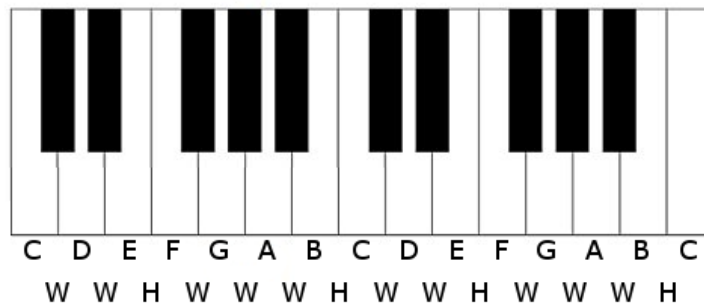


Understanding Guitar Scale Patterns:

3. Modes

by Matt D'Netto

The subject of modes popped up in a lesson recently when a student was practising a three octave G-major scale. They were having trouble with a position shift from second position to seventh position so I suggested isolating that part of the scale and practising it separately, playing the notes of the G-major scale but starting on an E (4th string) and finishing on an E (3rd string). Unwittingly, I had actually instructed the student to play the Aeolian mode, and since classical guitarists often concentrate only on major and minor scales I thought I'd go ahead and explain what modes are and how to derive scale patterns for the common modes and also for a couple of the more exotic modes that are particularly well used by guitarists.



We're already familiar with how to derive major and minor scales. In the simplest form, a major scale is a set of intervals described by playing the natural (white) notes from C to C and the intervals of a natural minor scale are defined by playing the natural notes from A to A. Given that, have you even wondered what scale you'd get if you didn't start on C or A, but instead played all the natural notes from D to D or E to E and so on? This is exactly how to derive the common modes and each has a unique character, offering something slightly different to the simple major and minor scales.

In the table overleaf I have used the keyboard diagram (see above) to work out the sequence of whole steps and half steps that define the modes and have given the name of each mode along with the corresponding starting note. Try playing the modes for yourself by using the natural notes on the guitar in first position, playing from C to C, D to D, E to E etc in order to try to get a feel for the different character of each mode and decide for yourself whether each mode feels more major or minor.

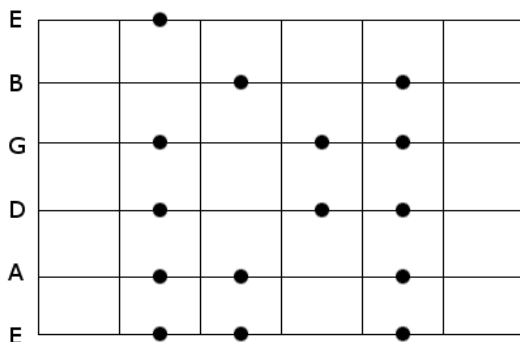
Generally speaking, Ionian, Lydian and Mixolydian are the major modes, Aeolian, Dorian and Phrygian are the minor modes and the Locrian mode is known as a diminished mode – it may have a minor third but it also has a diminished fifth rather than a perfect fifth, which the other modes possess.

| MODE | Intervals | | | | | | |
|----------------|-----------|---|---|---|---|---|---|
| Ionian[C] | W | W | H | W | W | W | H |
| Dorian [D] | W | H | W | W | W | H | W |
| Phrygian[E] | H | W | W | W | H | W | W |
| Lydian [F] | W | W | W | H | W | W | H |
| Mixolydian [G] | W | W | H | W | W | H | W |
| Aeolian [A] | W | H | W | W | H | W | W |
| Locrian [B] | H | W | W | H | W | W | W |

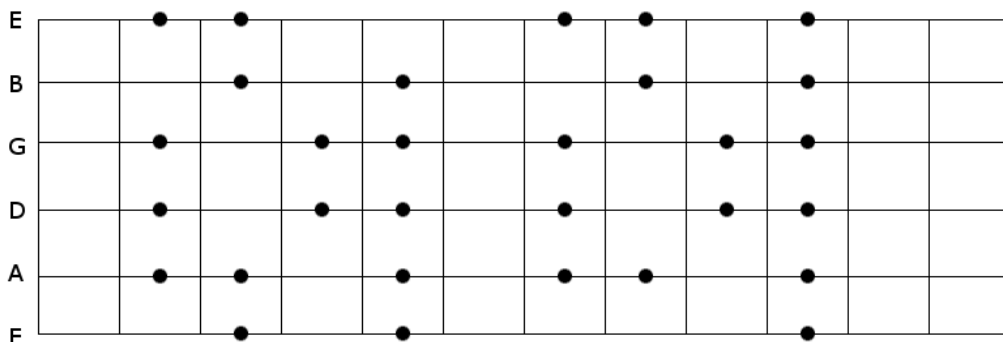
The Ionian mode corresponds to the standard major scale, whereas the Lydian mode is effectively a major scale with the fourth raised by a semitone, i.e. the third interval is a whole step rather than a half step. The Mixolydian mode is a major scale with the seventh note lowered by a semitone, i.e. the sixth interval is a half step rather than a whole step. This leaves the final interval as a whole step, giving the Mixolydian mode less of a sense of resolution than the Ionian or the Lydian major modes.

The Aeolian mode is our familiar natural minor scale, while Dorian is a minor scale with the sixth note raised by a semitone, i.e. the fifth interval is a whole step rather than a half step. The Phrygian mode is a minor scale with the second note lowered by a semitone, i.e. the first interval is a half step rather than a whole step.

On the following page I've drawn out a set of scale patterns for each of the common modes over two octaves. In these examples I've chosen to use as few position shifts as possible for simplicity. The way I have laid out the scale patterns below with similar fingerings shows just how closely related the modes are despite their different characteristics. The patterns differ only very slightly by the start and end notes but the different feel generated by such a small change is clear to hear. In these examples of two octave patterns Locrian, Ionian and Dorian are fingered with the same basic pattern, Phrygian and Lydian again share a similar pattern and finally Mixolydian and Aeolian follow a very similar fingering.

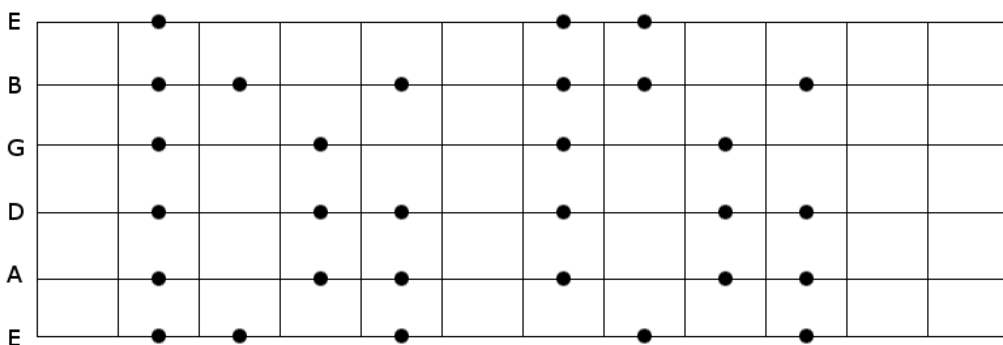


LOCRIAN



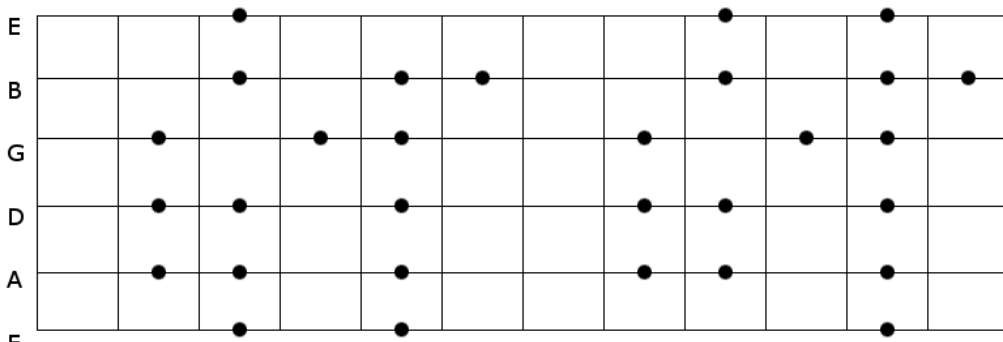
IONIAN

DORIAN



PHRYGIAN

LYDIAN



MIXOLYDIAN

AEOLIAN

In the same way we manipulated the natural minor scale to produce the harmonic minor scale and the melodic minor scale, we can manipulate some of the modes that we described above in order to produce some exotic sounding scales. For example, three modes/scales that are particularly useful to have in your repertoire as a guitarist, especially in flamenco, gypsy jazz and heavy metal are the Phrygian Dominant mode, the Neopolitan Minor scale and the Double Harmonic Major scale.

The Phrygian Dominant mode can be derived by taking the Phrygian mode and raising the third note by a semitone, i.e. the second interval becomes an augmented interval (A) rather than a whole step. This new pattern of intervals is provided in the table below along with the patterns for the Neopolitan Minor scale and the Double harmonic Major scale. The Phrygian Dominant mode can also be derived and thought of as the fifth (or dominant) mode of the Harmonic Minor Scale. So if we were to lay out the notes of the harmonic minor scale all you need do is start end and on the fifth note in order to arrive at the Phrygian Dominant. For example, in A minor, if we play the notes of the harmonic minor scale (A, B, C, D, E, F, G#, A) but start from E (E, F, G#, A, B, C, D, E), you can see that we arrive at the Phrygian Dominant pattern of intervals.

| MODE | Intervals | | | | | | |
|-----------------------|-----------|---|---|---|---|---|---|
| Phrygian Dominant | H | A | H | W | H | W | W |
| Neopolitan Minor | H | W | W | W | H | A | H |
| Double Harmonic Major | H | A | H | W | H | A | H |

The Neopolitan Minor scale can be derived by also taking the Phrygian mode but this time raising the seventh note by a semitone, i.e. sixth interval becomes an augmented interval rather than a whole step. It can also be derived by lowering the second note of the Harmonic Minor scale by a semitone.

Finally, the Double Harmonic Major scale includes both the augmented intervals from the Phrygian Dominant mode and Neopolitan Minor scale combined in the same scale pattern. So if we again start with the Phrygian mode, we raise the third and seventh notes by a semitone, i.e. the second and sixth intervals are both augmented intervals rather than whole steps. You can also see that due to the close relationship between these three new modes/scales, it is possible to derive the Double Harmonic Major scale as a Phrygian Dominant mode with raised seventh, or as a Neopolitan Minor scale with a raised third. The Double Harmonic Major scale is sometimes also called the Byzantine Scale.

The following scale patterns are my suggestions for two octave Phrygian Dominant, Neopolitan Minor and Double Harmonic Major scales. I've decided to avoid open strings to simplify generalising to different keys. Try using the patterns of intervals provided to make up your own one, two and three octave modal scale patterns, try incorporating open strings and try to find your own different ways to negotiate position changes and string crossings.

