



Has anyone covered the 'AI' Fingering method of playing chords in the magazine? I play using the normal 'Fingered Chord' option but when I tried AI Fingered instead I couldn't tell the difference - but everyone tells me that this is what the pro' players prefer. Why is that?

David Liddell (Midlands)

Hello David. Yes indeed, but it was quite some time ago. In February 2005 Jackie Marsden began a six part series called 'So you want to play professional chords?' which centred around the AI (Artificial Intelligence) chord system. Of course, at that time it was written using illustrations from the Tyros keyboard - although the system hasn't fundamentally changed since then and is incorporated in all the arranger workstation keyboards, CVP Clavinovas and of course the new PSR-SX instruments. You can still download a free copy of Jackie's series from our archive (in the members area of the Yamaha Club website). Look for the 'Old Archive'.

I'm afraid that if you use the Single-Finger chord method you'll not be able to make much use of the AI system... and it's true that it's the more advanced players who tend to favour this method, because it lets them dictate the path of the bass notes when playing the auto-accompaniment.

If, like David, you normally play three or four note chords with your left hand, you might find AI interesting (and, hopefully, fun) to have a go for yourself. Unfortunately the Genos Reference Manual isn't very illuminating because the only reference to AI is that it is...

"Basically the same as Fingered, with the exception that less than three notes can be played to indicate the chords (based on the previously played chord, etc.)"

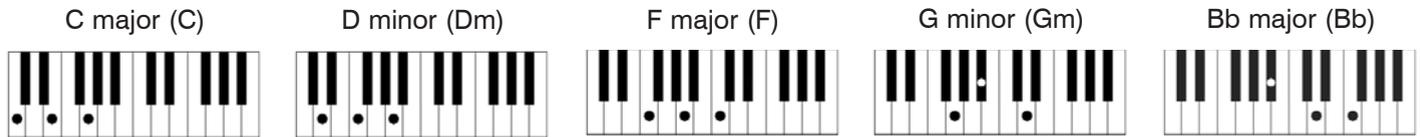
So, assuming you've got that, I need say no more! Actually there's a lot more to be said because this is a really clever system that is based on the logical and mathematical way in which harmony is structured. If that hasn't put you off let's move on the practical bit. Here's part of a traditional little tune we should be hearing in the next few weeks... 'Auld Lang Syne'.

F Dm Gm C F

Bb F Dm Gm C F Bb F

The accompaniment of this simple lead line version is made up of just five basic major or minor chords that you could play using either the Single Finger or Fingered chord method. Each of the chords is shown here in its 'root' position (i.e. with the keynote of the chord played at the bottom of the three notes).

If you've read Gill Eccles' articles on the theory of music you'll know all about how basic chords are formed from the 1st, 3rd and 5th notes of the keynote's major or minor scale.



When you play the piece of music using any of the 'Single Finger', 'Multi Finger' or 'Fingered' chord methods the notes played by the bass are automatically generated according to the accompaniment style you choose (e.g. Quickstep or Rumba). Try playing the tune using the Rumba 1 Style (from the Ballroom category). If you choose the Main A Style variation and play the first chord - F major - you'll hear the bass play a pattern using the notes F and C (the 1st and 5th notes of the F major scale). You don't have any say in the matter - that's just what it does.

What happens then if you're faced with a different arrangement of the tune with chord symbols that ask for more specific bass notes?

This is probably why the AI system appeals to slightly more advanced players. The music score below looks more complicated and the chords change on every beat of the bar. Actually it looks more complicated than it needs to because I've written in the bass notes to illustrate what effect the chord changes have on this part of the style.

F F/E Dm Dm/C Bb Bb/A Gm C F F/E Dm Dm/C

Bb Bb/A Gm C F F/E Dm Dm/C Bb Bb/A Gm A

Dm Dm/C Bb C F



An introduction to the AI chord fingering system

First, set up the AI Fingering option by pressing [DIRECT ACCESS] on the instrument's panel, followed by the [ACMP] button in the Style Control area of the panel.

When the Split Point & Fingering window opens tap the screen in the Fingering Type area (circled) and select AI Fingering from the list that appears.

Finally, close the window again by tapping the 'x' in the top right corner and the job is done.

Now let's take a look at the first three bars of the music again and see what we can find out about the AI chord system along the way.

The first bar is a 'lead-in bar' and only contains a single note (C) - so we'll move on to bar 2 where the first chord is F major. We can play this chord in just the same way using either the AI Fingering, Multi Fingering or Fingering chord options. It's a basic three-note chord (F, A and C). What's important is that the chord is established.

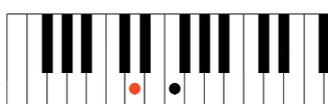
The second chord (F/E) may be new to you. This is an 'on-bass' chord - which means that the chord (F) is played with an (E) bass. Because the note E isn't a natural part of the F major chord it won't be natural for the instrument's 'brain' to choose this note for the bass - so we have to force it.

F/E (F major on E bass)



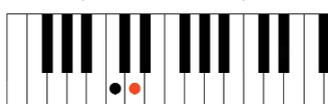
This is where the AI system's usefulness is first demonstrated. The illustration shows the accompaniment chord area of the Genos' keyboard. The chord's keynote is coloured red. To produce the F major chord over an E bass is now a simple matter of playing the F and the E notes together - with F as the top note and E as the lower. This tells the keyboard that you want it to continue the F major chord it has already recognised... but with E as the bass note.

Dm (D minor)



One of the great things about AI is that you can form most major and minor chords using only two notes. In the Fingering chord option you must play at least three notes for a chord to sound. The most important of these are the root (the keynote) and the 3rd note of the scale. These two notes provides the information the keyboard needs to determine whether a chord is major or minor one - so playing the keynote of the D minor scale (D) says "this is a chord based on D". Adding the 3rd note of the D minor scale (F) says "this is a minor chord". The instrument obligingly plays a D bass.

Dm/C (D minor on C bass)

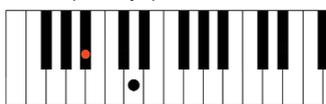


Having set the keynote (D) add the note C below it - so you are now playing notes D and C as illustrated.

If you still have that Rumba Style handy, set it going and try playing all four chords in this bar, one after the other. You can start with the F major chord using just the two notes F and A if you like, instead of playing the full three note chord. As you progress through the chords you'll hear the bass note descend F - E - D - C.

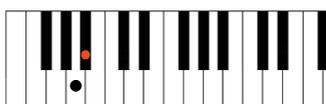
Take it slowly to begin with until you get used to the chord changes. As you become more confident gradually increase the speed. Right, let's push on and run through the rest of the chords.

Bb (Bb major)



Bar 3 begins with a Bb major chord on the 1st beat of the bar. You'll know what to do by now. Bb is the keynote and so you need to play this together with the third note of the Bb major scale - which is D.

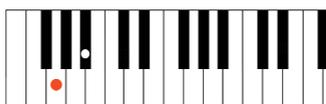
Bb/A (Bb major on A bass)



Note Bb (keynote) at the top with note A below will produce the Bb major chord on A bass.

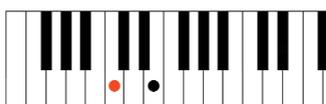
Now you're really getting the hang of it!

Gm (G minor)



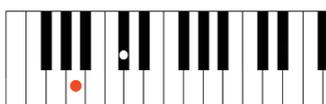
For a Gm chord in AI play the keynote (G) and add the third note of the G minor scale (Bb) above.

C (C major)



Play the keynote (C) and add the third note of the C major scale above to create a C major chord with just two notes.

A (A major)



That's it really. You may have noticed that this same sequence of chords is repeated right the way through the tune until the end of bar 7 where there's an A major chord. I'm sure I don't need to tell you now but, just in case, an A major chord is formed in AI by playing the keynote (A) and adding the third note of the A major scale (C#) above it.

The amazing thing is that in this exercise we can control the path of the bass notes throughout the music and play all these complicated looking chords... and yet never use more than two fingers from beginning to end.

Auld Lang Syne (in the style of James Last)

Although we've been using the rumba style it was never my intention to set the piece in this way. I found Auld Lang Syne worked really well with a 'James Last' pops orchestra feel and so, if you'd like to do the same here's a run down of the settings I used:

Registration 1

Style: Easy Listening > PartyAGogo. Tempo 100.

Right hand: OTS 4

Right 1: Brass > Trumpet (vol.100)

Right 2: Brass > PopHornsShake (vol.100)

Right 3: Legacy > Brass > Golden Trumpet (vol.100)

Harmony: On > Standard Duet 1

If you would like a MIDI file copy of me playing this to use as an audio illustration please email me to glyn@yamaha-club.co.uk with 'Auld Lang Syne' in the subject line.

In conclusion...

Of course there's far more to AI than we've discovered today. I have literally only just scratched the surface. Understanding the why's and wherefore's of the musical logic behind how the system works is another matter altogether and I'm quite sure that I haven't fully grasped it yet. The more I use it, however, the more I'm gaining an understanding of how it all hangs together but I've some way to go yet I think.

None-the-less, I came away from the Club Weekend last year, inspired yet again by some of the wonderful players we heard and determined to make myself play the keyboard *as a keyboard* and make use of the AI system properly.

As a one time dyed in the wool organist I've always missed the bass pedals and found it difficult to resist the temptation to try to turn each keyboard I've played into a kind of organ. Just like many more of us, who have come to the keyboard via the organ, I've tried adding second keyboards and bass pedals in an attempt to recreate what I'd lost - instead of fully embracing the wonderful and exciting instruments that we now have.

One of the things I've struggled with about AI is that the 'chords' you play bear precious little resemblance to the chords as you would play them on a piano. In fact, if you were to play this AI version of Auld Lang Syne on a piano, using the chords as I've illustrated them here, the result would sound discordant and not very nice.

In this sense I've been tempted to think that the whole AI thing is a nonsense - because it's a skill you can't use when you play any other kind of keyboard instrument. On the other hand, when you appreciate the difference the AI facility makes to the richness of the keyboard's harmonies it makes perfect sense to want to learn it in order to use the keyboard you're playing to the very best effect you can.

Of course not all AI harmonies can be produced using just two notes but, for now, I hope you'll enjoy tinkering with this introductory exercise.

Happy New Year!