

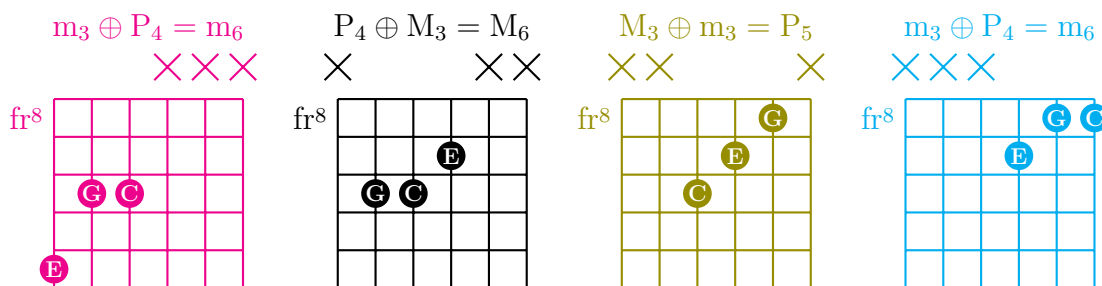
Pitch Equivalent Guitar Fingerings of the C Major Closed Triads

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Remarks

The following is a 5×4 table of some commonly used voicings of the C closed triads¹ 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 closed C. 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/permutation.
3. **Chord pitch** is constant on fingerings of the same color (located on the diagonals of positive slope). Since there are 7 diagonals in the table, there are exactly 7 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. In a given row, each chord follows from the preceeding by raising the base note by one octave. For exaample:



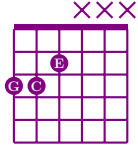
5. Since there are only three even permutations of three notes, the chords in row $i + 3$ will be an octave higher than in row i and of the same inversion.
6. The fingerings of major chords in other keys can now be obtained by a pitch translation of the entire table.

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

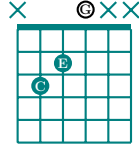
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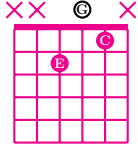
$$P_4 \oplus M_3 = M_6$$



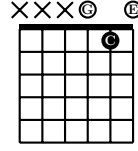
$$M_3 \oplus m_3 = P_5$$



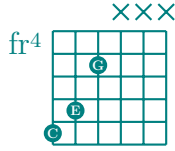
$$m_3 \oplus P_4 = m_6$$



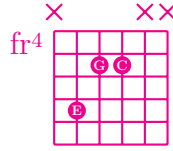
$$P_4 \oplus M_3 = M_6$$



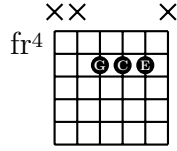
$$M_3 \oplus m_3 = P_5$$



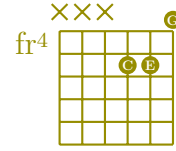
$$m_3 \oplus P_4 = m_6$$



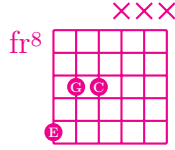
$$P_4 \oplus M_3 = M_6$$



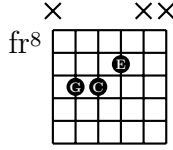
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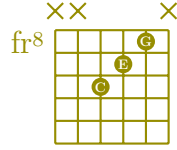
$$m_3 \oplus P_4 = m_6$$



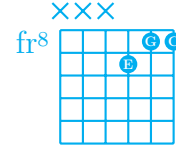
$$P_4 \oplus M_3 = M_6$$



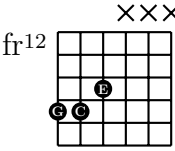
$$M_3 \oplus m_3 = P_5$$



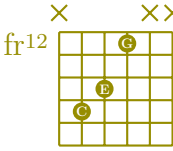
$$m_3 \oplus P_4 = m_6$$



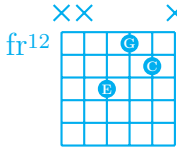
$$P_4 \oplus M_3 = M_6$$



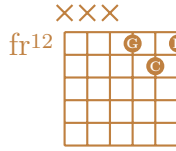
$$M_3 \oplus m_3 = P_5$$



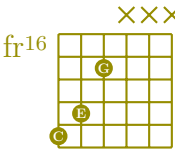
$$m_3 \oplus P_4 = m_6$$



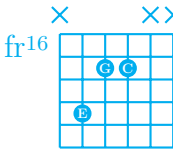
$$P_4 \oplus M_3 = M_6$$



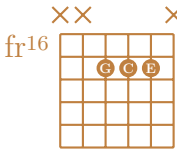
$$M_3 \oplus m_3 = P_5$$



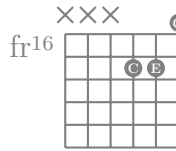
$$m_3 \oplus P_4 = m_6$$



$$P_4 \oplus M_3 = M_6$$



$$M_3 \oplus m_3 = P_5$$



Some Suggestions for Practice

The chords can be practiced

1. One row at a time (so as to remain within a given fret range).
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 7 connecting $X(5, 4)$ to $X(1, 1)$. Notice that these paths contain every color exactly once.
5. Interleaved with musically related chords.