

***Keyboard
Percussion
Handbook***

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Diatonic Modes

What is a mode?

Modality is defined by:

1. The octave serves as a means of stable limits.
2. Asymmetric scale pattern related, via transposition, to its relative major scale.
3. Each mode consists of seven pitches; five whole steps and two half steps, in various orders.
4. The sum of the intervals equals twelve half steps.

Why learn the modes?

Although much western art music utilizes two diatonic modes, ionian (major scale) and aeolian (natural minor scale), these represent only a portion of existing melodic vocabulary. World musical traditions utilize a wide variety of scales and modes that provide a simple and logical extension of melodic resources. You should learn, at the very least, the seven diatonic modes, chromatic scales, melodic and harmonic minor scales, whole tone scales, diminished scales, and major and minor pentatonic scales.

A symmetrically divided octave produces non-modal scales such as the whole tone scale (six note scale consisting entirely of whole steps) or diminished scales (eight note scale consisting of either a whole step - half step pattern or vice versa).

How should I learn the modes?

How you initially learn the modes will determine their utility. On the one hand, although allegedly “taught” the diatonic modes (church modes), many formally trained musicians demonstrate little practical understanding of them. Except for ionian (major) and aeolian (natural minor), they seldom can identify modes aurally and do not understand the relative colors or harmonic implications of each.

On the other hand, any competent jazz musician possesses an understanding of not only unaltered diatonic modes but also various altered diatonic modes. Because modal knowledge is required to improvise, improvisors rely on aural comprehension as they develop aural and theoretical skills. In jazz pedagogy, modes are taught in a practical manner similar to the transposition method advocated below.

1. Non-transposed method. Each mode begins on a different scale degree throughout an octave of white keys on the piano. Although seemingly simple, this method does not teach transposition, relative quality, or color comparisons. It is, however, the method often taught in music theory. This method is useful when someone must determine the correct pitches and key signature of a mode. Unfortunately, it does not provide enough information for functional musicianship - be it aural identification, composition, improvisation, or musical interpretation.

Seven diatonic modes, un-transposed from C major:

| Mode | Pitches | Begin on major scale degree |
|------------|------------------------|-----------------------------|
| Ionian | C, D, E, F, G, A, B, C | 1 |
| Dorian | D, E, F, G, A, B, C, D | 2 |
| Phrygian | E, F, G, A, B, C, D, E | 3 |
| Lydian | F, G, A, B, C, D, E, F | 4 |
| Mixolydian | G, A, B, C, D, E, F, G | 5 |
| Aeolian | A, B, C, D, E, F, G, A | 6 |
| Locrian | B, C, D, E, F, G, A, B | 7 |

2. Transposition method. This method involves learning each mode from the same starting note. Modes are best understood through a multi-dimensional approach including their relative color (bright to dark), tetrachord quality, seventh chord quality, interval pattern, relationship to familiar ionian and aeolian modes, and several emotional generalizations for each mode. One goal of this method is to provide a harmonic palette for the composer or improviser, similar to that of a visual artist. The colors are variously described as bright or dark, tense or relaxed, and possess emotional effects. Another goal is comparative; to relate less familiar modes to more familiar modes such as major and minor scales.

Seven diatonic modes, transposed from C; brightest to darkest:

| Mode | Pitches | Interval to relative major scale key signature |
|-------------|-----------------------------|---|
| Lydian | C, D, E, F#, G, A, B, C | Perfect fourth down |
| Ionian | C, D, E, F, G, A, B, C | Unison |
| Mixolydian | C, D, E, F, G, A, Bb, C | Perfect fifth down, Perfect fourth up |
| Dorian | C, D, Eb, F, G, A, Bb, C | Major second down |
| Aeolian | C, D, Eb, F, G, Ab, Bb, C | Minor third up |
| Phrygian | C, Db, Eb, F, G, Ab, Bb, C | Major third down |
| Locrian | C, Db, Eb, F, Gb, Ab, Bb, C | Minor second up |

How to practice modes

1. Choose a single starting pitch and play all seven modes, in order, from bright to dark. Sing along; notice the gradual change in quality as you move from one mode to another. Also play the related seventh chord.
2. Transpose each mode through all twelve keys; move up or down chromatically or through the cycle of dominants.

Seven Diatonic Modes - listed from brightest to darkest

| Mode | Tetrachords | 7th Chords | Interval Pattern | Relationship |
|-------------|---|-------------------|-------------------------|---------------------|
| Lydian | Lydian & Ionian aggressive, urgent, frantic, urbane, busy | Major | WWW (H) WWH | Ionian - #4 |
| Ionian | Ionian & Ionian stable, peaceful, placid, Major, content, hopeful | Major | WWH (W) WWW | Ionian |
| Mixolydian | Ionian & Dorian transient, searching, suspended, floating | Dominant | WWH (W) WWH | Ionian - b7 |
| Dorian | Dorian & Dorian brooding, uncertain, thoughtful, pensive | Minor | WHW (W) WWH | Aeolian - #6 |
| Aeolian | Dorian & Phrygian melancholy, sad, somber, Natural minor, darkly, romantic | Minor | WHW W) WHW | Aeolian |
| Phrygian | Phrygian & Phryg. mysterious, exotic, haunting, spacy, psychedelic | Minor | HWW (W) WHW | Aeolian - b2 |
| Locrian | Phrygian & Lydian angry, tense, ugly, mean, enraged | Half diminished | HWW (H) WWW | Aeolian - b2, b5 |

Note the shifting of the minor second interval from the right to the left. This is a visual representation of the quality of the mode.