

Chord Reference Charts and the Nucleus Concept

Ted Greene 1974-10-11, 1976-05-19

Each grouping of chords on the following pages can be seen as being derived from a given *Nucleus Chord* (hence the “nucleus concept”). Some benefits of this approach are:

- 1) Ease of memorization of large groups of chords, due to the ability to see all of them in relation to one central, nucleus chord, instead of thinking of them as being unrelated.
- 2) A more clear understanding of the construction of chords (knowing which note is where – like knowing if the root is in the bass, or the 3rd is in the melody, etc.).
- 3) An increased ability to make up variations on chord progressions, songs, original compositions, etc.
- 4) A better feeling for the concept of “moving lines” (a general increase in contrapuntal vision) due to the ability to see where the different chord tones lie.
And
- 5) A less frightening overall view of the fingerboard, due to the friendly relationship you will acquire with many small, visual anchor points.

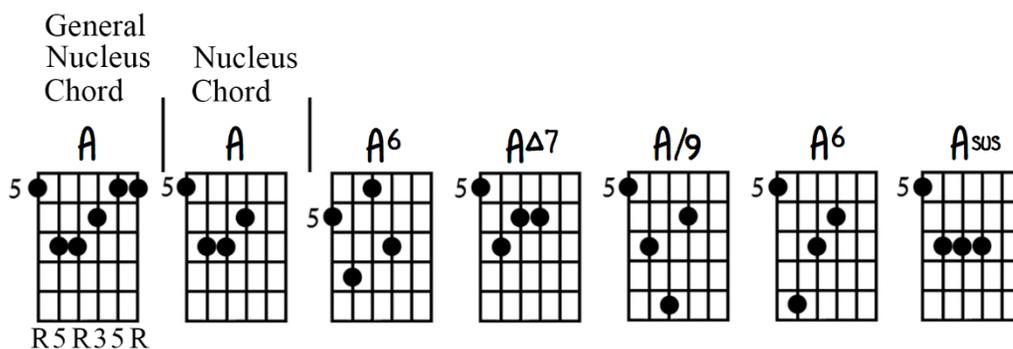
These pages are given for the purpose as listed above; the knowledge of how or where to *use* or *apply* chords (in other words, the principles of *Harmony*), is a separate study. So, in a way, these pages are for *reference*, meaning, as you are learning more and more about chord progressions and the like, you will want to know more and more actual physical forms or ways to make the principles come alive. One way to gradually learn more forms then, would be to keep referring back to these pages and extracting chords when you feel the need.

As with most studies on the guitar, much patience and determination are necessary for success with this material.

Make sure you analyze all the tones (Root, 3rd, 5th, etc.) are in each chord – see the first diagram for an example. (You needn't write them in if you don't care to, but the important thing is to know where the tones are eventually.)

All chords are given in only one key each, but should be learned in all keys in various cycles for added interest and enjoyment (ask about these if you're not familiar with them).

Some chords that are listed in one group might just as easily have been included in another group, so the choice was arbitrary to a certain extent, in some cases.



Nucleus Chord

A

Nucleus Chord

A

A⁶ A^{Δ7} A/9 A^{sus} A⁶ A^{6/9}

Nucleus Chord

A

A^{Δ7} A^{Δ9} A/9 A^{Δ7} A^{Δ7/6} A⁶ A⁶ A⁶ A^{sus}

Nucleus Chord

A^{sus/17} A^{Δ7} A^{Δ9}

Nucleus Chord

A

A⁶ A^{Δ7} A^{Δ7} A/9 A⁶ A^{sus}

Nucleus Chord

A

A⁶ A/9 A^{6/9} A^{Δ7} A/9 A⁶ A^{Δ7/6} A^{Δ7} A^{Δ7}

Nucleus Chord

A^{Δ9} A^{sus} A^{Δ9}

Because these 5 groups are so similar, a *summary* will be given on the following page.

I have found it much easier to *memorize* chords from a summary, although, the above, more detailed layout is better for seeing how the chords are derived initially.

Anyway, in the future, the above steps will be omitted, and only a summary given, when it is felt that this would help you learn the material faster.

(This reasoning will become clear as you progress on.)

General
Nucleus
Chord

A | AΔ7 AΔ7 AΔ7 AΔ7 AΔ7 AΔ7 AΔ7 A6 A6

AΔ7/6 AΔ7/6 A6 A6 A6 A6 A6 A6 A6 A6

A6/9 A6/9 A6/9 A/9 A/9 A/9 A/9 A/9 AΔ9 AΔ9

AΔ9 AΔ9 AΔ9 Asus Asus Asus Asus Asus

Nucleus
Chord

DbΔ13 | Db6/9 Db6/9 Db6/9 Db6/9 DbΔ13 Db6/9 Db6/9 DbΔ13 DbΔ13

Db/9 DbΔ9 Db/9 DbΔ9 Db/9 DbΔ9 DbΔ9 DbΔ9 DbΔ13 DbΔ9

Nucleus
Chord

DbΔ7 | Db Db/9 Db/9 Db/9 Db/9 Db6/9 Db6/9 Db6/9

Db⁹/₉ Db⁹/₉ Db/9 Db/9 Db Δ 13 Db⁶ Db⁶ Db⁶ Db Δ 7 Db Δ 7

Nucleus Chord E

E E/9 E/9 E/9 E Δ 7 E Δ 7 E Δ 9 E Δ 9 E Δ 7 E Δ 7

E Δ 7 E Δ 7 E⁶ E⁶ E⁶ E⁶ E⁶ E Δ 7/6 E⁶/₉ E⁶

Nucleus Chord E⁶

E⁶ E⁶/₉ E⁶/₉ E Δ 9 E Δ 9 E Δ 7 E Δ 7 E⁶

E⁶ E⁶/₉ E Δ 7 E/9 E/9 E/9 E/9 E⁶/₉ E⁶ E⁶

Nucleus Chord E

E E Δ 7 E Δ 9 E Δ 13 E Δ 7 E Δ 7 E/9 E/9 E Δ 9 E⁶

E⁶

Nucleus Chords

Extended Dominants:

A7 A7 A7/6 A7/6 A7/6 A9 A9 A13 A7/6 A7/6

Detailed description: This row shows ten guitar fretboard diagrams for A-family chords. The first two are A7 (Nucleus Chords). The next two are A7/6 (Extended Dominants). The next two are A9 (Extended Dominants). The next is A13 (Extended Dominant). The last two are A7/6 (Extended Dominants).

Suspended Dominants:

A9 A13 A9 A7sus A7sus A7sus A7sus A7sus A7sus A7sus

Detailed description: This row shows ten guitar fretboard diagrams for A-family suspended chords. The first two are A9 (Suspended Dominants). The next two are A13 (Suspended Dominants). The remaining six are A7sus (Suspended Dominants).

A11 A11 A11 A11 A11 A7/6sus A13sus A7/6sus A7/6sus A7sus/17

Detailed description: This row shows ten guitar fretboard diagrams for A-family altered and suspended chords. The first five are A11 (Altered Dominants). The next three are A7/6sus (Altered Dominants). The next is A13sus (Altered Dominant). The last is A7sus/17 (Suspended Dominant).

Altered Dominants:

A7sus/17 A7sus/17 A7sus/17 A7/6sus/17 A7+ A7+ A7b5 A7b9+ A7#9+ A9+

Detailed description: This row shows ten guitar fretboard diagrams for A-family altered and suspended chords. The first three are A7sus/17 (Suspended Dominants). The next is A7/6sus/17 (Suspended Dominant). The next two are A7+ (Altered Dominants). The next two are A7b5 (Altered Dominants). The next is A7b9+ (Altered Dominant). The next is A7#9+ (Altered Dominant). The last is A9+ (Altered Dominant).

A13b9 A7b9b5 A7#9 A7#9 A7b9 A7+ A7#9+ Am7+

Detailed description: This row shows seven guitar fretboard diagrams for A-family altered and suspended chords. The first two are A13b9 (Altered Dominant) and A7b9b5 (Altered Dominant). The next three are A7#9 (Altered Dominants). The next is A7b9 (Altered Dominant). The next is A7+ (Altered Dominant). The next is A7#9+ (Altered Dominant). The last is Am7+ (Altered Dominant).

Nucleus Chord

Extended Dominants:

Suspended Dominants:

Db7 Db9 Db13 Db9 Db7/6 Db9 Db7sus Db11 Db11 Db11

Detailed description: This row shows ten guitar fretboard diagrams for Db-family chords. The first is Db7 (Nucleus Chord). The next two are Db9 (Extended Dominants). The next is Db13 (Extended Dominant). The next two are Db9 (Extended Dominants). The next is Db7/6 (Extended Dominant). The next is Db9 (Extended Dominant). The next is Db7sus (Suspended Dominant). The last three are Db11 (Suspended Dominants).

Overtone Dominants:

Db13sus Db7b5 Db7/6#11 Db13#11 Db9b5(#11) Db13#11 Db9b5

Detailed description: This row shows seven guitar fretboard diagrams for Db-family overtone and altered chords. The first is Db13sus (Overtone Dominant). The next is Db7b5 (Overtone Dominant). The next is Db7/6#11 (Overtone Dominant). The next is Db13#11 (Overtone Dominant). The next is Db9b5(#11) (Overtone Dominant). The next is Db13#11 (Overtone Dominant). The last is Db9b5 (Overtone Dominant).

Em7/11 Em7/11 Em11 Em9/13 Em7/13 Em7 Em7 Em7 Em9 Em7/11

Em7/11 Em11 Em9/13 Em7/13 Em7 Em9 Em7 Em9 Em7/11 Em7/11

Nucleus
Chord

Em Em7 Em7 Em7 Em7 Em7 Em7/11 Em7/11 Em9/9 Em9/9

Em9 Em7sus Em7/13 Em7/11/13

↗
This section is
grouped in
areas not around
nucleus concepts

Bm7b5 Bm7b5 Bm7b5/11 Bm7b5

Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5/11 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5

Bm7b5+ Bm7b5/11 Em7b5 Em7b5 Em7b5 Em7b5 Am7b5/11 Am7b5 Am7b5+ Em7b5/11

Em7b5/11 Em7b5 Em7b5 Em7b5/11 Em7b5/11 Em7b5 Em7b5

See if you can determine a reasonable nucleus chord for each group

Nucleus Chord

What is a good nucleus chord here?

Chord Reference Charts and the NUCLEUS CONCEPT - Page 1

Each grouping of chords on the following pages can be seen as being derived from a given **NUCLEUS CHORD**, (hence the "nucleus concept").

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Make sure you analyze where all the tones (Root, 3rd, 5th, etc.) are in each chord - see the 1st diagram for an example. (you needn't write them in, if you don't care to, but the important thing is to know where the tones are (eventually)).

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The diagrams are organized into several groups:

- Group 1:** NUCLEUS CHORD A (fingering R5R3BR). Related chords: AG, A7, A19, A6, Asus.
- Group 2:** NUCLEUS CHORD A6. Related chords: A7, A19, Asus, A6, A6/9.
- Group 3:** NUCLEUS CHORD A7. Related chords: A9, A19, A7, A7/6, A6.
- Group 4:** NUCLEUS CHORD A9. Related chords: A7, A6, Asus, Asus/17, A7, A9.
- Group 5:** NUCLEUS CHORD A19. Related chords: A6, A7, A7, A9, Asus, A9.
- Group 6:** NUCLEUS CHORD A6/9. Related chords: A7, A9, A19, A7, A7/6, A6.
- Group 7:** NUCLEUS CHORD A7/6. Related chords: A7, A7, A9, Asus, A9.

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Chord Reference Charts + the Nucleus Concept - Page 3

NUCLEUS CHORD A7
5 0 2 0 0 0

EXTENDED DOMINANTS:
A7/6 A7/6 A7/6 A9 A9 A13 A7/6 A7/6 A9 A13 A9

SUSPENDED DOMINANTS:
A7sus A7sus A7sus A7sus A7sus A7sus A7sus A11 A11 A11 A11 A11

A7/6sus A13sus A7/6sus A7/6sus A7sus/11 A7sus/11 A7sus/11 A7sus/11 A7/6sus/11

ALTERED DOMINANTS:
A7+ A7+ A7b5 A7b9+ A7#9+ A9+ A13b9 A7b9b5 A7#9 A7#9 A7b9 A7+ A7+ (7#9+)

NUCLEUS CHORD Db
6 0 0 0 0 0

EXT. DOM'S:
Db9 Db13 Db9 Db7/6 Db9

SUSPENDED DOM'S:
Db7sus Db11 Db11 Db13sus

ALTERED DOM'S:
Db7b9 Db13b9 Db7b9+ Db13b9+11 Db11b9 Db13/11

OVER-TONE DOM'S:
Db7b5 Db7/6+11 Db9b5(+11) Db13+11 Db9b5

NUCLEUS CHORD E7
5 0 0 0 0 0

EXT. DOM'S:
E9 E13 E7/6 E9

SUS. DOM'S:
E7sus E11

ALTERED DOM'S:
E7b5 E7#9 E7b9 E7b9+ E7b9b5 E7b9+11 E13b9 E9+

OVER-TONE DOM'S:
E9b5(+11) E+11

NUCLEUS CHORD E7
3 0 0 0 0 0

ALTERED DOM'S:
E7b5 E7#9 E7b5 E7#9

NUCLEUS CHORD E7
1 0 0 0 0 0

ALTERED DOM'S:
E7b5 E7b5 E7+ E7+ E7/6sus E7/6sus

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Chord Reference Charts + the Nucleus Concept - Page 4

NUCLEUS CHORD
Bm

Bm7 Bm7 Bm9 Bm7 Bm7/11 Bm7 Bm9 Bm7/11 Bm7 Bm9 Bm7/11 Bm7 Bm9 Bm7/11 Bm7

Bm9 Bm7/11 Bm7 Bm7 Bm9 Bm7/11 Bm7 Bm9 Bm7/11 Bm9 Bm9 Bm11 Bm9 Bm9

Bm9 Bm7/11 Bm7/11 Bm7/13

NUCLEUS CHORD Bm7/11

Bm7/11 Bm7/11 Bm11 Km7/11 Bm7 Bm7/13 Bm7

Km7 Bm7 Bm7/11 Bm7/13 Bm9 Bm9

Bm9 Bm11 Bm9/13

NUCLEUS CHORD F#m7

F#m7/11 Bm9 F#m7/11 F#m11

NUCLEUS CHORD Em7

Em7 Em7 Em7 Em9 Em7/11 Em7/11

Em7/11 Em11 Em9/13 Em7/13 Em7 Em7 Em7 Em9 Em7/11 Em7/11 Em11 Em9/13 Em7/13

Em7 Em7 Em7 Em9 Em7/11 Em7/11 Em11 Em9/13 Em7/13

Em7 Em9 Em7 Em9

Em7/11 Em11

NUCLEUS CHORD Em

Em7 Em7 Em7 Em7 Em7 Em7 Em7/11 Em7/11 Em9 Em9

THIS SECTION IS GROUPED IN AREAS NOT AROUND NUCLEUS CONCEPTS

Em9 Em7sus Em7/13 Em7/11/13

Bm7b5 Bm7b5 Bm7b5/11 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5/11 Em7b5 Em7b5

Bm7b5 Bm7b5/11 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5 Bm7b5/11 Em7b5 Em7b5

Em7b5 Em7b5 Am7b5/11 Am7b5 Am7b5+ Em7b5/11 Em7b5/11 Em7b5 Em7b5 Em7b5/11 Em7b5/11

Em7b5 Em7b5

