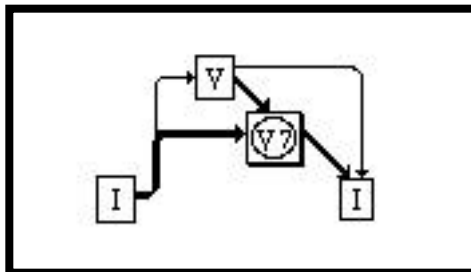


Chapter 19 The Dominant Seventh Chord, V7



In the above chart, a V7, or dominant seventh chord, expands the chart of the fundamental harmonic progression which appeared on worksheet 17.5. This new chart shows that V7 follows V or I, but does not usually precede V. Highlighted arrows represent the new voice leading for V7.



19.1 Analyze a phrase with a dominant seventh chord

The Ash Grove English folk song

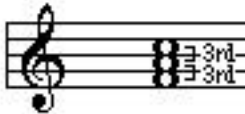
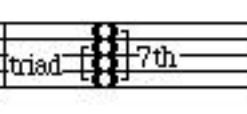
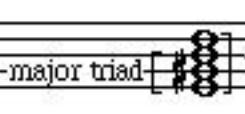
In the folk song “The Ash Grove,” $\hat{5}$ falls to $\hat{4}$ in eighth notes on the third beat of the first full measure. In the above harmonization, $\hat{4}$ forms the interval of a seventh (plus and octave) with the bass of V. In this example the passing tone $\hat{4}$ expands or elaborates V.

The brief chord which includes $\hat{4}$ on the last half of beat three is called a **V7** or dominant seventh chord. See its chord tones at the end of the measure. In this chapter you will learn the voice leading for approaching and leaving this chord, and in the next chapter you will use it in harmonizing whole phrases of music.

1. A seventh above the dominant is what scale degree? _____

2. The chord tones of V7 chords correspond to which scale degrees? _____

19.2 Identify and write dominant seventh chords

Example 1	Example 2	Example 3		
				
triad	a seventh chord	dominant seventh chord		
type of triad				
	major	minor	diminished	augmented
top 3rd	minor	major	minor	major
bottom 3rd	major	minor	minor	major

• Recall from Book 2 that triads are chords with three chord tones separated by thirds. See example 1. Triads are named according to the chart at the bottom of the box above.

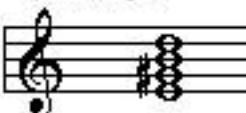
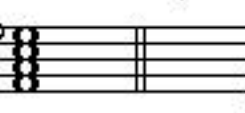





• Seventh chords have four, instead of three, chord tones separated by thirds. The name “seventh chord” comes from the interval of a seventh between the root and the top note. See example 2.

• You can distinguish various kinds of seventh chords by identifying the triad on the bottom as major, minor, diminished or augmented, and by identifying seventh interval as major, minor or diminished.

• One way to identify intervals of a seventh is by counting half steps down from the root to the note an octave below the seventh. An octave below a major seventh is one half step down from the root, a minor seventh is two half steps down and a diminished seventh is three half steps down.

• A dominant seventh chord has a major triad and a minor seventh. See Example 3.

1. IDENTIFY the triads and the seventh intervals in these seventh chords:

a) Example	b)	c)	d)	e)
				
Major triad minor 7th	triad 7th	triad 7th	triad 7th	triad 7th
f)	g)	h)	i)	j)
				
triad 7th	triad 7th	triad 7th	triad 7th	triad 7th

2. Which of the above seventh chords are dominant sevenths? _____

3. WRITE dominant seventh chords above the following roots. Do not use key signatures.



19.3 Write dominant seventh chords in a key

Example 1: G major key signature, G: V7 $\hat{5}$

Example 2: e minor key signature, e: V $^7_{3\#}$ $\hat{5}$

- The root of a dominant seventh chord is usually **5**, as implied by the word “dominant” in the name.
- If the key is major and the root is **5**, no accidentals are needed to write dominant seventh chords. See example 1.
- If the key is minor and the root is **5**, the third of dominant seventh chords must be raised a half-step. See example 2. Recall that these workbooks notate raised chord tones in general with small sharp signs, so the general notation for a dominant seventh in minor is V $^7_{3\#}$. However, there are some keys in which notes will be raised by a natural or a double sharp instead of a sharp.
- Raising the third of V7 is the same as raising **7**. You have already been doing this with V# chords in minor.

1. WRITE key signatures for these major keys and the V7 chords indicated below the staff.

Ab: V7 B: V7 D: V7 F: V7

2. WRITE key signatures for these minor keys and the V $^7_{3\#}$ chords indicated below the staff.

c: V $^7_{3\#}$ b: V $^7_{3\#}$ d: V $^7_{3\#}$ f#: V $^7_{3\#}$

19.4 Write V7 chords in four voices

Example 1	Example 2
G: complete V7 no doublings	Eb: incomplete V7 doubled root, no 5th

To write V7 chords in four voices... EITHER:

- Write a different chord tone for each voice, as in example 1. This is a complete V7. ...OR...
- Double the root and omit the fifth, as in example 2. This is an incomplete V7.

1. WRITE these complete and incomplete V7 chords in four voices.

complete V7	incomplete V7	complete V7	incomplete V7

		Write key signature	Write key signature
complete V7	incomplete V7	↑ D: complete V7	↑ G: incomplete V7

19.5 Approach V7 by V and mark tendency tones

The diagram on the left shows two ways to approach a V7 chord from a V chord. In the first, the root of V moves down to the seventh of V7. In the second, the fifth of V moves up to the seventh of V7.

Example 1 shows a V chord (F major) moving to a complete V7 chord (F7). The root of V (F) moves down to the seventh of V7 (E), and the fifth of V (C) moves down to the third of V7 (A). The 7th (4̂) and 3rd (?) are marked with arrows pointing down.

Example 2 shows a V chord (F major) moving to an incomplete V7 chord (F7). The fifth of V (C) moves up to the seventh of V7 (E), and the root of V (F) moves down to the third of V7 (A). The 3rd (?) and 7th (4̂) are marked with arrows pointing up.

V7 often follows V as an elaboration or an expansion. See the chart on the left of the box above. You can approach V7 from V in either of these two ways:

- Move the root of V down a step to a seventh above the bass. See example 1 above and worksheet 19.1. This is by far the more common voice leading and creates a complete V7 chord.
- Move the fifth of V up to the seventh above the bass. See example 2 above. This voice leading creates an incomplete V7 chord.

- Chord tones can be repeated, as in example 1, or sustained, as in example 2 and in worksheet 19.1.

- 4 and 7 are called tendency tones because they tend to move to notes which are a step away:

4̂ (the seventh of V7) tends to move down to 3̂, and 7̂ (the third of V7) tends to move up to 1̂ (hence 7̂'s name, "the leading tone"). See the arrows after these notes in the examples at the top of the page.

1. ELABORATE these V chords by following them with V7 chords. FOLLOW directions below the Roman numerals.

2. DRAW arrows from the tendency tones in V7 towards the next likely note.

The exercise consists of four measures of music. The first measure shows a V chord (F major) moving to a V7 chord (F7). The second measure shows a V chord (F major) moving to a V7 chord (F7). The third measure shows a V4 chord (F major) moving to a V7 3/4 chord (F7). The fourth measure shows a V# chord (F# major) moving to a V7 3# chord (F#7).

Below the music, the following directions are given:

- V V7 the root falls
- V V7 the root falls
- minor key V4 V7 3/4 the root falls
- minor key V# V7 3# the 5th rises

19.6 Resolve complete V7's to incomplete I's

The diagram on the left shows a flow from a complete V7 chord to an incomplete I chord. The V7 chord is shown with a circled 7 and a circled 3, indicating the tendency tones. The I chord is shown with a circled 3 and a circled 1, indicating the goal tones. Arrows show the 7th of V7 moving down to the 3rd of I, and the 3rd of V7 moving up to the 1st of I.

The musical example on the right shows a V7 chord in C major (complete) resolving to an I chord in C major (incomplete). The V7 chord has a 7th (B) and a 3rd (G). The I chord has a 3rd (E) and a root (C). The 7th (B) falls by step to the 3rd (E), and the 3rd (G) rises by half step to the root (C). The remaining voice (F) moves by step to the root (C).

The chart on the left side of the box above shows that V7 moves to I. In fact V7 moves even more strongly to I than does V. The reason for this is that V7 includes the dissonant intervals of a seventh from the bass and a tritone between the third and seventh of the chord. This harmonic tension is resolved as the tendency tones move to their goals ♯ and ♮.

- An incomplete I chord is missing a fifth, like an incomplete V7. Because of the missing fifth the incomplete I has a three roots and a third. See the second chord in the example on the right side of the box above.
- When moving from a complete V7 to an incomplete I, the tendency tones move to their goals:
 1. The seventh of V7 (♯) falls by step to the third of I.
 2. The third of V7 (♮) rises by half step to the root of I.
- The remaining voice moves by step to the root of I.

RESOLVE these V7 chords. On this page all V7 chords are complete and all I chords are incomplete.

The first system shows four pairs of V7 and I chords in different keys: E: V7 I, Bb: V7 I, G: V7 I, Eb: V7 I. The second system shows four pairs of V7 and I chords in different keys: eb: V7 i, d: V7# i, e: V7# i, f#: V7# i. A key signature box is present in the second system.

19.7 Resolve incomplete V7's to complete I's

C: V7 incomplete I complete

- As in the previous page, when moving from an incomplete V7 to a complete I the tendency tones move to their goals. See the example above.
 1. The seventh of V7 (♯) falls by step to the third of I.
 2. The third of V7 (♭) rises by half step to the root of I.
- The remaining voice stays the same. It has a common tone.

RESOLVE these V7 chords. On this page all V7 chords are incomplete and all I chords are complete.

d: $V_{3\#}^7$ i A: V7 I f: $V_{3\flat}^7$ i G: V7 I

major key: V7 I minor key: $V_{3\#}^7$ i \uparrow F: V7 I \uparrow D: V7 I

19.8 Resolve V7 to I, both chords complete

Bach, Chorale 179: Wachet auf, ruft uns die Stimme

V7 I

At the end of phrases, cadences are often reinforced by the full sound of complete chords. To write complete chords in a V7 I cadence:

- the 7th of V7 falls by step to the third of I, as usual.
- the 3rd of V7 (7) falls to the fifth of I. Here the leading tone does not rise to $\hat{1}$.

Do not use this voice leading with the third of V7 (7) in the soprano. In the top voice, it is particularly unsatisfying to hear that the leading tone does not go to $\hat{1}$, its usual goal.

RESOLVE these V7 chords to I. On this page, both chords are complete. PROVIDE whatever notes are missing.

c: $V7_{34}^7$ i Bb: V7 I G: V7 I d: $\begin{matrix} 7 \\ 3\# \end{matrix}$ $\begin{matrix} 5 \\ 3 \end{matrix}$

bb: $\begin{matrix} 7 \\ 34 \end{matrix}$ $\begin{matrix} 5 \\ 3 \end{matrix}$ 7 I V7 I V7 I

19.9 Review resolving V7 chords

•Regardless of whether a chord is incomplete in a V7 I progression, the seventh of V7 always falls by step. Begin writing the I chord with the voice which contained the seventh in the V7 chord.

WRITE these V7 I progressions.

A musical staff with two systems of two staves each (treble and bass clef). The key signature has one sharp (F#). The first system has a treble clef and a bass clef. The second system has a treble clef and a bass clef. The third system has a treble clef and a bass clef. Each system is divided into two measures by a double bar line. The first measure of each system contains a V7 chord, and the second measure contains an I chord. The V7 chords are: F#7 (first system), C#7 (second system), and G#7 (third system). The I chords are: C major (first system), F major (second system), and D major (third system).

_____ V7 I V7 I V7 I
 major incomplete complete complete incomplete complete complete
 key

A musical staff with two systems of two staves each (treble and bass clef). The key signature has two flats (Bb, Eb). The first system has a treble clef and a bass clef. The second system has a treble clef and a bass clef. The third system has a treble clef and a bass clef. Each system is divided into two measures by a double bar line. The first measure of each system contains a V7 chord, and the second measure contains an I chord. The V7 chords are: Bb7 (first system), Eb7 (second system), and Fb7 (third system). The I chords are: Bb minor (first system), Eb minor (second system), and Fb minor (third system).

_____ V_{3#}⁷ i V_{3#}⁷ i V_{3#}⁷ i
 minor incomplete complete complete incomplete complete complete
 key

19.10 Approach V7 from I

The diagram on the left shows a progression from I to V to V7 to I. Arrows indicate voice leading from I to V, and from V to V7. The V7 chord is highlighted with a box.

Example 1 shows a progression from I to V7 incomplete. The fifth of I (G) moves stepwise to become the root of V7 (G). The bass line shows I (C2), V7 incomplete (G2, F2), and I (C2).

Example 2 shows a progression from I to V7 complete. All voices move stepwise. The bass line shows I (C2), V7 complete (G2, F2, E2), and I (C2).

- To approach an incomplete V7 from I, use common tone stepwise (CTS) voice leading. Example 1 shows that the common tone is the fifth of I, and that this note becomes the root of V7.
- To approach a complete V7 from I, use ALL stepwise voice leading. Example 2 shows that in this voice leading the top three voices move downward.

WRITE these progressions. SEE the previous worksheets for moving from V7 to I and from V to V7.

The first exercise shows three progressions in G major:

- I (C2) V7 incomplete (G2, F2) I (C2) complete
- I (C2) complete V7 (G2, F2, E2) incomplete I (C2)
- I (C2) V7 incomplete (G2, F2) I (C2) complete

The second exercise shows a progression in Bb major:

- I (C2) V7 complete (G2, F2, E2) complete I (C2)

The third exercise shows a progression in G major with a 3/2 time signature:

- I (C2) V (G2) V7 complete (G2, F2, E2) I (C2) complete
- Note: the root falls (referring to the V chord)