



HD Chords by Eye and Ear

by [Marcy Prochaska](#)

Understanding chords on the HD begins with the major scale -- the kind of scale that Julie Andrews teaches in *The Sound of Music* with the song “Do-Re-Mi.” On this instrument, the major scale has a box shape, with four notes on one side of the box and four on the other. Each corner of the box is a marked course. To play a scale, start at the lower right mark, play four notes going up to the next mark, then cross to the lower left mark and play four more notes going up. If you start a scale on the bass bridge, you can play the same scale an octave higher by starting a new box shape on the treble bridge, beginning with the last note of the first scale.

There are seven chords belonging to any major scale, one for each note of the scale (the eighth is the same as the first, just an octave higher). To hear and see the first chord, play the first, third, and fifth notes of the scale. This pattern is called a triad, and we can generalize the 1-3-5 relationship to other chords. For example, the second chord begins on the second scale note and follows the same 1-3-5 pattern; i.e., the first, third, and fifth notes of the chord are the second, fourth, and sixth notes of the scale. In the same way, the first, third, and fifth notes of the third chord are the third, fifth, and seventh notes of the scale. We use scale note numbers to talk about where to start building a chord. We use chord note numbers to talk about how the chord is built from that starting place.

It’s good practice to play all of the triads on your dulcimer. Start with the lowest major scale on the bass bridge, and play a triad for each scale note. Do the same thing on the higher octave scale on the treble bridge. At the upper end of the dulcimer you’ll run out of room vertically. For the last complete scale that starts on the bass bridge, you can play those last triads by using the treble bridge duplicates of the missing notes. But for the last complete scale that starts on the treble bridge, there’s just no more room. Now go down to the lowest scale box on the treble bridge and play those triads. This is a good way to warm up in practice, and it’s also a good way to get familiar with a lot of chords.

The next step is to start learning in depth about one chord. The triad form is only one way to play a chord. As long as you use the same three notes -- in any order, in any octave -- you’re playing the same chord. Find a place where you have two octaves of a scale. Play the first chord. Now play the last scale note. Because it’s the same as the first scale note, it’s one of the chord notes -- just an octave higher. Add the third and fifth and eighth notes of the higher octave scale, and you have a very long (seven notes!) chord built from different octaves of the same three notes. Play up and down this pattern several times. Now explore further: where else on the instrument are these three notes? Look for different three-note patterns: 1-3-5, 3-5-1, 5-1-3, in different octaves. Look for different four-note patterns. (Don't forget your duplicate notes!) Do this exploration as a warm up for several days’ practices, until you

don't have to hunt for the notes you're looking for, but you start to see the shapes of the different patterns and hear how all of the patterns are the same chord.

Once you've done this exploration with one chord, do it with another chord. In a lot of tunes, the most common chords are the ones built on the first, fourth, and fifth scale notes. We call these the I, IV, and V chords (using Roman numerals to distinguish these numbers from scale note or chord note numbers). So once you've learned the I chord of a scale, it makes sense to learn the IV and V chords next. Then, explore the I, IV, and V chords of another scale. You'll see that the patterns have the same shapes, just different locations. Now it's time to tackle the other chords.

Consider one major scale. The I, IV, and V chords are bright and happy. They are major chords. In the triad form, they all start on a marked course. Chords in the triad form that start on unmarked courses are sad and haunting. Three of them are minor chords, and the other -- the one built on the seventh chord note -- is diminished. Diminished chords rarely appear in folk music, so chances are you can safely ignore their existence*. If you explore the three minor chords, ii, iii, and vi (lowercase for minor), you'll find they have some of the same patterns as the major chords, but some differences. Now you've learned all six chords for one scale. Try another scale... and another!

You can start applying chords to your music at almost any point in this process of exploration. One way is to add chord notes to a melody to create a solo arrangement. Here are some possibilities:

1. Two-note "chords" -- play a chord note at the same time as a melody note.
2. Filler notes -- play one or more chord notes in between melody notes.
3. Chord rolls -- play three or more chord notes very quickly, ending on a melody note.
4. Separated hands -- play chord patterns with your right hand while playing melody with your left.

How do you know what chord to play? Some sheet music indicates chords for you. For example, "D" is a major chord; in triad form, it starts with a D on a marked course. "Em" is a minor chord; in triad form, it starts with an E on an unmarked course. If you're working by ear, you can find chords by trial and error -- easier than it sounds because of the patterns you've been exploring. Just guess one of the patterns that contains the melody note you're working with -- start with major patterns if it's a happy tune. If it doesn't sound good, try another. Occasionally you'll find that the chord you like best doesn't actually contain the melody note -- that's okay. Let your ear be your guide.

If you can identify what key you're in, you can list the six chords that are your most likely choices throughout the tune. Sheet music indicates the key with a key signature -- a series of sharps or flats at the beginning of the tune. Three sharps is A major, two is D, one is G, none is C, and one flat is F. Each key signature can also represent modes related to the major key. For example, two sharps, the key of D major, can also represent E dorian, A mixolydian, or B minor modes. All three of these modes, however, will have the same set of six chords to choose from as A major. Sometimes you may get tripped up because the music may indicate a modal key signature differently. For example, a piece in E dorian may show only one sharp, but if you look through the music you'll find that all the Cs have been sharped. Your ear will also help you correct yourself if this happens.

At jam sessions or in other group playing situations, you may want to play back-up while others play the melody. The most important thing is to develop chord patterns that fit the rhythm of the tune. For reels, I like to mimic a guitarist's "boom-chuck" style. I play one chord note on the bass bridge with my right hand on the first and third beats, and two chord notes on the right treble on the second and fourth beats. For waltzes, I often play a four-note arpeggio: up four notes and back down, 1, 3, 5, 8, 5, 3. Try these, but also try your own patterns.

*If you're wondering why the same 1-3-5 triad form can have such different sounds, it has to do with the length of the intervals between the notes. Major chords have a longer interval between the 1 and 3 and a

shorter one between 3 and 5, minors have a short one then a long one, and diminished chords have two short intervals. On a piano keyboard, look at C, E, and G, a C major chord. There are more keys between C and E than between E and G. C minor has an Eb -- that means fewer keys between C and Eb than between Eb and G. C diminished has Eb and Gb -- same number of keys.