

Bass Fundamentals

Column #13 – Chords And Arpeggios

We're going to revisit chords and arpeggios again which, as you should know, are chords played one note at a time. We touched on the idea of arpeggios in the very first column and just recently in column #10, but without wading very deep into the topic beyond rudimentary ideas to give you a sense of what they are about and how you might use them in a simple fashion. Here, we'll dive deeper into the substance.

First, we'll start with chords.

Chords are the building blocks of progressions in music, string three or four chords that sound good together and you have a progression. Melodies are played over progressions. All chords are derived from the **Ionian** mode, more commonly known as the **Major** scale. If you do not know the Major scale, learning to understand chords will be difficult, and figuring out more complex chord voicings will be nearly impossible apart from a "trial and error" approach. Don't be that guy or gal! Don't stumble along with a trial and error mentality.

So, let's just make no assumptions here and start simple - which may mean "review" for some of you. Stick with me, even if you know some of this.

The Major scale is the "do, re, mi" scale we all learned as a kid. Think, "The Sound Of Music", "Doe, a deer, a female deer; Ray, a golden drop of sun..." Below is a table to demonstrate the notes in the **G** Major scale, along with their numeric equivalent, over two octaves.

G =	1/Rt	Root or Key tone of the given Scale or Chord
A =	2	Also a 9, see below
B =	3	Also a 10, see below
C =	4	Also an 11, see below
D =	5	
E =	6	Also a 13, see below
F# =	7	
G =	8/Rt	Root tone octave
A =	9	Also the 2 (usually rendered as a 'sus2' or 'suspended 2')
B =	10	Also the 3 (played an octave above the lowest root tone)
C =	11	Also the 4 (often rendered as a 'sus4' or 'suspended 4')
D =	5	There is no 12, but to help find the 13 th chord tone
E =	13	Also the 6 tone
F# =	7	There is no 14 tone
G =	Rt/1	Root tone octave

Take note of what is in the last column of the table, the explanations. Four of the notes, the **2**, **3**, **4** and **6**, also have a *secondary* numerical designation. They still retain their original identity, but for the purposes of creating more complex harmonic intervals (the complicated way of saying "chords"), these notes take on an additional identity value to make that possible. It makes them sound different, too, in part because of how you employ them beyond their primary roles. But they can still be their core selves, too. I know, it can get confusing. But by time, experience and just learning these basic ideas, you'll eventually understand it well enough.

There are six chord **types**. By type, we mean "family":

- **Major** family
- **minor** family
- **dominant** family
- **augmented** family
- **diminished** family
- **suspended** family

So, if we begin by taking the information above and apply it in the simplest way, creating a G Major chord, we would play the **G**, **B** and **D** tones simultaneously (harmonic interval) or in succession (melodic interval/arpeggio). So we are playing the **1/G**, the **3/B**, and the **5/D** tones. Look at the chart above.

The same applies to the **G** minor chord, playing the **G**, **B \flat** and **D** tones, again the G is 1, the B \flat is the \flat 3, and the D is the 5 tone. Again, look at the chart.

Since Bass does not lend itself well to playing chords, we generally play the melodic *arpeggiated* form to create a chord figure, as demonstrated here:

Major Chord

Minor Chord

For major and minor chords beyond the basics, simply add the extension(s) you require, whether the **7**, **9**, **11** or **13**, to create the sonic character of the chord you want to voice. In other words, once you hit the **maj7** or **mi7** chord (1, 3, 5, 7 tones), it becomes "additive", meaning that to play a **maj9**, you play a **maj7** and *add* the **9**. Reference the chart above.


So a **major 7** in G would be: **G/1, B/3, D/5, F \sharp /7**. The **minor 7** in G would be: **G/1, B \flat /3, D/5, F/ \flat 7**. Here are the Major and minor 7 chords:

Major 7 Chord


Minor 7 Chord

For the major and minor 9, just add the **A** tone on top:

Major 9 Chord



Minor 9 Chord



The image shows two musical diagrams. The first is for a Major 9 Chord, with a bass clef and a key signature of one sharp (F#). The top staff shows a sequence of notes: G2, B2, D3, F#3, A3, G4. The bottom staff shows a guitar fretboard with the root note B on the 3rd fret of the 6th string. The fingering sequence is 3-2-5-4-7-7, with a final 7 indicating a barre on the 7th fret.

The second diagram is for a Minor 9 Chord, with a bass clef and a key signature of one flat (Bb). The top staff shows a sequence of notes: G2, Bb2, D3, F3, Ab3, G4. The bottom staff shows a guitar fretboard with the root note B on the 3rd fret of the 6th string. The fingering sequence is 3-6-5-3-7-7, with a final 7 indicating a barre on the 7th fret.

You continue to add tones for the **11** and **13** chords. So **1, 3, 5, 7, 9, 11**, and the **13** can all be part of the **major 13** or **minor 13** chord (modifying the 3 and the 7 tones for the minor variant). Look at the chart again.

But - remember, that you don't have to play every single tone that a given chord contains. You can play whatever parts of the chord that preserve the character you wish to convey. So, for example, if you want to play a **minor 13** chord, you don't need to play all those notes - there are seven in the full **minor 13** chord. You can simplify the voicing by playing the necessary parts: **1, b3, b7, 13**.

For **dominant** chords, you have a little difference; the **dominant 6** chord is spelled 1,3,5,6 - the **same as a major 6** chord (context determines which is which), but from the **dominant 7** chord up, it becomes additive as well, just like Major and minor chords (but with a perfect 3 and a b7).

So a **Gdom6/Gmaj6** would be: **G/1, B/3, D/5, E/6**. A **Gdom7** would be: **G/1, B/3, D/5, F/ b7**. Look at the chart!

Dominant 6 Chord

Dominant 7 Chord

For **diminished** chords, follow these rules:

- For straight **diminished** chords, you flatten the 3 and the 5
- For a **half diminished**, usually called a **mi7b5**, you take a **minor 7** chord (1, b3, 5, b7) and then flatten the 5 as well
- For a full on **diminished 7** chord, you further flatten the 7, which in effect makes it a 6 tone, but it commonly referred to as a **double b7**, a fully diminished 7 tone

Therefore (and referencing the chart!)...

- **Gdim** chord: G/1, Bb/b3, Db/b5;
- **Gm7b5** chord: G/1, Bb/b3, Db/b5, F/b7
- **Gdim7** chord: G/1, Bb/b3, Db/b5, E/bb7

Diminished Chord

Musical notation for a Diminished Chord in B-flat major. The bass clef staff shows a B-flat chord with notes Bb, D, and F. The treble clef staff shows a guitar fretboard with the 3rd, 6th, and 4th frets indicated.

Half Diminished Chord (mi7b5)

Musical notation for a Half Diminished Chord (mi7b5) in B-flat major. The bass clef staff shows a B-flat chord with notes Bb, D, F, and Ab. The treble clef staff shows a guitar fretboard with the 3rd, 6th, 4th, and 3rd frets indicated.

Diminished 7 Chord

Musical notation for a Diminished 7 Chord in B-flat major. The bass clef staff shows a B-flat chord with notes Bb, D, F, and Ab. The treble clef staff shows a guitar fretboard with the 3rd, 6th, 4th, and 7th frets indicated.

Augmented chords are simply major chords with an *altered* 5 tone, which is **sharped**. You can also create a dominant 7 chord with a #5; simply raise the 5 tone sharp and you're there. It is often called a **dom7alt5**, too.

So, a **Gaug** (also displayed like this: **G+**) chord is: **G/1, B/3, D#/#5**; and a **Gdom7#5** is: **G/1, B/3, D#/#5, F/b7**. Take a look at the chart.

Augmented Chord

Musical notation for an Augmented Chord in B-flat major. The bass clef staff shows a B-flat chord with notes Bb, D, and F#. The treble clef staff shows a guitar fretboard with the 3rd, 2nd, and 6th frets indicated.

Dominant 7 #5 Chord

Musical notation for a Dominant 7 #5 Chord in B-flat major. The bass clef staff shows a B-flat chord with notes Bb, D, F, and Ab. The treble clef staff shows a guitar fretboard with the 3rd, 2nd, 6th, and 3rd frets indicated.

Suspended chords come in two flavours: **suspended 2** (1,2,5) and **suspended 4** (1,4,5). You can suspend a dominant chord by raising the 3 tone to the 4, retaining the $b7$ and 5. Check the chart.

Suspended 2 Chord



Suspended 4 Chord



Dominant 7 sus 4 Chord



A terrible common practice is to simply call a chord a "sus" chord, like this: **Esus**. The problem is that I don't know *which suspended chord* you mean. Another common practice is to call it a 2 chord, like this: **C2**. This has zero meaning to me. Do you mean **Csus2**? Or do you mean **Cadd9**? Big difference! You may think it's a semantic thing, but it isn't. Chord names can be confusing enough without adding to the problem - especially for new players. Let's keep it consistent and true to the theoretical constructs, please!

Any other chord you encounter, such as a **dominant 7** with a $b9$, is simply *altered* or *added to* from the original core type (major, minor, dominant, etc.).

Yes, again, it can make your brain hurt trying to understand these "rules". But just accept it as the way things are. It isn't that hard to sort out and remember; and we don't want to wade too deep into the theory on this, right?

The chart I keep telling you to look at is important to understand - memorize the information it contains. I've displayed it in the key of G, but you can transpose it to any key - since **scales and chords are not key dependent!**

So the basic rule here is to look at the **what**, maj7, mi7, dom7 etc., and less about the **where**, the key (A, B, C, E, G, etc.), and then determine **what's been added or changed**, whether it is the 5, 7, 9, 11, or 13. Do this and it becomes fairly simple to make adjustments on the fly. Well, once you get the hang of it anyway. It just takes a little work and time and repeated practice to become second nature.

And once it does become "natural", then you will have a whole lot of options. And options are what its all about!