

The Major triad with a flattened 5th is not used that often as a triad, so I am omitting it in an effort to save space. There are many other larger chords, like $maj 7 \flat 5$, that do contain a Maj 3rd and a $\flat 5$ though, so I encourage you to experiment with this triad (trichord) type on your own.

a) Palm Muting

When switching between chords with open strings, it is often desirable to mute the open strings with the fleshy part of the palm on your picking hand. The intent is to make it sound as if all the strings, whether fretted or not, have stopped vibrating at exactly the same time. This same type of palm mute can be used at strategic times to give the strumming a little bit of a lift, like between beats in a Freddie Green style accompaniment.

To be sure, there are many ways to mute open strings when chording. Sometimes it is done with a free finger on the fretting hand. Finger-style players have the luxury of using their plucking hand's fingers and thumb as well. The pick + fingers technique employed by many jazz players allows for the 3 free fingers on the picking hand to also be used for muting. Everybody is different. Various musical passages require different approaches. There is no "right" way to do this.

It should also be said that part of the charm of the guitar's sound has to do with open strings sometimes droning away in the background. If you totally eliminate this effect your sound may seem rather dry to some people.

Also, it should be said that it is often impossible to eliminate, completely, all of these extraneous noises from a performance on the guitar. Guitar is, in many ways, not as exacting an instrument as many others, like the piano. I like to compare this situation with the way audio engineers talk about "signal-to-noise ratio". At all times, any given piece of audio gear will suffer from some amount of noise and/or distortion of the input signal. The equipment designer's job is to make it so that this noise is below the audible threshold. When you play the guitar, you have to consciously be aware of every sound coming off of your instrument, and to try to make it so that the things you intend your audience to hear are indeed heard clearly, while the things that you don't want them to hear are below the audible range, or are masked in some way.

Muting of open strings may be touched upon again at various other spots in this book.

B. 7th-Chords

1. Construction

A "7th-chord" is also usually a tertian structure. We simply add another note to one of the triad types. This fourth note will be a major, minor, or augmented 3rd above the triad's 5th (or $\flat 5$ or $\sharp 5$). This new note will be 7 letter names (and therefore some sort of a 7th interval) above the chord's root. Hence the term "7th-chord".

C Major 7th = C (Root) E (3rd) G (5th) B (7th)

[Note: Sometimes, an inversion of a 7th-chord will be better named as if the lowest chord-tone is actually the

root.

Here's one example:

A Minor Seventh (Am7) consists of the tones A, C, E, G. Its first inversion is: C, E, G, A.

But this chord is usually named C Major 6th (C6) when C is in the bass. The formula for a Major 6th chord should be thought of as: 1 3 5 6. But it is still fundamentally tertian in nature.

See below for some other chords that contain chord degree Maj6.]

Here are the formulas for most types of 7th-chords in common use, and the way they are most often written in chord-symbol notation:

Note: Sometimes a 7 with a strike through it, "7" (aka a European 7), is used to indicate a Major 7th interval within a chord-symbol. This particular practice should be avoided, in my opinion, because it leads to confusion when trying to distinguish it from a regular "7" which always indicates a $\flat 7$ interval within a chord-symbol.

Major 7th	= 1 3 5 7	Written: Cmaj7, C Δ 7, CM7
Dominant 7th	= 1 3 5 $\flat 7$	Written: C7
Minor 7th	= 1 $\flat 3$ 5 $\flat 7$	Written: Cmin7, Cm7, C-7
Minor 7($\flat 5$)	= 1 $\flat 3$ $\flat 5$ $\flat 7$	Written: Cmin7 $\flat 5$, Cm7 $\flat 5$, C-7 $\flat 5$, C ϕ 7 (Half Diminished Seventh)
Diminished 7th	= 1 $\flat 3$ $\flat 5$ $\flat 7(6)$	Written: Cdim7, C $^\circ$ 7, C $^\circ$
Major 6th	= 1 3 5 6	Written: C6
Minor 6th	= 1 $\flat 3$ 5 6	Written: Cmin6, Cm6, C-6
Min(maj7)	= 1 $\flat 3$ 5 7	Written: Cm(maj7), C-(maj7), Cm($\sharp 7$), G+/C (G+ triad with C bass)
Dom7(sus4)	= 1 4($\sharp 3$?) 5 $\flat 7$	Written: C7sus4
Dom7 $\sharp 5$	= 1 3 $\sharp 5$ $\flat 7$	Written: C7 $\sharp 5$, Caug7, C+7
Dom7 $\flat 5$	= 1 3 $\flat 5$ $\flat 7$	Written: C7 $\flat 5$
Maj7sus4	= 1 4 5 7	Written: Cmaj7sus4, C Δ 7sus4, C7sus4 (This chord is rather rare.)
Maj7 $\sharp 5$	= 1 3 $\sharp 5$ 7	Written: Cmaj7 $\sharp 5$, Caug(maj7), C+(maj7), E/C (Emaj triad with C bass.)
Maj7 $\flat 5$	= 1 3 $\flat 5$ 7	Written: Cmaj7 $\flat 5$, C Δ 7 $\flat 5$, C7 $\flat 5$
Dim(maj7)	= 1 $\flat 3$ $\flat 5$ 7	Written: Cdim(maj7), B/C (Bmaj triad with C bass)

These are the most common 7th-chords used in jazz and popular music, as well as a few less common ones [Maj7sus4 and Dim(maj7)]. They are all completely tertian in construction except for the two Sus4 chords. To be sure, there are a great many other possible 4-note chords. Too many to list here. But most of them are rarely used as chords-in-their-own-right within a Tonal composition. Quite often though, a group of 4 notes that cannot itself be classified as a 7th-chord, can be seen to be functioning as a voicing of one or more of the regular 7th-chord chord-types. We shall also see that it is possible to add one or more extensions to a triad (a process that will obviously result in a chord with at least 4 notes) with a result that is not a 7th-chord.

Example: C, E \flat , G \sharp , B (1 $\flat 3$ $\sharp 5$ 7) cannot really be classified as a regular 7th-chord on its own. But it can be used over a D7 chord as a partial voicing of D7($\flat 9, \sharp 11, 13$). [Note: I refer to this chord later as Cm(maj7) $\sharp 5$, but this is quite an unusual name and usage.]

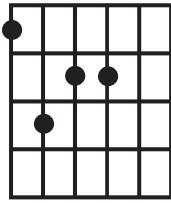
Example: C D E G can not be classified as a regular 7th-chord (because there is no 7th), but it can be seen as functioning as a C(add9) chord. This could be thought of as a tertian usage of a non-tertian chord.

2. Movable 7th-Chord Chord-Forms

The following Maj7 chord-forms use no open strings and, therefore, they can be transposed by simply moving their position on the fretboard.

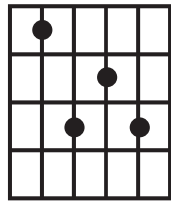
Rt. 6 - Maj7 - Tp. 1

R 5 7 3



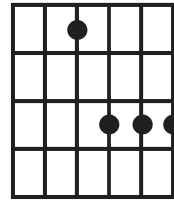
Rt. 5 - Maj7 - Tp. 1

R 5 7 3



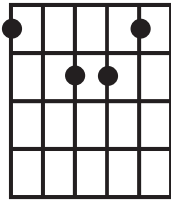
Rt. 4 - Maj7 - Tp. 1

R 5 7 3



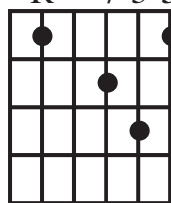
Rt. 6 - Maj7 - Tp. 2

R 7 3 5



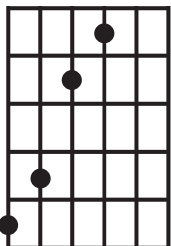
Rt. 5 - Maj7 - Tp. 2

R 7 3 5



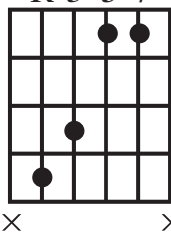
Rt. 6 - Maj7 - Tp. 3

R 3 5 7



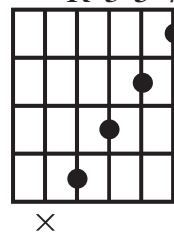
Rt. 5 - Maj7 - Tp. 3

R 3 5 7



Rt. 4 - Maj7 - Tp. 3

R 3 5 7



Ex. VI.B.2.-1

Change the fingerings of these Maj7th chord voicings into all the other 7th-chord chord-types by raising or lowering the relevant chord-tone(s) according to the 7th-chord formulas presented at the beginning of this sub-chapter. Some of the resulting grips will be impossible to play, but most will be fine. Some of the ones that seem too difficult at first will get easier with practice. Some voicings built off of the 6th string may sound muddy when played in the lower ranges. These will sound better if played higher up the fretboard. If a grip is impossible, then try it without the root.

Try to get fingerings that allow you to strum the chord with a pick. I.e. Any unused strings are either muted or simply not struck with the pick. Try also to look for fingerings that can only be played finger-style or pick + fingers.

Feel free to write out your own chord diagrams for these new chord-forms if it helps you to remember them. It would be a shame if every time you wanted to play Cdim7, you needed to play Cmaj7 first! Anything you can do that will help you memorize, execute, and understand a greater variety of chord voicings/grips is a good thing.

Examples:

<p>C7 Rt. 6 - Tp. 1 R 5 \flat7 3 8 fr.</p> <p>1 3 1 2</p>	<p>Cm7 Rt. 5 - Tp. 2 R \flat7 \flat3 5 3 fr.</p> <p>X 1 X 2 4 3</p>	<p>Cdim7 Rt. 4 - Tp. 1 R \flat5 \flat7 \flat3 10 fr.</p> <p>X 1 3 3 3</p>
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Ex. VI.B.2.-2

This is the 12 bar jazz blues progression I mentioned earlier. It is probably the single most important chord progression in the jazz repertoire. Learn it well.

Figure out as many ways as you can to play each of these chords, then look for logical ways to join them together, just like we did earlier with the movable triadic chord-form exercises.

Eg.

1. Go through the entire progression using just one of the chord-types with the root on the 6th string.
2. Go through the entire progression using one of the chord-types with the root on the 5th string.
- Etc., Etc.
3. Start on the 6th string for the 1st chord, and then go to the 5th string for the next chord. Etc., etc.

Important Note: When switching between the Rt. 6 - Tp. 2 forms and the Rt. 5 - Tp. 1 forms, the 3rd, 5th, and 7th of each chord will be found on the same group of three strings, while the roots alternate from string to string. This often results fairly good voice-leading without even knowing what voice-leading is!

The same effect occurs when alternating the Rt. 5 - Tp. 2 forms with the Rt. 4 - Tp. 3 forms.

Concentrate on getting really strong with these two pairs of grip-types!

4. Then transpose this chord progression into all 12 possible keys.

5. Learn to play this chord progression using only triads according to the chord simplification suggestions I presented earlier. (Ex. VI.A.3.-15) (I.e. Use this chord progression to review *everything* we've talked about regarding chords up to this point.)

When playing with a bass player, it is often not necessary for the guitar player to play the roots. Try leaving the roots out of these chords.

Notice anything worth commenting on when you omit the root?

A Dominant 7th chord is really just a Dim triad with a bass note added to it, a Maj 3rd below its root. (Eg. C7 = Edim/C.)

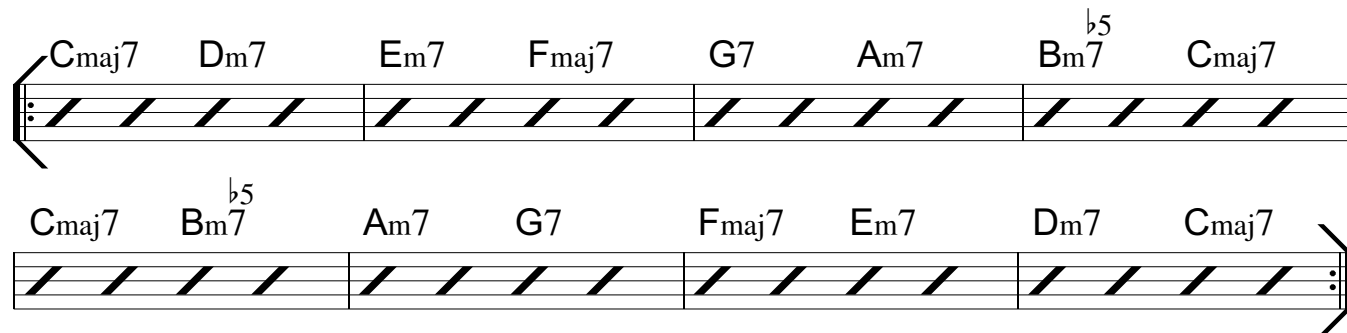
A Minor 7th chord is really just a Major triad with a bass note added to it, a Min 3rd below its root. (Eg. Gm7 = B \flat /G.)

A Minor 7 \flat 5 chord is really just a Minor triad with a bass note added to it, a Min 3rd below its root. (Eg. Em7 \flat 5 = Gm/E.)

Etc.

Hopefully, now you can see why its so important to know your triads really well!

Ex. VI.B.2.-3



These are the "diatonic 7-chords" (see below for more on "diatonic") derived from the C major scale, going through a step-wise root progression. Use the techniques we've discussed to find many different ways to finger this chord sequence.

Transpose it to all 12 keys.

Ex. VI.B.2.-4



These are also the diatonic 7th-chords in C major, but here the chord's roots are moving through a cycle of 5ths, like they often do within a real tune. Figure out a great many ways to navigate through these chords, then transpose to all 12 keys.

Ex. VI.B.2.-4

At the back of this chapter are chord charts for several jazz standards. Learn to play these progressions with as many grips as you can muster.

Note: If you think you now have a good handle on how 7th-chords are constructed and executed on the guitar, it would be a good idea to jump to Chapter VIII - Shell-Voicings. The sound of the shell-voicings is much more in-step with the sounds that jazz players actually use, compared to the voicings that we've seen up to now. Plus they're easier!

3. Open-Position 7th-Chord Chord-Forms

The following chord diagrams catalogue only some of the possibilities for 7th-chords in and around Open-Position. They all use at least one open string and therefore are not "movable" grips. They all have all 4 chord-tones (i.e. no omissions) except for one or two of them where I have omitted the 5th. There are many, many