

CHORD CONSTRUCTION

Chords are constructed from scales.

We use the C major scale as the basis for understanding chords, how they are constructed, and what *intervals* they contain.

INTERVAL = Distance between any two notes in a scale or a chord.

Chord/Scales & Intervals

Each degree of the scale has a chord built upon it.

We build chords by stacking intervals of a third on top of each other. E.g. C to E is a third. Why? Because we count from the start note to the third note. C, D, E = 1, 2, 3. So E is a 3rd from C. A 3rd from E is G. E, F, G = 1, 2, 3. 3rd from G is B – G, A, B.

Most chords are either triads (3 note Chords) or, 7th's (4-note chords).

In this example we are going to use 7th's, or, 4-note chords.

Why are 4-note chords called 7th chords? Well, if you study the diagram below, you will see that 7th chords are made up of the 1, 3, 5, & 7 degrees of the scale. The last note being the 7th, hence the name 7th chords.

We can also have 9th chords, 11th chords and 13th chords. To get these chords, all we do is keep stacking 3rds on top of each other. A 9th chord is a 5-part chord. An 11th chord is a six-part chord and a 13th is a 7-part chord. Interesting to note that a 13th chord uses all intervals of a scale. However, all notes of these chords are seldom played. Usually these large chords are reduced to 4 or 5-part chords, particularly on the guitar. (Guitar has only 6 strings, so only six notes can be played at once.) Only the important notes of these large chords are used on guitar. You will learn more about this later.

The notes in chords larger than 7ths, are called the upper partials; the 9, 11, 13.

STACKING 3RDS TO CREATE CHORDS

There are 2 qualities to any interval. The first tells us what the interval is—3rd, 5th, 7th, 2nd, 9th etc. The second tells us the type, or, *quality* of the interval—major, minor, diminished or augmented.

Chords from the major scale are constructed by stacking MAJOR and MINOR 3rds upon one another.

MAJ 3rd = 4 half steps, or 2 whole steps. MIN 3rd = 3 half steps, or 1½ whole steps.

Here, we will demonstrate with M3 = MAJOR 3rd, & m3 = MINOR 3rd.

Note Capital M for major, &, lower case m for minor 3rd.

In this example, we use the C major scale starting from each degree of the scale: C, D, E, F, G, A, & B. These are also called modes.

- C Ionian
- D Dorian
- E Phrygian
- F Lydian
- G Mixolydian
- A Aeolian
- B Locrian

The diagram illustrates the construction of seven 7th chords from the C major scale by stacking thirds. The chords are shown on a staff with notes 1-7 and the interval between them labeled as M3 or m3.

- CMAJ7**: C (1), E (M3), G (m3), B (M3), D (2), F (3), A (4)
- Dmi7**: D (1), F (m3), A (M3), C (m3), E (2), G (3), B (4)
- Emi7**: E (1), G (m3), B (M3), D (m3), F (2), A (3), C (4)
- FMAJ7**: F (1), A (M3), C (m3), E (M3), G (2), B (3), D (4)
- GDOM7**: G (1), B (M3), D (m3), F (m3), A (2), C (3), E (4)
- Ami7**: A (1), C (m3), E (M3), G (m3), B (2), D (3), F (4)
- Bm7b5**: B (1), D (m3), F (m3), A (M3), C (2), E (3), G (4)

CHORD CONSTRUCTION:

Maj7 chords = M3, m3, M3

mi7 chords = m3, M3, m3

Dom7 chords = M3, m3, m3

mi7b5 chords = m3, m3, M3

Triads

What we will do here, is learn all the basic triads (3-note chords) in all inversions and on all string sets.

There are 4 possible triads using Maj and min 3rds.

	<u>Stacked 3rds</u>	<u>Chord Tones</u>		<u>Example</u>
Major triad	= M3 + m3	= 1 3 5	e.g. CMaj	C E G
Minor triad	= m3 + M3	= 1 b3 5	e.g. Cmi	C Eb G
Diminished Triad	= m3 + m3	= 1 b3 b5	e.g. Cdim	C Eb Gb
Augmented triad	= M3 + M3	= 1 3 #5	e.g. Caug	C E G#

	ROOT Inv	1st Inv	2nd Inv
C Major			
C Minor			
C Diminished			
C Augmented			