

Dr. DeMotta's Introduction to Barry Harris-style diminished 6th harmony.

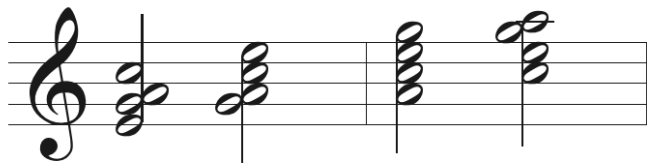
Diminished sixth harmony uses two alternating chords to harmonize scalar movement in various ways.

It's helpful to start learning this harmony by playing a major scale with passing tone (G#) between degrees 5 (G) and 6 (A):



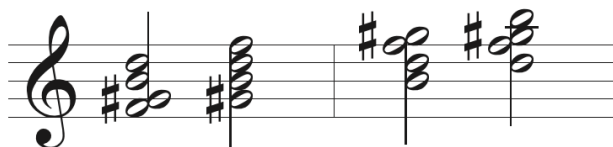
Notice that half of the pitches in this scale (C,E,G,A) combine to form a C major 6th chord (which shares the same pitches with the A minor 7th chord).

Inversions of Cmaj6th and/or Amin7



The four remaining pitches of the scale combine to form a fully diminished seventh chord enharmonically equivalent to Bdim7, Ddim7, Fdim7, and G#dim7. (I chose to spell the chromatic pitch as G# to more clearly illustrate the scale in ascending motion, but it can be thought of as Ab when more convenient).

Inversions of diminished chord:



By lowering the 3rd degree of the scale, the same effect can apply to minor:



Back to major: because every scale degree can be harmonized with an inversion of one of these two chords, a “scale of chords” can be constructed by alternating major 6th and diminished 7th chords. Fragments of this scale are often used in to harmonize scalar patterns.

scale harmonized with alternating major 6th and diminished chords

To get a more robust sound, use the “drop 2” technique, meaning take the 2nd highest note in each chord and lowered it an octave, creating parallel 10ths in outer voices. This works well with four-horn writing, where the lowest horn (baritone saxophone, for example) can play the voice that was dropped.

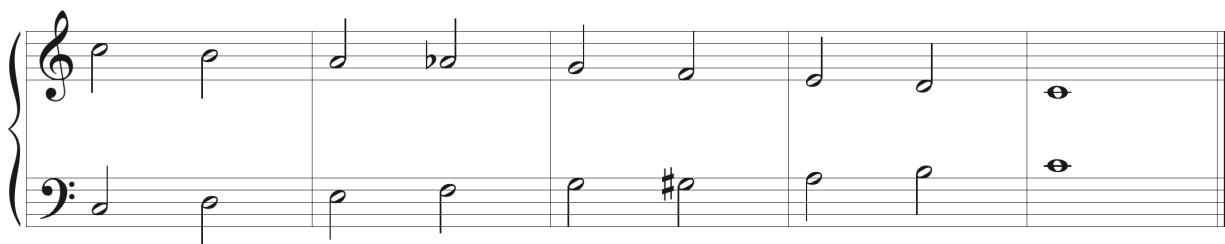
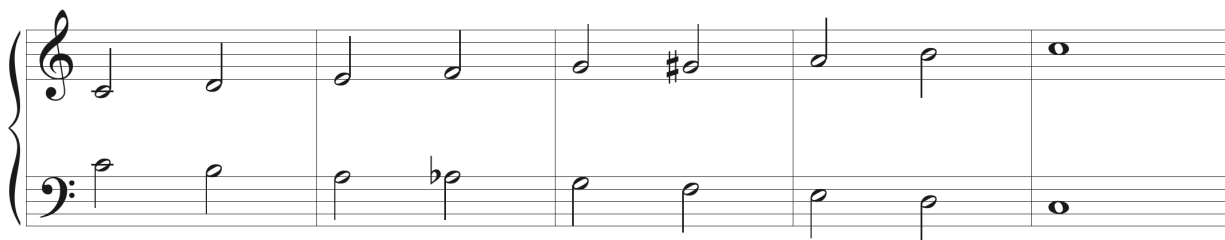
scale harmonized with alternating major 6th and diminished chords, "drop 2"

Apply the above scale of chords and its drop-2 version to minor by lowering all E-naturals to E-flats.

In addition to its usefulness harmonizing stepwise melodic fragments, this technique can be applied to chord progressions. It’s extremely helpful to pianists when comping and to arrangers writing horn backgrounds, etc.

both hands 8vb

Additionally, diminished sixth harmonic techniques can be used to elaborate individual chords within a progression and/or to provide motion that helps connect chords in a progression. (it's also useful for modulating to distant keys). The first step in using it for these purposes is to play the scale in contrary motion. Practice the major and minor versions of the scale in contrary motion (major shown below, minor not shown).



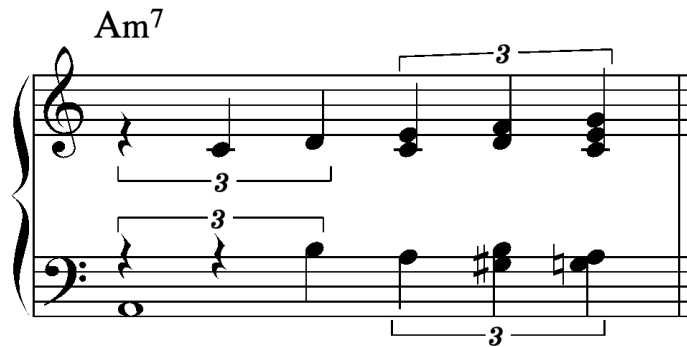
Next, practice this contrary motion version with each chord “filled in” between the outer notes. Here is the major version (with E naturals):



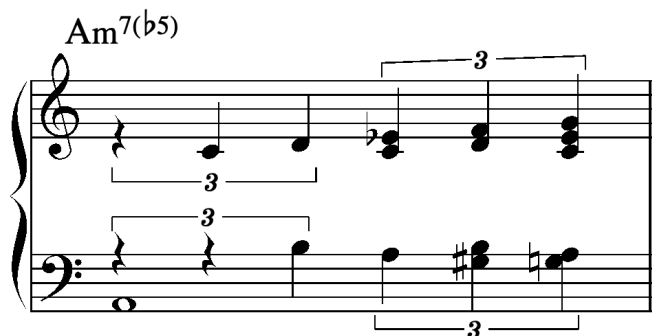
Here is the minor version (with E flats)



In this contrary-motion scale from C, the C can be thought of as either the tonic of a C major sixth or as the third degree of an A minor chord. Thinking this way, a portion of the contrary motion scale can be used to elaborate a minor chord from the third degree.



If we use the “minor” version of the scale (replacing the E-naturals with E-flats) the same pattern elaborates a half-diminished seventh chord (a.k.a. min7b5).



Advanced diminished 6th exercise:

The following example is an advanced exercise that combines parallel and contrary diminished sixth techniques into a descending fifths sequence (aka II-7 V7 sequence). The chord symbols are written to orient the reader to key centers and are not meant to be played or even taken literally. Notice how I connect the first 4 measures, which end on Eb major (elaborated with the scale), to the second four, which once again begin on A minor: The vii diminished 7th of Eb is enharmonically equivalent to that of A minor. Also notice the drop-2 technique alternating with drop-3 technique in mm. 5, 6, and 7 (tricky). Finally, I end the exercise on an Eb diminished chord. This is a “common-tone diminished resolution.” Practice this in all keys until fluent. After that, try it using Am7b5, Gm7b5, and Fm7b5 and the minor versions of the scale to elaborate those chords in the first 4 measures. Then think about this: if we started measure 5 of this exercise on Am7b5, which shares the same pitch content as Cm6, then mm4-5 would sound like a deceptive cadence to vi!

rubato Am7 D7 Gm7 C7 Fm7 Bb7

4

Ebmaj Am D7 Gm7 C7

7

Fm7 Bb7 Ebmaj