

Quick and Easy Guide to Modes

by Dennis Winge

There are so many advantages to learning the modes. Doing so enables you to:

1. Compose or analyze melodies
2. Easily recognize or compose chord progressions
3. Know what scale to use over a progression when improvising
4. Understand how you can play in many different modes without learning tons of new scales

I. Definition

In layman's terms, a mode is a *perspective* of a scale. In the key of A the notes are:

1	2	3	4	5	6	7
a	b	c#	d	e	f#	g#

So if we are in, let's say, the 3rd mode of this scale means that C# is the new key (really it's C#m but more on that later) and the notes are now:

1	2	3	4	5	6	7
c#	d	e	f#	g#	a	b

We simply took the notes in A and rearranged them according to the 3rd note's perspective, and we're not really in the key of A anymore, harmonically speaking, because the note a is not the root, c# is.

The modes are

I. Ionian; II. Dorian; III Phrygian; IV. Lydian V. Mixolydian VI. Aeolian VII. Locrian

Do yourself a huge favor and write out the major in all 12 keys using 12 sheets of paper, one for each key. Then underneath that write the rewrite the same notes of that key from the point of view of each mode. The first few modes of key of A will look like:

A - Ionian

1	2	3	4	5	6	7
a	b	c#	d	e	f#	g#

B - Dorian

1	2	3	4	5	6	7
B	c#	d	e	f#	g#	A

C# - Phrygian

1	2	3	4	5	6	7
c#	d	e	f#	g#	a	b

Notice that for even though in C# phrygian the notes are the same as the A Major Scale, we don't say "A phrygian" that would imply that the notes are a - bb - c - d - e - f - g which is the same notes as the key of F. If you can understand this one point right here, you grasp the essence of the modes. (Once you write out each key and each mode, go back and look at the 3rd mode of the key of F to confirm what I just wrote).

It may be helpful to think of each mode as its own scale. Now, instead of 12 scales there are really 84 scales (12 keys x 7 modes). You should think of each of the 84 as its own separate identity because even though any one of them shares the same notes with 11 others, each scale is unique in that only that scale has that particular "tonic" (root) and that particular structure.

For example, the fifth mode of the key of A is called E mixolydian and the notes are

E - Mixolydian

1	2	3	4	5	6	7
e	f#	g#	a	b	c#	d

The 7th mode of the key of A is called G# locrian and the notes are

G# - Locrian

1	2	3	4	5	6	7
g#	a	b	c#	d	e	f#

Even though the 2 scales share the same notes, they sound completely different *when played against their respective root notes*. So in order to really hear the difference, play them against a drone. Take your looper machine and record an E drone, or search for E-drone on YouTube. Then play the scale over it and hear the effect. After you've done that for a while, search or create a G# drone and play those same notes. The emotional character of the scale is now vastly different.

There are many other aspects to be discussed about modes, but for now, just spend time with any one of the 84 scales, find or create the appropriate drone, and explore how to play it on your instrument. And I know I said to think about each mode as its own scale, but you don't have to re-invent the wheel for finding a good fingering for the scale. Just find the mode on your 12 sheets, then use the major scale fingering of the mode at the top. (I call this the "parent scale" which means the Ionian key that shares the same notes as your key/ mode.)

For example if you're in B - Lydian, look at the top of the page and you will see F# at the top. Get a B drone and play the F# major scale fingering you already know and you'll hear what B Lydian sounds like. And, if you can, think of B as the root, not F#.

The only way to really understand this is to do what I have suggested:

a) write out the 84 scales

- b) pick one and play it over the tonic's drone
- c) use the fingering of the "parent scale" to find your way around

Going back to the 84 scales, 12 of them will share the same notes, and 12 of them will share the same modal characteristics. For example A-aeolian will share the same characteristics as the 11 other "aeolian" scales. In the next section you will learn how to simplify all this information into a relatively small amount of data.

Have fun and explore those modes!

II. Numeric Analysis

In order to really understand and use how a mode works, you have to understand its intervallic structure. This means numbering the notes in terms of their interval against the tonic. I will explain.

C - Ionian

1	2	3	4	5	6	7
C	d	e	f	G	a	b

The numeric analysis of the notes in C Ionian (or any Ionian) is 1, 2, 3, 4, 5, 6, 7. This may not mean much to you now but you'll see why it's important. Let's take C Dorian

C - Dorian

1	2	b3	4	5	6	b7
c	d	eb	f	g	a	bb

How did we get this? Well look at the key of Bb under Dorian key of Bb in the worksheets you wrote. (If you didn't write them, stop reading and go back and do them now, otherwise you're cheating yourself.)

So now we get to the good stuff. The way to analyze C Dorian is by numbering the intervals as they would relate to C major. You may ask "How did C major get into it? I thought this was related to Bb?" Yes, C Dorian is the second mode of Bb, but in analyzing intervallic structures we always use the major scale as the baseline standard against which compare. Let me illustrate:

Comparing the 2 scales above, you see that the e's are flat and the b's are flat. This means the intervallic analysis of C Dorian is 1, 2, b3, 4, 5, 6, b7. And this isn't just C Dorian, it's any Dorian mode!

Let's go further and take C Phrygian. How do we find this one among our 84 choices? Well, since Phrygian is the 3rd mode, and since it's two whole steps up from a root to its major 3rd, we have to go two whole steps *down* to find the parent scale. In this case it's

the key of Ab and notes are:

C - Phrygian

1	b2	b3	4	5	b6	b7
c	db	eb	f	g	ab	bb

Here the intervallic structure of Phrygian is 1, b2, b3, 4, 5, b6, b7.

If you're feeling overwhelmed, don't worry because in the next section we'll show you how to reduce all this down in very simple terms so you can find your way around in any key, any mode! But for now, write out the intervallic structures for the remaining modes. Do the same thing we did, i.e. find C - Lydian and compare it to C major, then C - mixolydian and compare it to C major, and the same with Aeolian and Locrian.

III. Memorizing the Modes

If you did all the work in the previous section, you will now get reap a great return on your investment. In summary, the intervallic structure of the modes looks like this:

Ionian

1	2	3	4	5	6	7
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Dorian

1	2	b3	4	5	6	b7
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Phrygian

1	b2	b3	4	5	b6	b7
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Lydian

1	2	3	#4	5	6	7
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Mixolydian

1	2	3	4	5	6	b7
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Aeolian

1	2	b3	4	5	b6	b7
---	---	----	---	---	----	----

Locrian

1	b2	b3	4	b5	b6	b7
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Notice no 2 modes are alike. If they were, they wouldn't be called separate modes!

In any case this is how we break down and simplify all this information. There are 2 main types of modes: major and minor. Ionian is the pure major. Aeolian is the pure minor.

We're going to group each mode into 1 of the 2 categories by looking at the 3rd which determines if a chord is major or minor. If the 3rd is flat, it's minor. If not, it's major. It looks like this:

Major Modes: Ionian, Lydian, Mixolydian

Minor Modes: Aeolian, Dorian, Phrygian & Locrian

Next we're going to compare each mode's intervallic structure to that of the 'pure' one in its respective category. In other words, Lydian is the same as Ionian but it has a #4. Mixolydian is the same as Ionian but it has a b7.

In the minor modes, Dorian is the same as Aeolian, but with a natural 6th. (The symbol for natural is \natural .) Phrygian is the same but with a b2, and Locrian has a b2 and a b5.

Put all this information in a simple chart like this:

Summary of the Modes

Ionian = mode I = pure major	Aeolian = mode VI = pure minor (b3, b6, b7)
Lydian = mode IV = major with a #4	Dorian = mode II = minor with $\natural 6$
Mixolydian = mode V = major with a b7	Phrygian = mode III = minor with b2
	Locrian = mode VII = minor with b2 and b5

Memorize this chart and you'll see how it makes things so much easier. Allow yourself time to play around with it on your instrument. For example, pick a random key and a random mode. Let's say it's E phrygian, a very fun mode for guitar.

There are two ways to explore this mode on your instrument. First, say to yourself "ok, Phrygian is the 3rd mode, and since the 3rd of a scale is 2 whole steps above the root, I will go down 2 whole steps to find the parent key." This is a valid way of doing it, because it will help you find the proper fingering for E phrygian. The answer you would have gotten is the key of C, and the advantage here is that you can use your muscle memory of the key of C to get around quicker.

However, the big disadvantage of this approach is you will always have to think about 2 keys at the same time, i.e. E and C in this example. Do yourself a big favor and memorize the fact that Phrygian has a b2, and now just use an E minor (Aeolian) scale but flat the 2nd note. It may take a bit more time to play flashy lines with this approach, but from now on you'll always know how to call a spade a spade. Any phrygian mode you want to use for the rest of your life, you'll use the minor scale and flat the 2. It won't take as long as

you think because there are only 7 modes and you already know 2 of them (Ionian and Aeolian) so be patient at first because you will get faster and faster at playing them. But first, memorize the chart!

IV. Harmonizing the Modes

Now the real fun begins because you will learn to create or recognize chord progressions that highlight or reveal each mode. Harmonizing a scale involves taking the root, third, fifth and optionally the 7th of each note in the scale using notes *from the rest of the scale*. What I mean is:

E - Ionian

1	2	3	4	5	6	7
e	f#	g#	a	b	c#	d#

The chord for the first scale degree would be every other note e, g#, b, d#. This is Emaj7. The chord for the second scale degree is every other note from f#, so f#, a, c#, and e. This is F#m7. (If you are unclear about this you should read my article "Harmonizing a Scale.")

The overall formula for harmonizing a major scale is:

Major Scale (Ionian)

I maj7	II min7	III min7	IV maj7	V7	VI min7	VII m7b5
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And now that you know that any of these notes can be the new 1st note of a particular mode, the harmonized scales get adjusted accordingly. Since the all the modes derive from the major scale, the harmonized major scale above will simply shift according to what note is now the new root of the mode. For example in E, you have:

E Ionian

Emaj7	F#min7	G#min7	A maj7	B7	C#min7	D#m7b5
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And if we choose at random the Mixolydian mode, now we're in B Mixolydian.

B Mixolydian

B7	C#min7	D#min7b5	Emaj7	F#min7	G#min7	A maj7
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Try playing around with this. Pick some chords that put the B7 chord in a prominent place (like first or last), like this:

||: B | E | C#min7 | G#min7 A maj7 :||

Notice that not all the chords are 7th chords. The 7ths are optional. Anyway this progression, although chosen at random, is fun to play over using a B mixolydian scale.

This is just a glimpse of how joyful modal playing can be. We'll get into more how to make progression that highlight different modes in the next section. For now, the result of our harmonization of the modes will look like this:

Mode Harmonization Chart

Ionian

I maj7	II min7	III min7	IV maj7	V 7	VI min7	VII m7b5
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Dorian

I min7	II min7	III maj7	IV 7	V min7	VI m7b5	VII maj7
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Phrygian

I min7	II maj7	III 7	IV min7	V m7b5	VI maj7	VII min7
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Lydian

I maj7	II 7	III min7	IV m7b5	V maj7	VI min7	VII min7
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Mixolydian

I 7	II min7	III m7b5	IV maj7	V min7	VI min7	VII maj7
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Aeolian

I min7	II m7b5	III maj7	IV min7	V min7	VI maj7	VII 7
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Locrian

I m7b5	II maj7	III min7	IV min7	V maj7	VI 7	VII min7
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Experiment with each one of these. Sit down with your instrument, pick a key, then a mode. In this example I choose the key of G and the mode of Lydian. (Just to avoid any confusion, G Lydian is the same as the key of D Ionian, but when we say "key" here we don't mean "parent scale," we mean what note is the tonic. So G Lydian means G is the root and we'll create a mode using G major with a #4 -- you did memorize the "Summary of the Modes" chart right?)

G Lydian

G maj7	A 7	B min7	C#m7b5	D maj7	E min7	F#min7
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For my progression I choose, | G | A | D Em | G |

Remember that 7ths are optional when harmonizing so don't let them bog you down. Also just to point out that some modes are more stable than others, meaning that some modes can easily begin to sound like the parent scale they were derived from. Lydian and Locrian are less stable meaning if you're in B Locrian it can easily start to sound like C Ionian if

you're not careful. In this case, G Lydian could turn into D Ionian, so in my progression I only used a D chord once and only for 2 beats so it doesn't sound like the I chord of the progression. In addition, I made G both the first and the last chord. (If you're not clear on this try playing | G | A | D | Em | over and over and it'll sound like you're in D major.)

Let yourself experience the quality of each mode. What mood does it have? What emotional expression can you give the music you write by utilizing certain modes?

V. Create Progressions that Highlight the Essence of the Mode

The last step involves taking that Mode Harmonization Chart and simplifying by utilizing the Summary of the Modes chart. Here we put it all together. What we're going to do is choose a progression that highlights the essence of the mode with just a few chords. Sometimes even just 2 chords can spell a mode.

The essence of Dorian, for example, is a minor mode with a natural 6th. So we're going to create a minor chord progression where at least one other chord has the natural 6th in it. Let's pick the key of Am. We're of course going to use Am in our progression and we also need a chord that has the note f# in it, because f# is the natural 6th of Am and the natural 6th is what gives Dorian its flavor. It is the "essence" of Dorian.

If we look at our Dorian harmonized scale above, we find that it'll go:

A Dorian

Amin7	Bmin7	Cmaj7	D7	Emin7	F#m7b5	Gmaj7
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Well the obvious choice for a chord that has an f# note in it is F#m7b5, but suppose you don't know or like that chord. Or even more significant would be that when you play the following, it doesn't really seem to 'go anywhere' and feels kind of stagnant (more on this some other day).

||: Am | F#m7b5 :||

Compare the above with this progression:

||: Am | Bmin7 :||

Now it feels like the progression 'moves' and we hit our objective of creating a Dorian progression since f# is the 3rd of Bmin7. So in both cases we achieved Dorian just by using 2 chords. (By the way, famous examples of this latter progression are in songs like "Smiling Faces" by the Undisputed Truth or "Moondance" by Van Morrison.)

Another Am Dorian progression could use D or D7 because f# is the 3rd of D. (Famous example, "Oye Como Va" by Tito Puente.)

||: Am | D7 :||

Keep in mind that now that you learned that Dorian can be created using a Imin - VIIm7b5 progression (our first example with F#m7b5), a Imin - IImin (our second example with Bm7) and a Imin - IV7 progression (the 3rd example with D7), you will learn to recognize

these patterns in other keys. For example when someone shows me a new song they wrote and asks me to improvise on it or come up with a melody, I instantly decode it. If the song goes:

||: Dm | F | G | Am C :||

I spot it as Dorian right away, because the G major has a b note in it, which is the natural 6th to D. If this sounds beyond your reach right now, keep in mind that also what helps me see this is that:

- on playing the progression, Dm sounds like the tonic
- I see the progression as a I - III - IV - V - VII progression in Dm
- I know that in the "pure minor" (Aeolian) the IV chord is minor. But in the above progression the G (the IV chord of Dm) is not minor but major. Therefore it must introduce a note that is outside Aeolian. Because the new note introduced is a natural 6th the mode must be Dorian. Just to double-check, I discover that no other chords in the progression have any other notes outside of D Dorian. (If any of them did it would be a "mixed" modal progression -- more on that in a minute.)

Let's take one more example. When I see the chords:

||: E | D | E D | E :||

...as in the song "I'm so Glad" by Skip James (made famous by Cream), I see it as E Mixolydian all the way. It's a major tonic of E but the D chord is a b7 which is the essence of Mixolydian.

VI. Real World Exceptions

Of course, not every song is strictly made of 7 notes of a particular mode. If that were the case, music would get awfully harmonically boring. So when you are first learning the modes, don't be thrown off by real songs and how they often don't seem to stick to one particular mode. Here are some common examples:

A. "Mixed" Modes

||: Am | C | D | F |

| Am | C | E | E7 |

| Am | C | D | F |

| Am | E7 | Am | E7 :||

This is House of the Rising Sun. I'd call the key Am and the mode Aeolian, but it does have a D major chord which would suggest A Dorian, so you just have to be careful when improvising using 7 note scales. (This partly explains why pentatonic scales are so useful; there is no 2nd or 6th in a minor pentatonic scale so you can freely use that over any part of a minor progression whether it's Phrygian, Dorian, or Aeolian.) If you want total

harmonic precision, though, use A Aeolian except for over the D chord in which you would use A Dorian.

B. The V chord is major or dominant in a minor progression.

The above example also has an E7 whereas in Am the V chord is Em. The V7 in a minor is extremely common, and makes a progression move so much more than a Vm does. So don't let it throw you. If you insist on being harmonically precise, throw in a g# note when you get to the E7 chord.

C. The Tonic is Major but the Progression in Minor

In "Knock on Wood" by Eddie Floyd, the introduction is:

| F | Ab Bb // | C | Eb C // |

These chords all come from F minor Dorian (work it out to prove it yourself) except that the I chord is Fmajor. Modern Western music comes from a long history of blending European classical music with the blues, so it's quite natural to our ear to do things like this. In improvising, use F minor pentatonic or F Dorian and don't worry about it. :) If you want to be totally harmonically precise, then over the F chord use F major pentatonic or F mixolydian.

There are many, many more examples that bust our little perfect modal world. Analyze many chord progressions and you'll get used to how they work. Keep a Harmonic Analysis Journal where you only write the song's title, the original key name, and the roman numerals with bar lines (as in John Mehegan's famous book "Tonal & Rhythmic Principles.")

VII. Conclusion

There are no 'conclusions' when it comes to music. It is all an adventurous journey of discovery and creativity. Keep on experimenting with different modes. Play them over a drone or make up chord progressions in that mode and 'loop' them for yourself to solo over. Compose melodies modally: it's easy and fun and you can't go wrong because all 7 notes work with each. Analyze tunes you love. Ask yourself "How does the harmony highlight the emotional quality of the song and how can I use that in my own music?" Show me your examples, and I'll help clarify the more confusing ones. Have fun and keep on rockin' in the free world. :)