

Exercise

Given below are the bass notes for five triad voicings that will be played by your instructor. These may include the augmented triad, which is always voiced in root position. For each triad, identify the quality (**Q**), soprano factor (**S**), and inversion or bass factor (**I**), and add the three upper voices. The triads will exhibit a wide range of spacings, and each will be played four times: twice as a blocked chord, once as an arpeggio (allowing the listener to focus more actively on the specific interval structure of the voices above the bass), and the final time as a blocked chord again.

Triad Exercise 17-1

Q	M	m	dim	Aug	m
S	3	r (6)	r (6)	5	3
I	r (5)	5 (4)	3 (3)	r (5)	3 (6)

Chords Out of Context: The Fully-Diminished-Seventh Chord (dd7 or °7)

The **fully-diminished-seventh chord** (labelled dd7 or °7) is built as a diminished triad with a diminished seventh above the root. This chord does not appear diatonically in either major or minor keys but comes about as $\text{vii}^{\circ 7}$ in minor when built on the leading tone. The chord is created in major keys by the addition of the minor sixth scale degree: 7–2–4–♭6.

Example 17-9 Structure and harmonic function of the fully-diminished-seventh chord

e: $\text{vii}^{\circ 7}$ i A: $\text{vii}^{\circ 7}$ I

Note that the fully-diminished-seventh chord has only a dominant function. Identifying this structure out of context depends on the individual's ability to distinguish three elements:

- the complex dissonance created by the diminished-seventh interval and two tritones (root to fifth and third to seventh)
- the pull of the bass note as a leading tone wanting to resolve up to a tonic
- no sense of inversion as the dd7 chord divides the octave evenly into minor thirds

It is common at first to mix up the half- and fully-diminished seventh sonorities, but with a little practice they become easily distinguishable for most musicians.

To identify the soprano factor for the fully-diminished-seventh chord, follow the strategies laid out earlier for other chords. You may hear the highest note as an interval (m3, °5, or °7) above the root. If that approach does not work, then perhaps a voice leading strategy is best for you. The advantage with this latter tactic is that the fully-diminished-seventh chord has only one function, dominant ($\text{vii}^{\circ 7}$). Typical resolutions for this harmony are illustrated in **Example 17-10**. Explore this sonority on your own to determine which methodology works best for you.