A Guide To Learning Songs By Ear
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If you have recently (within the last few years) picked up guitar, you have probably noticed the vast supply of song tabs and charts that is available to you with just a few clicks of your mouse. Searching through tabs and songs can become an all day event as you identify a song you want to learn, and wade through all the advertisements and incomplete attempts at teaching you a song. You start to realize that a lot of 'free' tablature isn't that accurate. Pretty soon, you have spent hours NOT playing your guitar and frustration starts to set in.

You might also be at a level in your playing where the basics are becoming commonplace, and you are ready to start applying what you know. There is no better way to enhance your creativity and improve your musical sense than regularly attempting to figure out songs by ear. You may not be 100% accurate, but the process that your brain and hands go through when you are using your ears in this way is priceless education, doesn't take hours upon hours, and... it is free!

When you begin this habit, start with songs that sound like they are at your playing level or below. Starting with a solo or complex riff can quickly lead to discouragement. Starting with a song centered around simple chord progressions is a great place to begin and build confidence. If the first few songs you try are too easy, there is nothing to keep you from advancing.

This lesson will cover methods and tips for figuring out progressions and melodies alike. You have likely seen someone listen to a song a few times and then just start playing it as if they've known it
forever, or maybe they noodle around a little bit, play some scales or chord positions and then stumble into some resemblance of the song. This article will detail a few of the basic tips I have implemented over the years to help me quickly and somewhat accurately figure out songs completely by ear. Here we go...

**Tip 1: If You Don't Sing, Learn to Sing a Little.**

Believe it or not, nothing improves your 'ear' like singing. It is also the only musical instrument that you have full access to where ever you go. You don't have to get to performance level, but being able to carry a tune and pickup basic melodies is huge and allows you to be constantly working on your ear training whenever there is music around.

How does singing help? Every time you learn a melody, or are humming part of a guitar line, you are improving your ear. I am not talking about the accidental "I've got a song stuck in my head today" kind of singing. I am talking about intentionally learning the ins and outs of a melody as you are listening to music. Once you have the melody in your memory, try to translate it to the guitar the next chance you get.

Singing also gives you a way to produce notes without having to think about scale patterns or chord positions. Sometimes when going straight to the guitar, it is easy to get limited by comfortable habits. If you start by learning with your voice and then go to the guitar, you increase your chances of thinking outside the box. Then the patterns you have learned can help with the transition to playing it on the guitar.

**Tip 2: Learn to Identify Intervals Without Having to Play Them**

It is key, when figuring out songs, that you are comfortable with the concepts and application of intervals. We are not going to go deep in to a lesson on them here, but there are a number of great JamPlay videos on the subject. If you need a place to start, check out my Phase 1 lesson entitled, fittingly enough "Intervals."

Here is a great exercise to help commit the sounds of intervals to memory: Grab your guitar and play a C Major chord. Then pick a familiar major scale position and play a C major scale while naming the tones using numbers (C=1, D=2, E=3, F=4, G=5, A=6, B=7). Strum the chord again. With the chord still ringing, sing the root of the chord, C, but instead of singing "C", sing "1". Then while maintaining the chord in the background, try to sing the following interval progression: 1, 2, 1, 3, 1, 4, 1, 5, 1, 6, 1, 7, 1, 8 (octave).
So you are centering your brain and pitch over the chord and singing each interval present in the major scale after the root. Now silence the chord and try to sing the interval progression again. When you're done with the progression, play the C major chord again and see how far (if at all) you have strayed from the reference pitch.

Next, do the same exercise using an Am chord and an A minor scale. It is probably review for you, but here are some chord and scale positions for you to use as you do this exercise:
Once you are comfortable with C Major and A minor, try different keys, one right after the other. You will find that it is initially quite difficult to reset your tonal center so you can accurately identify intervals within each new key.

After awhile, you will notice that, as you are listening to songs, you will start identifying intervals out of habit. You might be able to hear that the first two notes of a guitar melody moves from the root to the 4th. Or, you might hear the melody go to the Major 3rd of the key giving you a tip off as to which chords are being played.

Because every song is really just a bunch of intervals, training your ear to hear them is a huge step in being able to regularly and painlessly figure out songs.

**Tip 3: Start with the Bass Line**

If you’re in the beginning stages of figuring things out by ear, it can be quite daunting to start with chords - especially in our modern musical world where some song arrangements can be stupidly complex. Even if you are a seasoned musician with years of experience, starting with the bass line can drop a great deal of clues as to which chords are played or what the riff might be doing.

When I’m starting to figure out the rhythm guitar to a song, the first thing I do is work to figure out the basic bass line. If there is no bass, I just start by figuring out the lowest note of each chord. I will figure out bass notes for a whole chord progression before I start trying to play any chords because I want to have a good understanding of how the progression flows. I will press play on the song, hum the bass line, and then translate it to the guitar. It’s easy to see how hearing and connecting intervals is the key to figuring out songs.

Once you have figured out a general bass line, go to the top of the chord and see if you can figure out the highest note. Don’t worry about playing the bass note and the highest note at the same time right off. Get the high note line down and then work to combine them. At this point, you will start drawing from patterns and positions to make sense of the chord motion with respect to how the bass notes are moving in conjunction with the high notes. This is the right point to start conforming to known patterns and positions.

After you have gone through these processes for a while, you will find that, with more and more songs, you’ll be able to simply sit down and play along. Don’t get too confident, and you always be able to utilize this ‘troubleshooting' method to figuring out an unrecognizable chord.
Tip 4: Learn and Memorize the Chemistry of Basic Chord Positions

This tip will help you with figuring out all the middle notes in the chords. Stack this (big) tip on top of the other two in this article and you'll find your self able to hear the unique qualities, for example of a D chord or an Am7 chord without having to pick up your guitar. When we look at the 'chemistry' of the chord, we're looking at the order/placement of intervals within the chord, the function of that chord within the song and the sound of the chord against the bass. Let's break this down a bit...Starting with the intervals in a regular G chord:

This is a straight, basic major chord so we know that it will contain all of, and only the notes: Root, (the "1") 3rd, and 5th. There is also an order in which these intervals appear that is unique to this chord shape. If you play this chord open, the order of intervals will be the same as if you were to capo and play it based off of the 5th fret. Or, if you barre and play only the top (high) part of the chord, you're still using the same chord form, so the order of intervals will still be familiar if you know how the formation is made up.

If you spend some time practicing Tip 1, you'll be able to hear and figure out where the roots, 3rds and 5ths are within the chord. Here is the interval makeup for the above G chord (first string through 6th string):

1: fret 3 - root - G
2: open - 3rd - B
3: open - root - G
4: open - 5th - D
5: fret 2 - 3rd - B
6: fret 3 - root – G

Because the tones appear in this specific order within this chord formation, the chord carries a distinct tonality or signature. As your ear gets more and more trained, if you memorize the order of intervals within your basic chord forms, you'll spot them as you're hearing them. If you hear a chord where the root is the highest and lowest note and your 3rd just above the root on the lower end of the chord, you'll have a pretty good guess that the song contains a G form chord —even if it's not a G chord. It might be... but it also might just be in G form. Many people get hung up on songs that are tuned a half step down, or capo'd. If it's tuned a half step down, you'd be playing an F# Major chord in basic G form. If you know the interval makeup, you might get a dead give-a-way that the song
you're trying to figure out is in an alternate tuning.

Let's look at a few more chords and determine their interval makeup:

**Am**

1: open - 5th - E  
2: fret 1 - minor 3rd - C  
3: fret 2 - root - A  
4: fret 3 - 5th - E  
5: open - root - A  
6: XX

Aside from the A minor being an altogether different chord, its form is distinct in its interval makeup from that of the G chord. Not only is it different in tonality, being a minor chord, but it has the root as the bass note followed by the 5th instead of the 3rd and has the 5th as the highest tone of the chord. So if you hear a chord with this interval makeup, it just might be an A minor chord form.

Let's take a look at a few more.

**C/E**

1: open - 3rd - E  
2: fret 1 - root - C  
3: open - 5th - G  
4: fret 2 - 3rd - E  
5: fret 3 - root - C  
6: open - 3rd - E

**B**

1: fret 2 - 5th - F#  
2: fret 4 - 3rd - D#  
3: fret 4 - root - B  
4: fret 4 - 5th - F#  
5: fret 2 - root - B  
6: XX

**Dm7**

1: fret 1 - minor 3rd - F  
2: fret 1 - minor 7th - C  
3: fret 2 - 5th - A  
4: open - root - D  
5: XX  
6: XX

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There are a number of points of discussion concerning the above examples. The C/E chord can hide from you when you’re trying to pick it out of a song. Chords like this illustrate the importance of starting with your bass note (or bass line within a progression) and then working through familiar chords by reducing them to their interval makeup. To the untrained ear and buried deep in a song arrangement, it may be very easy to mistake the C/E for some type of E chord.

Look closely at the B chord and compare it with the Am example. Notice that the intervals are identical (other than the minor/major 3rd difference). Raising the 3rd on the A minor chord creates an open position A Major Chord. If you take that A chord and barre it up 2 frets, you have the B chord which can be looked at as an A form B chord. Moveable chord forms like this are covered in greater detail using the "CAGED" system. If you are not familiar or even want to dive a little deeper in to this system, look up Nick Kellie’s phase 2 lesson series. If you haven’t already, start to look at your basic chords C, A, G, E, and D as "forms" and, with the unique interval makeup of each, determine what is being played within the progression.

The Dm7 chord throws another tone in the mix and poses an interesting issue worth examining -- bringing us into how a chord can interact with a moving bass part. If you examine the notes played on strings 1, 2 and 3, you will notice that notes F, A, and C are being played. These notes by themselves make up an F Major chord. It is not uncommon for the bass note to change while the guitar chord stays fundamentally the same. One could write a catchy chord progression by playing the top half of this chord and just going back and forth between an F note on the first fret of the 6th string and the Dm7 listed above. **Watch out for these traps** and, as your learning, stick to the discipline of applying these tips, and you might save yourself some time and headache.

It is also important, when figuring out a progression, to look at what role each chord is playing in the song. If you haven’t already, take some time to read the "Nashville Number System" article in the Guides section. This article takes a detailed look at working with chords in a specific key and assigns numbers to each chord to define their role within a progression or song. The gist of that system with regards to learning songs by ear is this:

Determine what key the song or progression is in by figuring out where the progression seems to 'land' (it is also usually the first and last chord of the song as well). Then play the corresponding Major scale while naming the notes, and the numbers assigned to each of those notes (as covered in Tip 1). Next, you'll think of each note in the Major scale as being the root of a chord built off of that scale degree. For example, a C note is the 4th note in a G Major scale, so a C chord would be considered the 4 chord in the key of G. If the song stays true to a Major scale formula, your 1, 4 and 5
chords are going to be Major and your 2, 3 and 6 chords are minor. So if you know the key and you know what chords you have available to you within that key, it will help you **narrow down the possibilities** when making a guess at a chord. If you hear a minor chord in a song that is in the key of G, it's root is an A, B, or an E because those are the roots of chords 2, 3 and 6. Make sense? There are always exceptions, but that's where you'd rely more heavily on other aspects of the chemistry of the chord in question.

Here are some popular Major chord progressions to commit to memory so you can spot them a mile away when listening to music:

- 1 - 4 - 6 - 5
- 1 - 2 - 4 - 5
- 6 - 4 - 5 - 1
- 2 - 5 - 1 - 6
- 1 - 6 - 4 – 5

I have prepared **5 chords as audio samples** for you to start applying the tips in this lesson (included in the digital download). Listen to each chord, try to hum the lowest note and the highest note, then play each note on the guitar. After you've done this, try to fill in the rest of the notes using known positions and reducing the chord to a series of intervals.

I have also created 2 chord progressions with simple single note embellishments for you to try and figure out. These are just guitar and click track so you won't have to worry about trying to hear through other instruments.

After you've worked these out, move on to picking your first couple songs. Remember to start simple, have fun, and resist the urge to go out and find internet 'help'.

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