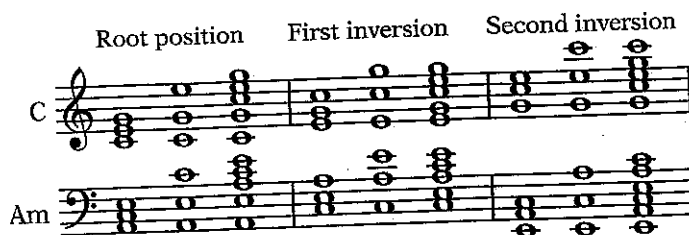


## Lesson 28: Triads in inversion

In this lesson you will learn about soprano and bass, inversion of triads (root position, first inversion, second inversion), and figured bass ( $\frac{5}{3}$ ,  $\frac{6}{3}$ ,  $\frac{6}{4}$ ).

The highest note in a chord is called the *soprano*; the lowest note is called the *bass*. When the root of the triad is in the bass (i.e., when the root of the triad is the lowest-sounding note), the triad is in *root position*. All the triads we have discussed thus far are in root position. But the third or fifth of the triad may also be in the bass. When that is the case, the triad has been *inverted*. When the third of the triad is in the bass, the triad is in *first inversion*. When the fifth of the triad is in the bass, it is in *second inversion*. Notice that the bass alone determines the position of the triad.

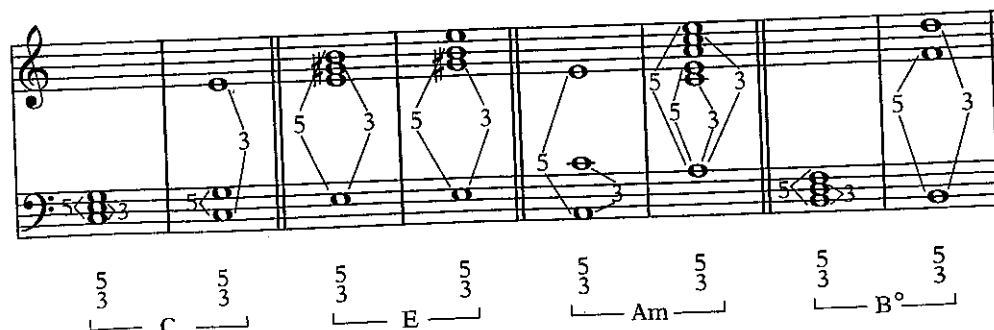
Triads in inversion



The first inversion of a triad is usually a weaker, less stable version of the root position. The second inversion, however, involves a significant difference. Recall that the interval of the perfect fourth is considered either consonant or dissonant, depending on the circumstances. In root position and first inversion, fourths occur among the upper voices and are thus consonant. In the second inversion, however, the fourth occurs between the bass and one of the upper voices—now there is nothing sounding below it and it is considered dissonant. As a result, a triad in second inversion is usually treated as a dissonant chord, and is used only under special circumstances, to be described later.



It is common to describe the position of triads, and other chords, using *figured bass* numbers. These numbers identify the intervals formed above a bass note (the lowest-sounding note). When a triad is in root position, there are intervals a fifth and a third above the bass, so the triad is said to be in  $\frac{5}{3}$  position.

Triads in  $\frac{5}{3}$  position (root position)

Notice that either or both the third and the fifth may be compound intervals and may be doubled. Notice also that the note creating a third with the bass may be either higher or lower than the note creating a fifth with the bass. The root may also appear doubled among the upper voices, an octave above the bass, but the number 8 is not normally included in the figured bass.

When a triad is in first inversion, there are intervals a sixth and a third above the bass, so the triad is said to be in  $\frac{6}{3}$  position.

Triads in  $\frac{6}{3}$  position  
(first inversion)

$\frac{6}{3}$     $\frac{6}{3}$     $\frac{6}{3}$     $\frac{6}{3}$     $\frac{6}{3}$     $\frac{6}{3}$     $\frac{6}{3}$     $\frac{6}{3}$   
 C   E   Am   B°

As with triads in  $\frac{5}{3}$  position, the sixth and third may be doubled, may be compound, and may occur above or below each other.

A triad in second inversion is in  $\frac{6}{4}$  position, with intervals a sixth and a fourth above the bass.

Triads in  $\frac{6}{4}$  position  
(second inversion)

$\frac{6}{4}$     $\frac{6}{4}$     $\frac{6}{4}$     $\frac{6}{4}$     $\frac{6}{4}$     $\frac{6}{4}$     $\frac{6}{4}$     $\frac{6}{4}$   
 C   E   Am   B°

The sixth and the fourth may be compound and may occur above or below each other.

Alphabetical chord symbols do not usually distinguish between the root position and inversions of a triad. Sometimes, however, composers indicate the position of a triad by providing the bass note following the chord symbol. The letter before the slash identifies the root of the triad and the letter after the slash identifies the actual bass note (which is the third or fifth of the triad).

Root position ( $\frac{5}{3}$ )   First inversion ( $\frac{6}{3}$ )   Second inversion ( $\frac{6}{4}$ )

C   C/E   C/G  
 E   E/G#   E/B  
 Am   Am/C   Am/E  
 B°   B°/D   B°/F

Chord symbols