

Jazz Theory: The Diminished Scale

by Dennis Winge

The diminished scale is alternating whole and half steps (8 note scale), while the whole tone is all whole steps (6 note scale). The diminished scale can be looked at from two perspectives: whole-half and half-whole.

- A. The whole-half (WH) is what is commonly referred to as the regular diminished scale, and in the key of C goes c d eb f f# g# a b. So that's what you would play over a C diminished chord; but there is a lot more to the story. Because the scale is symmetrical, every other note will yield the same results. In other words, over an Eb dim you would play eb f f# g# a b c d – the same 8 notes. In fact, the same would be true for Gb and A as well. Also, the diminished 7th chord itself has the exact same notes in it whether you start on C, Eb, Gb or A.

C dim7 = c, eb, gb, a
Ebdim7 = eb, gb, a, c
Gbdim7 = gb, a, c, eb
Adim7 = a, c, eb, gb

What this means is there are only 3 diminished scales. This is because one of them covers one group of 4 starting points out of our 12 notes, so there are only 3 groups total. Getting to know the groups will greatly enhance your facility with diminished scale usage. The groups are:

1. C° = Eb° = Gb° = A°
2. Db° = E° = G° = Bb°
3. D° = F° = Ab° = B°

An example of how getting to know the groups can help is if you were in a C blues, and on bar 6 the band played F#dim. You would know that this is the same as C° and that might make it easier. Famous examples of this type of diminished chord are in All the Things You Are and Chelsea Bridge, just to skim the surface.

- B. The other type is half-whole or HW. If you had a C7b9, you could play (while the bass plays C) db e g bb – the b9, 3, 5, & 7 of the chord – which is one of the groups above! Indeed, there is a strong connection between diminished and dominant chords. If you played the notes of a Db diminished scale over a C7b9 chord it would fit great, but technically since C is the root, your use of the scale would be HW. That being said, it is not necessary to think about it as two separate scales: simply target the b9, 3, 5 or 7 and play your regular diminished scale. Then you won't have to think "should this be WH or HW?" Just think WH only.

Of course the big question is, “How do I know when a diminished chord is a dominant b9 chord in disguise?” It has to do with the function of that chord. In *Have you Met Miss Jones*, it goes | F | F#dim | Gm | C7 |. The function of the diminished chord is the same as if it said D7b9 instead. Play it and you’ll hear this easily. The function of the diminished chord is as a V to wherever the harmony is moving to. In this case it’s acting as a V chord to Gm. Notice the root of the dim chord is a major third above the chord it is substituting for: this is very commonly the case. Why didn’t they just write D7b9? Because it provides smooth voice leading in the bass.

The implications of this are huge. Now you can make any dominant chord that is acting as a V to the next chord, target its b9, 3, 5 or 7 and play diminished harmony. This can be done even if the 7th chord does not specify b9 (and as long as the melody doesn’t prevent it). An example is:

C7b9 **Fmaj7**

The image shows a musical example of a dominant chord (C7b9) resolving to a major chord (Fmaj7). The notation includes a treble clef staff with a melody and a guitar tablature staff. The melody consists of the notes G, A, Bb, G, F, E, D, C. The bass line is indicated by numbers on a six-line staff: 3-8-6-3-1 | 0-4-2-1 | 3-2-0 | 4 | 5.

There are many great patterns for the diminished scale. To get you started, two of them are below. Try playing them over a C7b9, for example.

The image shows two examples of diminished scale patterns. The notation includes a treble clef staff with two melodic lines and a guitar tablature staff. The first melodic line consists of the notes G, A, Bb, C, D, Eb, F, G. The second melodic line consists of the notes G, Ab, Bb, C, D, Eb, F, G. The bass line is indicated by numbers on a six-line staff: 1-0-1 | 3-2-1-0-2 | 4-3-2-4-1-0 | 4-1 | 3.

1 2 3

T
A
B

3 2 1 4 1 0 4 2 4 3 2 0 2 1 0 3 1

3 2 1 4 4

Detailed description: The image shows a musical score for guitar. The top staff is a treble clef staff in 4/4 time, containing a melodic line with three measures. The first measure starts with a first-finger fingering (1) and contains a quarter note G4, an eighth note F4, a quarter note E4, and a quarter note D4. The second measure starts with a second-finger fingering (2) and contains a quarter note C4, an eighth note B3, a quarter note A3, and a quarter note G3. The third measure starts with a third-finger fingering (3) and contains a quarter note F3, an eighth note E3, a quarter note D3, and a quarter note C3. The bottom staff is a guitar tablature staff with six lines. The strings are labeled T (top), A, and B (bottom). The tablature shows fret numbers and fingerings for each string across the three measures. In the first measure, the B string has frets 3, 2, 1, 4 with fingerings 3, 2, 1, 4; the A string has frets 1, 0, 4, 2 with fingerings 1, 0, 4, 2; and the T string has fret 4 with fingering 4. In the second measure, the B string has frets 4, 3, 2 with fingerings 4, 3, 2; the A string has frets 0, 2, 1, 0, 3 with fingerings 0, 2, 1, 0, 3; and the T string has fret 4 with fingering 4. In the third measure, the B string has fret 1 with fingering 1; the A string has fret 1 with fingering 1; and the T string has fret 1 with fingering 1.