

SHREDDING COLTRANE CHANGES WITH THE BASIC PENTATONIC SCALE

Learn an easy way to solo over the most challenging chord progression in jazz

by Dr. Ronald S. Lemos

“Lose 30 pounds in five days without dieting!”

“Develop a six-pack stomach in one week without exercising!”

“Eliminate wrinkles without surgery!”

“Make over \$10 million in real estate with no previous experience!”

“Solo over Coltrane changes using only the basic pentatonic scale!”

Believe it or not, one of the above statements is actually true. Using only the basic pentatonic scale, you can solo over the changes in “Giant Steps” (Coltrane, J. (1959). On *Giant Steps* [CD]. ATLANTIC / WEA, 1998) at close to the maximum speed that you are able to play

In his book, *Giant Steps: An In-Depth Study of John Coltrane’s Classic* (Warner Bros. Publications, 1997), jazz guitar legend Joe Diorio states, “John Coltrane’s composition ‘Giant Steps’ is without a doubt the most challenging jazz chord progression of the late 20th Century.”

Soloing over the chord changes to this tune continues to be the Holy Grail for jazz musicians, including guitarists. Entire books have been written about improvising over these chord changes. Soloing over this chord progression is also the topic of countless magazine articles and chapters in jazz method books.

In his article, “Conquering Giant Steps” (*Guitar Player*, September 2005, pp. 92-99) Corey Christiansen wrote an excellent article on developing a soloing approach to these changes. The article contains examples of a wide variety of practical soloing approaches including arpeggios, digital patterns, chromatic notes, and motifs.

In the June 2007 issue of *Guitar Player* (“Coltrane-Style II-V-Is”), Christiansen follows up his previous article by demonstrating II-V-I guitar lines that can be played over this challenging chord progression.

COLTRANE CHANGES MADE EASY!

How about skipping all the theory, memorized licks, and woodshedding? How would you like to solo today over the arguably most famous John Coltrane composition?

In this article, I will demonstrate a “cheating” way to solo over these chord changes. With this approach you can solo over the entire song using only one pentatonic scale shape. Even better, it is the easiest of all the pentatonic scales since it is the first one you ever learned—the basic Minor Pentatonic Scale (see Ex. 1).

By focusing only on the basic pentatonic scale shape in Ex. 1, you are able to solo over the Coltrane changes in this song at close to your maximum soloing speed.

Ex. 2 shows: (1) the chord progression, (2) example rhythm chord voicings, and (3) boxed text over the chord symbols representing the specific Minor Pentatonic Scale we will use, along with the fret position.

Ex. 3 shows a simple 4-note repeating pattern, on strings 3 and 4, that we will use to practice the feel of jumping around the fretboard. Several technique approaches should be tried with this pattern. These include:

- Strict alternate picking: down/up/down/up
- Sweep picking: down/up/up/down
- Two note slurring: down/pull-off/down/pull-off
- Four note slurring: down/pull-off/hammer-on/pull-off
- Any other technique of your choice

Practice the pattern in Ex. 3 using the technique that feels most comfortable to you and allows you cleanly play as fast as you can.

Ex. 4 demonstrates how the pattern in Ex. 3 can be used over the chord changes to this tune. Notice that the only thing that changes is where you play the pattern on the fretboard.

Once you get comfortable with this exercise, try using other 4-note patterns on different string sets. For example, try playing the same pattern in Ex. 3 on strings 4/5. Next, try playing over the chord changes with any four-note repeating pattern on strings 1/2, then 2/3, and even 5/6.

READY, SET, SOLO!

Believe it or not, you are now ready to learn your first pentatonic solo over the chord changes to this famous John Coltrane composition.

Ex. 5 is an example guitar solo demonstrating the pentatonic approach to improvising over these chord changes. Practice slowly. It is very important to focus on playing cleanly. Start with a metronome speed of 100 bps (even slower is fine). Try to work up to a speed of around 200 bps. Notice that each of the 16 measures demonstrates different 4-note pentatonic patterns that you can practice individually. The goal is to gain facility with playing four and eight note pentatonic patterns while skipping around the fretboard.

MAKE IT MUSICAL

In practicing Ex.5, and in developing your own solos, it is very important that the individual pentatonic patterns connect with each other as much as possible. This is extremely important so that your soloing sounds as melodic as possible—as opposed to sounding like a bunch of unrelated licks thrown together. For example, look at the transition between Measures 2 and 3. Measure 2 ends with an Eb note (fourth string, first fret on the F Minor Pentatonic Scale). The goal is to (1) start Measure 3 with a note that is one or two steps higher or lower than this Eb note and (2) to use a target Minor Pentatonic Scale that is close to the scale you are finishing up

on. In this case, our target is the G Minor Pentatonic Scale, which has the following notes: G Bb C D F. Notice that both the D and F notes of the target G Minor Pentatonic Scale surround the Eb note from the F Minor Pentatonic scale. This means that either of these two notes would be good choices to continue the line from Measure 2. Since I wanted to start an ascending pattern, I chose the F note to start Measure 3. However, other choices could have also been made. For example, I could have used the F note to start a descending pattern. I could have also used the D note (one step down) for a new ascending or descending pattern.

Lick based patterns are also OK. For example, look at Measures 5-6. Notice how the same 4-note pattern is used for each chord and pentatonic fret position.

Granted that with this approach you have to move all over the fretboard. However, the position changes allow you to use only one pentatonic box shape. Also, all that hand movement actually looks pretty cool and “flashy”.

A LITTLE BIT OF THEORY OR “WHY THIS SYSTEM WORKS”

This approach “works” because I have basically converted all major, minor, and dominant chords to simple minor pentatonic chord shapes. This gives us the ability to use the basic Minor Pentatonic scale for soloing over all of the chords in this progression.

For stand-alone dominant seventh (V7) chords, I simply use the minor pentatonic scale that is five steps below the dominant seventh chord. For example, the second half of Measure 2 has a Bb7 chord. Simply count down five frets and you have an F Minor Pentatonic Scale. This works harmonically for the Bb7 since playing the F Minor Pentatonic Scale over the Bb7 (V) chord gives a nice jazzing suspended 11th sound to the Bb7 chord.

For the minor seventh/dominant seventh chord combinations, I use the corresponding Minor Pentatonic Scale for both chords. For example, in Measure 4 there is an Am7-D7 (II-V) chord progression. For this standard chord sequence you have the option of ignoring the dominant seventh chord (D7) and playing the whole measure as if contained only the Am7 chord. This works harmonically since the A Minor Pentatonic Scale fits perfectly over the Am7 chord and playing the A Minor Pentatonic Scale over the D7 (V) chord gives a nice jazzing suspended 11th sound to the D7.

For major seventh chords you have two pentatonic scale choices. You can either (1) play the minor pentatonic scale three frets down from the major chord or (2) four frets up from the major chord. The first option implies a major sixth chord. The second option implies a much “jazzier” major seventh/ninth chord. The major seventh chords in Measures 1, 2, 5, 6, and 15 use option (1). The major seventh chords in Measures 3, 7, 9, 11, and 13 use option (2).

Which option is “best”? The answer is “it depends”. Both options are simply different “colors” of a major chord. For the example solo in Ex. 5 I chose the pentatonic scale option for the major chord that was closest to the following minor pentatonic scale that was being used for either the dominant chord or the minor seventh/dominant seventh chord combination.

For example, chord in the second half of Measure 1 is a D7 chord. As mentioned earlier, the minor pentatonic scale five frets down can be played over a dominant seventh chord. In this case, the Am Pentatonic Scale, at the fifth fret can be used for a D7 chord. The preceding chord is a Bmaj7. We have two Minor Pentatonic Scale choices—the G# Minor Pentatonic Scale (three steps down at the 4th fret) or the D# Minor Pentatonic Scale (four steps up at the eleventh fret). Notice that there is only a one fret distance between the G# Minor Pentatonic Scale at the 4th fret and the Am Pentatonic Scale at the 5th fret that is used for the D7 chord. If the D# Minor Pentatonic Scale is used there is a jump of 7 frets down to get to the Am Pentatonic Scale. The goal is to minimize the distance that you need to travel as you change from one pentatonic scale to another.

Similarly, in Measure 3 there is an Ebmaj7 chord for the entire measure. Once again, the scale choices are the Cm Pentatonic scale at the 8th fret or the Gm Pentatonic Scale at the 3rd fret. I chose the G Minor Pentatonic Scale since it sits right between the preceding F Minor Pentatonic Scale at the end of Measure 2 and the following A Minor Pentatonic Scale in Measure 4. If I had chosen the C Minor Pentatonic Scale for the Ebmaj7 chord in Measure 3, I would have had to jump up 7 frets from the F Minor Pentatonic Scale and then jump back down 3 frets to get to the A Minor Pentatonic Scale in Measure 4.

WHAT'S NEXT?

While this approach works, there are several ways to build upon what you have learned. The first thing to do is to use additional pentatonic scale shapes. For the basic pentatonic scale, there are five different patterns you can use. Instead of limiting yourself to only the pattern used in this article (starting on the root), learn the other four patterns (starting on the b3rd, 4th, 5th and b7th). Once you have these down, you can minimize your left-hand movement and not have to jump all over the fretboard. By staying in one area of the fretboard, it is easier to make your lines connect, since all the notes are in close proximity to each other.

The next step would be to learn about all the different pentatonic scales that can be used over any chord. This article is based on my book, "Jazz Guitar Soloing Concepts: A Pentatonic Modal Approach to Improvisation" (Hal Leonard, 2008), where I devote an entire chapter to soloing over this chord progression using different types of pentatonic scales.

You should also study the more traditional approaches to soloing over these changes such as arpeggios, guide tones, scale patterns, and licks. To develop your aural and jazz language skills, make sure that you listen and study John Coltrane's solos on this tune. Also listen to recordings by other artists. Try to copy/transcribe portions of solos from the wealth of recorded solos that are available.

If you are interested in recordings by guitarists, there are many great versions (in different styles) available on CDs including the following:

Straight Ahead:

Jimmy Bruno, *Burnin*

Mark Elf, *Mark Elf Trio*

Mike Stern, *Give And Take*
John Scofield, *Now* (John Patitucci is leader)

Jazz Bossa:

Pat Metheny, *Trio* → *Live*
Howard Roberts, *The Magic Band II*

Solo Guitar:

Joe Pass, *Virtuoso 2*
Jimmy Bruno, “Solo”

Jazz Fusion:

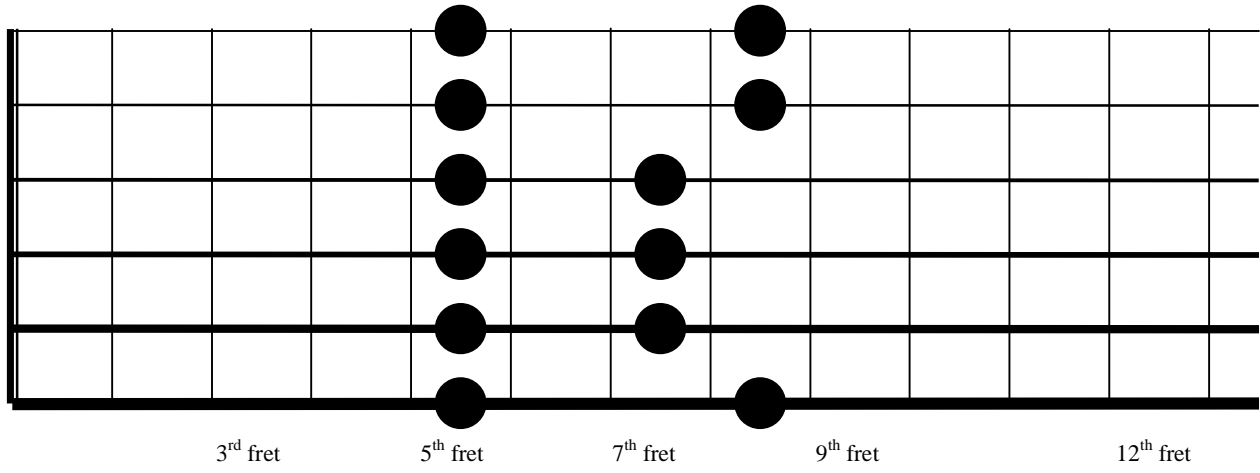
Greg Howe, *A Guitar Supreme: Giant Steps In Fusion Guitar*
Jennifer Batten, *Above Below And Beyond*
Scott Henderson, *Vital Tech Toness*

I hope that you have a lot of fun tackling this tune. Please feel free to email me (rlemos@calstatela.edu) with any questions or comments.

Dr. Ronald S. Lemos is Professor of Information Systems at California State University, Los Angeles. This article is based on concepts developed in his forthcoming book, Jazz Guitar Soloing Concepts: A Pentatonic Modal Approach to Improvisation, “Chapter 32: Coltrane Changes and Giant Steps,” (Hal Leonard, 2008).

Ex. 1

A Minor Pentatonic Scale



Chord Progression and Pentatonic Scales

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The sheet features four systems of chords, each with a corresponding musical staff. The chords are as follows:

- System 1:** G# Minor (4th fret), Am Minor (5th fret), E Minor (open pos), F Minor (1st fret), G Minor (3rd fret), A Minor (5th fret), D7 (4th fret). Diagrams: Bmaj7 (7fr), D7 (4fr), Gmaj7 (3fr), Bb7 (6fr), Ebmaj7 (5fr), Am7 (5fr), D7 (4fr).
- System 2:** E Minor (open pos), F Minor (1st fret), C Minor (8th fret), C# Minor (9th fret), D# Minor (11th fret), F Minor (1st fret), Bb7 (6th fret). Diagrams: Gmaj7 (5fr), Bb7 (6fr), Ebmaj7 (5fr), F#7 (8fr), Bmaj7 (7fr), Fm7 (6fr), Bb7 (6fr).
- System 3:** G Minor (3rd fret), A Minor (5th fret), B Minor (7th fret), C# Minor (9th fret), F#7 (8th fret). Diagrams: Ebmaj7 (5fr), Am7 (5fr), D7 (4fr), Gmaj7 (3fr), C#m7 (9fr), F#7 (8fr).
- System 4:** D# Minor (11th fret), F Minor (13th fret), C Minor (8th fret), C# Minor (9th fret), F#7 (8th fret). Diagrams: Bmaj7 (7fr), Fm7 (6fr), Bb7 (6fr), Ebmaj7 (5fr), C#m7 (9fr), F#7 (8fr).

The musical staff is in 4/4 time and contains diagonal lines representing a pentatonic scale. The systems are numbered 5, 9, and 13 on the left side of the page.

Ex. 3

Example Pentatonic Pattern

A Minor
5th fret

Am⁷

The image shows a musical score for an A minor pentatonic pattern on the 5th fret. It consists of two staves: a treble clef staff and a tablature staff. The treble clef staff is in 4/4 time and contains a melodic line of eight eighth notes: A5, G5, F5, E5, D5, C5, B4, and A4. The tablature staff shows the fret numbers for each note: 7, 5, 7, 5, 7, 5, 7, and 5. The notes are played on the 7th, 5th, 7th, 5th, 7th, 5th, 7th, and 5th frets of the strings, respectively.

Ex. 4

Pentatonic Exercise

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G# Minor 4th fret Am Minor 5th fret E Minor open pos F Minor 1st fret G Minor 3rd fret A Minor 5th fret

Bmaj⁷ D⁷ Gmaj⁷ B^{b7} E^bmaj⁷ Am⁷ D⁷

T	6	4	6	4	7	5	7	5	2	0	2	0	3	1	3	1	5	3	5	3	5	3	5	3	7	5	7	5	7
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E Minor open pos F Minor 1st fret C Minor 8th fret C# Minor 9th fret D# Minor 11th fret F Minor 1st fret

5 Gmaj⁷ B^{b7} E^bmaj⁷ F^{#7} Bmaj⁷ Fm⁷ B^{b7}

T	2	0	2	0	3	1	3	1	10	8	10	8	11	9	11	9	13	11	13	11	13	3	1	3	1	3	1	3	1
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G Minor 3rd fret A Minor 5th fret B Minor 7th fret C# Minor 9th fret

9 E^bmaj⁷ Am⁷ D⁷ Gmaj⁷ C[#]m⁷ F^{#7}

T	5	3	5	3	5	3	5	3	7	5	7	5	7	5	7	5	9	7	9	7	9	7	9	7	11	9	11	9	11	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----	---	----	---	----	---

D# Minor 11th fret F Minor 13th fret C Minor 8th fret C# Minor 9th fret

13 Bmaj⁷ Fm⁷ B^{b7} E^bmaj⁷ C[#]m⁷ F^{#7}

T	13	11	13	11	13	11	13	11	15	13	15	13	15	10	8	10	8	10	8	10	8	10	8	11	9	11	9	11	9
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Pentatonic Solo

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G# Minor 4th fret Am Minor 5th fret E Minor open pos F Minor 1st fret G Minor 3rd fret A Minor 5th fret

Bmaj⁷ D⁷ Gmaj⁷ B^{b7} E^bmaj⁷ Am⁷ D⁷

T 6 4 6 4 5 7 5 7 0 3 0 2 3 1 3 1 3 5 3 5 6 3 6 3 5 8 5 7 5 7 5 7

E Minor open pos F Minor 1st fret C Minor 8th fret C# Minor 9th fret D# Minor 11th fret F Minor 1st fret

5 Gmaj⁷ B^{b7} E^bmaj⁷ F#⁷ Bmaj⁷ Fm⁷ B^{b7}

T 0 2 0 3 1 3 1 4 8 10 8 10 9 11 9 11 4 2 4 2 2 4 1 4 1 3 1 3 1

G Minor 3rd fret A Minor 5th fret B Minor 7th fret C# Minor 9th fret

9 E^bmaj⁷ Am⁷ D⁷ Gmaj⁷ C#m⁷ F#⁷

T 5 3 5 3 5 3 5 7 5 7 5 7 5 7 10 9 7 9 7 9 7 9 11 9 11 9 12 9

D# Minor 11th fret F Minor 13th fret C Minor 8th fret C# Minor 9th fret

13 Bmaj⁷ Fm⁷ B^{b7} E^bmaj⁷ C#m⁷ F#⁷

T 11 13 11 14 11 13 11 13 15 13 15 13 16 8 10 8 11 11 8 11 12 9 12 9 12 9