

7th chords

Previously we looked at triads, how to spell major, minor and diminished triads.

Now we can take a look at notes beyond the 5th which provide more richness to the sound of the chord.

The basic rule is that the notes of a chord must 'stack' in 3rd intervals.

Note: There are obviously exceptions to the rule but we'll look at more exotic chords another time.

So getting back to the 'notes of chords stack in 3rd intervals' thing.

The interval between the root and a 3rd is obviously some sort of 3rd.

And the interval between a 3rd and a 5th is also some sort of 3rd.

Example: 3rd then 4th then 5th is still three notes apart making for a 3rd interval - including counting the one you start from

So to recap, the triad is composed of a root, 3rd and 5th.

If the interval of the 3rd above the root is 2 tones then it is major, and if 1 1/2 tones it is then minor.

If the 5th interval is 3 1/2 tones then it is perfect, 3 tones is diminished and 4 tones is augmented.

Moving up from the 5th of the chord by a 3rd interval we arrive then at the 7th.

5th □ 6th □ 7th which you can think of as moving up three places starting from and including the 5th

7th chords are very important as you'll come to see in the future.

For now, we will consider that there are only two types of 7th interval:

- the minor 7th interval is 5 tones [10 frets] above the root - you may find it easier to think of as 1 tone [2 frets] down from the octave

- the major 7th interval is 5 1/2 tones [11 frets] above the root - you may find it easier to think of as 1/2 tone [1 fret] down from the octave

There are four basic types of '7th chord' produced by a major scale.

The names and spellings for these 'chords of the 7th' are as follows [where the hypothetical note 'X' is the root]:

X major 7 - this is a major triad with a major 7th added

the spelling is - root, major 3rd, perfect 5th, major 7th.

It is written:

XΔ7 [the 'triangle shape' followed by the 7 means major 7th] and is spoken "X major seven"

X maj7 is the modern alternative to XΔ7, favoured these days by guitar related publications and is more common

X minor 7 - this is a minor triad with a minor 7th added

the spelling is - root, minor 3rd, perfect 5th, minor 7th.

It is written:

Xm7 and is spoken "X minor seven".

X min7 is the modern alternative to Xm7 and found in some guitar related publications - personally I prefer Xm7

X dominant 7 - this is a major triad with a minor 7th added

the spelling is - root, major 3rd, perfect 5th, minor 7th.

It is written: X7 and is spoken "X seven".

X half diminished 7 - this is a diminished triad with a minor 7th added

the spelling is - root, minor 3rd, diminished 5th, minor 7th.

It is written: Xm7b5, also Xm7-5 and also Xø7

It is spoken "X minor seven flat five" also "X half diminished seven".

Personally I prefer Xm7b5 as I think that it is more descriptive.

So, let's look at the scale of G major and go find all of these '7th' chords.

the key of G contains the notes:

Tonic = G, 2nd = A, 3rd = B, 4th = C, 5th = D, 6th = E, 7th = F#

chord 'I' as we know is tonic = G, 3rd = B, 5th = D, so the 7th is F#.

the triad is major and the 7th is 5 1/2 [11 frets] tones above the tonic [one semi-tone [1 fret] down from the octave] and is therefore a 'major 7th'.

So, the chord is GΔ7 [G maj7]

If you recall looking at chord II in G, we found that it was Am where root = A, 3rd = C and the 5th = E
the 7th is therefore the note after the next one in the G major scale - the note is G [E □ F# □ G]
From A, the note G is 5 tones [10 frets] tones above the tonic [one tone [2 frets] down from the octave] and is therefore a 'minor 7th'.
We can now see that we have a minor triad with a minor 7th added on top.
So looking at the possibilities listed above, a minor triad with a minor 7th is a minor 7 chord.
The chord is Am7.

Chord III is Bm [B, D, F#] so skip over the next note [G] to find the 7th which is A.
The note 'A' is 5 tones above the root of B and is a minor 7th.
The chord is Bm7.

So far I've worked out the following chords in the key of G major:
chord I7 [GΔ7],
chord II7 [Am7]
chord III7 [Bm7]

All that remains is to work out all of the other 7th chords in the key of G major [IV7, V7, VI7, VII7]

What are the 7th chords in the key of G major?