Pitch Equivalent Fingerings of the C Minor Open Triads

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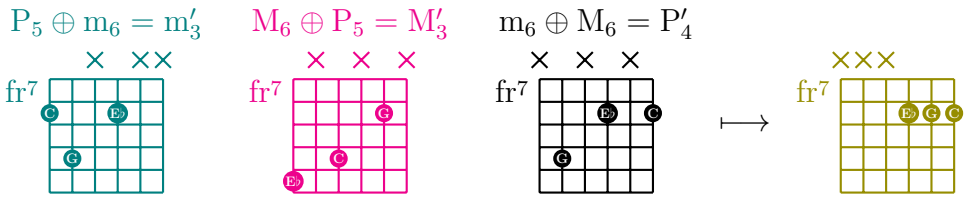
Remarks

The following is a 5×4 table of some commonly used voicings of the C minor open triads[1] on a 21 fret guitar. Let $X(i, j)$ be the chord in row i and column j, so that, for example, the top left and bottom right chords of the table will be denoted $X(1, 1)$ and $X(5, 4)$ respectively. Notice that:

1. Chords on a given row fall in roughly the same range of frets.
2. Each row contains a root, first inversion and second inversion triad of the open C minor. The fourth chord is an upward pitch translation by one octave of the first chord. Thus, for example, $X(3, 4)$ is one octave higher than $X(3, 1)$ and of the same inversion.
3. Chord pitch is constant on fingerings of the same color (located on the diagonals of positive slope). Since there are 8 diagonals in the table, there are exactly 8 chord pitches. It is natural to refer to fingerings of the same color as being *pitch equivalent.* or belonging to the same *pitch class.* Clearly, all fingerings in a given pitch class will have the same inversion.
4. The highest notes in each of the first three chords of a given row, together, form an inversion of one of the three C minor closed triads located on the first three strings. For example, here are the first three open chords in row two, followed by the corresponding C minor closed inversion on the first three strings:



   Different rows of the table generate different C minor closed triads in this manner. Conversely, each C minor closed triad on the first three strings generates a unique triple of open C minor open triads whose highest notes comprise the closed triad. Thus there is a one-to-one correspondence between C minor closed triads on the first three strings and the triples of C minor open triads. Knowledge of this correspondence facilitates memorization of the open triads.
5. Since there are only three odd permutations of three notes, the chords in row $i+3$ will be an octave higher than in row i and of the same inversion.
6. The fingerings of minor triads in other keys can now be obtained by a pitch translation of the entire table.

[1] Please refer to the article Guitar Chord Sequences Totally Ordered by Pitch for terminology.

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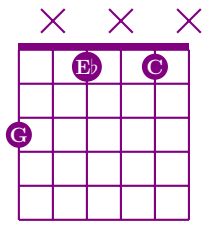
$m_6 \oplus M_6 = P'_4$



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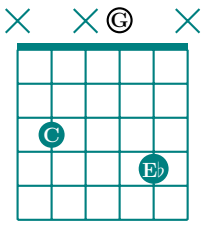

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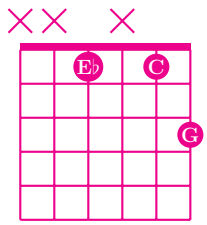

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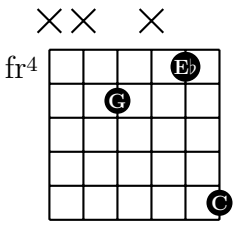

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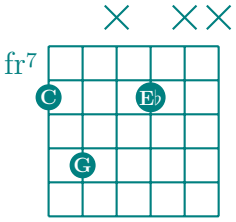

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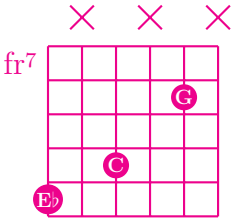

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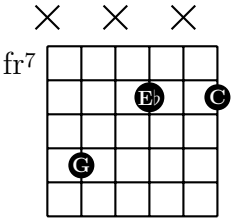

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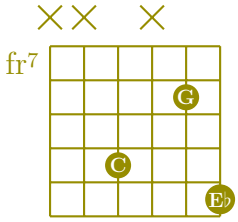

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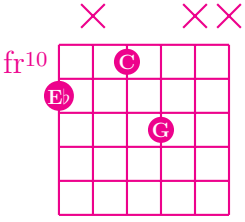

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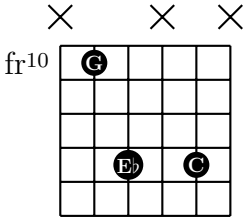

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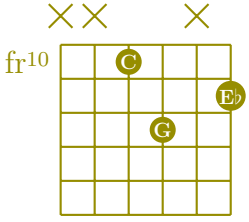

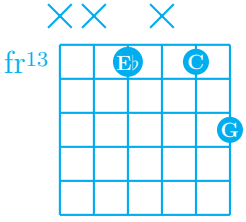

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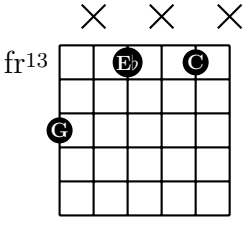

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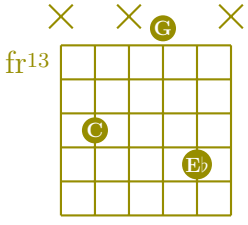

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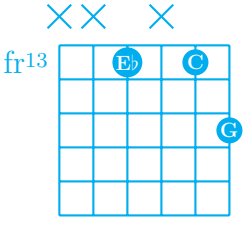

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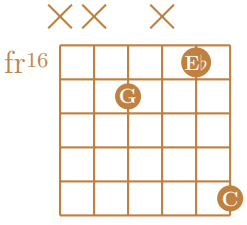

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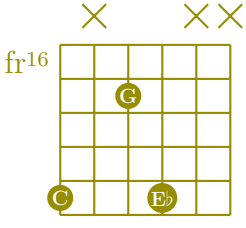

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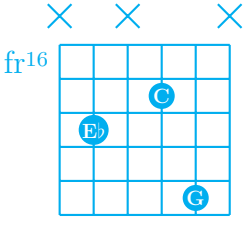

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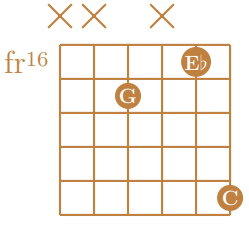

Some Suggestions for Practice

The chords can be practiced

1. One row at a time (so as to remain within a given fret range). Before and after each row, the closed chord determined by the highest notes of the three open chords can also be played.

2. One column at a time.

3. All chords of a given color.

4. In order of pitch increasing and pitch decreasing. This can be done by playing along all paths of length 6 connecting $X(5,3)$ to $X(1,1)$. Notice that these paths contain every color exactly once.

5. Interleaved with musically related chords.

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