

Modal scales & arpeggios

Major, Lydian, Locrian, Phrygian, Pure Minor, Dorian, & Mixolydian plus synthetic Lydian Dominant
Edited 2012 for the Kala U-Bass (or any bass tuned to EADG) by Klaus Smedegaard Bjerre

Scales and arpeggios have had a major focus in my work with my main instruments, the brasses and the recorders. Aside from training the sense of tonalities, they are extremely important for good intonation and for evenness of sound. I have edited comprehensive scale methods for trombone, euphonium, tubas, and recorders in various clefs and pitches. My relation with string basses doesn't have the same depth, but I took a course at our pedagogical university that taught me the basics. There is some logic behind the scales on my wind instruments, but not nearly as systematically as with the bass tuned to fourths. I was taught extended fingerings, and how they allow all major scales to be played each in one position at various points of the neck.

Recently a Kala UBass came to me, and the playing ease of the short frets made me try whether my scale systems from the winds were applicable on the bass also. A lot of work remains, but so far I found that all modal scales and at least one synthetic scale may be kept within just one position for each mode & key.

This is not the place to teach the modal scale system; only a few practical approaches will be mentioned as the modal scales fall in 2, or rather in 3, groups:

The **major** types all have a major third and a major ninth. Lydian deviates by having a raised fourth. Mixolydian has a minor seventh. The synthetic Lydian Dominant has a raised fourth and a minor seventh. All employ all four strings, if played in the same position. They start on the middle finger.

The **minor** types all have a minor thirds and a minor seventh, but 2 have the major ninth and 2 have the minor ninth. Of the former Pure Minor has a minor sixth. Dorian has a major sixth. Both employ all four strings, if played in the same position. They start on the pinkie. Of the latter both have the minor sixth. Phrygian has a pure fifth. Locrian has a diminished fifth. Both may be played on 3 adjacent strings and still stay within one position. They start on the index. (Musically Locrian is a diminished scale, but ergonomically it fits with the Phrygian).

These sheets are not meant as anything but an introduction to these scales no matter whether you read music, tablature, or a combination of these. They should be memorized, or better: they should be heard and understood, so that you can establish the patterns yourself. By principle all keys are equally easy, but that principle falls a bit short at least on the upper frets of the acoustic UBass. Skip what is not comfortable, as you should get the idea anyway by working through the lower frets. The tempo may be set to your liking, as long as it is kept steady.

Korsør - September 16th - 2012

Klaus Smedegaard Bjerre

Bassbone Music

YorkMasterBBb@yahoo.com

Major

8 10 7 8 10 7 9 10 7 10 9 7 10 8 7 10 8 7 10 9 7 9 10 7 8

3 5 2 3 5 2 4 5 2 5 4 2 5 3 2 5 3 2 5 4 2 4 5 2 3

9 10 12 9 10 12 9 11 12 9 12 11 9 12 10 9 12 10 9 11 12 9 10 11 12 9 10

5 7 4 5 7 4 6 7 4 7 6 4 7 5 4 7 5 4 7 6 4 6 7 4 5

11 12 14 11 12 14 11 13 14 11 14 13 11 14 12 11 14 13 11 12 14 11 13 14 11 12

7 9 6 7 9 6 8 9 6 9 8 6 9 7 6 9 7 6 9 8 6 8 9 6 7

1 2 4 1 2 4 1 3 4 1 4 3 1 4 2 1 4 2 1 4 3 1 3 4 1 2

9 11 8 9 11 8 10 11 8 11 10 8 11 9 8 11 10 8 9 11 8 10 11 8 9

4 6 3 4 6 3 5 6 3 6 5 3 6 4 3 6 4 3 6 5 3 5 6 3 4

1 11 3 10 11 3 10 12 13 10 13 12 10 13 11 10 13 11 10 11 3 12 13 10 11

6 8 5 6 8 5 7 8 5 8 7 5 8 6 5 8 6 5 8 7 5 7 8 5 6

13 15 12 13 15 12 14 15 12 15 14 12 15 13 12 15 14 12 13 15 14 12 15 13

Lydian

49

T
A
B

1315 121415 121415 12 151412 151412 15 13 1215 14 12 14 1512 13

810 7 9 10 7 9 10 7 10 9 7 10 9 7 10 8 7 10 9 7 10 7 8

57

T
A
B

3 5 2 4 5 2 4 5 2 5 4 2 5 4 2 5 3 2 5 4 2 4 5 2 3

1012 91112 91112 9 1211 9 1211 9 12 10 912 11 9 11 12 9 10

65

T
A
B

5 7 4 6 7 4 6 7 4 7 6 4 7 6 4 7 5 4 7 6 4 6 7 4 5

1214 111314 111314 11 141311 141311 14 12 1114 13 11 13 1411 12

73

T
A
B

7 9 6 8 9 6 8 9 6 9 8 6 9 8 6 9 7 6 9 8 6 8 9 6 7

2 4 1 3 4 1 3 4 1 4 3 1 4 3 1 4 2 1 4 3 1 3 4 1 2

81

T
A
B

9 11 8 10 11 8 10 11 8 11 10 8 11 10 8 11 9 8 11 10 8 10 11 9

4 6 3 5 6 3 5 6 3 6 5 3 6 5 3 6 4 3 6 5 3 5 6 3 4

89

T
A
B

11 13 10 12 13 10 12 13 10 13 12 10 13 10 11 10 13 12 10 13 10 11

6 8 5 7 8 5 7 8 5 8 7 5 8 7 5 8 6 5 8 7 5 7 8 5 6

Phrygian

145

Phrygian scale starting on G (one sharp). The notation shows the scale ascending and descending in two measures. The fretboard diagram below the staff indicates fingerings: 7 8 10, 7 9 10, 7 9, 10 9 7, 10 9 7, 10 8, 7 10 9, 7 10 7, 9, 10, 7.

153

Phrygian scale starting on A (two sharps). The notation shows the scale ascending and descending in two measures. The fretboard diagram below the staff indicates fingerings: 2 3 5, 2 4 5, 2 4, 5 4 2, 5 4 2, 5 3, 2 5, 4 2 5, 2 4 5, 2, 4 5 7, 4 6 7, 4 6, 7 6 4, 7 6 4, 7 5, 4 7 6, 4 7 4, 6 7, 4.

161

Phrygian scale starting on B (three sharps). The notation shows the scale ascending and descending in two measures. The fretboard diagram below the staff indicates fingerings: 4 5 7, 4 6 7, 4 6, 7 6 4, 7 6 4, 7 5, 4 7 6, 4 7 4, 6 7, 4, 6 7 9, 6 8 9, 6 8, 9 8 6, 9 8 6, 9 7, 6 9 8, 6 9 6, 8 9, 6.

169

Phrygian scale starting on C (no sharps or flats). The notation shows the scale ascending and descending in two measures. The fretboard diagram below the staff indicates fingerings: 1 2 4, 1 3 4, 1 3, 4 3 1, 4 3 1, 4 2, 1 4, 3 1 4 1, 3 4, 1, 1 2 4, 1 3 4, 1 3, 4 3 1, 4 3 1, 4 2, 1 4, 3 1 4 1, 3 4, 1.

177

Phrygian scale starting on D (two flats). The notation shows the scale ascending and descending in two measures. The fretboard diagram below the staff indicates fingerings: 3 4 6, 3 5 6, 3 5, 6 5 3, 6 5 3, 6 4, 3 6 5, 3 6 3, 5 6, 3, 3 4 6, 3 5 6, 3 5, 6 5 3, 6 5 3, 6 4, 3 6 5, 3 6 3, 5 6, 3.

185

Phrygian scale starting on E (one flat). The notation shows the scale ascending and descending in two measures. The fretboard diagram below the staff indicates fingerings: 5 6 8, 5 7 8, 5 7, 8 7 5, 8 7 5, 8 6, 5 8 7, 5 8 5, 7 8, 5, 5 6 8, 5 7 8, 5 7, 8 7 5, 8 7 5, 8 6, 5 8 7, 5 8 5, 7 8, 5.

Dorian

241

10 7 8 10 7 9 10 7 9 7 10 9 7 10 8 7 10 8 7 10 9 10 7 8 10 5 2 3 5 2 4 5 2 4 2 5 4 2 5 3 2 5 3 2 5 4 5 2 3 5

249

12 9 10 12 9 11 12 9 11 9 12 11 9 12 10 9 12 10 9 12 10 11 12 9 10 12 7 4 5 7 4 6 7 4 6 4 7 6 4 7 5 4 7 5 4 7 6 7 4 5 7

257

14 11 12 14 11 13 14 11 13 14 11 12 14 12 14 13 14 11 12 14 9 6 7 9 6 8 9 6 8 6 9 8 6 9 7 6 9 7 6 9 8 9 6 7 9

265

4 1 2 4 1 3 4 1 3 1 4 3 1 4 2 1 4 2 1 4 3 4 1 2 4 11 8 9 11 8 10 11 8 10 8 11 10 8 11 9 8 11 9 8 11 10 11 8 11 9 11

273

6 3 4 6 3 5 6 3 5 3 6 5 3 6 4 3 6 4 3 6 5 6 3 4 6 10 11 13 10 11 13 12 10 13 12 10 13 11 10 13 11 10 13 11 13

281

8 5 6 8 5 7 8 5 7 5 8 7 5 8 6 5 8 6 5 8 7 8 5 6 8 12 13 15 12 13 15 12 14 12 15 14 12 15 13 12 15 14 12 15 13 15 14 15

Mixolydian

289

Musical notation for Mixolydian scale starting at fret 289. It shows a bass staff with a treble clef and a key signature of one sharp (F#). The scale is written in eighth notes. Below the staff is a fretboard diagram with fingerings: 3 5 2 3 5 2 3 5, 2 5 3 2 5 3 2 5, 3 2 5 3 2 5 2 3, 10 12 9 10 12 9 10 12, 9 12 10 9 12 10 9 12, 10 9 12 10 9 12 10 9 12.

297

Musical notation for Mixolydian scale starting at fret 297. It shows a bass staff with a treble clef and a key signature of two sharps (F#, C#). The scale is written in eighth notes. Below the staff is a fretboard diagram with fingerings: 5 7 4 5 7 4 5 7, 4 7 5 4 7 5 4 7, 5 4 7 5 4 7 5 4, 12 14 11 12 14 11 12 14, 11 14 12 11 14 12 11 14, 12 11 14 12 11 14 12 11.

305

Musical notation for Mixolydian scale starting at fret 305. It shows a bass staff with a treble clef and a key signature of three sharps (F#, C#, G#). The scale is written in eighth notes. Below the staff is a fretboard diagram with fingerings: 7 9 6 7 9 6 7 9, 6 9 7 6 9 7 6 9, 7 6 9 7 6 9 7 6, 2 4 1 2 4 1 2 4, 1 4 2 1 4 2 1 4, 2 1 4 2 1 4 2 1.

313

Musical notation for Mixolydian scale starting at fret 313. It shows a bass staff with a treble clef and a key signature of four sharps (F#, C#, G#, D#). The scale is written in eighth notes. Below the staff is a fretboard diagram with fingerings: 9 11 8 9 11 8 9 11, 8 11 9 8 11 9 8 11, 9 8 11 9 8 11 9 8, 4 6 3 4 6 3 4 6, 3 6 4 3 6 4 3 6, 4 3 6 4 3 6 4 3.

321

Musical notation for Mixolydian scale starting at fret 321. It shows a bass staff with a treble clef and a key signature of two flats (Bb, Eb). The scale is written in eighth notes. Below the staff is a fretboard diagram with fingerings: 10 11 13 10 11 13 10 11, 10 13 11 10 13 11 10 13, 11 10 13 11 10 13 11 10, 6 8 5 6 8 5 6 8, 5 8 6 5 8 6 5 8, 6 5 8 6 5 8 6 5.

329

Musical notation for Mixolydian scale starting at fret 329. It shows a bass staff with a treble clef and a key signature of one flat (Bb). The scale is written in eighth notes. Below the staff is a fretboard diagram with fingerings: 13 15 12 13 15 12 13 15, 12 15 13 12 15 13 12 15, 13 12 15 13 12 15 13 12, 7 8 10 7 8 10 7 8, 7 10 8 7 10 8 7 10, 8 7 10 8 7 10 8 7.

Modal scales & arpeggios

- and as a bonus a synthetic scale with the same position properties:

Lydian Dominant

337

3 5 2 4 5 2 3 5 2 5 3 2 5 4 2 5 3 2 5 3 2 3 5 2 3 10 12 9 11 12 9 10 12 9 12 11 9 12 10 9 12 10 12 9 10

345

5 7 4 6 7 4 5 7 4 7 6 4 7 5 4 7 5 4 5 7 4 5 12 14 11 13 14 11 12 14 11 14 12 11 14 13 11 14 12 11 14 11 12 14 12

353

7 9 6 8 9 6 7 9 6 9 7 6 9 8 6 9 7 6 9 7 6 7 9 6 7 2 4 1 3 4 1 2 4 1 4 2 1 4 3 1 4 2 1 4 2 1 2 4 1 2

361

9 11 8 10 11 8 9 11 8 11 9 8 11 10 8 11 9 8 11 9 9 11 8 9 4 6 3 5 6 3 4 6 3 6 4 3 6 5 3 6 4 3 6 4 3 4 6 3 4

369

11 13 10 12 13 10 11 13 10 13 11 10 13 11 10 13 10 11 13 10 11 6 8 5 7 8 5 6 8 5 8 6 5 8 7 5 8 6 5 8 6 5 6

377

13 15 12 14 15 12 13 15 12 15 13 12 15 14 12 15 13 12 15 13 12 13 8 10 7 9 10 7 8 10 7 10 8 7 10 9 7 10 8 7 10 8 7 8 10 7 8