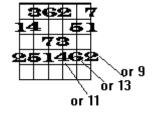
# **Chord Construction**

I am going to approach chord construction from the point of view of the major scale.

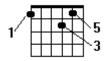
#### E Form

Using the E form scale, I have diagramed the scale with numbers indicating the tones of the scale through a two octave range.

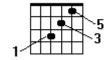


### The Major Chord (1,3,5)

The major chord is constructed by combing the first, third and fifth tones of the major scale. In the examples I have numbered the tones of the scale. A simple version of the major chord could look like this:



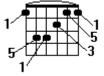
Or another possibility would be:



The order in which the tones are played isn't important. They don't need to be in order of 1st, 3rd and 5th. This example is still a major chord:

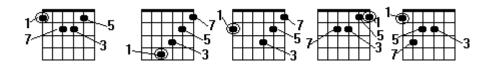


It is possible to use "doublings" when creating chords. That is the use of more than one of any of the chord tones. For example:



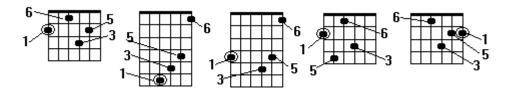
# The Major 7 Chord (1,3,5,7)

The major 7 chord is created by adding a seventh scale tone to the first, third and fifth tones. Using the E form scale, you can choose any combination of those 4 tones, in any order with as many or few doublings as you would like. Here are some possibilities. I have circled the location of the root, or first tone.



### The 6 Chord (1,3,5,6)

The 6th chord is created by adding the 6th scale tone to the major chord. Here are some examples:

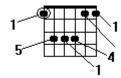


# **Suspensions**

Suspensions are usually written as "sus," or "sus4" or "sus2." If it only says "sus," it is assumed to be a "sus4."

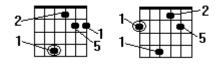
# The Sus4 Chord (1,4,5)

The suspended 4 chord is a major chord with the 4th tone substituted for the 3rd tone.



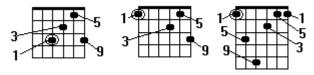
# The Sus2 Chord (1,2,5)

In the suspended 2 chord, the 2nd tone of the scale substitutes for the 3rd tone.



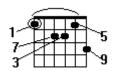
# The Add9 Chord (1,3,5,9 or upper octave 2)

Sometimes the sus2 chord is used interchangeably with the add9 chord. To be absolutely accurate, the add9 chord is not the same. It does use the 2nd tone of the scale, but it should be played at the upper octave. Also, in the add9 chord, it is not necessary to replace the 3rd tone with the 9th. Just simply add the 9th tone to the tones of the major chord.



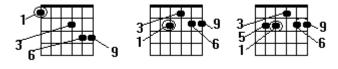
# The Major9 Chord (1,3,5,7,9)

There is a small difference between the major9 and the add9 chords. The major9 has all the same tones but includes a 7th tone as well.



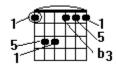
### The 6/9 Chord (1,3,5,6,9)

The 6/9 chord is a major chord with an added 6th and an added 9th tone. The 3rd should be present, but the 5th can be omitted if you choose.



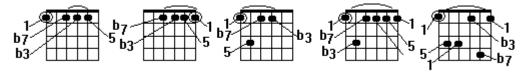
#### The Minor Chord (1,b3,5)

To create a minor chord, lower the 3rd tone of the major chord.



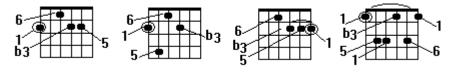
#### <u>The Minor7 Chord (1,b3,5,b7)</u>

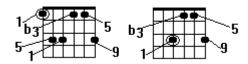
The minor 7 chord has both a flatted 3rd tone and a flatted 7th tone as well as the 1st and 5th tones.



### The Minor6 Chord (1,b3,5,6)

The minor6 chord has a 6th tone added to the 1st, flatted 3rd and 5th tones.



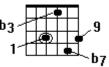


# <u>The Minor Add9 Chord (1,b3,5,,9)</u>

The minor add9 chord contains the same notes as the minor chord with a 9th tone added.

# The Minor 9 Chord (1,b3,5,b7,9)

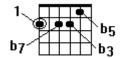
The minor9 chord contains the same notes as the minor7 chord with an additional 9th tone. When the harmony gets this extended, it may become necessary to omit notes because you don't have enough fingers or a long enough reach. Usually the first note to be omitted is the 5th scale tone. Omitting the 3rd takes away the distinction between major and minor, so it is a last resort. Omitting the 7th would change the minor9 to a minor add9. Omitting the root (1st tone) would change the name



of the chord unless you had a bass player to play the root for you. When it is unavoidable, I will omit the root. When I omit the root in a diagram, I put an empty circle in the position where the root would go. This is the minor9 chord with the 5th omitted:

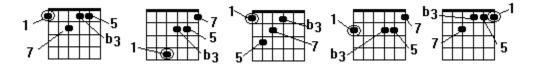
#### Minor7-5 also known as m7b5 or half diminished (1,b3,b5,b7)

The minor7-5 chord is constructed by simply lowering the 5th tone of the minor7 chord.



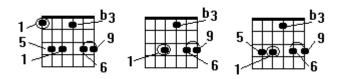
# Minor#7 also called m/maj7 (1,b3,5,7)

The minor#7 is the same as the minor7 chord except the 7th tone is not flatted. You could also think of it as a major7 chord with a flatted 3rd.



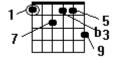
# Minor6/9 (1,b3,5,6,9)

The minor6/9 chord is a minor add9 with a 6th tone also included. The 5th tone can be omitted.



### Minor9#7 (1,b3,5,7,9)

The minor9#7 is the same as the m/maj7 with an added 9th tone. The 5th can be omitted if necesary.



### Minor sus 4 (2,4,5)

The minorsus4 chord is the same as the (ms\ajor) sus4 chord. Since the 3rd has been replaced by the 4th in both cj\hords, there is no distinction between major and minor.

# Minor7 sus4 (1,4,5,b7)

This chord is also the same as its major counterpart. (7sus4) Since the 3rd has been replaced by the 4th, there is no distinction between the major and minor chords.

# Minor11 (1,b3,5,b7,9,11 or 4 at the upper octave)

The minor 11 chord is different than the dominant 11 chord by its inclucion of the 3rd tone. In the doninant 11 chord, the 3rd is omitted since it is a half step away from the 11th

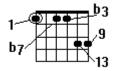
tone. (or an octave and a half step) This interval is a little harsh. The minor 11, however, uses the flatted 3rd which is a whole step away from the 11th tone. This is a less dissonant interval.

Since there are so many tones in the chord, it is common to omit the 5th tone.

The chord formations created from the E form major scale are not voiced in such a way as to allow the notes of the minor 11 chord to be reached. The chord could better be reached using another formation. The other formations will be covered following the section. on the E form.

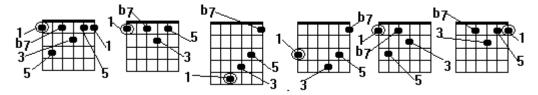
# Minor13 (1,b3,5,b7,9,13)

The minor 13 is the same as the minor with an added 13th tone. (or upper octave 6th tone) The 5th may also be omitted.



# Dominant7 Chord (1,3,5,b7)

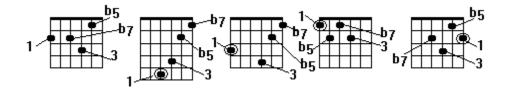
The dominant7 chord, usually just called the 7th chord, is a major chord with a flatted 7th tone added to it.



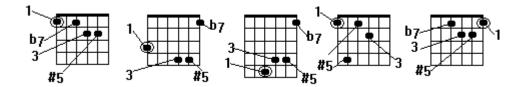
# Altered 7th Chords

The 7th chord can be altered by raising or lowering the 5th tone. The chords created are the 7-5 (also written 7b5) and the 7+5. (also written 7#5)

# The 7-5 Chord (1,3,b5,b7)

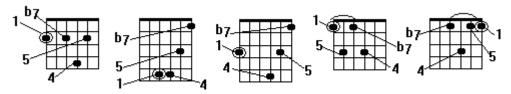


### The 7+5 Chord (1,3,#5,b7)



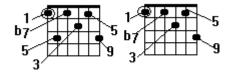
# The 7sus4 Chord (1,4,5,b7)

The 7sus4 chord is a dominant 7th chord with the 3rd tone raised to a 4th.



# The 9th Chord (1,3,5,b7,9)

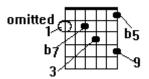
The dominant 9th chord (usually just called 9th chord) is a dominant 7th chord with an added 9th tone. It is okay to omit the 5th tone if necessay.



# Altered 9th Chords

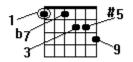
# The 9-5 Chord also written 9b5 (1,3,b5,b7,9)

The 9-5 chord is a dominant 9th chord with a lowered 5th tone. This chord cannot be done using the E form scale without omitting the root. I have diagramed it with the location of the omitted root labeled with an open circle.



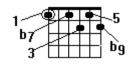
### The 9+5 Chord also written 9#5 (1,3,#5,b7,9)

The 9+5 chord is a dominant 9th chord with a raised 5th tone.



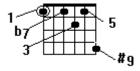
# The 7-9 Chord also written 7b9 (1,3,5,b7,b9)

This is a dominant 7th chord with a lowered 9th tone added to it. If you are familiar with the 9th chord, it is easier to approach this by first locating the dominant 9th chord, then lowering the 9th tone by one fret.



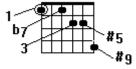
### The 7+9 Chord also written 7#9 (1,3,5,b7,#9)

This chord is a dominant 7th chord with an added raised 9th tone. You can also find this chord by first locating a dominant 9th chord, then raising the 9th tone.



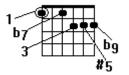
#### The 7+5+9 Chord also written 7#5#9 (1,3,#5,b7#9)

To find this chord, begin with the 9th chord and raise both the 5th tone and the 9th tone.



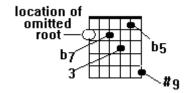
#### The 7+5-9 Chord also written 7#5b9 (1,3,#5,b7,b9)

This chord is the same as the 9+5 except the 9th is lowered. You may also choose to find it by begining with the 9th chord and raising the 5th tone and lowering the 9th tone.



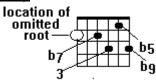
#### The -5+9 Chord also written 7b5#9 (1,3,b5,b7,#9)

As with the 9-5 chord, this chord cannot be reached without omitting the root.



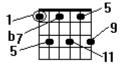
# The -5-9 Chord also written 7b5b9 (1,3,b5,b7,b9)

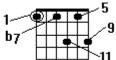
This chord also cannot be reached without omitting the root.



### The 11 Chord (1,5,b7,9,11)

The 11th chord is the same as a 9th chord except the 3rd tone is replaced by the 11th. (the 4th tone at the upper octave) The 5th is optional.



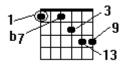


# The +11 Chord (1,3,5,b7,9,#11)

This chord contains a raised 11th tone, but the 3rd if usually not omitted. In the E form chord and scale, the +11 chord is not within reach.

# The 13th Chord (1,3,5,b7,9,13)

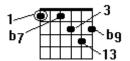
The 13th chord is the same as the 9th chord with an added 13th tone. (upper octave 6th) The 5th can be omitted if necessary.



### Altered 13th Chords

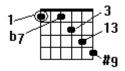
# The 13-9 Chord also written 13b9 (1,3,5,b7,b9,13)

To find this chord, use the 13th chord as a base, and lower the 9th tone.



# The 13+9 Chord also written 13#9 (1,3,5,b7,#9,13)

To find this chord, use the 13th chord as a base and raise the 9th tone.

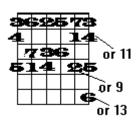


# **The Other Formations**

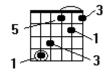
So far we have delt only with the E form scale and the chords derived from it. There are four other scale forms and chords derived from each of them. It is not always physically posible, or practical, to reach all of the possible chord configuations. Some of them have no practical fingerings in every form. In those forms, I will just state, "Not available in this form." Sometimes it is necessary to omit tones, in particular, the 5th. If the root is omitted, I will circle the place where the root originally was.

# C Form

The C form chords are constructed from the C form major scale.

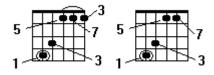


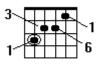
The Major Chord (1,3,5)



The Major 7 Chord (1,3,5,7)

The 6 Chord (1,3,5,6)

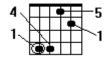


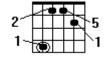


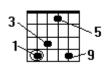
The Sus4 Chord

The Sus2 Chord

The Add9 Chord



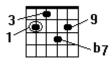


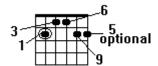


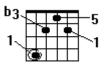
The Major9 Chord

The 6/9 Chord

The Minor Chord

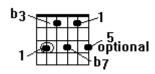


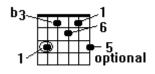


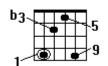


The Minor 7 Chord The Minor 6 Chord T

The Minor add9 Chord

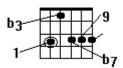


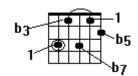


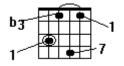


The Minor9 Chord

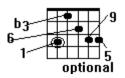
# The Minor7-5 Chord The m/maj7 Chord

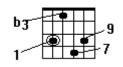


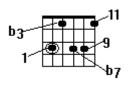




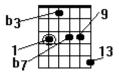
The Minor6/9 Chord The Minor9#7 Chord The Minor11 Chord



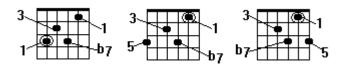




The Minor13 Chord

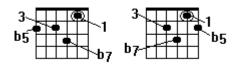


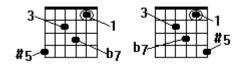
The 7th Chord



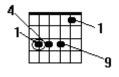
The 7-5 Chord

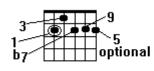
The 7+5 Chord

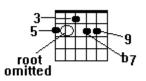




The 7sus4 Chord The 9th Chord

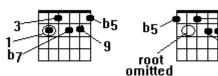


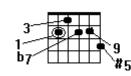


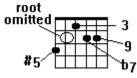


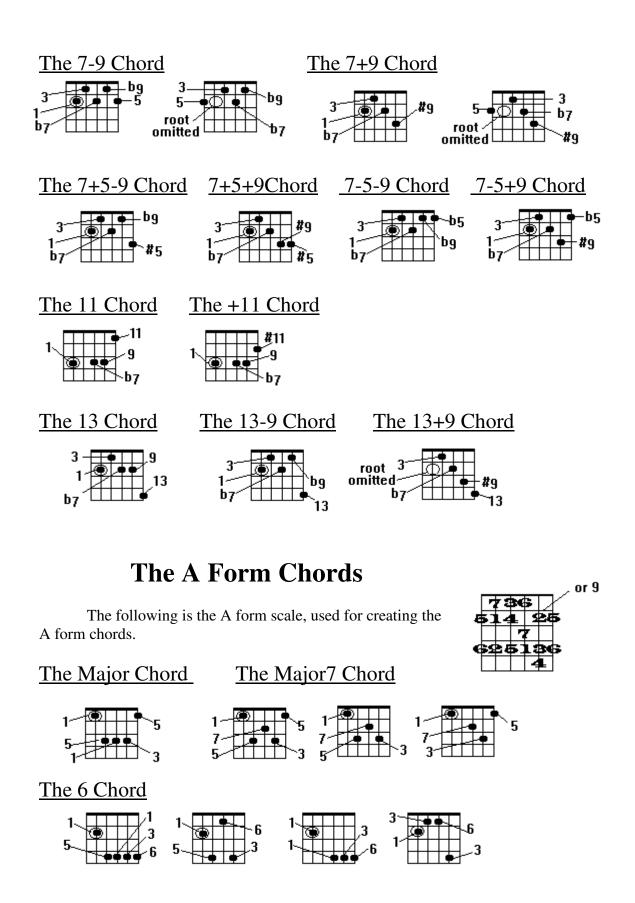
The 9-5 Chord

The 9+5 Chord

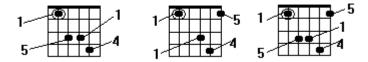




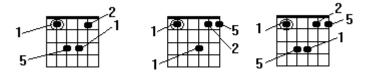




### The Sus4 Chord



# The Sus2 Chord



# The Add9 Chord

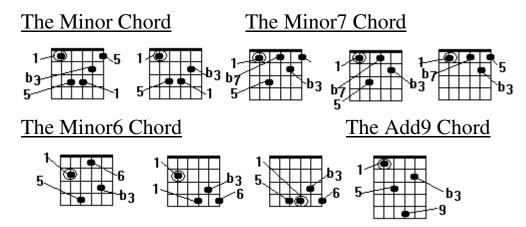
This is the same as the sus2 except it has the 3rd tone also included, and the 2rd tone is always played at the octave above the root. It isin't possible to reach all of the necessary notes using the A form scale.

# The Major9 Chord

Also not available in this form.

# The 6/9 Chord

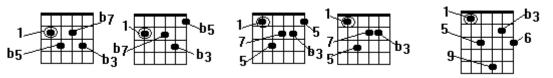
Also not available in this form.



# The Minor9 Chord

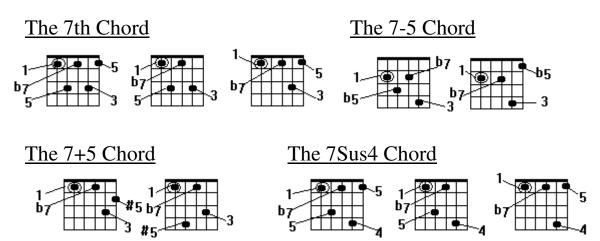
Not available in this form.

# The Minor7-5 Chord The m/maj7 Chord The Minor6/9 Chord



# The Minor9#7 Chord The Minor11 Chord The Minor13 Chord

None of these choirds are available in this form.

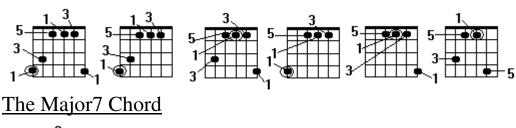


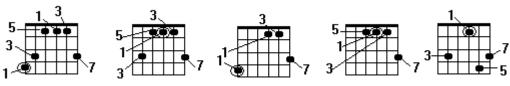
The 9th, Altered9ths, 11th and 13th Chords

Not available in this form.

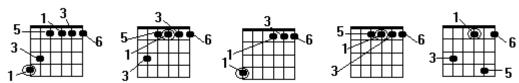
# **G Form Chords**

# The Major Chord





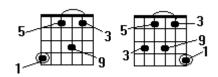
### The 6 Chord



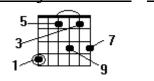
# The Sus4 Chord

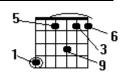
The Sus2 Chord

# The Add9 Chord

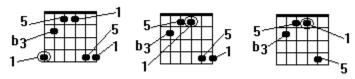


The Major9 Chord The 6/9 Chord

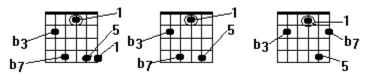




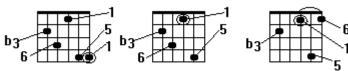
The Minor Chord

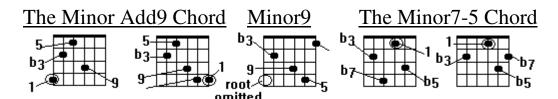


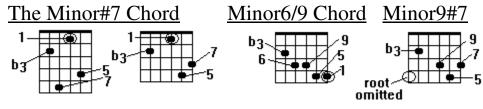
# The Minor7 Chord



# The Minor6 Chord

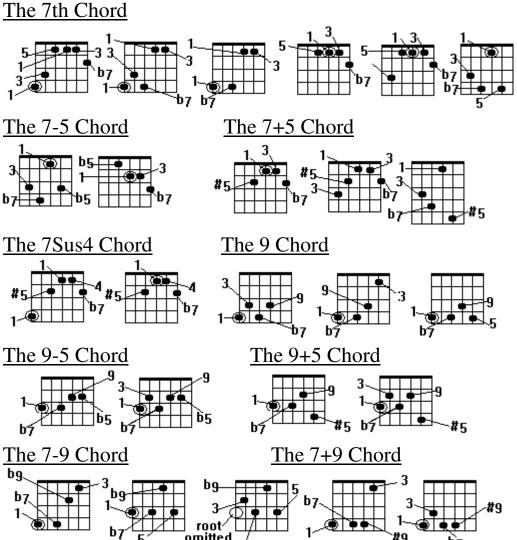


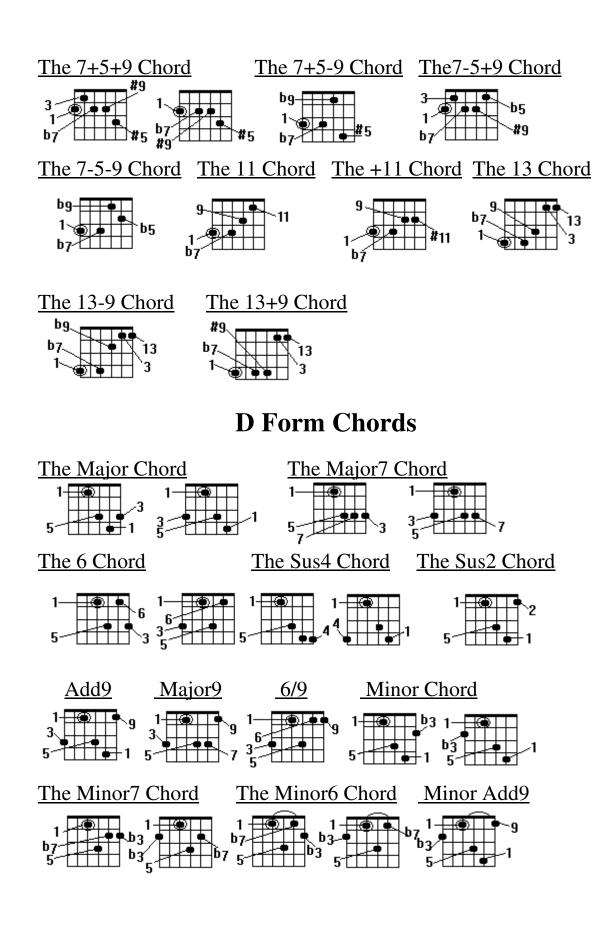




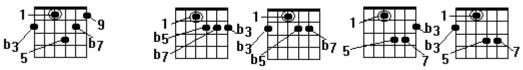
# The Minor11 & Minor13 Chords

Not available in this form.

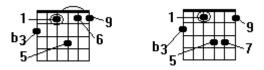




The Minor 9 Chord The Minor 7-5 Chord The Minor #7 Chord

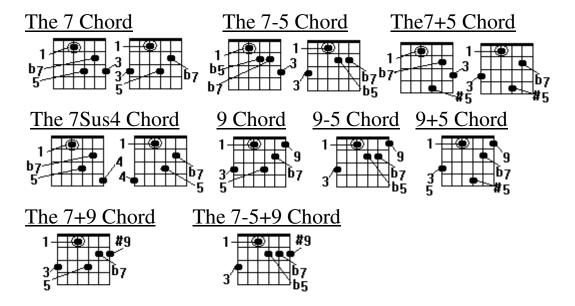


The Minor 6/9 Chord The Minor 9#7



The Minor 11 & The Minor 13 Chords

Not available in this form.

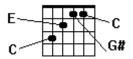


<u>The 7-9, 7-5+9, 7+5-9, 7-5+9, 7-5-9, 11, 13, and altered 11 &13 Chords</u> are not available in this form.

# **Augmented Chords (+)**

Augmented chords are a special type of chord known as symetrical chords. That means that the distance between each note in the chord is the same. In the case of the augmented chord, they are all an interval of a major 3rd (or two whole steps) apart. For example, the C augmented chord (sometimes written C+) is composed of the notes C, E and G#. There are two whole steps between C & E and two whole steps between E & G#. There are also two whole steps between G# and the next octave C. The C augmented chord could also be called the E augmented chord, since the E augmented chord consists of the notes E, G# and B# .(or C) The C+ and E+ chords could also be called G#+ as

well. Since all of the notes as equadistant apart, the chord can be identified by any note in the chord. On the guitar, this chord would look like this:



I If this chord were raised one fret higher, it would become C#+ or E#+ (F+) or A+. If it were raised another fret higher, it would become D+ or F#+ or A#+. If the form were raised another fret higher it would it would become the same three chords it was on the 1st fret. All augmented chords repeat themselves every four frets. There are three formations of augmented chords, one for each string set.

+ Chord for set 6,5,4,3

<u>string set 5,4,3,2</u>

string set 4,3,2,1







The augmented chord can also be played in open chord forms. Below are chord forms on string sets 6,3,2,1 and string set 6,4,3,2





# The Diminished Chord

Like the augmented chord, the diminished chord is symetrical chord. It can be identified by any note in the chord. Like the augmented chord, diminished chords repeat themselves as they progress up the fingerboard, but they repeat themselves every three frets instead of every four frets. There are five forms, one for each form in closed forms and two open forms.

String Set 4,3,2,1 Set 5,4,3,2 Set 6,5,4,3 Set 6,4,3,2 Set 5,3,2,1









