  M-R#-T# M#- S- U N- T-U# Ob-T#- V  0- U- X  P-Vb-Yb P#- V- Y  Q- X- J Rb-Yb- K  R- Y-K# Sb- J- L  S-J#-L#  T-K#-M# Ub- L- N U- M-N# Vb-M#- 0  V- N- P  X-N#-P# Yb- 0- Q  Y- P-Q#

# Quintadecimal Mode Representants:

IV - 0	J- N- R  K-N#-R#  K#- 0- S  L- P- T  M-P#-T#  M#- Q- U N-Q#-U#  0b- R- V  0-Sb- X  P- S-X#  P#- T- Y  Q-T#- J Q#- U-J#  R-Vb-K#  Sb- V- L  S- X-L#  T-Yb-M#  Ub-Jb- N U- J-N#  Vb- K- 0  V-K#-0#  X- L-P#  Yb- M- Q  Y-M#-Q#
IV - 1	J-N#- U  K- 0-Vb  K#-0#- V  L-P#- X  M- Q-Yb  M#-Q#- Y N- R- J  N#-R#- K  0- S-K#  P- T- L  P#-T#- M  Q- U-M# Q#-U#- N  R- V-0b  Sb- X- 0  S-X#- P  T- Y-P#  T#- J- Q U-J#-Q#  Vb-K#- R  V- L-Sb  X-L#- S  Yb-M#- T  Jb- N-Ub
IV - 2	J- Q-T#  J#-Q#- U  K#- R-Vb  L-Sb- V  L#- S- X  M#- T-Yb N-Ub-Jb  N#- U- J  0-Vb- K  0#- V-K#  P#- X- L  Q-Yb- M Q#- Y-M#  R- J- N  R#- K-N#  S-K#- 0  T- L- P  T#- M-P# U-M#- Q  U#- N-Q#  V-0b- R  X- 0-Sb  X#- P- S  Y-P#- T
V - 0	J-P#- X  K- Q-Yb  K#-Q#- Y  L- R- J  M-Sb- K  M#- S-K# N- T- L  N#-T#- M  0- U-M#  P-Vb- N  P#- V-0b  Q- X- 0 Q#-X#- P  R- Y-P#  Sb- J- Q  S- K-Q#  T-K#- R  T#- L-Sb U- M- S  Vb-M#- T  V- N-T#  X-N#- U  Yb- 0-Vb  Jb- P-Xb
V - 1	J- Q-Sb  K-Q#- S  K#- R- T  L-Sb-T#  M- S- U  M#- T-Vb N-T#- V  N#- U- X  0-Vb-Yb  P-Xb-Jb  P#- X- J  Q-Yb- K Q#- Y-K#  R- J- L  Sb- K- M  S-K#-M#  T- L- N  T#- M-N# U-M#- 0  Vb- N- P  V-0b-P#  X- 0- Q  X#- P-Q#  Y-P#- R
V - 2	J- L- R  K- M-Sb  K#-M#- S  L- N- T  M-N#-T#  M#- 0- U N- P-Vb  0b-P#- V  0- Q- X  P-Q#-X#  P#- R- Y  Q-Sb- J Q#- S- K  R- T-K#  Sb-T#- L  S- U- M  T-Vb-M#  T#- V- N U- X-N#  Vb-Yb- 0  Xb-Jb- P  X- J-P#  Yb- K- Q  Y-K#-Q#
VI - 0	J- Q- U  K-Rb-Vb  K#- R- V  L-Sb- X  M-Tb-Yb  M#- T- Y N-Ub- J  N#- U-J#  0-Vb-K#  P-Xb- L  P#- X- M  Q-Yb-M# Q#- Y- N  R- J-N#  Sb- K- 0  S-Lb- P  T- L-P#  T#- M- Q U-Nb-Q#  Vb- N- R  V-0b-R#  X- 0- S  Yb- P- T  Y-Qb-T#
VI - 1	J-N#- R  K- 0-Sb  Lb- P- S  L-P#- T  M- Q-T#  Nb-Q#- U N- R-Vb  0b-R#- V  0- S- X  P- T-Yb  Qb-T#- Y  Q- U- J Rb-Vb- K  R- V-K#  Sb- X- L  Tb-Yb- M  T- Y-M#  Ub- J- N U-J#-N#  Vb-K#- 0  Xb- L- P  X- M-P#  Yb-M#- Q  Y- N-Q#
VI - 2	J- N-Ub  J#-N#- U  K#- 0-Vb  L- P-Xb  M-P#- X  M#- Q-Yb N-Q#- Y  N#- R- J  0-Sb- K  P- S-Lb  P#- T- L  Q-T#- M Q#- U-Nb  R-Vb- N  R#- V-0b  S- X- 0  T-Yb- P  T#- Y-Qb U- J- Q  Vb- K-Rb  V-K#- R  X- L-Sb  Yb- M-Tb  Y-M#- T



# Quintadecimal Mode Representants:

VII - 0	J- N-Sb   K-N#- S   K#- 0- T   L- P-T#   M-P#- U   M#- Q-Vb N-Q#- V   N#- R- X   0-Sb-Yb   P- S- Y   P#- T- J   Q-T#- K Q#- U-K#   R-Vb- L   R#- V- M   S- X-M#   T-Yb- N   T#- Y-N# U- J- 0   Vb- K- P   V-K#-P#   X- L- Q   X#- M-Q#   Y-M#- R
VII - 1	J- 0- U   K- P-Vb   K#-P#- V   L- Q- X   M-Q#-X#   M#- R- Y N-Sb- J   N#- S- K   0- T-K#   P-T#- L   P#- U- M   Q-Vb-M# Q#- V- N   R- X-N#   Sb-Yb- 0   S- Y- P   T- J-P#   T#- K- Q U-K#-Q#   Vb- L- R   V- M-R#   X-M#- S   Yb- N- T   Y-N#-T#
VII - 2	J-P#- T   K- Q-T#   K#-Q#- U   L- R-Vb   M-R#- V   M#- S- X N- T-Yb   N#-T#- Y   0- U- J   P-Vb- K   P#- V-K#   Q- X- L Q#-X#- M   R- Y-M#   Sb- J- N   S- K-N#   T-K#- 0   T#- L- P U- M-P#   Vb-M#- Q   V- N-Q#   X-N#- R   Yb- 0-Sb   Y- P- S
VIII - 0	J- 0-Sb   K- P- S   K#-P#- T   L- Q-T#   M-Q#- U   M#- R-Vb N-R#- V   N#- S- X   0- T-Yb   P-T#- Y   P#- U- J   Q-Vb- K Q#- V-K#   R- X- L   Sb-Yb- M   S- Y-M#   T- J- N   T#- K-N# U-K#- 0   Vb- L- P   V- M-P#   X-M#- Q   X#- N-Q#   Y-N#- R
VIII - 1	J- N- T   K-N#-T#   K#- 0- U   L- P-Vb   M-P#- V   M#- Q- X N-Q#-X#   N#- R- Y   0-Sb- J   P- S- K   P#- T-K#   Q-T#- L Q#- U- M   R-Vb-M#   R#- V- N   S- X-N#   T-Yb- 0   T#- Y- P U- J-P#   Vb- K- Q   V-K#-Q#   X- L- R   Yb- M-Sb   Y-M#- S
VIII - 2	J-P#- U   K- Q-Vb   K#-Q#- V   L- R- X   M-Sb-Yb   M#- S- Y N- T- J   N#-T#- K   0- U-K#   P-Vb- L   P#- V- M   Q- X-M# Q#-X#- N   R- Y-N#   Sb- J- 0   S- K- P   T-K#-P#   T#- L- Q U- M-Q#   Vb-M#- R   V- N-R#   X-N#- S   Yb- 0- T   Y- P-T#
IX - 0	J- M-Sb   J#-M#- S   K#- N- T   L-N#-T#   M- 0- U   M#- P-Vb N-P#- V   N#- Q- X   0-Q#-X#   P- R- Y   P#-Sb- J   Q- S- K Q#- T-K#   R-T#- L   R#- U- M   S-Vb-M#   T- V- N   T#- X-N# U-Yb- 0   Vb-Jb- P   V- J-P#   X- K- Q   X#-K#-Q#   Y- L- R
IX - 1	J-P#- V   K- Q- X   K#-Q#-X#   L- R- Y   M-Sb- J   M#- S-J# N- T-K#   N#-T#- L   0- U- M   P-Vb-M#   P#- V- N   Q- X-N# Q#-X#- 0   R- Y- P   Sb- J-P#   S- K- Q   T-K#-Q#   T#- L- R U- M-R#   Vb-M#- S   V- N- T   X-N#-T#   Yb- 0- U   Jb- P-Vb
IX - 2	J-P#-Sb   K- Q- S   K#-Q#- T   L- R-T#   M-R#- U   M#- S-Vb N- T- V   N#-T#- X   0- U-Yb   P-Vb-Jb   P#- V- J   Q- X- K Q#-X#-K#   R- Y- L   Sb- J- M   S-J#-M#   T-K#- N   T#- L-N# U- M- 0   Vb-M#- P   V- N-P#   X-N#- Q   X#- 0-Q#   Y- P- R

# Hexadecimal Representant to Type and Mode Conversion Chart:

1	J- L- R is of form V - 2
2	J- L-Sb is of form III - 0
3	J- M-Sb is of form IX - 0
4	J- N- R is of form IV - 0
5	J- N- T is of form VIII - 1
6	J- N-Sb is of form VII - 0
7	J- N-Ub is of form VI - 2
8	J- O- R is of form I - 0
9	J- O- U is of form VII - 1
10	J- O-Sb is of form VIII - 0
11	J- O-Vb is of form II - 2
12	J- Q- T is of form II - 0
13	J- Q- U is of form VI - 0
14	J- Q- X is of form III - 1
15	J- Q-Sb is of form V - 1
16	J- Q-T# is of form IV - 2
17	J- Q-Vb is of form I - 2
18	J-M#- R is of form II - 1
19	J-M#- T is of form I - 1
20	J-N#- R is of form VI - 1
21	J-N#- U is of form IV - 1
22	J-P#- R is of form III - 2
23	J-P#- T is of form VII - 2
24	J-P#- U is of form VIII - 2
25	J-P#- V is of form IX - 1
26	J-P#- X is of form V - 0
27	J-P#-Sb is of form IX - 2
28	K- M-Sb is of form V - 2
29	K- N-Sb is of form II - 1
30	K- N-Ub is of form I - 1
31	K- O-Sb is of form VI - 1
32	K- O-Vb is of form IV - 1
33	K- P- S is of form VIII - 0
34	K- P-R# is of form I - 0
35	K- P-Vb is of form VII - 1
36	K- P-Xb is of form II - 2
37	K- Q- S is of form IX - 2
38	K- Q- X is of form IX - 1
39	K- Q-R# is of form III - 2
40	K- Q-T# is of form VII - 2
41	K- Q-Vb is of form VIII - 2
42	K- Q-Yb is of form V - 0
43	K-N#- S is of form VII - 0
44	K-N#-R# is of form IV - 0
45	K-N#-T# is of form VIII - 1
46	K-Q#- S is of form V - 1
47	K-Rb-T# is of form II - 0
48	K-Rb-Vb is of form VI - 0

# Hexadecimal Representant to Type and Mode Conversion Chart:

49	K-Rb-Yb is of form III - 1
50	L- N- T is of form V - 2
51	L- N-Ub is of form III - 0
52	L- O- T is of form II - 1
53	L- O-Vb is of form I - 1
54	L- P- T is of form IV - 0
55	L- P-T# is of form VII - 0
56	L- P-Vb is of form VIII - 1
57	L- P-Xb is of form VI - 2
58	L- Q- T is of form I - 0
59	L- Q- X is of form VII - 1
60	L- Q-T# is of form VIII - 0
61	L- Q-Yb is of form II - 2
62	L- R- J is of form V - 0
63	L- R- T is of form III - 2
64	L- R- X is of form VIII - 2
65	L- R- Y is of form IX - 1
66	L- R-T# is of form IX - 2
67	L- R-Vb is of form VII - 2
68	L-N#-T# is of form IX - 0
69	L-P#- T is of form VI - 1
70	L-P#- X is of form IV - 1
71	L-Sb- J is of form III - 1
72	L-Sb- V is of form IV - 2
73	L-Sb- X is of form VI - 0
74	L-Sb-T# is of form V - 1
75	L-Sb-Vb is of form II - 0
76	L-Sb-Yb is of form I - 2
77	M- O- U is of form IX - 0
78	M- P- V is of form I - 1
79	M- P-T# is of form II - 1
80	M- Q-T# is of form VI - 1
81	M- Q-Yb is of form IV - 1
82	M- S- U is of form V - 1
83	M- S- V is of form II - 0
84	M-N#- U is of form III - 0
85	M-N#-T# is of form V - 2
86	M-P#- U is of form VII - 0
87	M-P#- V is of form VIII - 1
88	M-P#- X is of form VI - 2
89	M-P#-T# is of form IV - 0
90	M-Q#- U is of form VIII - 0
91	M-Q#- Y is of form II - 2
92	M-Q#-T# is of form I - 0
93	M-Q#-X# is of form VII - 1
94	M-R#- U is of form IX - 2
95	M-R#- V is of form VII - 2
96	M-R#-T# is of form III - 2

# Hexadecimal Representant to Type and Mode Conversion Chart:

97	M-Sb- J is of form IX - 1
98	M-Sb- K is of form V - 0
99	M-Sb-Yb is of form VIII - 2
100	M-Tb-Yb is of form VI - 0
101	N- P- V is of form III - 0
102	N- P-Vb is of form V - 2
103	N- Q-Vb is of form II - 1
104	N- Q-Yb is of form I - 1
105	N- R- J is of form IV - 1
106	N- R-Vb is of form VI - 1
107	N- T- J is of form VIII - 2
108	N- T- L is of form V - 0
109	N- T- V is of form IX - 2
110	N- T-K# is of form IX - 1
111	N- T-U# is of form III - 2
112	N- T-Yb is of form VII - 2
113	N-P#- V is of form IX - 0
114	N-Q#- V is of form VII - 0
115	N-Q#- Y is of form VI - 2
116	N-Q#-U# is of form IV - 0
117	N-Q#-X# is of form VIII - 1
118	N-R#- V is of form VIII - 0
119	N-R#-U# is of form I - 0
120	N-Sb- J is of form VII - 1
121	N-Sb- K is of form II - 2
122	N-T#- V is of form V - 1
123	N-Ub- J is of form VI - 0
124	N-Ub- K is of form I - 2
125	N-Ub- L is of form III - 1
126	N-Ub-Jb is of form IV - 2
127	N-Ub-Yb is of form II - 0
128	O- Q- X is of form V - 2
129	O- Q-Yb is of form III - 0
130	O- R- J is of form I - 1
131	O- R- X is of form II - 1
132	O- S- X is of form VI - 1
133	O- S-K# is of form IV - 1
134	O- T- L is of form II - 2
135	O- T- X is of form I - 0
136	O- T-K# is of form VII - 1
137	O- T-Yb is of form VIII - 0
138	O- U- J is of form VII - 2
139	O- U- M is of form IX - 1
140	O- U- X is of form III - 2
141	O- U-K# is of form VIII - 2
142	O- U-M# is of form V - 0
143	O- U-Yb is of form IX - 2
144	O-Q#-X# is of form IX - 0

# Hexadecimal Representant to Type and Mode Conversion Chart:

145	0-Sb- J is of form VIII - 1
146	0-Sb- K is of form VI - 2
147	0-Sb- X is of form IV - 0
148	0-Sb-Yb is of form VII - 0
149	0-Vb- J is of form II - 0
150	0-Vb- K is of form IV - 2
151	0-Vb- L is of form I - 2
152	0-Vb-K# is of form VI - 0
153	0-Vb-M# is of form III - 1
154	0-Vb-Yb is of form V - 1
155	P- R- Y is of form IX - 0
156	P- S- K is of form VIII - 1
157	P- S- Y is of form VII - 0
158	P- S-Lb is of form VI - 2
159	P- S-X# is of form IV - 0
160	P- T- L is of form IV - 1
161	P- T-Yb is of form VI - 1
162	P- V- M is of form I - 2
163	P- V- N is of form III - 1
164	P-Q#- Y is of form III - 0
165	P-Q#-X# is of form V - 2
166	P-R#- K is of form I - 1
167	P-Sb-Yb is of form II - 1
168	P-T#- L is of form VII - 1
169	P-T#- M is of form II - 2
170	P-T#- Y is of form VIII - 0
171	P-T#-X# is of form I - 0
172	P-Vb- K is of form VII - 2
173	P-Vb- L is of form VIII - 2
174	P-Vb- N is of form V - 0
175	P-Vb-Jb is of form IX - 2
176	P-Vb-M# is of form IX - 1
177	P-Vb-Yb is of form III - 2
178	P-Xb- K is of form II - 0
179	P-Xb- L is of form VI - 0
180	P-Xb-Jb is of form V - 1
181	Q- S- K is of form IX - 0
182	Q- T- J is of form II - 1
183	Q- T- L is of form I - 1
184	Q- U- J is of form VI - 1
185	Q- U-M# is of form IV - 1
186	Q- X- J is of form III - 2
187	Q- X- K is of form IX - 2
188	Q- X- L is of form VII - 2
189	Q- X- 0 is of form V - 0
190	Q- X-M# is of form VIII - 2
191	Q- X-N# is of form IX - 1
192	Q-R#- K is of form III - 0

# Hexadecimal Representant to Type and Mode Conversion Chart:

193	Q-Sb- J is of form V - 2
194	Q-T#- J is of form IV - 0
195	Q-T#- K is of form VII - 0
196	Q-T#- L is of form VIII - 1
197	Q-T#- M is of form VI - 2
198	Q-Vb- J is of form I - 0
199	Q-Vb- K is of form VIII - 0
200	Q-Vb- N is of form II - 2
201	Q-Vb-M# is of form VII - 1
202	Q-Yb- K is of form V - 1
203	Q-Yb- L is of form II - 0
204	Q-Yb- M is of form IV - 2
205	Q-Yb- N is of form I - 2
206	Q-Yb- O is of form III - 1
207	Q-Yb-M# is of form VI - 0
208	R- J- L is of form V - 1
209	R- J- N is of form IV - 2
210	R- J- O is of form I - 2
211	R- J-M# is of form II - 0
212	R- J-N# is of form VI - 0
213	R- J-P# is of form III - 1
214	R- T- L is of form III - 0
215	R- T-K# is of form V - 2
216	R- U-K# is of form II - 1
217	R- U-M# is of form I - 1
218	R- V-K# is of form VI - 1
219	R- V-Ob is of form IV - 1
220	R- X- L is of form VIII - 0
221	R- X- O is of form II - 2
222	R- X-K# is of form I - 0
223	R- X-N# is of form VII - 1
224	R- Y- L is of form IX - 2
225	R- Y- P is of form IX - 1
226	R- Y-K# is of form III - 2
227	R- Y-M# is of form VII - 2
228	R- Y-N# is of form VIII - 2
229	R- Y-P# is of form V - 0
230	R-T#- L is of form IX - 0
231	R-Vb- L is of form VII - 0
232	R-Vb- N is of form VI - 2
233	R-Vb-K# is of form IV - 0
234	R-Vb-M# is of form VIII - 1
235	S- K- P is of form VIII - 2
236	S- K- Q is of form IX - 1
237	S- K-N# is of form VII - 2
238	S- K-Q# is of form V - 0
239	S- U- M is of form V - 2
240	S- U-M# is of form III - 0

# Hexadecimal Representant to Type and Mode Conversion Chart:

241	S- V- M is of form II - 1
242	S- V-0b is of form I - 1
243	S- X- 0 is of form VI - 2
244	S- X-L# is of form IV - 0
245	S- X-M# is of form VII - 0
246	S- X-N# is of form VIII - 1
247	S- Y- P is of form VII - 1
248	S- Y-L# is of form I - 0
249	S- Y-M# is of form VIII - 0
250	S- Y-P# is of form II - 2
251	S-J#-L# is of form III - 2
252	S-J#-M# is of form IX - 2
253	S-K#- 0 is of form IV - 2
254	S-K#-M# is of form V - 1
255	S-K#-P# is of form I - 2
256	S-Lb- P is of form VI - 0
257	S-Lb-N# is of form II - 0
258	S-Lb-Q# is of form III - 1
259	S-Vb-M# is of form IX - 0
260	S-X#- P is of form IV - 1
261	T- J- N is of form VIII - 0
262	T- J- Q is of form II - 2
263	T- J-M# is of form I - 0
264	T- J-P# is of form VII - 1
265	T- L- N is of form V - 1
266	T- L- 0 is of form II - 0
267	T- L- P is of form IV - 2
268	T- L- Q is of form I - 2
269	T- L- R is of form III - 1
270	T- L-P# is of form VI - 0
271	T- V- N is of form IX - 0
272	T- X- 0 is of form I - 1
273	T- X-M# is of form II - 1
274	T- Y-M# is of form VI - 1
275	T- Y-P# is of form IV - 1
276	T-K#- N is of form IX - 2
277	T-K#- 0 is of form VII - 2
278	T-K#- R is of form V - 0
279	T-K#-M# is of form III - 2
280	T-K#-P# is of form VIII - 2
281	T-K#-Q# is of form IX - 1
282	T-U#- N is of form III - 0
283	T-Vb-M# is of form V - 2
284	T-Yb- N is of form VII - 0
285	T-Yb- 0 is of form VIII - 1
286	T-Yb- P is of form VI - 2
287	T-Yb-M# is of form IV - 0
288	U- J- 0 is of form VII - 0

# Hexadecimal Representant to Type and Mode Conversion Chart:

289	U- J- Q is of form VI - 2
290	U- J-N# is of form IV - 0
291	U- J-P# is of form VIII - 1
292	U- M- 0 is of form IX - 2
293	U- M- S is of form V - 0
294	U- M-N# is of form III - 2
295	U- M-P# is of form VII - 2
296	U- M-Q# is of form VIII - 2
297	U- M-R# is of form IX - 1
298	U- X- 0 is of form III - 0
299	U- X-N# is of form V - 2
300	U- Y-N# is of form II - 1
301	U- Y-P# is of form I - 1
302	U-J#-N# is of form VI - 1
303	U-J#-Q# is of form IV - 1
304	U-K#- 0 is of form VIII - 0
305	U-K#- R is of form II - 2
306	U-K#-N# is of form I - 0
307	U-K#-Q# is of form VII - 1
308	U-M#- 0 is of form V - 1
309	U-M#- Q is of form IV - 2
310	U-M#- R is of form I - 2
311	U-M#- S is of form III - 1
312	U-Nb-P# is of form II - 0
313	U-Nb-Q# is of form VI - 0
314	U-Yb- 0 is of form IX - 0
315	V- J-P# is of form IX - 0
316	V- L-Sb is of form IV - 1
317	V- M- P is of form I - 0
318	V- M- S is of form II - 2
319	V- M-P# is of form VIII - 0
320	V- M-R# is of form VII - 1
321	V- N- P is of form III - 2
322	V- N- T is of form IX - 1
323	V- N-P# is of form IX - 2
324	V- N-Q# is of form VII - 2
325	V- N-R# is of form VIII - 2
326	V- N-T# is of form V - 0
327	V- Y-P# is of form III - 0
328	V-J#-Q# is of form I - 1
329	V-K#- R is of form VI - 2
330	V-K#-0# is of form IV - 0
331	V-K#-P# is of form VII - 0
332	V-K#-Q# is of form VIII - 1
333	V-0b- R is of form IV - 2
334	V-0b- S is of form I - 2
335	V-0b-P# is of form V - 1
336	V-0b-Q# is of form II - 0



# Hexadecimal Representant to Type and Mode Conversion Chart:

337	V-0b-R# is of form VI - 0
338	V-0b-T# is of form III - 1
339	X- J- Q is of form III - 0
340	X- J-P# is of form V - 2
341	X- K- Q is of form IX - 0
342	X- L- Q is of form VII - 0
343	X- L- R is of form VIII - 1
344	X- L-P# is of form IV - 0
345	X- L-Sb is of form VI - 2
346	X- M-P# is of form VI - 1
347	X- O- Q is of form V - 1
348	X- O- R is of form II - 0
349	X- O- S is of form VI - 0
350	X- O- T is of form I - 2
351	X- O- U is of form III - 1
352	X- O-Sb is of form IV - 2
353	X-K#- R is of form I - 1
354	X-K#-P# is of form II - 1
355	X-L#- S is of form IV - 1
356	X-M#- Q is of form VIII - 0
357	X-M#- S is of form VII - 1
358	X-M#- T is of form II - 2
359	X-M#-P# is of form I - 0
360	X-N#- Q is of form IX - 2
361	X-N#- R is of form VII - 2
362	X-N#- S is of form VIII - 2
363	X-N#- U is of form V - 0
364	X-N#-P# is of form III - 2
365	X-N#-T# is of form IX - 1
366	Y- L- R is of form IX - 0
367	Y- M-Q# is of form II - 1
368	Y- N-Q# is of form VI - 1
369	Y- P- R is of form IX - 2
370	Y- P- S is of form VII - 2
371	Y- P-Q# is of form III - 2
372	Y- P-T# is of form VIII - 2
373	Y-K#- R is of form III - 0
374	Y-K#-Q# is of form V - 2
375	Y-L#- S is of form I - 1
376	Y-M#- R is of form VII - 0
377	Y-M#- S is of form VIII - 1
378	Y-M#- T is of form VI - 2
379	Y-M#-Q# is of form IV - 0
380	Y-N#- R is of form VIII - 0
381	Y-N#- U is of form II - 2
382	Y-N#-Q# is of form I - 0
383	Y-N#-T# is of form VII - 1
384	Y-P#- R is of form V - 1

# Hexadecimal Representant to Type and Mode Conversion Chart:

385	Y-P#- S is of form II - 0
386	Y-P#- T is of form IV - 2
387	Y-P#- U is of form I - 2
388	Y-P#- V is of form III - 1
389	Y-Qb-T# is of form VI - 0
390	J#-L#- S is of form III - 0
391	J#-M#- S is of form IX - 0
392	J#-N#- U is of form VI - 2
393	J#-Q#- U is of form IV - 2
394	J#-Q#- V is of form I - 2
395	Jb- N-Ub is of form IV - 1
396	Jb- P-Vb is of form IX - 1
397	Jb- P-Xb is of form V - 0
398	K#- N- T is of form IX - 0
399	K#- O- S is of form IV - 0
400	K#- O- T is of form VII - 0
401	K#- O- U is of form VIII - 1
402	K#- O-Vb is of form VI - 2
403	K#- R- T is of form V - 1
404	K#- R- U is of form II - 0
405	K#- R- V is of form VI - 0
406	K#- R- X is of form I - 2
407	K#- R- Y is of form III - 1
408	K#- R-Vb is of form IV - 2
409	K#-M#- S is of form V - 2
410	K#-M#- T is of form III - 0
411	K#-N#- U is of form I - 1
412	K#-O#- V is of form IV - 1
413	K#-P#- S is of form I - 0
414	K#-P#- T is of form VIII - 0
415	K#-P#- V is of form VII - 1
416	K#-P#- X is of form II - 2
417	K#-Q#- T is of form IX - 2
418	K#-Q#- U is of form VII - 2
419	K#-Q#- V is of form VIII - 2
420	K#-Q#- Y is of form V - 0
421	K#-Q#-X# is of form IX - 1
422	L#- S- X is of form IV - 2
423	L#- S- Y is of form I - 2
424	L#- S-J# is of form III - 1
425	Lb- P- S is of form VI - 1
426	Lb-N#- S is of form II - 1
427	Lb-Q#- S is of form III - 2
428	M#- O- U is of form V - 2
429	M#- O-Vb is of form III - 0
430	M#- P-Vb is of form IX - 0
431	M#- Q- U is of form IV - 0
432	M#- Q- X is of form VIII - 1

# Hexadecimal Representant to Type and Mode Conversion Chart:

433	M#- Q-Vb is of form VII - 0
434	M#- Q-Yb is of form VI - 2
435	M#- R- J is of form II - 2
436	M#- R- U is of form I - 0
437	M#- R- Y is of form VII - 1
438	M#- R-Vb is of form VIII - 0
439	M#- S- U is of form III - 2
440	M#- S- X is of form VII - 2
441	M#- S- Y is of form VIII - 2
442	M#- S-J# is of form IX - 1
443	M#- S-K# is of form V - 0
444	M#- S-Vb is of form IX - 2
445	M#- T- J is of form I - 2
446	M#- T- X is of form II - 0
447	M#- T- Y is of form VI - 0
448	M#- T-K# is of form III - 1
449	M#- T-Vb is of form V - 1
450	M#- T-Yb is of form IV - 2
451	M#-P#- X is of form I - 1
452	M#-Q#- Y is of form IV - 1
453	N#- Q- X is of form IX - 0
454	N#- R- J is of form VI - 2
455	N#- R- X is of form VII - 0
456	N#- R- Y is of form VIII - 1
457	N#- S- K is of form VII - 1
458	N#- S- X is of form VIII - 0
459	N#- S-Lb is of form II - 2
460	N#- U- J is of form IV - 2
461	N#- U- M is of form III - 1
462	N#- U- X is of form V - 1
463	N#- U- Y is of form II - 0
464	N#- U-J# is of form VI - 0
465	N#- U-K# is of form I - 2
466	N#-P#- X is of form III - 0
467	N#-Q#- Y is of form I - 1
468	N#-R#- K is of form IV - 1
469	N#-T#- K is of form VIII - 2
470	N#-T#- L is of form IX - 1
471	N#-T#- M is of form V - 0
472	N#-T#- X is of form IX - 2
473	N#-T#- Y is of form VII - 2
474	Nb-P#- U is of form II - 1
475	Nb-Q#- U is of form VI - 1
476	Ob- V-K# is of form IV - 2
477	Ob- R- V is of form IV - 0
478	Ob- S- V is of form I - 0
479	Ob-P#- V is of form V - 2
480	Ob-Q#- V is of form II - 1

# Hexadecimal Representant to Type and Mode Conversion Chart:

481	Ob-R#- V is of form VI - 1
482	Ob-T#- V is of form III - 2
483	P#- R- J is of form III - 0
484	P#- R- Y is of form V - 2
485	P#- S- Y is of form II - 1
486	P#- S-K# is of form I - 1
487	P#- T- J is of form VII - 0
488	P#- T- L is of form VI - 2
489	P#- T- Y is of form IV - 0
490	P#- T-K# is of form VIII - 1
491	P#- U- J is of form VIII - 0
492	P#- U- M is of form VII - 1
493	P#- U- Y is of form I - 0
494	P#- U-Nb is of form II - 2
495	P#- V- J is of form IX - 2
496	P#- V- M is of form VIII - 2
497	P#- V- N is of form IX - 1
498	P#- V- Y is of form III - 2
499	P#- V-K# is of form VII - 2
500	P#- V-Ob is of form V - 0
501	P#- X- J is of form V - 1
502	P#- X- L is of form IV - 2
503	P#- X- M is of form VI - 0
504	P#- X-K# is of form II - 0
505	P#- X-M# is of form I - 2
506	P#- X-N# is of form III - 1
507	P#-Sb- J is of form IX - 0
508	P#-T#- M is of form IV - 1
509	Q#- S- K is of form V - 2
510	Q#- S-Lb is of form III - 0
511	Q#- T-K# is of form IX - 0
512	Q#- U- M is of form VIII - 1
513	Q#- U-J# is of form IV - 0
514	Q#- U-K# is of form VII - 0
515	Q#- U-Nb is of form VI - 2
516	Q#- V- N is of form VII - 1
517	Q#- V-J# is of form I - 0
518	Q#- V-K# is of form VIII - 0
519	Q#- V-Ob is of form II - 2
520	Q#- Y- M is of form II - 0
521	Q#- Y- N is of form VI - 0
522	Q#- Y- P is of form III - 1
523	Q#- Y-K# is of form V - 1
524	Q#- Y-M# is of form IV - 2
525	Q#- Y-N# is of form I - 2
526	Q#-T#- M is of form I - 1
527	Q#-U#- N is of form IV - 1
528	Q#-X#- M is of form VII - 2

# Hexadecimal Representant to Type and Mode Conversion Chart:

529	Q#-X#- N is of form VIII - 2
530	Q#-X#- 0 is of form IX - 1
531	Q#-X#- P is of form V - 0
532	Q#-X#-K# is of form IX - 2
533	Qb-T#- Y is of form VI - 1
534	R#- K- P is of form I - 2
535	R#- K- Q is of form III - 1
536	R#- K-N# is of form IV - 2
537	R#- U- M is of form IX - 0
538	R#- V- M is of form VII - 0
539	R#- V- N is of form VIII - 1
540	R#- V-0b is of form VI - 2
541	R#-T#- M is of form III - 0
542	R#-U#- N is of form I - 1
543	Rb-T#- K is of form II - 1
544	Rb-Vb- K is of form VI - 1
545	Rb-Yb- K is of form III - 2
546	Sb- J- L is of form III - 2
547	Sb- J- M is of form IX - 2
548	Sb- J- N is of form VII - 2
549	Sb- J- 0 is of form VIII - 2
550	Sb- J- Q is of form V - 0
551	Sb- J-P# is of form IX - 1
552	Sb- K- M is of form V - 1
553	Sb- K- N is of form II - 0
554	Sb- K- 0 is of form VI - 0
555	Sb- V- L is of form IV - 0
556	Sb- X- L is of form VI - 1
557	Sb- X- 0 is of form IV - 1
558	Sb-T#- L is of form V - 2
559	Sb-Vb- L is of form II - 1
560	Sb-Yb- L is of form I - 0
561	Sb-Yb- M is of form VIII - 0
562	Sb-Yb- 0 is of form VII - 1
563	Sb-Yb- P is of form II - 2
564	T#- J- Q is of form IV - 1
565	T#- K- Q is of form VII - 1
566	T#- K-N# is of form VIII - 0
567	T#- K-Rb is of form II - 2
568	T#- L- P is of form VII - 2
569	T#- L- Q is of form VIII - 2
570	T#- L- R is of form IX - 1
571	T#- L-N# is of form IX - 2
572	T#- L-Sb is of form V - 0
573	T#- M- P is of form II - 0
574	T#- M- Q is of form VI - 0
575	T#- M-N# is of form V - 1
576	T#- M-P# is of form IV - 2

# Hexadecimal Representant to Type and Mode Conversion Chart:

577	T#- M-Q# is of form I - 2
578	T#- M-R# is of form III - 1
579	T#- V- N is of form V - 2
580	T#- V-0b is of form III - 0
581	T#- X-N# is of form IX - 0
582	T#- Y- P is of form VIII - 1
583	T#- Y-N# is of form VII - 0
584	T#- Y-Qb is of form VI - 2
585	T#-X#- P is of form I - 1
586	Tb-Yb- M is of form VI - 1
587	U#- N- T is of form III - 1
588	U#- N-Q# is of form IV - 2
589	U#- N-R# is of form I - 2
590	Ub- J- N is of form VI - 1
591	Ub- K- N is of form I - 0
592	Ub- L- N is of form III - 2
593	Ub-Jb- N is of form IV - 0
594	Ub-Yb- N is of form II - 1
595	Vb- J- 0 is of form II - 1
596	Vb- J- Q is of form I - 1
597	Vb- K- 0 is of form IV - 0
598	Vb- K- P is of form VII - 0
599	Vb- K- Q is of form VIII - 1
600	Vb- K-Rb is of form VI - 2
601	Vb- L- 0 is of form I - 0
602	Vb- L- P is of form VIII - 0
603	Vb- L- R is of form VII - 1
604	Vb- L-Sb is of form II - 2
605	Vb- N- P is of form V - 1
606	Vb- N- Q is of form II - 0
607	Vb- N- R is of form VI - 0
608	Vb-Jb- P is of form IX - 0
609	Vb-K#- 0 is of form VI - 1
610	Vb-K#- R is of form IV - 1
611	Vb-M#- 0 is of form III - 2
612	Vb-M#- P is of form IX - 2
613	Vb-M#- Q is of form VII - 2
614	Vb-M#- R is of form VIII - 2
615	Vb-M#- S is of form IX - 1
616	Vb-M#- T is of form V - 0
617	Vb-Yb- 0 is of form V - 2
618	Vb-Yb- P is of form III - 0
619	X#- M-Q# is of form VII - 0
620	X#- N-Q# is of form VIII - 0
621	X#- O-Q# is of form IX - 2
622	X#- P- S is of form IV - 2
623	X#- P-Q# is of form V - 1
624	X#- P-T# is of form I - 2

# Hexadecimal Representant to Type and Mode Conversion Chart:

625	X#-K#-Q# is of form IX - 0
626	Xb- K- P is of form II - 1
627	Xb- L- P is of form VI - 1
628	Xb-Jb- P is of form V - 2
629	Yb- K- Q is of form V - 2
630	Yb- K-Rb is of form III - 0
631	Yb- L- Q is of form II - 1
632	Yb- L-Sb is of form I - 1
633	Yb- M- Q is of form IV - 0
634	Yb- M-Sb is of form VIII - 1
635	Yb- M-Tb is of form VI - 2
636	Yb- N- Q is of form I - 0
637	Yb- N- T is of form VII - 1
638	Yb- N-Ub is of form II - 2
639	Yb- O- Q is of form III - 2
640	Yb- O- T is of form VIII - 2
641	Yb- O- U is of form IX - 1
642	Yb- O-Sb is of form VII - 2
643	Yb- O-Vb is of form V - 0
644	Yb- P- T is of form VI - 0
645	Yb- P-Sb is of form II - 0
646	Yb- P-Vb is of form III - 1
647	Yb-M#- Q is of form VI - 1
648	Yb-M#- T is of form IV - 1

# Scale/Modes Chart for Root Pitch

J = Kb = Y# =% = C

=====

		C	D	E	F	G	A	B	C	D	E	F	G	A	B	C		
I	- 0		J	K#	L	M#	N#	0	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J
I	- 1		J	K	L	M#	N	0b	P	Q	R	S	T	U	Vb	X	Y	J
I	- 2		J	K	Lb	M	N	0	P#	Q	R	Sb	T	U	VbXb	Yb		J
II	- 0		J	K	L	M#	N#	0#	P#	Q	R	S	T	Ub	Vb	X	Yb	J
II	- 1		J	K#	L#	M#	N	0	P#	Q	R	Sb	T	U	V	X#	Y	J
II	- 2		J	K	L	M#	N	0	P	Q	R	S	T#	U	Vb	X	Y	J
III	- 0		J	K	L	M	Nb	0b	P	Q	R	Sb	T	Ub	Vb	X	Y	J
III	- 1		J	K	Lb	M	N	0	P#	Q	R	Sb	T	U	V	X	Yb	J
III	- 2		J	K#	L	M#	N#	0#	P#	Q	R	Sb	Tb	Ub	Vb	X	Y	J
IV	- 0		J	K#	L	M#	N	0b	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J
IV	- 1		J	K	L	M#	N#	0	P	Q	R	S	T#	U	V	X	Y	J
IV	- 2		J	K	Lb	M	N	0	P#	Q	R	Sb	T	T#	U	V	X#	J
V	- 0		J	K	L	M#	N#	0	P#	Q	R	S	T#	U#	V	X	Y	J
V	- 1		J	K	L	M#	N#	0#	P#	Q	R	Sb	Tb	Ub	Vb	X	Yb	J
V	- 2		J	K#	L	M	N	0	P#	Q	R	Sb	T	U	V	X#	Y	J
VI	- 0		J	K	L	M#	N#	0#	P#	Q	R	S	T#	U	Vb	X	Yb	J
VI	- 1		J	K#	M	N	N#	0	P#	Q	R	Sb	T	U	V	X#	Y	J
VI	- 2		J	K	L	M	N	0b	P	Q	R	S	T	Ub	Vb	X	Y	J
VII	- 0		J	K	L	M#	N	0b	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J
VII	- 1		J	K	L	M#	N#	0	P	Q	R	S	T#	U	Vb	X	Y	J
VII	- 2		J	K	L	M#	N#	0#	P#	Q	R	S	T	Ub	Vb	X	Y	J
VIII	- 0		J	K	L	M#	N#	0	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J
VIII	- 1		J	K	L	M#	N	0b	P	Q	R	S	T	Ub	Vb	X	Y	J
VIII	- 2		J	K	L	M#	N#	0#	P#	Q	R	S	T#	U	Vb	X	Y	J
IX	- 0		J	K	L	M	Nb	0b	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J
IX	- 1		J	K	L	M#	N#	0#	P#	Q	R	S	T#	U#	V	X	Y	J
IX	- 2		J	K	L	M#	N#	0#	P#	Q	R	Sb	Tb	Ub	Vb	X	Y	J
2m		+	+	.														
2M		+	+	.														
3M		+	+	+	+	+	+	+	+									
4		+	+	+	+	+	+	+	+									
6m		+	+	+	+	+	+	+	+									
7M		+	+	+	+	+	+	+	+									
7		+	+	+	+	+	+	+	+									
8		+	+	+	+	+	+	+	+									
15		+	+	+	+	+	+	+	+									



# Scale/Modes Chart for Root Pitch

K = J# =% C#

=====

		D	E	F	G	A	B	C	D	E	F	G	A	B	C					
I	- 0		K	L	M	N	O	P	P#	Q#	R#	S	T	U	V	X#	J	K		
I	- 1		K	Lb	M	N	Ob	Pb	Qb	Rb	Sb	T	Ub	Vb	Xb	Yb	J	K		
I	- 2		J#	K#	L	M#	N#	P	Q	Q#	R#	S	T#	U#	V	X	Y	J#		
II	- 0		K	Lb	M	N	O		P#	Q	Rb	Sb	T	T#	U	V	X#	Y	K	
II	- 1		K	L		M#	N	Ob	P	Q	Rb	Sb	Tb	Ub	Vb	X	Y	J	K	
II	- 2		K	Lb	M	N	Ob	P	Qb	Rb	Sb	T		U	Vb	Xb	Yb	J	K	
III	- 0		J#	K#	L#	M#	N	O		P#	Q#	R#	S	T#	U	V	X#	Y#	J#	
III	- 1		K	Lb	Mb	Nb	Ob	P		Q	Rb	Sb	Tb	Ub	Vb	X	Yb	Jb	K	
III	- 2		K	L	M	N	O		P#	Q	Q#	R#	S	T	U	V	X#	J	K	
IV	- 0		K	L	M	N	N#	O		P#	Q#	R#	S	T	U	V	X#	J	K	
IV	- 1		K	Lb	M	N	O	P	Qb	Rb	Sb	T		U	Vb	X	Yb	J	K	
IV	- 2		J#	K#	L	M#	N#	P	Q	Q#	R#	S		T#	U	Vb	X	Y	J#	
V	- 0		K	Lb	M	N	O	P		Q	Rb	Sb	T		U	V	X	Yb	J	K
V	- 1		K	Lb	M	N	O		P#	Q	Q#	R#	S	T	U	V	X#	Y	K	
V	- 2		K	L	M	Nb	Ob	P		Q	Rb	Sb	Tb	Ub	Vb	X	Y	J	K	
VI	- 0		K	Lb	M	N	O		P#	Q	Rb	Sb	T		U	Vb	Xb	Yb	Jb	K
VI	- 1		K	L		M#	N#	O	P	Q	Rb	Sb	Tb	Ub	Vb	X	Y	J	K	
VI	- 2		J#	K#	L#	M#	N#	O		P#	Q#	R#	S	T#	U	V	X#	Y#	J#	
VII	- 0		K	Lb	M	N	N#	O		P#	Q#	R#	S	T	U	V	X#	J	K	
VII	- 1		K	Lb	M	N	O	P	Qb	Rb	Sb	T		U	Vb	Xb	Yb	J	K	
VII	- 2		K	Lb	M	N	O		P#	Q	Rb	Sb	T	T#	U	V	X#	J	K	
VIII	- 0		K	Lb	M	N	O	P	P#	Q#	R#	S	T		U	V	X#	J	K	
VIII	- 1		K	Lb	M	N	N#	O		P#	Q#	R#	S	T#	U	V	X#	J	K	
VIII	- 2		K	Lb	M	N	O		P#	Q	Rb	Sb	T		U	Vb	Xb	Yb	J	K
IX	- 0		J#	K#	L#	M#	N	O		P#	Q#	R#	S	T	U	V	X#	Y#	J#	
IX	- 1		K	Lb	M	N	O		P#	Q	Rb	Sb	T		U	V	X	Yb	J	K
IX	- 2		K	Lb	M	N	O		P#	Q	Q#	R#	S	T	U	V	X#	J	K	
2m		+	+	.																
3M		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
4		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
6m		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
2M		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
3m		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
5		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
b5		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
6M		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
7M		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
7		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
8		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
15		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

# Scale/Modes Chart for Root Pitch

Lb = K# =% = D

=====

		D	E	F	G	A	B	C	D	E	F	G	A	B	C	D												
I	- 0		K#	L#M#	N#	0#P#Q	R		S	T	Ub	Vb	X	Y		J#K#												
I	- 1		K#L	M#	N#0	P	Q	R	S		T#U	V	X	Y		J#K#												
I	- 2		K#L	M	N	0	P#	Q#R	S	T	U	V	X	Yb	J	K#												
II	- 0		K#L	M#	N#	P	Q	Q#R	S		T#U	Vb	X	Y	J	K#												
II	- 1		Lb	M	N	N#0	P#	Q#R	S	T	U	V		X#	J	K												
II	- 2		K#L	M#	N#0		P#Q	R	S		T#	U#V	X	Y		J#K#												
III	- 0		K#L	M#N	0b	P	Q	R	S	T	U	Vb	X	Y		J#K#												
III	- 1		K#L	M	N	0	P#	Q#R	S	T	U	V		X#Y	J	K#												
III	- 2		Lb	M	Nb	0b	P	Q	Q#R	S	T	Ub	Vb	X	Y	K												
IV	- 0		K#	L#M#	N#0	P	Q	R	S	T	Ub	Vb	X	Y		J#K#												
IV	- 1		K#L	M#	N#	0#P#Q	R		S		T#	U#V		X#Y		J#K#												
IV	- 2		K#L	M	N	0	P#	Q#R	S	T	U	VbXb	Yb	J		K#												
V	- 0		K#L	M#	N#	0#P#	Q#R		S		T#	U#	V#X#Y			J#K#												
V	- 1		K#L	M#	N#	P	Q	Q#R	S	T	Ub	Vb	X	Y	J	K#												
V	- 2		K#	L#M#N	0	P#	Q#R		S	T	U	V		X#	Y#J#K#													
VI	- 0		K#L	M#	N#	P	Q	Q#R	S		T#	U#V	X	Y	J	K#												
VI	- 1		Lb	M	N	0	P	P#	Q#R	S	T	U	V		X#	J												
VI	- 2		K#L	M#N	0	P	Q	R	S		T#U	Vb	X	Y		J#K#												
VII	- 0		K#L	M#	N#0	P	Q	R	S	T	Ub	Vb	X	Y		J#K#												
VII	- 1		K#L	M#	N#	0#P#Q	R		S		T#	U#V	X	Y		J#K#												
VII	- 2		K#L	M#	N#	P	Q	Q#R	S		T#U	Vb	X	Y		J#K#												
VIII	- 0		K#L	M#	N#	0#P#Q	R		S	T	Ub	Vb	X	Y		J#K#												
VIII	- 1		K#L	M#	N#0	P	Q	R	S		T#U	Vb	X	Y		J#K#												
VIII	- 2		K#L	M#	N#	P	Q	Q#R	S		T#	U#V	X	Y		J#K#												
IX	- 0		K#L	M#N	0b	P	Q	R	S	T	Ub	Vb	X	Y		J#K#												
IX	- 1		K#L	M#	N#	P	Q	Q#R	S		T#	U#	V#X#Y			J#K#												
IX	- 2		K#L	M#	N#	P	Q	Q#R	S	T	Ub	Vb	X	Y		J#K#												
2m		+		.	3M		+	-----		.	4		+	-----		.	6m		+	-----	^/	^	-----	^		.		
2M		+	---		.	3m		+	-----		.	5		+	-----		.	b5		+	-----		.					
6M		+	-----	^/	^	-----	^	-----		.								7M		+	-----	^	-----	^	-----		.	
7		+	-----	^/	^	-----	^	-----		.								8		+	-----	^/	^	-----	^	-----		.
15		+	-----	^/	^	-----	^	-----	^/	^	-----	^/	^	-----	^/	^	-----											

# Scale/Modes Chart for Root Pitch

L = Mb =% D#

=====

	E	F	G	A	B	C	D	E	F	G	A	B	C	D
I - 0	L	M#N	0	P#Q	Rb	Sb	T	T#U	V	X#	J	K#L		
I - 1	L	M	N	0	P	Qb	Rb	Sb	T	U	Vb	X	Yb	J
I - 2	L	M	Nb	0b	P	Q	R	Sb	T	Ub	Vb	X	YbJb	K
II - 0	L	M	N	0	P#	Q#R	Sb	T	U	VbXb	Yb	J	K	L
II - 1	L	M#	N#0	P	Q	R	Sb	T	Ub	Vb	X	Y	J#K#L	
II - 2	L	M	N	0	P	Q	Rb	Sb	T	U	V	X	Yb	J
III - 0	L	M	N	0bPb	Qb	Rb	Sb	T	Ub	VbXb	Yb	J	K#L	
III - 1	L	M	Nb	0b	P	Q	R	Sb	T	Ub	Vb	X	Y	J
III - 2	L	M#N	0	P#	Q#R	Sb	T	T#U	V	X#	J	K#L		
IV - 0	L	M#N	0	P	Qb	Rb	Sb	T	T#U	V	X#	J	K#L	
IV - 1	L	M	N	0	P#Q	Rb	Sb	T	U	V	X	Y	J	K#L
IV - 2	L	M	Nb	0b	P	Q	R	Sb	T	T#	U#V	X	Y	K
V - 0	L	M	N	0	P#Q	R	Sb	T	U	V	X#Y	J	K#L	
V - 1	L	M	N	0	P#	Q#R	Sb	T	T#U	V	X#	J	K	L
V - 2	L	M#N	0b	P	Q	R	Sb	T	Ub	Vb	X	Y	J#K#L	
VI - 0	L	M	N	0	P#	Q#R	Sb	T	U	V	X	Yb	J	K
VI - 1	L	M#	N#	0#P#Q	R	Sb	T	Ub	Vb	X	Y	J#K#L		
VI - 2	L	M	N	0b	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K#L
VII - 0	L	M	N	0	P	Qb	Rb	Sb	T	T#U	V	X#	J	K#L
VII - 1	L	M	N	0	P#Q	Rb	Sb	T	U	V	X	Yb	J	K#L
VII - 2	L	M	N	0	P#	Q#R	Sb	T	U	VbXb	Yb	J	K#L	
VIII - 0	L	M	N	0	P#Q	Rb	Sb	T	T#U	V	X#	J	K#L	
VIII - 1	L	M	N	0	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K#L
VIII - 2	L	M	N	0	P#	Q#R	Sb	T	U	V	X	Yb	J	K#L
IX - 0	L	M	N	N#0	P#	Q#	R#	S#T#U	V	X#	J	K#L		
IX - 1	L	M	N	0	P#	Q#R	Sb	T	U	V	X#Y	J	K#L	
IX - 2	L	M	N	0	P#	Q#R	Sb	T	T#U	V	X#	J	K#L	
2m	+ .	3M	+----- .	4	+----- .	6m	+-----^/^-----^-- .							
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .							
6M	+-----^/^-----^-- .					7M	+-----^-----^----- .							
7	+-----^/^-----^-- .					8	+-----^/^-----^----- .							
15	+-----^/^-----^-----^/^-----^/^-----^/^-----^/^----- .													

# Scale/Modes Chart for Root Pitch

M = L# =% = E

=====

	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E
I - 0	M	N	Ob	P	Q	Q#R	S	T#U	Vb	X	Y	K	L	M	
I - 1	M	Nb	Ob	P	P#Q	R	S	T#	U#V	X#Y	K	L	M		
I - 2	L#M#N	0	P#	Q#	R#S	T#U	V	X#Y	J	K#	L#				
II - 0	M	Nb	Ob	P	Q	R	R#S	T#	U#V	X	Y	K	Lb	M	
II - 1	M	N	0	P	P#	Q#	R#S	T#U	V	X#	J	K#L	M		
II - 2	M	Nb	Ob	P	P#	Q#R	S	T#	U#	V#X#Y	K	L	M		
III - 0	M	M#	N#0	P	Q	R	S	T#U	V	X	Y	K	L	M	
III - 1	L#M#N	0	P#	Q#	R#S	T#U	V	X#	Y#J#K#	L#					
III - 2	M	N	Ob	P	Q	R	R#S	T#U	Vb	X	Y	K	L	M	
IV - 0	M	N	Ob	P	P#Q	R	S	T#U	Vb	X	Y	K	L	M	
IV - 1	M	Nb	Ob	P	Q	Q#R	S	T#	U#	X	Yb	J	K	L	M
IV - 2	L#M#N	0	P#	Q#	R#S	T#U	V	X	Yb	J	K#	L#			
V - 0	M	Nb	Ob	P	Q	Rb	SbTb	Ub	Vb	X	Y	J	K	L	M
V - 1	M	Nb	Ob	P	Q	R	R#S	T#U	Vb	X	Y	K	Lb	M	
V - 2	M	N	N#0	P#	Q#	R#S	T#U	V	X#	J	K#L	M			
VI - 0	M	Nb	Ob	P	Q	R	SbTb	Ub	Vb	X	YbJb	K	Lb	M	
VI - 1	M	N	0	P#Q	Q#	R#S	T#U	V	X#	J	K#L	M			
VI - 2	M	M#	N#0	P#Q	R	S	T#	U#V	X	Y	K	L	M		
VII - 0	M	Nb	Ob	P	P#Q	R	S	T#U	Vb	X	Y	K	L	M	
VII - 1	M	Nb	Ob	P	Q	Q#R	S	T#	U#	V#X#Y	K	L	M		
VII - 2	M	Nb	Ob	P	Q	R	R#S	T#	U#V	X	Y	K	L	M	
VIII - 0	M	Nb	Ob	P	Q	Q#R	S	T#U	Vb	X	Y	K	L	M	
VIII - 1	M	Nb	Ob	P	P#Q	R	S	T#	U#V	X	Y	K	L	M	
VIII - 2	M	Nb	Ob	P	Q	R	SbTb	Ub	Vb	X	YbJb	K	L	M	
IX - 0	M	M#	N#0	P	Q	R	S	T#U	Vb	X	Y	K	L	M	
IX - 1	M	Nb	Ob	P	Q	R	SbTb	Ub	Vb	X	Y	J	K	L	M
IX - 2	M	Nb	Ob	P	Q	R	R#S	T#U	Vb	X	Y	K	L	M	
2m	+ .	3M	+----- .	4	+----- .	6m	+----^/^------^- .								
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .								
6M	+-----^/^------^- .					7M	+-----^/^------^- .								
7	+-----^/^------^- .					8	+-----^/^------^- .								
15	+-----^/^------^- .						+-----^/^------^- .								

# Scale/Modes Chart for Root Pitch

Nb = M# =% = F

=====

		F	G	A	B	C	D	E	F	G	A	B	C	D	E	F
I - 0		M#	N#0	P#	Q#R	Sb	T	U	VbXb	Yb	J	K#	L#M#			
I - 1		M#N	0	P#Q	Rb	Sb	T	U	V	X	Y	J	K#	L#M#		
I - 2		M#N	0b	P	Q	R	S	T	U	Vb	X	Y	J	K	L	M#
II - 0		M#N	0	P#	Q#	R#S	T	U	V	X	Yb	J	K#L	M#		
II - 1		Nb	0b	P	P#Q	R	S	T	U	Vb	X	Y	K	L	M	Nb
II - 2		M#N	0	P#Q	R	Sb	T	U	V	X#Y	J	K#	L#M#			
III - 0		M#N	0	P	Qb	Rb	Sb	T	U	Vb	X	Yb	J	K#	L#M#	
III - 1		M#N	0b	P	Q	R	S	T	U	Vb	X	Y	J#K#L	M#		
III - 2		M#	N#0	P#	Q#	R#S	T	U	VbXb	Yb	J	K#	L#M#			
IV - 0		M#	N#0	P#Q	Rb	Sb	T	U	VbXb	Yb	J	K#	L#M#			
IV - 1		M#N	0	P#	Q#R	Sb	T	U	V	X#Y	J#K#	L#M#				
IV - 2		M#N	0b	P	Q	R	S	T	U	Vb	X	YbJb	K	L	M#	
V - 0		M#N	0	P#	Q#R	S	T	U	V	X#	Y#J#K#	L#M#				
V - 1		M#N	0	P#	Q#	R#S	T	U	VbXb	Yb	J	K#L	M#			
V - 2		M#	N#0	P	Q	R	S	T	U	Vb	X	Y	K	L	M	M#
VI - 0		M#N	0	P#	Q#	R#S	T	U	V	X#Y	J	K#L	M#			
VI - 1		Nb	0b	P	Q	Q#R	S	T	U	Vb	X	Y	K	L	M	Nb
VI - 2		M#N	0	P	Q	Rb	Sb	T	U	V	X	Yb	J	K#	L#M#	
VII - 0		M#N	0	P#Q	Rb	Sb	T	U	VbXb	Yb	J	K#	L#M#			
VII - 1		M#N	0	P#	Q#R	Sb	T	U	V	X#Y	J	K#	L#M#			
VII - 2		M#N	0	P#	Q#	R#S	T	U	V	X	Yb	J	K#	L#M#		
VIII - 0		M#N	0	P#	Q#R	Sb	T	U	VbXb	Yb	J	K#	L#M#			
VIII - 1		M#N	0	P#Q	Rb	Sb	T	U	V	X	Yb	J	K#	L#M#		
VIII - 2		M#N	0	P#	Q#	R#S	T	U	V	X#Y	J	K#	L#M#			
IX - 0		M#N	0	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K#	L#M#		
IX - 1		M#N	0	P#	Q#	R#S	T	U	V	X#	Y#J#K#	L#M#				
IX - 2		M#N	0	P#	Q#	R#S	T	U	VbXb	Yb	J	K#	L#M#			
2m	+ .	3M	+----- .	4	+----- .	6m	+----^/^------^- .									
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .									
6M	+-----^/^------^- .					7M	+-----^-----^- .									
7	+-----^/^------^- .					8	+-----^/^------^- .									
		15	+-----^/^------^-^-----^/^- .													

# Scale/Modes Chart for Root Pitch

N =% F#

=====

		G	A	B	C	D	E	F	G	A	B	C	D	E	F																			
I	- 0		N	0	P	Q	R	R#	S	T#	U#	V	X	Y	K	L	M#	N																
I	- 1		N	0b	P	Q	Q#	R	S	T#	U#	X	Yb	J	K	L	M#	N																
I	- 2		N	0b	Pb	Qb	Rb	Sb	T	Ub	Vb	Xb	Yb	J	K	Lb	M	N																
II	- 0		N	0b	P	Q	R	S	T	Ub	Vb	X	Yb	Jb	K	L	M	N																
II	- 1		N	0	P#	Q	Rb	Sb	T	Ub	Vb	Xb	Yb	J	K#	L#	M#	N																
II	- 2		N	0b	P	Q	Rb	Sb	Tb	Ub	Vb	X	Y	J	K	L	M#	N																
III	- 0		N	0b	P	P#	Q	R	S	T#	U#	V	X#	Y	K	L	M#	N																
III	- 1		N	0b	Pb	Qb	Rb	Sb	T	Ub	Vb	Xb	Yb	J	K#	L	M	N																
III	- 2		N	0	P	Q	R	S	T	T#	U#	V	X	Y	K	L	M#	N																
IV	- 0		N	0	P	Q	Q#	R	S	T#	U#	V	X	Y	K	L	M#	N																
IV	- 1		N	0b	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J	K#	L	M#	N																
IV	- 2		N	0b	Pb	Qb	Rb	Sb	T	Ub	Vb	Xb	Yb	Jb	Kb	Lb	M	N																
V	- 0		N	0b	P	Q	R	Sb	T	Ub	Vb	X	Y	J#	K#	L	M#	N																
V	- 1		N	0b	P	Q	R	S	T	T#	U#	V	X	Y	K	L	M	N																
V	- 2		N	0	P	Qb	Rb	Sb	T	Ub	Vb	Xb	Yb	J	K#	L#	M#	N																
VI	- 0		N	0b	P	Q	R	S	T	Ub	Vb	X	Y	J	K	L	M	N																
VI	- 1		N	0	P#	Q#	R	Sb	T	Ub	Vb	Xb	Yb	J	K#	L#	M#	N																
VI	- 2		N	0b	P	P#	Q#	R	S	T#	U#	V#	X#	Y	K	L	M#	N																
VII	- 0		N	0b	P	Q	Q#	R	S	T#	U#	V	X	Y	K	L	M#	N																
VII	- 1		N	0b	P	Q	R	Sb	Tb	Ub	Vb	X	Y	J	K	L	M#	N																
VII	- 2		N	0b	P	Q	R	S	T	Ub	Vb	X	Yb	Jb	K	L	M#	N																
VIII	- 0		N	0b	P	Q	R	R#	S	T#	U#	V	X	Y	K	L	M#	N																
VIII	- 1		N	0b	P	Q	Q#	R	S	T#	U#	V#	X#	Y	K	L	M#	N																
VIII	- 2		N	0b	P	Q	R	S	T	Ub	Vb	X	Y	J	K	L	M#	N																
IX	- 0		N	0b	P	P#	Q	R	S	T#	U#	V	X	Y	K	L	M#	N																
IX	- 1		N	0b	P	Q	R	S	T	Ub	Vb	X	Y	J#	K#	L	M#	N																
IX	- 2		N	0b	P	Q	R	S	T	T#	U#	V	X	Y	K	L	M#	N																
2m		+		.		3M		+	-----		.		4		+	-----		.		6m		+	-----	^	/	^	-----	^		.				
2M		+	---		.	3m		+	-----		.		5		+	-----	-----		.		b5		+	-----	-----	-----	-----	-----	-----		.			
6M		+	-----	^	/	^	-----	^	-----		.										7M		+	-----	^	-----	^	-----	-----		.			
7		+	-----	^	/	^	-----	^	-----		.										8		+	-----	^	/	^	-----	^	-----		.		
						15		+	-----	^	/	^	-----	^	-----	^	/	^	-----	^	-----	^	/	^	-----	^	/	^	-----	^	/	^		.

# Scale/Modes Chart for Root Pitch

Ob = N# =% = G

=====

		G	A	B	C	D	E	F	G	A	B	C	D	E	F	G
I - 0		Ob	P	P#	Q#	R#S	T	U	V	X	Yb	J	K#	M	N	Ob
I - 1		N#0	P#	Q#R	Sb	T	U		V	X#Y		K	Lb	M	N	N#
I - 2		N#0	P	Q	R	S	T#U		V	X	Y	J#K#L		M#	N#	
II - 0		N#0	P#	Q#	R#	S#T#U			V	X#Y	J	K#	L#M#	N#		
II - 1		Ob	P	Q	Q#R	S	T#U		V	X	Y	K	L	M#N	Ob	
II - 2		N#0	P#	Q#R	S	T	U		V	X#	J	K	Lb	M	N	N#
III - 0		N#0	P#Q	Rb	Sb	T	U		V	X	Y	J	K#	M	N	N#
III - 1		N#0	P	Q	R	S	T#U		V	X	Y	K	L	M	M#	N#
III - 2		Ob	P	Qb	Rb	Sb	T	T#U	V	X	Yb	J	K#	M	N	Ob
IV - 0		Ob	P	P#	Q#R	Sb	T	U	V	X	Yb	J	K#	M	N	Ob
IV - 1		N#0	P#	Q#	R#S	T	U		V	X#	J	K	L	M	N	N#
IV - 2		N#0	P	Q	R	S	T#U		V	X	Y	J	K	L	M#	N#
V - 0		N#0	P#	Q#	R#S	T#U			V	X#	J	K#L	M	N	N#	
V - 1		N#0	P#	Q#	R#	S#T#U			V	X	Yb	J	K#	L#M#	N#	
V - 2		Ob	P	P#Q	R	S	T#U		V	X	Y	K	L	M#N	Ob	
VI - 0		N#0	P#	Q#	R#	S#T#U			V	X#	Y#J#K#	L#M#	N#			
VI - 1		Ob	P	Q	R	R#S	T#U		V	X	Y	K	L	M#N	Ob	
VI - 2		N#0	P#Q	R	Sb	T	U		V	X#Y	J	K#	M	N	N#	
VII - 0		N#0	P#	Q#R	Sb	T	U		V	X	Yb	J	K#	M	N	N#
VII - 1		N#0	P#	Q#	R#S	T	U		V	X#	J	K	Lb	M	N	N#
VII - 2		N#0	P#	Q#	R#	S#T#U			V	X#Y	J	K#	M	N	N#	
VIII - 0		N#0	P#	Q#	R#S	T	U		V	X	Yb	J	K#	M	N	N#
VIII - 1		N#0	P#	Q#R	Sb	T	U		V	X#Y	J	K#	M	N	N#	
VIII - 2		N#0	P#	Q#	R#	S#T#U			V	X#	J	K	Lb	M	N	N#
IX - 0		N#0	P#Q	Rb	Sb	T	U		V	X	Yb	J	K#	M	N	N#
IX - 1		N#0	P#	Q#	R#	S#T#U			V	X#	J	K#L	M	N	N#	
IX - 2		N#0	P#	Q#	R#	S#T#U			V	X	Yb	J	K#	M	N	N#
2m	+ .	3M	+----- .	4	+----- .	6m	+----^/^------^- .									
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .									
6M	+-----^/^------^- .					7M	+-----^-----^- .									
7	+-----^/^------^- .					8	+-----^/^------^- .									
15	+-----^/^------^-^-----^/^- .															

# Scale/Modes Chart for Root Pitch

0 = Pb =% G#

=====

	A	B	C	D	E	F	G	A	B	C	D	E	F	G
I - 0	0	P#Q	R	S	T	Ub	Vb	X	YbJb	K	L	M#	N#0	
I - 1	0	P	Q	R	SbTb	Ub	Vb	X	Y	J	K#L	M#	N#0	
I - 2	0	P	Qb	Rb	Sb	T	U	Vb	X	Yb	J	K#L	M	N 0
II - 0	0	P	Q	R	S	T#U	Vb	X	Y	J	K	L	M#N	0
II - 1	0	P#	Q#R	Sb	T	U	Vb	X	Yb	J	K#	M	N	N#0
II - 2	0	P	Q	R	Sb	T	Ub	Vb	X	Y	J#K#L	M#	N#0	
III - 0	0	P	Q	Q#R	S	T#	U#	X	Yb	J	K	L	M#	N#0
III - 1	0	P	Qb	Rb	Sb	T	U	Vb	X	Yb	J	K#	L#M#N	0
III - 2	0	P#Q	R	S	T#U	Vb	X	YbJb	K	L	M#	N#0		
IV - 0	0	P#Q	R	SbTb	Ub	Vb	X	YbJb	K	L	M#	N#0		
IV - 1	0	P	Q	R	S	T	Ub	Vb	X	Y	J#K#	L#M#	N#0	
IV - 2	0	P	Qb	Rb	Sb	T	U	Vb	X	Yb	J	K	Lb	M N 0
V - 0	0	P	Q	R	S	T	U	Vb	X	Y	K	L	M	M# N#0
V - 1	0	P	Q	R	S	T#U	Vb	X	YbJb	K	L	M#N	0	
V - 2	0	P#Q	Rb	Sb	T	U	Vb	X	Yb	J	K#	M	N	N#0
VI - 0	0	P	Q	R	S	T#U	Vb	X	Y	J#K#L	M#N	0		
VI - 1	0	P#	Q#	R#S	T	U	Vb	X	Yb	J	K#	M	N	N#0
VI - 2	0	P	Q	Rb	SbTb	Ub	Vb	X	Y	J	K	L	M#	N#0
VII - 0	0	P	Q	R	SbTb	Ub	Vb	X	YbJb	K	L	M#	N#0	
VII - 1	0	P	Q	R	S	T	Ub	Vb	X	Y	J#K#L	M#	N#0	
VII - 2	0	P	Q	R	S	T#U	Vb	X	Y	J	K	L	M#	N#0
VIII - 0	0	P	Q	R	S	T	Ub	Vb	X	YbJb	K	L	M#	N#0
VIII - 1	0	P	Q	R	SbTb	Ub	Vb	X	Y	J	K	L	M#	N#0
VIII - 2	0	P	Q	R	S	T#U	Vb	X	Y	J#K#L	M#	N#0		
IX - 0	0	P	Q	Q#R	S	T#	U#	V#X#Y	K	L	M#	N#0		
IX - 1	0	P	Q	R	S	T#U	Vb	X	Y	K	L	M	M#	N#0
IX - 2	0	P	Q	R	S	T#U	Vb	X	YbJb	K	L	M#	N#0	
2m	+ .	3M	+----- .	4	+----- .	6m	+-----^/^-----^- .							
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .							
6M	+-----^/^-----^- .					7M	+-----^-----^- .							
7	+-----^/^-----^- .					8	+-----^/^-----^- .							
		15	+-----^/^-----^- .											



# Scale/Modes Chart for Root Pitch

P = 0# =% = A

=====

	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A
I - 0	P	Q	Rb	Sb	T	T#U	V	X#Y	J	K#	M	N	0	P	
I - 1	P	P#	Q#	R#S	T	U	V	X#	J	K	L	M	N	0	P
I - 2	P	P#Q	R	S	T#	U#V	X#Y	K	L	M	Nb	0b	P		
II - 0	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K	Lb	M	N	0b	P
II - 1	P	Q	R	SbTb	Ub	VbXb	YbJb	K	L	M#	N#0	P			
II - 2	P	P#	Q#	R#S	T#U	V	X#	J	K#L	M	N	0	P		
III - 0	P	P#	Q#R	Sb	T	U	V	X#Y	K	Lb	M	N	0	P	
III - 1	P	P#Q	R	S	T#	U#V	X#Y	K	L	M#N	0b	P			
III - 2	P	Q	Rb	Sb	T	U	VbXb	YbJbKb	Lb	M	N	0	P		
IV - 0	P	Q	Q#	R#S	T	U	V	X#Y	J	K#	M	N	0	P	
IV - 1	P	Qb	Rb	Sb	T	T#U	V	X#	J	K#L	M#N	0	P		
IV - 2	0#P#Q	R	S	T#	U#V	X#Y	J#K#L	M#	N#	0#					
V - 0	P	Qb	Rb	Sb	T	Ub	VbXb	Yb	J	K#	L#M#N	0	P		
V - 1	P	Qb	Rb	Sb	T	U	VbXb	YbJbKb	Lb	M	N	0b	P		
V - 2	P	Q	Q#R	S	T#	U#V	X#Y	K	L	M#	N#0	P			
VI - 0	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K#L	M	N	0b	P	
VI - 1	P	Q	R	S	T	Ub	VbXb	YbJb	K	L	M#	N#0	P		
VI - 2	P	P#	Q#R	S	T	U	V	X#	J	K	Lb	M	N	0	P
VII - 0	P	P#	Q#	R#S	T	U	V	X#Y	J	K#	M	N	0	P	
VII - 1	P	Qb	Rb	Sb	T	T#U	V	X#	J	K#L	M	N	0	P	
VII - 2	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K	Lb	M	N	0	P
VIII - 0	P	Qb	Rb	Sb	T	T#U	V	X#Y	J	K#	M	N	0	P	
VIII - 1	P	P#	Q#	R#S	T	U	V	X#	J	K	Lb	M	N	0	P
VIII - 2	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K#L	M	N	0	P	
IX - 0	P	P#	Q#R	Sb	T	U	V	X#Y	J	K#	M	N	0	P	
IX - 1	P	Qb	Rb	Sb	T	U	VbXb	Yb	J	K#	L#M#N	0	P		
IX - 2	P	Qb	Rb	Sb	T	U	VbXb	YbJbKb	Lb	M	N	0	P		
2m	+ .	3M	+----- .	4	+----- .	6m	+----^/^------^- .								
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .								
6M	+-----^/^------^- .					7M	+-----^/^------^- .								
7	+-----^/^------^- .					8	+-----^/^------^- .								
	15	+-----^/^------^- .													

# Scale/Modes Chart for Root Pitch

Qb = P# =% A#

=====

		B	C	D	E	F	G	A	B	C	D	E	F	G	A
I - 0		P#	Q#R	S	T#U	Vb	X	Y	J	K	L	M#	N#	0#P#	
I - 1		P#Q	R	S	T	Ub	Vb	X	Y	J#K#	L#M#	N#	0#P#		
I - 2		P#Q	Rb	Sb	T	U	V	X	Y	J	K#	L#M#N	0	P#	
II - 0		P#Q	R	S	T#	U#V	X	Y	J#K#L	M#	N#0	P#			
II - 1		P#	Q#	R#S	T	U	V	X	Y	J	K#	M	N	0	P P#
II - 2		P#Q	R	S	T	U	Vb	X	Y	K	L	M	Nb	0b	P P#
III - 0		P#Q	R	SbTb	Ub	Vb	X	Y	J	K#L	M#	N#	0#P#		
III - 1		P#Q	Rb	Sb	T	U	V	X	Y	J	K#	M	N	N#0	P#
III - 2		P#	Q#R	S	T#	U#V	X	Y	J	K	L	M#	N#	0#P#	
IV - 0		P#	Q#R	S	T	Ub	Vb	X	Y	J	K	L	M#	N#	0#P#
IV - 1		P#Q	R	S	T#U	Vb	X	Y	K	L	M	N	0b	P	P#
IV - 2		P#Q	Rb	Sb	T	U	V	X	Y	J	K#L	M	N	0	P#
V - 0		P#Q	R	S	T#U	V	X	Y	K	L	M#N	0b	P	P#	
V - 1		P#Q	R	S	T#	U#V	X	Y	J	K	L	M#	N#0	P#	
V - 2		P#	Q#R	Sb	T	U	V	X	Y	J	K#	M	N	0	P P#
VI - 0		P#Q	R	S	T#	U#V	X	Y	K	L	M	M#	N#0	P#	
VI - 1		Qb	Rb	Sb	T	T#U	V	X	Y	J	K#	M	N	0	P Qb
VI - 2		P#Q	R	Sb	T	Ub	Vb	X	Y	J#K#L	M#	N#	0#P#		
VII - 0		P#Q	R	S	T	Ub	Vb	X	Y	J	K	L	M#	N#	0#P#
VII - 1		P#Q	R	S	T#U	Vb	X	Y	K	L	M	Nb	0b	P	P#
VII - 2		P#Q	R	S	T#	U#V	X	Y	J#K#L	M#	N#	0#P#			
VIII - 0		P#Q	R	S	T#U	Vb	X	Y	J	K	L	M#	N#	0#P#	
VIII - 1		P#Q	R	S	T	Ub	Vb	X	Y	J#K#L	M#	N#	0#P#		
VIII - 2		P#Q	R	S	T#	U#V	X	Y	K	L	M	Nb	0b	P	P#
IX - 0		P#Q	R	SbTb	Ub	Vb	X	Y	J	K	L	M#	N#	0#P#	
IX - 1		P#Q	R	S	T#	U#V	X	Y	K	L	M#N	0b	P	P#	
IX - 2		P#Q	R	S	T#	U#V	X	Y	J	K	L	M#	N#	0#P#	
2m		+	+	.											
2M		+	+	.											
6M		+	+	.											
7		+	+	.											
15		+	+	.											

# Scale/Modes Chart for Root Pitch

Q =% B

=====

		B	C	D	E	F	G	A	B	C	D	E	F	G	A	B		
I	- 0		Q	R	Sb	T	U	VbXb	Yb	J	K	Lb	M	N	0	P#Q		
I	- 1		Q	Rb	Sb	T	T#U	V	X#	J	K#L		M#N	0	P#Q			
I	- 2		Q	Q#R	S	T#	U#	X	Yb	J	K	L	M#N	0b	P	Q		
II	- 0		Q	Rb	Sb	T	U	V	X	Yb	J	K#L	M	N	0	P	Q	
II	- 1		Q	R	S	T	Ub	Vb	X	Yb	J	K	L	M#	N#	0#P#Q		
II	- 2		Q	Rb	Sb	T	Ub	VbXb	Yb	J	K#	L#M#N		0	P#Q			
III	- 0		Q	Q#	R#S	T	U	V	X#	J	K	L	M	N	0	P#Q		
III	- 1		Q	Q#R	S	T#	U#	X	Yb	J	K	L	M#	N#0	P	Q		
III	- 2		Q	R	Sb	T	U	V	X	Yb	J	K	Lb	M	N	0	P#Q	
IV	- 0		Q	R	Sb	T	T#U	V	X#	J	K	Lb	M	N	0	P#Q		
IV	- 1		Q	Rb	Sb	T	U	VbXb	Yb	J	K#	L#M#	N#0	P#Q				
IV	- 2		Q	Q#R	S	T#	U#	X	Yb	J	K	L	M	Nb	0b	P	Q	
V	- 0		Q	Rb	Sb	T	U	Vb	X	Yb	J	K#	M	N	N#0	P#Q		
V	- 1		Q	Rb	Sb	T	U	V	X	Yb	J	K	Lb	M	N	0	P	Q
V	- 2		Q	R	SbTb	Ub	Vb	X	Yb	J	K	L	M#	N#	0#P#Q			
VI	- 0		Q	Rb	Sb	T	U	V	X	Yb	J	K#	L#M#N		0	P	Q	
VI	- 1		Q	R	S	T#U	Vb	X	Yb	J	K	L	M#	N#	0#P#Q			
VI	- 2		Q	Q#	R#S	T#U	V	X#	J	K#L	M	N		0	P#Q			
VII	- 0		Q	Rb	Sb	T	T#U	V	X#	J	K	Lb	M	N	0	P#Q		
VII	- 1		Q	Rb	Sb	T	U	VbXb	Yb	J	K#	L#M#N		0	P#Q			
VII	- 2		Q	Rb	Sb	T	U	V	X	Yb	J	K#L	M	N	0	P#Q		
VIII	- 0		Q	Rb	Sb	T	U	VbXb	Yb	J	K	Lb	M	N	0	P#Q		
VIII	- 1		Q	Rb	Sb	T	T#U	V	X#	J	K#L	M	N		0	P#Q		
VIII	- 2		Q	Rb	Sb	T	U	V	X	Yb	J	K#	L#M#N		0	P#Q		
IX	- 0		Q	Q#	R#S	T	U	V	X#	J	K	Lb	M	N	0	P#Q		
IX	- 1		Q	Rb	Sb	T	U	V	X	Yb	J	K#	M	N	N#0	P#Q		
IX	- 2		Q	Rb	Sb	T	U	V	X	Yb	J	K	Lb	M	N	0	P#Q	
2m	+ .	3M	+----- .	4	+----- .	6m	+----^/^-----^- .											
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .											
6M	+-----^/^-----^- .						7M	+-----^/^-----^- .										
7	+-----^/^-----^- .						8	+-----^/^-----^- .										
15  +-----^/^-----^------^/^-----^																		

# Scale/Modes Chart for Root Pitch

Rb = Q# =% C

=====

		C	D	E	F	G	A	B	C	D	E	F	G	A	B	C
I - 0		Q#	R#S	T#	U#V	X	Y		J#K#L	M#	N#	P	Q	Q#		
I - 1		Q#R	S	T#U	Vb	X	Y		K	L	M	N	Ob	P	Q	Q#
I - 2		Q#R	Sb	T	U	V	X#Y		K	Lb	M	N	N#0	P#	Q#	
II - 0		Q#R	S	T#	U#	V#X#Y		K	L	M	Nb	Ob	P	P#	Q#	
II - 1		Rb	Sb	T	T#U	V	X#Y		K	Lb	M	N	0	P#Q	Rb	
II - 2		Q#R	S	T#U	V	X	Y		K	L	M#N	Ob	P	Q	Q#	
III - 0		Q#R	S	T	Ub	Vb	X	Y	K	Lb	M	Nb	Ob	P	Q	Q#
III - 1		Q#R	Sb	T	U	V	X#Y		K	Lb	M	N	0	P	P#	Q#
III - 2		Rb	SbTb	Ub	Vb	X	YbJb		K	LbMb	Nb	Ob	P	Q	Rb	
IV - 0		Q#	R#S	T#U	Vb	X	Y		J#K#L	M#	N#	P	Q	Q#		
IV - 1		Q#R	S	T#	U#V	X	Y		K	L	M#N	0	P	Q	Q#	
IV - 2		Q#R	Sb	T	U	V	X#Y		J#K#	L#M#N	0	P#	Q#			
V - 0		Q#R	S	T#	U#V	X#Y		K	L	M#	N#0	P	Q	Q#		
V - 1		Q#R	S	T#	U#	V#X#Y		J#K#L	M#	N#	0#P#	Q#				
V - 2		Q#	R#S	T	U	V	X#Y		K	Lb	M	N	0	P#Q	Q#	
VI - 0		Q#R	S	T#	U#	V#X#Y		K	L	M#N	Ob	P	P#	Q#		
VI - 1		Rb	Sb	T	U	VbXb	YbJb		K	Lb	M	N	0	P#Q	Rb	
VI - 2		Q#R	S	T	U	Vb	X	Y	K	L	M	Nb	Ob	P	Q	Q#
VII - 0		Q#R	S	T#U	Vb	X	Y		J#K#L	M#	N#	P	Q	Q#		
VII - 1		Q#R	S	T#	U#V	X	Y		K	L	M#N	Ob	P	Q	Q#	
VII - 2		Q#R	S	T#	U#	V#X#Y		K	L	M	Nb	Ob	P	Q	Q#	
VIII - 0		Q#R	S	T#	U#V	X	Y		J#K#L	M#	N#	P	Q	Q#		
VIII - 1		Q#R	S	T#U	Vb	X	Y		K	L	M	Nb	Ob	P	Q	Q#
VIII - 2		Q#R	S	T#	U#	V#X#Y		K	L	M#N	Ob	P	Q	Q#		
IX - 0		Q#R	S	T	Ub	Vb	X	Y	J#K#L	M#	N#	P	Q	Q#		
IX - 1		Q#R	S	T#	U#	V#X#Y		K	L	M#	N#0	P	Q	Q#		
IX - 2		Q#R	S	T#	U#	V#X#Y		J#K#L	M#	N#	P	Q	Q#			

2m | + | . 3M | +-----| . 4 | +-----| . 6m | +----^/^-----^-| .  
 2M | +---| . 3m | +----| . 5 | +-----| . b5 | +-----| .  
 6M | +-----^/^-----^-| . 7M | +-----^-----^-| .  
 7 | +-----^/^-----^-| . 8 | +-----^/^-----^-| .  
 15 | +-----^/^-----^-^-----^/^-----^/^-----^/^-----^-| .

# Scale/Modes Chart for Root Pitch

R =% C#

=====

		D	E	F	G	A	B	C		D	E	F	G	A	B	C
I - 0		R	S	T	U	V	X	Yb	J	K#L	M	N	0	P#	Q#R	
I - 1		R	Sb	T	U	VbXb	Yb	J		K#	L#M#	N#0		P#	Q#R	
I - 2		R	SbTb	Ub	Vb	X	Y	J		K#L	M#	N#0	P	Q	R	
II - 0		R	Sb	T	U	V	X#Y	J		K#	L#M#N	0		P#Q	R	
II - 1		R	S	T#U	Vb	X	Y	J		K#L	M#	N#	P	Q	Q#R	
II - 2		R	Sb	T	U	Vb	X	Yb	J	K#	M	N	N#0	P#	Q#R	
III - 0		R	Sb	T	T#U	V	X#	J		K#L	M#N	0		P#	Q#R	
III - 1		R	SbTb	Ub	Vb	X	Y	J		K#L	M#	N#	0#P#Q		R	
III - 2		R	S	T	U	V	X#Y	J		K#L	M	N	0	P#	Q#R	
IV - 0		R	S	T	U	VbXb	Yb	J		K#L	M	N	0	P#	Q#R	
IV - 1		R	Sb	T	U	V	X	Yb	J	K#	M	N	0b	P	P#	Q#R
IV - 2		R	SbTb	Ub	Vb	X	Y	J		K#L	M#N	0b	P	Q	R	
V - 0		R	Sb	T	U	V	X	Y	J	K#	M	N	0	P	P#	Q#R
V - 1		R	Sb	T	U	V	X#Y	J		K#L	M	N	0	P#Q	R	
V - 2		R	S	T	Ub	Vb	X	Y	J	K#L	M#	N#	P	Q	Q#R	
VI - 0		R	Sb	T	U	V	X#Y	J		K#	M	N	N#0	P#Q	R	
VI - 1		R	S	T#	U#V	X	Y	J		K#L	M#	N#	P	Q	Q#R	
VI - 2		R	Sb	T	Ub	VbXb	Yb	J		K#	L#M#N	0		P#	Q#R	
VII - 0		R	Sb	T	U	VbXb	Yb	J		K#L	M	N	0	P#	Q#R	
VII - 1		R	Sb	T	U	V	X	Yb	J	K#	M	N	N#0	P#	Q#R	
VII - 2		R	Sb	T	U	V	X#Y	J		K#	L#M#N	0		P#	Q#R	
VIII - 0		R	Sb	T	U	V	X	Yb	J	K#L	M	N	0	P#	Q#R	
VIII - 1		R	Sb	T	U	VbXb	Yb	J		K#	L#M#N	0		P#	Q#R	
VIII - 2		R	Sb	T	U	V	X#Y	J		K#	M	N	N#0	P#	Q#R	
IX - 0		R	Sb	T	T#U	V	X#	J		K#L	M	N	0	P#	Q#R	
IX - 1		R	Sb	T	U	V	X#Y	J		K#	M	N	0	P	P#	Q#R
IX - 2		R	Sb	T	U	V	X#Y	J		K#L	M	N	0	P#	Q#R	
2m	+ .	3M	+----- .	4	+----- .	6m	+----^/^-----^- .									
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .									
6M	+-----^/^-----^- .					7M	+-----^-----^- .									
7	+-----^/^-----^- .					8	+-----^/^-----^- .									
		15	+-----^/^-----^- .													

# Scale/Modes Chart for Root Pitch

Sb = R# =% = D

=====

		D	E	F	G	A	B	C	D	E	F	G	A	B	C	D
I - 0		Sb	T	Ub	Vb	X	Yb	Jb	K	L	M	Nb	Ob	P	Q	R Sb
I - 1		R#S	T#	U#V	X	Y		K		L	M#N		0	P	Q	R R#
I - 2		R#S	T	U	V	X#	J	K		L	M	N	0	P	P#	Q# R#
II - 0		SbTb	Ub	Vb	X	Y	J	K		L	M#N	Ob	P	Q	Rb	Sb
II - 1		Sb	T	U	VbXb	Yb	J	K		L	M	N	0	P#	Q#R	Sb
II - 2		SbTb	Ub	VbXb	YbJb	K				L	M#	N#0	P	Q	R	Sb
III - 0		R#S	T#U	Vb	X	Y		K		L	M	N	Ob	P	Q	R R#
III - 1		R#S	T	U	V	X#	J	K		L	M	N	0	P#Q	Q#	R#
III - 2		Sb	T	Ub	Vb	X	Y	J	K	L	M	Nb	Ob	P	Q	R Sb
IV - 0		Sb	T	T#	U#V	X	Y	K		L	M	Nb	Ob	P	Q	R Sb
IV - 1		SbTb	Ub	Vb	X	YbJb	K			L	M#	N#0		P#Q	R	Sb
IV - 2		R#S	T	U	V	X#	J	K		L	M	N	N#0	P#	Q#	R#
V - 0		SbTb	Ub	Vb	X	Yb	J	K		L	M#	N#	0#P#Q		R	Sb
V - 1		SbTb	Ub	Vb	X	Y	J	K		L	M	Nb	Ob	P	Q	Rb Sb
V - 2		Sb	T	T#U	V	X#	J	K		L	M	N	0	P#	Q#R	Sb
VI - 0		SbTb	Ub	Vb	X	Y	J	K		L	M#	N#0	P	Q	Rb	Sb
VI - 1		Sb	T	U	V	X	Yb	J	K	L	M	N	0	P#	Q#R	Sb
VI - 2		R#S	T#U	V	X	Y	K			L	M#N	Ob	P	Q	R	R#
VII - 0		R#S	T#	U#V	X	Y		K		L	M	Nb	Ob	P	Q	R R#
VII - 1		SbTb	Ub	Vb	X	YbJb	K			L	M#	N#0	P	Q	R	Sb
VII - 2		SbTb	Ub	Vb	X	Y	J	K		L	M#N	Ob	P	Q	R	Sb
VIII - 0		SbTb	Ub	Vb	X	YbJb	K			L	M	Nb	Ob	P	Q	R Sb
VIII - 1		R#S	T#	U#V	X	Y		K		L	M#N	Ob	P	Q	R	R#
VIII - 2		SbTb	Ub	Vb	X	Y	J	K		L	M#	N#0	P	Q	R	Sb
IX - 0		R#S	T#U	Vb	X	Y		K		L	M	Nb	Ob	P	Q	R R#
IX - 1		SbTb	Ub	Vb	X	Y	J	K		L	M#	N#	0#P#Q		R	Sb
IX - 2		SbTb	Ub	Vb	X	Y	J	K		L	M	Nb	Ob	P	Q	R Sb

2m | + | . 3M | +-----| . 4 | +-----| . 6m | +----^/^-----^-| .  
 2M | +--| . 3m | +-----| . 5 | +-----| . b5 | +-----| .  
 6M | +-----^/^-----^-| . 7M | +-----^-----^-| .  
 7 | +-----^/^-----^-| . 8 | +-----^/^-----^-| .  
 15 | +-----^/^-----^-^-----^/^-----^/^-----^/^-----| .

# Scale/Modes Chart for Root Pitch

S = Tb =% = D#

=====

		E	F	G	A	B	C	D	E	F	G	A	B	C	D
I - 0		S	T#U	V	X#Y	J	K#	L#M#N	0	P#	Q#	R#S			
I - 1		S	T	U	V	X	Yb	J	K#	M	N	Ob	P	P#	Q#
I - 2		S	T	Ub	Vb	X	Y	J#K#	L#M#	N#	0#P#Q	R	S		
II - 0		S	T	U	V	X#	J	K	Lb	M	N	N#0	P#	Q#R	S
II - 1		S	T#	U#V	X	Y	K	Lb	M	Nb	Ob	P	Q	R	R#S
II - 2		S	T	U	V	X	Y	J	K#	M	N	0	P	P#	Q#
III - 0		S	T	U	VbXb	Yb	J	K#	L#M#	N#0	P#	Q#	R#S		
III - 1		S	T	Ub	Vb	X	Y	K	Lb	M	Nb	Ob	P	Q	Q#R
III - 2		S	T#U	V	X#	Y#J#K#			L#M#N	0	P#	Q#	R#S		
IV - 0		S	T#U	V	X	Yb	J	K#	L#M#N	0	P#	Q#	R#S		
IV - 1		S	T	U	V	X#Y	J	K#	M	N	0	P	Q	Q#	R#S
IV - 2		S	T	Ub	Vb	X	Y	J#K#	L#M#	N#0	P	Q	R	S	
V - 0		S	T	U	V	X#Y	K	Lb	M	N	0	P#Q	Q#	R#S	
V - 1		S	T	U	V	X#	Y#J#K#		L#M#N	0	P#	Q#R	S		
V - 2		S	T#U	Vb	X	Y	K	Lb	M	Nb	Ob	P	Q	R	R#S
VI - 0		S	T	U	V	X#	J	K	Lb	M	N	0	P	P#	Q#R
VI - 1		Tb	Ub	Vb	X	YbJb	K	Lb	M	Nb	Ob	P	Q	R	SbTb
VI - 2		S	T	U	Vb	X	Yb	J	K#	M	N	N#0	P#	Q#	R#S
VII - 0		S	T	U	V	X	Yb	J	K#	L#M#N	0	P#	Q#	R#S	
VII - 1		S	T	U	V	X#Y	J	K#	M	N	0	P	P#	Q#	R#S
VII - 2		S	T	U	V	X#	J	K	Lb	M	N	N#0	P#	Q#	R#S
VIII - 0		S	T	U	V	X#Y	J	K#	L#M#N	0	P#	Q#	R#S		
VIII - 1		S	T	U	V	X	Yb	J	K#	M	N	N#0	P#	Q#	R#S
VIII - 2		S	T	U	V	X#	J	K	Lb	M	N	0	P	P#	Q#
IX - 0		S	T	U	VbXb	Yb	J	K#	L#M#N	0	P#	Q#	R#S		
IX - 1		S	T	U	V	X#	J	K	Lb	M	N	0	P#Q	Q#	R#S
IX - 2		S	T	U	V	X#	Y#J#K#		L#M#N	0	P#	Q#	R#S		
2m		+	+	.											
2M		+	+	.											
6M		+	+	.											
7		+	+	.											
15		+	+	.											

=====

=====

2m | + | . 3M | + - - - - | . 4 | + - - - - | . 6m | + - - - ^ / ^ - - - - ^ - |  
2M | + - - | . 3m | + - - - | . 5 | + - - - - - - - | . b5 | + - - - - - - - | .  
6M | + - - - ^ / ^ - - - - ^ - - - | . 7M | + - - - - ^ - - - - ^ - - - | .  
7 | + - - - ^ / ^ - - - - ^ - - - | . 8 | + - - - ^ / ^ - - - - ^ - - - | .  
15 | + - - - ^ / ^ - - - - ^ - - - ^ / ^ - - - - ^ / ^ - - - - ^ - - - ^ / ^ - - - - ^ / ^ - - - - ^ - - -



# Scale/Modes Chart for Root Pitch

Ub = T# =% F

=====

		F	G	A	B	C	D	E	F	G	A	B	C	D	E	F		
I	- 0		Ub	VbXb	Yb	J	K	Lb	M	N	ObPb	Qb	Rb	Sb	T	Ub		
I	- 1		T#U	V	X#Y	J		K#	M	N	0	P	Q	Rb	Sb	T	T#	
I	- 2		T#U	Vb	X	Y	K	L	M	N	Ob	P	Q	Q#R	S	T#		
II	- 0		T#U	V	X#	J		K#L	M	N	0	P	P#	Q#	R#S	T#		
II	- 1		Ub	Vb	X	YbJb	K	L	M	N	Ob	P	Q	R	S	T	Ub	
II	- 2		T#U	V	X#Y		K	Lb	M	N	0		P#Q	Rb	Sb	T	T#	
III	- 0		T#U	V	X	Yb	J		K#	M	N	Ob	P	Qb	Rb	Sb	T	T#
III	- 1		T#U	Vb	X	Y	K	L	M	N	Ob	P	Q	R	R#S	T#		
III	- 2		Ub	VbXb	Yb	J		K#L	M	N	ObPb	Qb	Rb	Sb	T	Ub		
IV	- 0		Ub	VbXb	YbJbKb		Lb	M	N	N	ObPb	Qb	Rb	Sb	T	Ub		
IV	- 1		T#U	V	X#	J	K	Lb	M	N	0		P#Q	R	Sb	T	T#	
IV	- 2		T#U	Vb	X	Y	K	L	M	N	Ob	P	P#Q	R	S	T#		
V	- 0		T#U	V	X#	J	K	L	M	N	0		P#	Q#R	Sb	T	T#	
V	- 1		T#U	V	X#	J		K#L	M	N	N#0		P#	Q#	R#S	T#		
V	- 2		T#	U#V	X	Y	K	L	M	N	Ob	P	Q	R	S	T	T#	
VI	- 0		T#U	V	X#	J		K#L	M	N	0		P#Q	Q#	R#S	T#		
VI	- 1		Ub	Vb	X	Y	J	K	L	M	N	Ob	P	Q	R	S	T	Ub
VI	- 2		T#U	V	X	Y	J	K#	M	N	0	P	Qb	Rb	Sb	T	T#	
VII	- 0		T#U	V	X#Y	J		K#	M	N	N#0		P#	Q#	R#	S#T#		
VII	- 1		T#U	V	X#	J	K	Lb	M	N	0		P#Q	Rb	Sb	T	T#	
VII	- 2		T#U	V	X#	J		K#L	M	N	0	P	Qb	Rb	Sb	T	T#	
VIII	- 0		T#U	V	X#	J	K	Lb	M	N	N#0		P#	Q#	R#	S#T#		
VIII	- 1		T#U	V	X#Y	J		K#	M	N	0	P	Qb	Rb	Sb	T	T#	
VIII	- 2		T#U	V	X#	J		K#L	M	N	0		P#Q	Rb	Sb	T	T#	
IX	- 0		T#U	V	X	Yb	J		K#	M	N	N#0		P#	Q#	R#	S#T#	
IX	- 1		T#U	V	X#	J		K#L	M	N	0		P#	Q#R	Sb	T	T#	
IX	- 2		T#U	V	X#	J		K#L	M	N	N#0		P#	Q#	R#	S#T#		
2m	+ .		3M	+----- .		4	+----- .		6m	+----^/^-----^- .								
2M	+-- .		3m	+----- .		5	+----- .		b5	+----- .								
6M	+-----^/^-----^- .								7M	+-----^/^-----^- .								
7	+-----^/^-----^- .								8	+-----^/^-----^- .								
			15	+-----^/^-----^- .														

# Scale/Modes Chart for Root Pitch

U =% F#

=====

		G	A	B	C	D	E	F	G	A	B	C	D	E	F																
I	- 0		U	V	X	Y	J#K#L	M#	N#0	P	Q	R	S	T#U																	
I	- 1		U	Vb	X	Y	J	K	L	M#	N#	0#P#	Q#R	S	T#U																
I	- 2		U	VbXb	Yb	J	K#	L#M#	N#0	P#	Q#R	Sb	T	U																	
II	- 0		U	Vb	X	Y	K	L	M	Nb	0b	P	P#Q	R	S																
II	- 1		U	V	X#Y	J	K#	L#M#	N#0	P#	Q#	R#	S#T#U																		
II	- 2		U	Vb	X	Y	J	K#L	M#	N#	P	Q	Q#R	S	T#U																
III	- 0		U	Vb	X	YbJb	K	L	M#	N#0	P#Q	R	S	T#U																	
III	- 1		U	VbXb	Yb	J	K#	L#M#	N#0	P#	Q#	R#S	T	U																	
III	- 2		U	V	X	Y	K	L	M	M#	N#0	P	Q	R	S																
IV	- 0		U	V	X	Y	J	K	L	M#	N#0	P	Q	R	S																
IV	- 1		U	Vb	X	Y	J#K#L	M#	N#	P	Q	Q#	R#S	T#U																	
IV	- 2		U	VbXb	Yb	J	K#	L#M#	N#0	P#Q	Rb	Sb	T	U																	
V	- 0		U	Vb	X	Y	K	Lb	M	Nb	0b	P	Q	R	R#S																
V	- 1		U	Vb	X	Y	K	L	M	M#	N#0	P	Q	R	S																
V	- 2		U	V	X	Yb	J	K#	L#M#	N#0	P#	Q#	R#	S#T#U																	
VI	- 0		U	Vb	X	Y	K	L	M	Nb	0b	P	Q	Q#R	S																
VI	- 1		U	V	X#	Y#J#K#	L#M#	N#0	P#	Q#	R#	S#T#U																			
VI	- 2		U	Vb	X	Yb	J	K	L	M#	N#	0#P#Q	R	S	T#U																
VII	- 0		U	Vb	X	Y	J	K	L	M#	N#0	P	Q	R	S																
VII	- 1		U	Vb	X	Y	J#K#L	M#	N#	P	Q	Q#R	S	T#U																	
VII	- 2		U	Vb	X	Y	K	L	M	Nb	0b	P	P#Q	R	S																
VIII	- 0		U	Vb	X	Y	J#K#L	M#	N#0	P	Q	R	S	T#U																	
VIII	- 1		U	Vb	X	Y	J	K	L	M#	N#	0#P#Q	R	S	T#U																
VIII	- 2		U	Vb	X	Y	K	L	M	Nb	0b	P	Q	Q#R	S																
IX	- 0		U	Vb	X	YbJb	K	L	M#	N#0	P	Q	R	S	T#U																
IX	- 1		U	Vb	X	Y	K	L	M	Nb	0b	P	Q	R	R#S																
IX	- 2		U	Vb	X	Y	K	L	M	M#	N#0	P	Q	R	S																
2m		+	+	.		3M		+	-----		.		4		+	-----		.		6m		+	-----	^/	^	-----	^		.		
2M		+	---		.	3m		+	-----		.		5		+	-----	-----		.		b5		+	-----	-----	-----	-----		.		
6M		+	-----	^/	^	-----	^	-----		.			7M		+	-----	^	-----	^	-----		.									
7		+	-----	^/	^	-----	^	-----		.			8		+	-----	^/	^	-----	^	-----		.								
15		+	-----	^/	^	-----	^	-----	^/	^	-----	^	-----	^/	^	-----	^	-----	^	-----	^/	^	-----	^	-----	^	-----	^/	^		.

$$V_b = U\# \equiv G$$

I.Albrecht: 8va-Interval-Maximal 16-tone Scales – 75 –  
on 15ma w/o Diatonic Modes and Root-8va. of 79

# Scale/Modes Chart for Root Pitch

V = Xb =% G#

=====

		A	B	C	D	E	F	G	A	B	C	D	E	F	G				
I	- 0	V	X#Y		K	L	M	Nb	Ob	P	P#Q	R	S	T#	U#V				
I	- 1	V	X	Y	J#K#L		M#	N#	P	Q	Q#	R#S		T#	U#V				
I	- 2	V	X	Yb	J		K#	M	N	Ob	P	P#	Q#	R#S	T	U	V		
II	- 0	V	X	Y		K	L		M#N	Ob	P	Q	Q#R		S	T#U	V		
II	- 1	Xb	Yb	J	K	Lb	M		N	Ob	P	Qb	Rb	Sb	T	U	VbXb		
II	- 2	V	X	Y		K	Lb	M	Nb	Ob	P	Q		R	R#S	T#	U#V		
III	- 0	V	X	Y	J	K		L		M#	N#	0#P#	Q#R		S	T#	U#V		
III	- 1	V	X	Yb	J		K#	M		N	Ob	P	Qb	Rb	Sb	T	T#U	V	
III	- 2	V		X#Y		K	L		M#N	Ob	P	P#Q		R	S	T#	U#V		
IV	- 0	V		X#Y		J#K#L		M#	N#	0#P#Q		R	S		T#	U#V			
IV	- 1	V	X	Y		K	L	M	Nb	Ob	P	Q		R	Sb	T	T#	U#V	
IV	- 2	V	X	Yb	J		K#	M		N	Ob	P	P#	Q#R	Sb	T	U	V	
V	- 0	V	X	Y		K	L	M		N	Ob	P	Q		R	S	T	T#	U#V
V	- 1	V	X	Y		K	L		M#N	Ob	P	P#Q		R	S		T#U	V	
V	- 2	Xb	Yb	JbKb		Lb	M		N	Ob	P	Qb		Rb	Sb	T	U	VbXb	
VI	- 0	V	X	Y		K	L		M#N	Ob	P	Q		R	R#S		T#U	V	
VI	- 1	Xb	Yb	J		K#L	M		N	Ob	P	Qb		Rb	Sb	T	U	VbXb	
VI	- 2	V	X	Y	J		K#L		M#	N#	P	Q	Q#R		S		T#	U#V	
VII	- 0	V	X	Y		J#K#L		M#	N#	0#P#Q		R	S		T#	U#V			
VII	- 1	V	X	Y		K	L	M	Nb	Ob	P	Q		R	R#S		T#	U#V	
VII	- 2	V	X	Y		K	L		M#N	Ob	P	Q	Q#R		S		T#	U#V	
VIII	- 0	V	X	Y		K	L	M	Nb	Ob	P	P#Q		R	S		T#	U#V	
VIII	- 1	V	X	Y		J#K#L		M#	N#	P	Q	Q#R		S		T#	U#V		
VIII	- 2	V	X	Y		K	L		M#N	Ob	P	Q		R	R#S		T#	U#V	
IX	- 0	V	X	Y	J	K	L		M#	N#	0#P#Q		R	S		T#	U#V		
IX	- 1	V	X	Y		K	L		M#N	Ob	P	Q		R	S	T	T#	U#V	
IX	- 2	V	X	Y		K	L		M#N	Ob	P	P#Q		R	S		T#	U#V	
2m	+ .	3M	+----- .	4	+----- .	6m	+-----^/^-----^- .												
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .												
6M	+-----^/^-----^- .	7M	+-----^-----^- .																
7	+-----^/^-----^- .	8	+-----^/^-----^- .																
15	+-----^/^-----^- .																		

$$X = V\# \stackrel{=}{=} A$$

I. Albrecht: 8va-Interval-Maximal 16-tone Scales on 15ma w/o Diatonic Modes and Root-8va.

# Scale/Modes Chart for Root Pitch

Yb = X# =% = A#

=====

		B	C	D	E	F	G	A		B	C	D	E	F	G	A
I - 0		Yb	J	K	L	M#N	Ob	P		Q	Q#R	S	T#	U#	X	Yb
I - 1		YbJb	K	L	M	Nb	Ob	P		Q	R	Sb	T	Ub	Vb	X
I - 2		X#Y	J	K#	M	N	0	P		Q	Rb	Sb	T	T#U	V	X#
II - 0		YbJb	K	L	M#	N#0	P		Q	R	SbTb	Ub	VbXb	Yb		
II - 1		Yb	J	K#L	M	N	0	P		Q	Rb	Sb	T	U	V	X
II - 2		YbJb	K	L	M	N	Ob	P		Q	R	S	T	Ub	Vb	X
III - 0		YbJb	K	LbMb	Nb	Ob	P		Q	Rb	SbTb	Ub	Vb	X	Yb	
III - 1		YbJbKb	Lb	M	N	0	P		Q	Rb	Sb	T	U	VbXb	Yb	
III - 2		Yb	J	K	L	M#	N#0	P		Q	Q#R	S	T#	U#	X	Yb
IV - 0		Yb	J	K	L	M	Nb	Ob	P		Q	Q#R	S	T#	U#	X
IV - 1		YbJb	K	L	M#N	Ob	P		Q	R	S	T	U	Vb	X	Yb
IV - 2		X#Y	J	K#	M	N	0	P		Q	Q#	R#S	T	U	V	X#
V - 0		YbJb	K	L	M#N	0	P		Q	R	S	T#U	Vb	X	Yb	
V - 1		X#Y	K	L	M#	N#0	P		Q	Q#R	S	T#	U#V	X#		
V - 2		Yb	J	K	Lb	M	N	0	P		Q	Rb	Sb	T	U	V
VI - 0		YbJb	K	L	M#	N#0	P		Q	R	S	T	Ub	VbXb	Yb	
VI - 1		Yb	J	K#	L#M#N	0	P		Q	Rb	Sb	T	U	V	X	Yb
VI - 2		YbJb	K	Lb	M	Nb	Ob	P		Q	R	SbTb	Ub	Vb	X	Yb
VII - 0		X#Y	K	L	M	Nb	Ob	P		Q	Q#R	S	T#	U#	V#X#	
VII - 1		YbJb	K	L	M#N	Ob	P		Q	R	S	T	Ub	Vb	X	Yb
VII - 2		YbJb	K	L	M#	N#0	P		Q	R	SbTb	Ub	Vb	X	Yb	
VIII - 0		X#Y	K	L	M#N	Ob	P		Q	Q#R	S	T#	U#	V#X#		
VIII - 1		YbJb	K	L	M	Nb	Ob	P		Q	R	SbTb	Ub	Vb	X	Yb
VIII - 2		YbJb	K	L	M#	N#0	P		Q	R	S	T	Ub	Vb	X	Yb
IX - 0		X#Y	J#K#L	M#	N#	P		Q	Q#R	S	T#	U#	V#X#			
IX - 1		YbJb	K	L	M#	N#0	P		Q	R	S	T#U	Vb	X	Yb	
IX - 2		X#Y	K	L	M#	N#0	P		Q	Q#R	S	T#	U#	V#X#		
2m	+ .	3M	+----- .	4	+----- .	6m	+-----^/^-----^- .									
2M	+-- .	3m	+----- .	5	+----- .	b5	+----- .									
6M	+-----^/^-----^- .					7M	+-----^-----^- .									
7	+-----^/^-----^- .					8	+-----^/^-----^- .									
15	+-----^/^-----^- .															

# Scale/Modes Chart for Root Pitch

Y = Jb =% = B

=====

		B	C	D	E	F	G	A	B	C	D	E	F	G	A	B															
I	- 0		Y	K	Lb	M	N	N#0	P#	Q#R	Sb	T	U	V	X#Y																
I	- 1		Y	J	K#	L#M#N	0	P#	Q#	R#S	T#U	V	X#Y																		
I	- 2		Y	J	K	L	M#	N#	0#P#	Q#R	S	T#U	Vb	X	Y																
II	- 0		Y	J	K#	M	N	0	P	P#	Q#	R#S	T	U	V	X	Y														
II	- 1		Y	K	L	M	Nb	Ob	P	P#	Q#R	S	T#	U#	V#X#Y																
II	- 2		Y	J	K#	L#M#	N#0	P#	Q#	R#	S#T#U	V	X#Y																		
III	- 0		Y	J	K#L	M	N	0	P#	Q#R	S	T	U	V	X#Y																
III	- 1		Y	J	K	L	M#	N#	0#P#	Q#R	S	T#	U#V	X	Y																
III	- 2		Y	K	Lb	M	N	0	P	P#	Q#R	Sb	T	U	V	X#Y															
IV	- 0		Y	J#K#	L#M#N	0	P#	Q#R	Sb	T	U	V	X#Y																		
IV	- 1		JbKb	Lb	M	N	ObPb	Qb	Rb	Sb	T	Ub	VbXb	YbJb																	
IV	- 2		Y	J	K	L	M#	N#	0#P#	Q#R	S	T	Ub	Vb	X	Y															
V	- 0		JbKb	Lb	M	N	Ob	P	Qb	Rb	Sb	T	U	VbXb	YbJb																
V	- 1		Y	J	K#	M	N	0	P	P#	Q#R	Sb	T	U	V	X	Y														
V	- 2		Y	J#K#L	M#	N#	0#P#	Q#R	S	T#	U#	V#X#Y																			
VI	- 0		Y	J	K#	M	N	0	P	Qb	Rb	Sb	T	T#U	V	X	Y														
VI	- 1		Y	K	L	M#N	Ob	P	P#	Q#R	S	T#	U#	V#X#Y																	
VI	- 2		Y	J	K#L	M#N	0	P#	Q#	R#S	T	U	V	X#Y																	
VII	- 0		Y	J	K#	L#M#N	0	P#	Q#R	Sb	T	U	V	X#Y																	
VII	- 1		Y	J	K#	M	N	N#0	P#	Q#	R#	S#T#U	V	X#Y																	
VII	- 2		Y	J	K#	M	N	0	P	P#	Q#	R#S	T	U	V	X#Y															
VIII	- 0		Y	J	K#	M	N	N#0	P#	Q#R	Sb	T	U	V	X#Y																
VIII	- 1		Y	J	K#	L#M#N	0	P#	Q#	R#S	T	U	V	X#Y																	
VIII	- 2		Y	J	K#	M	N	0	P	Qb	Rb	Sb	T	T#U	V	X#Y															
IX	- 0		Y	J	K#L	M	N	0	P#	Q#R	Sb	T	U	V	X#Y																
IX	- 1		JbKb	Lb	M	N	0	P	Qb	Rb	Sb	T	U	VbXb	YbJb																
IX	- 2		Y	J	K#	M	N	0	P	P#	Q#R	Sb	T	U	V	X#Y															
2m		+	+	.	3M		+	-----		.	4		+	-----		.	6m		+	-----	^/	^	-----	^		.					
2M		+	---		.	3m		+	-----		.	5		+	-----	-----		.	b5		+	-----	-----	-----	-----		.				
6M		+	-----	^/	^	-----	^	-----		.								7M		+	-----	^	-----	^	-----	-----		.			
7		+	-----	^/	^	-----	^	-----		.								8		+	-----	^/	^	-----	^	-----	-----		.		
15		+	-----	^/	^	-----	^	-----	^/	^	-----	^/	^	-----	^/	^	-----	-----	^/	^	-----	^	-----	^/	^	-----	^/	^	-----		.