# Basic Chord Reference Table 

## Scale Degrees and Arabic Numerals in Music

In any major scale there are 7 notes ( 8 including the root at the top). These notes are called scale degrees and can be referred to by using solfege or a numbering system using Arabic numerals. In jazz and other, less diatonic forms of western music, the numbered system is preferred. This numbering system is quite easy as the root note is $\mathbf{1}$, the second degree is $\mathbf{2 , 3}$, and so on... here it is with the C scale

| Scale Degrees |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| C | 0 | $E$ | $F$ | $G$ | $A$ | 8 | $C$ |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |

Using this scale degree system is advantageous because it is not dependent on key and can be used easily to transpose material quickly. For example, Mary Had a Little Lamb in C goes EDCDEEE... but transposing from C to F\# would be tricky if you didn't think of $\mathbf{3 2 1 2 3 3 3}$. Using this system, not only scalar material but chords also can be transposed easily from one key to another.

## Introduction to Chord Theory

Chords in music are defined as a group of multiple notes played to create one sound. These chords are used to back up our favorite songs and create scaffolding for the melody to be held up with. Now that you know what a chord does what exactly is a chord? A chord is created by stacking every other music note of a scale together; it's simply as easy as playing the odd numbers of a scale!

Very basic chords are called triads and are made up of three notes, this is the smallest number of notes a chord can have (any less and you have an interval!) In order to build a triad count three notes using odd numbers: 13 5. Boom. That's it.

The usual chords you see in jazz and popular music (actual chords not triads) are called $7^{\text {th }}$ chords. These chords have four notes and go up to the $7^{\text {th }}$. Counting four notes using odd numbers gives us: $1 \mathbf{3 5 7}$. This is why they are called $7^{\text {th }}$ chords.

The more advanced chords in songs have more notes than just four and sound fancy but are harder to play. These chords have 5,6 , or 7 notes in them. Counting all the way to seven notes in odd numbers yields: $1 \mathbf{3 5 7 9 1 1} \mathbf{5 1 3}$. Because these chords go past 7, the usual number in scales, they are called extended chords.

## Basic Chord Reference Table

## Basic Chord Notation and Qualities

Most chords in jazz and modern western harmony are $7^{\text {th }}$ chords and just about any song in existence can be performed using these four note chords. When spelling a $7^{\text {th }}$ chord, odd numbers from 1 to 7 representing scale degrees are used just like normal notes would be used. For example, 1357 translates to C E G B or any other root for that matter. In addition, flatting or sharping a pitch with an accidental in the scale degrees raises or lowers the diatonic pitch. For example, $\mathbf{1 6 3} 5 \mathrm{b7}$ translates to F $^{*}$ AC\# E meaning that the $3^{\text {rd }}$ and $7^{\text {th }}$ are lowered in pitch, and not necessarily "flatted."

| Name | Symbol | Spelling (a common ext) | Chordal Application |
| :---: | :---: | :---: | :---: |
| Major | $C^{\Delta 7}$ or $\mathrm{CMAS}^{7}$ | 1, 3, 5, 7 (\#11) | Used as tonic of song, ie I. Also played when no symbol is specified ie C |
| Dominant | $C^{7} \ldots$... that's it | 1,3, 5, 67 (b9, or *9) | Also tonic of song, ie I $\mathrm{I}^{7}$. Played during blues. Similar to major with lowered 7 . |
| Altered Chord | CAt7 ${ }^{7}$ or $\mathrm{Cl}^{7}$ (th) | 1, 3, \#5, 67, 69, \#9, \#11 | Similar to Dom7 but this time acting as a $\mathrm{V}^{7}$ function chord resolving. |
| Minor | $\mathrm{C}-7$ or $\mathrm{CMIN}^{7}$ | 1, 63, 5, 67 (9, 11, 13) | Tonic of song ie i ${ }^{7}$ or ii of V ie ii $\mathrm{ii}^{7}$. Always play natural extensions. |
| Half-Diminished | $\mathrm{c}^{87}$ or $\mathrm{Cl}^{\text {-765 }}$ | 1, 63, 65, 67 (9, 11, 613 ) | Acting as ii ${ }^{7}$ in ii V I, but now in minor so iiø V i, ie ii i申? |
| Diminished | $\mathrm{Cl}^{07}$ or $\mathrm{Com}^{7}$ | 1, b3, 65, b67 (9, 11, b13) | Similar to Dom7 with a root a half step above, watch our for double flat 7 . |
| Augmented | $\mathrm{C+}{ }^{7}$ or CALT ${ }^{\text {c }}$ | 1, 3, $55,67(\Delta 7$ if $C+\Delta 7)$ | Sometimes used as an altered chord. Watch for Maj vs Dom $7^{\text {th }}$. |
| Suspended | Csus ${ }^{4}$ or $\mathrm{Csus}^{7}$ | 1,4, 5, 7 | Used to imply an open tonality, Maj or min, in many fusion songs as tonic. |

Note: Although all chords are notated in the key of ' $C$ ' these chords can (and should) be transposed into any key!

Tips for Practicing: transpose scales by 4ths, not chromatically. Practice scales descending once comfortable with ascending, start scales on chord tones other than the root (ie: $3,5,7,9,11,13$ )

For scales to play along with these chords, see the "Scale Usage Reference Table".

