

Augmented sixth chords

Background: augmented sixth chords are the **ultimate** in chromatic **predominant** chords. They often occur near cadences, and they almost always function as a strong signal that the dominant (and thus a cadence) is about to occur. In fact, they often function as signals that the end of a musical section (say, a period, or even a complete development section in sonata form) is about to occur. As such, they are very beautiful chords filled with important implications.

There are four basic kinds of augmented sixth chords: the three “nationalities” and one additional type that’s very occasionally used. The three nationalities are the Italian augmented sixth, shown as It+6; the French augmented sixth, shown as Fr+6; and the German augmented sixth, shown as Gr+6. The fourth type is known as the doubly-augmented augmented sixth, and is shown as DA+6. Where the three “nationalities” come from is unclear.

Augmented sixth chords are really all about **voice leading**; they don’t really have roots. The theorists Edward Aldwell and Carl Schachter write: “In general, the chromaticism of the augmented sixths gives them an intensely linear character and weakens the impression that they are vertical structures generated from a root.” The point is that they want **intensely** to resolve to V (or to I_4^6 first, then to V).

Here’s one way of viewing where they come from: 1) take the simple progression $iv^6 \rightarrow V$ in minor (see example a below); 2) add a chromatic passing tone (example b); and 3) harmonize the passing tone with the other members of the iv^6 and what you arrive at is an Italian augmented sixth chord (It+6; see example c).

The image shows three musical examples labeled a, b, and c, each on a single staff in a minor key. Example a shows a half note iv6 (F4, A4, C5) moving to a half note V (G4, B4, D5). Example b shows a half note iv6 (F4, A4, C5) moving to a half note V (G4, B4, D5) with a chromatic passing tone (Bb4) between them. Example c shows a half note iv6 (F4, A4, C5) moving to a half note V (G4, B4, D5) with an Italian augmented sixth chord (It+6) (F4, Ab4, C5, Eb5) in between.

a: iv^6 V iv^6 V iv^6 It+6 V

Spelling them: All the augmented sixth chords are spelled identically in major and minor keys; **however**, in major keys, more accidentals are required when writing the chord on the staff.

Note carefully that in the following explanation, $b\hat{6}$ refers to lowered scale degree $\hat{6}$ --solfège syllable **le**. For example, in the key of E major it’s C^b ; in a minor key, it refers to the lowered $\hat{6}$ that you would encounter in the natural minor scale, such as the note A^b in the key of c minor. $\#\hat{4}$ refers to raised $\hat{4}$ in either a major or minor key--solfège syllable **fi**. For example, it’s the note $G^\#$ in the key of D major or minor. Finally, $b\hat{3}$ refers to lowered $\hat{3}$ in a major key and plain old diatonic $\hat{3}$ in a minor key--solfège syllable **me**. For example, it’s the note D^b in the key of B^b major, or the note D in the key of b minor.

All four types (It+6, Gr+6, Fr+6, and DA+6) include: $b\hat{6}$ (usually in the **bass**), $\hat{1}$, and $\#\hat{4}$. You may well be writing and/or analyzing chords with both sharps and flats in them.

The different “nationalities” result from the addition of one **other** scale degree: the It+6 has an added $\hat{1}$; the Fr+6 has an added $\hat{2}$; the Gr+6 has an added $b\hat{3}$; the DA+6 has an added $\#\hat{2}$. **A few words about the DA+6:** it’s pretty rare; it’s used only in **major** keys, and it **only** resolves to I_4^6 . It **sounds** identical to the Gr+6; in fact, both the Gr+6 and the DA+6 sound like a Mm7 chord.

Chord	Scale degrees	Chord	Scale degrees
It+6	$b\hat{6}$ $\hat{1}$ $\#\hat{4}$ extra $\hat{1}$	Gr+6	$b\hat{6}$ $\hat{1}$ $\#\hat{4}$ extra $b\hat{3}$
Fr+6	$b\hat{6}$ $\hat{1}$ $\#\hat{4}$ extra $\hat{2}$	DA+6	$b\hat{6}$ $\hat{1}$ $\#\hat{4}$ extra $\#\hat{2}$

Doubling is a simple thing: scale degree $\hat{1}$ is doubled in the It+6; each of the other three contains four different pitches; therefore, no note is doubled. The figured bass symbols for these chords are as follows:

It+6:	\emptyset	Fr+6:	\emptyset	Gr+6 (in major):	\emptyset	Gr+6 (in minor):	\emptyset
	3		4		$\flat 5$		5
			3		3		3

What comes before and after them. Before the +6 chord: many different possibilities; some particularly likely ones are I, IV⁶, and vi (similarly, i, iv⁶, and VI in minor). After the +6 chord: **almost invariably** it's followed by V or by I₄⁶ (i₄⁶ in minor). It may also be followed by V⁷, though the voice leading is a little tricky.

A typical progression: i V⁶ V₂⁴/iv iv⁶ +6 i₄⁶ V i. Same idea in major.
↑
 (any of the "nationalities")

An aside: the +6 chord is *occasionally* used as a neighboring chord to the dominant: V +6 V.

Voice leading. VERY IMPORTANT: the augmented sixth (the interval between $\flat \hat{6}$ in the bass and $\sharp \hat{4}$ in some upper voice) **MUST** resolve out to an octave, using **contrary motion**. It **aches** to resolve this way, because $\flat \hat{6}$ functions as an upper leading tone to $\hat{5}$, while $\sharp \hat{4}$ functions as a lower leading tone to $\hat{5}$. The other voices resolve **by step** (where possible) to the nearest tone of the chord of resolution. The Fr+6 and It+6 resolve to either I₄⁶ or V; the Gr+6 **often** resolves to I₄⁶ because a smooth resolution directly to V produces parallel fifths. Recall that the DA+6 is **only** used in major and **only** resolves to I₄⁶; it is used for smoother voice leading in that $\sharp \hat{2}$ resolves smoothly to $\hat{3}$. See the examples below.

The image shows four musical examples of voice leading for augmented sixth chords. Each example consists of a treble and bass clef staff. The first example is in C major, showing the resolution of C: It+6 I₄⁶ V. The second is in d minor, showing d: Fr+6 i₄⁶ V. The third is in G major, showing G: Gr+6 I₄⁶. The fourth is in D major, showing DA+6 I₄⁶. The word "or:" is written between the third and fourth examples, indicating alternative voice leading options.

C: It+6 I₄⁶ V d: Fr+6 i₄⁶ V G: Gr+6 I₄⁶ DA+6 I₄⁶

The image shows a musical example of voice leading in g minor. It consists of a treble and bass clef staff. The progression is: g: i V⁶ V₂⁴/IV IV⁶ Gr+6 i₄⁶ V i.

g: i V⁶ V₂⁴/IV IV⁶ Gr+6 i₄⁶ V i