

# Triskaidekaphilia! 13th Chords everywhere.

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A 13th chord is an extremely rich and useful chord voicing. This section explains the 13th chord, and includes a study to greatly expand fretboard harmony. There is some disagreement of how a 13th chord should be interpreted so let's quickly survey the various approaches.

## 13th Chord Construction

Traditionally, the 13th chord is constructed by progressively adding 3rds to form a 7 note chord.

This 7 note chord is often found as an arpeggio, but is rare as a chord - due mainly to the functional confusion, and minor 9th clash, of the 3rd and the 11th together. For that reason the 11th is often omitted - or replaced with a #11

The #11 implies a particular mode (lydian dominant) so should be specified in the chord symbol - so we'll leave the 11th out altogether (unless its a minor 13th chord which can tolerate all 7 notes)

A 13th chord generally implies that there is a 9th - the inclusion of which is discretionary. However any desired alterations of the 9th (or 13th) should be indicated. Here are some examples that should make the point clear.

Dominant 13th  
(R,3,5,b7,9,13)  
Omits 11th

Minor 13th  
(R,b3,5,b7,9,11,13)  
All 7 notes of the dorian mode

Dominant 13th chords with variations of 9th and 13th intervals

## 13th Chord Voicings

With only 6 strings on a standard guitar, and up to 5 fingers on a standard human hand, some editing of 13th chords is needed to make the voicings possible. Luckily not all notes are needed, the 5th is fairly neutral and may be omitted, and even the root may be abandoned, particularly in an ensemble context. Here are some useful E- shape voicings with some representative variants. All the 13th voicings listed can be similarly modified.

### E shape

There are many possible voicings - some more practical than others - but the following exercise represents many of the most useful all within a circular study that requires a good harmonic understanding to play at a steady tempo.

This study explores various C13 and C9 voicings up the fretboard, and descends with G13 voicings.

(You can adopt a similar approach with any pair of 13th chords)

Remember also that any of the 13th voicings may be altered in terms of the 9th and 13th - and where possible, major 3rds may be lowered to minor 3rds to create minor 3rd variants.

The exercise is divided into four rows, each showing a sequence of chord voicings with their corresponding musical notation and fretboard diagrams.

- Row 1:** C13 (no 9th), C13 (no 5th), C9 (optional root), C13 (no 5th), C9 (no 5th), C13 (no 5th), C9 (no root), C13 (no 5th).
- Row 2:** C13 (no 5th), C13 (no 5th), C9 (no root), C13 (no 9th), C13 (no 9th), C13 (no 5th), C13 (optional root).
- Row 3:** G13 (no 9th), G13 (no 5th), G13 (no root), G9 (no 5th), G9 (no root), G13 (no 5th), G13 (optional root), G9 (optional root).
- Row 4:** G13 (no 5th), G13 (no 9th), G9 (no root), G13 (no 9th), G13 (no 5th), G13 (no 5th), G13 (no root).

One last point to consider: C13 can be used as a substitute for many chords including: Gm13 (Dorian), Bbmaj9(#11) (Lydian), Amin11(b9) (Phrygian) and Dmin11b13(Aeolian), which means these voicings can be readily used in many different modal contexts.