

Detesto Charts for Slim Heilpern's U12

The first page is my copedent, mostly the standard Newman universal setup, but with the top 3 strings reordered, right knee levers reversed, and an extra left knee lever added that I use occasionally.

The following 12 pages show all the possible intervals for a given root in open position.

Parenthesis show the split intervals.

Blue boxes are lowers and orange boxes are raises.

Background:

A number of years back when I was waiting for delivery of my first pedal steel, I purchased all of these old Steel Guitarist magazines and while reading them all front to back I came across this article titled "Here Come Detesto Numbers" (Steel Guitarist #5, May 1980, page 42) that has been a tremendous help to me, given that I only (so far) use pedal steel on recording projects and we do a lot of tunes with complex chord changes.

Early on in my PSG journey, I attempted to use various pedal steel chord charts to find my way around, but I found this approach to be somewhat inadequate. I'm often looking for rootless voicings, or ways to slide from one voicing to another on the same strings. What's most helpful to me is to decide on a particular voicing that I think will work well and then hunt for that voicing on the axe. And this is where the Detesto charts are extremely helpful.

The idea is to create one chart for each possible chord root (IOW, 12 charts). I just use a tabbed spreadsheet for this, one tab for each possible root. I'm using a U12 E9/B6 tuning and all the charts are based on open tuning (no bar).

Each chart assumes a different note as being the root by which all intervals are compared to. And all intervals are expressed in number form (I use 1, b9, 9, b3, 3, 4, b5, 5, b6, 6, b7, 7). Each chart is similar to a copedent chart but using numbers instead of note names. For instance, for the "E Root" chart, looking at my 5th string, I can see that my vertical lever takes it from a fifth to a flatted 5th. But on the "F Root" chart, it takes it from a flatted 5th to a 4th, and so on.

Why is this helpful? Because if, for instance, I'm looking for all possible ways to play a chord that's constructed as 3, b7, 9, I simply scan each chart looking for where those intervals can be found on the axe. The time this has saved me has made the initial time investment of creating the charts insignificant.

Hopefully, viewing the attached PDF will explain this better than I'm able to do with words :-). Obviously, this approach is not for everyone, but it has been a huge help to me and thought I should share in the event it helps someone else as well.

And, of course, big thanks to Frankie Detesto and George Estes, who wrote the article on this back in 1980!

- Slim

Copedent - Slim's E9/B6 U12 (rev 3)

U	E9	B6	String Name	String Deg (E Root)	←r	←f	↑ (x)	→ (g)	P1 (A)	P2 (B)	P3 (C)	P4 (8)	P5	P6	P7	← (d or e)	→ (f)
1	2	1	D#	7	D -1											C# -2	
2	3		G#	3					A +1								
3	1		F#	9				G +1									
4	4	2	E	1		Eb -1					F# +2 (R←F+1)			F +1 (R←E+0)		Eb -1	F +1
5	5	3	B	5			A# -1		C# +2 (↑C+1)		C# +2 (↑C+1)					C# +2	
6	6	4	G#	3				F# -2		A +1 (L→G-1)						A# +2	
7	7	5	F#	9									F -1				
8	8	6	E	1										D -2		Eb -1	F +1 (p6-Eb-1)
9	10	7	B	5	D +3				C# +2			C +1					
10		8	G#	3						A +1							
11		9	E	1								D# -1	F +1				F +1 (p4-E??)
12		10	B	5								G# -3	C# +2				

C Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	b3	9											b9	
2	G#	b6						6							
3	F#	b5					5								
4	E	3		b3					b5 (R→4)			4 (R←3)		b3	4
5	B	7			b7		b9 (↑1)		b9 (↑1)				b9 (↑1)		
6	G#	b6				b5		6 (L→5)					b7 (L→b6)		
7	F#	b5									4				
8	E	3										9		b3	4 (p6-b3)
9	B	7	9				b9			1					
10	G#	b6						6							
11	E	3								b3	4				4 (p4-3)
12	B	7								b6	b9				

Db Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	9	b9											1	
2	G#	5						b6							
3	F#	4						b5							
4	E	b3		9					4 (R→3)			3 (R←b3)		9	3
5	B	b7			6		1 (17)		1 (17)					1 (17)	
6	G#	5				4		b6 (L→b5)						6 (L→5)	
7	F#	4									3				
8	E	b3										b9		9	3 (p6-9)
9	B	b7	b9				1			7					
10	G#	5						b6							
11	E	b3								9	3				3
12	B	b7								5	1				

D Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	b9	1											7	
2	G#	b5						5							
3	F#	3				4									
4	E	9		b9					3 (R→b3)			b3 (R←9)		b9	b3
5	B	6			b6		7 (1b7)		7 (1b7)				7 (1b7)		
6	G#	b5				3		5 (L→4)					b6 (L→b5)		
7	F#	3									b3				
8	E	9										1		b9	b3 (p6-b9)
9	B	6	1				7			b7					
10	G#	b5						5							
11	E	9								b9	b3				b3
12	B	6								b5	7				

Eb Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	1	7											b7	
2	G#	4						b5							
3	F#	b3				3									
4	E	b9		1					b3 (R→9)			9 (R←b9)		1	9
5	B	b6			5		b7 (16)		b7 (16)					b7 (16)	
6	G#	4				b3		b5 (L→3)						5 (L→4)	
7	F#	b3									9				
8	E	b9										7		1	9b3 (p6-1)
9	B	b6	7				b7			6					
10	G#	4						b5							
11	E	b9								1	9				9
12	B	b6								4	b7				

E Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	7	b7											6	
2	G#	3						4							
3	F#	9							b3						
4	E	1		7					9 (R→b9)			b9 (R←1)		7	b9
5	B	5			b5		6 (1b6)		6 (1b6)					6 (1b6)	
6	G#	3				9			4 (L→b3)					b5 (L→3)	
7	F#	9										b9			
8	E	1											b7	7	b9 (p6-7)
9	B	5	b7					6			b6				
10	G#	3							4						
11	E	1								7	b9				b9
12	B	5								3	6				

F Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	b7	6											b6	
2	G#	b3						3							
3	F#	b9					9								
4	E	7		b7					b9 (R→1)			1 (R←7)		b7	1
5	B	b5			4		b6 (15)		b6 (15)					b6 (15)	
6	G#	b3				b9		3 (L→9)						4 (L→b3)	
7	F#	b9									1				
8	E	7										6		b7	1 (p6-b7)
9	B	b5	6				b6			5					
10	G#	b3						3							
11	E	7								b7	1				1
12	B	b5								b3	b6				

Gb Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	6	b6											5	
2	G#	9						b3							
3	F#	1						b9							
4	E	b7		6					1 (R→7)			7 (R←b7)		6	7
5	B	4			3		5 (↑b5)		5 (↑b5)					5 (↑b5)	
6	G#	9				1			b3 (L→b9)					3 (L→9)	
7	F#	1									7				
8	E	b7										b6		6	7 (p6-6)
9	B	4	b6				5			b5					
10	G#	9							b3						
11	E	b7								6	7				7
12	B	4								9	5				

G Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	b6	5											b5	
2	G#	b9						9							
3	F#	7				1									
4	E	6		b6					7 (R→b7)			b7 (R←6)		b6	b7
5	B	3			b3		b5 (14)		b5 (14)				b5 (14)		
6	G#	b9				7		9 (L→1)					b3 (L→b9)		
7	F#	7									b7				
8	E	6										5		b6	b7 (p6-b6)
9	B	3	5				b5			4					
10	G#	b9						9							
11	E	6								b6	b7				b7
12	B	3								b9	b5				

Ab Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	5	b5											4	
2	G#	1						b9							
3	F#	b7				7									
4	E	b6		5					b7 (R→6)			6 (R←b6)		5	6
5	B	b3			9		4 (13)		4 (13)					4 (13)	
6	G#	1				b7		b9 (L→7)						9 (L→1)	
7	F#	b7									6				
8	E	b6										b5		5	6 (p6-5)
9	B	b3	b5				4			3					
10	G#	1						b9							
11	E	b6								5	6				6
12	B	b3								1	4				

A Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	b5	4											3	
2	G#	7						1							
3	F#	6					b7								
4	E	5		b5					6 (R→b6)			b6 (R←5)		b5	b6
5	B	9			b9		3 (↑b3)		3 (↑b3)					3 (↑b3)	
6	G#	7				6		1 (L→b7)						b9 (L→7)	
7	F#	6									b6				
8	E	5										4		b5	b6 (p6-b5)
9	B	9	4				3			b3					
10	G#	7						1							
11	E	5								b5	b6				b6
12	B	9								7	3				

Bb Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	4	3											b3	
2	G#	b7						7							
3	F#	b6					6								
4	E	b5		4					b6 (R→5)			5 (R←b5)		4	5
5	B	b9			1		b3 (f9)		b3 (f9)					b3 (f9)	
6	G#	b7							7 (L→6)					1 (L→b7)	
7	F#	b6									5				
8	E	b5										3		4	5 (p6-4)
9	B	b9	3				b3			9					
10	G#	b7						7							
11	E	b5								4	5				5
12	B	b9								b7	b3				

B Root (open position)

String #	String Name	String Deg	←r	←f	↑	→	P1	P2	P3	P4	P5	P6	P7	←	→
1	D#	3	b3											9	
2	G#	6						b7							
3	F#	5						b6							
4	E	4		3					5 (R→b5)			b5 (R←4)		3	b5
5	B	1			7		9 (1b9)		9 (1b9)					9 (1b9)	
6	G#	6				5		b7 (L→b6)						7 (L→6)	
7	F#	5									b5				
8	E	4										b3		3	b5 (p6-3)
9	B	1	b3				9			b9					
10	G#	6						b7							
11	E	4								3	b5				b5
12	B	1								6	9				