The Major scale and related modes

Recognize this?

IONIAN
DORIAN
PHRYGIAN
LYDIAN
MIXOLYDIAN
AEOLIAN
LOCRIAN

The interval relationships of the Major scale are as follows:

<table>
<thead>
<tr>
<th>Modality</th>
<th>Interval</th>
<th>Related Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ionian</td>
<td>1, 2, 3, 4, 5, 6, 7</td>
<td>1, 2, 3, 4, 5, 6, 7</td>
</tr>
<tr>
<td>Dorian</td>
<td>1, 2, b3, 4, 5, 6, b7</td>
<td>2, 3, 4, 5, 6, 7, 1</td>
</tr>
<tr>
<td>Phrygian</td>
<td>1, b2, b3, 4, 5, b6, b7</td>
<td>3, 4, 5, 6, 7, 1, 2</td>
</tr>
<tr>
<td>Lydian</td>
<td>1, 2, #4, 5, 6, 7</td>
<td>4, 5, 6, 7, 1, 2, 3</td>
</tr>
<tr>
<td>Mixolydian</td>
<td>1, 2, 3, 4, 5, 6, b7</td>
<td>5, 6, 7, 1, 2, 3, 4</td>
</tr>
<tr>
<td>Aeolian</td>
<td>1, 2, b3, 4, 5, b6, b7</td>
<td>6, 7, 1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>Locrian</td>
<td>1, b2, b3, 4, b5, b6, b7</td>
<td>7, 1, 2, 3, 4, 5, 6</td>
</tr>
</tbody>
</table>

If you are not used to using extended fingerings, make sure that you take it easy as your hand will cramp, especially if you are using a 5 or 6 string or a long scale plus (35” or longer) bass. For the lower positions, my suggestion is to use fingers 1, 2, and 4 for whole-step intervals up to the 12th fret. Then, you can use whatever is comfortable after that.

ex: 5 STRING

I have included both a fretboard diagram and notation. For those of you who can’t read music, you should be able to relate the note with its placement on the fretboard. For those who can read music, the fretboard is needed to show you the correct fingerings. There is a brief description of the type of scale at the bottom of each page. It is just a reference, not a rule. Many modes can function over more than one chord, for instance, I like to use a G phrygian over a G7, this works because I know the intervals of the scale, and the tensions available for the 7 chord. After you learn the basics, and have your ears in shape, you can pretty much use any scale over any chord, if you resolve them correctly.

Every primary scale has its specific modes. Every mode has a related 7th chord. Those relations and the musical short-hand used to describe them are presented below:
The top letters describe the type of chord being played. GMaj7 means a G major 7th chord is being played. The bottom Roman numerals are used to describe the function of the chord. I means that it is the 1 chord of the progression. So a ii-V-I means that it is a progression starting on a minor 7th (2 chord) going to a dominant 7th (5 chord) going to a major 7th (1 chord) using cycle root motion. This type of progression is referred to as a cadence and is extremely popular in the jazz and fusion genre. It is also found all over in pop music. Make sure that you become very familiar with this progression. I will be referring to it quite often throughout this book. If you know the chord and its function, then you will know what scale to play. Sometimes the written chord changes will include the extensions that the composer wants used in the music. For example: CMaj7#11, means that a Lydian scale should be the starting point for the improvised line and that the #11 should be emphasized. It takes awhile to understand this short-hand, but once you do understand it, you can analyze a progression on the fly and base (bass?) your improvisation appropriately.

The "avoid" notes I mention in the scale description, are to be avoided for resolution, however, they may be played as a passing tone.
AEOLIAN / NATURAL MINOR

1 2 b3 4 5 6 b7

Aeolian is the 6th mode of the Major scale and is commonly called the Natural Minor scale. Its tonality is naturally, minor. The conditional avoid note is the b6th, but most people can get by using it as a passing tone. You will see this scale and chord in some I-vi-ii-V7 progressions and also iii-vi-ii-V7 progressions. It is also seen as the 1 chord in minor progressions. Its arpeggio is minor, and the extensions are 9, 11 and b13.
Fretboard Alchemy is terrific! It is clear, concise and easy to understand. I highly recommend this tool to all students of the bass. It lays out the various scales and modes in clear visual patterns on the fingerboard so the student can learn to associate what harmony is under his/her hands. The end result is solid understanding of what scales to use for grooves and soloing and for a bassist this understanding is crucial.

Lucas Pickford
www.lucaspickford.com

The material looks great; lots of info in a very precise, easy-to-follow presentation.

Ray Riendeau
www.rayriendeau.com

Fretboard Alchemy is a must for bassists who are trying to get a handle on harmony--very well organized. Where was this 20 years ago?

Craig Schoedler
www.craigschoedler.com

Scott Hubbell's "Fretboard Alchemy" is an excellent resource for anyone who is serious about learning the fingerboard and getting their harmony together. Buy it... get to work!

Todd Johnson
www.toddjohnsonmusic.com

Fretboard Alchemy is the most comprehensive resource addressing fingerboard harmony on 4, 5, and 6-string basses. It's thorough, practical, and most importantly, easy-to-understand. An indispensable reference tool for bassists of all levels.

Cliff Engel
www.bassically.net

Fretboard Alchemy strikes me as a solid & insightful resource for bassists, and should REALLY help a lot of players.

Norm Stockton
www.normstockton.com
**Fretboard Alchemy** is a really great comprehensive reference that would be helpful to any bass player interested in improving their ear training and coverage of the fingerboard.

*Adam Nitti*
www.adamnitti.com

Having a tool out in the market that further develops fretboard mastery is invaluable. I think it also is very comprehensive yet also lends for more volumes.

*Mike Dimin*
www.michaeldimin.com

With the concepts found in Fretboard Alchemy and a little imagination, even rockers like myself can find new magic in their music. Simply put, this is a "must have" for all bass players and I give it my highest recommendation.

*Jon Pomplin*
www.project814.com