

# THE COMPLETE CHORD FORMULAS

Digital Handbook



The easy-to-use quick reference  
guide to master every chord

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# Table of Contents

Introduction	3
Chapter 1 – The Standard Basic Chords	4
Chapter 2 – Suspended Chords	8
Chapter 3 – Sixth Chords	10
Chapter 4 – Adding Extensions & Alterations	12
Chapter 5 – Omit Chords	17
Chapter 6 – Slash Chords	18
Chapter 7 – Polychords	19
Chapter 8 – The Standard Basic Chord Voicings	20
Chapter 9 – Next Steps	23

# Introduction

*Welcome to The Complete Chord Formulas Handbook  
by Musicians Inspired!*

This handbook is meant to be a quick reference guide and learning tool to help you master playing every chord on the piano and reading every chord symbol in music.

In your musical journey, you will see chords everywhere! And learning chords on piano will help you with modern playing (Pop, Jazz, Rock, R&B, Country, etc.) as well as read Classical music faster.

The final chapter of this book goes into the topic of Chord Voicings, which is how professionals use chords to play songs. It's the beginning of "Chord Style" Piano Playing.

I hope this handbook is a useful tool in your music journey. If you have any questions, feel free to shoot me a message at [info@musiciansinspired.com](mailto:info@musiciansinspired.com)

Stay inspired!

*Matt Mi*

PS – If you are interested in learning piano with me, then [click here to checkout my free piano web class.](#)

# Chapter 1

## The Standard Basic Chords

**There are two systems of thinking to play our standard basic chords.**

The first is to think of the chord notes spatially (how they're constructed by intervals).


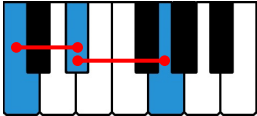
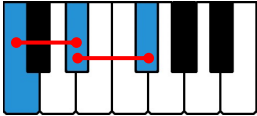
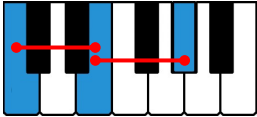
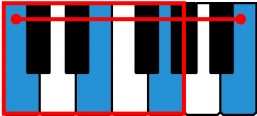
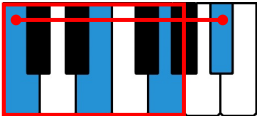
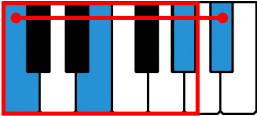
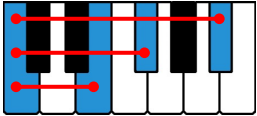
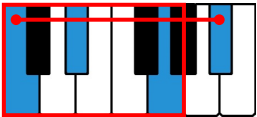
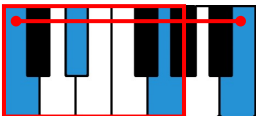
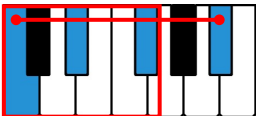
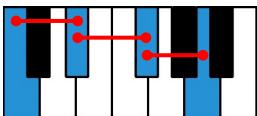
The second is to think of the chord notes as degrees of the Major Scale.

The following two pages are formula sheets that outline both ways of thinking.

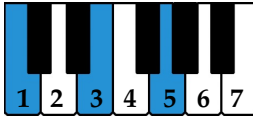
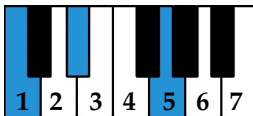
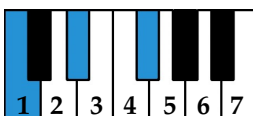
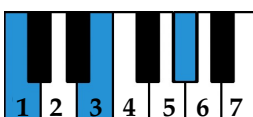
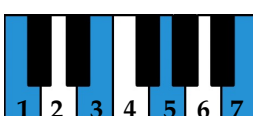

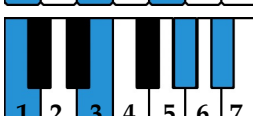
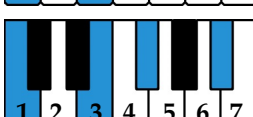



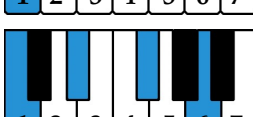
Try playing the "C" version of each standard chord. And work through each chord using the formulas on both pages. Your brain will start making connections and you'll begin to internalize the formulas.

After finishing the "C" version of each chord, you can experiment with other versions of the chords as well as come back to the sheets anytime you encounter a chord.

# Standard Chord Formulas Sheet

Chords	Spatial	
Major	M3 + m3	
Minor	m3 + M3	
Diminished	m3 + m3	
Augmented	M3 + M3	
Major 7th	Maj Triad w / M7	
Dominant 7th	Maj Triad w / m7	
Dominant 7th #5 (Augmented 7th)	Aug Triad w / m7	
Dominant 7th b5	M3, Tritone, and m7 (starting from root)	
Minor 7th	min Triad w / m7	
Minor(Major 7th)	min Triad w / M7	
Half Diminished 7th (Minor 7th b5)	dim Triad w / m7	
Diminished 7th	m3 + m3 + m3	

# Standard Chord Formulas Sheet

Chords	Major Scale Degrees W W H W W W H				
Major	1	3	5		
Minor	1	b3	5		
Diminished	1	b3	b5		
Augmented	1	3	#5		
Major 7th	1	3	5	7	
Dominant 7th	1	3	5	b7	
Dominant 7th #5 (Augmented 7th)	1	3	#5	b7	
Dominant 7th b5	1	3	b5	b7	
Minor 7th	1	b3	5	b7	
Minor(Major 7th)	1	b3	5	7	
Half Diminished 7th (Minor 7th b5)	1	b3	b5	b7	
Diminished 7th	1	b3	b5	bb7	

# Standard Chord Symbols List

Chords	Symbols			
Major	C	CM	Cmaj	CΔ
Minor		Cm	Cmin	C-
Diminished			Cdim	C <sup>o</sup>
Augmented			Caug	C+
Major 7th		CM7	Cmaj7	CΔ7
Dominant 7th	C7		Cdom7	
Dominant 7th #5 (Augmented 7th)	C7 <sup>(+5)</sup>	C7 <sup>(#5)</sup>	Caug7	C+7
Dominant 7th b5	C7 <sup>(-5)</sup>	C7 <sup>(b5)</sup>	Cdom7 <sup>(b5)</sup>	
Minor 7th		Cm7	Cmin7	C-7
Minor(Major 7th)		Cm(M7)	Cmin(maj7)	C-Δ7
Half Dim 7th (Minor 7th b5)		Cm7 <sup>(b5)</sup>	Cmin7 <sup>(b5)</sup>	C <sup>ø</sup> 7 C-7 <sup>(b5)</sup>
Diminished 7th			Cdim7	C <sup>o</sup> 7

## Chapter 2

# Suspended Chords

Suspended chords are powerful tools for composers, adding tension, emotion, and intrigue. They create anticipation and resolution by altering specific notes in major or minor triads. Represented as "sus" chords, they replace the third note with the second (sus2) or fourth (sus4) note of the scale, generating compelling tension.

The sus4 chord replaces the third note with the fourth, resulting in a combination of the root, fourth, and fifth notes. For example, in the key of C major, a C sus4 chord is formed by replacing the third with the fourth (F): C, F, and G. It adds an open and anticipatory sound, deviating from expected tonal resolution and adding intrigue.

On the other hand, sus2 chords replace the third note with the second, infusing the chord with a dreamy and introspective quality. This substitution brings serenity and calmness, diverging from traditional tonal resolution.

Suspended chords find applications across various genres like folk, pop, jazz, and rock music. In rock, sus4 chords build tension before powerful resolutions, intensifying the impact of choruses or climactic sections. In jazz, suspended chords serve as colorful substitutions, adding complexity to progressions and improvisations.

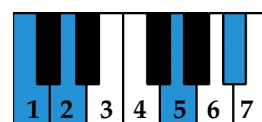
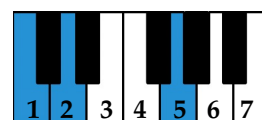
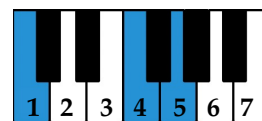
Suspended Chords often function as transitional or passing chords, leading to more stable major or minor chords. Transitioning to traditional triads effectively resolves the tension, providing a satisfying sense of completion for the listener.

In conclusion, suspended chords enhance compositions with tension, emotion, and depth, whether it's the unresolved intrigue of sus4 chords or the introspective allure of sus2 chords.



# Suspended Chord Formulas

Chords	Major Scale Degrees WWHWWWH		
Major	1	3	5
Suspended 4	1	4	5
Suspended 2	1	2	5
Dominant 7th	1	3	5 b7
Dom 7th Sus4	1	4	5 b7
Dom 7th Sus2	1	2	5 b7



Chords	Symbols	
C Suspended 4	Csus	Csus4
C Suspended 2		Csus2
C7 Suspended 4	C7sus	C7sus4
C7 Suspended 2		C7sus2

## Chapter 3

# Sixth Chords

Major and minor 6th chords are versatile chords that musicians and composers utilize to add depth, emotion, and sophistication to their compositions. These chords possess distinct qualities and evoke different moods, allowing for a wide range of musical expressions. In this chapter, we will explore the characteristics, construction, and applications of major and minor 6th chords.

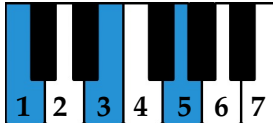
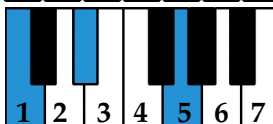
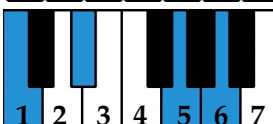
Let's start with major 6th chords. They consist of a Major Triad and the 6th scale degree, providing a bright and uplifting quality. They contribute to openness, joy, and optimism. On the other hand, minor 6th chords offer a more introspective and melancholic tone. They're built upon a minor triad with the addition of the 6th scale degree, evoking longing, nostalgia, and mystery.

Both major and minor 6th chords find applications in various genres. Major 6th chords add sophistication and richness in jazz, pop, and R&B. Minor 6th chords create a soulful atmosphere in jazz, blues, folk, and singer-songwriter compositions.

Considering their role in the harmonic context is essential. They can establish a tonal center as tonic chords, create tension as subdominant or dominant chords, and lead to other chords in a progression.

In conclusion, major and minor 6th chords offer emotional possibilities, from uplifting optimism to introspective melancholy. They enrich compositions across genres and styles.

## 6<sup>th</sup> Chord Formulas

Chords	Major Scale Degrees W W H W W W H				
Major	1	3	5		
Major 6th	1	3	5	6	
Minor	1	b3	5		
Minor 6th	1	b3	5	6	

Chords	Symbols			
C Major 6th	C6	CM6	Cmaj6	CΔ6
C Minor 6th		Cm6	Cmin6	C-6

## Chapter 4

# Adding Extensions & Alterations

Now that you know how to play the basic standard chords as well as Suspended and 6<sup>th</sup> Chords, we can now add extensions and alterations to all these chords.

From a Major Scale Degree system of thinking, the “extensions” to a chord are 9, 11, and 13. We add those extensions to our chords as well as alter those extensions by flatting and sharpening them.

These are all the possibilities of what we can add:

**9, b9, 11, #11, 13, b13**

Collectively these are called “tension notes”. Because when you add them to a chord, they create tense intervallic relationships with the existing notes of the triad or 7<sup>th</sup> chord.

In the following page, I show you examples of what notes you will most commonly see added in music. Have fun experimenting adding tension notes to the different chords that you’ve learned.

# Adding "Tension Notes" Chart

	Chords	Added Notes You'll Most Encounter in Music
<b>Triad</b>	Major	9
	Augmented	9, #11
	Minor	9
	Diminished	9, 11, b13
	Sus4	9
<b>6th</b>	Major 6th	9, #11
	Minor 6th	9, 11
<b>7th</b>	Major 7 <sup>th</sup>	9, #11, 13
	Dominant 7 <sup>th</sup>	b9, 9, #9, 11, #11, b13, 13
	Dominant 7 <sup>th</sup> #5 (Augmented 7 <sup>th</sup> )	b9, 9, #9, #11, 13
	Dominant 7 <sup>th</sup> b5	b9, 9, #9, b13, 13
	Dominant 7 <sup>th</sup> Sus4	b9, 9, #9, b13, 13
	Minor Major 7 <sup>th</sup>	9, 11, 13
	Minor 7 <sup>th</sup>	9, 11, 13
	Half Diminished 7th	9, 11, b13
	Diminished 7th	9, 11, b13

## Adding Tension Notes to Triads and 6<sup>th</sup> Chords

When we add a tension note to a Triad (3 note chord), we just write the word “add” plus what note we are adding. Here are examples of Triads with an added tension note.

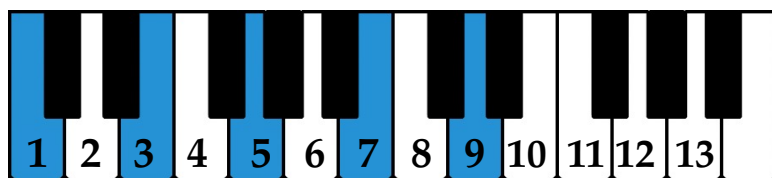
Chords	Symbols
C Major add 9	C(add9)
C Suspended 4 add 9	Csus4(add9)

When we add the 9<sup>th</sup> scale degree to our Major and Minor 6<sup>th</sup> chords, we get a special chord called a 6/9 chord with its own unique chord symbol.

Chords	Symbols
C Major 6 <sup>th</sup> add 9	C6/9
C Minor 6 <sup>th</sup> add 9	Cm6/9

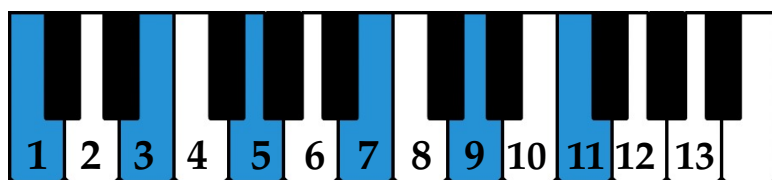
## 9<sup>th</sup>, 11<sup>th</sup> and 13<sup>th</sup> Chord Symbols

When we add the 9<sup>th</sup> scale degree to a 7<sup>th</sup> Chord we get a 9<sup>th</sup> Chord. Here's a C Major 9<sup>th</sup> Chord and its symbols:



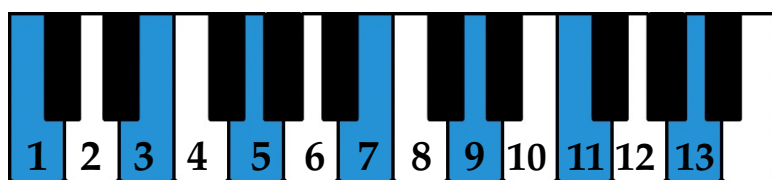
CM9  
Cmaj9  
CΔ9

When we add both the 9<sup>th</sup> and 11<sup>th</sup> scale degree to a 7<sup>th</sup> Chord we get an 11<sup>th</sup> Chord. Here's a C Major 11<sup>th</sup> Chord and its symbols:



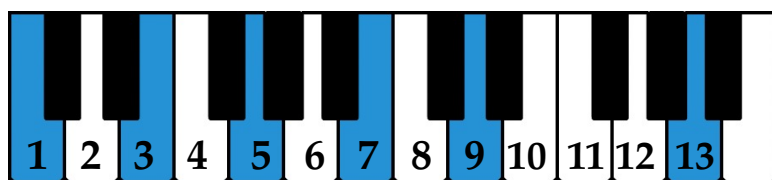
CM11  
Cmaj11  
CΔ11

When we add the 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> scale degrees to a 7<sup>th</sup> Chord we get an 13<sup>th</sup> Chord. Here's a C Major 13<sup>th</sup> Chord and its symbols:



CM13  
Cmaj13  
CΔ13

In the example below, we have only the 9 and 13 added. Since the 11 is missing it is not a 13<sup>th</sup> Chord. It's a 9<sup>th</sup> Chord with an added 13.

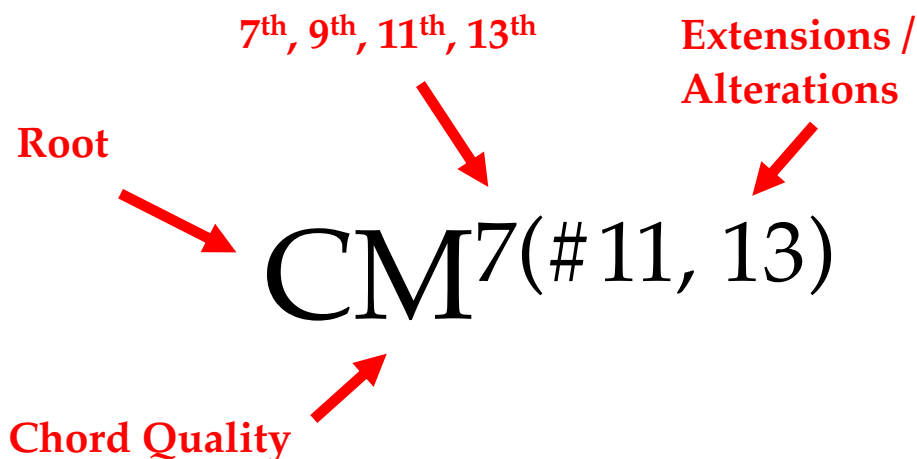


CM9(add13)  
Cmaj9(add13)  
CΔ9(add13)

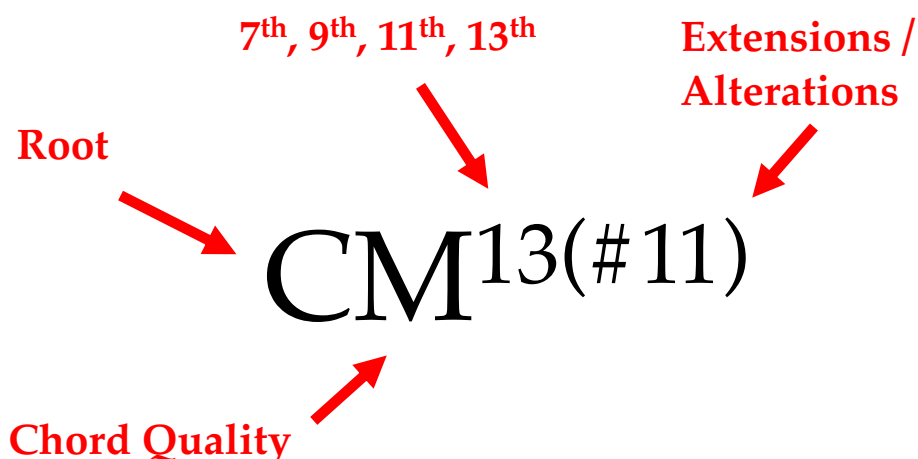
In Summary, when we create a 9<sup>th</sup>, 11<sup>th</sup>, or 13<sup>th</sup> Chord, we replace the 7 in the chord symbol for 9, 11, or 13.

# The 7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> Chord Symbols Preferred Format

This is ideally, how I like to write out Chord Symbols for 7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> Chords:



The chord above is a C Major 7<sup>th</sup> Chord with an added #11 and 13. We put all added extensions and alterations in superscripted parentheses. Here is another example:



This is a C Major 13<sup>th</sup> Chord with the 11 sharpened.



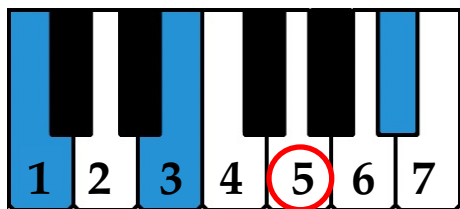
## Chapter 5

### Omit Chords

When it comes to chord symbols, the terms "no" and "omit" are used to indicate that certain notes in the chord should not be played. "no" and "omit" can be used interchangeably.

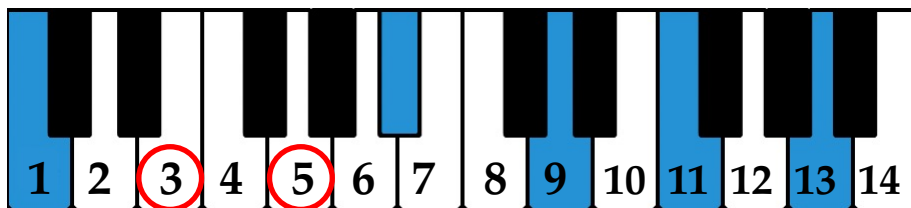
For example, if a chord symbol contains a "no 5" notation, this means that the fifth scale degree should not be played.

C7(no5) would be a C7 chord without the 5<sup>th</sup> Scale Degree. Here's that on the keyboard:



You can also indicate that multiple notes should be omitted, such as "no 3, no 5," which would indicate that both the third and fifth notes of the chord should be excluded.

C13(no3, no5) would be a C13 chord without the 3<sup>rd</sup> and 5<sup>th</sup> scale degrees. Here's that on the keyboard:



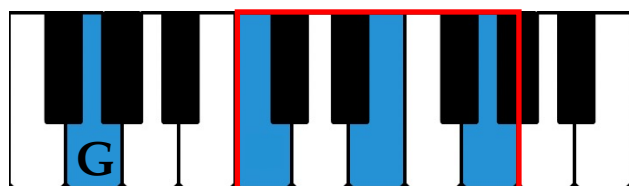
## Chapter 6

# Slash Chords

A slash chord is a chord that indicates a bass note other than the root note. Slash chords are often used to create a counter-melodies in the bass, as well as create more interesting and complex harmonies.

The notation for a slash chord consists of the chord symbol, followed by a slash ("/"), and then the bass note that should be played.

For example, the chord notation "C/G" indicates a C chord with a G note played in the bass.



**C Major Chord**

The bass note in a slash chord can be a note that is already a part of the chord, but it doesn't have to be. For example, you can have a Dmin7/G chord.



**D minor 7<sup>th</sup> Chord**

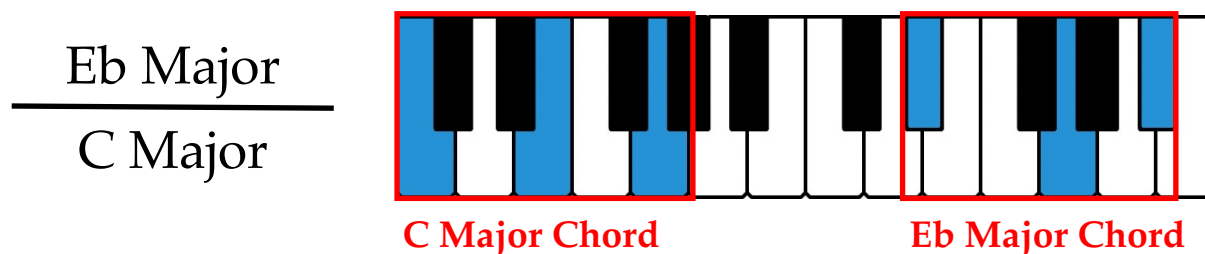
Utilizing slash chords is a method for employing chord symbols that can be mentally processed more quickly. For example, the chord above is also a G7sus4(add9) chord. Dmin7/G for some people is quicker and easier to process.

## Chapter 7

# Polychords

A polychord is a chord made up of two or more separate chords played at the same time. Polychords are a useful tool for creating complex harmonies.

To create a polychord, two separate chords are played simultaneously. For example, playing an Eb major chord over a C Major chord creates a polychord known as an Eb major over C Major chord. Polychords are commonly written as two chords separately with a horizontal line between them.



Polychords can be used as a simpler way to conceptualize chords. By playing the notes of the C Major Chord and the Eb Major Chord, you're actually playing a C7<sup>#9</sup>

Instead of thinking, "I need to play a C7<sup>#9</sup>" you can think, "I need to play an Eb chord over a C chord", which for some people is an easier and quicker way to mentally process the chord.

## Chapter 8

# The Standard Basic Chord Voicings

What is the difference between a "chord" and a chord voicing"? A chord is a group of three or more notes played simultaneously, creating a harmonic sound. It represents the combination of specific pitches that form a particular tonal quality or harmony.

On the other hand, a chord voicing refers to the specific arrangement or positioning of the notes within a chord. It determines how the individual pitches of a chord are distributed and arranged across the keyboard. Chord voicings affect the overall sound and character of a chord by altering its texture, color, and tonal range.

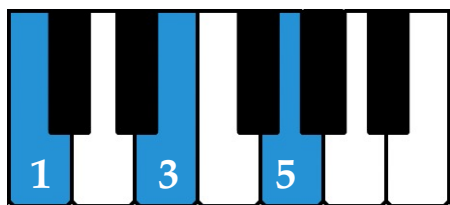
In essence, a chord is the abstract concept of a set of notes played together, while a chord voicing is the concrete representation of how those notes are physically played or arranged on the keyboard. Chord voicings involve decisions about octave placement, note order, inversions, additional tones, and other factors that shape the sound and expression of a chord.

Different chord voicings can yield distinct sonic qualities and emotional effects. They allow musicians to explore variations in sound, create specific textures, and convey particular moods or musical styles. Chord voicings play a crucial role in shaping the overall harmonic landscape, adding depth, complexity, and character to musical compositions and performances.

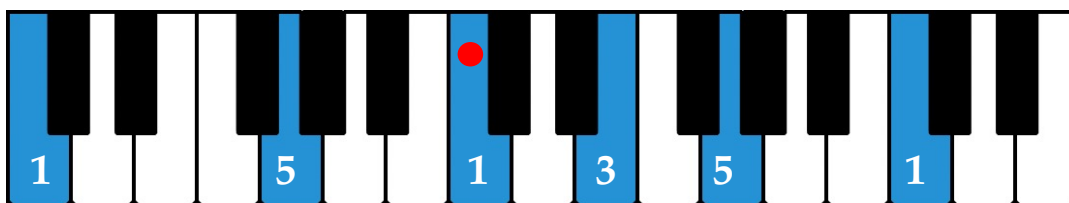
In summary, a chord represents a set of notes played together, while a chord voicing refers to the specific arrangement and distribution of those notes across the keyboard, influencing the sound and expression of the chord itself. We're now going to look at the Standard Basic Chord Voicings.

## The Standard Basic Triad Chord Voicings

Here's our C Major Chord. The notes are C, E, and G. The scale degrees are 1, 3, and 5.

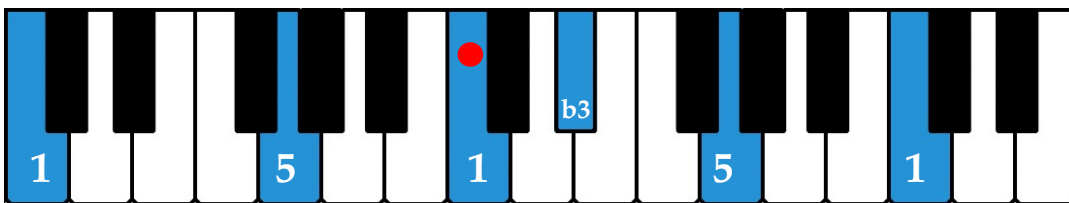


Here's the C Major 6-Note Standard Basic Triad Voicing:



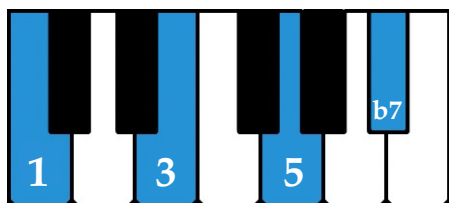
Notice here, we have 3 C's, 1 E, and 2 G's. The C with the red dot is Middle C. If we look at this from a scale degree perspective, with the C being "1", the E being "3", and the G being "5", we can see a pattern here. The bottom 3 notes (played by the left hand) is 1-5-1. The top 3 notes (played by the right hand) are 3-5-1.

This is the 1-5-1, 3-5-1, 6-Note Standard Basic Triad Voicing. This works for any pitch (e.g., A chords, F chords, Bb chords). It also works for all standard triads (major, minor, augmented, diminished). Simply sharp and flat scale degrees. For example, below is a C minor Chord 6-Note Standard Basic Triad Voicing. Notice the "b3" adjustment made.

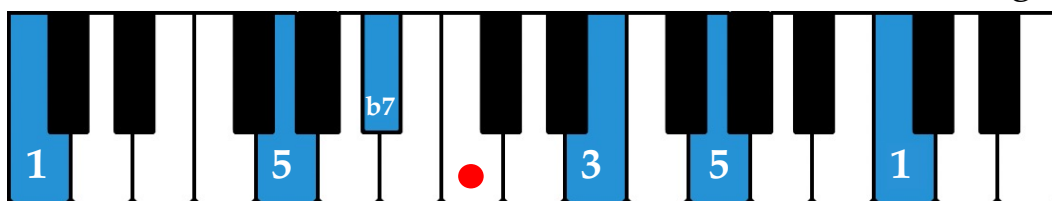


## The Standard Basic 7<sup>th</sup> Chord Voicings

Here's our C7 Chord. The notes are C, E, G, and Bb. The scale degrees are 1, 3, 5 and b7.



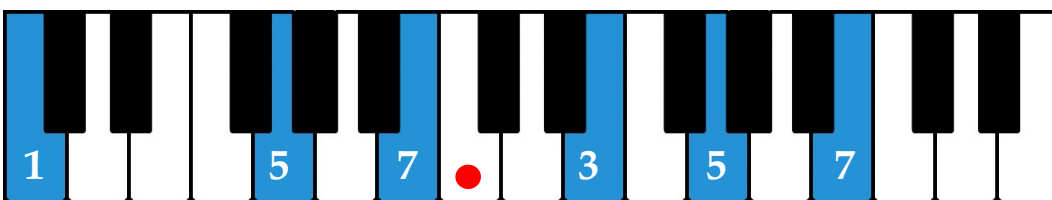
Here's the C7 6-Note Standard Basic 7<sup>th</sup> Chord Voicing:



Notice here, we have 2 C's, 1 E, 2 G's, and 1 Bb. If we look at this from a scale degree perspective, we can see a pattern. The bottom 3 notes (played by the left hand) is 1-5-b7. The top 3 notes (played by the right hand) are 3-5-1.

This is the 1-5-b7, 3-5-1, 6-Note Standard Basic 7<sup>th</sup> Chord Voicing. This works for any pitch (e.g., A7, Bb7 chords) and our most common 7<sup>th</sup> Chords (Major 7<sup>th</sup>, Dominant 7<sup>th</sup>, Minor 7<sup>th</sup>).

With our Major 7<sup>th</sup> and Minor 7<sup>th</sup> chords, a small adjustment is made. We lower the top "1" and make it a "7". For example here's a C Major 7<sup>th</sup> Chord Voicing:



In this pattern we now have a "7" in the right and left hands. 1-5-7 in the left, and 3-5-7 in the right.

## Chapter 9

# Next Steps

Congratulations on reaching the end of The Chord Formulas Handbook! Feel free to return to this resource as you progress through your music journey.

All chords were given as “C” chords. As you get more comfortable with the chord formulas, try playing chords for the rest of the musical alphabet.

**The Next Step** is to use these chords to play beautiful renditions of songs like the professionals. Those pianists you see at establishments, parties, and on YouTube drawing crowds and captivating them with a breadth of modern music.

If this sounds fun to you, I’ve just launched my *Professional Piano Accelerator Program*. This program trains you on how to improvise beautiful renditions of songs (both Chords and Melody) like the professionals. And gives you the ability to learn new songs in **minutes** (not months), like a “human record player”.

[Click here to learn more about the program.](#)

Stay inspired!

*Matt Mi*