

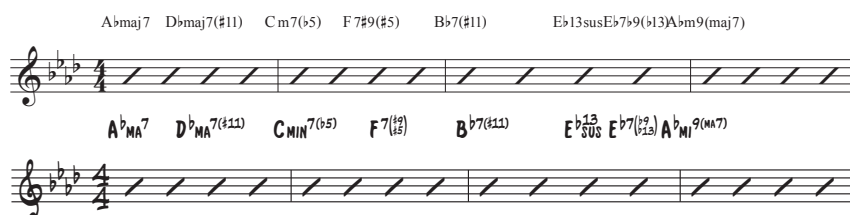
CHORD SYMBOL SPELLING

Chord symbol spelling is highly idiosyncratic and highly contentious. Everyone wants to believe that their preferred method of spelling chords is the One True Way. In reality, what is considered correct is determined by consensus within communities, not by the strict application of rules. That said, there are practical reasons to prefer chord symbols that are concise, compact, consistent, unambiguous, and visually distinct from one another.

CHORD NAME	RECOMMENDED	ACCEPTABLE	DO NOT USE
MAJOR TRIAD	G		GMA, G triad, G ^Δ , G ^{ΔTR} , etc.
MINOR TRIAD	G ⁻ , Gm, Gmi	Gmin	GMI, Gm triad, etc.
AUGMENTED TRIAD	G ⁺		Gaug
DIMINISHED TRIAD	G ^o		Gdim
SIXTH	G ⁶		anything else
MINOR SIXTH	G ⁻⁶ , Gm ⁶ , Gmi ⁶	Gmin ⁶	GMI ⁶ , etc.
MAJOR SEVENTH	G ^Δ , GMA ⁷	G ^{Δ7} , GMAJ ⁷	GM ⁷ , Gma ⁷ , GMaj ⁷ , etc.
SEVENTH	G ⁷		anything else
MINOR-MAJOR SEVENTH	G ^{-Δ} , Gm ^(MA7) , Gmi ^(MA7)	G ^{-Δ7} , Gmin ^(MA7)	Gm ^(M7) , GMI ^(maj7) , etc.
MINOR SEVENTH	G ⁻⁷ , Gm ⁷ , Gmi ⁷	Gmin ⁷	GMI ⁷ , etc.
HALF-DIMINISHED	G ^ø , Gm ^{7(b5)} , Gmi ^{7(b5)}	G ^{ø7} , G ^{-7(b5)} , Gmin ^{7(b5)}	GMI ^{7(b5)} , G ⁻⁷⁽⁻⁵⁾ , etc.
DIMINISHED SEVENTH	G ^{o7}		Gdim ⁷
CHORDS w/EXTENSIONS	G ^{Δ9} , GMA ¹³ , G ⁻⁹ , Gm ¹¹ , G ¹³ , G ⁹ , etc.		GMA ⁷⁽⁹⁾ , Gm ⁷⁽¹¹⁾ , G ⁷⁽¹³⁾ , G ^{6/9} , G ⁶⁽⁹⁾ , etc.
CHORDS w/SUSPENSIONS	G ^{sus} , G ^{7sus} , G ^{sus2} , etc.	G ^{sus4} , G ^{7sus4} , etc.	G ⁷⁽⁴⁾ , G ¹¹ , G ⁴ , G ² , etc.
CHORDS w/ALTERATIONS	G ^(#11) , G ^{13(b9)} , G ^{7(b9)} , etc.		G ^{#11} , G ¹³⁻⁹ , G ⁺⁷⁽⁺⁹⁾ , etc.
INVERSIONS/CHORDS w/ ALTERNATE BASS NOTES	G [/] _B , G ⁷ _F , G ^Δ _{Eb} , etc.		G/B, G ⁷ on F, G ^Δ /E ^b bass, etc.
POLYCHORDS/COMPOUND CHORDS	$\frac{G}{B}$, $\frac{G^7}{F}$, $\frac{G^\Delta}{E^b-}$, etc.		$\frac{G^7}{G \text{ over } B, F \text{ triad, etc.}}$

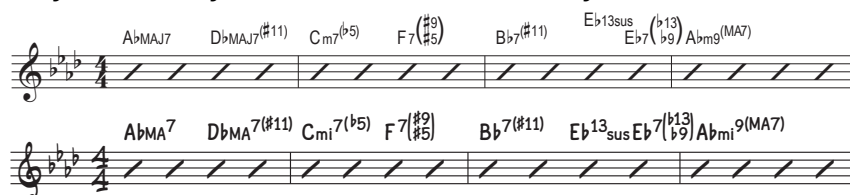
CHORD SYMBOLS AND MUSIC NOTATION SOFTWARE

Chord symbol defaults in the major music notation software applications (Finale, Sibelius, and Dorico) are all **unacceptable**. Here are examples that show some of the most common problems:



- Unlike the above, chord symbols must be **left-aligned with the beginning of the beat to which they are attached**, not centered above the beat. In Finale, select “Left-Align Chords” from the Chord Menu. In Sibelius, go to Text Styles > Chord Symbol. Find the “Horizontal Alignment” tab and select “Left Aligned.” (For additional Sibelius-specific details, see this link: <http://www.scoringnotes.com/tips/left-align-chord-symbols-sibelius/>.) In Dorico, under “Position > Horizontal alignment relative to chord, note, or rest” choose “Left.”
- Chord symbols should not appear too far away from the staff — generally **no more than two staff spaces above** unless it would otherwise collide. (Staff space = the distance between two staff lines.) A good default distance is 1.5 spaces above the top staff line.
- Be **consistent** — do not mix and match different spellings of the same chord type within the same piece, e.g., do not use both MA⁷ and MAJ⁷. Choose *either* the geometric symbols (Δ and -) or a consistent set of abbreviated symbols (e.g., MA and mi).
- When using an engraved template (i.e., one using a traditional music font, not a handwritten-style font), use a **sans-serif** font like Arial Narrow or Helvetica for the chord symbols. Do not use a serif font such as Times New Roman.
- Use UPPERCASE for **major** (MA or MAJ) and lowercase (m, mi, or min) for **minor**. Many handwritten-style chord fonts lack lowercase characters. A good alternative is the Finale Copyist Text font. (Finale users can also load/edit the corresponding chord library.)
- Chord symbols **must not collide**. It is permissible to nudge them slightly to the left or right, so long as the attachment point is still clear. They may also be displaced vertically to avoid collisions with the music or with other chord symbols.
- Chord roots, including the accidental (e.g., the A♭ in A♭MA⁷) should be **larger than chord suffixes**. A good range for chord roots is between 14-18 points, depending on the font.
- Accidentals in chord roots should be **in line with the root**. They should not be superscript, e.g., A[♭] not A[♭].
- Sevenths and other numeric extensions can either be **superscript** (e.g., B♭MA⁷) or **in line with the chord baseline** (e.g., B♭MA7). Both styles are okay, just be consistent.
- Alterations should be **superscript** and must be enclosed within **parentheses**, e.g., F7(♯9) not F7^{♯9}.
- Multiple alterations should be **stacked vertically** and enclosed in tall parentheses.

Here is what your chord symbols should look like once you have made these adjustments:



HARMONIC ANALYSIS

Chord symbols tell you the *quality* a chord, but do not tell you its *function*. For instance, CMA^7 could be a tonic chord in C major, a predominant chord in E minor, or the relative major in A minor.

To help identify the function of chord symbols, we use **Roman numeral analysis**, which describes the relationship of a chord to the key. For example, Roman numeral I is used for chords built on the first scale degree of the key, IV is used for chords built on the fourth scale degree, and so on.

By convention, major triads are represented by uppercase Roman numerals (I, IV, V, etc.) and minor triads by lowercase Roman numerals (ii, iii, vi, etc.). Augmented triads are uppercase with an added “+” — e.g., I^+ — and diminished triads with a “°” — e.g., vii° .

Seventh chords are indicated with a superscript 7 — e.g., V^7 for a dominant seventh chord, ii^7 for a minor seventh chord, and $\text{IV}^{\text{M}7}$ for a major seventh chord.

Roman numeral analysis predates jazz chord symbols, and so there are some differences in their respective conventions, for instance using just M^7 for major seventh instead of MA^7 . While M^7 is not recommended for chord symbols on lead sheets, it is the traditional symbol for major seventh chords used in Roman numeral analysis, and is not easily confused with minor seventh chords because of the uppercase/lowercase convention, e.g., $\text{IV}^{\text{M}7}$ vs. iv^7 .

A slash is used to indicate **applied chords**, such as applied dominants. For instance, a D^7 chord in the key of C is an applied dominant to G — in other words, it’s the dominant seventh chord of V, written “ V^7/V ”.

*IMPORTANT: note that unlike chord symbol notation, the slash in Roman numeral analysis does **not** refer to a chord inversion (e.g., C/E) or an alternate bass note (e.g., $\text{C}/\text{G}_\flat$). Instead, it refers to the **target** of an applied chord. So in Roman numeral analysis, V^7/V means “an applied dominant seventh chord targeting V,” V^7/IV means “an applied dominant seventh chord targeting IV,” and so on. Arrows can be used to indicate attachment to applied dominants — for example, $\text{ii}^7 \curvearrowright \text{V}^7/\text{IV}$ indicates that the applied dominant of IV (V^7 of IV) is preceded by its predominant ii^7 chord. So in the key of $\text{B}_\flat$, $\text{ii}^7 \curvearrowright \text{V}^7/\text{IV}$ would be $\text{Fmi}^7 - \text{B}_\flat^7 - \text{E}_\flat\text{MA}^7$.*

Instead of slashes, **chord inversions** in Roman numeral analysis are indicated with **figured bass symbols**. Figured bass is a tradition that goes back to the Baroque era (c.1600), allowing harpsichordists, organists, etc. to improvise chordal accompaniment above a written bass line, called a **basso continuo**. Figured bass numerals and symbols are the ancestors of modern chord symbol notation. They are used not just to help realize the *basso continuo* parts of Baroque music, but also to analyze the past 400+ years of Western music.

The figured bass system is actually very simple: the numbers describe the intervals to be added above the bass to form chords. So, for instance, a root position triad is formed by adding a fifth and a third above the bass. The figured bass for that symbol is written $\bar{3}$. Similarly, a first-inversion triad is formed by adding a sixth and a third above the bass, so the figure for that is $\bar{6}$. And a second-inversion triad — formed by a sixth and a fourth above the bass — has a figure of $\bar{4}$. Root position seventh chords are $\bar{7}_3$, in first inversion they are $\bar{6}_3$, in second inversion, $\bar{4}_3$, and in third inversion, $\bar{2}_4$.

In practice, however, composers and *basso continuo* players found it easier to use and read shorthand, rather than complete figures. Since root position triads are the most common, when there is no figure, a root position triad is assumed. Other shorthand figured bass symbols are shown here:

TRIADS			SEVENTH CHORDS			
root position	1st inversion	2nd inversion	root position	1st inversion	2nd inversion	3rd inversion
Full symbol: $\begin{smallmatrix} 5 \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 6 \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$	$\begin{smallmatrix} 7 \\ 5 \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 6 \\ 5 \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 6 \\ 4 \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 6 \\ 4 \\ 2 \end{smallmatrix}$
Shorthand symbol: (nothing)	6	$\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$	7	$\begin{smallmatrix} 6 \\ 5 \end{smallmatrix}$	$\begin{smallmatrix} 4 \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 4 \\ 2 \end{smallmatrix}$

Don't confuse the figured bass symbols for chord inversions used in Roman numeral analysis with jazz chord symbols! For instance, in the key of C, I^6 means "a C major triad in first inversion," whereas the chord symbol C^6 means "a root position C major triad with an added 6th." The Roman numeral analysis for a tonic C^6 chord is I^{add6} . (Triads with added sixths are quite rare in Western classical music prior to the Romantic period, so they ended up with a somewhat cumbersome analysis symbol.)

C/E C^6

I^6 I^{add6}

Additionally, in the figured bass system, the numbers refer to the *diatonic* interval above the bass. Chromatic alterations are indicated as follows:

accidental alone...	raise/lower the 3rd	slashed number, # or + next to number...	raise the interval	b next to number...	lower the interval
#		$\frac{4}{3}$ or $\frac{\#4}{3}$ or $\frac{4\#}{3}$ or $\frac{4+}{3}$		$\frac{7}{5}$ or $\frac{7\flat}{5}$	

As with contemporary chord symbols, figured bass symbols do not specify a particular voicing. The *basso continuo* player(s) choose how to voice the chord and in which register to play it, and improvise ornaments and other elaborations appropriate to the style.