## THE HALF-DIMINISHED

The half-diminished chord (a minor seventh chord with a flattened fifth) occurs as a four-note chord on the seventh degree of the major scale, on the second degree of the harmonic minor scale and on the sixth and seventh degree of the ascending form of the melodic minor scale. I'm sure you really wanted to know that.

It's surprising then that in spite of it's long and prolific pedegree, it isn't found in many of the older standards. Instead, we find plenty of instances of a minor sixth chord on the subdominant, leading to the dominant seventh on the dominant - IVm6 V7. Somewhere in the course of history, the third inversion of this chord gained favour giving the stronger  $\Pi^{\varnothing}$  V7 progression.

This seemingly useless bit of information however is relevant because one of the scales used for this chord is the minor melodic scale (ascending form), a minor third higher (eg. Fm for a  $D^{\emptyset}$ ). Additionally, notes that can be added to this chord can be taken from this scale, so for a  $D^{\emptyset}$  you can add the E (major 9th), G (11th) and Bb (minor 13th).



The chord can also be derived from the major scale a semitone above, eg. Eb for a  $D^{\emptyset}$ , in which case these are the extensions:



The chord also comes from the harmonic minor scale a tone down, giving the following extensions:



To summarise then, the extensions which apply to the chord are: the 11th, the 9 or b9 and the 13 or b13. The 13/b13 is not always added.

The usual scales which can apply are: the melodic minor (ascending form) a minor 3rd above; the major scale a semitone above; the harmonic minor a tone below.

Exactly which scale and which extensions to use depends on the context (the surrounding sequence). The flattened ninth would be used more in a  $II^{\emptyset}$  V7 Im involving one of the minor scales shown above, whereas the natural ninth would tend to be used in a  $II^{\emptyset}$  V7 I.

It's also possible to play more than one scale over the chord depending on whether it's an ascending or descending passage, much like the full melodic scale. Going up you could use the major 9th and major 13th; coming down, the minor 9th and minor 13th.

To get a more exotic sound the Middle-Eastern/Gypsy/Arabic scale a semitone below the root of the chord could be used:



This one needs to be treated with care.

Pentatonic scales (which are really only shortened forms of full length scales) can apply too, for instance, Fm69 in place of Fm scale.

The half-diminished chord is quite often found on a root-note a perfect fifth lower than the chord, eg.  $D^{\emptyset}/G$  sometimes written as  $D^{\emptyset}$  (G bass). This can take the place of the two chords  $II^{\emptyset}$  V7 ( $D^{\emptyset}$  G7).

A half-diminished chord can be substituted for a tonic chord a tritone away -D<sup>Ø</sup> in place of a Ab<sup>Δ</sup>. It can also be a substitute for a dominant 9th -D<sup>Ø</sup> in place of a Bb9, or sometimes a Bbm9, and as a substitute for a minor chord on IV -D<sup>Ø</sup> in place of an Fm6 or Fm69 or sometimes an Fm7.

In progressions, any half-diminished can follow another half-diminished. *I Got Rhythm* using a few consecutive half-diminished chords could take this form: | Bb Bo | Cm7 C#o | Dm7 Gm7 | E<sup>Ø</sup> Eb<sup>Ø</sup> | D<sup>Ø</sup> G7 | Ebm7 Ab7 |Cm9/F C<sup>Ø</sup>/F | Bb ||