

# Chapter 15

## How Chords are Constructed

### Chord

A chord is three or more notes sounded at the same time. Chords are the building blocks for the harmonic design of music. Each chord has its own distinctive sound and structure. In this chapter we will define and explore the most common chords.

### Triad

The music theory term for chord is *triad*. A triad is a chord of three notes. There are four basic triads. They are called *major*, *minor*, *diminished* and *augmented*. Each kind of triad has a distinctive sound that comes from the individual structure of the triad itself.

### Interval Structure of Triads

Triads are built using *minor* and *major thirds*. These two kinds of thirds are combined in various ways to create the vast harmonic palette of our musical language.

### Minor Third

A minor third is defined as a whole step + a half-step. It is abbreviated using a lower case "m" followed by a 3:

m3 = minor third

For example, the interval formed by the notes A + C is a minor third. In the previous section on how scales are built, we learned that the interval from A → B is a whole step, and the interval from B → C is a half-step.

When the notes A and C are played together they sound a minor third:

Whole and 1/2 step intervals → 1 + 1/2 = m3



By playing and looking at the scale notes of A, B and C in the example above, you can begin to decipher the character of the minor third interval, with its internal interval structure of a whole step + 1/2 step.

As long as the *harmonic* interval between the two notes is a minor 3rd, it does not matter what the *sequence* is of the whole and 1/2 step sequence *within* the minor 3rd.

## Major Third

A major third is defined as a whole step + a whole step. It is abbreviated using an upper case "M" followed by a 3:

M3 = Major third

The interval of the notes A + C# is a Major third.

When the notes A and C# are played together they sound a Major third:

Whole step intervals → 1 + 1 = M3



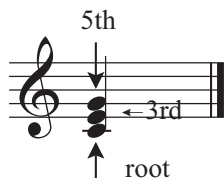
Play and listen to the notes above. By playing and looking at the scale notes of A, B and C#, you can learn to recognize the sound quality of the Major third interval.

## Major Chords

A major chord is a triad that is built as follows:

Major 3rd (M3) + minor 3rd (m3)

For example, a major triad built on the note C, consists of the notes C, E and G:



The lowest note C is called the *root*. The middle note E is called the *3rd*. The note G is called the *5th* of the triad.

Major 3rd + minor 3rd = C major triad

Whole and 1/2 step intervals →

A musical staff in treble clef showing the C major scale: C, D, E, F, G, A, B, C. Brackets above the scale indicate intervals: a whole step (1) between C and D, a whole step (1) between D and E, a half step (1/2) between E and F, and a whole step (1) between F and G. Below the staff, arrows point to C (root), E (3rd), and G (5th). To the right, a separate staff shows the C major triad (C, E, G) with arrows pointing to C (root), E (3rd), and G (5th).

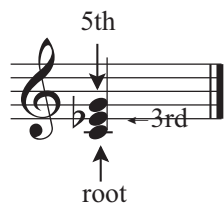
The root, 3rd and 5th are all notes of the C major scale, numbered by their position in the scale, starting with the note C.

## Minor Chords

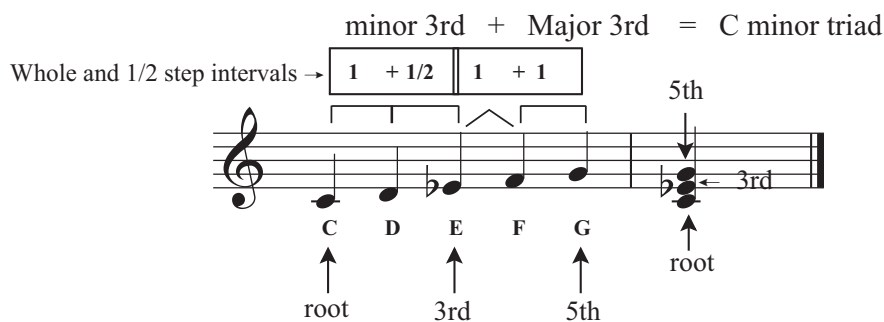
A minor chord is a triad that is built as follows:

$$\text{minor 3rd (m3) + Major 3rd (M3)}$$

For example, a minor triad built on the note C, consists of the notes C, Eb and G:



The lowest note C is called the root. The middle note Eb is called the 3rd. The note G is called the 5th of the triad.



The root, 3rd and 5th are all notes of the C minor scale, numbered by their position in the scale starting with the note C.

The major and minor triads comprise the vast majority of chords in the music we play. We have seen that their structure is:

$$\text{Major triad} = \text{M3} + \text{m3}$$

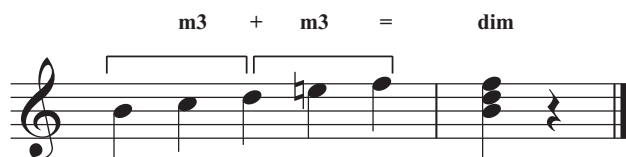
$$\text{minor triad} = \text{m3} + \text{M3}$$

## Diminished and Augmented Chords

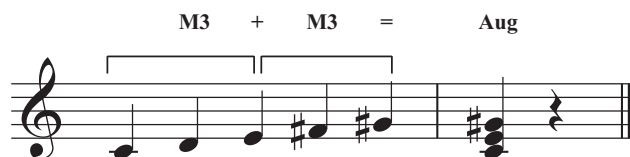
There are only two other possible triadic structures. They are as follows:

$$\text{diminished triad} = \text{m3} + \text{m3} \quad (\text{abbr: } \textit{dim.})$$

$$\text{Augmented triad} = \text{M3} + \text{M3} \quad (\text{abbr: } \textit{Aug.})$$



Illustrated above is a B diminished triad.



Illustrated above is a C augmented triad.