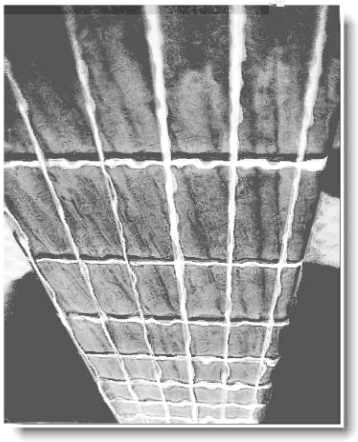
Chords- Theory and Application



Chords remain a mystery for most guitarists because of the mystique surrounding both the guitar and the theory behind what makes a chord appropriate. The almost limitless possibilities of how to play any given chord contributes to the confusion and leads most players to be happy with a few reliable forms. This in some cases is not a problem. Joe Pass did very well with a few dozen forms. This leads me to the point, to play better chords it is necessary to understand the role of the chord. In most songs the chord progression provides the backdrop for all else. I can hear the bass players moaning. I feel chords can make or break a good bass line as well as a good melody line. The chords can be a synopsis of the entire tune when carefully voiced.

The Basics

Chords are made up of intervals. In tertiary (the most common) harmony major and minor thirds are the building blocks. Also see chapter on "Quartal Harmony"

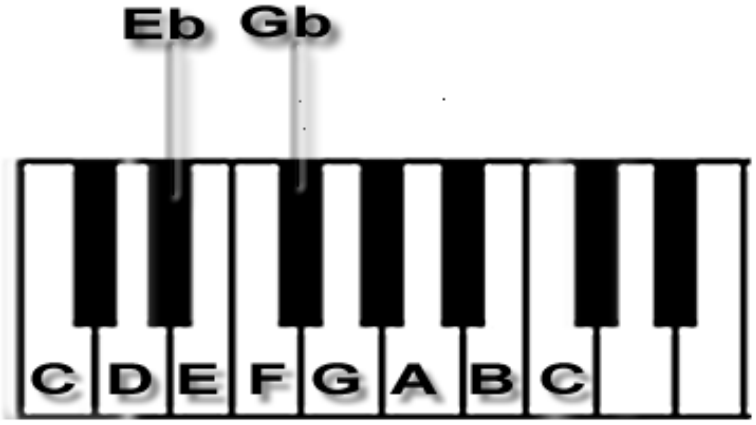
- Major third is 2 notes that are 2 whole steps (4 half steps) apart.
    - Example C to E

- Minor 3rd is 2 notes that are 1 ½ steps (3 ½ steps) apart
    - Example C to Eb

Stacking these building blocks yields four chord types:

- Major = Major 3rd + Minor 3rd
    - C E G = C major
- Minor= Minor 3rd + Major 3rd
    - C Eb G = C minor
- Augmented= Major 3rd + Major 3rd
    - C E G# = C augmented
- Diminished= Minor 3rd + Minor 3rd
    - C Eb Gb = C diminished

Use the piano keyboard to visualize this before going to the guitar



The major chord forms that are common are as follows.

The diagrams are not meant to be all inclusive. Many variations are derived from these basics.

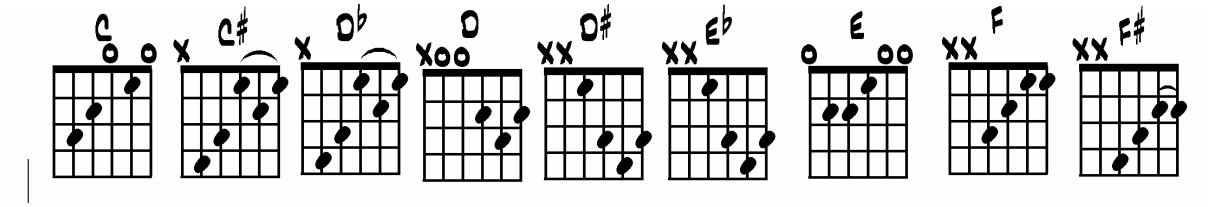
The method of presentation I use here is to assume all the chords to be moveable if you exclude the open strings. This can be accomplished by finger picking/plucking only the notes that are being held or stroking only the fingered strings.

This chart represents many more chords than what is shown. The C# form could be used at each fret covering the entire scale ending with another C# at the 13th fret.

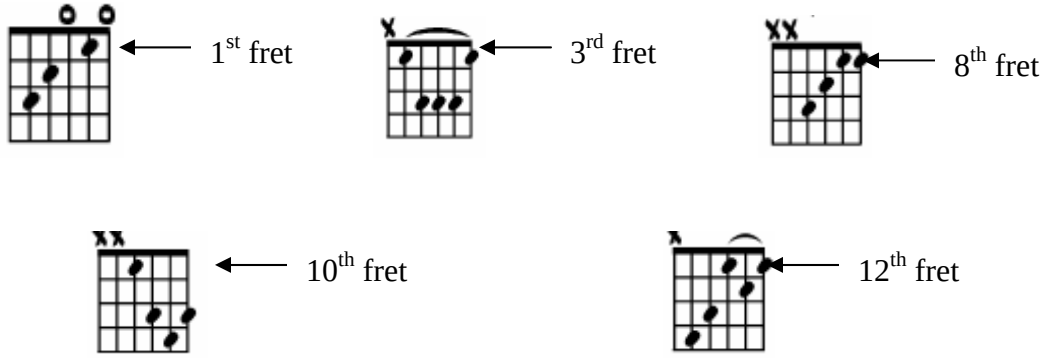
The D# could be used in the same way.

The F form may be played as a full barre chord

It may be moved along the neck to create all possible major chords.



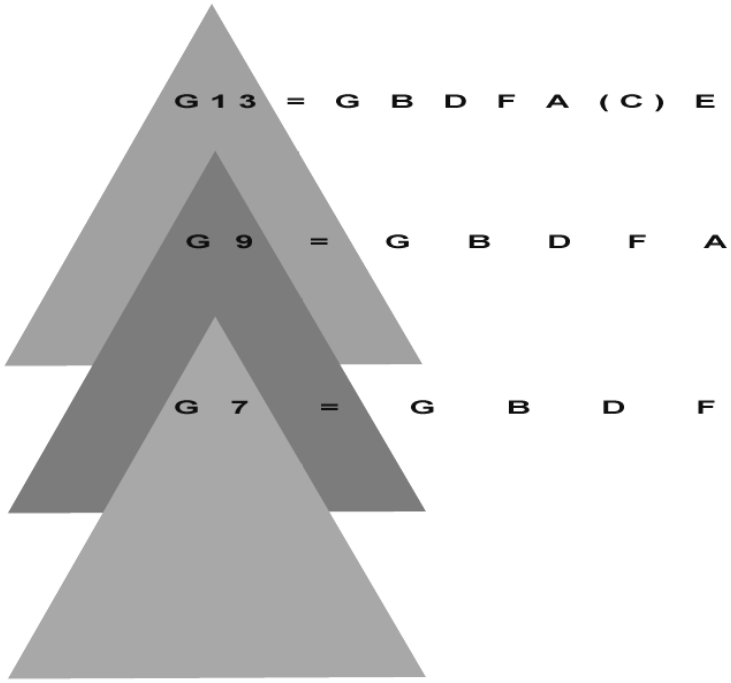
An example of the choices available for one chord: C major



- **Study the chapter on "Moveable chords" to gain a fuller working knowledge of chord forms.**

How many chords are there?

Generally it is thought that a PHD in rocket science is necessary to understand chords and how to put them together on the guitar. It might help but is not necessary. Chords have a telescopic nature that makes things a bit easier. By that I mean a chord with a large number after it; as in G13, is a G7 and a G9 as well.



This means that when confronted with a G9 chord you could play a G7 and it would probably work. Your ear is the final judge," If it sounds right, it is right."
Because there are qualities such as major or minor you need to be familiar with all major and minor forms as well as the other *"pivotal qualities"*. I use that term to define the fundamental quality that you should express in the chord and not ignore. Two such qualities are *Major or Minor* and *Major 7 or Dominant 7.*

Chord Possibilities

All chords fall into a few categories. The two greater categories are extended chords or altered chords. Extensions are generally built from scale tones. The exceptions are the minor and the dominant 7. There are ways of accommodating these chords without introducing altered tones. This involves using different scale forms as the source of the notes in the chord. The most common approach is to use a major scale and spell out the chord with reference to it. In general the possibilities include triads with major or minor 3rd and natural, sharped or flatted 5ths.Some possibilities don't work well because they start sounding like another chord with a simpler name. An example is Cmi#5. The notes in this chord are C,Eb, and G# (Ab) which is an Ab major triad. I have put a * in front of these and uncommonly used or ambiguous possibilities

Triads

Major=1,3,5
Augmented=1,3,#5
*Dim 5=1,3,b5

Minor 1,b3,5
Diminished 1,b3,b5
*Mi#5=1,b3,#5

Sevenths

6 types of triads plus 2 types of 7ths and a 6th

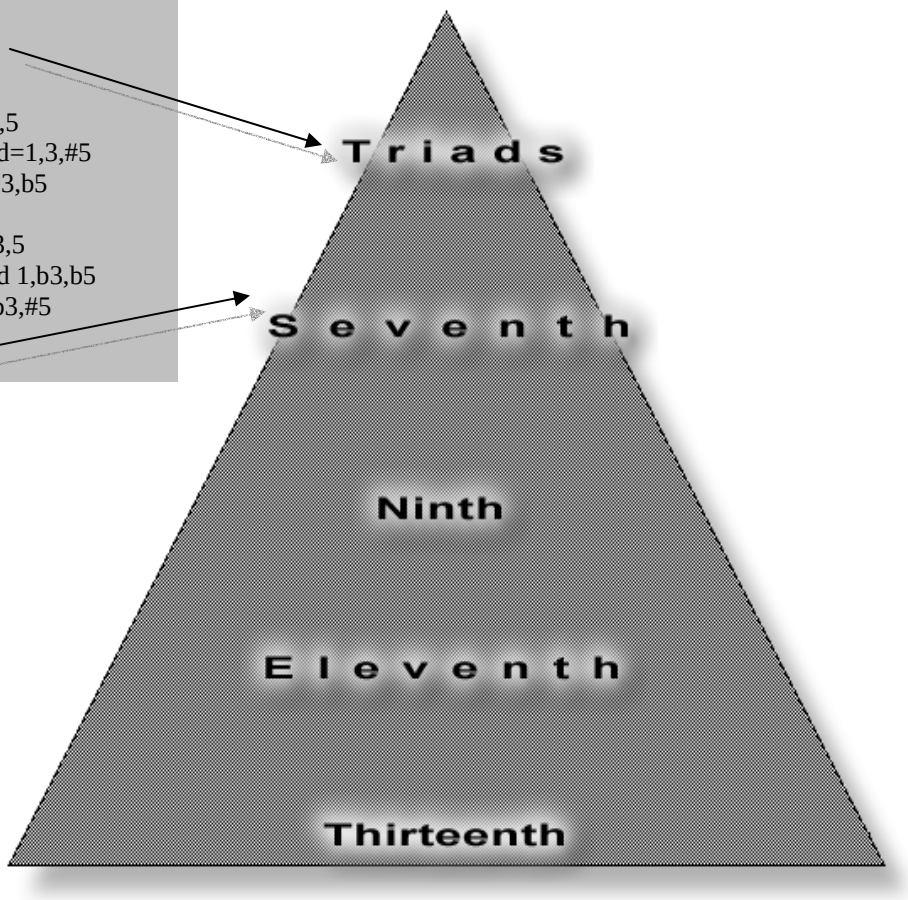
Major7=1,3,5,7
Maj7Augmented=1,3,#5,7
Maj7th b 5 (Lydian major)=1,3,b5,7

Dominant 7=1,3,5,b7
7Augmented=1,3,#5,b7
7th b 5=1,3,b5,b7

Dim 7=1b3b5,6 this is the common dim7 chord
The diminished 7th is a double flatted 7 (6th)

Minor 7= 1,b3,5,b7
Half Dim7= 1,b3,b5,b7
*Mi7#5=1,b3,#5,b7

Minor (maj)7= 1,b3,5,7
*Minor (maj7) b5= 1,b3,b5,7
*Mi7#5=1,b3,#5,b7



The remaining possibilities

The ninths (natural, sharp and flatted), elevenths (natural and augmented) and thirteenths (natural and flatted) can be added to all of the previous.
You can see the number of possible chords growing out of hand. What is important is to be in control of good sounding functional chords. I have found that putting chord types in categories helps a great deal. The general approach is to decide if a chord is either a build, tension or release chord. (This idea is covered in detail in the "Functional Harmony" chapter.)
Here are the general categories;

- The build or II chord is usually a minor 7^{th} chord.
- The tension or V chord is usually a dominant 7 chord.
- The release or I chord is usually a major 7 chord.

Table of chord types.
Roman numerals relate to scale degrees.
In the key of G the roots are;
II= Am
V=D7
I= G major

Build II (minor)	Tension V (dominant 7^{th})	Release I (Major 7)
Mi7 Mi 9 Mi11 Mi13 Mi7-5	7^{th} Extended; 9^{th} 11^{th} 13^{th} Altered; # or b5 # or b 9 #11 b13	Maj7 6^{th} Maj9 Ma 13 Lydian major (ma7-5)

These are by no means all possibilities, only chords that share a common root. In other chapters ("Blues" and " Modal Harmonic Devices") you will find alternate chords arrived at by devices such as "two/five substitutions" or "tritone substitutions" that result in chords having new root names and possibly what seems to be a crossed quality. A favorite example of this principal is when ending a song in D minor (last chord being D minor) I like to use a G13 as the final chord.
A good general approach is to try to play what the music is asking for until you find a better choice, staying within the general quality category. In other words, the music might be asking for a G13b9 which you might not know so using a G7b9 would be a workable solution. The b9 is the alteration so you might need to use a b9 instead of ignoring it and playing what you fell is close, such as a 9^{th}. This is a case of when close is not good enough, in fact close is the worst solution. It would be better to avoid any 9^{th}. Not knowing the correct form is a poor excuse but we all have played substitutes based on ease of playing or fluency. Learn the correct form and then make your choice.