Major Thirds Tuning

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Why Thirds?

Advantages:

- Learning the locations of notes is easy because the open strings are tuned to only three distinct pitches (E, A♭, and C).
- Any four fret span contains a complete chromatic scale. As a result, any scale can be played in any position, starting on any finger. No stretches or shifts are needed, even when modulating. This does not mean that shifts are completely eliminated, but that position changes can be made based on musical rather than technical reasons.
- Because of the symmetrical nature of the tuning, you never have to learn additional fingerings for different string sets. For example, in standard tuning, there are 3 different fingerings for a closed major triad. In major thirds tuning there is only one fingering.
- Inverting chords in thirds tuning is a simple process. To move a note an octave higher, just play the same fret three strings higher.
- The smaller interval of the major third makes playing closed voicings of 4-note chords possible. This is what originally drew me to the tuning. Tightly packed voicings that piano players often play are impossible on a standard tuned guitar. In major thirds tuning, all closed inversions of seventh chords are possible, as well as clusters and cross string scales. Open voicings remain very playable as well.
- Larger chords are possible in thirds tuning without leaving notes out. There are a much larger variety of 5 and 6 note chords possible in major thirds tuning.
- Both sight-reading and improvisation are easier in major thirds tuning because the location of notes is more logical. It is, in my opinion, more logical than the piano in many ways, because of the absence of black keys. There are no “hard” keys to play in. Everything is equal.
- If you already play guitar in standard tuning, major thirds tuning forces you to abandon licks and patterns that you may rely on too heavily and think more musically.
- Symmetrical scales and tonalities, such as whole-tone, augmented, and diminished are much easier. This can lead to fresh ideas that are rarely heard on a standard tuned guitar.

Disadvantages:

- No more “cowboy chords.” Conventional open chord shapes from standard tuning are no longer possible. Some simpler styles of music may be more difficult.
- There is a reduced range when using six strings. I have remedied this by playing a seven string guitar.
- Some guitar music which makes heavy use of open strings will be more difficult in major thirds tuning.
A Brief History of the Tuning

Major thirds tuning was developed by Ralph Patt in the 1960s. Patt was influenced by the free jazz improvisations of Ornette Coleman and the atonal classical compositions of Arnold Schoenberg. Though chromatic and atonal music inspired him to originally pursue the tuning, he eventually found it to be more useful than standard tuning for commercial music as well.

Tuning Up

Though major thirds tuning can be used on a standard 6-string guitars, the smaller interval will decrease the overall range by 4 semi-tones. This can be overcome by using a 7-string guitar.¹ You will probably want to get a custom set of strings and a set-up. I use the following gauges, but feel free to experiment based on your own preference. You can calculate string tension here. http://www.mcdonaldstrings.com/stringxxiii.html stringsbymail.com is a great place to order individual strings.

1 - E .011
2 - C .014
3 - A b .018
4 - E .022
5 - C .030
6 - A b .038
7 - E .048

I use seven string guitar diagrams for all the examples in this book, however, most examples will still work on a six string guitar. If you are using a six string, just ignore the 1st string of the diagrams.

¹ Ralph Patt eventually transitioned to an 8-string that added a high A b
Scales

In major thirds tuning, any scale can be played in any four fret position. There are four fingerings for any diatonic scale, one starting on each left hand finger. I have used the major scale as an example, but the same principles apply to other scales (harmonic minor, melodic minor, etc.) as well.

Here are the four fingerings for the major scale.

Starting on 1st finger

Starting on 2nd finger

Starting on 3rd finger

Starting on 4th finger

See the appendix for the fingerings of the other parent scales.

2 See the appendix for the fingerings of the other parent scales.
When extending a scale a second octave, the fingering repeats itself three strings higher.

A fingering can also be repeated diagonally four frets higher to create 3-octave scales.

One of the best features of major thirds tuning is the ability to modulate without changing positions. Improvisors can follow complex chord changes without worrying about how they will transition from one scale to the next.

The following page demonstrates two great ways to practice scales in all 12 keys: chromatically, and counter-clockwise through the circle of fifths. Notice that in both exercises, the same fingerings repeat after every four keys.
Chromatically

Counter-clockwise through the Circle of Fifths
Triads

Beginning guitarists rarely learn chords in a systematic way. Many guitarists think of chords as shapes or “grips” rather than a collection of notes or intervals. This often results in deficiencies in guitarists' knowledge, technique, and creativity.

Thirds tuning makes learning chord construction very simple. Because of the symmetrical nature of the tuning, it is much easier to learn chords based on their intervallic construction. The most common harmonies are built upon major and minor thirds. In thirds tuning, a major third higher can be found on the same fret as any given note on the next highest string. A note a minor third higher can be found one fret lower on the next highest string. The diagram to the right shows a closed root position C major triad (M3+m3).

This is the only shape for a closed root position major triad. It can be moved both horizontally and vertically. In standard tuning, you would have to learn 3 different shapes. Finding inversions is also a very simple process in thirds tuning. To invert the triad, simply move the lowest note of the chord up an octave by playing the same fret 3 strings higher. The diagram below shows all inversions of a closed C major triad.

Converting these closed voicings to open voicings is just as easy. Just move the middle note up an octave by playing it on the same fret 3 strings higher. While the closed voicings are played on 3 adjacent strings, open voicings skip a string between each note. This is similar intuitive to the way open and closed voicings appear on the keyboard. The notes of closed triads are closer together, the notes of open triads are further apart.
You may also notice the similarity between the shapes of the open and closed voicings. Open and closed voicings with the same note in the highest voice have the same shape, except the open voicings skip a string between each note.
The same process can be followed to derive minor triads (m3+M3).
Diminished Triads (m3+m3) span the largest amount of frets at 3, but the fingerings are still easy.
The open strings in major thirds tuning naturally form an augmented triad (M3+M3). Therefore, all notes of any inversion or voicing will be on the same fret.
Triad Progressions

This chapter demonstrates just a couple of progressions to practice using both open and closed voicings. Using good voice-leading in progressions is easy in thirds tuning.

The following diagram contains a I IV V I (key of C) in every inversion, first using closed voicings, then using open voicings.

The following exercise is a circle progression in the key of C, first using closed, then open voicings. I have voiced both progressions so that they share the note in the highest voice.

3 A progression moving in ascending diatonic fourths. (I, IV, vii, iii, vi, ii, V, I)
Seventh Chords

Closed voicings of chords with four or more notes is a very familiar sound in jazz. While these types of chords are easily played on the piano, they are close to impossible to play in standard tuning on guitar. Traditionally, jazz guitarists solve this problem by lowering one or more notes by an octave. While these types of voicings are still possible in thirds tuning, and easy to derive, closed voicings of nearly all 4 note chords are now possible. Inverting 4-note chords is a slightly more complicated process than for triads. Since the third string up from the lowest strings is occupied, the bottom note must be moved 4 frets lower on the next highest string. The following diagram shows all closed-voiced inversions of the most common seventh chords.
Converting these closed voicings to various open voicings is as simple as dropping one or more notes down 3 strings.

Some of these voicings can be re-fingered to avoid excessive string skipping.
Seventh Chord Progressions

The following example demonstrates how these seventh chord shapes may be applied to the first 8 bars of a well-known jazz standard.
Symmetrical Scales

The fingerings for symmetrical scales are very intuitive in major thirds tuning. Here are the fingerings for the most common types.

Whole Tone Scale

Diminished Scale (whole-half)

Diminished Scale (half-whole)

Augmented Scale

Tritone Scale
Natural Harmonics

The harmonics of the open strings create an augmented triads. The 5th and 12th fret harmonics form an E augmented triad and the harmonics on the 7th fret create a B harmonic triad. Because any note of an augmented triad can be considered the root, these two triads can be thought of as a half-step apart (E augmented and D# augmented). When alternating between harmonics of the 5th and 7th frets, an augmented scale is created.
Appendix

Ascending Melodic Minor

Starting on 1st finger

Starting on 2nd finger

Starting on 3rd finger

Starting on 4th finger
Harmonic Minor

Starting on 1st finger

Starting on 2nd finger

Starting on 3rd finger

Starting on 4th finger
Harmonic Major

Starting on 1st finger

Starting on 2nd finger

Starting on 3rd finger

Starting on 4th finger
Other Resources

Ralph Patt's Jazz Web Page
Wikipedia - “Major Thirds Tuning”
Wikipedia - “Ralph Patt”
Kiefer Wolfowitz - “Chord Diagrams for M3 Tuning”
William Sethares - “Alternate Tuning Guide”
Jakub Marian - “Major Third Guitar Tuning”
Alexandre Oberlin - "Tuning your guitar in major thirds: Tune afresh and improvise!"
Andreas Griewank - “Tuning guitars and reading music in major thirds.”
Jazz Guitar Online - “Major Thirds Tuning” thread
Keith Bromley - “Chord Shapes for Major-Thirds (M3) Tuning on a 7-String Guitar.”
Rudi Seitz - “M3 Tuning For Guitar: A First Look.”