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Harmonic Alchemy: Face The Diminished

by Guy Pople

Introduction

I introduced one of the Diminished family, the dim 7th chord, in part 1 of the Harmonic Alchemy series, "Mining for Precious Chords", and elucidated its role as a svelte non-diatonic 'chord substitution'. In this article I will take a much closer look at the 'diminished' sound and its theoretical sources.

Specifications

Diminished chords are so named because of the presence of the following unique intervals i.e. their thirds & 5ths are flat (minor 3rd and diminished 5th respectively). For this reason they are often called 'minor flat 5 chords'. The diminished family includes the following chords: mb5, m7b5, m6b5 (or mbb7b5, -, dim7th), mb9b5, m11b5, mb13b5, m13b5.

Vibe

These intervals create a tense dissonance and peculiar sonority. Pick through the F# mb5 below, letting the intervals ring into one another (novices are too keen to 'strum' a new find and dismiss it outright):

E	2
B	1
G	2
D	4
A	
E	
F#m b5	

Notice it's strange but appealing vibe. This atmosphere is the playground of modern horror/thriller sound designers and was once where the likes of Bach and Mozart went to seek representation of anguish. Download this [informative article \(pdf\)](#) , pages 8-17.

Now play a G major before it and an Em after

E	3	0
B	3	0
G	4	0
D	5	2
A		
E		

E		
G	Em	

The weirdness dissipates as it slots right in, fit for purpose as a leading chord. In this way the dim chord can be used independently for its eldritch qualities, or as a team player.

Source

The natural diatonic source for the diminished triad (R b3 b5) is the Locrian Mode because its tonic triad is diminished i.e. F# Locrian in the key of G or Em is spelled: F# G A B C D E and its tonic triad is F# A C. The interval between F# and A is a b3 and between F# and C is a b5 (also known as a tritone or augmented 4th). Note there is a b3 between the A and C so you could perceive the triad as a pair of b3rds stacked.

The b3, b5 combination also emerges by virtue of the Harmonic Minor scale. Staying in the key of Em, and sharpening D (E F# G A B C D#) reveals 3 more instances of the diminished triad- A Dorian (A C D#), C Lydian (C D# F#) and D# Mixolydian (D# F# A).

Similarly, the E Melodic Minor scale (E F# G A B C# D#) reveals a dim triad on the C# (C# E G). The dim triad above (F# A C) is also a feature of the following scales:

- 1) F#m Blues: F# A B C Db E
- 2) F# 1/2 whole diminished: F# G A A# C C# D# E
- 3) F# whole 1/2 diminished: F# G# A B C D D# E
- 4) F# Chromatic

Shapes

Here are the shapes of F# dim based on the CAGED system (note: some of these shapes require angled bars):

E	9	8		8		2	5
B	7	10	10	10	1	1	7
G	5	11	11	11	2	2	5
D	7	10	10		4	4	4
A	9	9	12		3		
E			14		2		
C	A	G	G	E	E	D	

The dim 7th chord mentioned in the intro is a diminished triad chord extended by a 6th or bb7th (F# A C + D#). This extended dim chord also goes by the following monikers e.g. F#mb5 bb7, F#0, F# -. This is also the most common diminished chord. Indeed, most folk aren't aware of the rest of the family so I have prepared a few other extensions taken from the Locrian Mode:

E				5		2
B	10	8		0		1
G	9	11		5		2
D	10	10		4		0
A	9	9				
E						2

F#m7b5	F#mb5b9 no3rd	F#mb5add11	F#mb5 b6
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The F#m7b5 is known as a 'half-diminished', which is odd considering it has an authentic diminished triad.

Miscellaneous

Here's a shortcut to a dim7 chord. If you raise the root of a dom 7th you get a dim 7th e.g. raise the F in F7 (F A C D#) to F# (F# A C D#).

E		
B	10	10
G	8	8
D	10	10
A	8	9
E		
F7	F#dim7	

In this way you can re-use the common dom7 shapes to produce dim7ths.

A dim7th chord can also be seen as an inversion of a Dom7 b9, e.g.

E		
B		10
G	8	8
D	10	10
A	9	9
E	10	
D7 b9	D7 b9 / F#	

Refer to my previous Harmonic Alchemy articles to see how this knowledge can be used to inform chord substitutions.

Conclusion

I hope this article has cast the diminished chord in a favourable light and will encourage you to explore its intriguing qualities further.

Read the standard version of this column online at: <https://www.guitar9.com/columnist595.html>

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