

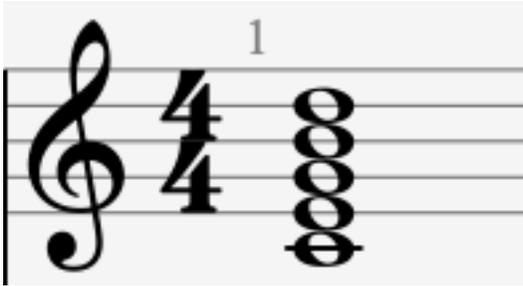


Useful Substitutions for Chord Extensions and Alterations

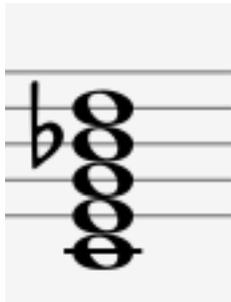
After learning all about Triads, Shell Voicings, Drop 2, and Drop 3 chords the next logical step is learning about higher extensions. 9, 11, and 13 chords are the next chord extensions to study.

9 chords (not to be confused with add9 chords) are simple 7 chords that have an added 9th added to the top of the 7th. These notes added above 7th chords are known as EXTENSIONS.

Below are examples of 9 chords.



Here is an example of what is called a Major 9th chord. It is simply a Major 7th chord with an added 9th on the top. This example is a Cmaj9 chord



Here is a C9 chord. It is a C7 chord with an added 9th.



And finally, here is a C minor 9 chord. Simply a C minor 7 chord with an added 9th.

Let's look at how we would play these voicing on the guitar substituting drop 2 chords.

Once you encounter 9th chords, the first note you should think about ditching is the root. This is counterintuitive since most players think from the root as they make their chord shapes. Study the following examples.

Em7 = CMaj9

T	8
A	7
B	9
B	7

Em7(b5) = C9

T	8
A	7
B	8
B	7

EbMaj7 = Cmin9

T	8
A	7
B	8
B	6

By eliminating the root, we are left with the 3rd, 5th, 7th, and 9th. These four chord members we have left conveniently all spell a 7th chord that we already know. You can make simple work of these substitutions by remembering the following formulas.

1. Major 9 = Minor 7 + 4 frets

Ex. C major 9 = E minor 7

2. 9 = Minor 7 (b5) + 4 frets

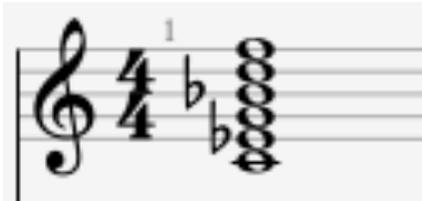
Ex. C9 = E minor 7(b5)

3. Minor 9 = Major 7 + 3 frets

Ex. C minor 9 = Eb major 7

Next, let's take a look at 11th chords. As you can imagine 11th chords add another extension on top of the 9th. We will run into some problems and exceptions with the use of these chords.

Minor 11 Chords



The chords above illustrates a full C minor 11. Notice the added 11 (F) above the 9 (D).

Below is a useful voicing for this chord on the guitar.

Cm11 = Bbsus4/C

Musical notation and guitar tablature for Cm11 = Bbsus4/C. The notation shows a C minor 11 chord in 4/4 time. The guitar tablature shows the following fret numbers: 4, 3, 3, 3.

T	4
A	3
B	3
	3

Notice we can also analyze this chord as a Bbsus4 triad with a C in the bass. Think of the substitution formula as going a whole step down from the root (2 frets), and playing a sus4.

Musical notation and guitar tablature for Cm11 = Bbsus4/C in a different position. The notation shows a C minor 11 chord in 4/4 time. The guitar tablature shows the following fret numbers: 6, 8, 8, 8.

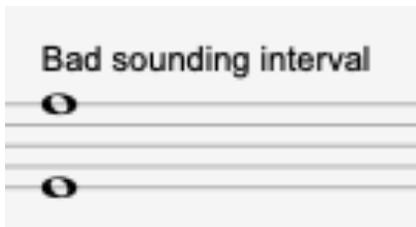
T	6
A	8
B	8
	8

Here is another example of the same chord in a different position.

11 Chords



Here is a full C11 chord. Simply a C9 chord with an added 11th. When played as is, it is not a very pleasing.



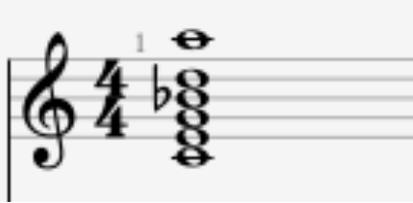
This is due to the minor 9th interval created between the 3rd and 11th, so we eliminate the 3rd.

In practice, we are left with something like the chord below.

Musical notation and guitar tablature for a C11 = Bb/C chord. The notation is in 4/4 time, treble clef, one flat key signature. The notes are C4 (bass), Bb3, D4, F4, and C5. The text 'C11 = Bb/C' is written above the staff. Below the staff is a guitar tablature with the following fret numbers: 6, 7, 8, 8. The letters 'T', 'A', 'B' are written vertically to the left of the tablature lines.

Think of the formula for this chord as going down a whole step and playing a major chord. C11 = Bb major triad with a C in the bass.

13 Chord



It looks this C13 chord is missing a member at first glance. Where is the 11th?

In jazz, the 11th is left out of a 13 chord to avoid a similar problem like we saw in the C11 chord.

In practice, the guitar voicings for 13 chords are quite similar to 9th chords. Study the following examples. You can see how they could almost be seen as an extension of 9 chords.

C9	C13
8 7 8 7	10 7 8 7
C9	C13
8 7 8 7	10 7 8 7

Alterations

In the most basic sense, alteration happens in chords when 5ths and 9ths are moved up or down one half step.

Altered Dominants

Below we can see what happens with a variety of alterations to 7/9 chords.

The image shows two musical staves in 4/4 time. The first staff is for the C9 chord, with a treble clef and a key signature of one flat (Bb). The notes are C4 (bass), G4, Bb4, and F5. The second staff is for the C7b9 chord, with the same treble clef and key signature. The notes are C4 (bass), G4, Bb4, and Fb5. Below each staff is a guitar fretboard diagram with three strings (T, A, B) and fret numbers (8, 7, 8, 7).

Here we can see how the D in the C9 chord is transformed to a b9 (Db). Note the chord is the same thing as a E diminished 7 chord.

The image shows two musical staves in 4/4 time. The first staff is for the C9 chord, with a treble clef and a key signature of one flat (Bb). The notes are C4 (bass), G4, Bb4, and F5. The second staff is for the C7#9 chord, with the same treble clef and key signature. The notes are C4 (bass), G4, Bb4, and F#5. Below each staff is a guitar fretboard diagram with three strings (T, A, B) and fret numbers (8, 7, 8, 7).

Now we see the 9th move a half step up to a D#. You could also see this chord as an Eb major triad with an E in the bass.

C9 C9#5 C9b13

8 7 8 7 9 7 8 7 9 7 8 7

Here we altered the 5th up a half step. Notice you can also call this raised 5th a b13.

C9 C9b5 C9#11

T A B T A B T A B

8 7 8 7 7 8 7 7 8

Here is a C9 chord with a b5. You will also see it written as a #11.

C9 C (#9,#5) or F#13

8 7 8 7 9 8 8 7

Here are examples of what happens when you alter 5ths and 9ths.

C9 C9 (b9,b5) or Gb7

6

8 7 7 6
 8 7 8 8
 7 7

C9 C7 (b9,b13) or Gb 9

7

T 8 9
 A 7 6
 B 8 8
 7 7

Take note in the previous 3 examples, we could also call the chord by another dominant chord's name a tri-tone away. This is known as a tri-tone substitution. Learning these can help you create shortcuts in you mind when you see dominant chords with lots of alterations.

Major 9 (#11)



Here is a major 9 chord with a #11. This chord is synonymous with the Lydian mode, as a #11 is the same as a #4.

On the guitar, you can simply take a voicing that you know for a major 9 chord and move the 5th down a half step to create the #11 like below.

