

Inversions of the Dominant Seventh Chord

Identification

V_7 has 3 inversions: in the 1st inversion, the 3rd is in bass; in the 2nd, the 5th; in the 3rd, the 7th.

Inversions of V_7 Inversions of V_7^{\flat}

1st 2nd 3rd 1st 2nd 3rd

C: V_7 V_5^6 V_3^4 V_2 c: V_7^{\flat} V_5^6 V_3^4 V_2

In the 1st inversion, V_5^6 , the figures represent the intervals of the root (6) and 7th (5) above bass.

C: V_5^6 c: V_5^6

In the 2nd inversion, V_3^4 , the figures represent the intervals of the root (4) and 7th (3) above bass. The figure 6 with a slash is used in a minor mode to indicate the alteration of the leading tone. A slash through a figure means that the note is to be raised a half step.

C: V_3^4 c: V_3^4

In the 3rd inversion, V_2 , the figure represents the interval of the root (2) above bass. The figure 4 with a slash is used in a minor mode to indicate the alteration of the leading tone.

C: V_2 c: V_2

Resolutions of the Inversions

The inversions of V_7 are usually used in a *complete form* and resolve to I in the way similar to the resolution of the root position V_7 , with only *one* difference:

- 1) the 7th and 5th move by step down;
- 2) the 3rd moves by step up;
- 3) the root *remains stationary*.

C: V_5^6 I V_3^4 I V_2 I₆

As seen from the examples, V_5^6 and V_3^4 normally resolve to I; V_2 resolves to I₆.

Preparation and Use

The inversions of V_7 are used in the same way as V_7 in root position; the 7th may be approached smoothly (passing, prepared) or with a leap.

The *passing* 7th is usual for V_5^6 and V_2 .

In such case, V_5^6 is used after V_6 in which the root is doubled (the passing 7th is in upper voices, more often in soprano).

C: V_6 V_5^6 I V_6 V_5^6 I V_6 V_5^6 I

Haydn, Piano Sonata in C major, Hob. XVI: 35, III

Allegro

p

V_2 is often used after V or cadential (rarely after passing) I_4^6 (passing 7th in bass).

C: V V_2 I_6 IV_6 [I_4^6] cad. V_2 I_6

Mozart, Ariette “Oiseaux, si tous les ans”, K. 307

Allegretto

C: [I_4^6] cad. V_2 I_6

The 7th is *prepared* if there is the harmonic connection of IV with any inversion of V_7 .

C: IV V_2 I_6 IV V_3^4 I IV_6 V_5^6 I

The 7th may be approached with a *leap* if V is used. A leap in bass when connecting $V-V_2$ or a leap in upper voices (often in soprano) when connecting $V_6-V_5^6$ are all not rare.

C: V V₂ I₆ V₆ V₃⁶ I V₆ V₃⁶ I

The use of the inversions of V₇ significantly increases the possibilities of the melodic behavior of each voice (especially the bass line). Thus, it is recommended to use the inversions of V₇ as much as possible while saving V₇ in its root position mostly for cadences.

Passing V₃⁴

V₃⁴ is often used as a *passing chord* (instead of V₄⁶) between I and I₆ (or vice versa).

In order to avoid doubling of the 3rd in I₆ in I–V₃⁴–I₆ progression, the 7th moves up parallel to bass. Such progression with the unresolved 7th became acceptable due to its characteristic motion of parallel 3rd's (or 10th's) between bass and an upper voice (often soprano).

Larghetto Mozart, Horn Concerto No. 3, K. 447, II

Horn in E \flat *p con molto espressione*

pp

A \flat : I V₃⁴ I₆

In open spacing, a diminished 5th would move to a perfect 5th (or vice versa). These 5th's are *not* considered to be parallel and are *allowed*.

Allegro vivace Beethoven, Piano Sonata No. 18, Op. 31, No. 3, II

A \flat : I V₃⁴ I₆

Interchange of the Chords

Like any triad, V₇ and its inversions can be interchanged. It is always better to keep the 7th in the same voice. It is not allowed to move the 7th by step up.

C: V_7 V_3^4 V_5^6 V_7

In rare cases it is possible to *exchange* the 7th with the 5th.

Beethoven, Symphony No. 7, Op. 92, III

Assai meno presto

D: V_7 I

Exercises

1. Analyze the following music.

a)

Andante

Händel, Samson, No. 1: Overture

b)

Adagio

Haydn, Symphony No. 100 in G major, I

ii

c)

Allegro (♩ = 96)

Beethoven, Piano Sonata No. 6, Op. 10, No. 2

[illegible]

d)

Andante con variazioni (♩ = 72)

Beethoven, Piano Sonata No. 12, Op. 26, Theme

Andante con variazioni (♩ = 12)

p *cresc.* *sf* *p*

p cresc. *p*

$V_6^{\circ}/V_{\text{VII}}^{\circ}$ vi_{VII}°
M.B.

sf *p* *cresc.* *p*

2. Realize the following figured basses and harmonize the melodies.

a) 