



The Chord Theory ebook

A basic & comprehensive guide

Chord categories explained
Chords and intervals
Chords and scales relationship
Chord construction
Inverted chords
Major and minor
and more

GUITAR CHORDS - FIND, LEARN AND PLAY
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The **Chord Theory** ebook

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Introduction

Chords are of vital importance for musicians and often the first a beginner learn about. Chords are essential when it comes to guitar, but are also fundamental for other instruments, such as the piano. Chords, are however, not relevant for percussion instruments and only of minor importance for instruments like bass guitar or harmonica.

In the long run, you will get a lot of benefits from knowing something about the theory of chords. How chords are constructed, how they can be separated into chord categories, or chord families, and why some chords sound great together while others don't.

General music theory

As a prelude to the main subject, chords, it could be a good idea to take a short journey through some fundamental parts of general music theory.

Notes, tones and pitches

The words *note*, *tone* and *pitches* can be confusing. Not at least notes and tones tend to be inter-mixed as synonyms. There are, however, distinctions. It can be reasonable to treat them as synonyms in some cases, but in precise music vocabulary they can be separated.

A tone can be seen as a sound made by an instrument whereas a note is a description of a tone. In music sheets, for instance, notes are used to give information about the duration of a tone (quarter notes etc.).

We normally don't say "the tones in a chord", we say the "notes in a chord". But we could say: "I like the tones coming from your guitar when you play that chord".

A pitch, finally, refers to a frequency, measured in Hertz (Hz). The "Middle C", for instance, which is the fourth C key on a full-size piano keyboard, has a pitch with a frequency of 261.6 Hz.

Sharps (#) and flats (b)

To understand the theoretical music lingo, you must be familiar with *sharps* (#) and *flats* (b). These are called *accidentals* and are in opposition to the *naturals* (C, D, E, F, G, A and B).

If you see a chord symbol as C#, it is spelled "C sharp". And if you see a chord symbol as Db, it is spelled "D flat". The next thing you should know is that C# and Db is exactly the same thing as tones considered. They are written differently because the changing of keys.

These relationships can be seen in the following list:

- C# = Db
- D# = Eb
- F# = Gb
- G# = Ab
- A# = Bb

Intervals

Precisely as it sounds, **intervals are distances between two notes**. The units for intervals are *semi-steps* and *whole steps*. There is one semi-step between C and C# and there is one whole step between C and D.

One advantage to know which interval two notes have is because intervals has different sound characters. The sound character of notes with only one semi-step in between is dissonant because they almost collide. Try to play C and C# together on a guitar or piano and you will hear a sound that is quite unpleasant.

Notes with five scale steps between can sound rather firm (this interval constitutes the 5th chords, or power chords, which are used a lot in heavier rock styles). Thirds on the other hand is very often used in acoustic fingerpicking songs and in classical music played on a classical guitar. They have a very pleasing sound.

What makes the whole thing with intervals a bit intricate is that some intervals exist in different forms. There are, for instance, minor third and major third. These have the same intervals considering scale steps, but differ considering semi-steps. For the latter, there are no scale context involved and every note is counted.

Principally it is quite easy – you need to be able to count to thirteen and keep apart the name of intervals with the semi-step numerals ...

Interval	Semi-steps	Scales degrees	Abbreviation
Perfect Unison	1	1	P1
Minor Second	2	b2	m2
Major Second	3	2	M2
Minor Third	4	b3	m3
Major Third	5	3	M3
Perfect Fourth	6	4	P4
Augmented Fourth	7	#4	A4
Perfect Fifth	8	5	P5
Minor Sixth	9	b6	m6
Major Sixth	10	6	M6
Minor Seventh	11	b7	m7
Major Seventh	12	7	M7
Octave	13	8	8va

Concerning the abbreviations: P stands for “perfect”, M stands for major and m stands for “minor” which are so-called qualities that describe intervals. The octave can also be abbreviated P8 (perfect octave). The abbreviations are mentioned here, but these are not something you must learn.

The augmented fourth (#4) can also be called a diminished fifth (b5), which is practically the same thing.

Lastly, there are two types of intervals: *melodic intervals* when two notes are played separately and *harmonic intervals* when two notes are played simultaneously. The power chord (5th chord) that involve a root and a fifth can both be seen as a chord and as a harmonic interval.

The relationship between scales and chords

The notes in chords are often referred to as intervals, such as a *third* or a *fifth*. The relationship between intervals, chords and scales is illustrated in the table below by comparing the C major scale and the C major chord from the perspective of scale steps. The scale steps explain why the second and third notes in the C chord (as well as other major triads) are referred to as third and fifth.

Scale steps	1	2	3	4	5	6	7
C scale	C	D	E	F	G	A	B
C chord	C		E		G		

The first note is not called the first, although it wouldn't be illogical, but the *root*.

That is clear and simply, isn't it? It can, however, be a little more complicated. You may encounter terms such as major third, perfect fifth and minor seventh. Let's take a closer look by replacing the C major chord from the previous table with the Caug chord:

Scale steps	1	2	3	4	5	6	7
C scale	C	D	E	F	G	A	B
Chromatic scale steps					#5		
Caug chord	C		E		G#		

The augmented chord (abbreviated aug) consists by a root, a third and an *augmented fifth*. The augmented fifth is a G# note, a G with a sharp (#) sign, and outside the C scale. The correct degree for this note is written as #5, indicating that it is a tone one semi-step above G. The third row in the table displays the scale step #5, which is included in the Chromatic scale which include all notes.

Here comes a third example:

Scale steps	1	2	3	4	5	6	7
C scale	C	D	E	F	G	A	B
Chromatic scale steps							b7
C7 chord	C		E		G		Bb

The dominant seventh chord (abbreviated 7) consists by a root, a third, a fifth and a minor seventh and as can be noted from the table doesn't fully match the C major scale. The fourth note in C7 is a minor seventh interval, namely Bb. The correct scale step for this note is written b7, indicating that it is a tone one semi-step below B.

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Key and chord chart

A chart with keys and chords showing the relationship of chords in all the keys can be seen below. From left to right you can see the key and the chords that belong to it.

Key	I	ii	iii	IV	V	vi
C#	C#	D#m	E#m	F#	G#	A#m
F#	F#	G#m	A#m	B	C#	D#m
B	B	C#m	D#m	E	F#	G#m
E	E	F#m	G#m	A	B	C#m
A	A	Bm	C#m	D	E	F#m
D	D	Em	F#m	G	A	Bm
G	G	Am	Bm	C	D	Em
C	C	Dm	Em	F	G	Am
F	F	Gm	Am	Bb	C	Dm
Bb	Bb	Cm	Dm	Eb	F	Gm
Eb	Eb	Fm	Gm	Ab	Bb	Cm
Ab	Ab	Bbm	Cm	Db	Eb	Fm
Db	Db	Ebm	Fm	Gb	Ab	Bbm
Gb	Gb	Abm	Bbm	Cb	Db	Ebm
Cb	Cb	Dbm	Ebm	Fb	Gb	Abm

In essence, the table gives tips on which chords to play together. Chords on the same rows will always sound good in different progressions because they belong to the same key.

For an example, look at the chord chart and the column that begins with C. Here we find C major, D minor, E minor, F major, G major and A minor. Every one of these chords always sound nice together. Try the following chord progression:

C - Em - Am - F - G - C

Really nice and smooth, isn't it? Of course, sometimes we want some dissonance in our music but the chart above gives us the fundamentals for creating chord progressions.

One more area in which the chart can assist us is in writing our own songs. As we recognize chords that match, we can use them together then composing music.

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