Piano Fingerings for Improvisation

Trumpet players have it so easy – just three fingers to worry about. (OK, so there's a bit more to brass playing than that ...) But for improvising pianists, using at least five fingers for melody and moving them into different positions poses some real challenges.

My friend Murray Snyder, an accomplished jazz pianist who has also played for the Broadway productions of The Full Monty, Grease, and Annie (see his bio here) has given this subject a lot of thought. The rest of this article contains tips and ideas for helping you plan and execute solid piano fingerings in improvisation. The following topics are discussed:

- The Challenge
- Scale Fingering Guidelines
- Planning Fingerings
- Major Scale Fingerings
- Lydian Scale Fingerings
- Mixolydian Scale Fingerings
- Dorian Scale Fingerings
- Natural Minor Scale Fingerings
- Melodic Minor Scale Fingerings
- Diminished Scale Fingerings
- Pentatonic Scale Fingerings
- Blues Scale Fingerings
- Conclusion
- Resources: Scale Practice Methods and Voicings

From Murray:

The Challenge

The main problem with fingering on piano is literally that you can't play notes that your fingers aren't over; you only have access to a limited number of pitches at a time. For example, put the fingers of your right hand on F E D C (4 3 2 1, with 1 as the thumb). In this position you can play pretty fast — maybe 16th-notes, maybe even 180 per quarter note. But if you write out a jazzy line in 16ths and try it at 180 per quarter, it's a totally different story. In the first case, your fingers were over the keys, and that makes a lot of difference.

Pianists who play sheet music or written melodies or major concertos hardly ever plan fingerings in "real time," the way it would have to be done in order to improvise. A help in sheet music is the second time you play it – the melody doesn't change, and you can improve your fingerings. And you look ahead to see where you'll need to go. (In concertos all the important fingerings are carefully planned and practiced.) In flexible scales, it probably won't be the same way twice in a row. But if someone eventually wants to enjoy being able to play moderately to relatively fast, fingerings for flexible scales must be addressed.

Scale Fingering Guidelines

- 1. When ascending, pass the thumb under while a finger (usually 3 or 4) is on a black key. Do this whenever practical.
 - For example, in A Major ascending, pass the thumb under after C# and G#.
- 2. When descending, pass the fingers over the thumb *to* a black key whenever practical. For example, in A Major descending, pass the fingers over the thumb from A to G#, and D to C#.
- 3. Starting a white key scale with the thumb is the norm with the "classical" scales (Major, Melodic minor, Harmonic minor), but doesn't always work for the modes.
 - In the Scale Fingering section that follows, there are either two sets of fingerings or one for a best-case scenario. Usually one fits with the above guidelines and one fits a different efficiency, such as not having the thumb turn under more than once per octave. Use either, invent your own but always find something relaxed and comfortable. Remember your tone you produce will be affected by any unnecessary tension.
- 4. Don't use thumbs on black keys for scales it isn't hard to avoid that in 7-note or 8-note scales, but it is going to happen in the blues and pentatonic scales.
 - It's a comfort thing playing the D major scale with the thumb on F# and C# and using the rest of your fingers in order would be uncomfortable.

Improvisation and flexible scales can be more forgiving than these guidelines, but the purpose of these fingerings are to give you a rock solid concept, a feeling of what good, efficient fingerings feel like. You'll probably want to use fingerings as comfortable as these when you are improvising.

Planning Your Fingerings

In playing flexible scales on piano, you need to plan ahead using "neighborhood" thinking and fingering. Remember that there are ten fingerings for every note on the piano. It may seem obvious, but it isn't always.

The guideline is this: when you practice, plan where you want to go so that you don't run out of fingers in that direction. As you practice flexible scales, take the time to re-think your fingerings with the guideline in mind.

Here are some guidelines to keep in mind as you practice flexible scales.

- 1. Use fingers over thumb (descending right hand), and thumb under fingers (ascending right hand).
- 2. Let your fingers "hop" to a new position ("my fingers are here now, and now they are there ...")
- 3. Use a "crab" motion, sneaking the thumb beside the third, fourth, or fifth finger. For example: c d e f ,e f g a using 1 2 3 4 ... 1 2 3 4 (where 4 to 1 is the crab motion of F back to E).
- 4. In planning fingerings use the smallest amount of hand positions. You can test this by playing the notes as a cluster (any group of four or five consecutive notes). If you can play the cluster without strain, then using that hand position to play those notes is a good option.
- 5. Starting a white-key scale with the thumb means that you "turn the thumb under" (or fingers over) only once per octave.

For example, compare E Lydian this way: 1,2,3,1,2,3,4,5 (thumb on tonic and one pass under with the thumb) to this way: 2,3,1,2,3,4,1,2 (follows the black key over/under rule but requires passing the thumb under twice). One pass under (the first method) may be easier, but if your flexible scale moves scale-wise then it would depend on your highest and lowest notes. Still, you should think in terms of the "least number of passes" and "maximum comfort" when practicing flexible scales.

Notes on the Scale Fingerings

- 1. The scales given in the next section are all ascending. Fingerings are given with the second octave in parentheses. If you play just one octave and come down, don't cross over to the thumb on the top note; just use the next finger when possible.
- 2. Descending is exactly the same as ascending in reverse, so just use the same fingerings from right to left for descending.
- 3. These are not the only fingerings for these scales feel free to experiment. We're not in the business to play scales but to make music, so don't feel you need to learn and memorize all of these fingerings. But if you practice some of them and take the time to study the ideas behind the fingerings, you'll naturally and easily play good ones. In performances, if you have to play a scale with less than your favorite fingering, go with it and just keep the "turning thumb under or finger over" guidelines in mind.

1. SCALE WISE

FINGERINGS CHOICES

(COMPOSER)

When Descending scale wise - "Plan" for the thumb to be the last white key before black



A TRICKIER ONE, STILL, 5,4,3,2,1 WON'T GET YOU TO THE "B" SO



3 2 1 3 2 1 43 2

Plan for the thumb to be on the last white key before

BLACK KEYS AND WORK BACKWARD

Use the thumb under 2,3 or 4 when ascending from black key to white



YET DON'T THINK YOU HAVE TO THUMB UNDER OR FINGERS OVER ON EVERY OCCURENCE!

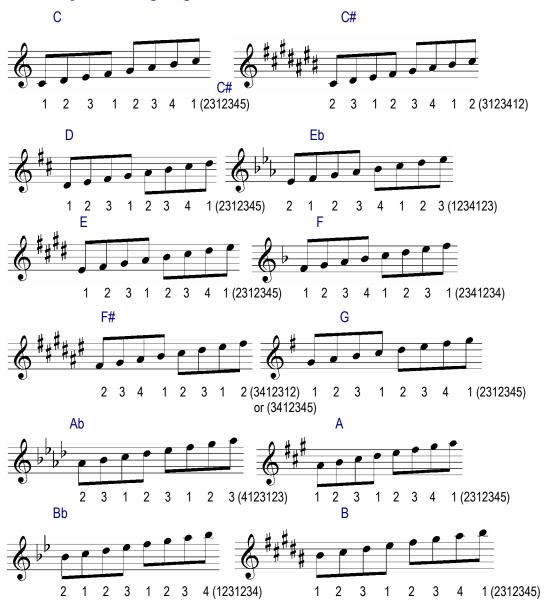








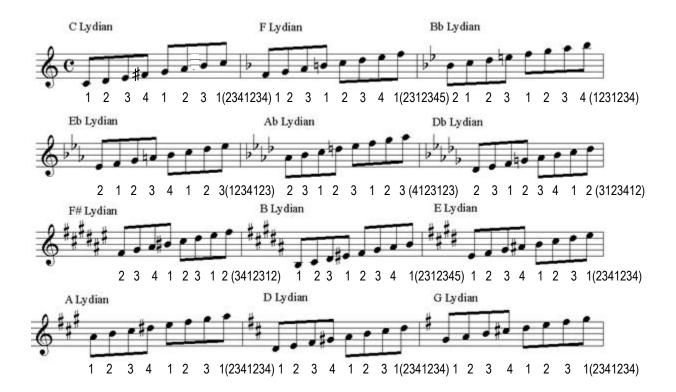
Major Scale Fingerings



Fingering Types

Major Scales

Lydian Scale Fingerings



Fingering Types

Lydian Scales

12312341(2312345) = F, B

12341231(2341234) = C, E, A, D, G

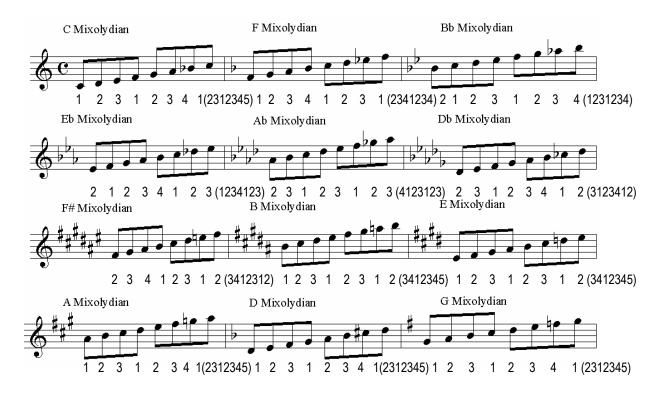
2 1 2 3 1 2 3 4 (1 2 3 1 2 3 4) = Bb

21234123(1234123) = Eb

 $2\ 3\ 1\ 2\ 3\ 1\ 2\ 3\ (4\ 1\ 2\ 3\ 1\ 2\ 3) = Ab$

 $2\ 3\ 1\ 2\ 3\ 4\ 1\ 2\ (3\ 1\ 2\ 3\ 4\ 1\ 2) = Db$

Mixolydian Scale Fingerings



Fingering Types

Mixolydian Scales

12312312(3412345) = B, E,

12312341(2312345) = C, A, D, G

12341231(2341234) = F

2 1 2 3 1 2 3 4 (1 2 3 1 2 3 4) = Bb

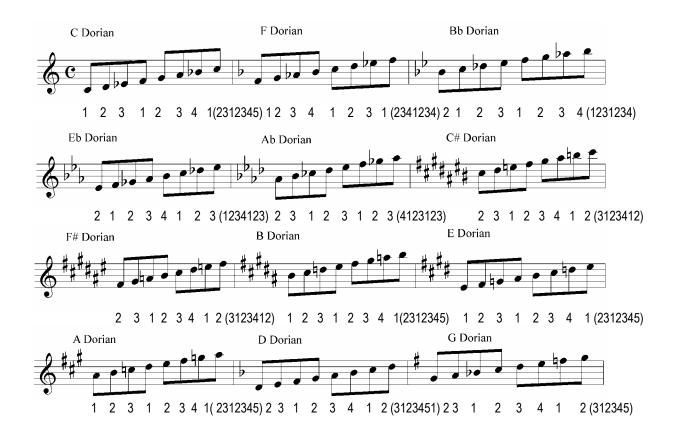
21234123(1234123) = Eb

23123123(4123123) = Ab

23123412(3123412) = Db

Dorian Scale Fingerings

For B Dorian, I use no thumbs on black keys for scales. It breaks the guidelines but I like it; the fingering 1231234 is ingrained in pianists. An alternate scale for B Dorian that doesn't start on the thumb is: 2,3,1,2,3,4,1,2,3,1,2,3,4,1,2. For E Dorian, also try: 1 2 3 1 2 3 4 1 (2312345) (same notes as above, starting on 2 and using D Major fingerings to be within the guideline).



Fingering Types

Dorian Scales

12312341(2312345) = C, B, E, A

12341231(2341234) = F

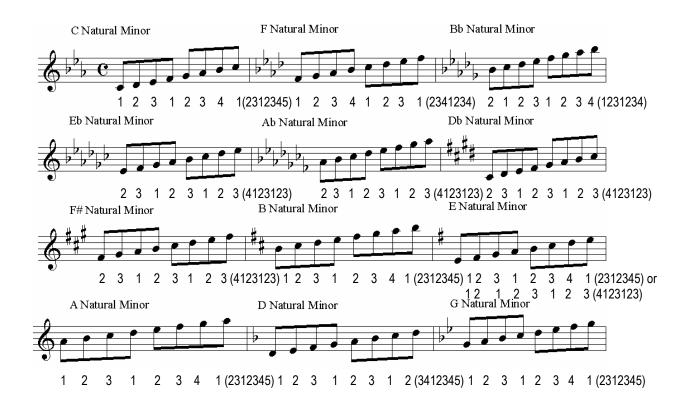
21231234(1231234) = Bb

21234123(1234123) = Eb

23123123(4123123) = Ab

23123412(3123412) = Db

Natural Minor Scale Fingerings



Fingering Types

Natural Minor Scales

12312341(2312345) = C, B, E, A

12341231(2341234) = C, E, A, D, G

2 1 2 3 1 2 3 4 (1 2 3 1 2 3 4) = Bb

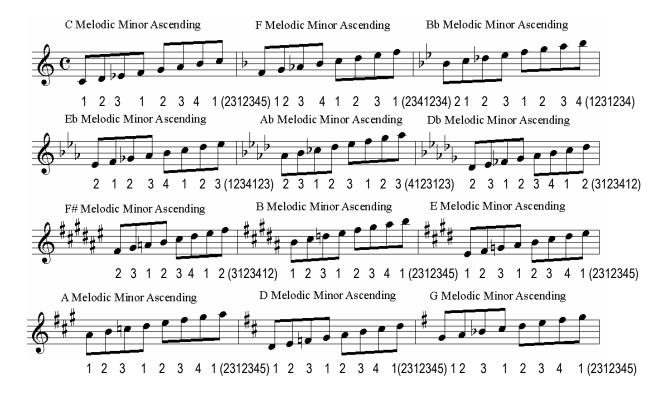
2 1 2 3 4 1 2 3 (1 2 3 4 1 2 3) = Eb

 $2\ 3\ 1\ 2\ 3\ 1\ 2\ 3\ (4\ 1\ 2\ 3\ 1\ 2\ 3) = Ab$

 $2\ 3\ 1\ 2\ 3\ 4\ 1\ 2\ (3\ 1\ 2\ 3\ 4\ 1\ 2) = Db$

Melodic Minor Scale Fingerings

For Db Melodic Minor Ascending, notice that there are only two white keys per octave, so the thumb is used on each.



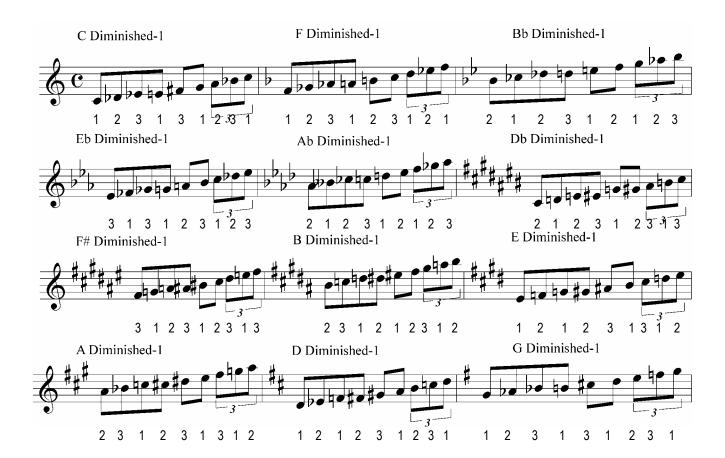
Fingering Types

Melodic Minor Ascending Scales

1 2 3 1 2 3 4 1 (2 3 1 2 3 4 5) = F, B 1 2 3 4 1 2 3 1 (2 3 4 1 2 3 4) = C, E, A, D, G 2 1 2 3 1 2 3 4 (1 2 3 1 2 3 4) = Bb 2 1 2 3 4 1 2 3 (1 2 3 4 1 2 3) = Eb 2 3 1 2 3 1 2 3 (4 1 2 3 1 2 3) = Ab 2 3 1 2 3 4 1 2 (3 1 2 3 4 1 2) = Db

Diminished Scale Fingerings (1/2, whole)

These are only a suggestion and not the only possible fingering for diminish scales. Feel free to experiment with these scales in "real" music, fingering the phrases (not just the underlying scale).



Pentatonic Scale Fingerings

The Pentatonic scale usually works out to 123-12 fingerings. This is OK, but it could slow you down by not being able to use the 1234 grouping anywhere. or any scale with four black keys in a row (B pentatonic for example. If you turn back on the scale (mixed contours), you have a lot of pentatonic notes to play.

The fewers hand positions the better. Get comfortable with all the notes you can under your fingers, with zero strain. (Any strain is bad, so let go of some notes if you are straining at all.)

Blues Scale Fingerings

The blues scale is handled differently, with simple fingering guidelines. The blues scale is used more as a pool of notes to pull from than just a scale. (Ultimately all scales are a pool of notes to pull from.)

Some of the blues scales have un-pianistic, wild skips. If you want to play any five notes from the scale, you could just "1,2,3,4,5" it. Do you need just a piece of the scale? The upper neighborhood or lower neighborhood of the scale? Do you want to play the pure scale in consecutive notes for two octaves? These all play into it answering your question.

In some blue scales, depending on the root, there is no perfect solution. For example, in the Eb Blues scale – Eb Gb Ab A Bb Db Eb Gb Ab – note the grouping of 5 flats (black key flats) in a row. The most any major or minor scale ever has is three in a row, allowing fingers 2,3,4, on them followed by the thumb under. Five black keys in a row is a nightmare for the guidelines. But a rest will fix it, allowing time to change hand positions. Adding some white keys between the black keys also solves the technical problem. Or maybe the scale can turn back on itself – that can help too. But if you want the pure scale as is, it's a rough one.

Conclusion

The purpose of this scale and finger practice is to learn the scales (which you have to do anyway). By practicing these guidelines *and* practicing the permutations (scales starting anywhere in the scale – root to root, 2nd to 2nd, 4th to 4th, etc.) you'll be able to easily make melodic connections. (See chapter 3B – moving to the next chord and starting on the same note, or a half or whole step up or down, without having to jump to the root of the next chord to start a new scale.)

But even more importantly, it's to make fingering ultimately a non-issue with regard to playing contours, flexible scales, motifs, phrases, improvisations, solo transcriptions and anything else in The Art of Improvisation.

More Ways to Practice The Dorian Scales (or all the scales)

(COMPOSER)

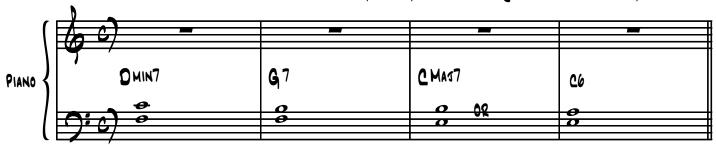






EASY COMPING (ALSO FOR NON PIANIST)

For comping without a bass player. 1. For Minor Chords and Dominant 7ths. Use only the 3rd and 7th. For Major use 3rd and 7th or 3rd and 6th . If you are new at this or comping for someone else's lesson keep it simple. Less is more. If you are new to this remember to comp is short for accompany. The safest voicing is using these two notes. (More advanced next paragraph



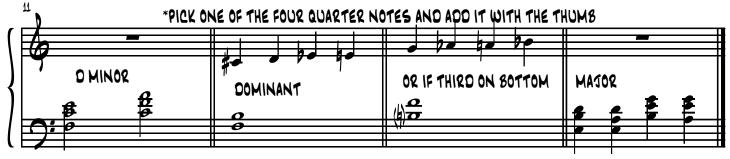
FOR voice leading move the top voice by step or retain the same pitch. The other tones can move move freely

DIMINISHED -FOR 3 NOTE DIM VOICING ADD THE ROOT OR FLAT FIFTH ON TOP (WITH THE THUMB)

PIPIN ON TOP COUTH THE THOMS				
		_	_	_
G ⁷	CMA97 02	FOR C6	C°7	C°7
	a			G7 CMA97 OR FOR C6 C°7

NOTICE THAT SOME VOICING ARE 3RD ON BOTTOM AND SOME ARE 7TH ON BOTTOM. THAT IS TOTALLY CORRECT AND HELPS THE TOP VOICE LEAD SMOOTHLY FROM CHORD TO CHORD

5



*MORE ADVANCED - ON MINOR CHORDS ADD THE 5TH OR 9TH ON TOP WITH THE THUMB. ON DOMINANT ADD ONE OF THE (EIGHT) THUMB NOTES. ON MAJOR AND THE 9TH OR 5TH ON TOP.

*IF THERE IS NO BASS PLAYER YOU CAN PLAY THE ROOT OF THE CHORD WITH YOUR LEFT HAND AND THESE VOICINGS WITH YOUR RIGHT HAND. THE PURPOSE OF ALL THESE PARTICULAR VOICINGS IS TO GIVE YOU SOMETHING EASY TO LEARN AND NICE TO PLAY AS QUICKLY AS POSSIBLE.

*EVEN WITH THESE. MOVE THE TOP NOTE SMOOTHLY (WITHOUT MUCH LEAP) FROM CHORD TO CHORD. (MAY I SUGGEST TRANSPOSING INTO DIFFERENT KEYS? OR WRITE OUT AND PLAY 8 BARS OF A TUNE WITH THESE VOICINGS TO HELP YOU LEARN THEM.) SUGGESTED READING - FOR VOICINGS LIKE THESE READ JOHN MEHEGAN'S BOOK. FOR VOICINGS IN FOURTHS READ FRANK MANTOOTH'S BOOK, FOR VOICING WITH THE ROOT AND SOLO PIANO

Recommend Reading for Chord Voicings

- John Mehegan: Jazz Improvisation 4: Contemporary Piano Styles (for voicing similar to the ones here) or Jazz Improvisation: Contemporary Piano Styles, 1965
- Frank Mantooth, Voicing for Jazz Keyboard (for two handed chord voicings mostly in fourths, without the roots)
- Jimmy Amadie, Harmonic Foundation for Jazz and popular music (for solo pianist voicings with the root)

All three of these books deal less with harmonic progressions, and more with learning chord voicings and how to easily know what to play when reading chord progressions.