Positions on the Diatonic Mouth Harp

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What's a Position?

The position you play in on the mouth harp corresponds to the relative position on the circles of fifths. The circle of fifths represents 3½ step intervals between tones. The explanation you typically get with sharps and flats is essentially bullshit, since people that use that also call D : C-sharp-sharp (C##), which is a hack to make the theory look correct.

It's really just an easy way of determining chord transposition, which is especially applicable to the mouth harp. On the mouth harp the most common position you play blues in, with that position being the tonic for your song, is called the second position. The first position, the key your harp is tuned in, becomes your IV-offset and the third your V-offset.

For rock harp, when you have a full soloing non-backing position, using the third position becomes really attractive also, with the second then being your IV-offset and fourth your V-offset. More on this later.

The circle of fifths looks like this:

C G D A E B F# C# G# D# A# F C

So if you want to play second position in C, you need an F-harp. Your IV-chord will be in F and your V-chord in G. On a C-harp, you typically play in G, with your IV-chord in C and your V-chord in D. For rock harp, you might want to always use harps that are a full chromatic step tuned below the key you wish to play in : i.e. D for E, G for A, and F for G.

Although your song has a tonic, when you switch to the IV-offset or V-offset, in second position you can switch respectively to the first or third position on your mouth harp, temporarily changing the key of your song. You can do this for instance to maintain your groove, while going along with the chord-change. You can also just stick to the song's tonic.

In the end switching positions or keys is a matter of taste and the desire to be either consonant or dissonant. Do you want to keep it moving, grooving, or do you want to kick against people's shins? Anything is possible. It's all relative.

Scales and Octave Transpositions on Your Diatonic Mouth Harp

In order to find the different scales on different positions on your mouth harp, it's easiest to first examine the chromatic, then the major, minor, mixolydian, and blues and rock scales. For every scale this essay analyzes the first, second, and third position. Most other positions are left up for your enjoyment to analyze. Although less common, they can be interesting.

The numbers in the following sections refer to the hole on the ten-hole diatonic harmonica you're supposed to play. The action can either be B for blow, D for draw, every apostrophe indicates a ½ step bend, so three apostrophes means 1½ step bend, and oB or oD means overblow or overdraw.

Bold means tonic. Underscore indicates octave availability when disregarding overbends.

The Chromatic Scale

The chromatic scale consists of all tones, with consistent note-distances of ½ steps, which in C translates to : C C# D D# E F F# G G# A A# B c. First position :

1B	1D'	1D	1oB	2B	2D"	2D'	2D/3B	3D"'	3D"	3D'	3D
4B	4D'	4D	4oB	5B	5D	5oB	6B	6D'	6D	6oB	7D
7B	7oD	8D	8B'	8B	9D	9B'	9B	9oD	10D	10B"	10B'
10B											

Second position :

					1B	1D'	1D	1oB	2B	2D"	2D'
2D/3B	3D"'	3D"	3D'	3D	4B	4D'	4D	4oB	5B	5D	5oB
6B	6D'	6D	6oB	7D	7B	7oD	8D	8B'	8B	9D	9B'
9B	9oD	10D	10B"	10B'	10B						

Third position :

										1B	1D'
1D	1oB	2B	2D"	2D'	2D/3B	3D"'	3D"	3D'	3D	4B	4D'
4D	4oB	5B	5D	5oB	6B	6D'	6D	6oB	7D	7B	7oD
8D	8B'	8B	9D	9B'	9B	9oD	10D	10B"	10B'	10B	

Fourth position (for the pentatonic blues/rock scale with a quint-offset) :

			1B	1D'	1D	1oB	2B	2D"	2D'	2D/3B	3D"'
3D"	3D'	3D	4B	4D'	4D	4oB	5B	5D	5oB	6B	6D'
6D	6oB	7D	7B	7oD	8D	8B'	8B	9D	9B'	9B	9oD
10D	10B"	10B'	10B								

The Major Scale

The major scale consists of whole and half steps and is typically used for backing grooves. The distances are 1 1 ½ 1 1 1 ½, which in C translates to : C D E F G A B c. First position :

1B	1D	2B	2D"	2D/3B	3D"	3D
4B	4D	5B	5D	6B	6D	7D
7B	8D	8B	9D	9B	10D	10B'
10B						

Second position :

			1B	1D	2B	2D'
2D/3B	3D"	3D	4B	4D	5B	5oB
6B	6D	7D	7B	8D	8B	9B'
9B	10D	10B'	10B			

Third position :

						1D'
1D	2B	2D'	2D/3B	3D"	3D	4D'
4D	5B	5oB	6B	6D	7D	7oD
8D	8B	9B'	9B	10D	10B'	

Fourth position (tonic in third position pentatonic blues/rock scale – quint / V-chord) :

		1D'	1D	2B	2D'	3D"'
3D"	3D	4D'	4D	5B	5oB	6D'
6D	7D	7oD	8D	8B	9B'	9oD
10D	10B'					

If you consider a basic walking shuffle, which is largely based on a chordal approach, you'll see that the basic tones used in fourth position contain too many overbends, regardless of what octave you choose : prime—prime-terz—terz-quint—quint-sixth—sixth. The first whole octave has the sixth as an overblow, the second whole octave has the terz as an overdraw.

This means that when you're supporting other players also, either you need to beat it out with fewer notes, emphasizing rhythm, or just play second position instead. Third position as a tonic in rock-harp is for soloing and soloing only, unless you've got customized harps that accommodate overbending or don't mind buying new harps regularly.

The Minor Scale : Regular and Melodic Descending

The minor scale, called regular or melodic descending, consists of half and whole steps. It can be used on other instruments for backing grooves. On mouth harp, stick to the blues scale. The distances are 1 ½ 1 1 ½ 1 1, which in A translates to : A B c d e f g a. First position :

1B	1D	1oB	2D"	2D/3B	3D"'	3D'
4B	4D	4oB	5D	6B	6D'	6oB
7B	8D	8B'	9D	9B	9oD	10B"
10B						

Second position :

			1B	1D	1oB	2D"
2D/3B	3D"	3D'	4B	4D	4oB	5D
6B	6D	6oB	7B	8D	8B'	9D
9B	10D	10B"	10B			

Third position :

						1B
1D	2B	2D"	2D/3B	3D"	3D'	4B
4D	5B	5D	6B	6D	6oB	7B
8D	8B	9D	9B	10D	10B"	10B

The Minor Scale : Melodic Ascending

The melodic ascending minor scale consists of half and whole steps, but with a different interval pattern than before. The distances are 1 ½ 1 1 1 ½ with as an example in A : A B c d e f# g# a. First position :

1B	1D	1oB	2D"	2D/3B	3D"	3D
4B	4D	4oB	5D	6B	6D	7D
7B	8D	8B'	9D	9B	10D	10B'
10B						

Second position :

			1B	1D	2B	2D'
2D/3B	3D"	3D'	4B	4D	5B	5oB
6B	6D	6oB	7B	8D	8B	9B'
9B	10D	10B"	10B			

Third position :

						1D'
1D	2B	2D"	2D/3B	3D"	3D	4D'
4D	5B	5D	6B	6D	7D	7oD
8D	8B	9D	9B	10D	10B'	

The Harmonic Minor Scale

The harmonic minor scale consists of half and whole steps. The distances are 1 ½ 1 1 ½ 1 1 with an example in A : A B c d e f Gg# a. First position :

1B	1D	1oB	2D"	2D/3B	3D"'	3D'
4B	4D	4oB	5D	6B	6D'	6oB
7B	8D	8B'	9D	9B	9oD	10B"
10B						

Second position :

			1B	1D	1oB	2D"
2D/3B	3D"	3D'	4B	4D	4oB	5D
6B	6D	6oB	7B	8D	8B'	9D
9B	10D	10B"	10B			

Third position :

						1B
1D	2B	2D"	2D/3B	3D"	3D'	4B
4D	5B	5D	6B	6D	6oB	7B
8D	8B	9D	9B	10D	10B"	10B

The Mixolydian Scale

The mixolydian, which lends notes as a lighter form of Blues-scale, makes use of half and whole steps, and is pretty much like the major scale, but with a flat seventh. The distances are 1 1 ½ 1 1 ½ 1 with as an example in G : G A B c d e f g. First position :

1B	1D	2B	2D"	2D/3B	3D"	3D'
4B	4D	5B	5D	6B	6D	6oB
7B	8D	8B	9D	9B	10D	10B"
10B						

Second position :

			1B	1D	2B	2D"
2D/3B	3D"	3D	4B	4D	5B	5D
6B	6D	7D	7B	8D	8B	9D
9B	10D	10B'	10B			

Third position :

						1B
1D	2B	2D'	2D/3B	3D"	3D	4B
4D	5B	5oB	6B	6D	7D	7B
8D	8B	9B'	9B	10D	10B'	10B

The Blues Scale

The blues doesn't always stick to the blues scale, but that is where its foundation lies when it comes to the heavier set kind of music. The distances are 1½ 1 ½ ½ 1½ 1, with as an example set in E : E G A A# B d e. First position :

1B	1oB	2D"	2D'	2D/3B	3D'
4B	4oB	5D	5oB	6B	6oB
7B	8B'	9D	9B'	9B	10B"
10B					

Second position :

		1B	1D'	1D	2D"
2D/3B	3D'	4B	4D'	4D	5D
6B	6oB	7B	7oD	8D	9D
9B	10B"	10B			

Third position :

					1B
1D	2D"	2D/3B	3D"'	3D"	4B
4D	5D	6B	6D'	6D	7B
8D	9D	9B	9oD	10D	10B

The Pentatonic Blues/Rock Scale

When you want a more uplifting rocking kind of feel, when you omit one note from the blues scale it becomes something else. It also makes your mouth harp easier to play. The distances are 1½ 1 1 1½ 1, with as an example set in E : E G A B d e. First position :

1B	1oB	2D"	2D/3B	3D'
4B	4oB	5D	6B	6oB
7B	8B'	9D	9B	10B"
10B				

Second position :

		1B	1D	2D"
2D/3B	3D'	4B	4D	5D
6B	6oB	7B	8D	9D
9B	10B"	10B		

Third position :

				1B
1D	2D"	2D/3B	3D"	4B
4D	5D	6B	6D	7B
8D	9D	9B	10D	10B

Fourth position :

	1B	1D	2B	2D/3B
3D"	4B	4D	5B	6B
6D	7B	8D	8B	9B
10D	10B			

As you can see, when you play third position rock harp, meaning that that's your I-offset (prime), your IV-offset (quart) has second position as a foundation, and your V-offset (quint) has fourth position as a foundation.

Final Remarks

When you study these scales, you need to consider that some notes can be played well and others can't. Playing overbends, as in overdraws and overblows, takes a little more force and is as such more likely to flatten your reeds, making them go out of tune, when you use regular harps. You can buy special harps for overbending or have them customized.

When you study the blues scale, you'll find some positions in relation to the tonic lend themselves to particular octaves more than to others. This means that when the band plays the I-chord and then some (you're in second position) you're best off staying on the low side to be able to fully express yourself when playing blues.

For your quart tonic (first position, the band plays the IV chord and then some), you're actually better off playing either second position low side still or if you want to solo, you can use the first position highest full octave. The third position is actually the most versatile in

that you're only missing one note. It's an important note, so you might want to play the lowest two full octaves mostly.

In the end it's about consonance and expressing yourself. If you mean to play blues, as long as your music doesn't disagree with the band, you can actually switch keys midsong in order to communicate how you feel. Don't limit yourself too much. Low or mid-range playing : second position or third. High playing : first position.

Also think about why you play in a position. When you regard the mixolydian scale, which you can also use to solo, second position playing lends itself best even though third position normally is the most versatile position on the mouth harp for blues music.

When just playing the pentatonic blues/rock scale, third position will actually also provide you with a full range of motion from high to low and vice-versa. In the end, bend by feel. Try not to worry too much. Do worry about not forgetting to return to your tonic though, that will actually get you into trouble. The tonic finishes it.

Literature

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