## **Modes & Altered Tones**

It is extremely helpful to think about the modes as altered forms of the diatonic scale built on the tone that names the mode. To be specific, ask the question *how does the G-Mixolydian scale differ from the G-Ionian scale*? The key signature of G-Ionian has one sharp: F#. G-Mixolydian is built on the C-Ionian scale in which there are no sharps or flats.

To create the G-Mixolydian scale from G-Ionian requires that the 7<sup>th</sup> tone of the G-Ionian scale must be dropped a half tone.

| G-Ionian | G-Mixolydian | Tones Altered from Ionian<br>Scale that Names the Mode |
|----------|--------------|--|
| G        | G            |  |
| A        | A            |  |
| В        | В            |  |
| С        | С            |  |
| D        | D            |  |
| E        | E            |  |
| F#       | F-natural    | Flatten the 7th  |

This may seem like pointless information. But it turns out to be vital. So, let's examine all of the modes to answer this same question: *What tones in the scale of the Ionian mode are altered to produce one of the remaining six modes?* 

| Mode       | Tones Altered from Ionian    |
|------------|------------------------------|
| Ionian     | none                         |
| Dorian     | b7th, b3rd                   |
| Phrygian   | b7th, b3rd, b6th, b2nd       |
| Lydian     | # 4th                        |
| Mixolydian | b7th                         |
| Aeolian    | b7th, b3rd, b6th             |
| Locrian    | b7th, b3rd, b6th, b2nd, b5th |

Modes & Altered Tones www.billtroxler.com Page 2 of 3

A valuable exercise is to work thorough deriving each of the scales for each mode to see how these altered tones appear. Here's another example to help with that. Let's identify the tones that have to be altered from D – Ionian to create D – Dorian mode.

Remember the Dorian mode begins on the second degree of the scale. If D is the second tone of the mode we want to create, then the tones of the scale are the same as the tones of the C-Ionian scale begins on C. The key of "C" has no sharps or flats. The key of "D" has two sharps: F# and C#. So, we have to figure out what tones on the D-Ionian scale have to be altered in order to create the D-Dorian scale.

| D-lonian | D-Dorian    | Tones Altered from Ionian |
|----------|-------------|---------------------------|
| D        | D           |                           |
| E        | E           |                           |
| F#       | F - natural | Flatten the 3rd           |
| G        | G           |                           |
| A        | A           |                           |
| В        | В           |                           |
| C#       | C - natural | Flatten the 7th           |

The altered tones can be derived in this same way for every mode.

If you have trouble following the logic of this, remember everything flows from the diatonic scale and its pattern of steps: W W H W W W H. For every diatonic scale there are three whole steps and two half steps. The modes merely alter the order of these steps. It works like this:

| Mode       | Pattern of Steps     |
|------------|----------------------|
| Ionian     | w w н w w w <b>н</b> |
| Dorian     | w н w w w <b>H</b> w |
| Phrygian   | нѡѡҝ                 |
| Lydian     | w w w <b>H</b> w w н |
| Mixolydian | w w <b>Н</b> w w н w |
| Aeolian    | w <b>H</b> w w нw w  |
| Locrian    | Нѡѡнѡѡ               |

Modes & Altered Tones www.billtroxler.com Page 3 of 3

In the Ionian mode the half step from the 7<sup>th</sup> tone of the scale to the next octave of the root of the scale is in bold. You can see this tone move from the end of the scale to the beginning of the scale. The 7<sup>th</sup> tone of a scale is often called the "leading tone". That's because it is the tone that leads the ear back to the tonic tone. It is also a tone of high dissonance with the tonic. Leading tones matter within a chord. For example the 3<sup>rd</sup> of a V chord contains the leading tone. Say the key is "C". The V chord is G. That chord is spelled: G B D. And "B" is the leading tone on C-Ionian. This leading helps to give the V chord, the dominant chord, its power to pull the music back to the tonic chord.

You will also hear discussions about the "upper leading tone." This term refers to the 7<sup>th</sup> tone of a V<sup>7</sup> chord that resolves down the scale. For example in the key of "C" a V<sup>7</sup> chord is G7. That chord is spelled G B D F (natural). The 7<sup>th</sup> tone of the chord is F (natural). The tonic chord is C. That chord is spelled: C E G. So it can be said that the F (natural). Of the G7 chord resolves to the E tone in the C chord. Thus this 7<sup>th</sup> of the dominant chord is sometimes called an upper leading tone.

These theory discussions are interest and good mental gymnastics. They help explain the propulsive power buried inside chords and why some harmonic movement is more powerful than others.

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