## 13th Chords

13th chords are achieved by adding the 13th interval to any of the 7th chords. The 13th interval is the same note as the 6th interval. The 13th interval is typically played an octave above the 7th, but it is not necessary.

You can include the 9th and/or 11th interval(s) when building 13th chords, but those are optional. A full 13th chord includes 7 notes. It would have intervals 1, 3, 5, 7, 9, 11, and 13. Most of us guitar players are using a 6 stringed instrument. It is simply not possible to have all 7 notes being played by oneself. You will need to choose which intervals are most important to achieve the sound you want.

The following formulas are various 13th chords that can occur. The 13th chords that appear in the Major Scale will have roman numerals underneath them indicating where in the Major Scale they occur.

Starting with the Major 7 chord formula:

$$1, 3, 5, 7 + 13 = Major 13$$
  $1, 3, 5, 7 + b13 = Major b13$   $1 - IV$ 

Starting with the Dominant 7 chord formula:

$$1, 3, 5, b7 + 13 = Dominant 13 (can just be written as 13)$$

$$1, 3, 5, b7 + b13 = Dominant 7 b13$$

Starting with the Minor 7 chord formula:

$$\frac{1, b3, 5, b7}{ii} + 13 = Minor 13$$
  $\frac{1, b3, 5, b7}{iii - vi} + b13 = Minor b13$ 

Starting with the Minor 7 b5 formula (or half diminished 7)

$$1, b3, b5, b7 + 13 = Minor 13 b5$$
  $1, b3, b5, b7 + b13 = Minor b13 b5$  vii

Here are the 13th chords in order as they appear in the Major Scale:

www.MileHighShred.com