CHAPTER 11:
MODES AND MODAL HARMONY

This chapter is a study of the seven modes of the major scale.

WHAT ARE MODES?

Modes are simply scales, or more precisely, "scales within scales." Every diatonic scale contains its own set of modes, but the modes of the major scale are by far the most common, and they will be the focus of this chapter.

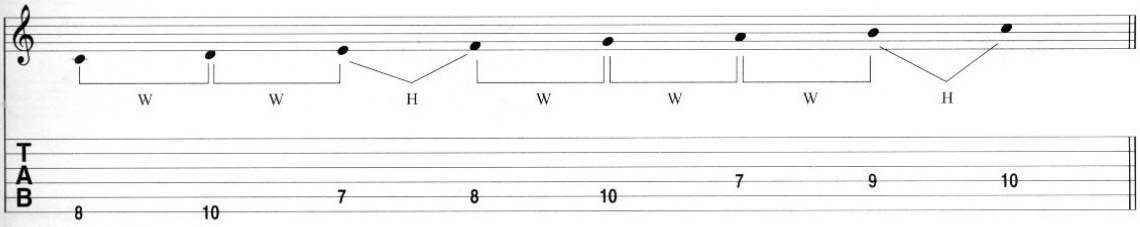
Modes are created by shifting the tonal center away from the root—or tonic—of a scale, to another note of that same scale, thereby creating a new tonality. We've seen how this works with the relative minor scale (this is actually a mode), which is constructed from the sixth note of the major scale (Chapter 3). Let's review the process using a different note of the major scale.

When you play the C major scale from its root (C) to the octave, it has the familiar "do-re-mi-fa-sol-la-ti-do" major scale sound. This, of course, is due to the order of intervals, or intervallic formula: whole–whole–half–whole–whole–whole–half (Fig. 1).

Fig. 1

TRACK 49

C major scale (root to root)

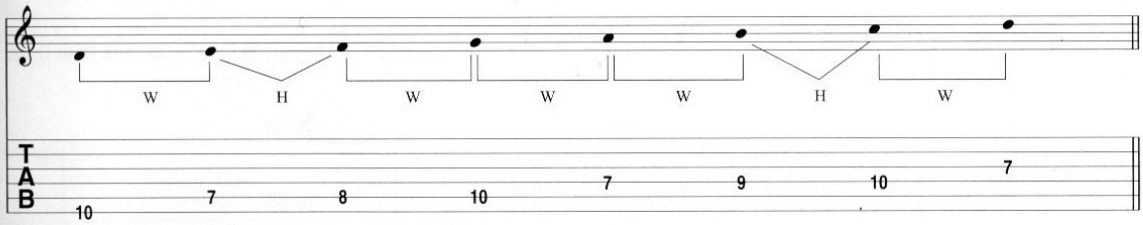


Now, if you play the C major scale again, but this time start from the second note (D) and play up to its octave (D), you will be playing the second "mode" of the C major scale (Fig. 2). Notice that it doesn't sound like C major anymore, even though you're playing the same notes. There is a simple explanation for this "phenomenon": you've shifted the order of intervals by starting on the second note of the scale. Now the intervallic formula reads: whole–half–whole–whole–whole–half–whole. Thus, "a scale within a scale."

Fig. 2

TRACK 49 (cont'd)

C major scale (D to D)

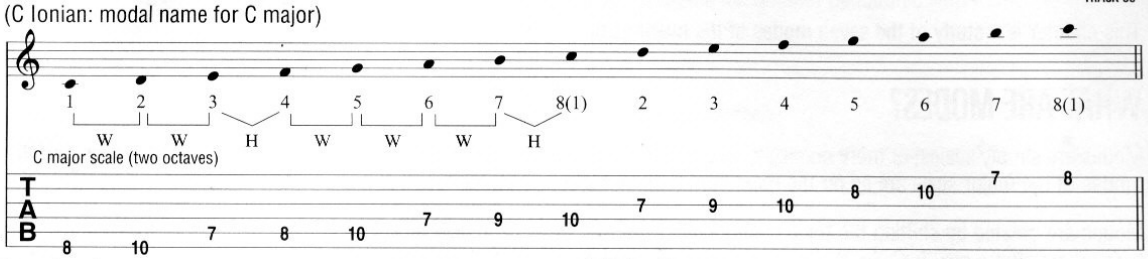


This process can be applied to the other notes of the C major scale as well. And since the C major scale has seven notes (C–D–E–F–G–A–B), it contains seven modes (Fig. 3). (Note: All major scales, no matter what key, have the same intervallic formula. Therefore, the process for constructing the seven modes of every major scale is exactly the same as illustrated in the key of C.)

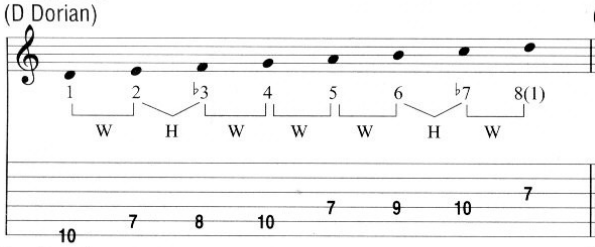
Fig. 3

TRACK 50

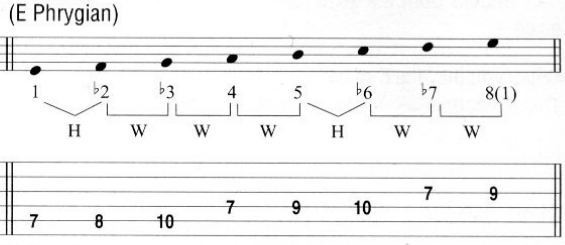
First mode
(C Ionian: modal name for C major)



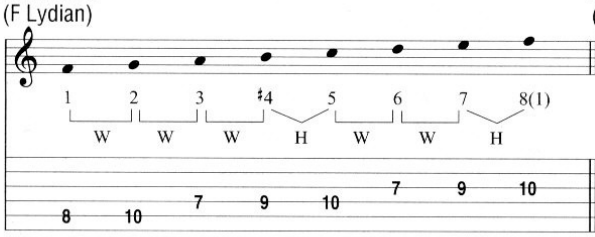
Second mode
(D Dorian)



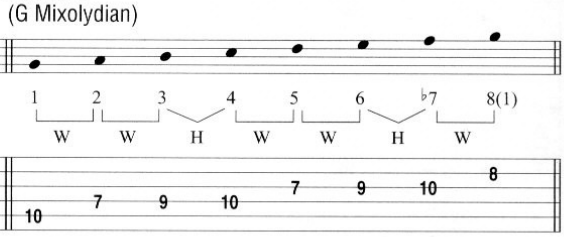
Third mode
(E Phrygian)



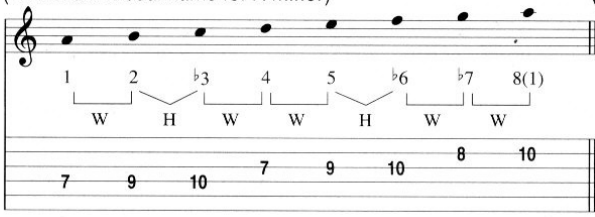
Fourth mode
(F Lydian)



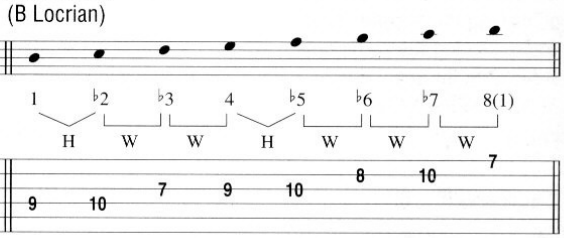
Fifth mode
(G Mixolydian)



Sixth mode
(A Aeolian: modal name for A minor)



Seventh mode
(B Locrian)



The names of the modes of the major scale have Greek origins. You'll want to memorize the names, the order, and their basic quality (major, minor, dominant, or diminished) as soon as possible.

	Mode	Pronunciation	Quality
1	**Ionian**	eye-own-ee-un	major
2	**Dorian**	door-ee-un	minor
3	**Phrygian**	fridge-ee-un	minor
4	**Lydian**	lid-ee-un	major
5	**Mixolydian**	mix-oh-lid-ee-un	dominant
6	**Aeolian**	ay-oh-lee-un	minor
7	**Locrian**	low-kree-un	diminished

The Parent Scale

The *parent scale* is the major scale from which a specific mode is derived. For example, C major is the parent scale of D Dorian. It is also the parent scale of G Mixolydian, F Lydian, and so on. The ability to recognize the parent scale is important for understanding modal concepts. Here is a three-step, fill-in-the-blanks process that will help you name the parent scale of any mode.

To find the parent scale of A Mixolydian:

Step 1) Mixolydian is the fifth mode.

Step 2) A is the fifth scale step of D major.

Step 3) D major is the parent scale of A Mixolydian.

Spend some time drilling yourself to find the parent scales to all of the modes, in as many keys as possible. Your knowledge of major scales and their key signatures will determine how rapidly you will find the answers. Here's a blank form you can work with:

To find the parent scale of ___ _____ :

Step 1) _____ is the _____ mode.

Step 2) ____ is the _____ scale step of ____ major.

Step 3) ____ major is the parent scale of ___ _____.

HOW MODES ARE USED

There are three main categorizations for how modes are used:

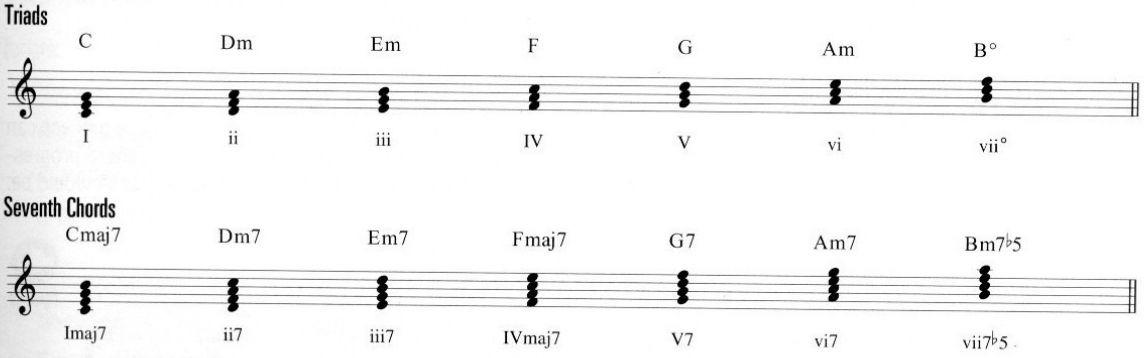
- As melodic devices for soloing over diatonic chord progressions in major and minor keys.
- As melodic devices for soloing over "modal" progressions.
- As a source for creating "altered" scales.

Modes in Major and Minor Scale Progressions

To understand how modes are used in diatonic chord progressions, it's necessary to have a working knowledge of major scale harmony. This was covered in Chapter 6, but let's do a quick review.

The notes of the major scale can be harmonized (stacked in 3rd intervals) to build diatonic triads and seventh chords from each scale degree. Here they are in the key of C (Fig. 4).

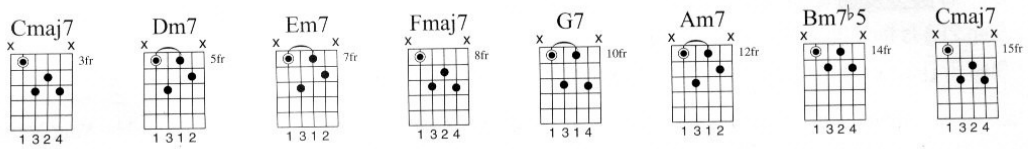
Fig. 4



These chords constitute the harmonic palette for the key of C major—the range of possible harmonies you'll find in a diatonic progression. Each chord has a *quality* (major, minor, etc.) and a function (I, ii, iii, etc.) determined by its position within the scale. (Although the triads omit the seventh, the basic chord qualities and functions remain the same.) This results in a chord formula that applies to all major keys: Imaj7–ii7–iii7–IVmaj7–V7–vi7–vii7♭5. In Fig. 5 you'll find voicings of the seventh chords from C major. Play them (in order) up and down the neck, and you will hear the underlying sound of the major scale.

Fig. 5

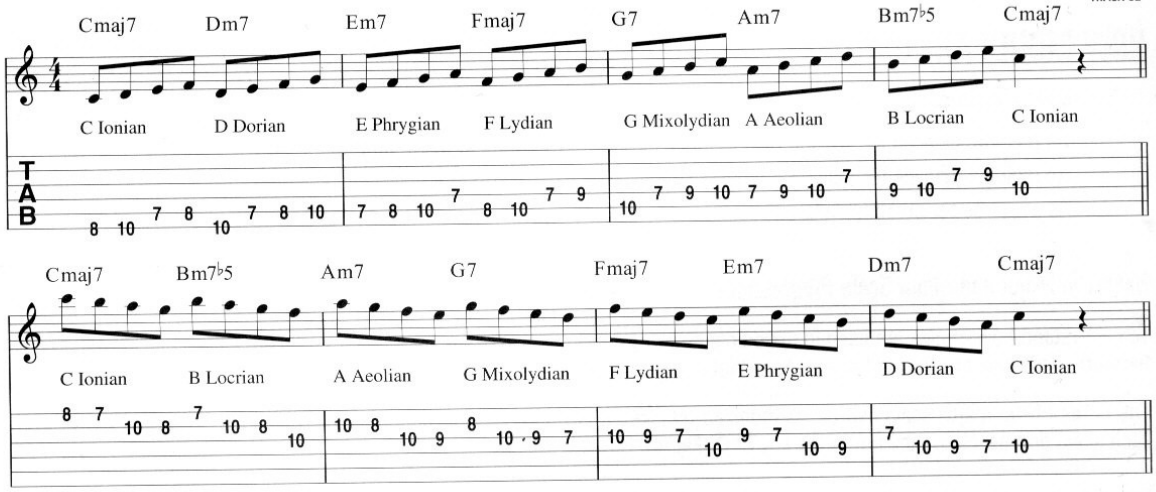
TRACK 51



Just as there is a designated chord for each scale step, there is a corresponding mode for each chord. For example, over the ii7 chord in a C major progression, the ear wants to "hear" the corresponding mode—D Dorian—because it's the diatonic choice (Dm7 is the ii chord in C, and D Dorian is the second mode of C). Likewise, if the V7 (G7) chord comes along, the fifth mode (G Mixolydian) is the "proper" choice. Here's a straightforward, "hands-on" demonstration of how this concept works (Fig. 6). Have a friend play the chords while you play the exercise.

Fig. 6

TRACK 52



Every note of each mode is represented in this exercise. Keep in mind that in reality, this "modal" approach works best when a chord lasts long enough (one or more measures) for a melody to be fully developed.

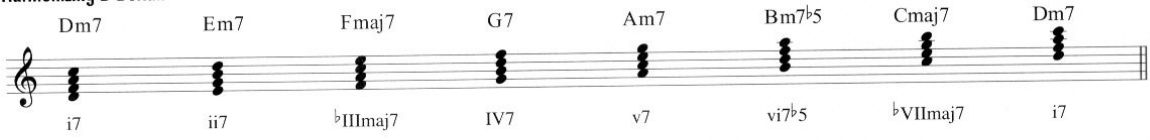
Modes and Modal Progressions

We've witnessed how the major scale can be harmonized to create chords built from each scale degree. The same process can be applied to the modes to create *modal harmony*. When the chords from a specific mode are used to create a chord progression, it is called a *modal progression*. For example, if you were to harmonize D Dorian in seventh chords, the result would be: Dm7–Em7–Fmaj7–G7–Am7–Bm7♭5–Cmaj7 (Fig. 7).

Fig. 7

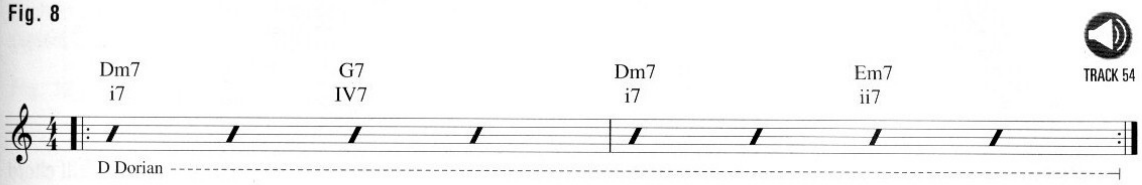
TRACK 53

Harmonizing D Dorian



Of course, these chords belong to C major—the parent scale of D Dorian—but now Dm7 is the tonic, or i chord, and each chord now serves a different function. If you were to build a progression around the Dm7 chord (i chord) using some or all of the other chords in the harmonized mode, you would be creating a modal progression—in this case, a D Dorian progression. D Dorian is now the key center, so the Dorian mode is the ideal choice for soloing (Fig. 8).

Fig. 8



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Modes as "Altered" Scales

Theoretically, there are specific modes that the ear "wants" or "expects" to hear in a diatonic progression. But sometimes the element of surprise is desired while improvising, and it often surfaces in the form of dissonance, or tension. Superimposing modes and mixing-and-matching *parallel modes* (different modes that share the same root) can be handy improvisational tools for achieving this type of effect. For example, G Phrygian might be used where G Aeolian is the more likely candidate; A Lydian could be substituted for A Ionian; E Mixolydian and E Dorian might be juggled back and forth over an E7 chord for a delightfully bluesy outcome; etc.

In order for this modal style of playing to work, you need to follow some type of system, or the results will be chaotic. Grouping the modes into specific categories for comparison purposes is extremely helpful for this (and all other modal applications as well, for that matter). The chart below breaks the modes into two basic categories (major and minor) and then compares these to the properties of the major scale and minor scale.

Major Modes

- Ionian: major scale
- Lydian: major scale with a ♯4
- Mixolydian: major scale with a ♭7th

Minor Modes

- Aeolian: minor scale
- Dorian: minor scale with a natural 6th
- Phrygian: minor scale with a ♭2nd
- Locrian: minor scale with a ♭5th and ♭2nd

THE MODES

Ionian

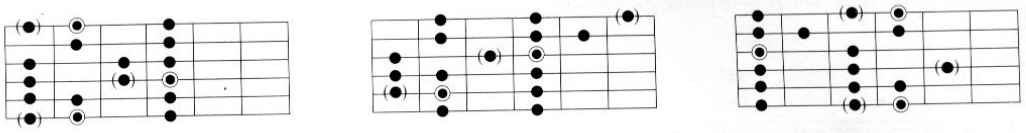
Formula:	1–2–3–4–5–6–7
Construction:	W–W–H–W–W–W–H
Category:	Major
Differentiating scale degree:	7th (Note: The "differentiating scale degree" is the note that sets this mode apart from other modes in the same category.)
For chord types:	major, 6, 6/9, maj7, maj9, maj13, add9
Harmony:	Imaj7–ii7–iii7–IVmaj7–V7–vi7–vii7♭5
Common Progressions:	I–IV–I; ii–V–I; I–vi–IV–V; I–iii–IV–I; I–IV; I–V–I

Ionian outlines the basic structure of a major seventh chord (root, 3rd, 5th, 7th) and these extensions: 9th, 11th, and 13th.

Patterns for Ionian

(Roots are circled; notes in parentheses are the 7th degrees.)

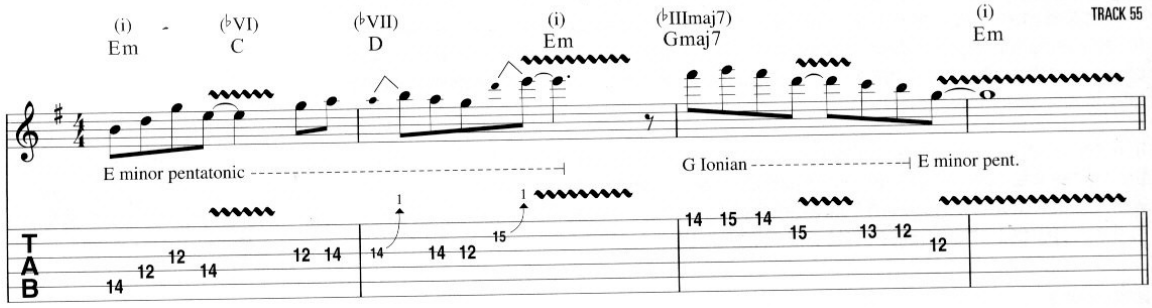
Fig. 9



Ionian is the modal name for the major scale. It corresponds to the I chord in major keys, but it also aligns with the ♭III chord in minor key progressions. For example, in an E minor progression, Gmaj7 is the ♭III chord. If that chord comes along, G Ionian is the ideal mode to play because it is the "diatonic" mode in that situation (Fig. 10).

Fig. 10

TRACK 55



Dorian

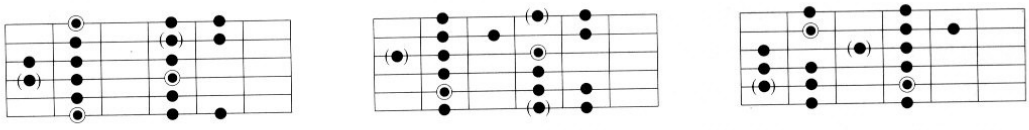
Formula:	1–2–♭3–4–5–6–7
Construction:	W–H–W–W–W–H–W
Category:	Minor
Differentiating scale degree:	6th
For chord types:	minor, m6, m6/9, m7, m9, m13, m(add9)
Harmony:	i7–ii7–♭IIImaj7–IV7–v7–vi7♭5–♭VIImaj7
Common Progressions:	i–IV; i–ii; i–♭III–IV; i–v–IV–i; i–ii–♭III–ii

Dorian outlines the basic structure of a minor seventh chord (root, ♭3rd, 5th, ♭7th) and these extensions: 9th, 11th, and 13th.

Patterns for Dorian

(Roots are circled; notes in parentheses are the 6th degrees.)

Fig. 11

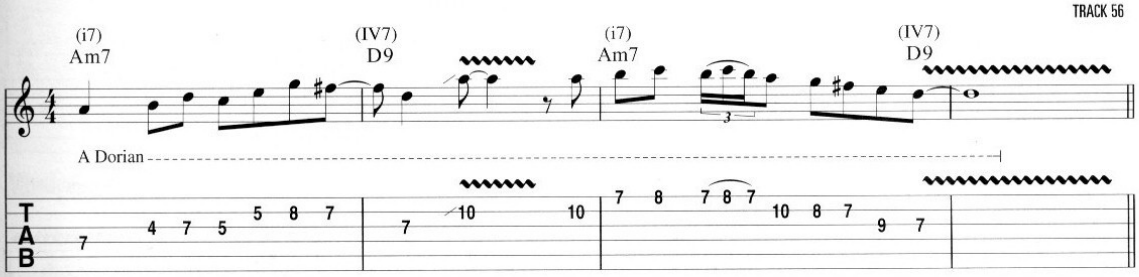


Dorian is the second mode of the major scale. It corresponds to the ii chord in major keys and the iv chord in minor key progressions. It has the same structure as the natural minor scale (Aeolian), except that it has a "raised" or natural 6th degree. This makes the scale sound lighter, softer, and a bit more mysterious than the "heavier," more dramatic Aeolian mode.

Dorian can be heard extensively in jazz, blues, and rock music, and is featured prominently in the blues-rock solos of guitarists such as Jimi Hendrix, Carlos Santana, Jimmy Page, and Robby Krieger. Fig. 12 offers an example of the A Dorian mode in a classic Latin-rock, i7–IV7 progression.

Fig. 12

TRACK 56



Phrygian

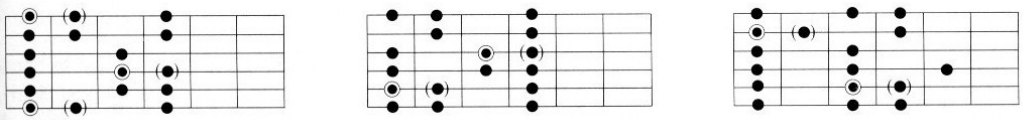
Formula:	1–♭2–♭3–4–5–♭6–♭7
Construction:	H–W–W–W–H–W–W
Category:	Minor
Differentiating scale degree:	♭2nd
For chord types:	m(♭9), m7(♭9), m(♭9, ♭6)
Harmony:	i7–♭IImaj7–♭III7–iv7–v7♭5–♭VImaj7–♭vii7
Common Progressions:	i–♭II; i–♭III–♭II; i–♭vii; i–♭II–i–♭vii

Phrygian outlines the basic structure of a minor seventh chord (root, ♭3rd, 5th, ♭7th) and these extensions: ♭9th, 11th, and ♭13th.

Patterns for Phrygian

(Roots are circled; notes in parentheses are the ♭2nd degrees.)

Fig. 13

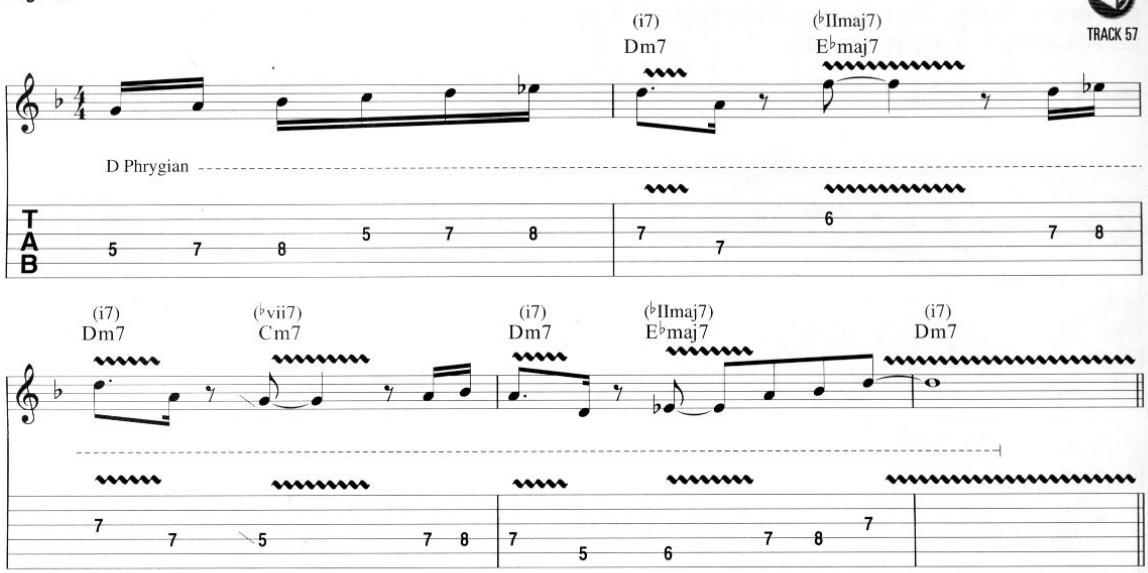


Phrygian is the third mode of the major scale. It corresponds to the iii chord in major keys and the v chord in minor key progressions. In iii chord applications it almost goes by unnoticed, but over the v chord in minor keys, and when isolated in a Phrygian progression, it has a very exotic sound. This is due mainly to the ♭2nd degree.

Phrygian makes its home in the adventurous progressions of jazz/fusion, but it also can be found in the rock world from vintage psychedelic bands like Jefferson Airplane and Quicksilver Messenger Service, to hardcore metal bands like Metallica and Megadeth. Fig. 14 offers an example of D Phrygian employed over a jazz-fusion.style, Phrygian progression.

Fig. 14

TRACK 57



Lydian

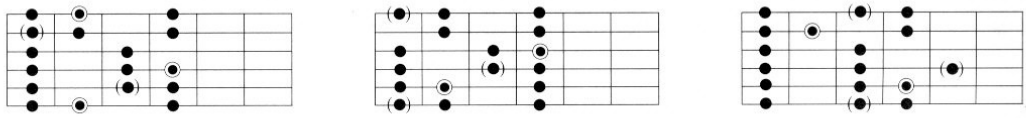
Formula:	1–2–3–♯4–5–6–7
Construction:	W–W–W–H–W–W–H
Category:	major
Differentiating scale degree:	♯4th
For chord types:	major(♯11); 6♯11; 6/9♯11; maj7♯11; maj13♯11
Harmony:	Imaj7–II7–iii7–♯iv7♭5–Vmaj7–vi7–vii7
Common Progressions:	I–II; I–II–vii; 1–vii; I–iii–vii

Lydian outlines the basic structure of a major seventh chord (root, 3rd, 5th, 7th) and these extensions: 9th, ♯11th, and 13th.

Patterns for Lydian

(Roots are circled; notes in parentheses are the ♯4th degrees.)

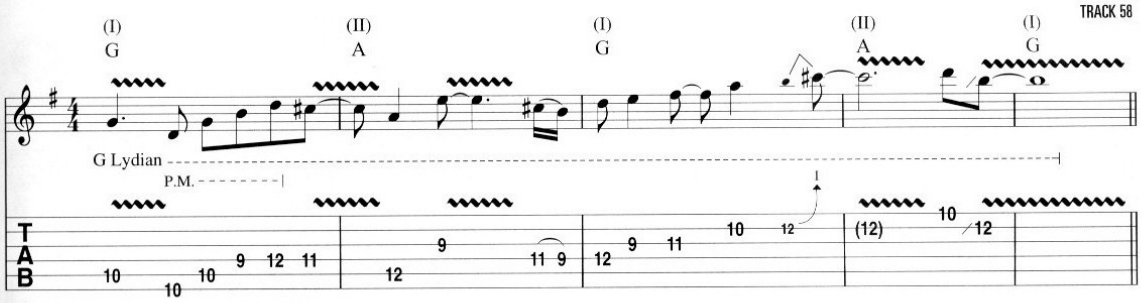
Fig. 15



Lydian is the fourth mode of the major scale. It corresponds to the IV chord in major keys and the ♭VI chord in minor key progressions. Of all the modes, it is the closest in structure to that of the major scale (Ionian). The only difference is its ♯4th degree—seemingly a small difference, but it's significant. Whereas Ionian is consonant and familiar, Lydian has a "dreamy" and anticipatory nature. Often used in movie scores, Lydian is also a favorite choice among singer/songwriters like Stevie Nicks and Joni Mitchell. In the hands of guitarists like Joe Satriani and Steve Vai, Lydian can bring tears to your eyes. Fig. 16 offers a soul-stirring example of G Lydian over a classic, I–II Lydian progression.

Fig. 16

TRACK 58



Mixolydian

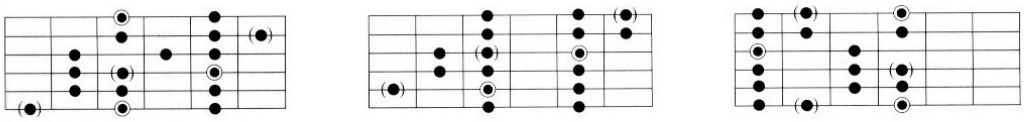
Formula:	1–2–3–4–5–6–♭7
Construction:	W–W–H–W–W–H–W
Category:	major (sometimes called the dominant mode)
Differentiating scale degree:	♭7th
For chord types:	7; 9; 13; all 7sus4 types
Harmony:	I7–ii7–iii7♭5–IVmaj7–v7–vi7–♭VIImaj7
Common Progressions:	I–♭VII; I–♭VII–IV; I7–v; I7–IV; I–IV–♭VII–I; I7–I7sus4; I–vi–♭VII

Mixolydian outlines the basic structure of a dominant seventh chord (root, 3rd, 5th, ♭7th) and these extensions: 9th, 11th, and 13th.

Patterns for Mixolydian

(Roots are circled; notes in parentheses are the ♭7th degrees.)

Fig. 17

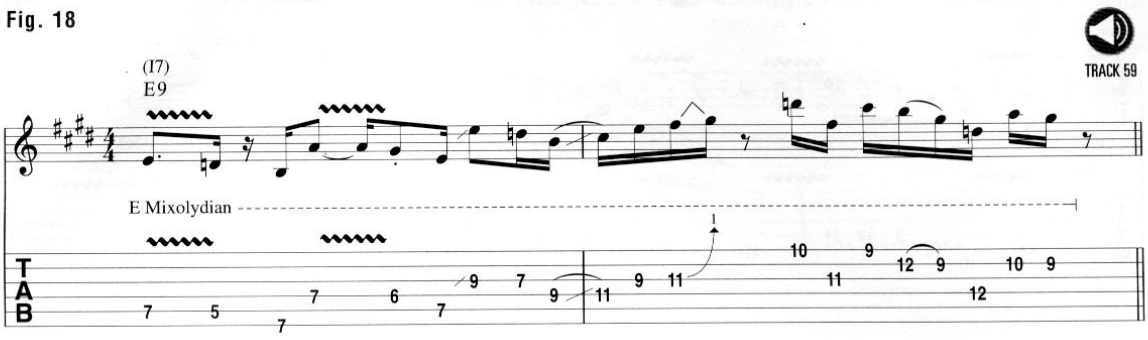


Mixolydian is the fifth mode of the major scale. It is sometimes referred to as the dominant mode because it corresponds to the V7 chord in major keys. But it also aligns with the ♭VII chord in minor key progressions.

The sound of Mixolydian is in the music all around us. The abundance of dominant seventh chords in the progressions of blues, funk, jazz, country, and rock make Mixolydian a popular choice among guitarists in those styles. Mixolydian is also a favorite of songwriters. Many a classic guitar riff has been culled from the Mixolydian mode—Roy Orbison's "Oh, Pretty Woman," The Beatles' "I Feel Fine," and "Birthday," and Jimi Hendrix's "Third Stone from the Sun," to name a few.

Mixolydian really comes alive in the dominant seventh jams of funk music. Fig. 18 offers an example of E Mixolydian in motion over an E9 vamp.

Fig. 18



Aeolian

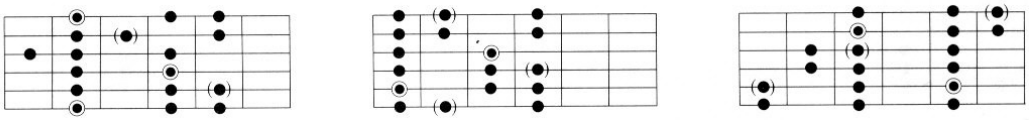
Formula:	1–2–♭3–4–5–♭6–♭7
Construction:	W–H–W–W–H–W–W
Category:	minor
Differentiating scale degree:	♭6th
For chord types:	minor, m♭6, m7, m9, m11, m(add9)
Harmony:	i7–ii7♭5–♭IIImaj7–iv7–v7–♭VImaj7–♭VII7
Common Progressions:	i–♭VII–♭VI; i–iv; i–v; i–♭III–♭VII; i–♭VI

Aeolian outlines the basic structure of a minor seventh chord (root, ♭3rd, 5th, ♭7th) and these extensions: 9th, 11th, and ♭13th.

Patterns for Aeolian

(Roots are circled; notes in parentheses are the ♭6th degrees.)

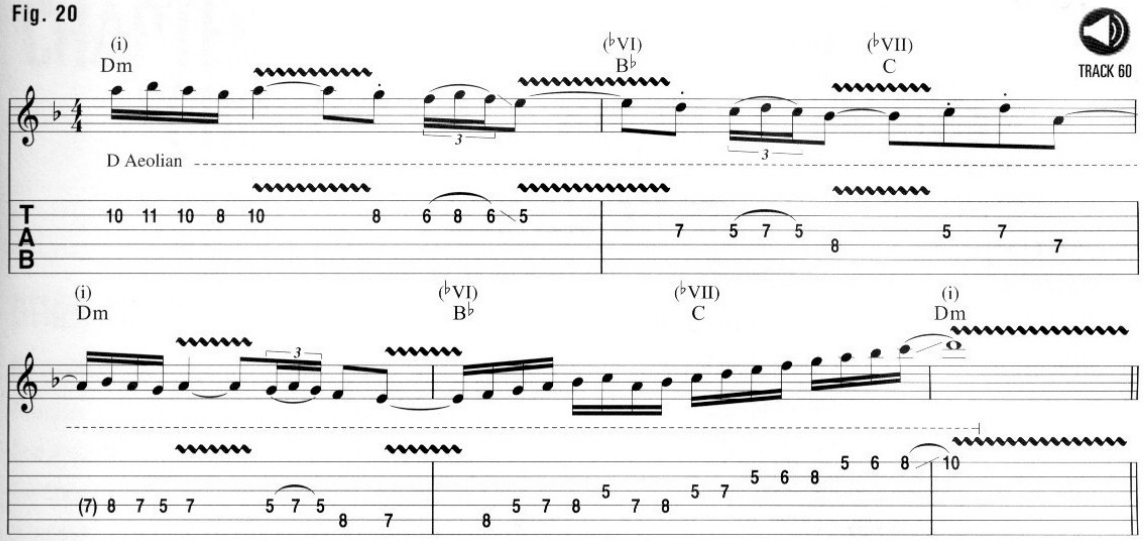
Fig. 19



Aeolian is the modal name for the natural minor scale, and it is the mode that all other minor modes are compared to. It is the sixth mode of the major scale and corresponds to the vi chord in major keys. But its main role is to service the i chord in minor key progressions.

Common descriptions of the Aeolian mode include "romantic," "heavy," and "melodramatic"—small wonder it is such a favorite among hard-rock guitarists. Fig. 20 makes good use of the ♭6th degree of D Aeolian in a D minor rock ballad example.

Fig. 20



Locrian

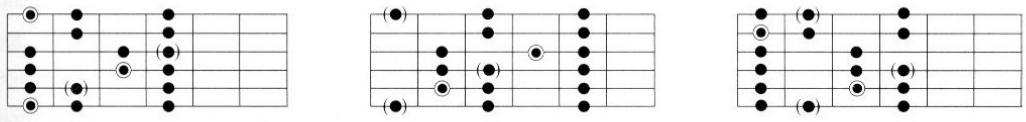
Formula:	1–♭2–♭3–4–♭5–♭6–♭7
Construction:	H–W–W–H–W–W–W
Category:	minor (sometimes called the half-diminished mode)
Differentiating scale degree:	♭5th
For chord types:	diminished; m7♭5
Harmony:	i7♭5–♭IImaj7–♭iii7–iv7–♭Vmaj7–♭VI7–♭vii7
Common Progressions:	I°–♭II; i7♭5–iv7; i7♭5–♭vii7

Locrian outlines the basic structure of a minor seventh flat five chord (root, ♭3rd, ♭5th, ♭7th) and these extensions: ♭9th, 11th, and ♭13th.

Patterns for Locrian

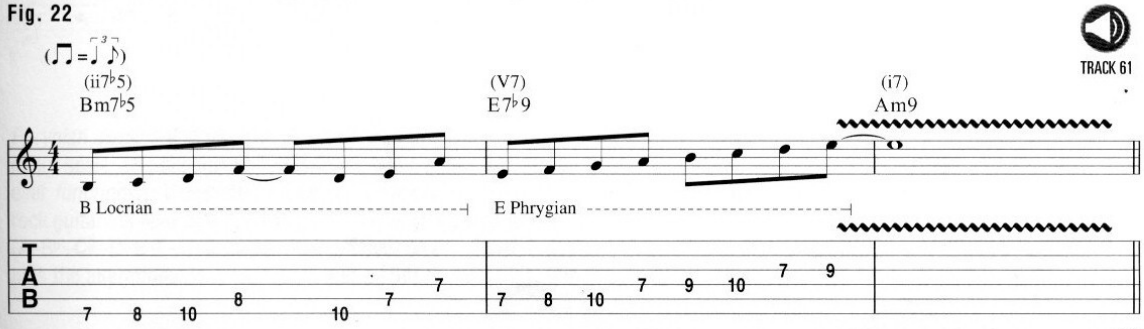
(Roots are circled; notes in parentheses are the ♭5th degrees.)

Fig. 21



Locrian is the seventh mode of the major scale. It corresponds to the vii° chord in major keys, but it is most often relegated to the ii7♭5 chords in minor key progressions. When played out of context, it's a very strange sounding scale indeed. But when mated with a minor seven flat five chord, it nails all of the chord tones and provides some choice alterations (♭9th and ♭13th). Fig. 22 dispatches the B Locrian mode over the ii chord (Bm7♭5) in the key of A minor.

Fig. 22



Quiz #11

(Answers are in the back of the book.)

1) What is the parent scale of G Dorian? _____
2) What is the parent scale of A Mixolydian? _____
3) What is the parent scale of C Lydian? _____
4) True or False: Dorian is a minor mode. _____
5) True or False: Lydian is a major mode. _____
6) Which mode is sometimes called the dominant mode? _____
7) What two modes have ♭2nd scale degrees? _____ _____
8) Which mode has a ♯4th scale degree? _____
9) What is the differentiating scale degree of Dorian? _____
10) What is the modal name for the major scale? _____
11) True or False: Lydian is very close in structure to the major scale. _____
12) True or False: Locrian is associated with the ii chord in minor keys. _____

Ear Training Drill #6

TRACK 62

In each example you will hear one of the seven modes played in two octaves. Circle the correct answer. All examples start on the root. (Answers are in the back of the book.)

1) Ionian or Mixolydian?
2) Dorian or Phrygian?
3) Aeolian or Locrian?
4) Lydian or Ionian?
5) Mixolydian or Dorian?
6) Mixolydian or Ionian?
7) Phrygian or Locrian?
8) Ionian or Dorian?
9) Dorian or Aeolian?
10) Lydian or Mixolydian?