

5

Introducing Inversions



Inversions

In *Lesson 1* of the course we learned about triads — three notes played together to form a chord or separately as an **arpeggio**.

So far we have played triads in **root position**. This means that the root note of the chord is positioned at the base, or bottom of the chord. This can result in a lot of movement for the left hand when it is playing chords.

In reality, it is often possible to play the three notes of a triad in a different order, without the root note of the chord being at the bottom. This results in less work and more economical movement for the left hand. Essentially, the hand stays in the same basic position and the fingers do the work.

Lesson Objectives

- Introduce the concept of **inversions** and use practically to develop ‘**economy of movement**’.
- Develop left hand triads through the use of inversions.
- Introduce and begin to play **chord progressions**.

Changing Chords

The following example illustrates a basic way to change from A to D. The hand has to move a long way. Use the multimedia files taking great notice of the movement of the hand and the sound of the chords as they change.

Exercise 1

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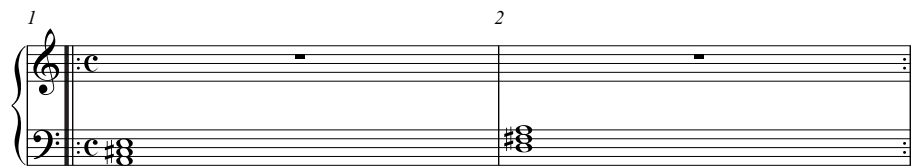
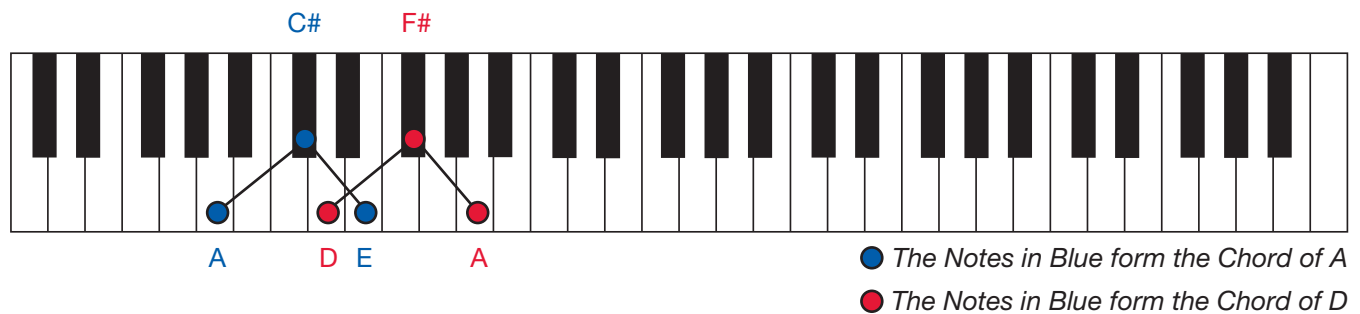


Figure 1 — Changing Chords A to D (Root Positions)



Changing Chords

Now having changed chords using the root positions, we have quite a large movement for the left hand to make. If we analyse the two different chords perhaps there are common notes that would make it possible to change chords with less movement.

The notes in the chord of A are: **A**, C# and E.

The notes in the chord of D are: D, F# and **A**.

So we have an A in both chords. At the moment, we play the A at the bottom of the A chord and in the D chord we play the A at the top, the fifth.

So why don't we keep the A at the bottom of the chord. That way we can play the A with the same finger and not move the hand at all.

Look at our next exercise and *Figure 2* below to see how the notes are positioned and how much easier it is to change between chords as a result.

So if we leave the A where it is, we can simply move our 2nd finger up a semitone from C# to D. The E moves up a tone to the F#. We have therefore achieved the change of chord from A to D with the smallest of movements.

Using the multimedia files as always practise changing chords.

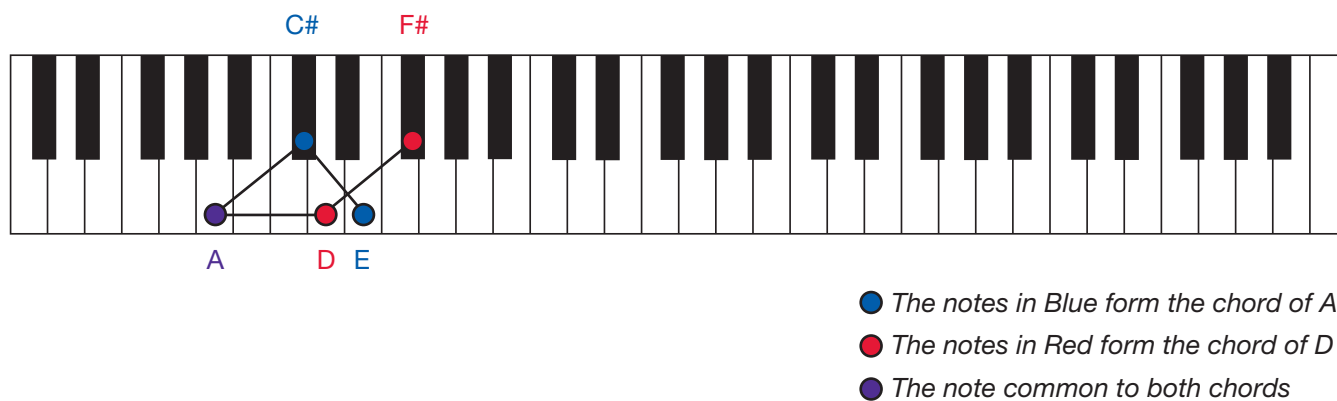
Semitone

The interval between two adjacent keys on a piano is a semitone. This applies to white and black keys. Thus...

B → C = 1 semitone

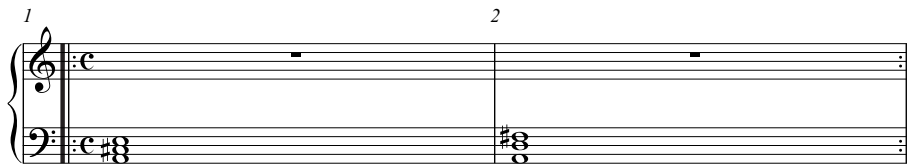
F → F# = 1 semitone

Figure 2 – Changing Chords A to D (using Inversions)



Exercise 2

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Inversions

This new way of playing the D chord is called an ***inversion***. The D root note is now not at the bottom of the chord. Instead it is in the middle. All three notes of the D chord are still present (D, F# and A) except in a new order (A, D and F#).

Economy of Movement

I am sure that you haven't failed to notice how much easier it is for you to make the change between chords using this inversion. This economy of movement has a very positive effect on the overall sound of the chord change which is now smooth. It also sounds better too.

It is often possible to use inversions throughout a chord progression to create a smooth, economical sound. A good keyboard player is always aware of this and looks to achieve it when changing chords.

That is one reason why it is important to know the names of all the notes in each chord as it makes it easier to change from one chord to another using inversions.

A Chord Progression

Songs often contain several chords linked together to form a **chord progression**, which becomes the basis of the song. Let's add another chord to our progression — the chord of G. We now have three chords, A, D and G.

We changed from A to D using an inversion. Now use an inversion of the G chord to move from the D chord. The notes of the G chord are G, B and **D**, but remember you don't have to play them in this order!

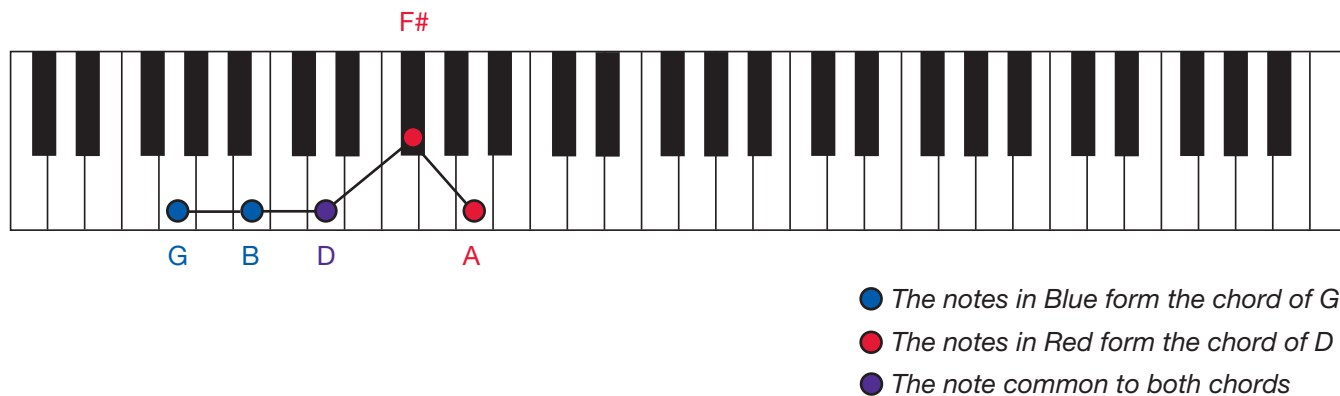
Look at your left hand as you play the D chord. What are the notes in the chord?

The task is to understand how you can change these notes easily into the notes of the G chord using an inversion.

Changing Chords D to G (Root position)

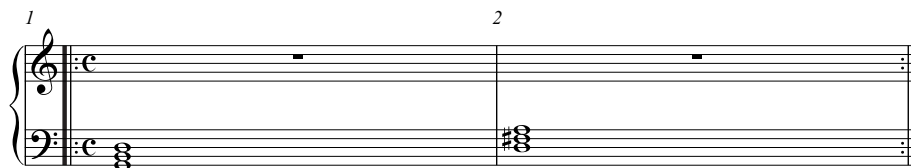
As we did with our first chord change, let's have a look at the chord change in the root position, so that we can compare the change made from the root position to that using an inversion.

Figure 3 — Changing Chords G to D (Root Positions)



Exercise 3

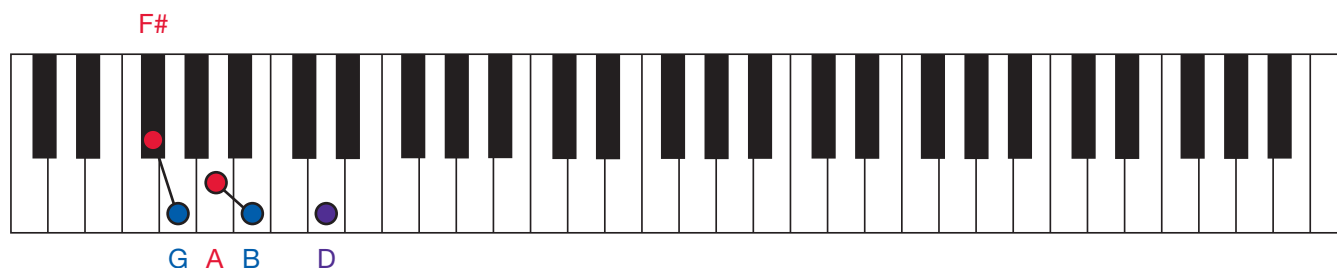
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Changing Chords G to D (Using an Inversion)

So the easiest way to play G changing from D in it's root position, is to leave D at the top of the chord and simply drop a semitone from G to F# and a tone from B to A. Look at our example below and practise this chord change, comparing it's sound and ease of movement compared to the root position.

Figure 4 – Changing Chords G to D (using an inversion)



- The notes in Blue form the chord of G
- The notes in Red form the chord of D
- The note common to both chords

Exercise 4

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Chord Progressions, choosing Inversions

The D chord inversion we played when changing from A to D is quite different from the inversion we chose when we changed from G to D. This highlights the fact that we need to be able to recall the notes in our chords and form them according to the last chord, rather than saying this is an inversion of G. It is totally dependent on the chord before and the note selection in that chord.

To practise this, we have a short chord progression to play, using the economy of movement we have previously discussed.

Look at the next exercise and develop your ability to move between each of these chords, using the minimum of effort and ensuring that you can remember each of the notes in each chord. It is absolutely essential to be able to move smoothly through chord changes using appropriate and musical Inversions.

You may wish to adjust your fingering because the stretches have changed and we have recommended an alternative fingering below each chord in the progression.

Exercise 5

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1 2 3 4

A D G D

4-2-T 4-1-T 4-1-T 4-1-T FINGERING

Developing Fluency

Once you have developed some degree of comfort making the chord changes you should try and be able to move more quickly between the chords and we have written the same changes in the next exercise. The only difference is that we are using half notes.

Exercise 6

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The image shows a musical exercise on a grand staff. The right hand (treble clef) has a whole rest in both measures. The left hand (bass clef) plays a sequence of four chords: A major, D major, G major, and D major. The first two chords are in the first measure, and the last two are in the second measure. The chords are labeled 'A', 'D', 'G', and 'D' below the staff. The first measure is marked with a '1' above the staff, and the second measure is marked with a '2' above the staff. The key signature has one sharp (F#) and the time signature is common time (C).

Adding the Root Note to your Inversions


Chord progressions work well and sound good because all the notes of each triad are present. The ear is not adversely affected by inversions. The ear simply hears the triad as a triad sound, and can easily make sense of it. Often though, the bass guitar player will be playing the root note of the triad. This has the effect of anchoring the sound of the chord and confirms what the ear is hearing.

Let's check this ourselves using the following exercises, which have a bass root note in the left hand and the chord in the right hand.

Exercise 7 uses half notes and our last exercise uses quarter notes which will increase further your ability to move fluently between chords. We are using the same chord progression of A, D G, D.

Exercise 7

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Musical notation for Exercise 7, consisting of two staves (treble and bass clef) in common time (C). The piece is in the key of D major. The first staff contains two measures of chords: the first measure has a D major triad (D4, F#4, A4) and a D major dyad (D4, F#4); the second measure has a D major triad (D4, F#4, A4) and a D major dyad (D4, A4). The second staff contains two measures of single notes: the first measure has a D4 note and the second measure has an A4 note. The exercise is marked with a '1' above the first measure and a '2' above the second measure.

Exercise 8

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Musical notation for Exercise 8, consisting of two staves (treble and bass clef) in common time (C). The piece is in the key of D major. The first staff contains four measures of chords: the first measure has a D major triad (D4, F#4, A4) and a D major dyad (D4, F#4); the second measure has a D major triad (D4, F#4, A4) and a D major dyad (D4, A4); the third measure has a D major triad (D4, F#4, A4) and a D major dyad (D4, F#4); the fourth measure has a D major triad (D4, F#4, A4) and a D major dyad (D4, A4). The second staff contains four measures of single notes: the first measure has a D4 note, the second measure has an F#4 note, the third measure has an A4 note, and the fourth measure has a D5 note. The exercise is marked with a '1' above the first measure.

Practising

You have learned a great deal in these first few lessons and it is well worthwhile going back now through all your lessons playing each exercise along with the KeyboardXtractor to check your progress. You could make notes of the exercises you play well and the ones you find hard to play and focus your attention on developing fluency in those weaker areas.

You don't have to be perfect to move on, as you can constantly refer back and review your development. Just make sure that you know what you are doing and have enough control over the exercises to feel reasonably comfortable.