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# Reading the Chord and Scale Charts

Every section in this book includes a Chord and Scale Chart. Use this chart to learn what scale(s) will work over the chord in question. To make proper use of the chart, you will have to determine what key the tune is in, or the key of the specific part of the tune you are working with (see *Determining the Key* below). This will then help you determine the exact function of the chord you want to improvise over. As soon as you know the key of the tune and the function of the chord, the Chord and Scale Chart will help you learn what scale(s) to use.

Here is how the charts look:

## Chord and Scale Chart


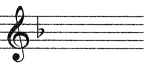

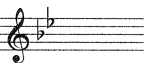

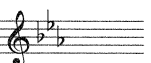
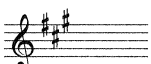
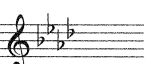
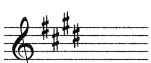
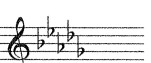

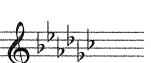
Chord	Function	Major or Minor key	Scale or Mode	Starting on...
min9	ii or vi .....	Major .....	Minor Pentatonic .....	The root of the chord
	ii .....	Major .....	Dorian .....	The root of the chord

This chart explains that if the tune is in a major key, and a min9 chord is functioning as ii or vi in the key, you can improvise with a minor pentatonic scale built up from the root of the chord. You will also notice that the chart says you can use the Dorian mode starting on the root of the min9 chord if it is functioning as ii in the key. Sometimes the chart may indicate that a scale should start on a note other than the root. For instance, it may indicate that a scale can be used “starting on” the 4th of a chord. Just figure up a 4th from the root of the chord, and use the resulting note as the root of the indicated scale. For instance, a 4th up from the root of a C chord would be F.

## Determining the Key

The overall key a song is written in can be determined by looking at the key signature which is located between the clef and the time signature. Every key signature has a corresponding major and minor scale. Since each scale contains a different number of sharps or flats, you can easily figure out what key the song is in.

Each key signature is shared by one major and one minor key. We call this relationship *relative*. In other words, we would say that D Minor is the relative minor key to F Major because they share the same key signature: one flat. If the key signature has three sharps, you know the song is in either the key of A Major or F# Minor because both the A Major and the F# Minor scales contain three sharps. If the song ends on an A Major chord, it is in the key of A Major. If it ends on an F#min chord, it is in the key of F# Minor.

Key Signature	Major Key	Minor Key	Key Signature	Major Key	Minor Key
	C	A		F	D
	G	E		Bb	G
	D	B		Eb	C
	A	F#		Ab	F
	E	C#		Db	Bb
	B	G#		Gb	Eb

## Determining Chord Function

It is important to realize that the same chord can behave very differently in different keys and settings.

In every major and minor key there are seven diatonic chords. We can find out what these chords are by stacking 3rds on top of each note in the scale. Three note stacks will give us triads, four note stacks will give us 7th chords and so on. Notice that if you harmonize each major scale this way, the harmonic pattern stays constant in every key.

Each chord is given a corresponding Roman numeral. Major and Dominant chords will always use upper case numerals (for instance, in a major key: I and IV for major, V7 for Dominant). Minor and diminished chords will always use lower case (again, in a major key: ii, iii, and vi for minor, vii for min7<sup>b</sup>5).

In the harmonized major scale, the first and the fourth chords (I and IV) are always Maj7 chords. The second, third, and sixth chords (ii, iii, vi) are always min7 chords. The fifth chord (V7) is always Dominant and the seventh chord (vii) is always min7<sup>b</sup>5 (half diminished). Check out these examples:

### C Major

I	ii	iii	IV	V7	vi	vii	I
CMaj7	Dmin7	Emin7	FMaj7	G7	Amin7	Bmin7 <sup>b</sup> 5	CMaj7

### F Major

I	ii	iii	IV	V7	vi	vii	I
FMaj7	Gmin7	Amin7	B <sup>b</sup> Maj7	C7	Dmin7	Emin7 <sup>b</sup> 5	FMaj7

### G Major

I	ii	iii	IV	V7	vi	vii	I
GMaj7	Amin7	Bmin7	CMaj7	D7	Emin7	F <sup>#</sup> min7 <sup>b</sup> 5	GMaj7

A chord's Roman numeral reveals its function in a key. An FMaj7 played in the key of C (IV) serves a very different role than the same chord in the key of F (I). An Amin7 is the vi chord in the key of C, the iii chord in the key of F and the ii chord in the key of G. What this means is that when learning to improvise over a chord progression, you need to be aware of each chord's function.