



# BASS

## Scales Round Two—Back to School (work):

### The Minor Scales and the Modes

by Tom Pieper

All right you have had your summer off and now we can continue to work on the musical tasks that need constant vigilance. Many of you have had extra time in the summer for camps and hours of practice. With the start of a new cycle we must now continue to make progress with a busier and more distracting schedule. In the winter issue of *String Notes*, we reviewed the three-octave major scales for the bass and many similarities will continue with the minor scales. As I said before, scales in general, and specifically on the bass, give us an opportunity to rev-up and energize our playing.

#### Continuing with Back to Basics

The minor scales are no more difficult to play on the bass than the major scales; the biggest obstacle is our lack of familiarity with the sound. As always make sure your instrument is in tune at the beginning of each practice session. If you use a tuner you will train your ear to be correct from the start and this will make the sound of the scales and the relationship of the intervals easier to grasp and assimilate into your ear's acceptance.

#### The minor scale in three forms:

We have three forms of the minor scale to understand and master to be admitted into the string playing club. Many of us can describe by rote what changes with the 6<sup>th</sup> and 7<sup>th</sup> notes of each form of the scale; however producing the sound accurately is a more challenging task. Like the major scales if we have a consistent fingering we will be able to produce the pitches, and be able to recognize these sounds when we hear them. The more we know about these scales the better prepared we will be to fit into any musical situation. The situations I see are playing the scale for technique, recognizing the scale in your part in a piece of music, hearing other instruments playing the scale and playing in tune with that part, and using the scale for improvisation.

#### Natural Minor

We begin by deriving the minor scale from

its relative major key. The *natural minor* scale has the same series of half and whole steps of the major scale but starts out a minor third below the major key

1	2	^ 3	4	5	^ 6	7	8
1,	½,	1,	1,	½,	1,	1	
E	F#	G	A	B	C	D	E
1	2	3	^ 4	5	6	7	^ 8
1,	1,	½,	1,	1,	1,	½	
G	A	B	C	D	E	F#	G

This is the same as the major scale pattern displaced by two notes.

#### Melodic Minor

The *melodic minor* raises the 6<sup>th</sup> and 7<sup>th</sup> pitches ½ step on the way up and drops them to their natural pitches on the way down.

1	2	^ 3	4	5	6	7	^ 8
1,	½,	1,	1,	1,	1,	½	
E	F#	G	A	B	C#	D#	E
8	7	6	^ 5	4	3	^ 2	1
1,	1,	½,	1,	1,	½,	1	
E	D	C	B	A	G	F#	E

Our goal is to be able to play all minor scales in all keys (12), and for 3 octaves at ♩ = 80 bpm. As with the majors the steps remain the same.

- Start with one key
- Begin with the 2 octave scale
- Start at a manageable tempo
- Use different bowings and increase tempo
- You have succeeded

#### Key of E Melodic Minor:

Remember you have 1 sharp in the key signature plus C# and D# ascending and D#, C# descending. Start in 1<sup>st</sup> position: your first finger is one whole step above the nut on the E and A strings. On the D string you will play in half position to begin and then shift to 1<sup>st</sup>. On the G string you start in 1<sup>st</sup> position and shift to 2<sup>nd</sup> ½ and 4<sup>th</sup> positions.

The pattern of half and whole steps is [1, ½, 1, 1, 1, 1, ½] ascending and [1, 1, ½, 1, 1, ½, 1] descending; for every scale we will start the second octave with the first finger and then group the notes together in pairs. With this pattern you never have to shift more than one whole or one half step. When going up the scale the 1-1 shifts keep the hand in a good position with the fingers parallel to the string.

First Octave

Note:	E	F#	G	A	B	C#	D#	E	
Finger:	0	1	2	0	1	4	-1	-1	
Position:	1 <sup>st</sup>	-----						½	1 <sup>st</sup>

Second Octave

Note:	E	F#	G	A	B	C#	D#	E
Finger:	1	4	-1*	4	-1	4	-2	4
Position:	1 <sup>st</sup>	----	3 <sup>rd</sup>	----	2½	----	4 <sup>th</sup>	----

\* Yes you could play the G and A in 1<sup>st</sup> position, but by adding the shift you can apply this to other keys where you could not use an open string.

It makes no difference what key you are playing, you always start the 2<sup>nd</sup> octave with the first finger, and pair two notes together and you will land on your fourth finger (third finger above the octave). All keys can use the same fingering. Try it out now!

When you come down for the 3<sup>rd</sup> octave your fingers expand to a whole step apart for the top three notes. Do this by keeping the 3<sup>rd</sup> finger in place and expanding the distance between the 3<sup>rd</sup> and 2<sup>nd</sup> finger to a whole step.

Third Octave

Note:	E	F#	G	A	B	C#	D#	E
Finger:	4	-1	2	-1	3	-1	2	3
Position:	4 <sup>th</sup>	5 <sup>th</sup> ½						Thumbless Thumb position

#### Harmonic Minor

The *harmonic minor* scale raises the 7<sup>th</sup> pitch up and down—creating an augmented second between the 6<sup>th</sup> and 7<sup>th</sup> tone of the scale. Remember you have 1 sharp in the key signature plus a D#. Start in half position—Your first finger is one half step above the nut on the E, A, and D strings. When you

get to the octave shift to 1<sup>st</sup> position. On the G string you start in 1<sup>st</sup> position and 2<sup>nd</sup> 1/2 positions, and 4<sup>th</sup> position. Take the most care between the 6<sup>th</sup> and 7<sup>th</sup> tones of the scale because you must play an augmented 2<sup>nd</sup>. This interval sounds like a minor 3<sup>rd</sup> but is called a second because of the degrees of the scale used.

1	2	^	3	4	5	6	7	^	8
	1,	1/2,	1,	1,	1/2,	1 1/2,	1/2		
E	F#	G	A	B	C	D#	E		

### Modes

Now that we've covered the minor scales, and the majors from the previous article—specially for a bassist the next most important scale sounds to know are the modes. We will look at them first in the key of G major. All of the scales are from G, meaning that they all only have one sharp, F#. We build a scale off of each scale tone of the G major scale. The first three modes can all be played in 1<sup>st</sup> position. See the examples in the sidebar on page 29.

Some ways to improve your playing on the modes are:

- Play the modes up and down in one key (G)
- Up one, down next
- Try in the Key of E major and B $\flat$  major

With the major scales, minor scales, and the major modes mastered in these keys you will be off to a good start in making music in various musical situations. Try to use some of the scales in all of your practice sessions. The more you do them the better in tune you will be and the better the sound will be from your bass.

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**E Melodic Minor 2-octaves**

**E Melodic Minor 3<sup>d</sup> octave**

**E Harmonic Minor 2-octaves**

**E Harmonic Minor 3<sup>d</sup> octave**