

Topic 5: Music theory code-breaking reference guide

[Fundamentals of Music Theory](#) / Topic 5: Music theory code-breaking reference guide
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5.1. General knowledge

You will have gathered by now just how many different ways there are to conceptualise the elements of musical compositions, and to communicate about these. There are different approaches to naming the component parts of various, inter-related theoretical systems - all of which might make use of stave notation. In this topic, we gather together some information to help you organise your knowledge.

Wikipedia can be a useful place to start if you want to improve your general knowledge and understanding. You could browse and read these various pages which refer to different musical notation systems.

- [Roman numeral analysis](#)
- [Lead sheet](#)
- [Macro analysis](#)

At this stage, you might also like to take some time to think about the following technical expressions. In the context of your own growing music theoretic knowledge, you will feel more familiar with the concepts to which they refer.

- **Chord Voicing.** The inversion in which a chord should be written out or played
- **Voice leading.** How individual lines (parts) sound and the way that they interact together as harmony, creating harmonic (chord) progressions
- **Spell out a chord.** Identify which notes – which letter names – are indicated by a particular chord, chord symbol, or notated figure.

Degrees of a scale

Use the following names to indicate a particular step of a scale:

1 = Tonic

2 = Supertonic

3 = Mediant

4 = Subdominant

5 = Dominant

6 = Submediant

7 = Leading note

Chord description as Roman numerals

- Use Roman numerals (I, II, III, IV, V, VI, VII) to indicate the triad build on a particular scale degree.
- Use CAPITALS to indicate a major triad (e.g. I, IV and V in a major key)
- Use lower-case to indicate a minor triad (e.g. ii, iii, vi and vii in a major key)

Chord voicing (inversion)

Local (UK-wide) convention is to use Latin letters (a,b,c,d) alongside Roman numerals to indicate voicing. We use this system in the video lectures.

With the example of a chord V (the dominant chord, the triad built on scale degree 5):

1. If it's in root position, then we could describe it as Va.
2. In first inversion, it could be described as Vb
3. In second inversion it would be described as Vc

For chords containing more than three notes, this system can be expanded. Seventh chords, for example (which contain four notes) can also be in third inversion, which would be described as Vd.

5.2. Lead sheet chord symbols

Quick Reference Table for Chord Spellings

Chord Type	Also Written As (Includes Alternatives)	Chord Spelling	E.g. (Chord Label)	E.g. (Spelling)
MAJOR		1, 3, 5	C	C E G
MINOR	m	1, b3, 5	Cm	C Eb G
DIMINISHED	dim, °, mb5	1, b3, b5	C o	C Eb Gb
DIMINISHED 7TH	dim7, ° 7, dim	1, b3, b5, bb7	C °7	C Eb Gb Bbb
HALF DIMINISHED	m7b5, °	1, b3, b5, b7	C °7	C Eb Gb Bb
AUGMENTED	aug, +	1, 3, #5	C+	C E G#
DOMINANT 7 TH	7	1, 3, 5, b7	C7	C E G Bb
MINOR 7TH	m7	1, b3, 5, b7	Cm7	C Eb G Bb
MAJOR 7TH	maj7, M7	1, 3, 5, 7	CM7	C E G B
SUSPENDED 4TH	sus4	1, 4, 5	Csus4	C F G
SUSPENDED 2ND	sus2	1, 2, 5	Csus2	C D G
7TH SUSPENDED 4TH	7sus4	1, 4, 5, b7	C7sus4	C F G Bb
7TH SUSPENDED 2ND	7sus2	1, 2, 5, b7	C7sus2	C D G Bb
ADDED 9TH	add9	1, 3, 5, 9	C add9	C E G D
6TH	6	1, 3, 5, 6	C6	C E (G) A
MINOR 6TH	m6	1, b3, 5, 6	Cm6	C Eb (G) A

How to indicate voicings

If you see a chord label using a slash (/), this tells you which note to use in the bass. E.g. C7 / G means: play the notes of a dominant seventh on C, with a G in the bass. (I.e. second inversion.)

5.3. Figured Bass

Please visit [Figured bass notation](#) to learn more detail about this system, including conventions for abbreviations, and for including accidentals.

Figured bass – also known as thoroughbass – tells performers how and (roughly) when to voice the chords to accompany the melodic line. It arose to support musical compositions and performances featuring a *basso continuo*, an improvised form of accompaniment. The numerical figures appear below the staff, aligned vertically to show the metrical position of the chord changes (i.e. on which beat of the bar the harmony should change).

Written and printed (or copied) as part of a musical score, figured bass tells us how the bass line should sound and what the chord progression should be. A figured bass would be provided in addition to the musical notation for the upper part(s) of a composition or song. This system for notation uses the five-line staff. But it does not include complete, detailed voicing or pitch information. Rather, it provides the specific notes/pitches for a bass-line PLUS numerical annotations that tell performers how to harmonize those notes.

The single line notation shows which pitch should be played: how the bass line should sound. The numbers indicate which chord should be played.