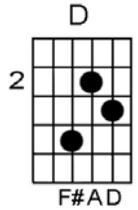




## Inversions

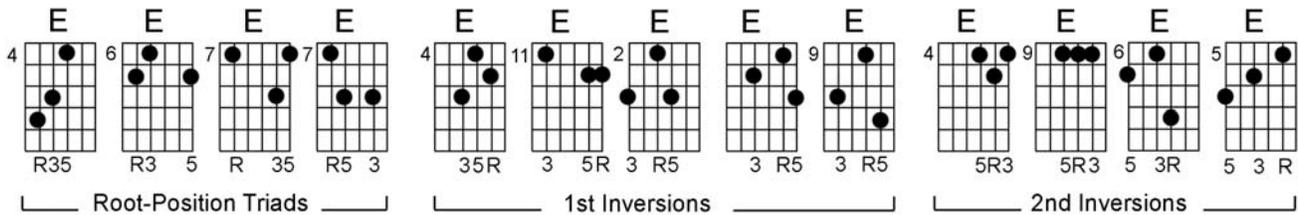


The notes in a triad need not be arranged in order. Suppose you encounter a D triad as follows: This is still a D chord but the notes are scrambled up a little. This chord is called a **1st Inversion**. Before you find out what that means the following must be said: The note that forms a 3rd interval with the bass note of a triad (speaking about a triad with its notes in regular order now) is called the **3rd** of the triad. Example: F# is the 3rd of D. Likewise, the note that forms the 5th interval with the bass of a triad is called the **5th** of that triad. The bass note of a triad is called the **root** (just as scales have roots, every triad is said to have a root). Examples: A is the 5<sup>th</sup> of Dm, D is the root of Dm.

A **1st Inversion** is a triad that has its **3rd in the bass**.

A **2nd Inversion** is a triad that has its **5th in the bass**.

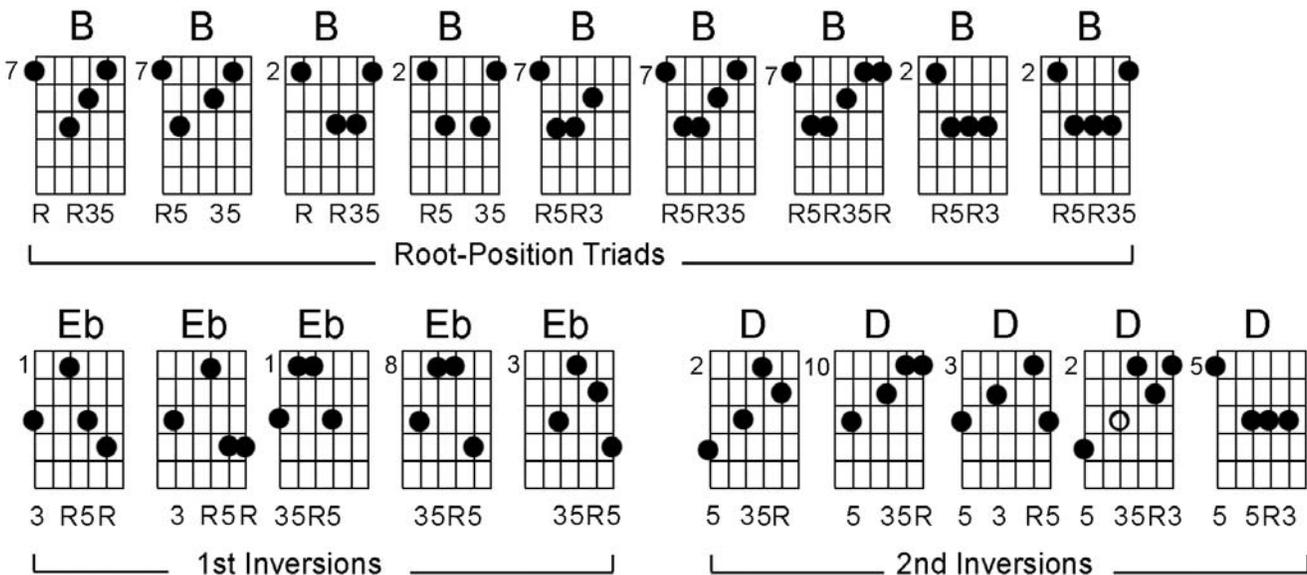
A **“Root-position”** triad (this term refers to the regular, root in the bass triad and will be used occasionally to distinguish the regular triad from its inverted brothers—the 1st and 2nd inversions) or an inversion may have different **Voicings** of its notes. The word ‘voicing’ refers to the exact *arrangement* or order of the notes...play and compare the following voicings of an E major triad (and its inversions).



Did you happen to notice that the same voicing can be played in more than one place on the guitar? Ask about this phenomenon if you’re not sure.

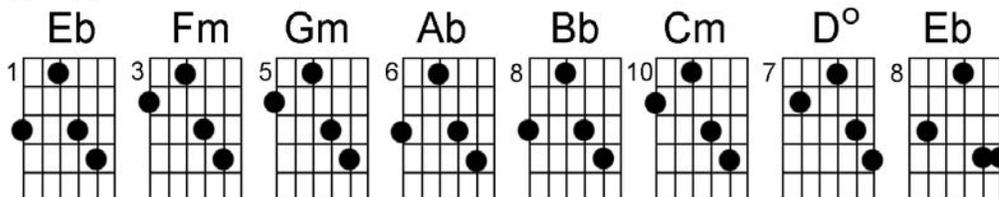
## 4 Note, 5 Note, and 6 Note Triads (Triads with Doubled Notes)

Triads often have doubled notes, that is, 2 roots, 2 3rds, and/or 2 5ths. Play and compare the following examples:

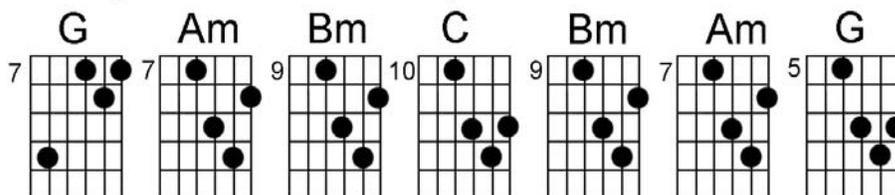


Here are a few examples of some diatonic chord scales using some larger triad sounds:

### Key of Eb

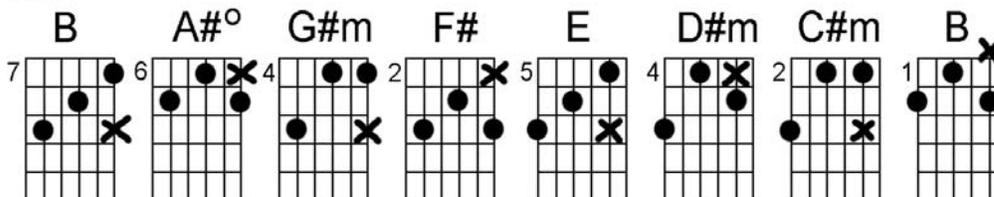


### Key of G (partial chord scale)



The X's are played after the ●'s; try and keep as many notes ringing as possible (in other words, don't lift anything off to play the X's).

### Key of B



As you can see, there is a whole beautiful world of sound in just triads. If you are interested in being a complete musician, then a serious study of triad sounds will be a tremendously beneficial investment of your time. If you decide to do this though, make sure that it is tune with your musical goals and priorities. For instance, if you have decided to specialize in jazz, and you want to play in a group, then frankly, triads are not one of your main priorities at first. However, if you have any classical music in your blood and you want to be able to play solo guitar, then triads are high on the list of musical tools you will be able to use. (These are just 2 isolated choices out of many. If we haven't nailed down a musical direction for you yet, now is the time, so let's discuss it). Also if you **review** all the material up to now from time to time it *will* sink in.

Fill out Quiz #3 now.

### Tonality Quiz #3

- 1) Triads contain what type of intervals in relation to the bass?
- 2) How many types of common 5th intervals are there?
- 3) What are they called?
- 4) How do they differ?
- 5) Identify the following 5th intervals (give the *specific* names):  
 A to Eb \_\_\_\_\_ C# to G \_\_\_\_\_ Db to Ab \_\_\_\_\_ G to D# \_\_\_\_\_  
 Bb to F \_\_\_\_\_ E to B \_\_\_\_\_ F# to C \_\_\_\_\_ Ab to E \_\_\_\_\_
- 6) Answer true or false: G to Db is a diminished 5th. \_\_\_\_\_  
 C to Ab is an augmented 5th. \_\_\_\_\_ B to F# is a perfect 5th. \_\_\_\_\_  
 Cb to Gbb is a diminished 5th. \_\_\_\_\_ D# to A# is a perfect 5th. \_\_\_\_\_  
 Fb to B is a diminished 5th. \_\_\_\_\_ If you didn't have to fill  
 C to Hb is a tormented 11-teenth. \_\_\_\_\_ out this page you'd be  
 happier. \_\_\_\_\_
- 7) What are the 4 types of triads?
- 8) What intervals does each one have in relation to its root?
- 9) What is an inversion?
- 10) Tell which tone is in the bass on the following triads (write either R, 3, or 5 underneath each figure):
 

<b>C major</b>	<b>G minor</b>	<b>D dim.</b>	<b>Bb major</b>	<b>Db augmented</b>
C	Bb	F	F	Db
G	G	D	D	A
<u>E</u>	<u>D</u>	<u>Ab</u>	<u>Bb</u>	<u>F</u>
—	—	—	—	—
<b>E minor</b>	<b>Ab minor</b>	<b>F# major</b>	<b>G# minor</b>	
E	Cb	F#	D#	
B	Ab	C#	B	
<u>G#</u>	<u>Eb</u>	<u>A#</u>	<u>G#</u>	
—	—	—	—	
- 11) What is a 1st inversion?
- 12) What is a 2nd inversion?
- 13) What does the word *voicing* refer to?
- 14) Can the same voicing be played in more than one place on the guitar?
- 15) Write a very brief summary of the main points discussed in the [three part] pages on Tonality. (Use the back of this paper if you like.)

TONALITY - page 5

NAMING OF TRIADS BY RELATIONSHIP OF ALL NOTES TO THE BASS

Another very important way of naming triads (and especially larger chords) is by viewing the intervals that are formed from the base note (lowest note) to the other notes. → examples: In a D triad, there is a 3rd interval between D and F# and a 5th interval between D and A.



② In a Gm triad, there is a 3rd interval between G and Bb, and a 5th interval between G and D.



③ In a C° triad, there is a 3rd interval between C and Eb, and a 5th interval between C and Gb.



Do you see a pattern starting to emerge?

If you continued similar studies of the construction of other triads, you would eventually come to the following conclusion: ALL COMMON TRIADS CONTAIN A 3RD INTERVAL and A 5TH INTERVAL

(in relation to the base).

The significance of this thought will become clear as you progress on... PATIENCE.

There are 3 common specific types of 5th intervals which are as follows:

① A PERFECT 5TH interval has 3 1/2 STEPS between the 2 notes involved → Examples: A to E (A, B, C#, D#, E), Bb to F, C to G, D to A, Eb to Bb, F# to C#, etc.

② A DIMINISHED 5TH interval has 3 STEPS between its notes (because there are 3 whole steps in this interval, it is also called the TRI-TONE). Example: A to Eb (A, B, C#, Eb) ← notice that although A to D# would sound the same as A to Eb, it is a type of 4th interval, not a 5th. More Examples:

B to F, C to Gb, D to Ab, E to Bb, F# to C, G to Db, Gb to Dbb, G# to D, etc.

③ An AUGMENTED 5TH interval has 4 STEPS between its notes. Examples: A to E# (A to F is a type of 6th, not a 5th), Bb to F#, B to Fx (why not G?), C to G#, Db to A, D to A#, Eb to B, F to C#, etc.

If we now classify the 4 common triad types by their intervals in relation to their base notes, the following appears:

- ① A MAJOR TRIAD has a MAJOR 3RD and a PERFECT 5TH.
- ② A MINOR TRIAD has a MINOR 3RD and a PERFECT 5TH.
- ③ A DIMINISHED TRIAD has a MINOR 3RD and a DIMINISHED 5TH.
- ④ An AUGMENTED TRIAD has a MAJOR 3RD and an AUGMENTED 5TH.

If you are starting to feel swamped with facts, relax... most of this information is being given for reference later, or to lay the groundwork so that you understand the origin of the playing material you are going to be dealing with or are already dealing with. For now, just make sure you understand all this stuff... as mentioned before, memorization will happen gradually, as you work more + more with the material.

INVERSIONS

The notes in a triad need not be arranged in order. Suppose you encounter a D triad as follows: notes are scrambled up a little.



This is still a D chord but the chord is called a 1ST INVERSION. This means the following must be said: with the bass note of a triad (speaking regular order now) is called the 5th of that triad. The bass note of a triad is called the Root (just as scales have roots, every triad is said to have a root).

Before you find out what that the note that forms a 3rd interval about a triad with its notes in 3RD of the triad. Example: F# is the 3rd of D. Likewise, the note that forms the 5th interval with the base of a triad is called the 5th of that triad. The bass note of a triad is called the Root (just as scales have roots, every triad is said to have a root) Examples: A is the 5th of Dm, D is the root of Dm.

# TONALITY - Page 6

## INVERSIONS (continued)

A 1ST INVERSION is a triad that has its 3RD IN THE BASS.

A 2ND INVERSION is a triad that has its 5TH IN THE BASS.

A "root-position" triad (this term refers to the regular, root in the bass triad and will be used occasionally to distinguish the regular triad from its inverted brothers - the 1st + 2nd INVERSIONS) or an inversion may have different VOICINGS of its notes; the word voicing refers to the exact arrangement or order of the notes... play + compare the following voicings of an E MAJOR TRIAD (and its inversions):

ROOT-POSITION TRIADS				1ST INVERSIONS				2ND INVERSIONS				

Did you happen to notice that the same voicing can be played in more than one place on the guitar? Ask about this phenomenon if you're not sure.

## 4 NOTE, 5 NOTE and 6 NOTE TRIADS (Triads with DOUBLED notes)

Triads often have doubled notes, that is 2 roots, 2 3rds and/or 2 5ths. Play + compare the following examples:

ROOT POS. TRIADS								
1ST INV.					2ND INV.			

Here are a few examples of some diatonic chord scales using some larger triad sounds:

								X4 of G (PARTIAL CHORD SCALE):					

The X's are played after the o's; try and keep as many notes ringing as possible (in other words, don't lift everything off to play the X's)

As you can see, there is a whole beautiful world of sound in just triads. If you are interested in being a complete musician, then a serious study of triad sounds will be a tremendously beneficial investment of your time; if you decide to do this though, make sure that it is time with your musical goals + priorities - for instance, if you have decided to specialize in jazz, and you want to play in a group, then frankly, triads are not one of your main priorities at first. However, if you have any classical music in your blood and you want to be able to play solo guitar, then triads are high on the list of musical tools you will be able to use. (These are just 2 isolated choices out of many - if we haven't nailed down a musical direction for you yet, now is the time, so let's discuss it).

Also, if you REVIEW all the material up to now from time to time, IT WILL SINK IN.

## TONALITY QUIZ #3

- ① Triads contain what type of intervals in relation to the bass?
- ② How many types of common 5th INTERVALS are there?
- ③ What are they called?
- ④ How do they differ?
- ⑤ Identify the following 5th intervals (give the specific names):
 

A to E <sup>b</sup> _____	C <sup>#</sup> to G _____	D <sup>b</sup> to A <sup>b</sup> _____	G to D <sup>#</sup> _____
B <sup>b</sup> to F _____	E to B _____	F <sup>#</sup> to C _____	A <sup>b</sup> to E _____
- ⑥ Answer true or false: G to D<sup>b</sup> is a diminished 5th. \_\_\_\_\_  
 C to A<sup>b</sup> is an augmented 5th. \_\_\_\_\_ B to F<sup>#</sup> is a perfect 5th. \_\_\_\_\_  
 C<sup>b</sup> to G<sup>b</sup> is a diminished 5th. \_\_\_\_\_ D<sup>#</sup> to A<sup>#</sup> is a perfect 5th. \_\_\_\_\_  
 F to B is a diminished 5th. \_\_\_\_\_  
 C<sup>\*</sup> to H<sup>b</sup> is a tormented 11-teenth. \_\_\_\_\_  
*If you didn't have to fill out this page, you'd be happier.* \_\_\_\_\_
- ⑦ What are the 4 types of triads?
- ⑧ What intervals does each one have in relation to its root?
- ⑨ What is an inversion?
- ⑩ Tell which tone is in the bass on the following triads (write either R, 3, or 5 underneath each figure):
 

C MAJOR	G MINOR	D DIMINISHED	B <sup>b</sup> MAJOR	D <sup>b</sup> AUG.	E MAJ.	A <sup>b</sup> MIN.	F <sup>#</sup> MAJ.	G <sup>#</sup> MIN.
C	B <sup>b</sup>	F	F	D <sup>b</sup>	E	C <sup>b</sup>	F <sup>#</sup>	D <sup>#</sup>
G	G	D	D	A	B	A <sup>b</sup>	C <sup>#</sup>	B
E	D	A <sup>b</sup>	B <sup>b</sup>	F	G <sup>#</sup>	E <sup>b</sup>	A <sup>#</sup>	G <sup>#</sup>
—	—	—	—	—	—	—	—	—
- ⑪ What is a 1st INVERSION?
- ⑫ What is a 2nd INVERSION?
- ⑬ What does the word VOICING refer to?
- ⑭ Can the same voicing be played in more than one place on the guitar?
- ⑮ Write a very brief summary of the main points discussed on the first 6 pages on Tonality. (Use the back of this paper if you like):