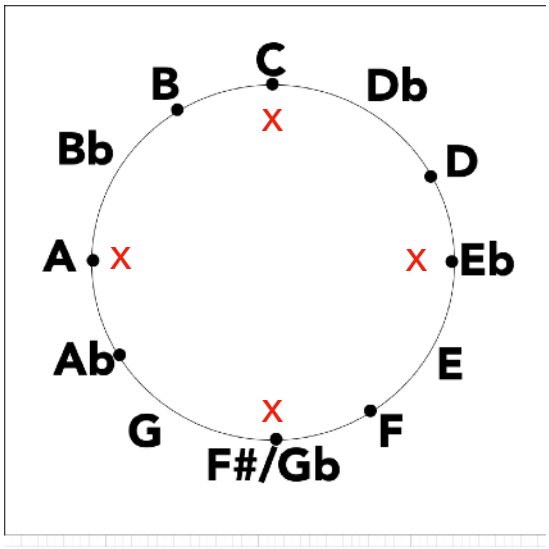
Rob's Piano Room - Module 18 - PDF
Diminished Seventh Chords

Main points

As with the previous module, it would be good to learn the various diminished seventh chords one or two at a time, familiarizing yourself with each before going on

The diminished 7th chord is a symmetrical chord , meaning it has the same interval (a minor third) between all notes.



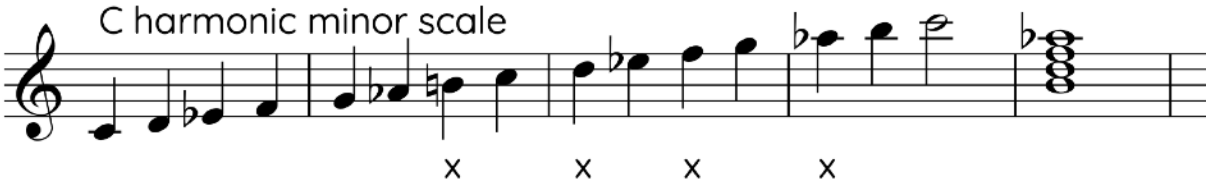
It can be handy to view it on a 'clock' of our twelve chromatic notes in order to see this more clearly. The red x's show the 4 notes of the diminished scale, showing how each note is 3 semitones away from the next.

The other way to find a diminished chord is to find a diminished triad first (which is found by lowering the 3 and 5 of a major triad), then adding a 'diminished seventh' (same as a major 6th) on top.

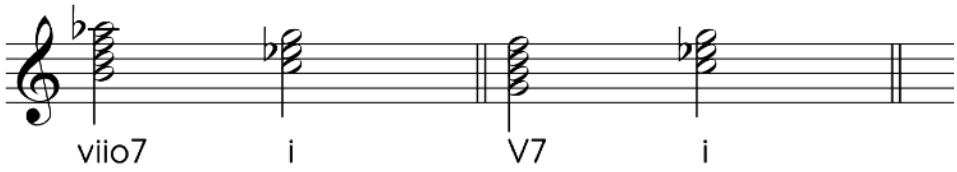
So, in C, find the C,Eb,Gb, then add the A on top. You can then double check to see if you are correct by checking for the 3 semitones between each note.

The symbol for the diminished 7 is the note name plus 'o7'

The diminished seventh chord is derived from the seventh degree of the harmonic minor scale as shown



A typical (though not the only) resolution for a diminished seventh chord is up a semitone, to a major or minor triad. It is important to know that a diminished seventh chord resolving up a semitone in this way is acting like a dominant (or secondary dominant) chord, as those two usages share many notes , as we see here-



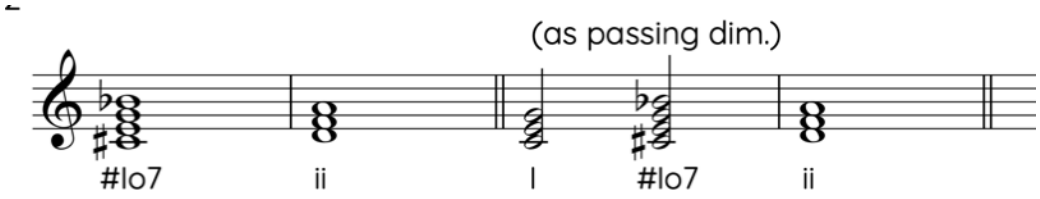
Some diminished seventh chords are not acting as a dominant and are used because of the way the individual notes lead to the next chord. These are referred to as chromatic diminished seventh chords.

Our diminished sevenths will have a chord they will resolve to, which is the most important thing to notice. We will often find that the diminished chord seems to lead from one chord to another. This is referred to as a passing diminished. (Even in this case the resolution of the diminished chord is the most crucial part.) We will see many examples of the passing diminished below.

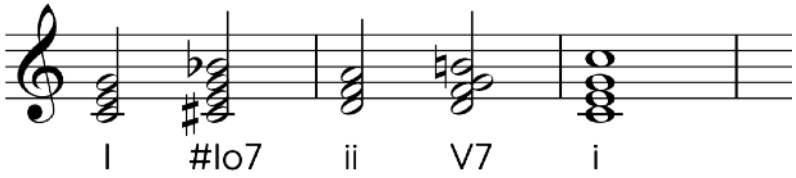
Let's now look at these one by one

#1o7

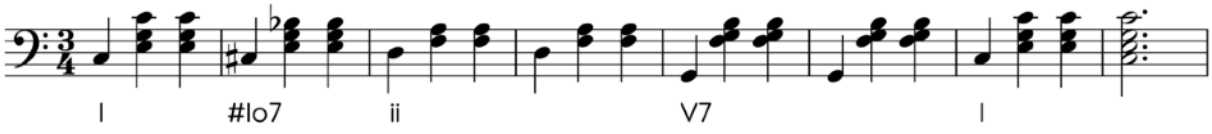
The #1o7 (for example C#o7 in C major) wants to move to the ii chord, acting as a secondary dominant. We will often see it acting as a passing diminished between I and ii.



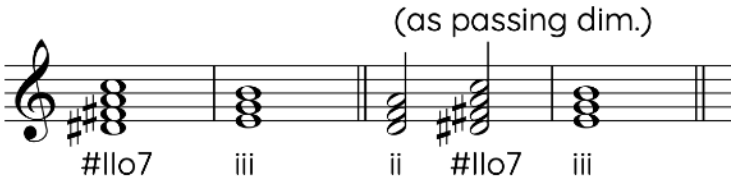
Here it is with a few more chords to finish off a short chord progression



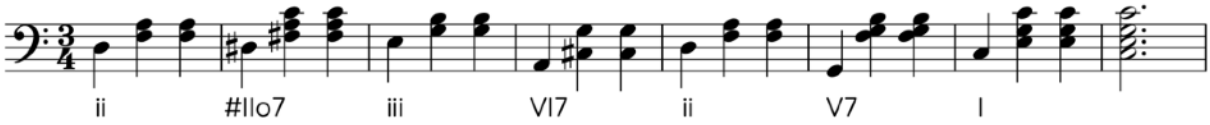
And here is this progression, with a modified harmonic rhythm, in the left hand, so you can practice adding melodies overtop. For now just use chord tones for the diminished chord.(As always feel free to plav in 3/4, or as held chords without a time signature for practice, etc.)



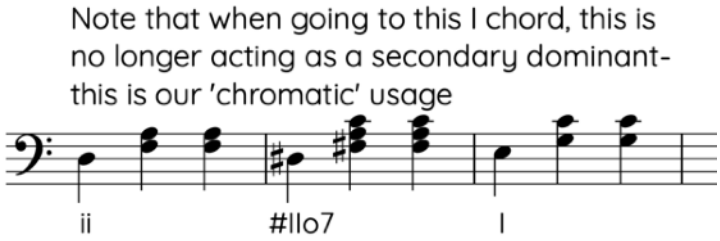
Our next example is #IIo7 (D#o7 in C major) This one has a secondary dominant usage, as well as a chromatic usage. Here is the secondary dominant version first resolving to the iii-



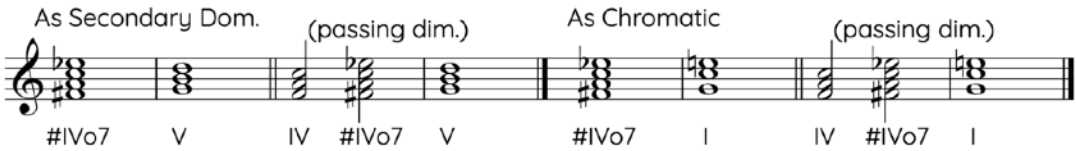
Notice it can be seen as a passing diminished between ii and iii
Here is a more complete chord progression using #II diminished, for your melody practice.



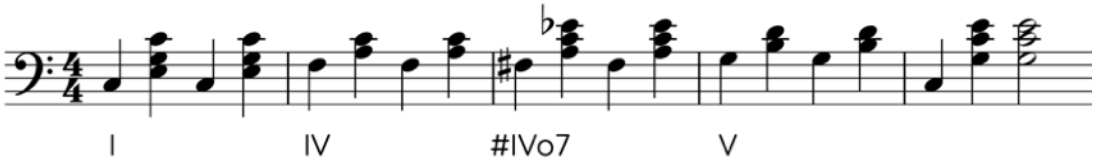
Here is our chromatic usage. Rather than going to iii, it moves to an inversion of I. Notice the root movement is still up a semitone, it just doesn't move to a root position chord. Try making this change in the above progression.

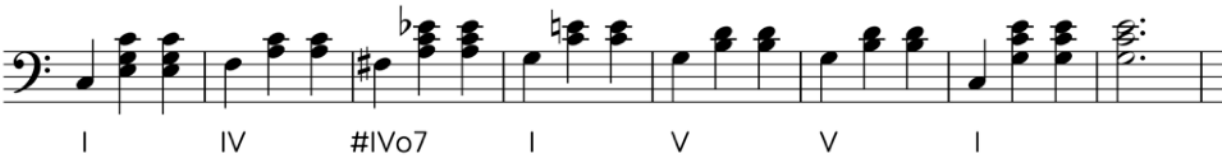


Next we will see #IVo7, which also has both a secondary dominant and chromatic version. In this case the secondary dominant version leads to V (or V7), and again the chromatic version leads to an inversion of I. Note their uses as passing diminished.

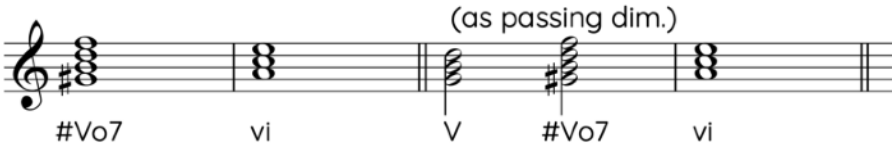


Here is each in a short progression for your melody practice.

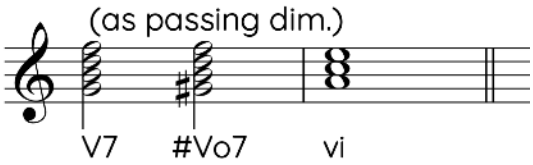




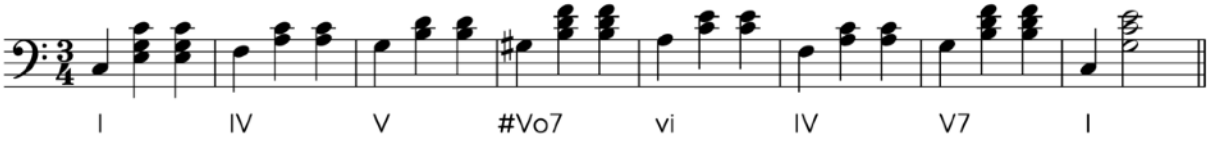
Next let's look at #Vo7. This one only has a secondary dominant use, resolving to vi.



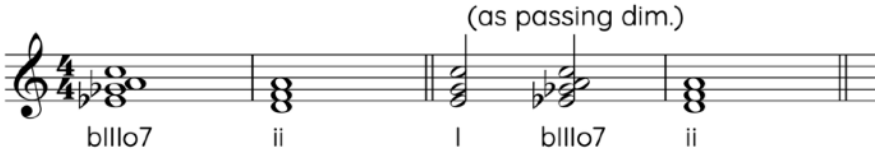
It's good to see how this chord works as a passing diminished from V7. Notice only one note changes!



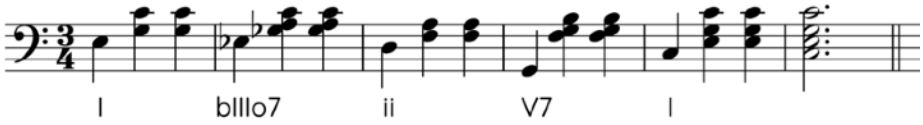
Here is a short progression using this chord



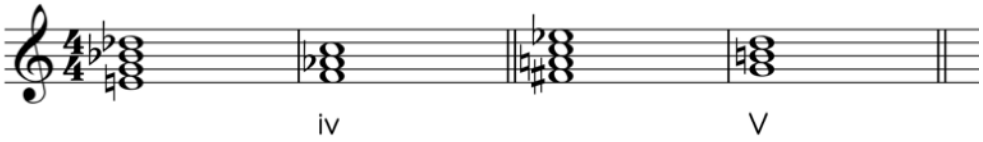
Up to now we have only looked at chords in which the bass note is rising. There is one common example where the root descends. We are going to refer to it as the bIIIo7. (It is the same as the #IIo7, but as it is falling to ii its's nice to call it bIII so we have a change of letter name as it resolves - but it is the same chord.) This is considered a chromatic usage.



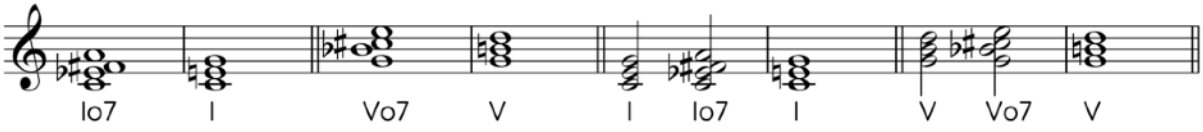
And here it is in a short progression



Here are the most common diminished chords used in a minor key, resolving to the iv and the V, as secondary dominant usages.

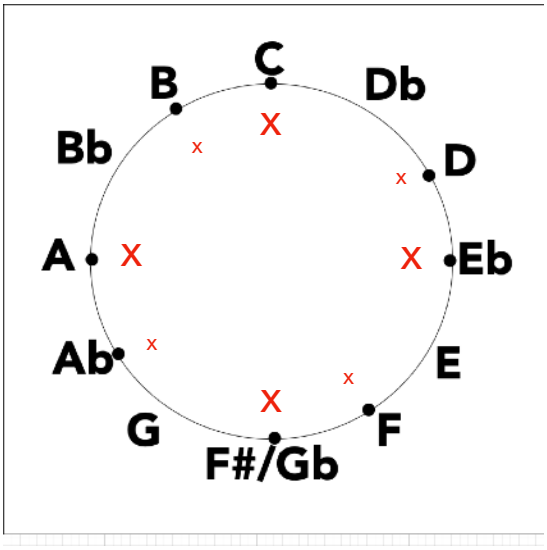


There is one other kind of diminished seventh usage to look at, referred to as the auxiliary. This chord resolves to a major or minor chord of the SAME root. (And is often preceded by the same chord it removes to. This most commonly occurs on the I or V, although others are possible



These are particularly nice to prolong a chord. If you want to stay on I for a while, for example, you might move to the diminished and back on the same root, giving colour without root movement. Or you might start on I diminished for an unusual colour, and resolve to I afterwards.

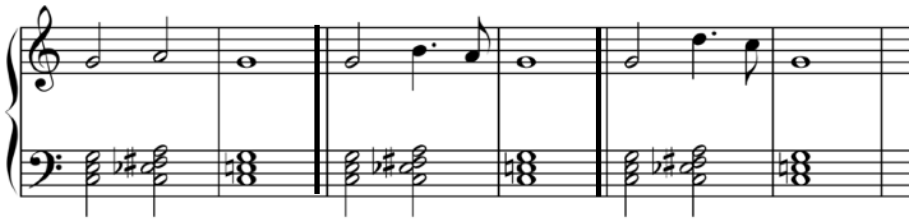
Since we are discussing the diminished chord, it would be good to discuss the ‘diminished scale’ as well to show some very lovely colour notes that can be used on the diminished chord. The diminished scale is comprised of the 4 notes of the diminished 7th chord, plus the note a semitone below each chore tone, for a total of 8 notes. (Notice that we could see this as a tone above each chord note if we wanted - to clarify this let’s revisit our diagram, adding the new notes



These four added notes can be used as colour notes overtop of your diminished chord, often replacing one of the chord notes. Not every one will work in every situation, so this will require some trial and error

Here are a few examples of this

This example first shows a chord tone in the melody over the diminished chord, the shows two colour note possibilities.



When finding passing tones, etc on your diminished seventh chords, you may find other possibilities other than those offered by the diminished scale, so let your ear be the guide.