A BRIEF GUIDE TO PIANO FOURTH VOICINGS

INTRODUCTION

This article is intended to give you a basic command of the most useful piano chords voiced in fourths (also known as “quartal voicings”). This sound is heard in the playing of McCoy Tyner, Chick Corea and just about every pianist that has come after them. It’s also used by arrangers.

These voicings make for a much more open sound than the more traditional voicings based on thirds. The left-hand versions are often used to accompany a right-hand solo (frequently using pentatonic and hexatonic scales), but they also have a lot of applications in comping, both in modal tunes and when playing changes.

It’s especially useful to practise these voicings, as they allow you to see keys and chords in a different light. Most people find it quite tricky to read/play fourth intervals at first.

1. BASIC II-V-I IN FOURTHS

As modern as they may sound, the basic fourth voicings are derived from the standard rootless left-hand voicings most jazz pianists are already familiar with. The two inversions of these voicing sets are as follows:

\[
\begin{align*}
\text{Dm7} & \quad \text{G7} & \quad \text{C}\Delta \\
\text{Dm7} & \quad \text{G7} & \quad \text{C}\Delta
\end{align*}
\]

Removing a middle note from these voicings is a popular choice, as it creates a less congested sound. It also converts the second two voicings into stacks of diatonic fourths (diatonic just means “from the key – could be perfect or augmented, doesn’t matter”):

\[
\begin{align*}
\text{Dm7} & \quad \text{G7} & \quad \text{C}\Delta \\
\text{Dm7} & \quad \text{G7} & \quad \text{C}\Delta
\end{align*}
\]

There’s no reason why you shouldn’t play these voicings as is, but it’s also possible to adjust the Dm7 voicings to convert the whole batch into fourths:

\[
\begin{align*}
\text{Dm7} & \quad \text{G7} & \quad \text{C}\Delta \\
\text{Dm7} & \quad \text{G7} & \quad \text{C}\Delta
\end{align*}
\]
A note here on range. It's usually best to keep these voicings roughly within an octave of middle C. Much lower and they're muddy, much higher and they're thin. To give you more options you can invert them, for instance:

Dm7

2. FULL TWO-HANDED FOURTH VOICINGS

There are ways of building bigger chords in fourths across the two hands, but you have to take care when constructing them if you want to clearly express the harmony. What follows are the choices that give the most possible diatonic fourths while steering clear of the “avoid” notes and still giving the strongest possible representation of the chord. (The “avoid” notes are the 4ths of G7 and C.)

On the II chord (Dm7), build five consecutive fourths up from the 5th:

Note that this voicing contains the root (D), 3rd (F), 5th (A) and 7th (C). Extending it either above or below tends to unbalance the sense of D minor.

On the V chord (G7), build five or six consecutive fourths up from the 7th:

This can't be extended further either way, because that would mean playing the “avoid” note (the 4th, C). Note that this is the same as thing as a classic left-hand voicing with the second from bottom tone (A) raised an octave and the 5th (D) and root (G) added on top of the whole lot.
On the I chord (CΔ), build five consecutive fourths up from the 3rd:

![Musical notation showing five consecutive fourths up from the 3rd.

Note that this is the same thing as a classic left-hand voicing with the second from bottom tone (G) raised an octave and the root (C) added on top. Note also that this is the same as the II voicing for Am7 (the relative minor of C). The Dm7 voicing we looked at above is, likewise, the same as the voicing for FΔ. Being aware of your relative major-minor pairings allows you to learn two things at once.

These voicings are fuller, so can work satisfactorily further up the keyboard than the left-hand fourths we looked at earlier. But of course you can invert them, with the proviso that you’d be disturbing the pure sound of stacked fourths. Oh, and the V and I voicings move nicely in parallel together. The II voicing is a bit more problematic, but you can use inversions to achieve smooth voice leading across the whole II-V-I.

This is just a brief roundup of the fullest sounds over each chord quality (hint: there are also possibilities for FΔ+4 – the Lydian mode of the key – and Gsus – the Mixolydian mode). You should also explore stacks of four fourths over the different chords. Remember, ambiguity is not necessarily a bad thing in music. This is particularly the case in a modal context.

One other possibility is worth mentioning here – the tonic minor chord. Building five fourths up from the 3rd of a minor chord (here Dm) gives you the following (which is the same as the G7 voicing we looked at earlier):

![Musical notation showing five fourths up from the 3rd of a minor chord.

This reads (bottom to top) minor 3rd, 6th, 9th, 5th and root. Minor 3rd, 6th and 9th in combination is a great way of representing a tonic minor chord. So this voicing will work well over a Dm which is part of a E∅ A7alt Dm progression, rather than Dm7 G7 CΔ.

3. THE “RIDE” VOICINGS

Back to left-hand voicings. There are two problems with these voicings – both are concerned with ambiguity.

First, since chord tones are built in thirds, a three-note voicing built in fourths will only ever contain two chord tones. Second, many stacks of three fourths often don’t contain the root.

The solution to the first problem is to use fourth chords in pairs (or more), seesawing between them – this allows you to more fully represent the chord tones. For the sake of smooth
motion, it’s best to choose fourth stacks a tone apart. The solution to the second problem is to play a low root and 5\textsuperscript{th} or root and octave, then jump up and follow it with one or more fourth chords. Put the two solutions together and you have the basis of the style McCoy Tyner is famous for:

\[
\text{Dm7}
\]

Another little point to mention here: if the chord quality we’re dealing with has a perfect 5\textsuperscript{th} then either a low root and 5\textsuperscript{th} or an octave will sound good. If the chord doesn’t contain a perfect 5\textsuperscript{th} (on a half-diminished or altered chord, for instance) then we’d usually choose a low octave. An altered 5\textsuperscript{th} played this low tends to muddy, rather than reinforce the harmony.

*Incidentally, if you think about it, this solution to a very modern use of harmony has its roots in a very old piano style – stride. As is so often the case, what seems at first glance like revolution is actually evolution…*

When used together in pairs or more, with or without the low root thump (which is used more in a modal context than in playing changes), these structures are known by some as “rides” – presumably since the hand sort of “rides” up and down the keyboard. Some pairs of fourth stacks work better than others in different chord contexts.

**RIDES IN MINOR**

Let’s start by looking at all the possibilities available over a Dm7 (II) chord:

\[
\text{Dm7}
\]

You can work out which ones are going to sound best by doing a little maths and letting your ear guide you. The maths part is simple: the combinations that work best are the ones that combine to give you the most strong chord tones.

The I-II pairing is quite strong, combining root and 7\textsuperscript{th} with 5\textsuperscript{th} and root. The IV-V pairing is even stronger, combining 7\textsuperscript{th} and 3\textsuperscript{rd} with 5\textsuperscript{th} and root. Others contain varying combinations of chord tones, but these two pairings seem to win out on the ear front, and are the most used:
Dm7

We can connect these by using the fourth stack built on III. But remember that this voicing is more suggestive of tonic minor (Dm⁶₉) than a II chord (Dm7). This doesn’t mean it can’t be used over a Dm7, however, especially in combination with a neighbour.

In a modal context, you have a lot more freedom to play any of the fourth stacks (especially since Dorian doesn’t contain an “avoid” note) – but even so, these sets of rides can be seen as the important “hinges” in the harmony.

RIDES IN MAJOR

Let’s now look at which rides might suit a CΔ chord:

CΔ

Hmm. Problems already. Anything involving the 4th of the key (the “avoid” note) is out. There are a couple of possibilities:

Now this may not look familiar but we’ve come across these choices before, in a different key. Remember how in minor, we found that the rides based on I-II and IV-V worked best in minor? Look again at these four stacks, but see them in A minor instead. They are the same thing as the I-II and IV-V combinations in A minor, which is the relative minor of C. If you’ve
learned A minor, you already know which rides sound good in C major. Learn major-minor pairs together.

Remember we also said that we could connect the two pairs in minor by using the stack on III – but with the proviso that it would tilt the sound in slightly in favour of tonic minor? We can do the same here (from A minor) but with the proviso that it turns the chord into C\textsubscript{\Delta+4}, C Lydian:

\[ C \text{ Lydian} \]

The Lydian alteration (raising the 4\textsuperscript{th}) always sounds okay in major. The D minor rides we looked at earlier will also work on its relative major, F. Using the middle one (the one suggestive of tonic minor) will convert the chord into F\textsubscript{\Delta+4}.

*Incidentally, the reason this works is not because we’re dealing with straight classical relative major-minors (which are the Ionian and Aeolian modes), but with Lydian major and Dorian minor, which are in the same relationship, a minor 3\textsuperscript{rd} apart.*

Why don’t we try looking at all the stacks available from A minor (shown here starting on C):

Am7 (aka C Lydian)

This has the same effect as raising the 4\textsuperscript{th} on a C major scale. Experiment and see how other combinations sound in the context of C with sharp 4\textsuperscript{th}. The best way to hear the possibilities is to play a la Tyner, bashing down a pedalled low root and 5\textsuperscript{th} or root and octave then following with the rides.

Again, in a modal context, you have more scope – the Lydian mode is popular in modal compositions as it also lacks an “avoid” note.

**RIDES IN DOMINANT**

Over G7:
We have the same problem as we did with CΔ here – the presence of the “avoid” note (the fourth, C) in the scale restricts our choices. Well, sort of. You can always play voicings freely from this scale, which makes it a Gsus chord.

This isn’t too problematic because in fourth voicings you’ll never get the 4th of the key voiced above the 3rd, which is the potential source of dissonance in sus/Mixolydian chords. As long as the harmony is voiced as sus – as is the case with these fourth stacks, then the Mixolydian mode doesn’t have an “avoid” note, and you can play freely. That said, most players seem to gravitate towards using rides on VII-I-II when playing sus.

If you want the straight dominant sound, there are options that avoid the 4th (II-III and VI-VII) and you can focus on those. We can’t connect them with the intermediate ride (I) though, because that would make the chord a sus.

But as with the major chord, we could also opt to raise the 4th (usually referred to in a dominant context as the 11th):

\[ G7+11 \]

Experiment and find pairs that sound good together. Yet again, raising the “avoid” note in the harmony frees you up to use more of the fourth stacks in combination. Tynerise to hear how the different rides sound together.

**RIDES ON CHORDS FROM MELODIC MINOR**

We’ve now arrived at melodic minor – the scale in question above (for G7+11) was D melodic minor:

And the question arises, are we still dealing with fourths? The I and IV voicings given above for G7+11 (the ones with G and C# on the bottom) contain intervals that look like major 3rds but are actually fourths within the melodic minor key (ie they are four tones apart).

Major 3rd interval:
C# (Db) – F

But in the scale:
C# D E F

So is this a fourth or not? Yes and no. Sure, the interval looks like a major 3rd, but within the context of the melodic minor key it’s actually a diminished 4th.
The melodic minor scale goes with a whole family of chord types, which you really need to learn as a set. Here are the chords that go with D melodic minor:

- **DΔ** (aka minor-major, tonic minor)
- **Esusb9** (not much used)
- **FΔ+5** (aka Lydian Augmented)
- **G7+11** (aka Lydian Dominant)
- **A7susb13** (not much used)
- **B∅** (aka half-diminished #2)
- **C#7+9** (aka altered, Super Locrian, diminished-whole tone, Jazz minor, Pomeroy scale)

Happily, we don’t tend to worry about “avoid” notes in melodic minor. Just about all the ride permutations are up for grabs over all the chords in this melodic minor family.

Have a play around with rides from this melodic minor over the different roots. Be aware of the position of the “false” fourth interval in melodic minor. As before, the best way to hear the different possibilities is to play a la Tyner (but remember when you’re doing the low register thump that some of these chord-scales don’t have a perfect 5th).

A quick tip: if you need to find a fourth voicing for an altered chord in a hurry, just play the standard rootless voicing and leave a note out. For instance:

**C#7+9**

rootless voicings

![Rootless Voicings](image)

fourth voicings

![Fourth Voicings](image)

Actually, as we saw at the start, the same holds true for unaltered V and I chords.

**RIDES ON CHORDS FROM DIMINISHED HARMONY**

Since we’ve arrived at the happy situation where everything works with everything else, let’s look at how fourth stacks work with the diminished scale. The predominant use of this symmetrical scale in jazz harmony is over dominant 7b9 chords. The repeating pattern of the scale tones is half-step whole-step.

So the scale G Ab Bb B C# D E F is what we’d play over a G7b9 chord. Since everything is symmetrical and repeats at the interval of a minor 3rd, we can play the same scale over Bb7b9, C#7b9 and E7b9 – the only difference is where you choose to start (and what the bass happens to be playing at the time).
Constructing voicings from fourths within the diminished scale yields unusual results, since only every other chord stack is composed of true fourths (I’ve marked them T):

G7b9  
\[ \text{T} \quad \text{T} \quad \text{T} \quad \text{T} \quad \text{T} \]

Which is really quite horrible to read (I’ve tried to notate it as clearly as possible), but a lot easier to see on the keyboard.

The recurring pattern is major 3\(^\text{rd}\) on top of a tritone followed by perfect 4\(^\text{th}\) on top of a tritone. The major 3\(^\text{rd}\) is another “false” 4\(^\text{th}\) – a major 3\(^\text{rd}\) which is actually a 4\(^\text{th}\) within the scale. So if you “ride” up and down by scale step, you’ll always wind up playing a major 3\(^\text{rd}\) somewhere. Not a bad thing, just something to be aware of.

All of these three-note stacks are interchangeable over G7b9, Bb7b9, Db7b9 and E7b9. As a rule, the stacks containing true fourths tend to be favoured.

There are only three diminished scales, each serving four chords. Learn to associate each as a family and you’ll save yourself a lot of work. By the way, if you’re used to hearing silent-movie melodrama from the diminished chord practising these voicings will open up your ears to other possibilities.

One more thing. The piano can create visual illusions. Compare the first voicing above (beginning on G) with the second from last (beginning on E). Play them a couple of times and look at the shapes they form on the keyboard. Doesn’t the first one look so evenly spread between the notes, whereas the other one looks like there’s a yawning gap followed by a smaller one? It’s an illusion – they are intervalically exactly the same. A clear example of how practising fourths can help you view the keyboard in a different light.

4. EXPANDING FOURTH VOICINGS

One way of opening up the possibilities for voicings when comping is to use stacks or rides in the left hand and add one, two or more chord tones on top in the right – if you use rides, parallel structures can sound great.

One quick example, using the I-II ride in the LH with a diatonic 3\(^\text{rd}\) figure moving in parallel in the RH. Recognise this?

\[ \text{Dm7} \]
Another option is to combine rootless or shell voicings in the left hand with fourth structures in the right. Both these approaches take you out of strict fourth country and open up all sorts of voicings that have a “fourthy” flavour but are more flexible.

A closing remark. Very rarely in real life will you use fourth voicings exclusively. In the heat of battle, it’s probably fairer to call this voicing style “thinned” or “open”, rather than strictly “quartal”. Take these voicings around the keys — it’s just as important to practise seeing them as playing them. You should also practise tunes using just strict fourth voicings, to explore the possibilities and get used to them in various contexts. But remember that these voicings also sound great in combination with other types of harmony. Don’t get messianic about fourths — sometimes your taste will suggest it’s a good time to use something else. It’s always a good idea to listen when your taste is talking.

Best of luck, and feel free to e-mail me with any queries or comments at jlyon@opus28.co.uk. 

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