# Learning the Extended Range Bass Guitar Neck (Key of C-Major) By Byron Santo

In this lesson, we will take my Extended Range Bass Neck chart and apply the key of C-Major to it. Only the notes that correspond to the key of C-Major will appear on the chart. The color-coding and octave numbering corresponds to the chromatic version of the ERB or Extended Range Bass chart to maintain consistency between key signatures. Now we can visualize how the entire ERB neck chart relates to the key of C-major, no flats or sharps.

This lesson assumes that you have some knowledge of scale and chordal theory, if you do not, there are many books available on this site.

Now lets look at a few of the most common five and seven tone scales that can be created from the key of C-major. I have purposely not listed scale fingerings, patterns or string/fret locations for the scales. The goal of this lesson is to learn the note names of every string/fret location that corresponds to the key of C-Major.

# Scales derived from the key of C-Major

# 7 Tone Scales

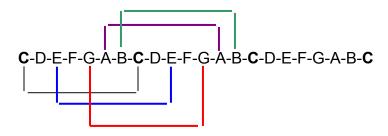
C-Major or Ionian Scale: C-D-E-F-G-A-B-C D-Dorian Scale (2<sup>nd</sup> Mode): D-E-F-G-A-B-C-D E-Phrygian (3<sup>rd</sup> Mode): E-F-G-A-B-C-D-E F-Lydian (4<sup>th</sup> Mode): F-G-A-B-C-D-E-F G-Mixolydian (5<sup>th</sup> Mode): G-A-B-C-D-E-F-G A-Minor or Aoelian (6<sup>th</sup> Mode): A-B-C-D-E-F-G-A B-Locrian (7<sup>th</sup> Mode): B-C-D-E-F-G-A-B

# **5 Tone Scales**

C-Major Pentatonic: C-D-E-G-A-C

D-2<sup>nd</sup> Mode of Major Pentatonic: D-E-G-A-C-D E-3<sup>rd</sup> Mode of Major Pentatonic: E-G-A-C-D-E G-4<sup>th</sup> Mode of Major Pentatonic: G-A-C-D-E-G A-Minor Pentatonic (5<sup>th</sup> Mode): A-C-D-E-G-A

As you can see, the only difference between these scales/modes is the number of notes or tones within the scale/mode and the starting note of the scale/mode but they are all related to the key of C-Major, no flats or sharps.



So by learning the key of C-Major we have actually learned 12 different scales/modes. Now let's try experimenting with different scale fingerings and the number of octaves in your scales. Listed below are just a few of the many ways to experiment with creating your own scale fingerings and in the process gain knowledge of the neck. Some of these examples may not be practical in a musical situation but by trying them, you will be forcing yourself to learn the neck by notes instead of by patterns. Take the examples slow and think about every note that you will play, even say the note(s) out loud as you play them.

- 1) One octave scale on one string
- 2) One octave scale on two strings
- 3) 4-notes-per-string, two or more octaves
- 4) 3-notes-per-string, two or more octaves
- 5) Alternate between 4-notes-per-string and 3-notes-per-string, one or more octaves
- 6) Alternate between 3-notes-per-string and 4-notes-per-string, one or more octaves
- 7) Ascend 4-notes-per-string and Descend 3-notes-per-string, one or more octaves
- 8) Ascend 3-notes-per-string and Descend 4-notes-per-string, one or more octaves
- 9) Octave Displacements: Instead of playing the entire scale in the same octave play one or more notes in the scale one octave above or below the original octave.
- 10) Play each note in the scale on every possible string/fret location for the specific note. This will familiarize you with the different timbre variations of same pitch notes on different strings.

Now we will look at the three and four tone arpeggio/chords that can be derived from the key of C-major. Not counting inversions, a total of Forty-Five three and four tone arpeggio/chords can be constructed from the key of C-Major. You will also notice in the three and four tone groupings that a few of the arpeggios are color-coded. The color-coding corresponds to arpeggio/chords with different names but with the same notes.

# Arpeggios/Chords derived from the key of C-Major

## 3 Tone Arpeggios

Major Arpeggios & Inversions

C Maj: C-E-G, 1<sup>st</sup> Inversion E-G-C, 2<sup>nd</sup> Inversion G-C-E F Maj: F-A-C, 1<sup>st</sup> Inversion A-C-F, 2<sup>nd</sup> Inversion C-F-A G Maj: G-B-D, 1<sup>st</sup> Inversion B-D-G, 2<sup>nd</sup> Inversion D-G-B

#### Minor Arpeggios & Inversions

**D Min:** D-F-A, 1<sup>st</sup> Inversion F-A-D, 2<sup>nd</sup> Inversion A-D-F **E Min:** E-G-B, 1<sup>st</sup> Inversion G-B-E, 2<sup>nd</sup> Inversion B-E-G **A Min:** A-C-E, 1<sup>st</sup> Inversion C-E-A, 2<sup>nd</sup> Inversion E-A-C

## **Diminished Arpeggios & Inversions**

**B Dim**: B-D-F, 1<sup>st</sup> Inversion D-F-B, 2<sup>nd</sup> Inversion F-B-D

#### Sus2 Arpeggios & Inversion

C Sus2: C-D-G, 1<sup>st</sup> Inversion D-G-C, 2<sup>nd</sup> Inversion G-C-D D Sus2: D-E-A, 1<sup>st</sup> Inversion E-A-D, 2<sup>nd</sup> Inversion A-D-E F Sus2: F-G-C, 1<sup>st</sup> Inversion G-C-F, 2<sup>nd</sup> Inversion C-F-G G Sus2: G-A-D, 1<sup>st</sup> Inversion A-D-G, 2<sup>nd</sup> Inversion D-G-A A Sus2: A-B-E, 1<sup>st</sup> Inversion B-E-A, 2<sup>nd</sup> Inversion E-A-B

Sus4 Arpeggios & Inversion

C Sus4: C-F-G, 1<sup>st</sup> Inversion F-G-C, 2<sup>nd</sup> Inversion G-C-F D Sus4: D-G-A, 1<sup>st</sup> Inversion G-A-D, 2<sup>nd</sup> Inversion A-D-G E Sus4: E-A-B, 1<sup>st</sup> Inversion A-B-E, 2<sup>nd</sup> Inversion B-E-A G Sus4: G-C-D, 1<sup>st</sup> Inversion C-D-G, 2<sup>nd</sup> Inversion D-G-C A Sus4: A-D-E, 1<sup>st</sup> Inversion D-E-A, 2<sup>nd</sup> Inversion E-A-D

Quartal-3 Arpeggios & Inversion

**D Q3:** D-G-C, 1<sup>st</sup> Inversion G-C-D, 2<sup>nd</sup> Inversion C-D-G **E Q3:** E-A-D, 1<sup>st</sup> Inversion A-D-E, 2<sup>nd</sup> Inversion D-E-A **G Q3:** G-C-F, 1<sup>st</sup> Inversion C-F-G, 2<sup>nd</sup> Inversion F-G-C **A Q3:** A-D-G, 1<sup>st</sup> Inversion D-G-A, 2<sup>nd</sup> Inversion G-A-D **B Q3:** B-E-A, 1<sup>st</sup> Inversion E-A-B, 2<sup>nd</sup> Inversion A-B-E

# 4 Tone Arpeggios

# Major 6<sup>th</sup> Arpeggios & Inversions

**C Maj6:** C-E-G-A, 1<sup>st</sup> Inversion E-G-A-C, 2<sup>nd</sup> Inversion G-A-C-E, 3<sup>rd</sup> Inversion A-C-E-G **F Maj6:** F-A-C-D, 1<sup>st</sup> Inversion A-C-D-F, 2<sup>nd</sup> Inversion C-D-F-A, 3<sup>rd</sup> Inversion D-F-A-C **G Maj6:** G-B-D-E, 1<sup>st</sup> Inversion B-D-E-G, 2<sup>nd</sup> Inversion D-E-G-B, 3<sup>rd</sup> Inversion E-G-B-D

#### Minor 6<sup>th</sup> Arpeggios & Inversions

**D Min6:** D-F-A-B, 1<sup>st</sup> Inversion F-A-B-D, 2<sup>nd</sup> Inversion A-B-D-F, 3<sup>rd</sup> Inversion B-D-F-A

# Major 7<sup>th</sup> Arpeggios & Inversions

C Maj7: C-E-G-B, 1<sup>st</sup> Inversion E-G-B-C, 2<sup>nd</sup> Inversion G-B-C-E, 3<sup>rd</sup> Inversion B-C-E-G F Maj7: F-A-C-E, 1<sup>st</sup> Inversion A-C-E-F, 2<sup>nd</sup> Inversion C-E-F-A, 3<sup>rd</sup> Inversion E-F-A-C

# Dominant 7<sup>th</sup> Arpeggios & Inversions

G Dom7: G-B-D-F, 1<sup>st</sup> Inversion B-D-F-G, 2<sup>nd</sup> Inversion D-F-G-B, 3<sup>rd</sup> Inversion F-G-B-D

## Minor 7<sup>th</sup> Arpeggios & Inversions

**D Min7:** D-F-A-C, 1<sup>st</sup> Inversion F-A-C-D, 2<sup>nd</sup> Inversion A-C-D-F, 3<sup>rd</sup> Inversion C-D-F-A **E Min7:** E-G-B-D, 1<sup>st</sup> Inversion G-B-D-E, 2<sup>nd</sup> Inversion B-D-E-G, 3<sup>rd</sup> Inversion D-E-G-B **A Min7:** A-E-C-G, 1<sup>st</sup> Inversion E-C-G-A, 2<sup>nd</sup> Inversion C-G-A-E, 3<sup>rd</sup> Inversion G-A-E-C

# Minor b6th Arpeggios & Inversions

**E Min b6:** E-G-B-C, 1<sup>st</sup> Inversion G-B-C-E, 2<sup>nd</sup> Inversion B-C-E-G, 3<sup>rd</sup> Inversion C-E-G-B **A Min b6:** A-C-E-F, 1<sup>st</sup> Inversion C-E-F-A, 2<sup>nd</sup> Inversion E-F-A-C, 3<sup>rd</sup> Inversion F-A-C-E

## Half-Diminished 7<sup>th</sup> Arpeggios & Inversions

B-D-F-A, 1<sup>st</sup> Inversion D-F-A-B, 2<sup>nd</sup> Inversion F-A-B-D, 3<sup>rd</sup> Inversion A-B-D-F

# **Dominant sus2 Arpeggios & Inversions**

D-E-A-C, 1<sup>st</sup> Inversion E-A-C-D, 2<sup>nd</sup> Inversion A-C-D-E, 3<sup>rd</sup> Inversion C-D-E-A G-A-D-F, 1<sup>st</sup> Inversion A-D-F-G, 2<sup>nd</sup> Inversion D-F-G-A, 3<sup>rd</sup> Inversion F-G-A-D A-B-E-G, 1<sup>st</sup> Inversion B-E-G-A, 2<sup>nd</sup> Inversion E-G-A-B, 3<sup>rd</sup> Inversion G-A-B-E

#### **Dominant sus4 Arpeggios & Inversions**

D-G-A-C, 1<sup>st</sup> Inversion G-A-C-D, 2<sup>nd</sup> Inversion A-C-D-G, 3<sup>rd</sup> Inversion C-D-G-A E-A-B-D, 1<sup>st</sup> Inversion A-B-D-E, 2<sup>nd</sup> Inversion B-D-E-A, 3<sup>rd</sup> Inversion D-E-A-B G-C-D-F, 1<sup>st</sup> Inversion C-D-F-G, 2<sup>nd</sup> Inversion D-F-G-C, 3<sup>rd</sup> Inversion F-G-C-D A-D-E-G, 1<sup>st</sup> Inversion D-E-G-A, 2<sup>nd</sup> Inversion E-G-A-D, 3<sup>rd</sup> Inversion G-A-D-E

#### Major 7<sup>th</sup> Sus2 Arpeggios & Inversions

C-D-G-B, 1<sup>st</sup> Inversion D-G-B**-C**, 2<sup>nd</sup> Inversion G-B-C-D, 3<sup>rd</sup> Inversion B-C-D-G F-G-C-E, 1<sup>st</sup> Inversion G-C-E-F, 2<sup>nd</sup> Inversion C-E-F-G, 3<sup>rd</sup> Inversion E-F-G-C

# Major 7<sup>th</sup> Sus4 Arpeggios & Inversions

C-F-G-B, 1<sup>st</sup> Inversion F-G-B-C, 2<sup>nd</sup> Inversion G-B-C-F, 3<sup>rd</sup> Inversion B-C-F-G

Listed below are a few arpeggio/chord examples to try.

- 1) One octave arpeggio on one string
- 2) One octave arpeggio on two strings
- 3) One octave arpeggio on three strings
- 4) Two octave arpeggio on two strings
- 5) Two octave arpeggio on three strings
- 6) Two octave arpeggio on ALL strings
- 7) Arpeggio followed by Inversions, One or more octaves
- 8) Combining arpeggios to create complex arpeggios, i.e. C-Maj (C-E-G) and B-Dim (B-D-F) = C Major 11<sup>th</sup> arpeggio or chord.

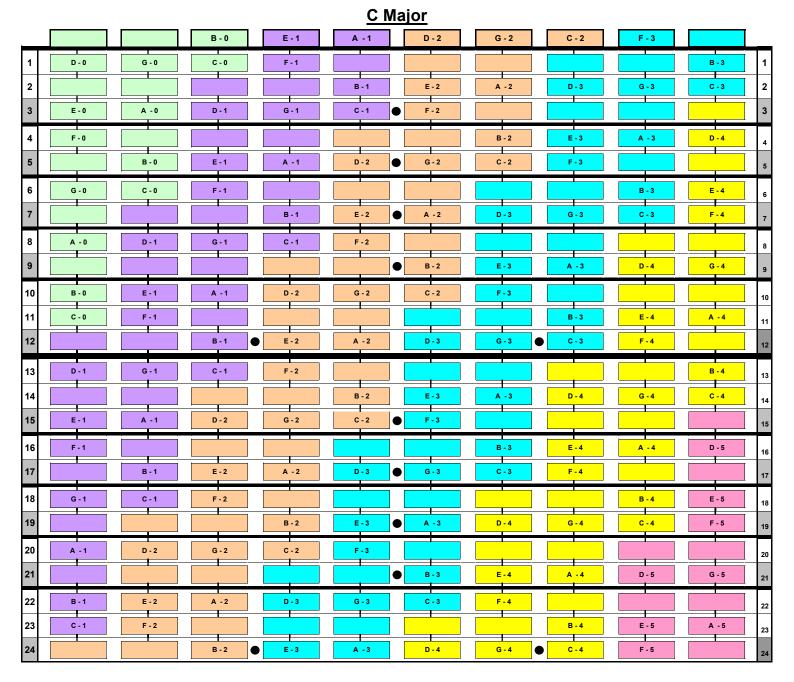
As you have probably already noticed, there is a large amount of information that can be obtained just from the key of C-Major, no flats or sharps, so take your time with this lesson and remember that the benefits of your hard work and diligence will be a greater knowledge of the neck.

Good luck and if you have any questions please feel free to email me at ByronSanto@hotmail.com

Byron Santo
www.ByronSanto.com
www.myspace.com/byronsanto



# Byron Santo's Extended Range Bass Guitar Neck



Each octave of the extended range bass neck chart is numbered and color coded. This allows the bassist a quick and efficient method of locating same pitch notes on various strings.

4 String Book E. A. D. S. C. ov. A. D. C. S. C. strings	
4 String Bass : E, A, D, & G or A, D, G & C strings	
5 String Bass : B, E, A, D, & G or E, A, D, G & C strings	
6 String Bass : B, E, A, D, G & C or E, A, D, G, C & F strings	
7 String Bass : B, E, A, D, G, C & F or F#, B, E, A, D, G & C or E, A, D, G, C, F & A# strings	
8 String Bass : F#, B, E, A, D, G, C & F or B, E, A, D, G. C, F & A# strings	
9 String Bass : F#, B, E, A, D, G, C, F & A# strings	
10 String Bass : C#, F#, B, E, A, D, G, C, F & A# strings	







