



*By Carl Verheyen - GJD Contributor*

Last month I talked about the modes and how they applied to the contexts of various chord progressions. You can begin to see how the modes work over certain chords, because chords are nothing more than stacks of notes from those scales. Now you need to know where the chords come from. Follow these simple directions and this will all be revealed!

Here is how you start:

- 1) Write the C major scale out using whole notes on the top line of a 12 stave piece of manuscript paper.
- 2) Over the first note C, go up a third to E and write it above that first C note. Go up another 3rd to G and write it above the E.
- 3) Now you have a C triad. Do the same on the next note D. It becomes D F A, a Dm triad. The next chord becomes E G B, an Em triad, and so on up the scale.
- 4) Stack 3rds on each note in the scale until all 8 notes are harmonized in 3rds.
- 5) Go back and stack one more 3rd on each chord. This puts the 7th on the chords, making Cmaj7, Dm7, Em7, Fmaj7, G7, Am7, Bm7b5, Cmaj7
- 6) Carry the 4th note of the C major scale, which is F down to the next stave and write out the notes from F to F on that line.
- 7) Go up to the 4th degree and flat that note, which is Bb.
- 8) Continue as before building the triads first and then adding the 7ths all the way through the key of F. The chords in the new key become Fmaj7, Gm7, Am7, Bbmaj7, C7, Dm7, Em7b5, Fmaj7.
- 9) Continue through the flat keys: C F Bb Eb Ab Db and Gb by bringing down the 4th note, writing out the scale degrees, adding the existing flats from the above line and flattening the 4th degree. This teaches you key signatures as well as the diatonic chords in each key.

Now you can see where all the chords come from. Next we'll take the sharp keys:

- 1) Write out all the notes from B to B on the stave.
- 2) Place a sharp before each note in the scale except B.
- 3) As with the flat keys, go up a 4th and instead of adding a flat, erase a sharp, which does exactly the same thing: it lowers the pitch.
- 4) Carry the 4th note of the B major scale, which is E down to the next stave and write out the notes from E to E on that line, including the sharps from the key of B.
- 5) Erase the # on the 4th degree of the scale, which is A.

- 6) Continue down through the sharp keys building each scale.
- 7) Harmonize each scale building the chords.
- 8) Make sure you label each chord. In the key of E we have:  
Emaj7 F#m7 G#m7 Amaj7 B7 C#m7 D#m7b5 Emaj7

You can assign numbers to each chord as well. There is an entire system used in music (sometimes called the Nashville Number System) that uses the chord numbers instead of the actual chord symbols. In these instances a progression like:

I: C | Am7 | F | Fm6 | Dm7 | G7 | C :|

Is referred to as:

I: I | VIIm7 | IV | IVm6 | IIm7 | V7 | I :|

The reason the number system is useful is because transposing to any other key is very simple. That same progression in Eb would be:

I: Eb | Cm7 | Ab | Abm6 | Fm7 | Bb7 | Eb :|

This is all the theory you'll need to know for 90% of your work as a guitarist. I can instantly tell you the VIIm7 chord in Ab or E major or any other key because I spent the time harmonizing the scales. A good musician has this information instantly accessible and therefore can transpose a song to any key if he or she knows it in one key. Have you ever been on a gig or in a session when a singer suddenly needs the song in another key than the one you learned it in? I use the split second recall of the number system to "lift the grid" and set it down in a new key. Try playing Charlie Parker's "Donna Lee" in F major. It's a mental workout!

Good luck with your music,  
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