An Introduction to Extended Harmony
By Scott Blanchard

Want to beef up your chord vocabulary? Want to accompany your melodies with lush and exotic sounds? If you answered yes, then read on below. In this edition of the Theory Corner, I’ll show you everything you need to get started. I’ll introduce you to extended harmonies (or chords), which are commonly used in jazz music but are also prominent in other genres such as rock, funk, acoustic, blues, orchestral music and more. Harmony, as you may know, can be defined as the result produced when tones are sounded simultaneously. You may also be familiar with intervals, also sometimes classified as diads (two-note chords). In this lesson, we’re going to focus on extending the major and minor triads (three-note chords) into 7th, 9th, 11th and 13th chords.

We’ll be discussing many chord types today, so I want to introduce you to all the chord names and their respective symbols before we begin. Here is a detailed list composed of chord names and their chord symbol equivalents, arranged by chord type:

<table>
<thead>
<tr>
<th>Chord Type</th>
<th>Symbol</th>
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<tbody>
<tr>
<td>C Major</td>
<td>C</td>
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<tr>
<td>C Major 7th</td>
<td>CMaj7</td>
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<tr>
<td>C Major 9th</td>
<td>CMaj9</td>
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<tr>
<td>C Major 11th</td>
<td>CMaj11</td>
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<td>C Major 13th</td>
<td>CMaj13</td>
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<td>C Minor</td>
<td>Cmin</td>
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<td>C Minor 7th</td>
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<td>C Minor 11th</td>
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<tr>
<td>C Minor 13th</td>
<td>Cmin13</td>
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</tbody>
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Major Triads and Major 7th Chord Extensions
To begin, let’s build a triad, or three-note chord. We’ll build chords using the C-note as our root. In the example below, you’ll see a C Major triad. To build this chord, or any major chord, take the root note (the note the chord is named after, in this case the C-note), the Major 3rd above the root note (the E-note in this case), and the Perfect 5th above the root note (the G-note in this case).
**Major 7th Chords**

First, it is important to note that any and all 7th chords are four-note chords. Let’s begin by building a CMaj7 chord. We will start with our C chord, then stack a note on top that’s the interval of a Major 7th (M7) above the root. This gives us the note B, so the chord from bottom to top is spelled C–E–G–B. If we wanted to look at this chord in terms of numbers, we could start with 1 (the root), and finish with 3, 5 and 7. Look at the example below to see what I mean.

![CMaj7 chord](image)

One must first understand 7th chords before exploring extended chords. The triad is the most basic and stable harmony in Western music, and by definition has an implied root, 3rd and 5th. 7th chords are the first level of harmony where number labeling is necessary for identification. Let’s continue with extended harmonies and build a CMaj9 chord.

**Major 9th Chords**

When stacked from bottom to top, 9th chords are five-note chords. They are given their name because we add a 9th above the root, which in this case is a D-note. Another way to think of this is to count nine letter names up from the C-note. This will also give us the D-note. The CMaj9 chord is spelled C–E–G–B–D, or 1–3–5–7–9 in numbers. Be sure to note that this chord includes the 7th. Take a look at the example below.

![CMaj7 CMaj9 chords](image)

**Major 11th Chords**

To build the CMaj11 chord, we’re going to count up 11 letter names from the root (C-note) to the F-note. Here’s another way to look at it: instead of counting up 11 letter names, count up four because it will give you the correct letter name an octave lower. CMaj11 is spelled C–E–G–B–D–F, or 1–3–5–7–9–11 in numbers. Here’s what that looks like on the staff.

![CMaj11 chord](image)
Major 13th Chords
If you didn’t notice, 13th chords are seven-note chords. That’s a lot of notes to keep track of! Using all our notes from the CMaj11 chord, we’ll add one more to the top to build CMaj13. So, we’ll add a 13th above the C-note to build this chord or count up six letter names, because doing so gives us the same letter name as the 13th an octave lower. However you choose to do it, you should get the A-note as the 13th. The CMaj13 chord is spelled C–E–G–B–D–F–A, or can be represented by numbers as 1–3–5–7–9–11–13.

Dominant 7th Chords and Dominant Extended Chords
Dominant 7th chords (such as C7) are named this way because they traditionally function as the V7 chord, or dominant chord in a given key, and are traditionally built off the fifth, or dominant, scale degree. In some styles, such as jazz, blues and rock, dominant 7th chords can take on new roles such as I, IV and V chords in a given key and context. This is, however, a stylistic choice, and for now, we’ll focus solely on constructing the chords, and less on how they’re applied in practice.

To build all of these dominant chord types — dominant 7th, 9th, 11th and 13th chords — we need to change one important thing that differentiates them from the major 7th chord types you just learned. In dominant chord types, the 7th is lowered or flatted (♭), resulting in the interval of a minor 7th (m7) above the root. So, if we take CMaj7 and lower (♭) the 7th (changing the B-note to a B♭-note), we now have a C7 chord. The C7 chord is spelled C–E–G–B♭–D, or can be thought of as 1–3–5–♭7. If you compare and contrast the major 7th and dominant 7th chords, you can see their similarities and differences. Take a look at this example to see what we just did.

Dominant 9th Chords
To build a C9 chord, we’ll add the note nine letter names above the root (C-note), giving us the D-note. C9 is spelled C–E–G–B♭–D. In numbers, a dominant 9th chord can be represented as follows: 1–3–5–♭7–9. Notice that all dominant extended chords have a ♭7. Check out the example below to see what we just did.
Dominant 11th Chords
To build an 11th chord, we’ll add yet another note to the C9 chord. To do this, add the note that’s an 11th above the root to the top of the chord (in this case the F-note). So, from bottom to top, a C11 chord is spelled C–E–G–B♭–D–F. In numbers, that looks like this: 1–3–5–b7–9–11.

![C11 chord diagram](image1)

Note: With six notes total, some musicians will choose to omit up to three notes from the 11th chord due to not only its available voicings (guitarists), but also to reduce some muddiness depending on the range, as well as to showcase the dissonance of this chord. It’s important to remember that these chords have exotic sounds and many players tend to play just a few notes from the extended harmonies. This often applies to 13th chords, and sometimes 7th and 9th chords as well. Although many notes may sometimes be omitted, the 3rd, 7th, and other upper extensions are usually included to help define the chord in context and to still offer the distinct sounds of extended harmony.

Dominant 13th Chords
To build a 13th chord, we’ll add a note the interval of a 13th above the C-note, or count up six letter names because doing so gives us the same letter name as the 13th, just an octave lower. The A-note is the 13th, so the C13 chord is spelled C–E–G–B♭–D–F–A, or 1–3–5–b7–9–11–13.

![C13 chord diagram](image2)

Minor Triads, Minor 7th Chords and Minor 7th Chord Extensions
Let’s begin our look at minor extended harmonies by first building a minor triad, with the C-note as our root. Now that we have the root, we just need the lowered (♭) 3rd and the 5th. Therefore, Cmin is spelled C–Eb–G. Remember how I said earlier that 7th chords are four-note chords? Well, the minor 7th chord is no exception. Starting with Cmin, all we need to do is add a minor 7th above the root and we’ll have a Cmin7 chord. To build this chord, take the C7 chord and lower (♭) the 3rd a half-step. So, you have the notes C–Eb–G–B♭, or 1–b3–5–b7. Take a look below.

![Cmin, C7, Cmin7 chord diagrams](image3)
**Minor 9th Chords**
To build a Cmin9 chord, we’ll start with Cmin, then add the lowered (♭) 7th and 9th above it, giving us the notes C–Eb–G–B♭–D, or 1–♭3–5–♭7–9. Easy enough?

![Cmin9](image)

**Minor 11th Chords**
Let’s construct a Cmin11 chord. We can start with Cmin, and continue by stacking the 7th, 9th, and 11th on top, giving us the notes C–Eb–G–B♭–D–F, or 1–♭3–5–♭7–9–11.

![Cmin11](image)

**Minor 13th Chords**
You’ve probably guessed how to build this chord. We’re going to add the 13th (the A-note) above the root. Cmin13 is spelled C–Eb–G–B♭–D–F–A. In numbers the chord can be thought of as 1–♭3–5–♭7–9–11–13. Here’s what that looks like:

![Cmin13](image)

**Conclusion**
For more on extended harmonies, be sure to check out the licks section of this newsletter, where you’ll find some excellent examples of extended harmony on guitar, keyboard and bass. In addition, there are some great drum grooves, all with complete notation.

Be sure to check out WorkshopLive’s awesome lessons on extended harmony for a better understanding on how to voice, apply, and make music with these chords. Guitarists will want to view intermediate lessons in blues (taught by Dennis McCumber, Matt Smith and Mark Dziuba), intermediate lessons in jazz (taught by Mark Dziuba and Jody Fisher), advanced lessons in acoustic (taught by Greg Horne and Larry Marciano), and advanced lessons in rock (taught by Dave Martone and Tobias Hurwitz).

Not a guitar player? Don’t fret! (pun intended). Keyboard players will want to check out lessons in the Pianist’s Tool Box (taught by David Pearl and Joe Rose).

Bassists will enjoy Chris Kuffner’s advanced lesson “Compound Intervals and 9ths.”