

Triads — 1st Inversion

Any root position triad may be changed by moving the root (bottom note) of the chord to another position. This is called an **INVERSION**—it means the notes are rearranged and a tone other than the root is the bottom note of the chord.

The first inversion can be made from a C triad by moving the root (C) to the top of the chord.

Root Position 1st Inversion

C E G becomes E G C

All letter names are the same, but the 3rd (E) is now on the bottom, and the root (C) is now on top. This is called 1st **INVERSION**.

1st Inversion Triads in C major
(3rd is on the bottom).

In 1st inversion, the 3rd is *a/ways* the bottom note.

OPEN and CLOSE POSITIONS

When the notes of a chord are spaced within an octave, it is in **CLOSE POSITION**.

When the notes of a chord are spaced larger than an octave, it is in **OPEN POSITION**.

Close Position

Root Position

Open Position

Root Position

Close Position

1st Inversion

Open Position

1st Inversion

Exercises

- 1** Rewrite the following root position triads in open position.

- 2** Using the given notes as the root, add the 3rd and 5th *below* each note to make 1st inversion triads in the key of C.

- 3** Using the given notes as the 3rd, add the 5th and root *above* each note to make 1st inversion triads in the key of C (close position).

Triads — 2nd Inversion

Any 1st inversion triad may be inverted again by moving the lowest note (3rd) to the top.

The second inversion can be made from a 1st inversion C triad by moving the 3rd (E) to the top of the chord.

1st Inversion 2nd Inversion

Root 5th 3rd 3rd Root 5th

E G C becomes G C E

All letter names are the same, but the 5th (G) is now on the bottom, and the root (C) is now in the middle. This is called 2nd INVERSION.

2nd Inversion Triads in C Major
(5th is on the bottom).

In 2nd inversion, the **5th** is *always* the bottom note.

Close Position

2nd Inversion

Open Position

2nd Inversion

Triads in all Positions (close).

Root Position 1st Inversion 2nd Inversion Root Position

Root position: **root** is on the bottom.

1st inversion: **3rd** is on the bottom.

2nd inversion: **5th** is on the bottom.

Both inversions: In close position, the **root** is always the upper note of the interval of a 4th.

1st Inversion

2nd Inversion

Exercises

- 1** Rewrite the following close position 2nd inversion triads in open position.

- 2** Rewrite the following root position triads in 2nd inversion (close position).

- 3** Using the given notes as the root, add the 5th *below* and the 3rd *above* to make 2nd inversion triads in the key of C.

V7 Chord—1st, 2nd and 3rd Inversions

The V7 chord can also be inverted. Since the V7 chord is a 4-note chord, it can be written in four different positions: root, 1st inversion, 2nd inversion and 3rd inversion (7th at the bottom).

Close Position

Root Position (root on bottom)

1st Inversion (3rd on bottom)

2nd Inversion (5th on bottom)

3rd Inversion (7th on bottom)

In 1st, 2nd and 3rd inversions in close position, the **root** is always the upper note of the interval of a 2nd.

Exercises

- 1** Write the 1st, 2nd and 3rd inversions for the following V7 chords in close position.

a.

D7

b.

A7

c.

C7

d.

F7

- 2** Indicate the inversion of the following V7 chords.

C7 A7 F7 D7 A7 F7 D7

1st 2nd 3rd 1st 3rd 1st 2nd

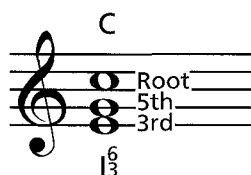
- 3** Write the following V7 chords in the given inversions. The bottom note is given. Add accidentals where needed

F7 3rd C7 1st A7 2nd D7 1st C7 3rd F7 2nd D7 3rd

Figured Bass

To indicate what inversion of a chord to use, numbers are added to the Roman numeral of that chord. This system originated during the BAROQUE PERIOD (1600–1750) and is called FIGURED BASS.

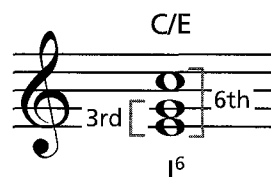
1st Inversion Triads (3rd is the lowest note)



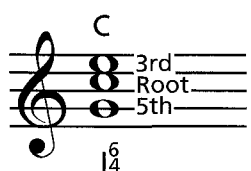
In the key of C, the 1st inversion of the I chord was originally written $I \frac{6}{3}$.

The numbers $\frac{6}{3}$ indicate the intervals of the chord from the bass (lowest) note. The middle note G is up a 3rd from the bass note E, and the top note C is up a 6th. Over time, the bottom 3 was dropped and shortened to I^6 .

Another way to indicate a 1st inversion C chord is by using the chord symbol C followed by the bass note, written C/E.

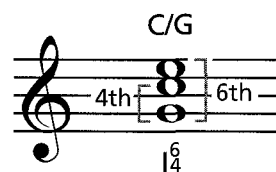


2nd Inversion Triads (5th is the lowest note)



In the key of C, the 2nd inversion of the I chord is written I^4_6 . The middle note C is up a 4th from the bass note G, and the top note E is up a 6th.

Another way to indicate a 2nd inversion C chord is C/G.



V⁷ Chords The V⁷ chord has four different positions.

	C ⁷ *	C ⁷ /E	C ⁷ /G	C ⁷ /B \flat
	Root Position	1st Inversion	2nd Inversion	3rd Inversion
Figured Bass:	V^7_3	V^6_3	V^6_4	V^6_2
Shortened to:	V^7	V^6_5	V^4_3	V^4_2

Letter name chord symbols (C/G) are usually written above the staff. Roman numeral chord symbols (V^7) are usually written below the staff.

*The C⁷ chord is the V⁷ chord in the key of F.

Exercises

1

Write the chord symbol above the staff and the Roman numeral below the staff, using figured bass where applicable, for each chord in the key of C.

a.

b.

Major Chord Progressions

Chords that move (or progress) from one to another are called a CHORD PROGRESSION. Because the I, IV and V chords contain all the notes of the major scale, they can be used to ACCOMPANY (play along with) most simple melodies. In many chord progressions, a V⁷ chord is used in place of the V chord.

C F C G G⁷ C

I IV I V or V⁷ I

When the IV and V (or V⁷) chords are in root position, the progression sounds choppy. To make it easier to play and sound smoother, the IV chord often is moved to the 2nd inversion, and the V (or V⁷) chord often is moved to the 1st inversion.

In the IV chord, the 5th (C) is moved down an octave.

2nd inversion
1 octave lower

IV IV⁶/₄

In the V chord, the 3rd (B) and 5th (D) are moved down an octave.

1st inversion
1 octave lower

V V⁶

In the V⁷ chord, the 3rd (B), 5th (D) and 7th (F) are moved down an octave.

1st inversion
1 octave lower

V⁷ V⁵/₆

The following positions are often used for smooth progressions. Notice there is a common tone between each chord.

Root Position 2nd Inversion Root Position 1st Inversion Root Position

I IV⁶/₄ I V⁶ or V⁵/₆ I

Exercises

- * **1** Write the chords in root position in the key of G major. Write the chord symbol for each above the staff.

G C G D D⁷ G

I IV I V and V⁷ I

- 2** Rewrite the above chord progression to make it sound smoother. Add chord symbols.

G C/G G D/F# D⁷/F# G

I IV⁶/₄ I V⁶ and V⁵/₆ I

- 3** Write the chords in root position in the key of F major. Write the chord symbol for each above the staff.

F B^b F C C⁷ F

I IV I V and V⁷ I

- 4** Rewrite the above chord progression to make it sound smoother. Add chord symbols.

F B^b/F F C/E C⁷/E F

I IV⁶/₄ I V⁶ and V⁵/₆ I

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Examples:

1



2



3



Page 88 from the Student Book:

88

UNIT 13

EAR TRAINING FOR LESSONS 51-55

Track 1*

1

Listen to the C major chord in root position and then in 1st inversion.

Write whether the chord in each example is in root position (R) or 1st inversion (1st). Each example will be played twice.



a. R b. 1st c. 1st d. R e. 1st

Track 2

2

Listen to the C major chord in root position and then in 2nd inversion.

Write whether the chord in each example is in root position (R) or 2nd inversion (2nd). Each example will be played twice.

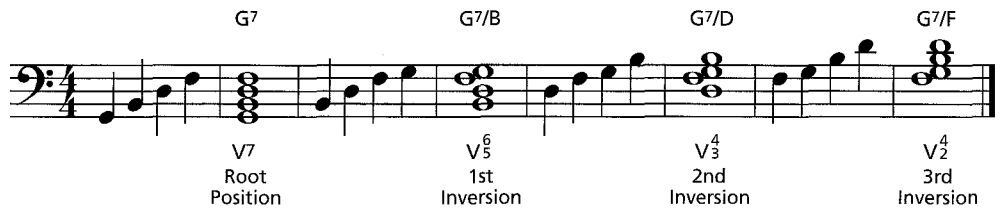


a. R b. 2nd c. R d. 2nd e. 2nd

Track 3

3

Listen to the V7 chord in root, 1st, 2nd and 3rd inversions.



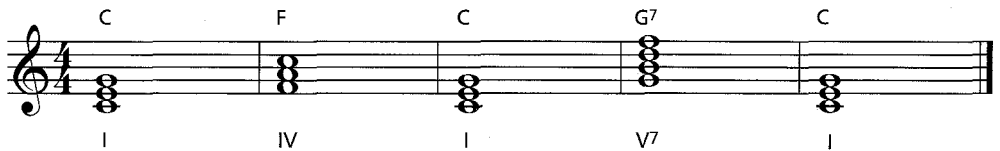
Write whether the V7 chord in each example is in root position (R) or 3rd inversion (3rd). Each example will be played twice.

a. 3rd b. R c. R d. 3rd e. 3rd

Track 4

4

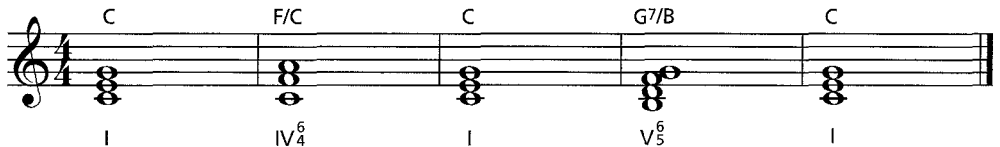
Listen to the chord progression in C major with all chords in root position.



Track 5

5

Listen to the same chord progression with inversions.



Track 6

6

You will hear I, IV and V7 root position chords in the key of C major. Write the Roman numerals for the missing chords on the lines. Each example will be played twice.

a. I IV I V7 I

b. I V7 I IV V

*Track 1 refers to the track number on Ear Training CD 2.

4

Play Example 4, above.

5

Play Example 5, above.

6

