

CONTENTS

Part 7 - Chord Progression and Comping

<u>chapter</u>		<u>page</u>
66	Introduction to Chord Progression	2109
67	Open Position Basslines	2123
68	Major Scale-Tone Triads.....	2151
69	Triad Bass Harmonization.....	2189
70	Pedal Point Chord Progression	2199
71	Chord Archetypes.....	2249
72	Scale-Tone Seventh Chord Progression.....	2271
73	Summary of Chord Progression Types.....	2295
74	Abbreviating and Elabloring Chord Progression	2301
75	Comping Strategies	2331
76	Quartal and Quintal Harmony	2361

Introduction To Chord Progression

- **Basic Definitions**
- **Scale-Tone Chord Construction**
- **Chord Construction by Formula**
- **Major Scale-Tone Chord Progression**
- **Parent Scale, Chord Scale and Key Scale**
- **Modulation and Voice Leading**
- **Recognizing Chord Progressions**

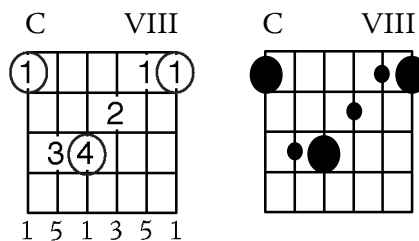
BASIC DEFINITIONS

Chord

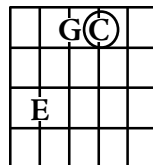
Two scale tones played simultaneously constitute an interval. Three or more scale tones played simultaneously constitute a chord. An interval (two different notes played simultaneously) can be considered a chord, but the more common definition of a chord specifies a minimum of three different notes played simultaneously.

Chord Root

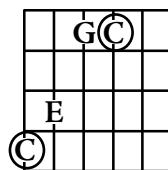
A chord root is the note after which a chord is named. “A” is the root of an A7 chord. “D” is the root of a Dm7 chord. “Eb” is the root of an Eb7 chord. The root is the main note of a chord. Enlarged or circled notes on diagrams indicate chord roots.



A chord root is the lowest bass note you can imagine in a chord. In the chord below, the lowest pitch that sounds is not the root of the chord. The bass note (on the fourth string) is “E”, but the root is “C”.



The version of the “C” chord below includes the root in the bass. The root is a “C” note, after which the chord is named.



Tonic Chord

The tonic chord (or “main chord”) is the chord you would expect the piece of music to end on. It is the chord which sounds most resolved in a piece of music. A tonic chord is used to give the most final sound at the end of a piece.

I said “you would expect” the piece of music to end on the tonic chord, because although the listener expects a song to end on the tonic chord, it doesn’t have to. A song can end with a deceptive cadence (deceptive chord sequence) where the final chord is not the tonic chord. This type of ending is intended to “trick” the listener. Although a deceptive cadence does not produce as strong a feeling of resolution, it still can be stimulating. Likewise, songs often begin on the tonic chord, but they don’t have to.

Many recorded pieces of music have a “fade-out” ending, where no distinct ending chord is played. I generally don’t like fade-out endings. I much prefer hearing the ending the band or artist would play in a live performance.

compositional techniques of establishing the tonic chord:

- ✦ Use long duration or frequent occurrence of the main chord.
- ✦ Use the root of the main chord as the continual bass note for a series of chords.
- ✦ Progressions are typically built with groups of two or four bars. A tonic chord would typically be the first chord after a two or four bar unit.
- ✦ Use a main chord which has a strong consonance. Example “a” below is the strongest consonance and example “c” has the weakest consonance.
 - a. The main chord usually has a strong tonality (is easy to establish as the main chord) in major, Dorian, Mixolydian or Aeolian mode (when major, Dorian, Mixolydian or Aeolian scales are used).
 - b. The main chord has a passive tonality (somewhat difficult to establish as a main chord) in Phrygian or Lydian mode (when Phrygian or Lydian scales are used).
 - c. The main chord has a weak tonality (quite difficult to establish as the main chord) in Locrian mode (when Locrian scale is used).
- ✦ Use the root of the main chord in a low range of pitch.

Tone Center

The tone center of a piece of music is the root of the tonic chord (the chord you expect the piece to end on). If the tonic chord is Cm7, the tone center is “C.” If the tonic chord is Ebm, the tone center is “Eb.” The roman numeral “III” on the upper right of each diagram indicates that the top fret is the third fret.

Whenever scales are shown on diagrams in this book, the tone centers are indicated by enlarged, circled, or “squared” notes:

Key

A song is said to be in a key named after the tone center. If the tone center is “A”, the song is said to be in the key of “A”. The key may be further qualified by the scale or mode type, such as “A” major, “A” minor or “A” Mixolydian.

The term “minor” is often used loosely in key names where the song may be in any mode which has a minor chord built on the tone center (e.g., Aeolian or harmonic minor). Likewise, the term major is sometimes used in reference to any mode which has a major chord built on the tone center (e.g., Mixolydian or Phrygian major).

SCALE-TONE CHORD CONSTRUCTION

In the scale tone method of chord construction, each tone of a scale can be the root of another chord. The typical construction is with every-other tone of the scale. Scale tone chords are most often conceived on the major scale, but other seven tone scales can be used as well.

Chords are commonly constructed with an every-other-note pattern on the major scale called thirds. In numbers, this is 1-3-5-7-2-4-6-1-3-5, etc. In letters it is F-A-C-E-G-B-D-F-A-C, etc. (notice that it includes the F-A-C-E- and Every Good Boy Does Fine sequences typically used to memorize the every-other-note patterns of lines and spaces on the staff).

Memorizing Major Scale Note Names

Since chords are constructed from major scales (or from altered major scales), you need to know the names of the notes in all major scales. [Key signatures](#) can help you memorize these note names. In written form, a key signature is written immediately after the clef in a piece of music to indicate which notes (if any) are sharped or flatted (not both) in the major scale on which the piece is based.

Major Scale-Tone Triads

Three note chords are called triads. They can be built on each tone of a major scale, using the every-other note pattern of thirds. Roman numerals are assigned to each scale tone. Due to the varying step-to-step intervals in the major scale, the chords differ. The qualities are as follows:

<u>scale tone</u>	<u>quality</u>	<u>scale tones</u>	<u>written name</u>
I	major	1, 3, 5	I
II	minor	2, 4, 6	II ^m
III	minor	3, 5, 7	III ^m
IV	major	4, 6, 1	IV
V	major	5, 7, 2	V
VI	minor	6, 1, 3	VI ^m
VII	diminished	7, 2, 4	VII ^{dim.}

Major Scale-Tone Seventh Chords

Four note chords should be called quadrads. Chords built in thirds can be called “tertian”, to indicate their structure of notes three scale tones apart (inclusive, in that “A” to “C” is three letters). Quadrads constructed with an every-other scale tone are commonly called “seventh chords”. They could more descriptively be called *tertian* quadrads.

Confusingly, “seventh chord” can refer to chord types or can be an abbreviation for a dominant seventh chord. The group of chord types including major seventh, dominant seventh, minor seventh and any chord with “seventh” in its name is called “seventh chords”. A dominant seventh chord commonly has the abbreviated name “seventh chord”. C7 (C seventh) is a C dominant seventh chord. Seventh chords with the root “C” include C major seventh, C dominant seventh, and C minor seventh.

Like triads, seventh chords can be built on each tone of a major scale, using the every-other note pattern of thirds. Roman numerals are assigned to each scale tone. Due to the varying step-to-step intervals in the major scale, the chords differ. The qualities are as follows:

<u>scale tone</u>	<u>quality</u>	<u>scale tones</u>	<u>written name</u>
I	major seventh	1-3-5	Ima7
II	minor seventh	2-4-6	IIIm7
III	minor seventh	3-5-7	IIIIm7
IV	major seventh	4-6-1	IVma7
V	dominant seventh	5-7-2	V7
VI	minor seventh	6-1-3	VIIm7
VII	minor seventh flat five	7-2-4	VIIIm7b5

Memorizing Global Spellings for Seventh Chords

Every major scale uses the same seven letters (A, B, C, D, E, F, G). Every major scale uses the same cycle of letters in thirds in the primary method of chord construction (below) Therefore, it is very useful to memorize parts of the cycle of thirds. Starting on different letters.

Any seventh chord (tertian quadrad) with the letter “C” in its name (Cma7, Cb7, C#m7b5) uses the same four letters. All of the chords below with “C” in their letter name have the letters C, E, G and B.

<u>chord</u>	<u>spelling</u>
Cbma7	Cb-Eb-Gb-Bb
C7	C-E-G-Bb
C#m7b5	C#-E-G#-B

Because of this, it is very important to memorize the spelling of all seven of the tertian quadads (seventh chords) constructed from the C major scale. For each root (C, D, E, F, G, A or B), *any* seventh chord with that root in its letter name would use the seven letters. The seven tertian quadads from the C major scale are shown below.

<u>chord</u>	<u>spelling</u>
Cma7	C-E-G-B
Dm7	D-F-A-C
Em7	E-G-B-D
Fma7	F-A-C-E
G7	G-B-D-F
Am7	A-C-E-G
Bm7b5	B-D-F-A

CHORD CONSTRUCTION BY FORMULA

Chords can be constructed by specifying the numbered tones of a major scale they use. In this formula method of chord construction, chords are conceived with their root on the tone center (step “1”) of a major scale named after the chord root. The root of a chord is the letter at the beginning of its name and any sharp or flat that may be immediately after the letter in its name. Bb (“B” flat) is the root of a Bbma13#11 chord and Bb is the root of a Bb major chord.

A major chord is constructed with the first, third and fifth tones of a major scale named after the chord root, so it uses the numbered tones “1-3-5”. The formula for a major chord is “1-3-5”. A Bb major chord uses tones 1, 3, 5 of a Bb major scale. To know the specific names of the notes in a chord, you need to know the names of the notes in a major scale on its chord root. Some chord tones may be an altered version of a major scale tone, such as a “flat three”. A minor chord uses major scale tones “1-b3-5” of a major scale on the chord root.

MAJOR SCALE TONE CHORD PROGRESSION

Chord Root Movement

The root is the note after which a chord is named. In popular music, the roots are usually the lowest note in the chord. When the root is in the bass the chord is said to be in root position. The roots of triads move in three categories: stepwise, thirds and fourths. In each of these categories, the interval is counted in a inclusive manner, so C to E would be up a third and C to A would be down a third. The root of the C chord in a C major scale could move stepwise to D or B, in thirds to E or A and in fourths to F or G.

Types of Root Movement

Stepwise order has the chord roots moving up or down in alphabetical order. Root movement in *thirds* is an every-other-note pattern (F-A-C-E-G-B-D-F-A, etc.) and is three notes from each note to the next, inclusive. *Fourths* is every fourth note, inclusive. When roots move up or down in *fourths*, two letters are skipped from each note to the next (B-E-A-D-G-C-F-B-E-A, etc.)

In each type of root movement (stepwise, thirds and fourths), look for:

- ✦ chords of the same quality with their roots a whole step apart (IV major and V major; II minor and III minor),
- ✦ ambiguous chord progressions which could occur in different parts of a major scale, but are relatively the same progression:

I major to II minor and V major to VI minor

I major to VI minor, IV major to II minor and V major to III minor
 VI minor to IV major and III minor to I major

- progressions involving chords of different quality which are unique within the major scale (III minor to IV major).

Listen for the nature of each type of major scale tone triad root movement. In stepwise progressions, every note changes from chord to chord, producing a “processional” effect. Example: I, II_m, III_m, IV, V, VI_m VII_{dim} (notice the pair of minor and the pair of major triads).

In triad progressions up or down in thirds, two notes stay the same and one note changes from chord to chord, producing a transforming effect and the weakest of the three types of major scale tone triad progression. Example: II_m, IV, VI_m, I, III_m.

In progressions up or down in fourths, one note stays the same and two notes change from chord to chord, producing a “pivot” effect, characteristic of hymns, jazz standards (though they use 7th chords) and Motown. Example: VII_{dim}, III_m, VI_m, II_m, V, I, IV (notice the grouping of three minor chords and three major triads).

PARENT SCALE, CHORD SCALE AND KEY SCALE

Parent Scales Defined

Chord progressions are mainly constructed from the notes of seven tone scales. Primary seven tone scales are major, harmonic minor, melodic minor and harmonic major. Other seven tone scales can be generated by using any of these with a tone center other than the first step of the scale. These other scales are called *modes*. To play an example of a mode, you would play a scale up and down an octave, beginning and ending on the desired tone center. For example, if you wanted to create a mode on the second step of the C major scale, you would play from “D” up to “D”, then back down. This would be called D Dorian mode. There are mode names for each of the seven tones of the major scale, as shown below.

modes of the c major parent scale

major scale tone	mode name	typical example, using C major scale
1	major (Ionian)	C-D-E-F-G-A-B-C-B-A-G-F-E-D-C
2	Dorian	D-E-F-G-A-B-C-B-A-G-F-E-D-C-D
3	Phrygian	E-F-G-A-B-C-B-A-G-F-E-D-C-D-E
4	Lydian	F-G-A-B-C-B-A-G-F-E-D-C-D-E-F
5	Mixolydian	G-A-B-C-B-A-G-F-E-D-C-D-E-F-G
6	Aeolian	A-B-C-B-A-G-F-E-D-C-D-E-F-G-A
7	Locrian	B-C-B-A-G-F-E-D-C-D-E-F-G-A-B

Relative Major And Minor Keys

In the [relative major and minor system](#) of key signatures, still predominant today, pieces of music are categorized as to their basic quality being major or minor. Sharps or flats are written where necessary at the beginning of a piece of music to indicate the major scale on which it is based. A Aeolian (also called A natural minor) has the same notes as C major. C major is the relative major of A Aeolian and A Aeolian is the relative minor of C major.

If the piece of music sounds resolved on a minor chord, the key signature indicates a key in Aeolian mode, named after the letter name of the root of the chord (including any necessary sharp or flat in the name), on the sixth step of the major scale indicated by the key signature. If the piece is based on a minor chord but is not in Aeolian mode, accidentals (sharps or naturals) are writing before particular notes in the body of the music notation to alter the Aeolian mode that was indicated by the key signature.

Modes of Harmonic Minor

There are mode names for each of the modes of harmonic minor, as shown below. Harmonic minor is a variant of Aeolian mode, where the seventh note of Aeolian is raised a half step. This is equivalent to raising the fifth tone of the parent major scale. As you can see below, A Aeolian has had its seventh tone "G" raised (compare to the chart above). C major sharp five below is the altered version of A Aeolian's parent major scale, C major.

Modes Of The A Harmonic Minor Parent Scale:

harmonic minor tone	mode name	typical example, using A harmonic minor
1	harmonic minor	A-B-C-D-E-F-G#-A-G#-F-E-D-C-B-A
2	Locrian natural six	B-C-D-E-F-G#-A-G#-F-E-D-C-B-A-B
b3	major sharp five	C-D-E-F-G#-A-G#-F-E-D-C-B-A-B-C
4	Dorian sharp four	D-E-F-G#-A-G#-F-E-D-C-B-A-B-C-D
5	Phrygian major	E-F-G#-A-G#-F-E-D-C-B-A-B-C-D-E
b6	Lydian sharp two	F-G#-A-G#-F-E-D-C-B-A-B-C-D-E-F
7	"Mixolydian sharp one"	G#-A-G#-F-E-D-C-B-A-B-C-D-E-F-G#

Key Scales Defined

The key scale is named after the tone center (defined earlier). You would expect the section (or song) to end on the note after which the key is named. It is generally best to predominate a melody with key scales that retain a melodic thread which moves toward its eventual goal of the tonic chord.

Chord Scales Defined

For the purpose of considering a chord as a temporary key (to improvise on it, for example), the root of the chord can be considered a temporary tone center. You should determine in context which type of scale would be used on the chord. The chord scale for adjacent chords in a progression would typically share the same parent scale. For example, Dm could use D Dorian mode, G major could use G Mixolydian, where the parent major scale is C major (since the notes of D Dorian, G Mixolydian and C major are all the same). If too much focus is put on chord scales rather than key scales, the music can sound fragmented and disjointed.

MODULATION AND VOICE LEADING

Modulation Through Pivotal Relationships

Memorize all major scale-tone triads, seventh chords and modes. Be able to recall them in stepwise order, in thirds and in fourths; ascending and descending order. Begin to conceive major scale tone chord progressions in many keys. Abstractly combine the chords from one major scale with those from another through (1) a chord common to both of them, or (2) use of an altered chord and a second major scale set of chords that includes the altered chord.

Compose ten triad chord progressions of four chords or more each. For the first five or so progressions, use triads exclusively from one major scale (Book 3, Chapter 25, pages 285-287). Any triad of the major scale may be the main chord (mode). Mix the root movement between stepwise, thirds and fourths (you don't have to use all three types in each progression).

For the next couple of progressions, use a pivotal chord common to two major scales. For the last couple of progressions, use of an altered chord and a second major scale set of chords that includes the altered chord.

Voice Leading

In studying the arrangement of chord tones of one chord moving to those of another, each note in a chord is called a *voice* and has a logical destination in the next chord. As a voice progresses through a number of chords, it creates a *voice path*. The study of the path created by each voice is called *voice leading*. The study of the matrix of paths created by a number of voices is called *voice mapping*. Voice leading is explained in further detail in the chapter on voice leading.

RECOGNIZING CHORD PROGRESSIONS

The two most effective clues to use in recognizing which major scale a progression was constructed on are:

- Two chords of the same quality on adjacent scale steps, where you should suspect they are derived from steps two and three of a major scale if they are both minor or steps four and five of a major scale if they are both major. The chords don't need to have occurred in alphabetical order in the progression, you can re-order them.
- Two or more chords whose roots can be ordered in perfect fourths.

Unaltered Major Scale Tone Chord Progression Exercise

Listen to each song (if you have the recording). Play the progression on Songs By Letter Name. Determine the major scale from which the chords came and the tonic chord (chord you would expect the song or section to end on). The chords won't necessarily occur in the same order in the song as they do on the Major Scale Tone Chords reference chart. Look for:

- (1) two chords of the same quality that could be put in alphabetical order.
- (2) two or more chords that could be put in an order of fourths. Identify the major scale in which the chord qualities would match those in the song (major, minor).

<u>title</u>	<u>parent scale (of)</u>	<u>tonic chord</u>	<u>key scale (in)</u>
Afro Blue, section A	Eb major	Fm	F Dorian
Afro Blue, section B	Ab major	Fm	F Aeolian
Ain't No Sunshine	C major	Am	A Aeolian
All Along the Watchtower	Eb major	Cm	C Aeolian
Black verse	A major	E7	E Mixolydian
Blue Moon	C major	C	C major
Come To My Window	C major	C	C major
Flake verse	F major or Bb major	Dm or F	D Aeolian or F major (more likely than modes of Bb major)
Heart of Gold intro	G major	Em	E Aeolian
Heart of Gold verse	G major	G	G major
Hound Dog	C major	C	C major
How's It Gonna Be	F major	F	F major
Imagine verse and bridge	C major	C	C major
I'm Lookin' Through You	G major	G	G major
Island In the Sun	G major	G	G major
Knockin' On Heavens	A major	A	A major
Kodachrome verse	E major	E	E major
Like A Rolling Stone	C major	C	C major

Minority (exclude the B chord)	C major	C	C major
Polly verse	G major	Em	E Aeolian
Runaway chorus	A major	A	A major
Say It Ain't So verse	E major	E	E major
Save Tonight	C major	Am	A Aeolian
Soul To Squeeze (after intro)	F major	F	F major
Sympathy For Devil verse	A major	E	E Mixolydian
Time Of Your Life	G major	G	G major
Under the Boardwalk verse	G major	G	G major
Under the Boardwalk chorus	G major	Em	E Aeolian
What's It like	C major or F major	Dm	D Dorian or D Aeolian
Yellow Ledbetter	E major	E	E Major

Altered Major Scale Tone Chord Progression Exercise

chords changed to set up a cadence

In each case, a chord on the fifth step of a major scale based on the target chord is changed from minor to major.

III_m chords of the parent major scale changed to III major (V of VI_m: V of chord scale to VI_m of parent scale)

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>V of target chord</u>	<u>target chord</u>
Put Your Lights On	C major	A Aeolian	E	Am
Runaway verse	C major	A Aeolian	E	Am
Flake chorus	F major	D Aeolian	A	Dm

II_m chords of the parent major scale changed to II major (V of V: V of chord scale to V of parent)

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>V of target chord</u>	<u>target chord</u>
Are You Lonesome Tonight	C major	C major	D	G (target chord)
Help! intro.	D major	D major	E	A (target chord)

in "Help!" intro., the progression suggests that it would end on a D major chord, but D major is never played.

VI_m chords of the parent major scale changed to VI major (V of II_m: V of chord scale to II_m of key and parent scale)

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Me and My Uncle	D major	E Aeolian	B=V of II _m (B _m to B major)
Kodachrome chorus	A major	A major	C#=V of VI (C _{#m} to C _# major), F#=V of II _m (F _{#m} to F _# major)

I chords of the parent major scale changed to I₇ (V of IV: V of chord scale to IV of parent)

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>V of target chord</u>	<u>target chord</u>
Are You Lonesome Tonight	C major	C major	C ₇	F (target chord)

chord qualities changed to alter the mood**darkening the mood by changing major chords to minor**

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Sleepwalk	C major	C major	F changed to Fm

brightening the mood by changing m7 or major seventh chords to dominant seventh

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Black chorus	G major	E Aeolian (alt.)	Em7 changed to E7

brightening the mood by changing minor chords to major

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Ends verse	Bb major (alt.)	G Aeolian (alt.)	Gm changed to G
Imagine chorus of F)	C major (alt.)	C major (alt.)	Em changed to E (becomes lower chromatic)
Fly Away	G major (alt.)	Bb Aeolian (alt.)	Bbm changed to Bb, Ebm changed to Eb
In Bloom verse	Db major (alt.)	Bb Aeolian (alt.)	Bbm changed to Bb, Ebm changed to Eb B and A are upper & lower chromatics to Bb
Polly bridge	F major	D Aeolian (alt.)	Dm changed to D, Gm changed to G

darkening the mood by changing major seventh chords to dominant seventh

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Torn	Eb major	F Dorian	Bbma7 changed to Bb7 (as in a Blues in F)

mode (scale) changed to alter the mood

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>changed chord(S) and description</u>
Say It Ain't So bridge B B E	E major	B Mixolydian	G changes to B Aeolian

pivotal chords (in two or more major scales in their unaltered form)

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Help! verse	A major/D major	A major/A Mixo.	D is of A and D major, G = bVII of A Mixo, V of D
You've Got To Hide verse	G major/C major	G major/G Mixo.	C and G are of C and G major, F = IV of C, bVII in G Mixo.

extractions from longer progressions

<u>title</u>	<u>parent scale (of)</u>	<u>key scale (in)</u>	<u>altered chords</u>
Debasser	F major	F major	Gm changed to G major (suggests G would progress to C, although it doesn't). Extracted from F Bb G C, without the C.

Open-Position Basslines

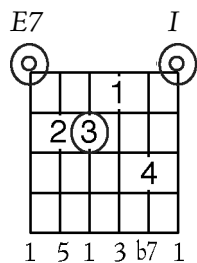
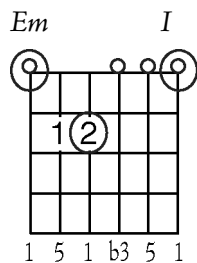
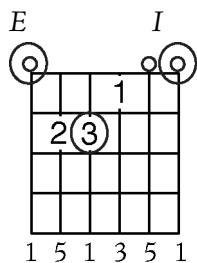
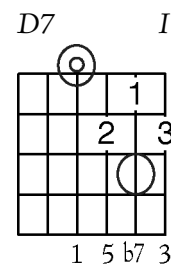
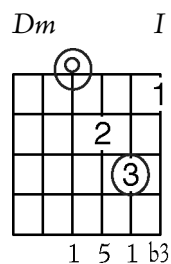
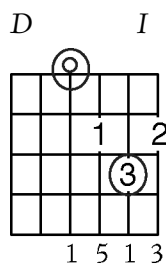
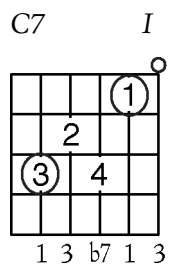
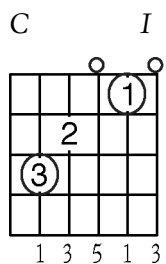
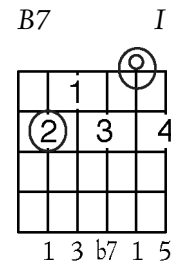
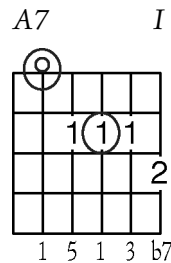
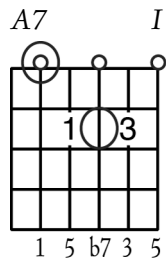
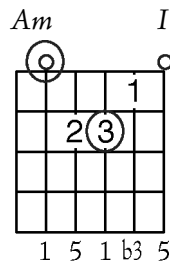
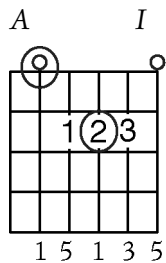
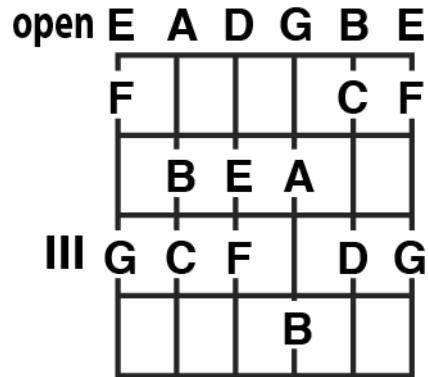
- **What You Need To Know**
- **Roots and Fifths in Basslines**
- **Roots, Thirds and Fifths in Basslines**
- **Scalar Pickups in Basslines**
- **Open Chord Basslines, Low Octave**
- **Open Chord Basslines, Full Octave**
- **Bassline Pickups**

WHAT YOU NEED TO KNOW

Before studying this chapter, make sure you are familiar with [Note Sets, Structures and Design](#) and with [Basic Chord Construction](#).

ROOTS IN BASSLINES

In all of the most common open chord fingerings, the chord root is on the largest string used in the chord.



ROOTS AND FIFTHS IN BASSLINES

A **Am**

root fifth root fifth root fifth root fifth

TAB: 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2 0 2 2

A7 **A7** **B7** **C**

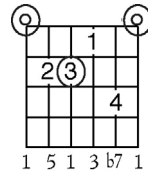
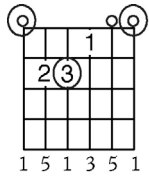
root fifth root fifth root fifth root fifth

TAB: 0 2 2 0 2 2 2 0 2 2 2 1 1 0 1 0 0 1 0 0 2 2 3 3

C7 **D** **Dm** **D7**

root fifth root fifth root fifth root fifth

TAB: 0 1 3 3 0 2 3 2 1 3 3 2 2 1 3 2 0 2 1 2 0 2 0 0



13 E E7

Musical notation for E and E7 chords. The notation is in treble clef and shows two measures. The first measure is for E major and the second is for E7 major. Each measure contains four chords: root, fifth, root, and fifth. The notes for E major are G#2, B2, D#3, E3. The notes for E7 major are G#2, B2, D#3, E3, G#4. The bassline is shown in TAB format below the staff.

root fifth root fifth root fifth root fifth

T	0	0	0	0	0	0	0	0	0	0	0
A	1	1	1	1	1	1	1	1	1	1	1
B	2	2	2	2	2	2	2	2	2	2	2
	0	2	2	2	2	2	2	2	2	2	2

I Saw Her Standing There, Roots and Fifths in the Bass

The score is divided into four systems, each with a treble clef staff and a bass staff. The bass staff shows the root and fifth of the chord for each measure, with fingerings and triplet markings. The chords are: C7 (measures 1-4), F (measures 5-8), C7 (measures 9-12), G7 (measures 13-16), and C7 (measures 17-20). The key signature has one flat (Bb).

System 1 (Measures 1-4): Chords: C7, F, C7. Bass notes: C, G, C, G, C, G, C, G.

System 2 (Measures 5-8): Chords: C7, G7, C7. Bass notes: C, G, C, G, C, G, C, G.

System 3 (Measures 9-12): Chords: C7, F, Ab. Bass notes: C, G, C, G, C, G, Ab, Eb.

System 4 (Measures 13-20): Chords: C7, G7, C7. Bass notes: C, G, C, G, C, G, C, G.

The Secondary Dominant Progression, Roots and Fifths in the Bass

1 C E7 Am C7

root fifth root fifth root fifth root fifth

T	0 0 0	0 0	0 0 0	0 0	0 0 0	0 0	0 0 0	0 0
A	1 1 1	1 1	3 3 3	3 3	1 1 1	1 1	1 1 1	1 1
B	0 0 0	0 0	1 1 1	1 1	2 2 2	2 2	3 3 3	3 3
B	3	3	0	2	0	0	3	3

5 F A7 Dm F7

root fifth root fifth root fifth root fifth

T	1 1 1	1 1	0 0 0	0 0	1 1 1	1 1	4 4 4	4 4
A	2 2 2	2 2	2 2 2	2 2	3 3 3	3 3	2 2 2	2 2
B	3	3	0	0	2 2 2	2 2	3 3 3	3 3
B	3	3	0	0	0	0	3	3

9 Bb D7 G B7

root fifth root fifth root fifth root fifth

T	6 6 6	6 6	3 3 3	3 3	3 3 3	3 3	2 2 2	2 2
A	6 6 6	6 6	5 5 5	5 5	3 3 3	3 3	0 0 0	0 0
B	7 7 7	7 7	0 4 4 4	0 4 4	0 0 0	0 0 0	2 2 2	2 2
B	8	8	0	0	3	3	2	2

13 Em G7 C G7 C

root fifth root fifth root fifth root fifth

T	0 0 0	0 0	0 0 0	0 0	0 0 0	0 0	0 0 0	0 0
A	0 0 0	0 0	0 0 0	0 0	1 1 1	0 0	0 0 0	0 0
B	2 2 2	2 2	0 0 0	0 0	0 0 0	0 0	0 0 0	0 0
B	0	2	3	0	3	3	3	3

ROOTS, THIRDS AND FIFTHS IN BASSLINES

Under The Boardwalk-Roots, Thirds and Fifths in the Bass

verse

5 G D

root . third fifth . root . third . root . third fifth . root . third .

TAB: 3 0 2 0 0 | 3 0 2 0 0 | 0 2 4 2 0 | 0 2 4 2 0

9 D G

root . third fifth . root . third . root . third fifth . root . third .

TAB: 0 2 4 2 0 | 0 2 4 2 0 | 3 0 2 0 0 | 3 0 2 0 0

13 C G

root . third fifth . root . third . root . third fifth . root . third .

TAB: 0 1 0 2 0 | 0 1 0 2 0 | 3 0 2 0 0 | 3 0 2 0 0

17 G D G

root . third fifth . root . third . root . third fifth . root . third .

TAB: 3 0 2 0 0 | 0 2 4 2 0 | 3 0 2 0 0 | 3 0 2 0 0

OPEN CHORD BASSLINES, LOW OCTAVE

play in reverse order, also

Am 1-b7-b6-5 1-b7-6-5 1-7-b7-6-b6-5

1 1 1 1 | 1 1 | 0 0 | 1 1 2 0
 3 3 3 3 | 3 3 | 1 1 | 3 4 4 1
 0 2 4 2 T 2 0 2 | 0 2 4 2 T 2 0 2 | 0 2 4 2 | 4 2 2 3 T 3 0 3

T 1 1 1 1 | 1 1 | 0 0 | 1 1 2 0
 A 2 2 2 2 | 2 2 | 2 2 | 2 2 2 2
 B 0 3 | 1 0 | 0 3 | 2 0 | 0 4 | 3 2 | 1 0

8 A 1-b7-6-5 1-7-6-5 1-7-b7-6-b6-5

1 1 1 1 | 1 1 | 1 1 | 1 1 3 3 3
 1 1 1 1 | 1 1 | 1 1 | 1 1 3 3 3
 0 1 2 1 | 2 1 0 1 | 0 1 3 1 | 2 1 0 1 | 0 1 3 1 | 2 1 2 3 | 1 3 0 3

T 2 2 2 2 | 2 2 | 2 2 | 2 2 2 2
 A 2 2 2 2 | 2 2 | 2 2 | 2 2 2 2
 B 0 3 | 3 2 | 0 4 | 3 2 | 0 4 | 3 2 | 1 0

15 Bb 1-b7-6-5 1-7-6-5 1-7-b7-6-b6-5

3 1 3 3 | 3 1 | 3 3 | 3 3 1 3 3
 3 1 3 3 | 3 1 | 3 3 | 3 3 1 3 3
 1 3 2 1 | 2 3 1 3 | 0 3 0 1 | 2 3 0 3 | 1 3 0 3 | 2 1 2 3 | 1 3 1 3

T 3 3 3 3 | 3 3 | 3 3 | 3 3 3 3
 B 3 3 3 3 | 3 3 | 3 3 | 3 3 3 3
 B 1 3 | 4 3 | 1 0 | 4 3 | 1 0 | 4 3 | 2 1

22 Bm 1-b7-b6-5 1-b7-6-5 1-7-b7-6-b6-5

2 2 2 2 | 2 2 | 1 2 | 2 2 2 1 2 2
 4 4 4 4 | 4 4 | 4 4 | 4 4 4 4 4 4
 1 3 0 3 | 1 3 1 3 | 1 3 0 3 | 2 3 1 3 | 1 3 1 3 | 0 3 2 3 | 1 3 1 3

T 3 3 3 3 | 3 3 | 3 3 | 3 3 3 3
 B 3 3 3 3 | 3 3 | 3 3 | 3 3 3 3
 B 2 0 | 3 2 | 2 0 | 4 2 | 2 1 | 0 4 | 3 2

57 E 1-b7-6-5 1-7-6-5 1-7-b7-6-b6-5

0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 2 1 0 1 4 1 2 1 2 1 2 1 4 1 2 1 2 1 2 1 0 1 4 1 3 1 2 1

T 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 B 2 0 1 1 2 1 1 1 1 1 1 1 0 1 1 1 1 1

2 0 1 4 2 2 1 4 2 2 1 0 4 4 2

64 Em 1-b7-b6-5 1-b7-6-5 1-7-b7-6-b6-5

0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 2 0 0 0 3 0 2 0 2 0 0 0 4 0 2 0 2 0 1 0 0 0 4 0 3 0 2 0

T 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 A 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 B 2 0 0 0 0 0 0 0 0 0 0 0 0 0

2 0 3 2 2 0 4 2 2 1 0 4 3 2

71 F 1-b7-6-5 1-7-6-5 1-7-b7-6-b6-5

1 1 1 1 0 0 0 0 0 0 0 0 0 0
 1 1 1 1 0 0 0 0 0 0 0 0 0 0
 3 2 1 2 0 2 3 2 3 1 3 1 0 1 3 1 3 1 2 1 1 1 0 1 4 1 3 1

T 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 A 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 B 3 1 2 0 2 3 2 3 1 3 1 0 1 3 1 3 1 2 1 1 1 0 1 4 1 3 1

3 1 2 0 2 3 2 3 1 3 1 0 1 3 1 3 1 2 1 1 1 0 1 4 1 3 1

78 F#m 1-b7-b6-5 1-b7-6-5 1-7-b7-6-b6-5

1 1 1 1 1 1 2 1 1 1 1 2 1 1
 1 1 1 1 1 1 2 1 1 1 1 2 1 1
 3 1 1 1 0 1 3 1 3 1 1 1 1 2 3 1 3 1 2 1 1 1 1 2 0 1 3 1

T 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 A 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 B 4 2 2 0 2 2 4 2 2 1 2 2 4 3 2 2 2 1 2 0 2 2 4

4 2 2 0 2 2 4 2 2 1 2 2 4 3 2 2 2 1 2 0 2 2 4

barré 4 strings barré 3 strings barré 3 strings barré 3 strings barré 4 strings barré 3 strings

85 G 1-b7-6-5 1-7-6-5 1-7-b7-6-b6-5

4 4 3 3 3 3 3 3 3 3 1 3 3 3
 3 3 2 2 2 0 2 2 2 0 2 2 2 2
 0 2 1 0 0 0 0 4 1 0 0 0 0 4 1 1 1 4 1 4 0 4

TAB 0 3 2 0 0 0 4 4 2 0 0 0 4 4 3 4 2 4 1 4 0 4

92 Gm 1-b7-b6-5 Gm 1-b7-b6-5 1-7-b7-6-b6-5

1 1 3 3 1 1 2 2 1 1 1 2 3 3
 1 1 3 3 1 1 2 2 1 1 1 2 3 3
 3 1 3 1 1 3 0 3 3 1 3 1 1 2 0 2 3 1 2 1 1 1 1 2 1 3 0 3

TAB 5 3 1 0 5 3 2 0 5 3 4 3 3 2 3 1 0 3

barré 4 strings barré 3 strings barré 4 strings barré 3 strings barré 4 strings barré 3 strings

OPEN CHORD BASSLINES, FULL OCTAVE

play in reverse order, also

Am
Am Aeolian

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 0 3 4 3 4 3 0 3 2 3 4 3 0 3

T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 B 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

5 Am
Am Dorian

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 0 3 4 3 4 3 0 3 2 3 4 2 0 2

T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 B 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

9 A
A major Mixolydian

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 0 1 3 1 4 1 0 1 3 1 4 1 0 2 1 2

T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 B 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

13 A
A major Ionian

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 0 1 3 1 4 1 0 1 3 1 4 1 1 2 1 2

T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
 B 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

17 Bb

Bb major
Mixolydian

1 4 2 4 0 3 1 3 2 3 0 4 1 1 3 1

T 3 3 3
A 0 3 1 3
B 1 3

21 Bb

Bb major
Ionian

1 4 2 3 0 3 1 3 2 3 0 4 2 4 3 4

T 3 3 3
A 0 3 1 3
B 1 3

25 Bm

Bm
Aeolian

1 2 3 2 0 2 1 2 3 2 0 2 1 2 2

T 3 4 4
A 0 4 2 4
B 2 4

29 Bm

Bm
Dorian

1 2 3 2 0 2 1 2 3 2 1 2 1 2 2

T 3 4 4
A 0 4 2 4
B 2 4

33 C

C major
Mixolydian

37 C

C major
Ionian

41 Cm

Cm
Aeolian

45 Cm

Cm
Dorian

49 D

D major
Mixolydian

1 1 1 1 1 1 1 1 1 1

2 2 2 2 2 2 2 2 4 4 4

0 1 1 1 4 1 0 1 3 1 3

TAB 0 2 2 2 | 4 2 0 2 | 2 3 4 3 | 5 7 7 7

53

D major
Ionian

1 1 1 1 1 1 1 1 1 1

2 2 2 2 2 2 2 2 4 4 4

0 1 1 1 4 1 0 1 3 2 3

TAB 0 2 2 2 | 4 2 0 2 | 2 3 4 3 | 6 7 7 7

57 Dm

Dm
Aeolian

1 1 1 1 1 1 1 1 1 1

4 4 4 4 4 4 4 4 2 2 2

0 2 3 1 3 1 0 2 4 4 1 3

TAB 0 2 2 2 | 3 2 0 3 | 2 3 3 3 | 5 6 7 6

61 Dm

Dm
Dorian

1 1 1 1 3 1 2 2 2 2

4 4 4 4 4 4 1 3 1 3 4 3

0 2 3 1 3 1 0 2 4 3 1 3 4 3

TAB 0 2 2 2 | 3 2 0 3 | 2 3 4 6 | 5 6 7 6

65 E

E major
Mixolydian

0 1 2 1 4 1 0 1 2 1 4 1 0 1 2 1

T
A
B

0 2 4 0 2 4 0 1 2 1

69 E

E major
Ionian

0 1 2 1 4 1 0 1 2 1 4 1 2 1 2 1

T
A
B

0 2 4 0 2 4 1 1 2 1

73 Em

Em
Aeolian

0 0 2 0 3 0 0 0 2 0 3 0 0 0 2 0

T
A
B

0 2 3 0 2 3 0 0 2 0

77 Em

Em
Dorian

0 0 2 0 3 0 0 0 2 0 4 0 0 0 2 0

T
A
B

0 2 3 0 2 4 0 0 2 0

81 F

F major
Mixolydian

1 2 3 4 0 1 3 4 0 1 3 4

TAB: 1 2 3 4 0 1 3 4

85 F

F major
Ionian

1 2 3 4 0 1 3 4 0 1 3 4

TAB: 1 0 4 3 0 3 4 3

89 F#m

F#m
Aeolian

1 1 1 1 1 1 1 1 1 1 1 1

2 1 4 1 0 1 2 1 4 1 0 1 2 1 4 1

TAB: 2 1 4 1 0 1 2 1 4 1 0 1 2 1 4 1

93 F#m

F#m
Dorian

1 1 1 1 1 1 1 1 0 1 1 1

0 1 4 1 0 1 2 1 4 1 4 0 1 1 4 1

TAB: 2 0 4 1 0 1 2 1 4 1 4 0 1 1 4 1

97 G

G major
Mixolydian

3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1

1 0 0 0 1 0 1 0 0 0 1 0 1 0 0 0

T 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

B 3 0 2 3 0 0 2 0 3 0 0 0 0 0 0 0 0 0

101 G

G major
Ionian

3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1

1 0 0 0 1 0 1 0 0 0 1 0 4 0 0 0 0

T 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

B 3 0 2 3 0 0 2 0 4 0 0 0 0 0 0 0 0 0

105 Gm

Gm
Aeolian

3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2

2 0 0 0 1 0 2 0 0 0 1 0 1 1 3 1 1 1

T 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

B 3 0 1 3 0 0 1 0 3 1 1 3 5 3 3 3 3 3

109 Gm

Gm
Dorian

3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 2

0 0 0 0 1 0 2 0 0 0 1 0 1 1 3 1 1 1

T 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

B 3 0 1 3 0 0 1 0 3 1 1 3 5 3 3 3 3 3

BASSLINE PICKUPS

What is a Bassline Pickup?

A bassline pickup is a series of notes played before the first beat of a chord. The chord being led into is the target chord. The notes may come from an arpeggio or scale. They may represent the sound of the chord they precede or they may represent the sound of a chord that progresses to the target chord.

1 2 C 3 4 C

three-note C major scale pickup one note pickup, using a scale-tone neighbor of the target

5 6 C 7 8 C

C major pentatonic pickup with the last note as a neighboring tone of the target chord G major pentatonic pickup with an octave displacement to low C

The Target Chord

The target chord can be any chord in a chord progression, commonly the first chord in the chord progression. It usually begins on the first beat, but it can be on the third beat in 4/4, or even the third beat in 3/4. The target tone is the first note played at the beginning of the target chord.

The Setup Chord

The setup chord is the chord preceding the first beat of the first bar of the main chord progression. For example, G7 can precede C. G7 can be represented with a G major pentatonic, G Mixolydian mode (G major scale with flat seven = C major scale), a G major arpeggio or a G7 arpeggio.

Scales And Arpeggios Used in Pickups

arpeggios

pentatonic scales

heptatonic (7-tone) scales

arpeggios with passing tones and neighboring tones

pentatonic scales with added tones (add 4 for major, add 2 for minor)

Rhythms Used in Pickups

continuous eighths, triplets or sixteenths

Irregular rhythms

combined quarters and eighths, rhythmic words, syncopated series

The Linear Pickup

A linear pickup is a series of ascending or descending scale or arpeggio tones that precede the target chord in ascending or descending order.

Non-Linear Pickups

When a scale or arpeggio changes direction in regard to ascending or descending, it is non-linear. Pickups don't have to be entirely linear. They are usually all or mostly linear.

skipping to a neighbor of the target at the last pickup tone

resolution with an octave displacement

The Pickup Bar

The pickup bar, sometimes called bar zero in software, is the bar preceding bar one, the beginning of a section. The pickup bar can contain notes of an arpeggio or scale for the setup chord (G7) or the target chord (C).

Setup Chord Pickups During the Target Chord

Setup chord pickups can also be used during a target chord, where a setup chord (G7) is sounded in the melody, but not in the accompaniment. In such a situation, the setup chord should be one to two seconds at most, usually closer to one second. At 120 BPM, two beats is one second. Otherwise, the listener will have too long a time to ponder the “mismatching” of the melody and accompaniment chords.

The Pickup Series

Start with increasing numbers of pickups, using the pickup series.

pickup with tones (or a scale) of the setup chord

Play one note (the setup tone) of G7 as the last eighth note in the pickup bar. Then play a single triad tone of the target chord, with the smallest interval possible from the setup tone or the setup tone can be “5” of the key of the target chord (the note “G”), progressing to “1” of the target chord (the note “C”).

Progressively add more pickup notes as in the pickup series. For example, play the last eighth note in the pickup bar, then the last two eighth notes, the last three, etc.

pickup with tones (or a scale) of the target chord

Play one note of C as the last eighth note in the pickup bar. Then play a single triad tone of the target chord, with the smallest interval possible from the setup tone or the setup tone can be “5” of the key of the target chord (the note “G”), progressing to “1” of the target chord (the note “C”). Progressively add more pickup notes as in the pickup series.

Adding Chromatics

Chromatics may be added between 2 and 3 or between 5 and 6 of major pentatonic. Chromatics may be added between 4 and 5 or between b7 and 1 of major pentatonic.

The Strength Of Resolution

strength of resolution according the last pickup tone

The last pickup tone will be well-remembered by the listener, usually strongest of the pickups tones. The last pickup tone can be a setup chord tone, a neighboring tone of the target tone, a lower chromatic for the target tone. The setup tone can also be the fifth of the key of the target chord progressing to the root of the target chord. In order of strength, they are:

strong: lower chromatic of the target tone or fifth of the target chord progressing to the root

moderate: a neighboring scale tone of the target tone

weak: a chord tone that is not a neighbor of the target tone

the lower sixth and upper flatted third as neighboring tone pickups

Both of these resolve to the root of the target chord. As a lower neighboring tone, the sixth of the target chord may approach from below to the root of the target chord from below, usually in the context of a major pentatonic scale. With another minor third interval, the flat three of the target chord may approach from above to the root of the target chord.

strength according the quality of the setup chord

Setup chords that are better known to progress to target chords are stronger in their resolution to the target chord.. Dissonant V or bII of target chords are very strong in their resolution to the target chord.

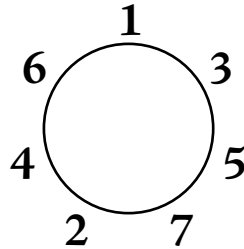
Major Scale-Tone Triads

The background features two large, light gray, stylized numbers, '6' and '8', which are partially obscured by the text. The '6' is on the left and the '8' is on the right. Both numbers have a white circular cutout in the center.

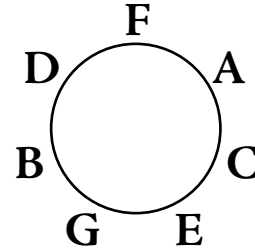
- **The Cycle of Thirds**
- **Chords from the Major Scale Fretboard Pattern**
- **Major Scale-Tone Root Cycles**
- **Three-Note Triad Chord Progression**
- **Major Scale-Tone Triad Voice Leading**
- **The Chord Progression Game**
- **Triad Subsets of the Major Scale**
- **Using Triads in Improv and Comping**

THE CYCLE OF THIRDS

the seven number cycle of every-other number



the seven letter cycle of every-other letter

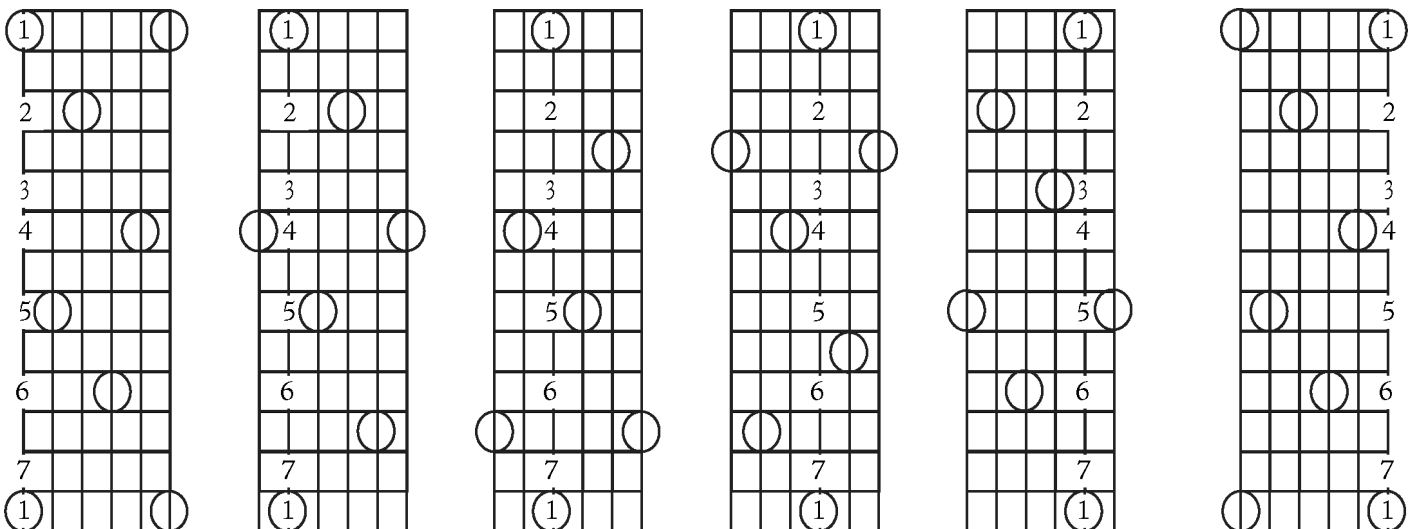


By default, chords are constructed from an every-other-note cycle. In numbers, this is 1-3-5-7-2-4-6. In letters, it's F-A-C-E-G-B-D. Common chords called *triads* are most commonly built with three consecutive notes on the cycle, such as "1-3-5" or "2-4-6". Quadrads use four consecutive notes on the cycle: "1-3-5-7" or "2-4-6-1". Pentads use five consecutive notes on the cycle: "1-3-5-7-2" or "2-4-6-1-3" (however, not all of the pentads have an acceptable sound).

CHORDS FROM THE MAJOR SCALE FRETBOARD PATTERN

The Major Scale on One String

The major scale can be used as a reference to compare any scale, chord, or melody. The tones of a scale have defined intervals which can be measured in whole steps. Whole steps equal an interval of two frets, such as the interval between "1" and "2" on either of the diagrams below. When the seven tones of the scale are numbered, consecutive notes are two frets apart, with two exceptions. The interval from "3" to "4" and the interval from "7" to "1" is a half step, or one fret, as you can see below.



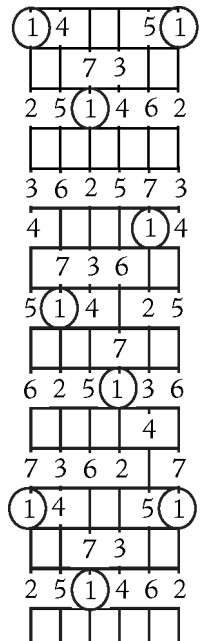
The Major Scale on All Strings

Notice in the diagram at the right that the relative pattern for the major scale on each string is the same. It just starts at a different place. Notice that "1" (circled) is five frets toward the guitar body on the next smaller string, except on the second string it is four frets toward the guitar body from the "1" on the third string. This is true for any numbered major scale tone.

Notice also that the pattern repeats on the fretboard every twelve frets. To help recognize this, view the major scale "lines" of notes across the fretboard. From scale tone "2" on the sixth string, the line reads to the right "2-5-1-4-6-2". From "3" on the sixth string, the line reads "3-6-2-5-7-3". From "6", its "6-2-5-1-3-6". Each of these major scale "lines" run right across the fret. The other four lines have slight deviations. The line at "1", which is "1-4-7-3-5-1", where "7-3" are one fret closer to the guitar body. "4-7-3-6-1-4" has "7-3-6" one fret closer to the guitar body. "5-1-4-7-2-5" has "7" one fret closer to the guitar body. "7-3-6-2-4-7" has "4" one fret farther from the guitar body. See [Full-Fretboard Major Scale Visualization](#).

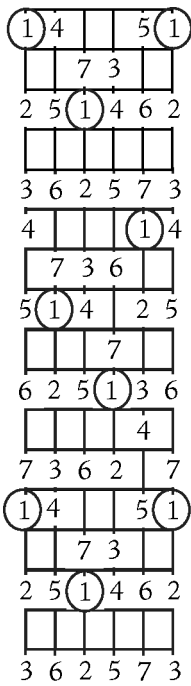
In building the scale pattern on all strings, the next smaller string is "up a fourth", where in most cases, each note is four scale tones higher on the same fret, except scale tone seven is one fret closer to the guitar body. Each pair of numbers in the perfect fourth sequence "7-3-6-2-5-1-4" is on the same fret of adjacent strings. With scale tones "4 and 7" however, "7" is one fret closer to the guitar body.

Exception: between the third and second string, each pair of numbers in the perfect fourth sequence "7-3-6-2-5-1-4" forms a diagonal shape with the note on the second string one fret closer to the guitar body. With scale tones "4 and 7" however, "7" is on the second string two frets above "4" (closer to the guitar body).

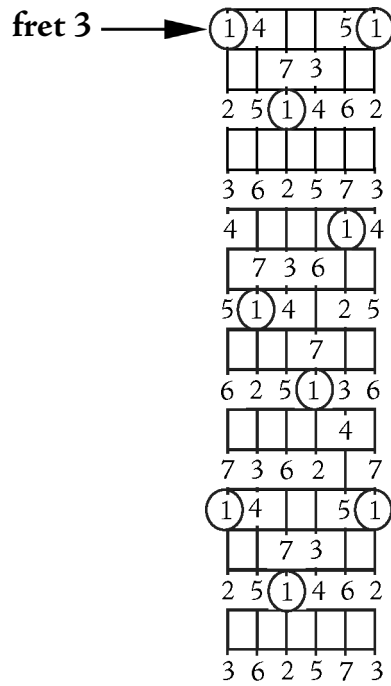


The Movable Major Scale

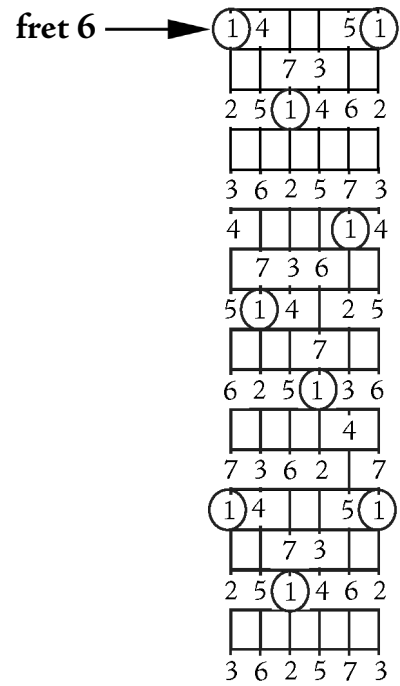
the movable major scale



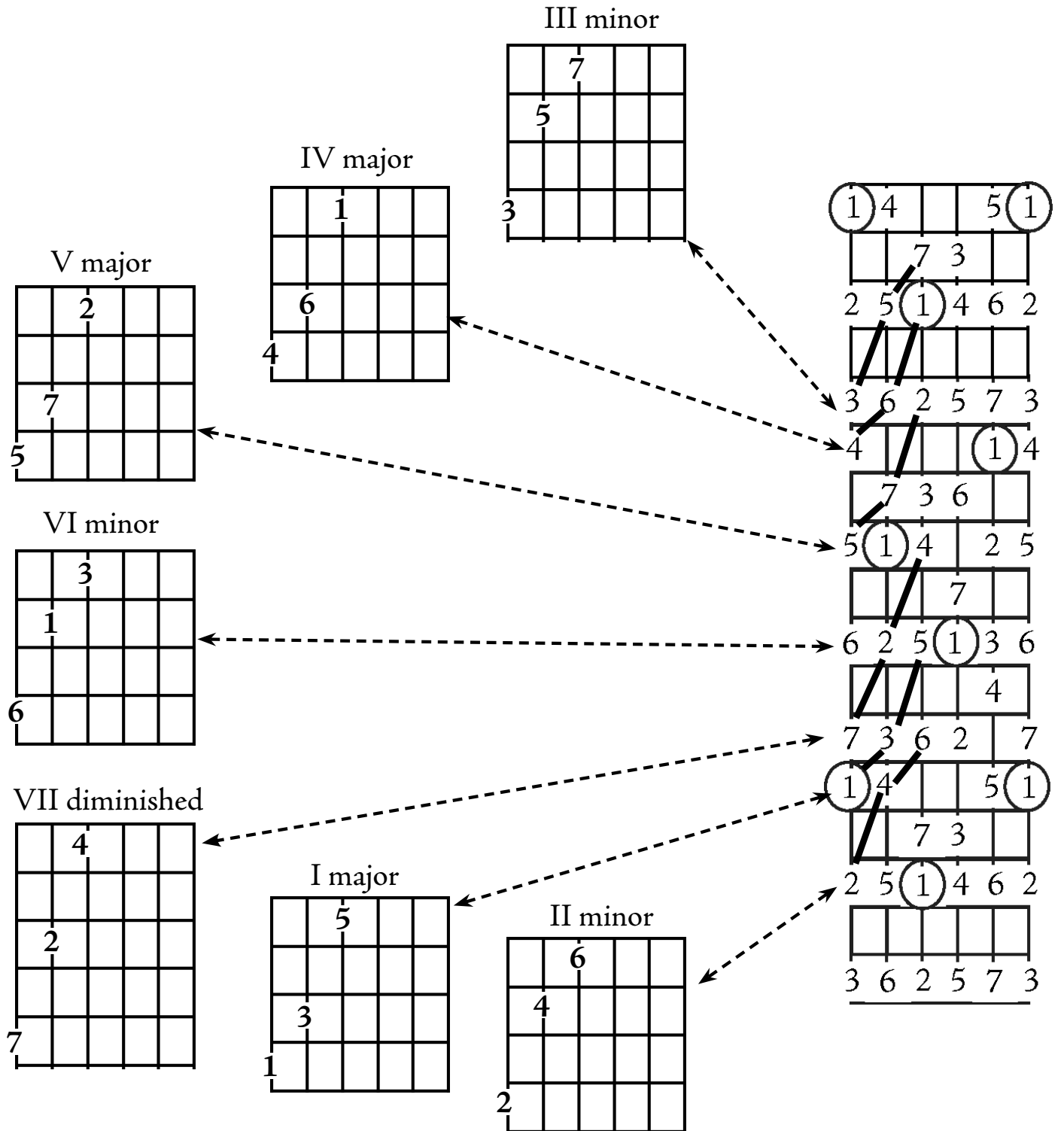
G major scale



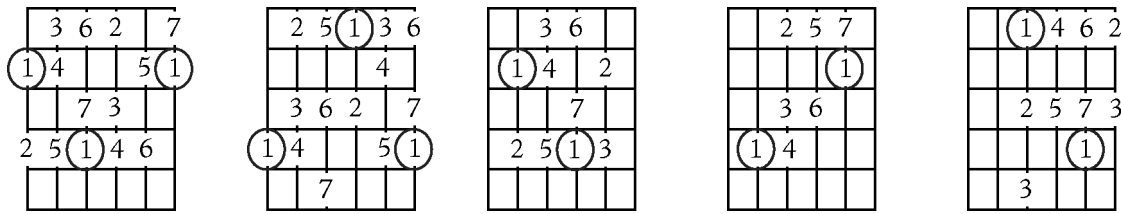
B \flat major scale



Discovering Chords within the Major Scale



Scale Fingerings Extracted from the Full Fretboard Pattern



discovering major chords within the major scale

In any area of the full fretboard major scale, combinations of scale tones “1, 3, 5” or “4, 6, 1” or “5, 7, 2” make major chords. It will be shown below that either of these three combinations of three notes makes a major chord.

A major scale fingering 6

1-3-5 makes I major

A II

scale tones → 1 2 3 4 5 6 7 1 1 3 5
fingers → 4 1 3 4 1 3 1 2 4 3 1

A major scale fingering 2
added scale tone 1 on the sixth string

4-6-1 makes IV major

D VII

scale tones → 1 2 3 4 5 6 7 1 4 6 1
fingers → 1 1 3 4 1 3 4 1 4 3 1

A major scale fingering
added scale tones 1 and 2 on the sixth string

5-7-2 makes V major

E IX

scale → 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 5 7 2
fingers → 1 3 1 2 4 1 3 4 1 3 4 1 3 1 2 4 3 1

The combination of one, three and five is called the “I” chord (written with a roman numeral “one”). The combination of four, six and one is called a “IV” chord (Roman numeral “four”). Five six and two are called the “V” chord (Roman numeral “five”). A long time ago, we figured out that chords sound better when their notes are not too close together, so we built them with every other scale tone. Notice that each set of numbers (1-3-5, 4-6-1 and 5-7-2) are three consecutive numbers from the “every-other” cycle below.

discovering minor and diminished chords within the major scale

In any area of the full fretboard major scale, combinations of scale tones “2-4-6” or “3-5-7” or “6-1-3” make minor chords. They are named after the first note of each sequence: “2-4-6” is a II minor chord, “3-5-7” is a III minor chord and “6-1-3” is a VI minor chord.

A major scale fingering 7

2-4-6 makes II minor

Bm IV

1 2 3 4 5 6 7 1 2 4 6
2 4 1 2 4 1 3 4 4 2 1

5 7 4 5 7 4 6 7 7 5 4 4 7

A major scale fingering 1

3-5-7 makes III minor

C#m VI

scale → 1 2 3 4 5 6 7 1 3 5 7
fingers → 1 2 4 1 2 4 1 2 4 2 1

5 7 9 5 7 9 6 7 9 7 6 6 9

A major scale fingering 4

added scale tones 1, 2 and 3 on the sixth string

6-1-3 makes VI minor

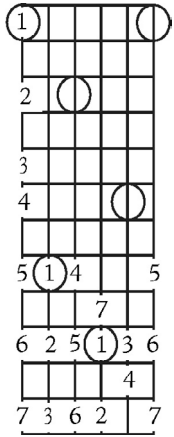
F#m IX

scale → 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 6 1 3
fingers → 1 2 4 1 2 4 1 2 4 1 2 4 1 3 4 4 2 1

5 7 9 10 12 14 11 12 14 11 12 14 11 13 14 14 12 11 11 12 14

Combinations of scale tones "7, 2, 4" make diminished chords named after "7", a VII diminished chord.

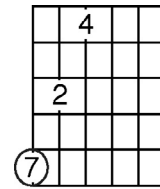
A major scale fingering 5



added scale tones 1, 2, 3 and 4 on the sixth string

7-2-4 makes VII diminished

G[#]dim XII



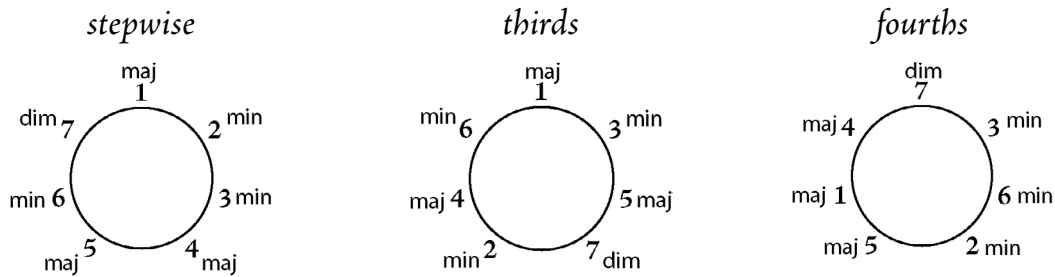
15

scale → 1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 6 1 3
 fingers → 1 3 1 2 1 2 4 1 2 4 1 2 4 1 2 4 2 1

T
A
B

5 7 9 10 12 14 16 12 14 16 12 14 16 13 14 16 14 12 12 14 16 16 14 12 12 14 16

MAJOR SCALE-TONE ROOT CYCLES



The Stepwise Cycle on the Major Scale

Playing the notes of a major scale in alphabetical or numerical order is called *stepwise order*. The notes can ascend or descend, but the most typical examples of a scale will ascend or ascend, then descend.

Scale tones three to four is an interval of one fret. Scale tones seven to one (at the octave, where the eighth note has the same name as the first note) are also an interval of one fret. Saying they are an interval of one fret is to say there are no notes between them: they are on frets next to each other. The other step to step intervals are two frets apart, indicating that there is a fret between them. The two fret intervals in the major scale are major scale tones one to two; two to three; four to five; five to six; and six to seven.

The Cycle of Thirds on the Major Scale

Playing the notes of a major scale alphabetically and numerically in an order ascending or descending by every-other-note is called *thirds*. Each note to the next in this cycle involves a range of three notes in the scale inclusively, hence the name *thirds*. This cycle of thirds on the major scale is called the *major scale-tone cycle of thirds*, or the *major scale-tone tertian cycle* (tertian means “of threes”).

Scale tones one to three are interval of four frets (three “empty” frets between them). Scale tones four to six are also four frets, and scale tones five to seven are four frets. These four fret intervals can be called *major thirds*, since they are the same as the interval from major scale tones one to three. A minor third is a three-fret interval (two “empty” frets between them).

The Cycle of Fourths on the Major Scale

Playing the notes of a major scale alphabetically and numerically in an order ascending or descending by every fourth note (inclusively) is called *fourths*.

Visualizing Chord Progressions in Fourths on the Guitar

The piano and guitar are each effective in their own way in visualizing note structures. The piano makes it very easy to see the linear pattern of natural notes on the white keys with the sharps and flats on the black keys. However, it takes an expert pianist to be able to play chord progressions equally well in all keys. The guitar has no markings to indicate natural notes. It does, however, provide a structure to see the most important chord progressions with root movement in fourths.

The sequence of perfect fourths in the major scale is 7-3-6-2-5-1-4. It can be thought in a cycle, as shown below, but major scale tones four through seven span the interval of an augmented fourth instead of a perfect fourth. Any four consecutive notes in the major scale constitute a perfect fourth interval of two and a half steps, except steps four through seven, which do not include a half step. An interval of two frets (not counting the starting fret) constitutes a whole step and one fret is a half step. Two and a half steps is five frets (not counting the starting fret).

perfect fourths and perfect fifths

perfect fourths → 7-3-6-2-5-1-4 ← perfect fifths (read right to left)

perfect fifths → 4-1-5-2-6-3-7 ← perfect fourths (read right to left)

C Major Scale-Tone Tertian Triads, Roots Moving in Perfect Fourths

I am showing the perfect fourth order before stepwise order of chord roots because of its visibility on the guitar.

	minor				major		
diminished							
VII^{dim.}	III^m	VI^m	II^m	V	I	IV	
B ^{dim.} XIV	E ^m XII	A ^m XII	D ^m X	G X	C VIII	F VIII	
B^{dim.} VI	E^m VII	A^m V	D^m V	G III	C III	F I	

MST Tertian Triads, Stepwise Roots

I	II^m	III^m	IV	V	VI^m	VII^{dim.}
C	III	D ^m	V	F	G	X
C	VIII	D^m	X	E^m	XII	F
XIII	G	III	Am	VI	B^{dim.}	VI

MST Tertian Triads, Roots in Thirds

I	III^m	V	VII^{dim.}	II^m	IV	VI^m
C	Em	G	B dim	D ^m	F	Am
C	Em	G	B dim	D^m	F	Am
V	IV	III	III	II	V	V

Stepwise E Major Scale-Tone Triads

Bold roman numerals are scale tones. Roman numerals at the upper right of each diagram is the number of the top fret.

I	II^m	III^m	IV	V	VI^m	VII^{dim.}
E	F#^m	G#^m	A	B	C#^m	D#^{dim.}
I	II	IV	V	VII	IX	XI

E	F#^m	G#^m	A	B	C#^m	D#^{dim.}
VII	IX	XI	XII	II	IV	VI

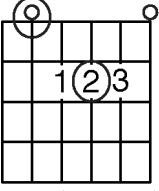
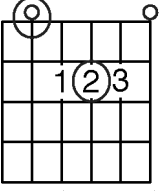
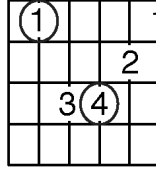
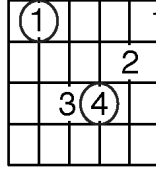
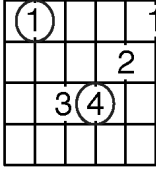
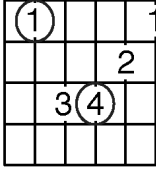
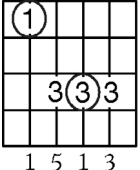
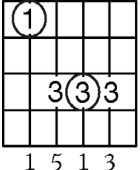
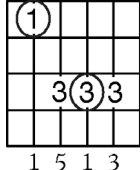
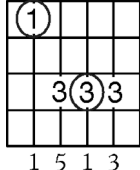
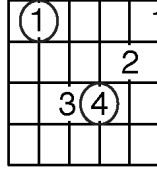
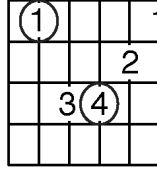
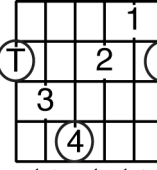
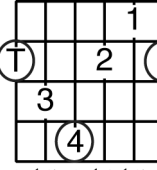
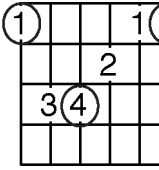
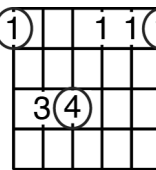
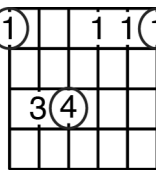
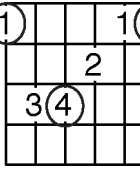
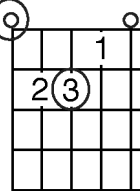
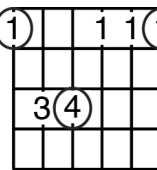
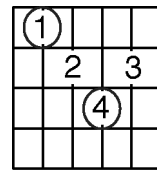
E Major Scale-Tone Triads in Fourths

	<i>minor</i>			<i>major</i>		
diminished						
VII^{dim.}	III^m	VI^m	II^m	V	I	IV
D#^{dim.}	G#^m	C#^m	F#^m	B	E	A
VI	IV	IV	II	II	I	I

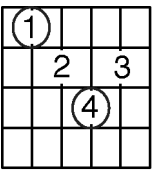
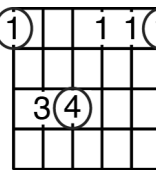
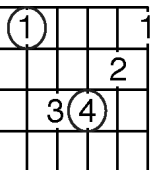
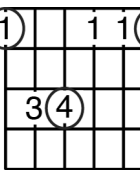
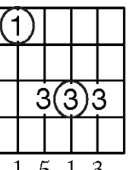
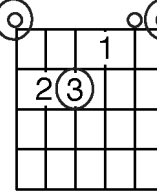
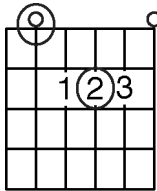
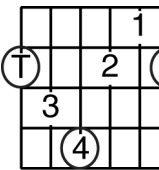
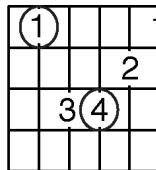
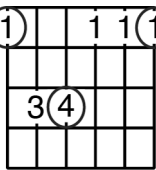
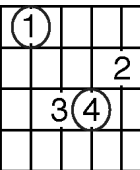
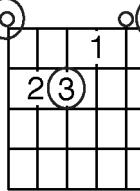
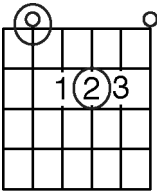
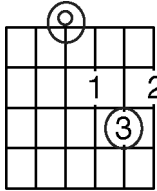
D#^{dim.}	G#^m	C#^m	F#^m	B	E	A
XI	XI	IX	IX	VII	VII	V

Stepwise A Major Scale-Tone Triads

Bold roman numerals are scale tones. Roman numerals at the upper right of each diagram is the number of the top fret.

I		II^m		III^m		IV		V		VI^m		VII^{dim.}	
A	I	B^m	II	C^{#m}	IV	D	V	E	VII	F^{#m}	IX	G^{#dim.}	XI
													
1 5 1 3 5	1 5 1 3 5	1 5 1 b3 5	1 5 1 b3 5	1 5 1 b3 5	1 5 1 b3 5	1 5 1 3	1 5 1 3	1 5 1 3	1 5 1 3	1 5 1 b3 5	1 5 1 b3 5	1 b5 1 b3 b5	1 b5 1 b3 b5
A		B^m		C^{#m}		D		E		F^{#m}		G^{#dim.}	
V	VII	IX	X	I	II	IV							
													
1 5 1 3 5 1	1 5 1 b3 5 1	1 5 1 b3 5 1	1 5 1 3 5 1	1 5 1 3 5 1	1 5 1 b3 5 1	1 b5 1 b3							

A Major Scale-Tone Triads in Fourths

	<i>minor</i>				<i>major</i>		
<i>diminished</i>							
VII^{dim.}	III^m	VI^m	II^m	V	I	IV	
G^{#dim.} XI	C^{#m} IX	F^{#m} IX	B^m VII	E VII	A V	D V	
							
1 b5 1 b3	1 5 1 b3 5 1	1 5 1 b3 5	1 5 1 b3 5 1	1 5 1 3	1 5 1 3 5 1	1 5 1 3 5	
G^{#dim.} III	C^{#m} IV	F^{#m} II	B^m II	E I	A I	D I	
							
1 b5 1 b3 b5	1 5 1 b3 5	1 5 1 b3 5 1	1 5 1 b3 5	1 5 1 3 5 1	1 5 1 3 5	1 5 1 3	

Stepwise F Major Scale-Tone Triads

Bold roman numerals are scale tones. Roman numerals at the upper right of each diagram is the number of the top fret.

I	II^m	III^m	IV	V	VI^m	VII^{dim.}
F I	G^m III	A^m V	B^b VI	C VIII	D^m X	E^{dim.} XI
1 5 1 3 5 1	1 5 1 b3 5 1	1 5 1 b3 5 1	1 5 1 3 5 1	1 5 1 3 5 1	1 5 1 b3 5 1	1 b5 1 b3 b5

F VIII	G^m X	A^m XII	B^b I	C III	D^m V	E^{dim.} VII
1 5 1 3	1 5 1 b3 5	1 5 1 b3 5	1 5 1 3	1 5 1 3	1 5 1 b3 5	1 b5 1 b3

F Major Scale-Tone Triads in Fourths

	<i>minor</i>			<i>major</i>		
diminished						
VII^{dim.}	III^m	VI^m	II^m	V	I	IV
E^{dim.} VII	A^m V	D^m V	G^m III	C III	F I	B^b I
1 b5 1 b3	1 5 1 b3 5 1	1 5 1 b3 5	1 5 1 b3 5 1	1 5 1 3	1 5 1 3 5 1	1 5 1 3

E^{dim.} XI	A^m X	D^m X	G^m X	C VIII	F VIII	B^b VI
1 b5 1 b3 b5	1 5 1 b3 5	1 5 1 b3 5 1	1 5 1 b3 5	1 5 1 3 5 1	1 5 1 3	1 5 1 3 5 1

THREE-NOTE TRIAD CHORD PROGRESSION

Triad Arcs

I refer to the three groups of notes that represent all major chord tones or all minor chord tones on the fretboard as *arcs*, since they are the notes conceptually embraced by an arc, as shown below.

major chord tone arcs

minor chord tone arcs

The diagrams illustrate the following chord forms and their triad arcs:

- C form:** Notes 1, 3, 5. Arcs connect 1-3-5 and 1-3-5.
- E form (Major):** Notes 1, 3, 5. Arcs connect 1-3-5 and 1-3-5.
- A/G form:** Notes 1, 3, 5. Arcs connect 1-3-5 and 1-3-5.
- E form (Minor):** Notes 1, b3, 5. Arcs connect 1-b3-5 and 1-b3-5.
- D/C form:** Notes 1, b3, 5. Arcs connect 1-b3-5 and 1-b3-5.

IIIm -V -I-IV-IIIm-VIm - E Form I arc

strings 1-2-3

Am I	D II	G III	C III	Bm II	Em III	Am V
1 b3 5	5 1 3	3 5 1	1 3 5	1 b3 5	5 1 b3	b3 5 1

strings 2-3-4

Am I	D II	G III	C V	Bm III	Em IV	Am V
5 1 b3	3 5 1	1 3 5	5 1 3	5 1 b3	b3 5 1	1 b3 5

strings 3-4-5

Am II	D II	G IV	C V	Bm IV	Em IV	Am V
b3 5 1	1 3 5	5 1 3	3 5 1	b3 5 1	1 b3 5	5 1 b3

strings 4-5-6

Am II	D IV	G V	C V	Bm IV	Em V	Am VII
1 b3 5	5 1 3	3 5 1	1 3 5	1 b3 5	5 1 b3	b3 5 1

IIm-V-I-IV-IIIIm-VIm - C form I Arc

strings 1-2-3

Am V	D V	G VII	C VIII	Bm VII	Em IX	Am VIII
b3 5 1	1 3 5	5 1 3	3 5 1	b3 5 1	1 b3 5	5 1 b3

strings 2-3-4

Am V	D VII	G VII	C VIII	Bm VII	Em VIII	Am IX
1 b3 5	5 1 3	3 5 1	1 3 5	1 b3 5	5 1 b3	b3 5 1

strings 3-4-5

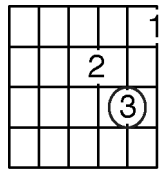
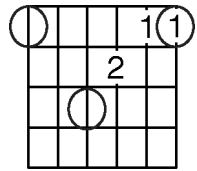
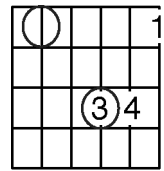
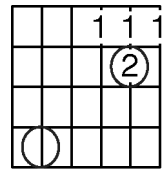
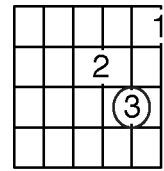
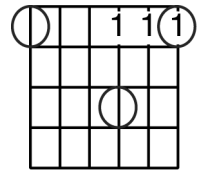
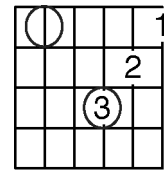
Am V	D VII	G VII	C IX	Bm VII	Em IX	Am IX
5 1 b3	3 5 1	1 3 5	5 1 3	5 1 b3	b3 5 1	1 b3 5

strings 4-5-6

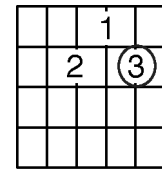
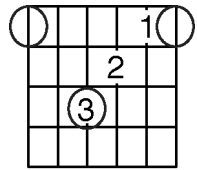
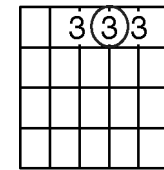
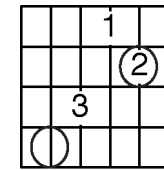
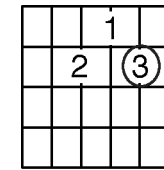
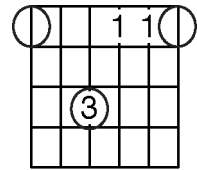
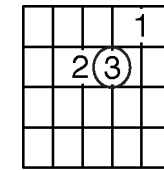
Am VII	D VII	G IX	C X	Bm IX	Em IX	Am X
b3 5 1	1 3 5	5 1 3	3 5 1	b3 5 1	1 b3 5	5 1 b3

IIm-V-I-IV-III-VIm - A/G form I Arc

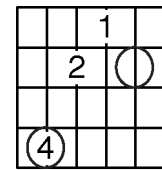
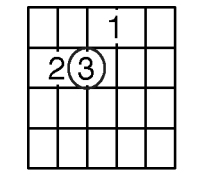
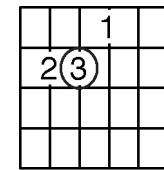
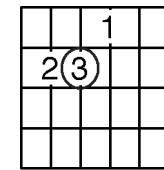
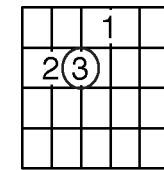
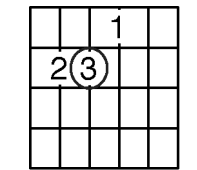
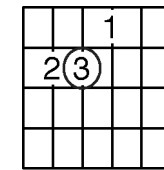
strings 1-2-3

Am I	D X	G X	C XII	Bm X	Em XII	Am XII
						
5 1 b3	3 5 1	1 3 5	5 1 3	5 1 b3	b3 5 1	1 b3 5

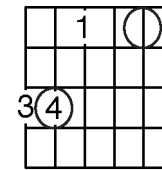
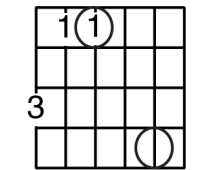
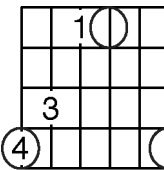
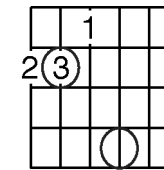
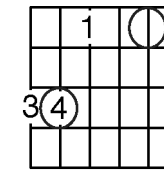
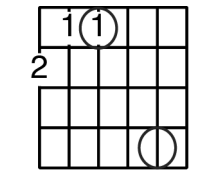
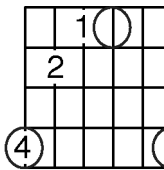
strings 2-3-4

Am IX	D X	G XII	C XII	Bm XI	Em XII	Am XIII
						
b3 5 1	1 3 5	5 1 3	3 5 1	b3 5 1	1 b3 5	5 1 b3

strings 3-4-5

Am IX	D XI	G XII	C XII	Bm XI	Em XII	Am XIV
						
1 b3 5	5 1 3	5 1 3	5 1 3	5 1 3	5 1 3	5 1 3

strings 4-5-6

Am X	D XIV	G XII	C XIV	Bm XII	Em XIV	Am XIV
						
5 1 b3	3 5 1	1 3 5	5 1 3	5 1 b3	b3 5 1	1 b3 5

MAJOR SCALE-TONE TRIAD VOICE LEADING

<u>root movement</u>	<u>chord types</u>	<u>chord pair</u>		<u>voice leading</u> (relates to first chord)	<u>Key of C</u>	<u>Key of A</u>
stepwise	major to minor	I	II ^m	all up 1 scale tone	C-D ^m	A-B ^m
		V	VI ^m	all up 1 scale tone	G-A ^m	E-F ^{#m}
	major to major	IV	V	all up 1 scale tone	F-G	D-E
	minor to minor	II ^m	III ^m	all up 1 scale tone	D ^m -E ^m	B ^m -C ^{#m}
	minor to major	III ^m	IV	all up 1 scale tone	E ^m -F	C ^{#m} -D
dimin. to major	VII dim	I	all up 1 scale tone	B dim-C	G [#] dim-A	
fourths	major to major	I	IV	3rd & 5th up a scale step	C-F	A-D
		V	I	3rd & 5th up a scale step	G-C	E-A
	minor to major	II ^m	V	3rd & 5th up a scale step	D ^m -G	B ^m -E
	minor to minor	III ^m	VI ^m	3rd & 5th up a scale step	E ^m -A ^m	C ^{#m} -F ^{#m}
	dimin. to minor	VI ^m	II ^m	3rd & 5th up a scale step	A ^m -D ^m	F ^{#m} -B ^m
major to dimin.	VII dim	III ^m	3rd & 5th up a scale step	Bd im-E ^m	G [#] dim-C ^{#m}	
thirds	major to minor	IV	VII dim.	3rd & 5th up a scale step	F-B dim.	D-G [#] dim.
		I	III ^m	root down a scale step	C-E ^m	A-C ^{#m}
	major to dimin.	IV	VI ^m	root down a scale step	F-A ^m	D-F ^{#m}
		V	VII dim	root down a scale step	G-B dim	E-G [#] dim
	minor to major	II ^m	IV	root down a scale step	D ^m -F	B ^m -D
		III ^m	V	root down a scale step	E ^m -G	C ^{#m} -E
	dimin. to minor	VI ^m	I	root down a scale step	A ^m -C	F ^{#m} -A
VII dim		II ^m	root down a scale step	B dim-D ^m	G [#] dim-B ^m	

THE CHORD PROGRESSION GAME

Theory of Chord Construction and Progression

A chord root is the note after which a chord is named. The root of Cma9 is "C". The root of Bb7b9 ("B" flat seventh, flat nine) is "Bb" ("B" flat).

Major scale tone chord roots can progress in stepwise, fourths or thirds.

Stepwise root order is numerically 1-2-3-4-5-6-7-1-2, etc.

Root movement in fourths is 7-3-6-2-5-1-4-7-3, etc. in numbers and B-E-A-D-G-C-F-B-E-A, etc. in letters. In reverse order, this is fifths" 4-1-5-2-6-7-3-7 (repeating cycle) in numbers and F-C-G-D-A-E-B (cycle) in letters.

Root movement up in thirds is 1-3-5-7-2-4-6 (repeating cycle). in numbers and F-A-C-E-G-B-D (cycle) in letters. Roots down in thirds are 6-4-2-7-5-3-1 or -D-B-G-E-C-A-F,

Chords with root movement in stepwise order in C major are C (I), Dm (IIIm), Em (IIIIm), F (IV), G (V), Am (VIIm), B dim. or m7b5 (VII dim or VIIIm7b5), C, Dm, Em, etc. This order can also be used in reverse: C-B dim.-Am-G, etc., which is still stepwise.

Chords with root movement in fourths (B-E-A-D-G-C-F) in C major are B dim. or m7b5 (VII dim or VIIIm7b5), Em (IIIIm), Am (VIIm), Dm (IIIm), G (V), C (I), F (IV), B dim., Em (IIIIm), Am, etc. This order can also be used in reverse, which is down in fourths or up in fifths: F-C-G-D-A-E-B.

Chords with root movement up in thirds in C major are C (I), Em (IIIIm), G (V), B dim. or Bm7b5 (VII dim or VIIIm7b5), Dm (IIIm), F (IV), Am (VIIm), C, G, B dim, etc. This order can also be used in reverse: F-C-G-D, etc., which is then root movement in fifths.

The complete series of perfect fourths Any seven in a row are a major scale, with "1" next-to-last, which names the major scale. It is also the accumulative order of flats in flat key signatures.

B# E# A# D# G# C# F# B E A D G C F Bb Eb Ab Db Gb Cb Fb

The complete series of perfect fifths Any seven in a row are a major scale, with "7" last. Raising "7" a half step (one fret) identifies "1", which names the major scale. It is also the accumulative order of sharps in sharp key signatures.

Fb-Cb-Gb-Db-Ab-Eb-Bb-F-C-G-D-A-E-B-F#-C#-G#-D#-A#-E#-B#

Chords are usually phrases in groups of four, eight, twelve, sixteen, twenty four or thirty two bars, but don't have to be.

To give the familiar sound of order to a chord progression, it should have sequences of three or more chords with their roots progressing in stepwise or fourths order. Sequences of three or more roots in thirds is not often used, but can be (C Em G G).

The Rules of the Game

Use only root movement in stepwise (consecutive) or fourths order. Fourths may be up or down. Down a fourth is the same as up a fifth. Choose three or more chords in one of the systems of order. Find the last chord in the other system of order and progress two or more chords farther in that order. You could go back and fourth many times, but once in each system of order is usually enough to get started.

For example, begin with stepwise root movement: C-Dm-Em-F (I, II_m, III_m, IV of C). Then, from the “F” chord, change to root movement backwards in fourths (which is fifths, as stated above): F-C-G-Dm. This could produce the following chord progression:

C-Dm-Em-F-C-G-Dm-Dm

Dm was used for two bars to complete an eight bar phrase, given that each chord name indicated one bar.

step-by-step procedure

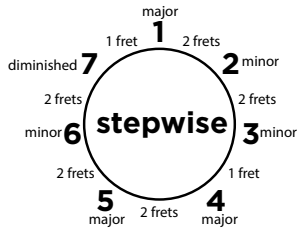
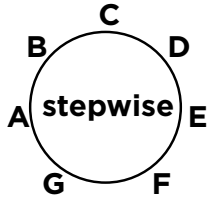
- ✦ Choose a single major scale, shown in a horizontal row on the Major Scale Tone Chords chart below.
- ✦ Decide on a few chords in stepwise or perfect fourths root movement.
- ✦ Keep the last chord from step 2 in mind, which could be called the “pivotal” chord. Find it in another order of root movement (in stepwise, thirds or fourths) and continue in the new order.
- ✦ Continue the progression as long as you like, finding the last chord you used in one order in another and continuing from there.

Major Scale-Tone Chord Cycles and Tables

In the tables below, each row is a key. Read a row for a key all the way across the three tables.

stepwise

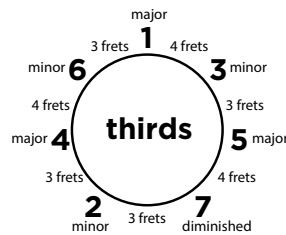
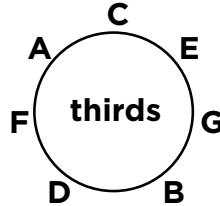
With stepwise roots, ascending suggests going somewhere. Descending suggests returning. All notes change (1-3-5 to 2-4-6).



1	2	3	4	5	6	7
1-3-5	2-4-6	3-5-7	4-6-1	5-7-2	6-1-3	7-2-4
maj.	min.	min.	maj.	maj.	min.	dim.
C#	D#m	E#m	F#	G#	A#m	B#dim
F#	G#m	A#m	B	C#	D#m	E#dim
B	C#m	D#m	E	F#	G#m	A#dim
E	F#m	G#m	A	B	C#m	D#dim
A	Bm	C#m	D	E	F#m	G#dim
D	Em	F#m	G	A	Bm	C#dim
G	Am	Bm	C	D	Em	F#dim
C	Dm	Em	F	G	Am	Bdim
F	Gm	Am	Bb	C	Dm	Edim
Bb	Cm	Dm	Eb	F	Gm	Adim
Eb	Fm	Gm	Ab	Bb	Cm	Ddim
Ab	Bbm	Cm	Db	Eb	Fm	Gdim
Db	Ebm	Fm	Gb	Ab	Bbm	Cdim
Gb	Abm	Bbm	Cb	Db	Ebm	Fdim
Cb	Dbm	Ebm	Fb	Gb	Abm	Bbdim

thirds

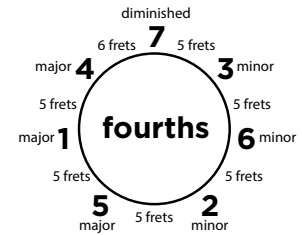
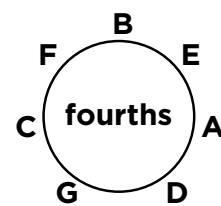
Progression in thirds is incidental. Each chord to the next only changes one note (1-3-5 to 3-5-7).



1	3	5	7	2	4	6
1-3-5	3-5-7	5-7-2	7-2-4	2-4-6	4-6-1	6-1-3
maj.	min.	maj.	dim.	min.	maj.	min.
C#	E#m	G#	B#dim	D#m	F#	A#m
F#	A#m	C#	E#dim	G#m	B	D#m
B	D#m	F#	A#dim	C#m	E	G#m
E	G#m	B	D#dim	F#m	A	C#m
A	C#m	E	G#dim	Bm	D	F#m
D	F#m	A	C#dim	Em	G	Bm
G	Bm	D	F#dim	Am	C	Em
C	Em	G	Bdim	Dm	F	Am
F	Am	C	Edim	Gm	Bb	Dm
Bb	Dm	F	Adim	Cm	Eb	Gm
Eb	Gm	Bb	Ddim	Fm	Ab	Cm
Ab	Cm	Eb	Gdim	Bbm	Db	Fm
Db	Fm	Ab	Cdim	Ebm	Gb	Bbm
Gb	Bbm	Db	Fdim	Abm	Cb	Ebm
Cb	Ebm	Gb	Bbdim	Dbm	Fb	Abm

fourths

Progression in fourths is pivotal. With triads, one note is retained and two note move up a scale tone (1-3-5 to 1-4-6).



7	3	6	2	5	1	4
7-2-4	3-5-7	6-1-3	2-4-6	5-7-2	1-3-5	4-6-1
dim.	min.	min.	min.	maj.	maj.	maj.
B#dim	E#m	A#m	D#m	G#	C#	F#
E#dim	A#m	D#m	G#m	C#	F#	B
A#dim	D#m	G#m	C#m	F#	B	E
D#dim	G#m	C#m	F#m	B	E	A
G#dim	C#m	F#m	Bm	E	A	D
C#dim	F#m	Bm	Em	A	D	G
F#dim	Bm	Em	Am	D	G	C
Bdim	Em	Am	Dm	G	C	F
Edim	Am	Dm	Gm	C	F	Bb
Adim	Dm	Gm	Cm	F	Bb	Eb
Ddim	Gm	Cm	Fm	Bb	Eb	Ab
Gdim	Cm	Fm	Bbm	Eb	Ab	Db
Cdim	Fm	Bbm	Ebm	Ab	Db	Gb
Fdim	Bbm	Ebm	Abm	Db	Gb	Cb
Bbdim	Ebm	Abm	Dbm	Gb	Cb	Fb

USING TRIADS IN IMPROV AND COMPING

Preparation

In improvising melody and comping (composing an accompaniment part spontaneously), you need to quickly perform the three-step procedure below:

1. determine the scale-tone chord type by number.
2. choose arpeggio, chord, and/or pentatonic fingering(s).
3. determine seven tone scale fingering.

Determining a Scale-Tone Chord by Number

In a chord progression, groups of consecutive chords usually occur in the same heptatonic (seven-tone) scale, and more commonly in the major scale. A good first step in recognizing the numbered scale tones on which a group of chord roots have occurred is to identify a scale-tone pair of chords.

Unique And Ambiguous Major Scale Tone Pairs Of Chords

If you see two major chords with their roots a whole step (two frets) apart, you should suspect they have come from major scale tones four and five and are “IV type” and “V type” chords. Two minor roots a whole step apart should be suspected as “II type” and “III type”. A minor chord root progressing up a half step (one fret) to a major chord is probably “III type” to “IV type”.

Any major scale-tone triad pair of chords that includes a diminished triad (on the seventh step of the major scale), is unique. With roots moving in perfect fourths, the only other unique pair of triads is IIm to V. In stepwise order, every pair in the cycle from IIm to V is unique (IIm to IIIIm, IIIIm to IV and IV to V). With roots moving in thirds the only unique pairs of triads include the VII diminished triad.

Three Categories of Arpeggio and Heptatonic Scale Fingerings

Arpeggios and heptatonic (seven-tone) scales usually fall into these categories for the location of the low octave root or tone center:

index finger

middle finger, in this case meaning the middle or ring finger

little finger, in this case meaning the ring or little finger

Notice that the ring finger could be in either category as a middle finger or little finger. Where it is the high-pitched note used on a string, it can be in the “little finger” category. Where the ring finger is next to highest-pitched note on a string, it is in the middle finger category.

TRIAD SUBSETS OF THE MAJOR SCALE

On the following pages, the parts of major scales that make up each of the chords are shown. When the part of a scale is shown that makes up a particular chord, it will be called a *subset* of the scale. An arpeggio is a chord played one note at a time. Here is a linked list of the chord and arpeggio subsets of the major scale that are shown:

- ✦ [Subset Triad Chords of Major Scale Fingerings, Close-Voiced, Root position](#)
- ✦ [Subset Triad Chords of Major Scale Fingerings, Close-Voiced, First Inversion](#)
- ✦ [Subset Triad Chords of Major Scale Fingerings, Close-Voiced, Second Inversion](#)

- ✦ [Subset Triad Chords of Major Scale Fingerings, Open voiced, Root Position](#)
- ✦ [Subset Triad Arpeggios of the Major Scale](#)
- ✦ [Open-Voiced, Three-Note Triad Chord Subsets of The Major Scale](#)
- ✦ [Open-Voiced, Three-Note Triad Chord Subsets of the Major Scale, Roots up in Perfect Fourths.](#)

also, these supplementary fingerings are shown:

- ✦ [Close-Voiced, Three-Note Triads, Roots up in Perfect Fourths](#)

Subset Triad Chords of Major Scale Fingerings

Close-Voiced, Root Position - play by row

fingering 1	fingering 2	fingering 3	fingering 4	fingering 5	fingering 6	fingering 7

Subset Triad Chords of Major Scale Fingerings

Close-Voiced, First Inversion - play by row

fingering 1	fingering 2	fingering 3	fingering 4	fingering 5	fingering 6	fingering 7

Subset Triad Chords of Major Scale Fingerings

Close-Voiced, Second Inversion - play by row

fingering 1	fingering 2	fingering 3	fingering 4	fingering 5	fingering 6	fingering 7

Subset Triad Chords of Major Scale Fingerings Open-Voiced, Root Position - play by row

fingering 1	fingering 2	fingering 3	fingering 4	fingering 5	fingering 6	fingering 7

Subset Triad Arpeggios of the Major Scale play by column or row

	fingering 1	fingering 2	fingering 3	fingering 4	fingering 5	fingering 6	fingering 7
E shape							
E shape							
G shape							
A shape							
A shape (7 is C shape)							
C shape							
D shape							

Open-Voiced, Three-Note Triad Chord Subsets of the Major Scale play by column or row

	fingering 1	fingering 2	fingering 3	fingering 4	fingering 5	fingering 6	fingering 7
E shape							
E shape							
E shape							
A shape							
A shape							
C shape							
D shape							
D shape							

Open-Voiced, Three-Note Triad Chord Subsets of the Major Scale Roots Up In Perfect Fourths - play across facing pages by row

fingering 1

fingering 2

fingering 3

(continued in rows from the previous page)

						<i>fingering 1</i>
--	--	--	--	--	--	--------------------

--	--	--	--	--	--

						<i>fingering 2</i>
--	--	--	--	--	--	--------------------

--	--	--	--	--	--

						<i>fingering 3</i>
--	--	--	--	--	--	--------------------

--	--	--	--	--	--

(fingerings 4 through 6)

fingerings 4

Diagram 1: F4 (4th fret, strings 4, 3, 2, 1) with fingerings 1, 4, 2, 5.

Diagram 2: G4 (5th fret, strings 4, 3, 2, 1) with fingerings 4, 1, 6.

Diagram 3: A4 (6th fret, strings 4, 3, 2, 1) with fingerings 4, 1, 7, 2.

Diagram 4: B4 (7th fret, strings 4, 3, 2, 1) with fingerings 3, 5, 7, 1.

Diagram 5: C5 (8th fret, strings 4, 3, 2, 1) with fingerings 3, 6, 1, 1.

Diagram 6: D5 (9th fret, strings 4, 3, 2, 1) with fingerings 4, 6, 1, 2.

fingerings 5

Diagram 1: F5 (5th fret, strings 4, 3, 2, 1) with fingerings 1, 4, 2, 5, 7, 3, 6, 1, 3, 6, 4, 7.

Diagram 2: G5 (6th fret, strings 4, 3, 2, 1) with fingerings 5, 2, 7, 1.

Diagram 3: A5 (7th fret, strings 4, 3, 2, 1) with fingerings 5, 1, 3, 1.

Diagram 4: B5 (8th fret, strings 4, 3, 2, 1) with fingerings 4, 6, 1, 1, 7.

Diagram 5: C6 (9th fret, strings 4, 3, 2, 1) with fingerings 4, 2, 7, 1, 1.

Diagram 6: D6 (10th fret, strings 4, 3, 2, 1) with fingerings 5, 3, 7, 1, 3.

fingerings 6

Diagram 1: F6 (6th fret, strings 4, 3, 2, 1) with fingerings 6, 2, 5, 1, 3, 6, 4, 7, 1, 4, 5, 1, 7.

Diagram 2: G6 (7th fret, strings 4, 3, 2, 1) with fingerings 6, 1, 3, 1, 1.

Diagram 3: A6 (8th fret, strings 4, 3, 2, 1) with fingerings 6, 1, 2, 4, 1.

Diagram 4: B6 (9th fret, strings 4, 3, 2, 1) with fingerings 5, 7, 2, 1, 1.

Diagram 5: C7 (10th fret, strings 4, 3, 2, 1) with fingerings 5, 3, 1, 1, 1, 1.

Diagram 6: D7 (11th fret, strings 4, 3, 2, 1) with fingerings 4, 6, 1, 4, 1, 1.

(continued in rows from the previous page)

fingering 4

fingering 5

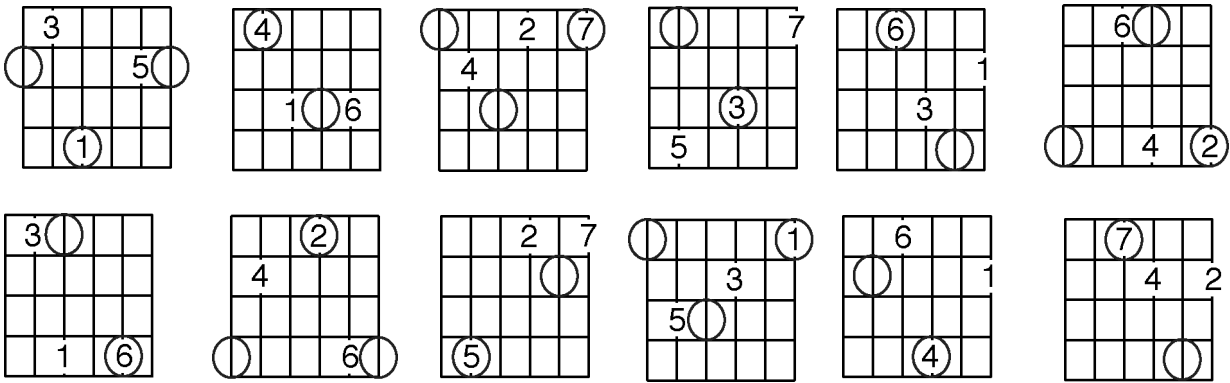
fingering 6

(fingering 7)

fingering 7

v

(continued in rows from the previous page)



fingering 7

Close-Voiced, Three-Note Triads, Roots up in Perfect Fourths

string set 6-5-4

string set 5-4-3

string set 4-3-2

A 3x7 grid of guitar fretboard diagrams for string set 4-3-2. Each diagram shows a 3-string section (strings 4, 3, 2) with fingerings indicated by circled numbers. The diagrams represent various triads and dyads across the fretboard.

string set 3-2-1

A 3x7 grid of guitar fretboard diagrams for string set 3-2-1. Each diagram shows a 3-string section (strings 3, 2, 1) with fingerings indicated by circled numbers. The diagrams represent various triads and dyads across the fretboard.

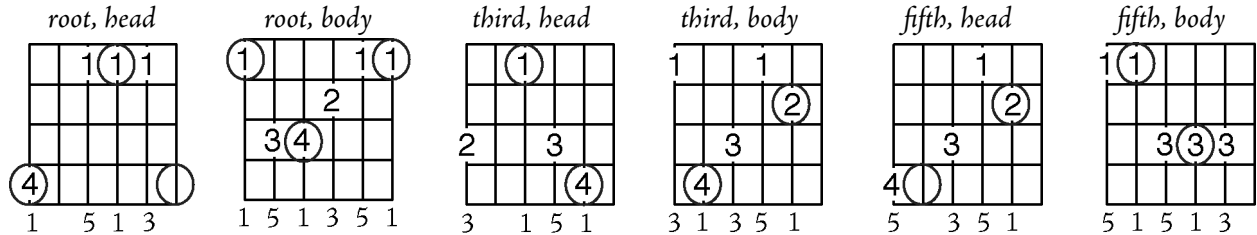
Triad Bass Harmonization

- **Strumable Triad Inversions**
- **Three Note Close-Voiced Triad Inversions**
- **Three Note Open-Voiced Triad Inversions**
- **Basslines with Strumable I, IV and V Triads**
- **Basslines with Strumable I, IV, V and IIIm Triads**
- **Basslines with Strumable VIIm, IV and V Triads**
- **Triad Descending Bass Harmonization**

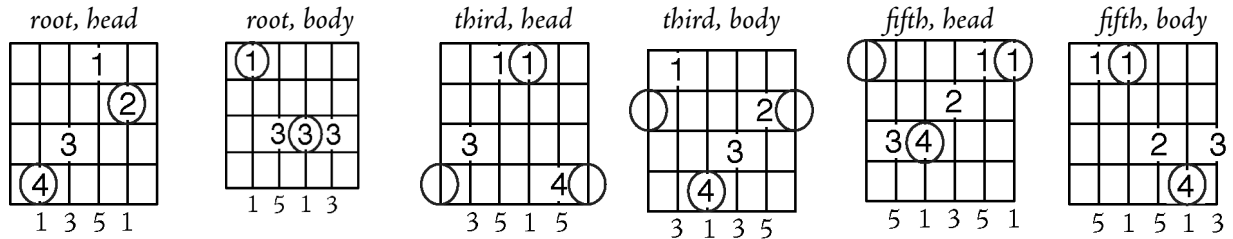
STRUMABLE TRIAD INVERSIONS

strumable major

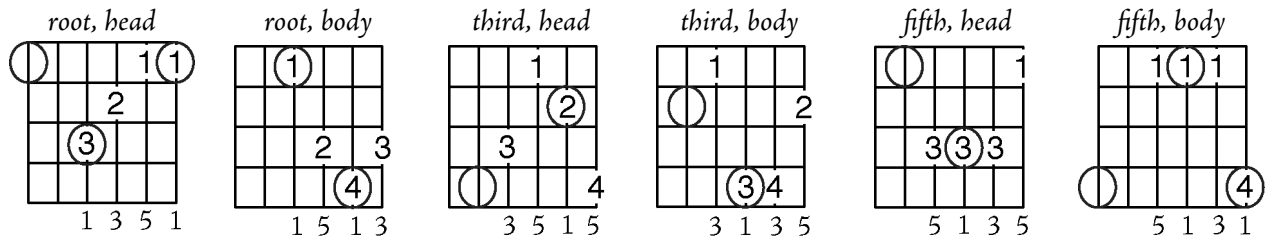
sixth string bass, major



fifth string bass, major

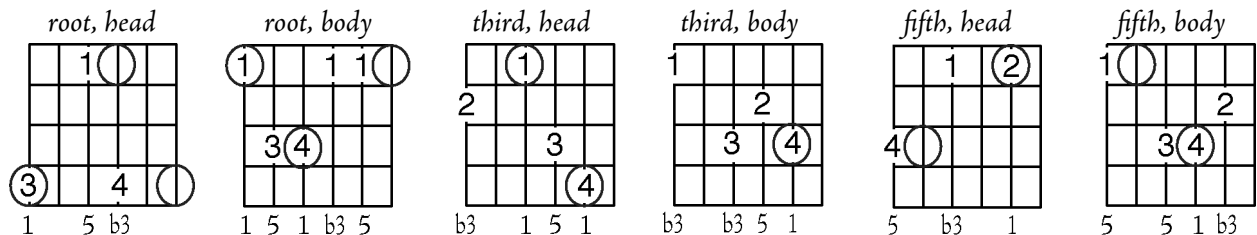


fourth string bass, major

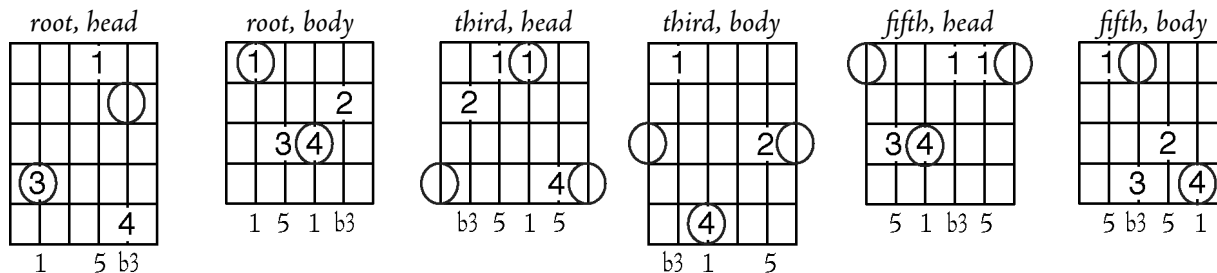


strumable minor

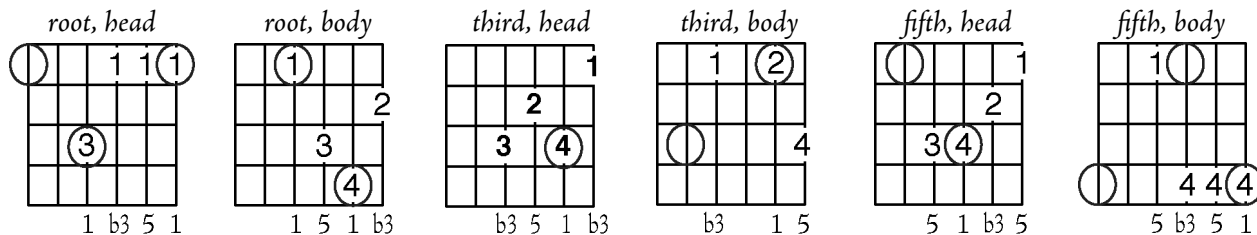
sixth string bass, minor



fifth string bass, minor

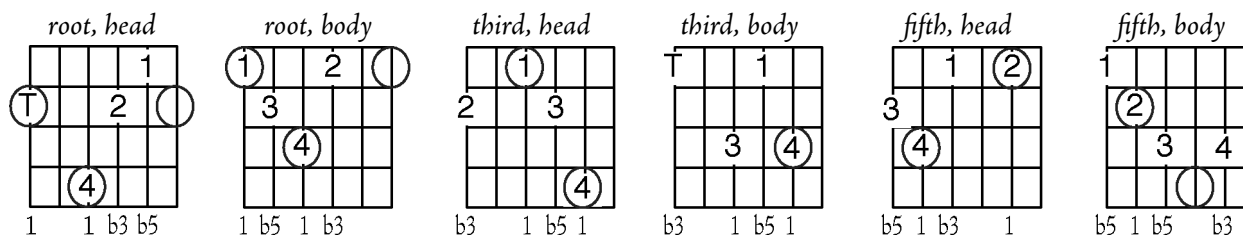


fourth string bass, minor

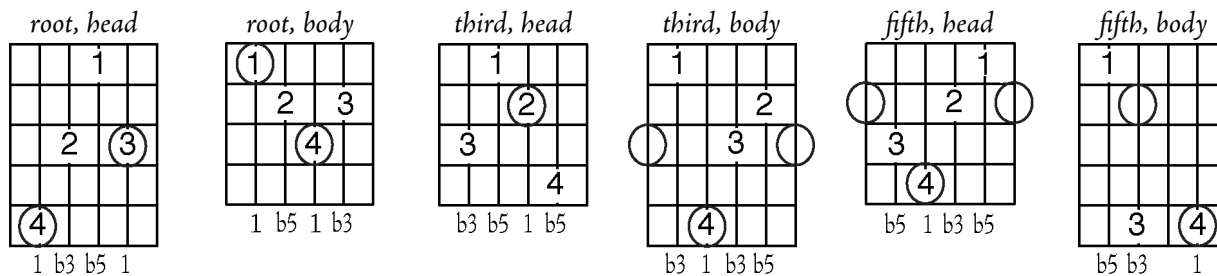


strumable diminished

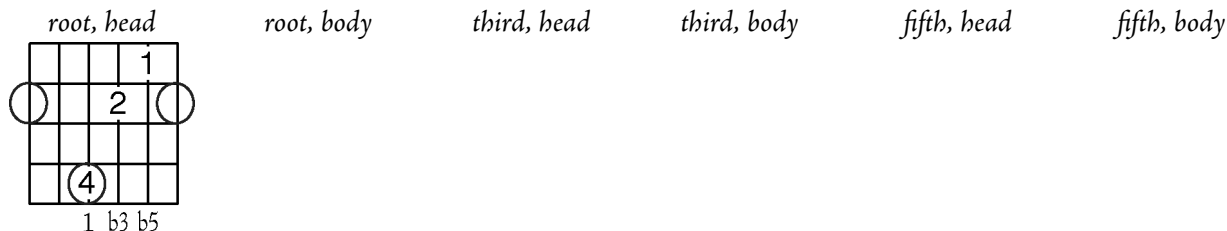
sixth string bass, diminished



fifth string bass, diminished

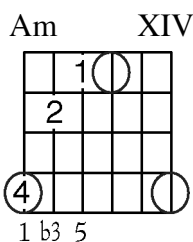
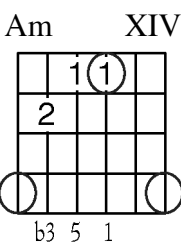
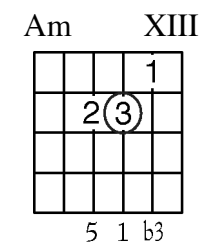
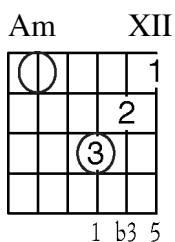
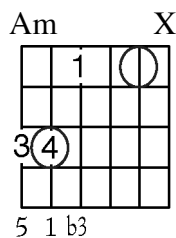
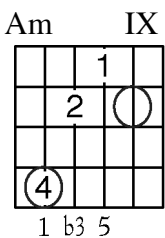
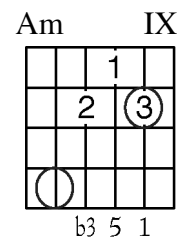
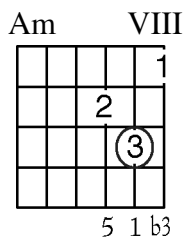
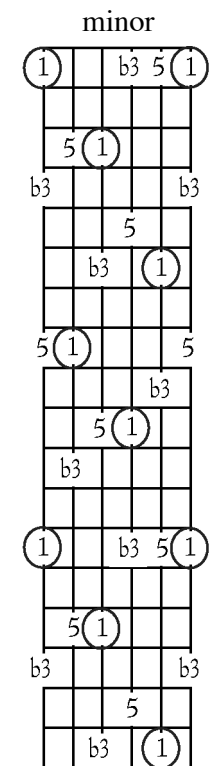
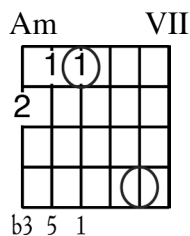
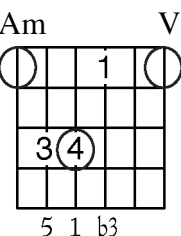
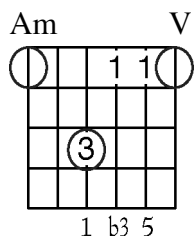
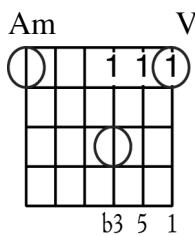
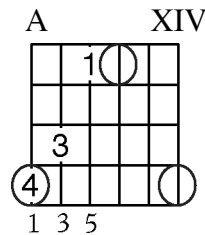
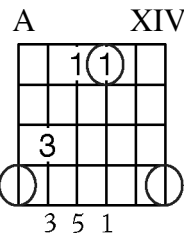
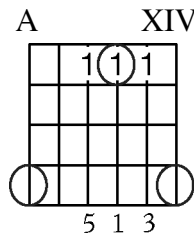
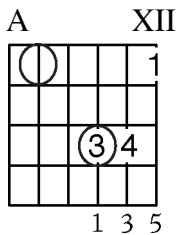
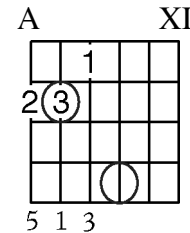
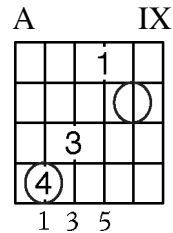
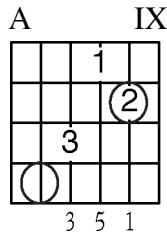
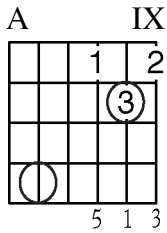
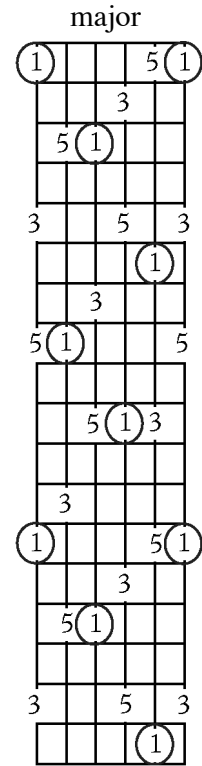
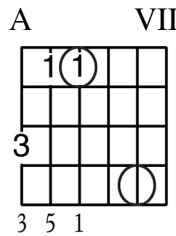
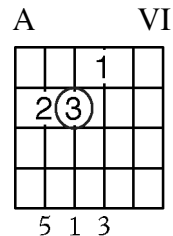
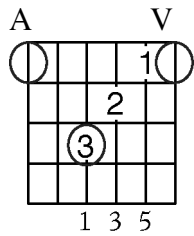
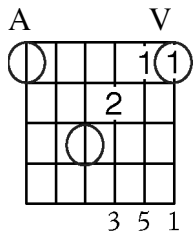


fourth string bass, diminished



CLOSE-VOICED 3-NOTE TRIAD INVERSIONS

inversion sequences by position in rows and by bass string in columns



OPEN-VOICED 3-NOTE TRIAD INVERSIONS

inversion sequences by bass string in columns and by inversion in columns

major three-note open-voiced triads

	<i>root, head</i>	<i>root, body</i>	<i>third, head</i>	<i>third, body</i>	<i>fifth, head</i>	<i>fifth, body</i>
	<i>root, head</i>	<i>root, body</i>	<i>third, head</i>	<i>third, body</i>	<i>fifth, head</i>	<i>fifth, body</i>
	<i>root, head</i>	<i>root, body</i>	<i>third, head</i>	<i>third, body</i>	<i>fifth, head</i>	<i>fifth, body</i>

minor three-note open-voiced triads

	<p><i>root, head</i></p> <p>1 5 b3</p>	<p><i>root, body</i></p> <p>1 5 b3</p>	<p><i>third, head</i></p> <p>b3 1 5</p>	<p><i>third, body</i></p> <p>b3 1 5</p>	<p><i>fifth, head</i></p> <p>5 b3 1</p>	<p><i>fifth, body</i></p> <p>5 b3 1</p>
	<p><i>root, head</i></p> <p>1 5 b3</p>	<p><i>root, body</i></p> <p>1 5 b3</p>	<p><i>third, head</i></p> <p>5 b3 1</p>	<p><i>third, body</i></p> <p>5 b3 1</p>	<p><i>fifth, head</i></p> <p>5 b3 1</p>	<p><i>fifth, body</i></p> <p>5 b3 1</p>
	<p><i>root, head</i></p> <p>1 b3 5 1</p>	<p><i>root, body</i></p> <p>1 5 b3</p>	<p><i>third, head</i></p> <p>b3 1 5</p>	<p><i>third, body</i></p> <p>b3 1 5</p>	<p><i>fifth, head</i></p> <p>b3 1 5</p>	<p><i>fifth, body</i></p> <p>5 b3 1</p>
	<p><i>root, head</i></p> <p>1 b3 5 1</p>	<p><i>root, body</i></p> <p>1 5 b3</p>	<p><i>third, head</i></p> <p>b3 1 5</p>	<p><i>third, body</i></p> <p>b3 1 5</p>	<p><i>fifth, head</i></p> <p>b3 1 5</p>	<p><i>fifth, body</i></p> <p>5 b3 1</p>

BASSLINES WITH STRUMMABLE I, IV and V TRIADS

G III 1 5 1 3 5 1	D/A V 5 1 5 1 3	G/B V 3 1 5 1	C VIII 1 5 1 3 5 1	G/D X 5 5 1 3	C/E XII 3 1 5 1	D/F# XII 3 1 5 1	G XII 1 5 1 3
C III 1 5 1 3	G5/D V 5 1 5 1	C/E V 3 5 1 5	F VIII 1 5 1 3	C5/G X 5 1 5 1	F/A X 3 5 1 5	G/B XII 3 5 1 5	C XII 1 3 5 1
E II 1 5 1 3	B/F# IV 5 1 3 1	E/G# IV 3 5 1 5	A V 1 3 5 1	E/B VII 5 1 3 5	A/C# IX 3 5 1 5	B/D# XI 3 5 1 3	E XII 1 3 5 1
A V 1 5 1 3 5 1	E/B VII 5 1 5 1 3	A/C# VII 3 1 5 1	D VII 1 5 1 3	A/E V 5 1 3 5 1	D/F# VII 3 5 1 5	E/G# IV 3 5 1 3	A V 1 3 5 1
D V 1 5 1 3	A/E VII 5 1 3 5	D/F# VII 3 5 1 3	G VII 1 3 5 1	D/A V 5 1 3 5	G/B VII 3 5 1 3	A/G# IX 3 5 1 3	D X 1 3 5 1

BASSLINES WITH I, IV, V and IIIm TRIADS

G III 1 5 1 3 5 1	Am V 1 5 1 b3 5	G V 3 1 5 1	Am VII b3 1 5 1	G/D X 5 5 1 3	Am/E XII 5 1 5 1 b3	D/F# XII 3 1 5 1	G XII 1 5 1 3
C III 1 5 1 3	Dm V 1 5 1 b3	C/E V 3 5 1 5	Dm/F VII b3 5 1 5	C/G VIII 5 1 3 5	Dm/A X 5 1 b3 5	G/B XII 3 5 1 3	C XII 1 3 5 1
E II 1 5 1 3	F#m IV 1 5 1 b3	E/G# IV 3 5 1 5	F#m/A VI b3 5 1 5	E/B VII 5 1 3 5	F#m/C# IX 5 1 b3 5	B/D# XI 3 5 1 3	E XII 1 3 5 1
G III 1 5 1 3 5 1	Am V 1 5 1 b3 5	G V 3 1 5 1	Am V b3 1 b3 5	G5/D X 5 1 5 1	Am/E V 5 1 b3 5	D/F# VII 3 5 1 3	G VII 1 3 5 1
C III 1 5 1 3	Dm V 1 5 1 b3	C/E V 3 5 1 5	Dm/F V b3 1 b3 5	C/G III 5 1 3 5	Dm/A V 5 1 b3 5	G/B VII 3 5 1 3	C VIII 1 3 5 1

BASSLINES WITH VIIm, IV and V TRIADS

<i>Em/G</i> III b3 b3 5 1	<i>D/A</i> V 5 5 1 3	<i>Em/B</i> VII 5 1 5 1 b3	<i>C</i> VIII 1 5 1 3 5	<i>D</i> X 1 5 1 3 5	<i>Em</i> XII 1 5 1 b3 5	<i>D/F#</i> XII 3 1 5 1	<i>Em/G</i> XII b3 1 b3 5
<i>Am/C</i> II b3 5 1 5	<i>G5/D</i> V 5 1 5 1	<i>Am/E s</i> VII 5 b3 5 1	<i>F</i> VIII 1 5 1 3	<i>G</i> X 1 5 1 3	<i>Am</i> XII 1 5 1 b3	<i>G/B</i> XII 3 5 1 5	<i>Am</i> XIII b3 5 1 b3
<i>C#m/E</i> I b3 5 1 5	<i>B/F#</i> II 5 1 3 5	<i>C#m/G#</i> IV 5 1 b3 5	<i>A</i> V 1 3 5 1	<i>B</i> VII 1 3 5 1	<i>C#m</i> IX 1 b3 5 1	<i>B/D#</i> XI 3 5 1 3	<i>C#m</i> XII b3 5 1 b3
<i>Em/G</i> III b3 b3 5 1	<i>D/A</i> II 5 3 5 1	<i>Em/B</i> II 5 b3 5 1	<i>C</i> III 1 5 1 3	<i>D</i> II 1 3 5 1 3	<i>Em</i> II 1 5 1 b3	<i>D/F#</i> II 3 5 1 5	<i>Em/G</i> III b3 5 1 b3

TRIAD DESCENDING BASS HARMONIZATION

1-7-6-5, 7-6-5-4, 6-5-4-3, 5-4-3-2, 4-3-2-1, 3-2-1-7, 2-1-7-6

I-VII^{dim}-VI^m-V

I-VII^{dim}-VI^m-I/5

I-VII^{dim}-VI^m-III^m/b3

I-V/3-VI^m-V

I-V/3-VI^m-I/5

I-V/3-VI^m-III^m/b3

I-III^m/5-VI^m-V

I-III^m/5-VI^m-I/5

I-III^m/5-VI^m-III^m/b3

VI^m/b3-VII^{dim}-VI^m V

VI^m/b3-VII^{dim}-VI^m I/5

VI^m/b3-VII^{dim}-VI^m III^m/b3

VI^m/b3-V/3-VI^m V

VI^m/b3-V/3-VI^m I/5

VI^m/b3-V/3-VI^m III^m/b3

VI^m/b3-III^m/5-VI^m V

VI^m/b3-III^m/5-VI^m I/5

VI^m/b3-III^m/5-VI^m III^m/b3

IV/5-VII^{dim}-VI^m-V

IV/5-VII^{dim}-VI^m-I/5

IV/5-VII^{dim}-VI^m-III^m/b3

IV/5-V/3-VI^m-V

IV/5-V/3-VI^m-I/5

IV/5-V/3-VI^m-III^m/b3

IV/5-III^m/5-VI^m-V

IV/5-III^m/5-VI^m-I/5

IV/5-III^m/5-VI^m-III^m/b3

Pedal Point Chord Progression

- **Drone and Pedal Point**
- **Open Bass Pedal Point: Modal Scales**
- **Open Bass Pedal Point: Modal Thirds**
- **Open Bass Pedal Point: Modal Sixths**
- **Open Bass Pedal Point: Modal Triads**
- **Triads as a Harmonic or Melodic Basis**
- **I-IV-I7: Thirds with Pedal Point**
- **“Six Nine” VIm-Vm Triads with Pedal Point “1”**
- **More Triads with a Pedal Point**
- **Scale-Tone Triads of Four Heptatonic Scales**
- **Modal Triad Improv and Cluster Playing**

DRONE AND PEDAL POINT

History

A drone is a continuous low-pitched buzz or hum. Vocally, a drone is used in chants in many world cultures. The raga, a classical East Indian Hindu musical form nearly two thousand years old, uses a drone. American Indian chants (often called pow-wow) use a drone in a pulsing fashion. Bagpipes, a commonly Scottish instrument, use a drone and are found throughout Europe, Northern Africa, the Persian Gulf, and the Caucasus. It is said that Roman Emperor Nero played bagpipes (C. Suetonius Tranquillus: "The Lives of the Twelve Caesars", 54).

Archelological dating of paintings on cave walls and shelters in Northern Australia suggests that the Aboriginal people of the Kakadu region of the Northern Territory have been using a drone pipe instrument called the diggeridoo for at least 1,500 years.

The berimbau in Brazil is a single-stringed instrument with a gourd resonator that produces a drone. The string is rubbed with a stone. It is said that its origins are in South Africa, where there are similar instruments (Funso Afolayan: "Culture and Customs of South Africa", page 240-241)

Beginning in the twelfth century in Europe, choral pieces sometimes included held notes in one of the voices that did not necessarily harmonize with the chords produced by the other voices. The tradition was carried over to the church organ, when church organists began a tradition of sustaining a bass note while changing chords on the keyboard above it. The device was given the name *pedal point* and later *organ tone* and *pedal tone*. The term pedal tone is ambiguous, since it also refers to the fundamental harmonic tone on tubular mouthpiece instruments.

Establishing a Tone Center

The pedal point can be a very effective device in establishing a tone center by sustaining or repeatedly playing the same note in the bass. Some pedal point chords may be part of a succession of chords that establishes an architecture important enough to forgive the dissonance of one or more of the chords. The C# diminished chord below was used in this Bach Prelude in Dm shown below, as part of a succession of chords leading to Dm.

J.S. Bach: Prelude In Dm

1

Dm V V Dm V Gm VI VI V Gm VI V

5

C#dim/D III II C#dim/D III II Dm I I Dm7 I I

OPEN BASS PEDAL POINT: MODAL SCALES

The sixth string is tuned down to "D".

Modes in the Key of "D" by Parent Scale

	major (on 1)	Dorian (on 2)	Mixolydian (on 5)	Aeolian (on 6)
V	5	6	2	3
	6	7	3	4
VII	7	1	4	5
	(1)	(2)	(5)	(6)
IX	2	3	6	7
	3	4	7	1
XII	4	5	1	2
	5	6	2	3
XV	6	7	3	4
XVII	7	1	4	5
	(1)	(2)	(5)	(6)
XIX				

Modes in the key of "D" by Key Scale

	major	Dorian	Mixolydian	Aeolian
V	5	5	5	5
	6	6	6	b6
VII	7	b7	b7	b7
	(1)	(1)	(1)	(1)
IX	2	2	2	2
	3	b3	3	b3
XII	4	4	4	4
	5	5	5	5
XV	6	6	6	b6
XVII	7	b7	b7	b7
	(1)	(1)	(1)	(1)
XIX				

OPEN BASS PEDAL POINT: MODAL THIRDS

The sixth string is tuned down to "D". The scale is "tracked" by the high-pitched note of each third.

Thirds in the Key of "D" by Parent Scale

	major (on 1) emphasize 1-3-5	Dorian (on 2) emphasize 2-4-6	Mixolydian (on 5) emphasize 5-7-2	Aeolian (on 6) emphasize 6-1-3
V				
VII				
IX				
XII				
XV				
XVII				
XIX				

"Thirds in the Key of "D" by Parent Scale

	major emphasize 1-3-5	Dorian emphasize 1-b3-5	Mixolydian emphasize 1-3-5	Aeolian emphasize 1-b3-5
V				
VII				
IX				
XII				
XV				
XVII				
XIX				

OPEN BASS PEDAL POINT: MODAL SIXTHS

The sixth string is tuned down to "D". The scale is "tracked" by the high-pitched note of each sixth.

Sixths in the Key of "D" by Parent Scale

major (on 1) emphasize 1-3-5	Dorian (on 2) emphasize 2-4-6	Mixolydian (on 5) emphasize 5-7-2	Aeolian (on 6) emphasize 6-1-3
V	V	V	V
VII	VII	VII	VII
IX	IX	IX	IX
XII	XII	XII	XII
XV	XV	XV	XV
XVII	XVII	XVII	XVII
XIX	XIX	XIX	XIX

"Sixths in the Key of "D" by Parent Scale

major emphasize 1-3-5	Dorian emphasize 1-b3-5	Mixolydian emphasize 1-3-5	Aeolian emphasize 1-b3-5
V	V	V	V
VII	VII	VII	VII
IX	IX	IX	IX
XII	XII	XII	XII
XV	XV	XV	XV
XVII	XVII	XVII	XVII
XIX	XIX	XIX	XIX

OPEN BASS PEDAL POINT: MODAL TRIADS

The sixth string is tuned down to "D". The scale is "tracked" on the third string.

Modal Root Position Triads in the Key of "D" by Parent Scale

major (on 1) emphasize 1-3-5	Dorian (on 2) emphasize 2-4-6	Mixolydian (on 5) emphasize 5-7-2	Aeolian (on 6) emphasize 6-1-3

Modal Root Position Triads in the Key of "D" by Key Scale

major emphasize 1-3-5	Dorian emphasize 1-b3-5	Mixolydian emphasize 1-3-5	Aeolian emphasize 1-b3-5

Modal First Inversion Triads in the Key of "D" by Parent Scale

The sixth string is tuned down to "D". The scale is "tracked" on the first string.

	major (on 1) emphasize 1 3 5	Dorian (on 2) emphasize 2 4 6	Mixolydian (on 5) emphasize 5 7 2	Aeolian (on 6) emphasize 6 1 3
V				
VII				
IX				
XII				
XV				
XVII				
XIX				

Modal First Inversion Triads in the Key of "D" by Key Scale

	major emphasize 1 3 5	Dorian emphasize 1 b3 5	Mixolydian emphasize 1 3 5	Aeolian emphasize 1 b3 5
V				
VII				
IX				
XII				
XV				
XVII				
XIX				

Modal Second Inversion Triads in the Key of "D" by Parent Scale

The sixth string is tuned down to "D". The scale is "tracked" on the second string.

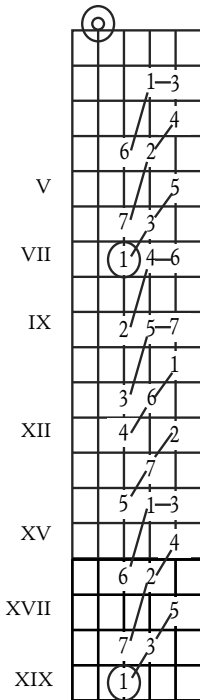
	major (on 1) emphasize 1 3 5	Dorian (on 2) emphasize 2 4 6	Mixolydian (on 5) emphasize 5 7 2	Aeolian (on 6) emphasize 6 1 3
V				
VII				
IX				
XII				
XV				
XVII				
XIX				

Modal Second Inversion Triads in the Key of "D" Key Scale

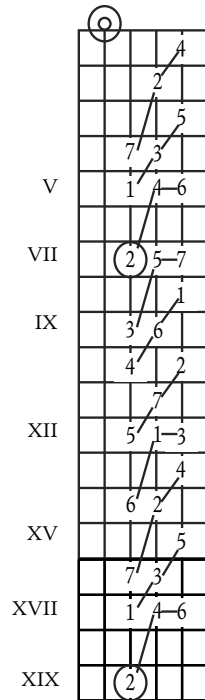
	major emphasize 1 3 5	Dorian emphasize 1 b3 5	Mixolydian emphasize 1 3 5	Aeolian emphasize 1 b3 5
V				
VII				
IX				
XII				
XV				
XVII				
XIX				

"A" Modal Root Position Triads by Parent Scale

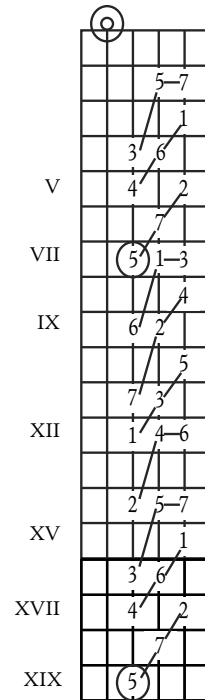
major (on 1)
emphasize 1-3-5



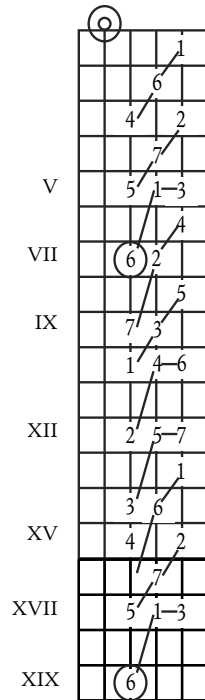
Dorian (on 2)
emphasize 2-4-6



Mixolydian (on 5)
emphasize 5-7-2



Aeolian (on 6)
emphasize 6-1-3



Each set of "Open Bass Pedal Point Modal Triads" shown below uses a particular scale as its basis. When the scale is Mixolydian, it uses a major scale where the key noted in the title is on the fifth step of that major scale. Dorian is on the second step of its parent scale, and Aeolian on the sixth step.

key scale	key tones	parent major scale	parent major scale tones
A major	A-B-C#-D-E-F#-G#-A	A major	A-B-C#-D-E-F#-G#-A
A Mixolydian	A-B-C#-D-E-F#-G-A	D major	D-E-F#-G-A-B-C#-D
A Dorian	A-B-C-D-E-F#-G-A	G major	G-A-B-C-D-E-F#-G
A Aeolian	A-B-C-D-E-F-G\ -A	C major	C-D-E-F-G-A-B-C
D major	D-E-F#-G-A-B-C#-D	D major	D-E-F#-G-A-B-C#-D
D Mixolydian	D-E-F#-G-A-B-C-D	G major	G-A-B-C-D-E-F#-G
D Dorian	D-E-F-G-A-B-C-D	C major	C-D-E-F-G-A-B-C
D Aeolian	D-E-F-G-A-Bb-C-D	F major	F-G-A-Bb-C-D-E-F

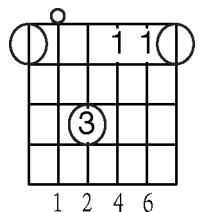
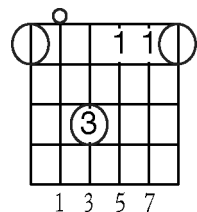
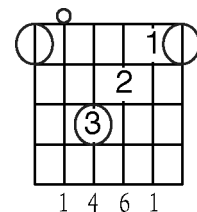
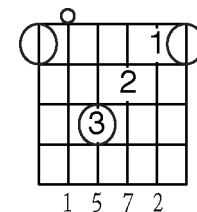
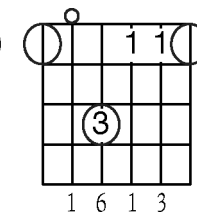
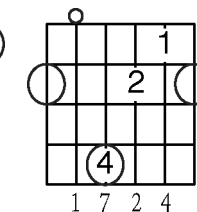
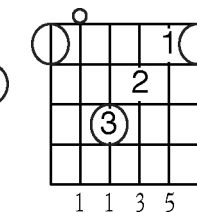
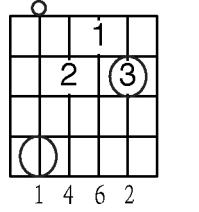
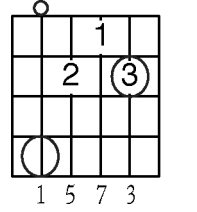
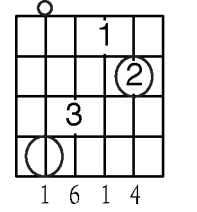
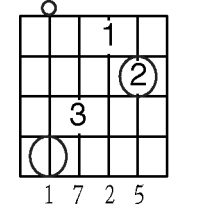
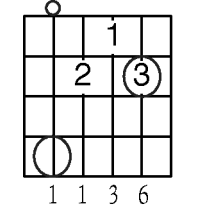
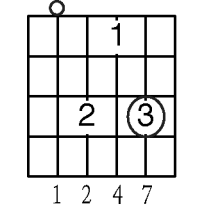
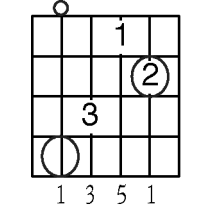
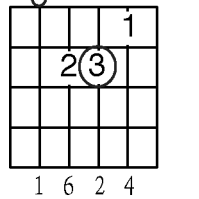
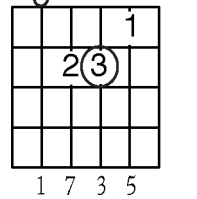
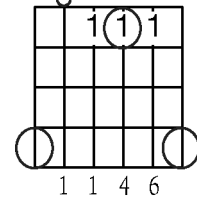
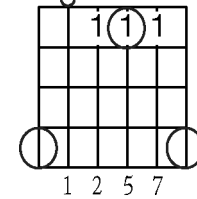
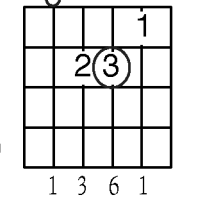
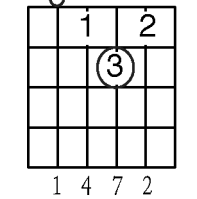
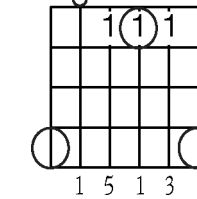
A Major Scale Tone Triads with Open String Pedal Point "A"

A V 1 1 3 5	Bm/A VII 1 2 4 6	C#m/A IX 1 3 5 7	D/A X 1 4 6 1	E/A XII 1 5 7 2	F#m/A II 1 6 1 3	G#dim/A III 1 7 2 4
A IX I 1 3 5 1	Bm/A XI 1 4 6 2	C#m/A I 1 5 7 3	D/A II 1 6 1 4	E/A IV 1 7 2 5	F#m/A VI 1 1 3 6	G#dim/A VII 1 2 4 7
A II 1 5 1 3	Bm/A II 1 6 2 4	C#m/A V 1 7 3 5	D/A VII 1 1 4 6	E/A IX 1 2 5 7	F#m/A IX 1 3 6 1	G#dim/A XII 1 4 7 2

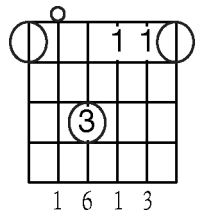
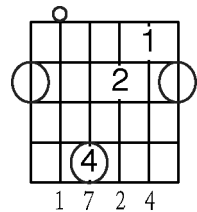
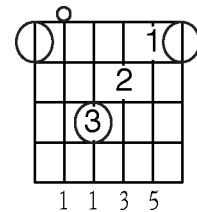
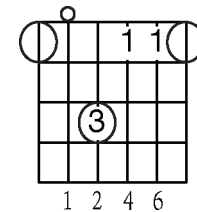
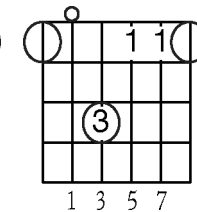
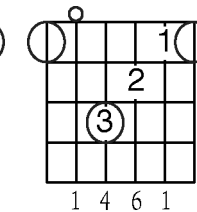
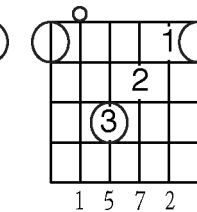
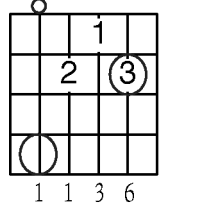
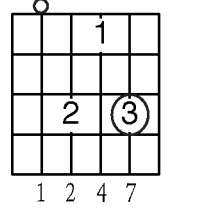
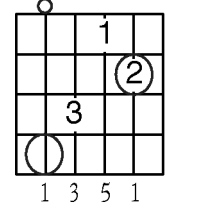
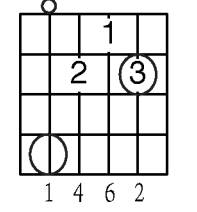
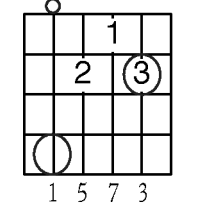
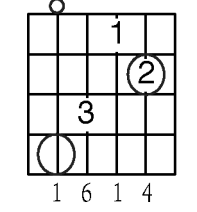
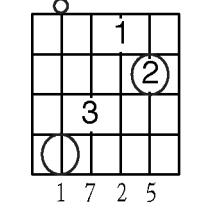
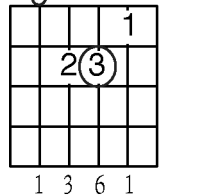
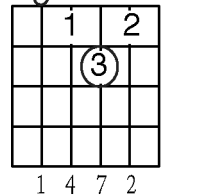
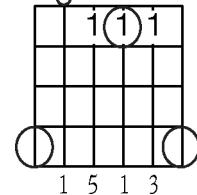
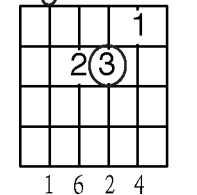
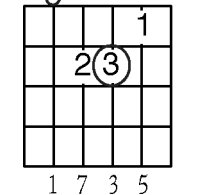
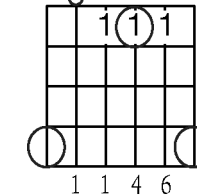
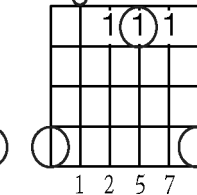
A Mixolydian Scale Tone Triads with Open String Pedal Point "A"

A V 1 5 7 2	Bm/A VII 1 6 1 3	C#dim/A VIII 1 7 2 4	D/A X 1 1 3 5	Em/A XII 1 2 4 6	F#m/A II 1 3 5 7	G/A III 1 4 6 1
A IX 1 7 2 5	Bm/A XI 1 1 3 6	C#dim/A XII 1 2 4 7	D/A II 1 3 5 1	E/A IV 1 4 6 2	F#m/A VI 1 5 7 3	G/A VII 1 6 1 4
A II 1 2 5 7	Bm/A II 1 3 6 1	C#m/A V 1 4 7 2	D/A VII 1 5 1 3	E/A IX 1 6 2 4	F#m/A IX 1 7 3 5	G/A XII 1 1 4 6

A Dorian Scale Tone Triads with Open String Pedal Point "A"

<i>Am</i> V 	<i>Bm</i> VII 	<i>C/A</i> VIII 	<i>D/A</i> X 	<i>Em/A</i> XII 	<i>F#dim/A</i> I 	<i>G/A</i> V 
<i>Am</i> IX 	<i>Bm</i> XI 	<i>C/A</i> XII 	<i>D/A</i> II 	<i>Em/A</i> IV 	<i>F#dim/A</i> V 	<i>G/A</i> VII 
<i>Am</i> I 	<i>Bm</i> III 	<i>C/A</i> V 	<i>D/A</i> VII 	<i>Em/A</i> VIII 	<i>F#dim/A</i> X 	<i>G/A</i> XII 

A Aeolian Scale Tone Triads with Open String Pedal Point "A"

<i>Am</i> V 	<i>Bdim/A</i> VI 	<i>C/A</i> VIII 	<i>Dm/A</i> X 	<i>Em/A</i> XII 	<i>F/A</i> I 	<i>G/A</i> III 
<i>Am</i> IX 	<i>Bdim/A</i> X 	<i>C/A</i> XII 	<i>Dm/A</i> II 	<i>Em/A</i> XII 	<i>F/A</i> V 	<i>G/A</i> VII 
<i>Am</i> I 	<i>Bdim/A</i> III 	<i>C/A</i> V 	<i>Dm/A</i> VI 	<i>Em/A</i> VIII 	<i>F/A</i> X 	<i>G/A</i> XII 

D Major Scale Tone Triads with Open String Pedal Point "D"

D	V	Em/D VII	F#m/D IX	G/D X	A/D XII	Bm/D II	C#dim/D III
1 1 3 5	1 2 4 6	1 3 5 7	1 4 6 1	1 5 7 2	1 6 1 3	1 7 2 4	
D	X	Em/D XII	F#m/D II	G/D III	A/D V	Bm/D VII	C#dim/D VIII
1 3 5 1	1 4 6 2	1 5 7 3	1 6 1 4	1 7 2 5	1 1 3 6	1 2 4 7	
D	II	Em/D III	F#m/D V	G/D VII	A/D IX	Bm/D X	C#dim/D XII
1 5 1 3	1 6 2 4	1 5 7 3	1 1 4 6	1 2 5 7	1 3 6 1	1 2 5 7	

D Mixolydian Scale Tone Progressions with Pedal Tone "D"

D	V	Em/D VII	F#dim/D IX	G/D X	Am/D XII	Bm/D II	C/D III
1 5 7 2	1 6 1 3	1 7 2 4	1 1 3 5	1 2 4 6	1 3 5 7	1 4 6 1	
D	X	Em/D XII	F#dim/D I	G/D III	Am/D V	Bm/D VII	C/D VIII
1 7 2 5	1 1 3 6	1 2 4 7	1 3 5 1	1 4 6 2	1 5 7 3	1 6 1 4	
D	II	Em/D III	F#dim/D V	G/D VII	Am/D VIII	Bm/D X	C/D XII
1 2 5 7	1 3 6 1	1 2 5 7	1 5 1 3	1 6 2 4	1 5 7 3	1 1 4 6	

D Dorian Scale Tone Progressions with Pedal Tone "D"

<i>Dm</i> V 1 2 4 6	<i>Em/D</i> VII 1 3 5 7	<i>F/D</i> VIII 1 4 6 1	<i>G/D</i> X 1 5 7 2	<i>A/D</i> XII 1 6 1 3	<i>Bm/D</i> II 1 7 2 4	<i>C/D</i> III 1 1 3 5
<i>Dm</i> X 1 4 6 2	<i>Em/D</i> XII 1 5 7 3	<i>F/D</i> I 1 6 1 4	<i>G/D</i> III 1 7 2 5	<i>A/D</i> V 1 1 3 6	<i>Bm/D</i> VII 1 2 4 7	<i>C/D</i> VIII 1 3 5 1
<i>Dm</i> I 1 6 2 4	<i>Em/D</i> III 1 5 7 3	<i>F/D</i> V 1 1 4 6	<i>G/D</i> VII 1 2 5 7	<i>A/D</i> IX 1 3 6 1	<i>Bm/D</i> X 1 2 5 7	<i>C/D</i> XII 1 5 1 3

D Aeolian Scale Tone Progressions with Pedal Tone "D"

<i>Dm</i> V 1 6 1 3	<i>Edim/D</i> VI 1 7 2 4	<i>F/D</i> VIII 1 1 3 5	<i>G/D</i> X 1 2 4 6	<i>A/D</i> XII 1 3 5 7	<i>Bb/D</i> I 1 4 6 1	<i>C/D</i> III 1 5 7 2
<i>Dm</i> X 1 1 3 6	<i>Edim/D</i> XI 1 2 4 7	<i>F/D</i> I 1 3 5 1	<i>G/D</i> III 1 4 6 2	<i>A/D</i> V 1 5 7 3	<i>Bb/D</i> VI 1 6 1 4	<i>C/D</i> VIII 1 7 2 5
<i>Dm</i> X 1 3 6 1	<i>Edim/D</i> XI 1 2 5 7	<i>F/D</i> I 1 5 1 3	<i>G/D</i> III 1 6 2 4	<i>A/D</i> V 1 5 7 3	<i>Bb/D</i> VI 1 1 4 6	<i>C/D</i> VIII 1 2 5 7

TRIADS AS A HARMONIC OR MELODIC BASIS

Triads can be a structural basis to your comping or soloing. During a single chord, use any of the seven triads in its [parent scale](#), emphasizing those in the current chord, de-emphasizing ones not in the current chord and creating tonal and stylistic environments for any that you dwell on.

Read more about this in [Tonal Layers/Harmonic Clusters/Triads As A Harmonic Or Melodic Basis](#).

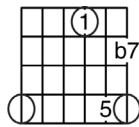
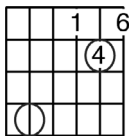
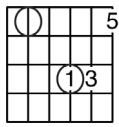
I-IV-I7: THIRDS WITH PEDAL POINT

“I-IV-I7” indicates a I chord, IV chord, then I chord of a seventh quality (I7). Based on a major scale named after the root of the I chord, the chords use tone the following scale tones: I is 1-3-5, IV is 4-6-1 and I7 is I-3-5-b7. It is typical in voicings (choices of notes to play) for this chord progression that the I7 chord is played without a third, making I7 (no third), which can be written as I7n3.

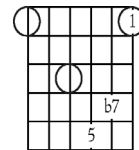
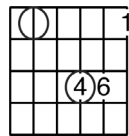
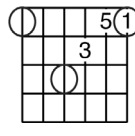
**Orient the fingerings below by keeping “1” on the same note.
Three moves to four, then to five. Five moves to six, then to seven.**

I-IV-I7: Close-Voiced on String Set 3-2-1

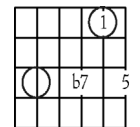
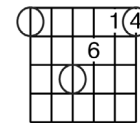
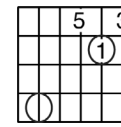
root in bass



third in bass

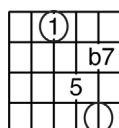
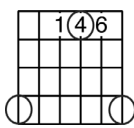
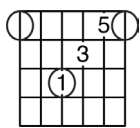


fifth in bass

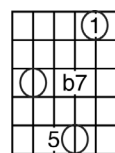
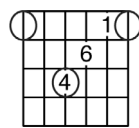
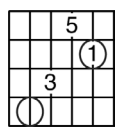


I-V-I7: Close-Voiced on String Set 4-3-2

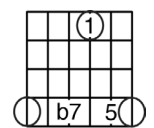
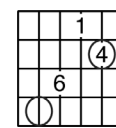
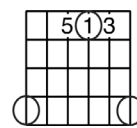
root in bass



third in bass

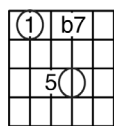
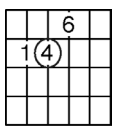
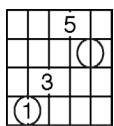


fifth in bass

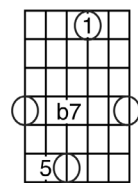
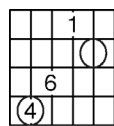
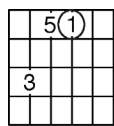


I-IV-I7: Close-Voiced on String Set 5-4-3

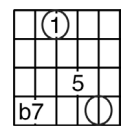
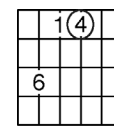
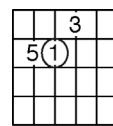
root in bass



third in bass

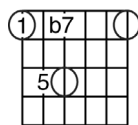
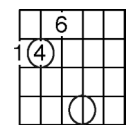
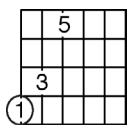


fifth in bass

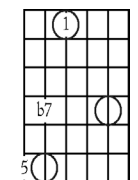
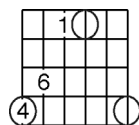
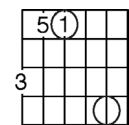


I-IV-I7: Close-Voiced on String Set 6-5-4

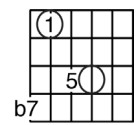
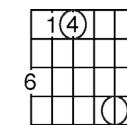
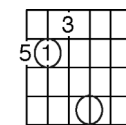
root in bass



third in bass



fifth in bass



I-IV-I7 Blues

Chord progression: G C G7 C G C G7 C G C G7 C G C G7 C G C G7 C G C G7 C G C G7 C G C G7 C G C G7 C

Chord progression: C F C7 F C F C7 F C F C7 F C F C7 F G7 C G7 C G C G7 C G C G7 C G C G7 C

Chord progression: D G D7 G D G D7 G D G D7 G G7 C G7 C G C G7 C G C G7 C G C G7 C

Retain the Root

The most important thing to remember in working out voicings is that note that is the root of the original chord does not change. The remaining voices move up, typically in parallel on adjacent strings.

Notes Other than the Root Move in Thirds or Sixths

The typical [voice leading](#) for this progression retains the root, moves the third and fifth up a step to the fourth and sixth, making a IV chord (IV is 4, 6, and 1). Next, the fourth and sixth each move up another step to the fifth and seventh, making a I7(no third) chord. The I7(no third) chord uses scale tones 1, 5 and 7. "5" and/or "7" may be flat, according to the mode. "5" is sharp in some modes.

The two voices other than the root move in parallel thirds. It is effectively two notes harmonized in thirds over a pedal point. With inversions, these notes other than the original root may move in parallel sixths or tenths (an octave and a third).

I-IV-I7 Can be Used in Different Order

Often songs have used I-IV-I7 in reverse order: I7-IV-I.

Modal I-IV-I7 Progression

The I-IV-I7 chord progression may be based on each of many seven tone scales. Each scale may use different versions of the numbers, such as b7 for Mixolydian, but the numbers remain the same. It is very useful to note the *changes of intervals* in the I-IV-I7 progression particular to each scale. In Mixolydian, for example (I-IV-I7), the two moving notes change interval each time they ascend. They change from I to IV. They change again from IV to I7n3. In Dorian mode, they stay the same from Im to IV, then change from IV to Im7n3. Phrygian and Aeolian are identical, since the I-IV-I7 chord progression does not use scale tone two. Phrygian major is commonly usable, harmonic minor is not.

<u>mode</u> <u>scale</u>	<u>progression</u>	<u>movement of thirds in parent</u>
major (Ionian)	I-IV-Ima7n3	3 minor, 4 major, 5 major
Dorian	Im-IV-Im7n3	4 major, 5 major, 6 minor
Phrygian (same as Aeolian)	Im-IVm-Im7n3	5 major, 6 minor, 7 minor
Lydian	I-IV diminished-Ima7n3	6 minor, 7 minor, 1 major
Mixolydian	I-IV-I7n3	7 minor, 1 major, 2 minor
Aeolian (same as Phrygian)	Im-IVm-Im7n3	1 major, 2 minor, 3 minor
Locrian	I diminished-IVm-Im7b5n3	2 minor, 3 minor, 4 major
Phrygian major	I-IVm-I7n3	5 major, b6 major, b7 major

Using Modal I-IV-I7 for Secondary Roots

Secondary roots are commonly used to create substitute chord progression. You need to know the cycles of thirds and fourths. See [Number And Letter Cycles](#) in [Note Sets, Structures And Design](#).

Using secondary roots on the third or sixths create harmony parts. Secondary roots on the fifth can create harmony parts in the high range or a shift of emphasis to the “IV” chord of “I-IV-I7”.

know the chord type you are starting with

The chord quality of the chord you are enhancing can tell you its type. Major chords can be I, IV or V types; or can be a III major type which usually comes before a VIIm type (with the roots progressing up a perfect fourth).

Chords built on the first step of a major scale are major seventh. Major seventh chords are usually a I type, unless the scale has a sharp four, in which case they are a IV type.

Minor chords can be a IIIm or VIIm type, more commonly treated as a VIIm type. IIIm type is common to blues in major keys, often used in place of a V type. The only modal difference between the IIIIm

type (Phrygian mode) and VIIm type (Aeolian mode) is that IIIIm type has a flat two. Since the I, IV, I7 progression doesn't use a "2", it is the same for IIIIm type and VIIm type. So, you can usually think of IIIIm as VIIm, as far as I, IV, I7 voicings.

secondary roots on the third

Playing a I-IV-I7 progression modally on the third (of the appropriate type) of the original chord makes the original sound like a ninth.

For any scale tone chord, you need to know its numbered type (I type, V type). The secondary root on the third is two consecutive numbers higher, and is the next number *clockwise* in the cycle of thirds (see [Number And Letter Cycles](#)).

secondary roots on the sixth

Playing a I-IV-I7 progression modally on the sixth (of the appropriate type) of the original chord makes the original sound like a sixth. This can only be done on I-IV-V and IIm chord types, which are the only major scale-tone sixth chords. Sixth chords cannot (are not acceptable) have a flatted or sharpened sixth. Modes III, VI and VII of the major scale have a flat sixth, so are not acceptable.

For any scale tone chord, you need to know its numbered type (I type, V type). The secondary root on the sixth is two consecutive numbers lower, and is the next number *counter-clockwise* in the cycle of thirds (see [Number And Letter Cycles](#)).

For the I, IV and V chords this is the relative major and relative minor relationship. The traditional relative minor of I is VIIm. Modally, the same relationship occurs for IV type chords with a relative IIm and for V type chords with a relative IIIIm.

IIm has what could be called a "relative VII diminished". The "relative diminished" of Dm is B diminished.

secondary roots on the fifth

Most commonly, secondary roots on the fifth can be used to emphasize the *second* chord in the I, IV, I7 progression, the "IV chord".

In using I-IV-I7 on the fifth of a I type (the original chord being enhanced), for example, it would be "V-I-V7", and should emphasize the second chord "I". Restated in letters, I-IV-I7 on the fifth of the I type C major would be G-C-G7 (I-IV-I7 in G, which is mode V of C). This should emphasize the second chord "C", which is the original chord being enhanced.

Playing a I-IV-I7 progression modally on the fifth (of the appropriate type) of the original chord can make the original sound like an eleventh. The following types work:

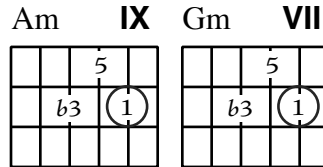
original chord type	type on fifth	eleventh version of original
IIIm type	VIIm type	IIIm11
IV type	I type	IVma9#11
V type	IIIm type	V11
VIIm type	IIIIm type	VIIm11
VIIIdim type	IV type	VIIIm11b5b9

The VIIIm11b5b9 is not currently acceptable as a chord, but it works melodically as an arpeggio.

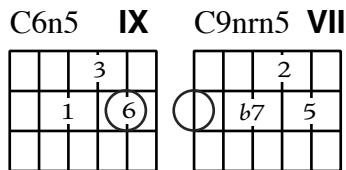
SIX NINE: VI_m-V_m TRIADS WITH PEDAL POINT "1"

Six Nine: VI_m-V_m over One

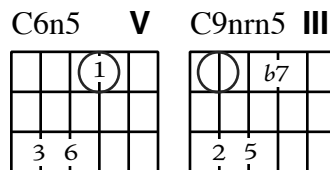
This becomes a sixth to ninth chord change, since VI_m equals I₆ no fifth and V_m equals I₉ no root, no third. During a C7 chord, the two chord progression C6_n5 to C9_{nrn}3 can be represented by playing Am-Gm.



C6_n5 and C9_{nrn}3 are respectively synonyms for Am and Gm.



Don't voice the note that is the ninth of the I_{9nrn}3 too low. The voicing for the second chord in the example below doesn't do a good job of sounding a ninth chord.



Close-Voiced Six Nine Blues in G

1 G⁷ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹ G⁷ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹

TAB

7	5	8	7	5	8	6	7	5	8	6	7	5	8	6	7	5	8
10	10		9	7	9	7	9	7	9	7	9	7	9	7	9	7	9

5 C⁷ C⁶ C⁹ C⁶ C⁹ C⁶ C⁹ C⁶ C⁹ G⁷ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹

TAB

5	3	5	3	5	3	7	5	8	6	7	5	8	6	7	5	8	6
8	8			5	7	5	7	5	7	5	7	5	7	5	7	5	7

9 D⁷ D⁶ D⁹ D⁶ D⁹ D⁶ D⁹ D⁶ D⁹ G⁷ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹ G⁶ G⁹

TAB

10	8	12	10	12	10	7	5	8	6	7	5	8	6	7	5	8	6
10	10	11	9	11	12	10	11	9	10	11	9	10	11	9	10	11	9

Six Nine Blues #1 in G

Chord diagrams for G6 (III) and G9 (I) are shown above the first system. The G6 diagram has notes 2, 4, 3, 6, 1. The G9 diagram has notes 2, 5, b7. The musical notation shows a melody in G major with a pedal point on G. The bass line consists of a steady eighth-note pattern: 3, 5, 7, 5, 7.

Chord diagrams for C6 (V) and C9 (III) are shown above the second system. The C6 diagram has notes 6, 1, 3. The C9 diagram has notes 5, b7, 9. The musical notation continues the melody and bass line. The bass line pattern remains 3, 5, 7, 5, 7.

Chord diagrams for C6 (V), C9 (III), D6 (III), and D9 (I) are shown above the third system. The C6 diagram has notes 6, 1, 3. The C9 diagram has notes 5, b7, 9. The D6 diagram has notes 3, 6, 1. The D9 diagram has notes 9, 5, b7. The musical notation concludes the piece with a double bar line. The bass line pattern remains 3, 5, 7, 5, 7.

Six Nine Blues #2 in G

G6 IV G9 II

	2	
3	4	

1 3 6

	2	
3	4	

b7 2 5

C6 III C9 III

3 3 3

1 3 6

	1	1	1

b7 2 5

C6 III C9 III

3 3 3

1 3 6

	2	
3	4	

1 3 6

G6 IV

	2	
3	4	

1 3 6

G6 IV

	2	
3	4	

1 3 6

D6 III Eb9 II D9 I

	1	
2	3	

3 1 6

	1	
2	3	

2 b7 5

	1	
2	3	

2 b7 5

G6 IV G9 II

	2	
3	4	

1 3 6

	2	
3	4	

b7 2 5

1. G6 IV

	2	
3	4	

1 3 6

2. G6 IV

	2	
3	4	

1 3 6

Six Nine Blues #3 in G

Swing Eighth

G6	VII	G9	V	G6	VII	G9	V
6 1 3		5 b7 2		6 1 3		5 b7 2	

C6	VIII	C9	VI	G6	VII	G9	V
3 6 1		2 5 b7		6 1 3		5 b7 2	

D6	X	C9	VIII	F6	V	F#6	VI	G6	VII	D7#9	IV
3 6 1		b7 3 5 2		6 1 3		6 1 3		6 1 3		1 3 b7 #2	

Six Nine Blues #4 in G

Swing Eighths

G6 VIII
G9 VI
G6 VIII
G9 VI

C6 IX
C9 VII
G6 VIII
G9 VI
C7 III
C#7 IV
D7 V

Bb7 VI
B7 VII
C7 VIII
1. G6 VIII
G9 VI

2. G6 VIII
D7b9 VII
G6 VIII

Six Nine Blues #5 in G

Swing Eighths

F X G6 IX G9 VII

3 5 1 1 3 6 b7 2 5 3 5 1 1 3 6 b7 2 5

G6 G6

S 1 S S 1 S S

3 3 1 3 3 3 3 1 3 3

T 4/4 12 14 12 10 12 10 9 10 12 14 12 10 12 9 10 12

A 12 14 14 12 10 12 10 9 10 12 14 12 10 12 9 10 12

B 12 14 14 12 10 12 10 9 10 12 14 12 10 12 9 10 12

Bb X C6 IX C9 VII

3 5 1 2 3 b7 2 5 3 5 1 2 3 b7 2 5

C6 G6

S 2 S S 1 S S

3 3 1 3 3 3 3 1 3 3

T 4/4 12 14 12 10 12 10 9 10 12 14 12 10 12 9 10 12

A 12 14 14 12 10 12 10 9 10 12 14 12 10 12 9 10 12

B 12 14 14 12 10 12 10 9 10 12 14 12 10 12 9 10 12

C7 X

1 5 b7

1. D6 G6 D7 IX

S S S 1 S S

3 3 3 3 1 3 3

T 4/4 12 14 12 12 14 11 12 14 12 10 13 12 10 10 9

A 12 14 14 12 12 14 11 12 14 12 10 13 12 10 10 9

B 12 14 14 12 12 14 11 12 14 12 10 13 12 10 10 9

2. F X G6 IX

3 5 1 1 3 6

G6

S 1 S

3 3 1 3 3

T 4/4 12 14 12 10 12 9 10

A 12 14 14 12 10 12 9 10

B 12 14 14 12 10 12 9 10

MORE TRIADS WITH PEDAL POINT

More Two-Triad Pedal Point Progressions

stepwise or perfect fourth root name movement with pedal point on first root

Triad with root as pedal point and stepwise or perfect fourth root movement to another triad. Only the commonly usable modes are shown.

- ✦ Major: I-II^m over one of major. In major mode, parent scale and the key scale are one and the same.
- ✦ Major: I-IV over one of major. In major mode, parent scale and the key scale are one and the same.
- ✦ Major: I-V over one of major. In major mode, parent scale and the key scale are one and the same.
- ✦ Dorian: II^m-I over two of the major parent scale. In terms of the Dorian key scale, this is I^m, bVII over one.
- ✦ Dorian: II^m-III^m over two of the major parent scale. In terms of the Dorian key scale, this is I^m, II^m over one.
- ✦ Dorian: II^m-V over two of the major parent scale. In terms of the Dorian key scale, this is I^m, IV over one.
- ✦ Dorian: II^m-VI^m over two of the major parent scale. In terms of the Dorian key scale, this is I^m-V^m over one.
- ✦ Lydian: IV-V over four of the major parent scale. In terms of the Lydian key scale, it is I-II over one.
- ✦ Mixolydian: V-IV over five of the major parent scale. In terms of the Mixolydian key scale, it is I-bVII over one.
- ✦ Mixolydian: V-VI^m, over five of the major parent scale. In terms of the Mixolydian key scale, it is I-II^m over one. It is the same chord progression as I II^m over one of major (above), with a changed key scale.
- ✦ Mixolydian: V-I over five of the major parent scale. In terms of the Mixolydian key scale, it is I-IV over one.
- ✦ Mixolydian: V-II^m over five of the major parent scale. In terms of the Mixolydian key scale, it is I-V^m over one.
- ✦ Aeolian: VI^m-V over six of the major parent scale. In terms of the Aeolian key scale, this

is Im-bVII over one. It is the same chord progression as IIm-I over two of major (above), changing the key scale from Dorian to Aeolian.

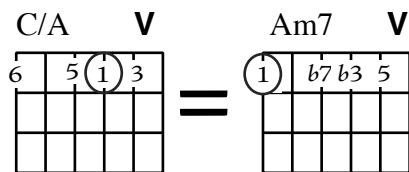
- Aeolian: VIm-IIIm over six of the major parent scale. In terms of the Aeolian key scale, this is Im-IVm over one.
- Aeolian: VIm-IIIm over six of the major parent scale. In terms of the Aeolian key scale, this is Im-Vm over one.

three four over one

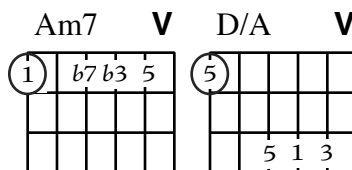
The “three” chord adds a harmony to the current chord and the “four” chord inserts the triad with its root a scale tone above the current chord. Only the commonly usable modes are shown.

- **III-IV over one of major.** In major mode, parent scale and the key scale are one and the same.
- IV-V over two of the major parent scale. In terms of the Dorian key scale, it is bIII-IV over I.

Using G major as the parent scale, the IV chord is C major, With “A” in the bass (“2” of G major), the chord is C/A. C/A is a synonym for Am7.



This progression would typically be used to replace a IIm7, where the IV/5 chord is de-emphasized rhythmically. V over two (of the G major parent scale) is D over A.



Mixolydian: VII diminished, I over five of the major parent scale. In terms of the Mixolydian key scale, it is III diminished, IV over I.

Three-Triad Pedal Point Progressions

one, two, three over one

Similar to the I-IV-I7 progression, but with II instead of IV and by using a III chord, the third chord is a complete I7, rather than I7 no root.

With scale-tone triads, the third chord in this progression becomes a seventh chord.

- **I-IIIm-IIIIm over one of major.** In major mode, parent scale and the key scale are one and the same. The third chord is Imaj7.
- **IIIm-IIIIm-IV over two of the major parent scale.** In terms of the Dorian key scale, this is Im-IIIm-bIII over one and the third chord is IIIm7 (bIII over one).
- **IIIIm-IV-V over three of the major parent scale.**
- **IV-V-VIm over four of the major parent scale.** In terms of the Lydian key scale, this is I-II-IIIIm over one and the third chord is IVmaj7 (IIIIm over one).
- **V-VI-VII diminished over five of the major parent scale.** In terms of the Mixolydian key scale, this is V-VIm-VII dim. over one and the third chord is V7 (III dim. over one).
- **VIm-VII diminished-I over six of the major parent scale.** In terms of the Aeolian key scale, this is VIm-VII dim.-I over one and the third chord is VIm7 (IIIIm one).
- **VII diminished-I-IIIm over seven of the major parent scale.** In terms of the Locrian key scale, this is I dim.-II-IIIIm over one and the third chord is VIIIm7b5 (IIIIm one).

three four five over one

An expansion of the “chord off the third” concept and similar to the I-IV-I7 chord progression. This doesn’t work well in Phrygian, Lydian or Locrian.

With scale-tone triads, the third chord in this progression becomes a ninth chord.

- **IIIIm-IV-V Over One:** Major mode. Cma7: Em/C (= Cma7)-F/C-G/C.
- **IV-V-VIm Over Two:** Dorian mode. Cm7: Eb/C-F/C-Gm/C.
- **VII diminished-I-IIIm Over Five:** Mixolydian mode. C7: Edim7/C (= C7)-F/C-Gm/C.
- **I-IIIm-IIIIm Over Six:** Aeolian mode. Am7: C/A-Dm/A-Em/A.

SCALE TONE TRIADS OF FOUR HEPTATONIC SCALES

Major Scale Tone Triads on Strings 3-2-1

root position (roots on the third string)

I major 1-3-5 C III	II minor 2-4-6 Dm V	III minor 3-5-7 Em VII	IV major 4-6-1 F VIII	V major 5-7-2 G X	VI minor 6-1-3 Am XII	VII diminished 7-2-4 B dim. XI	I major 1-3-5 C III
1 3 5	1 b3 5	1 b3 5	1 3 5	1 3 5	1 b3 5	1 b3 b5	1 3 5

first inversion (third in the bass, root on the first string)

I major 3-5-1 C VIII	II minor 4-6-2 Dm X	III minor 5-7-3- Em XII	IV major 6-1-4 F I	V major 7-2-5 G III	VI minor 1-3-6 Am V	VII diminished 2-4-7 B dim. VI	I major 3-5-1 C VIII
3 5 1	b3 5 1	b3 5 1	3 5 1	3 5 1	b3 5 1	b3 b5 1	3 5 1

second inversion (fifth in the bass, root on the second string)

I major 5-1-3 C XII	II minor 6-2-4 Dm I	III minor 7-3-5 Em III	IV major 1-4-6 F V	V major 2-5-7 G VII	VI minor 3-6-1 Am VIII	VII diminished 4-7-2 B dim. X	I major 5-1-3 C XII
5 1 3	5 1 b3	5 1 b3	5 1 3	5 1 3	5 1 b3	b5 1 b3	5 1 3

quartal triads on strings 3-2-1

1-4-7	2-5-1	3-6-2	4-7-3	5-1-4	6-2-5	7-3-6	1-4-7
Csus4 I	Dsus4 II	Esus4 IV	Fsus#4 V	Gsus4 VII	Asus4 IX	Bdim.sus4 X	Csus4 XII
5 1 4	5 1 4	5 1 4	5 1 #4	5 1 4	5 1 4	b5 1 4	5 1 4

Major Scale Tone Triads on Strings 4-3-2

root position (roots on the fourth string)

I major 1-3-5 C VIII	II minor 2-4-6 Dm X	III minor 3-5-7 Em XII	IV major 4-6-1 F I	V major 5-7-2- G III	VI minor 6-1-3 Am V	VII diminished 7-2-4 B dim. VI	I major 1-3-5 C VIII
1 3 5	1 b3 5	1 b3 5	1 3 5	1 3 5	1 b3 5	1 b3 b5	1 3 5

first inversion (third in the bass, root on the second string)

I major 3-5-1 C I	II minor 4-6-2 Dm II	III minor 5-7-3 Em IV	IV major 6-1-4 F V	V major 7-2-5 G VII	VI minor 1-3--6 Am IX	VII diminished 2-4-7 B dim. X	I major -3-5-1 C XII
3 5 1	b3 5 1	b3 5 1	3 5 1	3 5 1	b3 5 1	b3 b5 1	3 5 1

second inversion (fifth in the bass, root on the third string)

I major 5-1-3 C V	II minor 6-2-4 Dm VI	III minor 7-3-5 Em VIII	IV major 1-4-6 F X	V major 2-5-7 G III	VI minor 3-6-1 Am I	VII diminished 4-7-2 B dim. III	I major 5-1-3 C V
5 1 3	5 1 b3	5 1 b3	5 1 3	5 1 3	5 1 b3	b5 1 b3	5 1 3

quartal triads on strings 4-3-2

1-4-7	2-5-1	3-6-2	4-7-3	5-1-4	6-2-5	7-3-6	1-4-7
Csus4 V	Dsus4 VII	Esus4 IX	Fsus#4 X	Gsus4 XII	Asus4 II	Bdim.sus4 III	Csus4 V
5 1 4	5 1 4	5 1 4	5 1 #4	5 1 4	5 1 4	b5 1 4	5 1 4

Major Scale Tone Triads on Strings 5-4-3

root position (roots on the fifth string)

I major 1-3-5 C XII	II minor 2-4-6 Dm II	III minor 3-5-7 Em IV	IV major 4-6-1 F V	V major 5-7-2 G VII	VI minor 6-1-3 Am IX	VII diminished 7-2-4 B dim. X	I major 1-3-5 C XII
1 3 5	1 b3 5	1 b3 5	1 3 5	1 3 5	1 b3 5	1 b3 b5	1 3 5

first inversion (third in the bass, root on the third string)

I major 3-5-1 C V	II minor 4-6-2 Dm VII	III minor 5-7-3- Em IX	IV major 6-1-4 F X	V major 7-2-5 G XII	VI minor 1-3-6 Am II	VII diminished 2-4-7 B dim. III	I major 3-5-1 C V
3 5 1	b3 5 1	b3 5 1	3 5 1	3 5 1	b3 5 1	b3 b5 1	3 5 1

second inversion (fifth in the bass, root on the fourth string)

I major 5-1-3 C VIII	II minor 6-2-4 Dm X	III minor 7-3-5 Em XII	IV major 1-4-6 F I	V major 2-5-7 G III	VI minor 3-6-1 Am V	VII diminished 4-7-2 B dim. VI	I major 5-1-3 C VIII
5 1 3	5 1 b3	5 1 b3	5 1 3	5 1 3	5 1 b3	b5 1 b3	5 1 3

quartal triads on strings 5-4-3

1-4-7	2-5-1	3-6-2	4-7-3	5-1-4	6-2-5	7-3-6	1-4-7
Csus4 X	Dsus4 XII	Esus4 II	Fsus#4 III	Gsus4 V	Asus4 VII	Bdim.sus4 VIII	Csus4 V
5 1 4	5 1 4	5 1 4	5 1 #4	5 1 4	5 1 4	b5 1 4	5 1 4

on strings 6-5-4, the fingerings would be relatively the same as on strings 5-4-3

Major Sharp Five Scale Tone Triads on Strings 4-3-2

(put the tone center one VI m for harmonic minor)

root position (roots on the fourth string)

I augmented 1-3-#5 F aug. I	II minor 2-4-6 Gm III	III major 3-#5-7 A V	IV major 4-6-1 Bb VI	#V diminished #5-7-2 C dim. VIII	VI minor 6-1-3 Dm X	VII diminished 7-2-4 E dim. XI	I augmented 1-3-#5 F aug. I
1 3 #5	1 b3 5	1 3 5	1 3 5	1 b3 b5	1 b3 5	1 b3 b5	1 3 #5

first inversion (third in the bass, root on the second string)

I augmented 3-#5-1 D aug. II	II minor 2-4-6 Em IV	III major #5-7-3 F# VI	IV major 6-1-4 G VII	#V diminished 7-2-#5 A dim. IX	VI minor 1-3-6 Bm XI	VII diminished 2-4-7 C# dim. XII	I augmented 3-#5-1 D aug. II
3 #5 1	b3 5 1	3 5 1	3 5 1	b3 b5 1	b3 5 1	b3 b5 1	3 #5 1

second inversion (fifth in the bass, root on the third string)

I augmented #5-1-3 Bb aug. III	II minor 6-2-4 Cm IV	III major 7-3-#5 Dm VI	IV major 1-4-6 Eb VIII	#V diminished 2-#5-7 F dim. X	VI minor 3-6-1 Gm X	VII diminished 4-7-2 A dim. XII	I augmented #5-1-3 Bb aug. XV
#5 1 3	5 1 b3	5 1 3	5 1 3	b5 1 b3	5 1 b3	b5 1 b3	#5 1 3

Major Sharp Five Scale Tone Triads on Strings 3-2-1

(put the tone center one VI m for harmonic minor)-00

root position (roots on the third string)

I augmented 1-3-#5 Bb aug. I	II minor 2-4-6 Cm III	III major 3-#5-7 D V	IV major 4-6-1 Eb VI	#V diminished #5-7-2 F dim. X	VI minor 6-1-3 Gm X	VII diminished 7-2-4 A dim. XII	I augmented 1-3-#5 Bb aug. XIV
1 3 #5	1 b3 5	1 3 5	1 3 5	1 b3 b5	1 b3 5	1 b3 b5	1 3 #5

first inversion (third in the bass, root on the first string)

I augmented 3-#5-1 F aug. I	II minor 2-4-6 Gm III	III major #5-7-3 Am V	IV major 6-1-4 Bb VI	#V diminished 7-2-#5 C# dim. VIII	VI minor 1-3-6 Dm X	VII diminished 2-4-7 E dim. XI	I augmented 3-#5-1 F aug. XIII
3 #5 1	b3 5 1	3 5 1	3 5 1	b3 b5 1	b3 5 1	b3 b5 1	3 #5 1

second inversion (fifth in the bass, root on the second string)

I augmented #513 D aug. II	II major 624 Em III	III major 73#5 F# VI	IV major 146 G VII	#V diminished 2#57 A# dim. IX	VI minor 361 Bm XI	VII diminished 472 C# dim. XII	I augmented #513 D aug. XIV
#5 1 3	5 1 b3	5 1 3	5 1 3	b5 1 b3	5 1 b3	b5 1 b3	#5 1 3

Major Sharp Five Scale Tone Triads on Strings 5-4-3

root position (roots on the fifth string)

I augmented 1-3-#5	II minor 2-4-6	III major 3-#5-7	IV major 4-6-1	#V diminished #5-7-2	VI minor 6-1-3	VII diminished 7-2-4	I augmented 1-3-#5
D aug. III	Em IV	F# VI	G VII	A# dim. IX	Bm XI	C# dim. XII	D aug. XV

first inversion (third in the bass, root on the third string)

I augmented 3-#5-1	II minor 2-4-6	III major #5-7-3	IV major 6-1-4	#V diminished 7-2-#5	VI minor 1-3-6	VII diminished 2-4-7	I augmented 3-#5-1
A aug. II	Bm IV	C# VI	D VII	E# dim. IX	F#m XI	G# dim. XII	A aug. XIV

second inversion (fifth in the bass, root on the fourth string)

I augmented #5-1-3	II minor 6-2-4	III major 7-3-#5	IV major 1-4-6	#V diminished 2-#5-7	VI minor 3-6-1	VII diminished 4-7-2	I augmented #5-1-3
F aug. II	Gm III	A V	Bb VI	C# dim. IX	Dm X	E dim. XII	F aug. XIII

on strings 6-5-4, the fingerings would be relatively the same as on strings 5-4-3

Melodic Minor Scale Tone Triads on Strings 4-3-2

root position (roots on the fourth string)

I minor 1-b3-5 Fm I	II minor 2-4-6 Gm III	bIII augmented b3-5-7 Ab aug. V	IV major 4-6-1 Bb VI	V major 5-7-2 C VIII	VI diminished 6-1-b3 D dim. IX	VII diminished 7-2-4 E dim. XI	I minor 1-b3-5 Fm XIII
1 b3 5	1 b3 5	1 3 #5	1 3 5	1 3 5	1 b3 b5	1 b3 b5	1 b3 5

first inversion (third in the bass, root on the second string)

I minor b3-5-1 Dm II	II minor 4-6-2 Em IV	bIII augmented 5-7-b3 F aug. VI	IV major 6-1-4 G VII	V major 7-2-5 A IX	VI diminished 1-b3-6 B dim. X	VII diminished 2-4-7 C# dim. XII	I minor b3-5-1 Dm XIV
b3 5 1	b3 5 1	3 #5 1	3 5 1	3 5 1	b3 b5 1	b3 b5 1	b3 5 1

second inversion (fifth in the bass, root on the third string)

I minor 5-1b-3 Bbm III	II minor 6-2-4 Cm IV	bIII augmented 7-b3-5 Db aug. VI	IV major 1-4-6 Eb VIII	V major 2-5-7 F X	VI diminished b3-6-1 G dim. XI	VII diminished 4-7-2 A dim. XIII	I minor 5-1-b3 Bbm XV
5 1 b3	5 1 b3	#5 1 3	5 1 3	5 1 3	b5 1 b3	b5 1 b3	5 1 b3

Melodic Minor Scale Tone Triads on Strings 3-2-1

root position (roots on the third string)

I minor 1-b3-5 Bbm I	II minor 2-4-6 Cm III	bIII augmented b3-5-7 Db aug. V	IV major 4-6-1 Eb VI	V major 5-7-2 F VIII	VI diminished 6-1-b3 G dim. IX	VII diminished 7-2-4 A dim. XI	I minor 1-b3-5 Bbm XIII

first inversion (third in the bass, root on the first string)

I minor b3-5-1 Fm I	II minor 4-6-2 Gm III	bIII augmented 5-7-b3 Ab aug. V	IV major 6-1-4 Bb VI	V major 7-2-5 C VIII	VI diminished 1-b3-6 D dim. IX	VII diminished 2-4-7 E dim. XI	I minor b3-5-1 Fm XIII

second inversion (fifth in the bass, root on the second string)

I minor 5-1b-3 Dm II	II minor 6-2-4 Em III	bIII augmented 7-b3-5 F aug. V	IV major 1-4-6 G VII	V major 2-5-7 A IX	VI diminished b3-6-1 B dim. X	VII diminished 4-7-2 C# dim. XII	I minor 5-1-b3 Dm XIV

Melodic Minor Scale Tone Triads on Strings 5-4-3

root position (roots on the fifth string)

I minor 1-b3-5 Dm II	II minor 2-4-6 Em IV	bIII augmented b3-5-7 F aug. VI	IV major 4-6-1 G VII	V major 5-7-2 A IX	VI diminished 6-1-b3 B dim. XI	VII diminished 7-2-4 C# dim. XII	I minor 1-b3-5 Dm XIV
1 b3 5	1 b3 5	1 3 #5	1 3 5	1 3 5	1 b3 b5	1 b3 b5	1 b3 5

first inversion (third in the bass, root on the third string)

I minor b3-5-1 Am II	II minor 4-6-2 Bm IV	bIII augmented 5-7-b3 C aug. V	IV major 6-1-4 D VII	V major 7-2-5 E IX	VI diminished 1-b3-6 F# dim. X	VII diminished 2-4-7 G# dim. XII	I minor b3-5-1 Am XIV
b3 5 1	b3 5 1	3 #5 1	3 5 1	3 5 1	b3 b5 1	b3 b5 1	b3 5 1

second inversion (fifth in the bass, root on the fourth string)

I minor 5-1b-3 Fm I	II minor 6-2-4 Gm III	bIII augmented 7-b3-5 Ab aug. V	IV major 1-4-6 Bb VI	V major 2-5-7 C VIII	VI diminished b3-6-1 D dim. X	VII diminished 4-7-2 E dim. XI	I minor 5-1-b3 v
5 1 b3	5 1 b3	#5 1 3	5 1 3	5 1 3	b5 1 b3	b5 1 b3	5 1 b3

Harmonic Major Scale Tone Triads on Strings 4-3-2

root position (roots on the fourth string)

I major 1-3-5 F I	II diminished 2-4-b6 G dim. III	III minor 3-5-7 Am V	IV minor 4-b6-1 Bbm VI	V major 5-7-2 C VIII	VI augmented b6-1-3 Db aug. X	VII diminished 7-2-4 E dim. XI	I major 1-3-5 F XIII

first inversion (third in the bass, root on the second string)

I major 3-5-1 D II	II diminished 4-b6-2 E dim. IV	III minor 5-7-3 F#m VI	IV minor b6-1-4 Gm VII	V major 7-2-5 A IX	VI augmented 1-3-b6 Bb aug. XI	VII diminished 2-4-7 C# dim. XII	I major 3-5-1 D XIV

second inversion (fifth in the bass, root on the third string)

I major 5-1-3 Bb III	II diminished b6-2-4 C dim. IV	III minor 7-3-5 Dm VI	IV minor 1-4-b6 Eb VII	V major 2-5-7 F X	VI augmented 3-b6-1 Gb aug. XI	VII diminished 4-7-2 A dim. XIII	I major 5-1-3 Bb XV

Harmonic Major Scale Tone Triads on Strings 3-2-1

root position (roots on the third string)

I major 1-3-5 Bb I	II diminished 2-4-b6 C dim. II	III minor 3-5-7 Dm V	IV minor 4-b6-1 Ebm VI	V major 5-7-2 F VIII	VI augmented b6-1-3 Gb aug. X	VII diminished 7-2-4 A dim. XII	I major 1-3-5 Bb XIII
1 3 5	1 b3 b5	1 b3 5	1 b3 5	1 3 5	1 3 #5	1 b3 b5	1 3 5

first inversion (third in the bass, root on the first string)

I major 3-5-1 F I	II diminished 4-b6-2 G dim. II	III minor 5-7-3 Am V	IV minor b6-1-4 Bbm VI	V major 7-2-5 C VIII	VI augmented 1-3-b6 Db aug. X	VII diminished 2-4-7 E dim. XI	I major 3-5-1 F XIII
3 5 1	b3 b5 1	b3 5 1	b3 5 1	3 5 1	3 #5 1	b3 b5 1	3 5 1

second inversion (fifth in the bass, root on the second string)

I major 5-1-3 D II	II diminished b6-2-4 E dim. III	III minor 7-3-5 F#m V	IV minor 1-4-b6 Gm VI	V major 2-5-7 A IX	VI augmented 3-b6-1 Bb aug. XI	VII diminished 4-7-2 C# dim. XII	I major 5-1-3 D XIV
5 1 3	b5 1 b3	5 1 b3	5 1 b3	5 1 3	#5 1 3	b5 1 b3	5 1 3

Harmonic Major Scale Tone Triads on Strings 5-4-3

root position (roots on the fifth string)

I major 1-3-5 D II	II diminished 2-4-b6 E dim. III	III minor 3-5-7 F#m VI	IV minor 4-b6-1 Gm VII	V major 5-7-2 A IX	VI augmented b6-1-3 Bb aug. XI	VII diminished 7-2-4 C# dim. XII	I major 1-3-5 D XIV
1 3 5	1 b3 b5	1 b3 5	1 b3 5	1 3 5	1 3 #5	1 b3 b5	1 3 5

first inversion (third in the bass, root on the third string)

I major 3-5-1 A II	II diminished 4-b6-2 B dim. IV	III minor 5-7-3 C#m VI	IV minor b6-1-4 Dm VII	V major 7-2-5 E IX	VI augmented 1-3-b6 F aug. X	VII diminished 2-4-7 G# dim. XII	I major 3-5-1 A XIV
3 5 1	b3 b5 1	b3 5 1	b3 5 1	3 5 1	3 #5 1	b3 b5 1	3 5 1

second inversion (fifth in the bass, root on the fourth string)

I major 5-1-3 F I	II diminished b6-2-4 G dim. III	III minor 7-3-5 Am V	IV minor 1-4-b6 Bbm VI	V major 2-5-7 C VIII	VI augmented 3-b6-1 Db aug. X	VII diminished 4-7-2 E dim. XI	I major 5-1-3 F XIII
5 1 3	b5 1 b3	5 1 b3	5 1 b3	5 1 3	#5 1 3	b5 1 b3	5 1 3

on strings 6-5-4, the fingerings would be relatively the same as on strings 5-4-3

MODAL TRIAD IMPROV AND CLUSTER PLAINING

The Power of Triads

Triads can be extremely useful in improvising both melody and accompaniment parts. You need to intimately know the graphic structures on the fretboard and how to intuitively use them. You can learn to use them in more complex relationships like a composer and arranger, but to do so you must have a thorough understanding of the theory *and* be able to think *theory summaries*.

Here are a couple of examples of theory summaries:

If you have a good theoretical knowledge of blues improv, you know that you should generally flat the third of the key when making melody on a IV7 chord, since it is constructed with 4-6-1-b3 of the key.

In improvising on a jazz blues, during the later part of IV7 before I7 (F7 before C7), IV (F) Mixolydian sharp one (F#) creates V harmonic minor and suggests the Vm part of the I7 chord. See [Melodically Superimposed Cadences/Harmonic Minor Cadences](#).

Learning Linear Triads by String Set

do it yourself

Learn to construct the linear sets of triads yourself. Don't just learn by rote. Use the sets of fingerings in this course as a confirmation, but learn to conceive and build the sets yourself.

learn to build triad arcs

In [Scale Tone Arpeggios And Pentatonics/Building Triad Arcs](#), you can go through a set of the seven major scale in-position fingerings and get an overview of the full fretboard triad structure. Highly recommended.

string sets and triad inversions

For each inversion on each string set (4-3-2 or 3-2-1), build the library of triads for the heptatonic (seven-tone scale) you are using. For the major scale, you'll need major, minor and diminished. On the string you have chosen each step of the scale will represent the root of a chord. The three inversions are generically 1-3-5, 3-5-1 and 5-1-3 (by "generically", I mean the "3's" may be flat and the "5's" may be flat or sharp).

range of positions and choosing a string for the roots

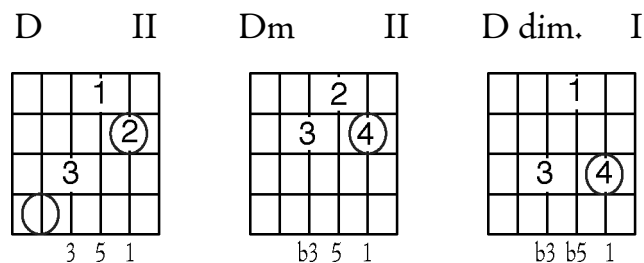
“Position” can refer to a area of the fretboard in relation to the index finger in single-note playing of scales or arpeggios. Generally, the number of the fret at which the first finger is hovering is the number of the position.

Start by playing sets of triads in stepwise order from about positions III to XV. Choose a string on which to play the roots of the chords, starting in III position area. Play the chosen major scale on that string in single notes from the lowest fretted note up an octave (twelve frets). Determine the lowest pitch in that scale that can be part of a triad in the scale without an open string.

build a library of the chord types

During the course of playing triads on each step of the scale, you’ll need the types of triads that occur in that scale. In major scale, for example, you’ll major, minor and diminished. Make a version of those on the first scale tone you have chosen on the second string to build a library of types.

Choosing the second string for an F major scale, the note “D” on the third fret is the sixth step of the scale. During the course of playing the F major scale tone triads on string set 432 in ascending order, you will need major, minor and diminished triads. Build one of each type on the note “D”, so you’ll know the fingerings for those types as you construct the set of triad fingerings.



tracking the scale

Think the location of each scale tone as you ascend the chosen string in alphabetical order, building a triad on each step named after the note. Think the roots by scale-tone number with the appropriate quality. I, IV and V are major. II, III and VI are minor. VII is diminished. Keep your focus on the scale numbers, which I call “tracking the scale. Here are a couple of examples:

C major scale, root on third string: Am has its root on second fret and is in first position (without open strings) and is a VI_m chord.

D major scale, root on second string: C# is on the second string, and would be scale tone seven. Play the three types of C# chords, major minor and diminished. The major and minor can be played without and open string, but C# diminished would require the third string open. So, start with the next higher scale tone “D”, which can be played in second position.

learn all three inversions

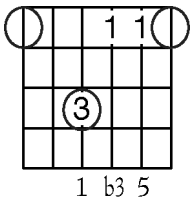
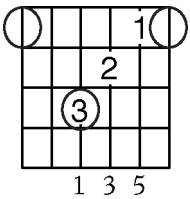
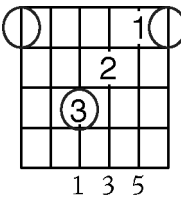
Learn all three inversions in one key before going to another. Build your memories of graphic sequences and fingerings first, before explicit memory of the chord names. Then you'll be able to improvise with the chords in a range of a few frets without having to know their names.

In a small range of frets, combine the fingerings. For example, in F, from fifth to tenth position, string set 4-3-2, play triads with roots on each string in ascending order:

fourth string roots 3-4-5

(circled roots)

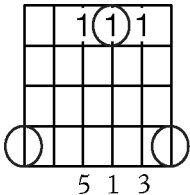
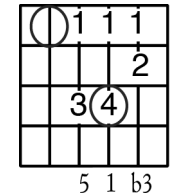
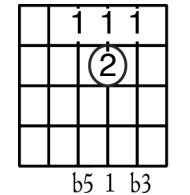
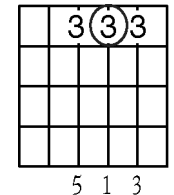
generic order of voices 1-3-5

Am	VI	Bb	VI	C	VIII
					

third string roots 5-6-7-1

(circled roots)

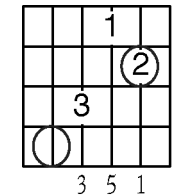
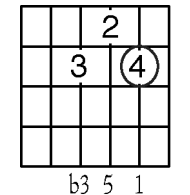
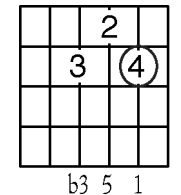
generic order of voices 5-1-3

C	V	Dm	V	E dim.	VIII	F	VIII
							

second string roots 1-2-3

(circled roots)

generic order of voices 3-5-1

F	V	Gm	VII	Am	IX
					

multiple scales for the same progression

In many American music styles like blues, multiple parent scales are necessary. See [Modes/Modes Of I-IV-V Blues](#) and [Modes on Jazz Blues](#). In the same chord progression, a C7 chord may use the F major parent scale for melody and accompaniment parts, while a F7 chord may use a Bb major scale. You would need to know the sets of triads for both scales to improvise effectively. You often will have to deal with many major scales (or other seven tone scales). You also will have to learn to think of all these scales in terms of the note named after the key, which is modal. Though this is learnable, it is so complicated that at first you should learn the sets of triads (or other scale tone structures) and use them with aural intuition before detailed analysis.

Using Pedal Point Conceptually

While improvising over any chord, you can conceive a pedal point with the root of that chord *or* with its [secondary roots](#). In improvisational music, there can be many versions of the current chord. A dominant seventh chord, such as C7, could be depicted as C (major triad) C7, C9, C13, C7/6 or C6. This can be done in chords, arpeggios or single note melody that is based on the chords and arpeggios.

duality chords

Duality tones are discussed in [Tonal Themes And Schemes](#). They are notes common to both the current chord and a key scale (a scale named after the current key). *Duality chords* are an even closer relationship. They are notes common to the current chord and some version of the tonic chord. They always involve chord synonyms, two or more chords that have different names but the same notes, like Am7 and C6.

aural improv with duality chords

As you improvise aurally (by ear) using a key scale that contains all the notes of the current chord, you will find some triads or thirds (two note chords that are major or minor third intervals) that sound consonant with the current chord, making some apparent version of it. It doesn't matter so much what the name is, just that it sounds good. So, you don't need to burden your mind and distract yourself from your expression and creativity. You can name the chords later, or not. Like Duke Ellington said "if it sounds good, it is good."

I remember a Miles Davis quote that went something like "there are no wrong notes in jazz". What did he mean? That you can indiscriminately play any note at any time? Not exactly. He meant that any "unintended" note can be molded into good thematic material and then repeated with theme and variation to validate it.

My friend says his wife, who is a film director, asks anyone to scribble anything on a piece of paper, they she draws around it to make something beautiful and meaningful. Steve Allen used to have a regular segment in his late night variety show where he asked five (? , can't remember) audience members to each come up and choose a note near the center of the piano. He would then immediately compose a song around the sequence of notes! I thought that was really cool. He was obviously an accomplished pianist. Wikipedia, for what its worth, says he wrote over 14,000 songs.

When you find a note, a third or triad that sounds well over the current chord, emphasize it by repeating it, sustaining it, accenting it or otherwise drawing attention to it. It is some kind of duality chord that you can name later (or not).

When you come across a note, a third or a triad that doesn't seem to be part of the current chord, don't emphasize it. Major scale tone I, IIIm, IV or V type chords each have four strong triad subsets. They can each be a ninth chord, so they have a triad subset on their root third or fifth. Ima9, for example is

made up of tones 1-3-5-7 and 9(2). The 1-3-5 part is a I major triad. The 3-5-7 part is a III minor triad. The 5-7-2 part is a V major triad.

I, II^m IV and V each also have a sixth in their mode. In the key of D, the II minor chord in the key of C, for example, the sixth tone from “D” is “B”, its sixth. So it can be Dm⁶ (1-b3-5-6 of D), using all notes of the C major scale.

If you are playing on one of these chords that has many possible versions, it will have many triad subsets. So, you can emphasize many different triads based on its parent scale.

Since chords are built by default with every other note of a scale, roots of triads that are not part of the current chord are usually one scale step away from triads that are part of the current chord. Let’s say you are playing on Cma⁹ in the key of “C”, which consists of 1-3-5-7-2 of the C major scale. You play the notes of Dm, which is 2-4-6. The “4” in that chord creates a soft dissonance against the Cma⁹. By going one step up the scale, the root (“E”, 3 of C) of the Em triad is part of the Cma⁹. Em is 3-5-7 and Cma⁹ is 1-3-5-7-2. If go one step down the scale from the root “D” of Dm to the root “C” of C major triad, obviously that is part of Cma⁹, also. So....if you are playing on big chord like a ninth that can have a sixth, the root of any dissonant triad is likely one scale step away, up or down, from a consonant one that you can emphasize.

Small Structures Connect to Larger Ones

When you’re using pedal point thirds, one of the notes will often be an interval of a third or fourth that creates a triad when combined with the pedal point. When that happens, you can take the pivotal opportunity to use the triad to begin a pedal point triad series.

When pedal point triads are part of a seventh or larger chord, you can segue into an arpeggio structure representing the larger chord.

Triads As Secondary Roots

As many as four triads can be used to represent a larger chord. Ninth chords contain three triads, one on the root, third and fifth. Seventh chords contain two triads, one on the root and one on the fifth. Sixth chords contain two triads, one on the root and one on the fifth.

secondary root triads for major scale tone chords

	I major	II minor	III minor	IV major	V major	VI minor	VII diminished
I chords	I major		I _{ma} 7 no root		I _{ma} 9 no root, no third	I ₆ no 5	
II chords		II minor		II _m 7 no root		II _m 9 no root, no third	II _m 6 no 5
III chords			III minor		III _m 7 no root		
IV chords	IV _{ma} 9 no root, no third	IV ₆ no fifth		IV major		IV _{ma} 7 no root	
V chords		V ₉ no root, no third	V ₆ no fifth		V major		V ₇ no root
VI chords	VI _m 7 no root		VI _m 9 no root, no third			VI minor	
VII chords		VII _m 7 _b 5 no root					VII diminished

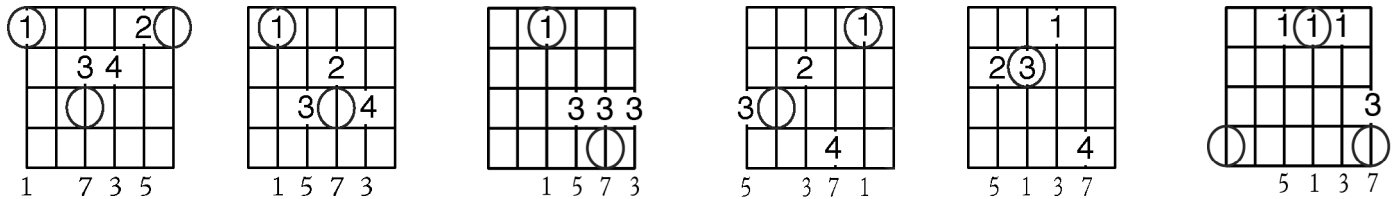
Chord Archetypes

- **Seventh Chords with Root or Fifth in the Bass**
- **1,512 Variations of a Tertian Chord**
- **Fingering Families of Seven Seventh Chord Types**
- **Fingering Families of 14 Quadrad Types**
- **Memorize Full-Fretboard Chord Tones**

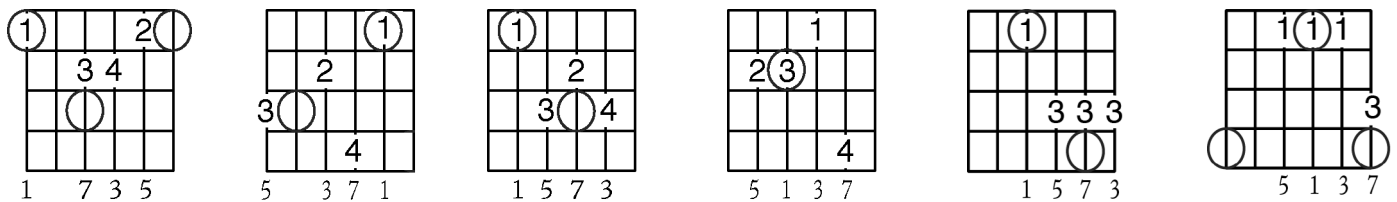
SEVENTH CHORDS WITH ROOT OR FIFTH IN THE BASS

memorize these archetypal major seventh chord fingerings

Notice that the first three fingerings have roots (labeled "1" below the string) in the bass, and the last three have fifths (labeled "5" below the string) in the bass.

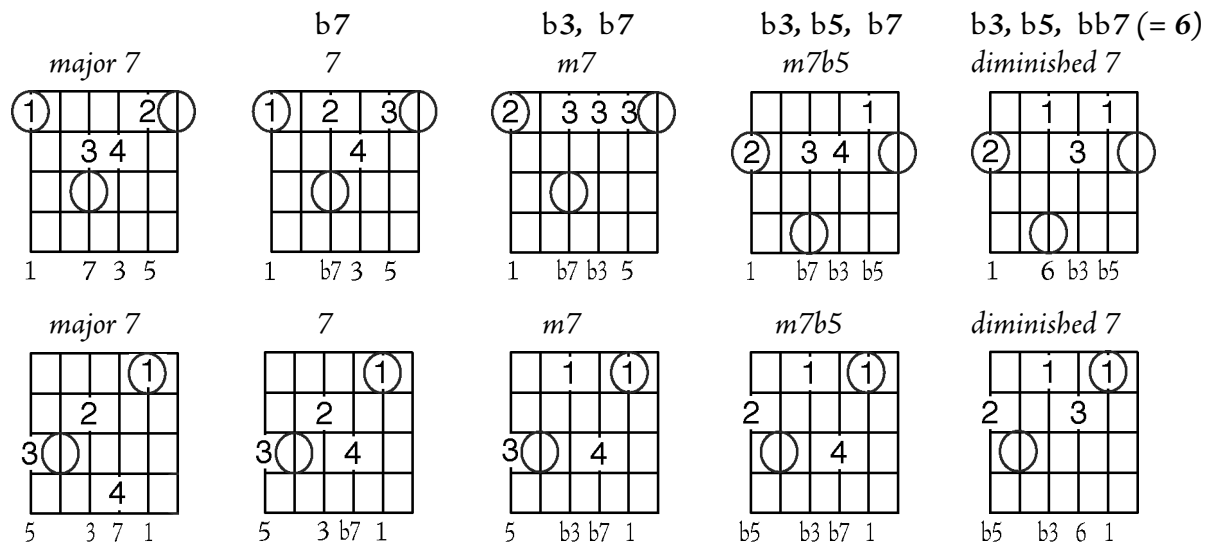


Each pair of fingerings below are on the same string set. For example, the first two chords are fingered on strings 6, 4, 3 and 2. For each pair of chords, the first has the root in the bass and the second has the fifth in the bass.



creating five versions from each archetypal seventh chord fingering

Modify the first fingering in each row by accumulatively flattening the seventh, third, fifth. Then flat the seventh again (double-flatted), leaving the third and fifth flat. These modifications are shown progressively in each row, from left to right.



<p><i>major 7</i></p> <p>1 5 7 3</p>	<p><i>7</i></p> <p>1 5 b7 3</p>	<p><i>m7</i></p> <p>1 5 b7 b3</p>	<p><i>m7b5</i></p> <p>1 b5 b7 b3</p>	<p><i>diminished 7</i></p> <p>1 b5 6 b3</p>
<p><i>major 7</i></p> <p>5 1 3 7</p>	<p><i>7</i></p> <p>5 1 3 b7</p>	<p><i>m7</i></p> <p>5 1 b3 b7</p>	<p><i>m7b5</i></p> <p>b5 1 b3 b7</p>	<p><i>diminished 7</i></p> <p>b5 1 b3 6</p>
<p><i>major 7</i></p> <p>1 5 7 3</p>	<p><i>7</i></p> <p>1 5 b7 3</p>	<p><i>m7</i></p> <p>1 5 b7 b3</p>	<p><i>m7b5</i></p> <p>1 b5 b7 b3</p>	<p><i>diminished 7</i></p> <p>1 b5 6 b3</p>
<p><i>major 7</i></p> <p>5 1 3 7</p>	<p><i>7</i></p> <p>5 1 3 b7</p>	<p><i>m7</i></p> <p>5 1 b3 b7</p>	<p><i>m7b5</i></p> <p>b5 1 b3 b7</p>	<p><i>diminished 7</i></p> <p>b5 1 b3 6</p>

1,512 VARIATIONS OF A TERTIAN QUADRAD

Quadrad And Tertian Defined

A quadrad is a four-note chord. A tertian chord is constructed in thirds, by an every-other-note pattern in a seven-tone scale. A tertian quadrad is a four-note chord constructed in thirds. Tertian quadrads are commonly called seventh chords. Confusingly, the term seventh chord is also used as an abbreviation of the dominant seventh chord, with the numeric formula based on a major scale with the same letter name: 1, 3, 5, b7 (see Change Quality below).

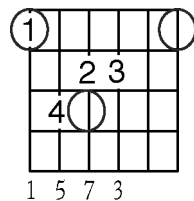
Access To 3,024 Seventh Chord Fingerings

Most seventh chords can be derived by making the modifications described below to the 157300 and 135700 seventh chord fingerings. "Serial numbers" are defined later in this study. There are:

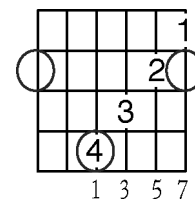
1. fourteen qualities.
2. four options inverting the chord on the same string set (strings on which the chord is fretted).
3. three options (averaged) by changing string set.
4. three options by inversion (raising the fifth or seventh an octave) and
5. three options by omitting the root or fifth.

Do the math: this is $2 \times 14 \times 4 \times 3 \times 3 \times 3 = 3,024$ chord fingerings! A third or half of them are acutally useful, but this is a very efficient way to access them: get quick at following the construction path rather than just rote memorization.

major 7
serial number 157300



major 7
serial number 001357



Change Quality (14 options)

There are fourteen relatively common quadrad qualities. A chord root is the letter name after which a chord is named. The letter name expressing the chord root may be followed by a flat or sharp, showing that it is a half step above or below a natural letter name. Natural letter names are those with not sharp or flat. When a natural needed for clarity, the symbol “*n*” can be used to represent natural.

A chord formula is a numerical expression in relation to a major scale named after the chord root. The chord formula may require flats or sharps before numbers to show where chord tones are half steps (one-fret intervals) above or below chord tones.

Quadrad Formulas by Chord Family

<u>major</u>	<u>dominant</u>	<u>minor</u>	<u>diminished</u>
major 7 (ma7) = 1-3-5-7	7 (dominant seventh) = 1-3-5-b7	minor seventh = 1-b3-5-b7	diminished seventh (= m6b5) = 1-b3-5-bb7 (= 6)
ma7b5 = 1-3-b5-7	7b5 = 1-3-b5-b7		m7b5 = 1-b3-b5-b7
ma7#5 = 1-3-#5-7	7#5 = 1-3-#5-b7		
6 (ma6) = 1-3-5-6		m6 = 1-b3-5-6	
	7sus.4 = 1-4-5-b7	m(ma7) = 1-b3-5-7	
	7sus.2 = 1-2-5-b7		

Quadrad Formulas, Written Forms and Spoken Forms

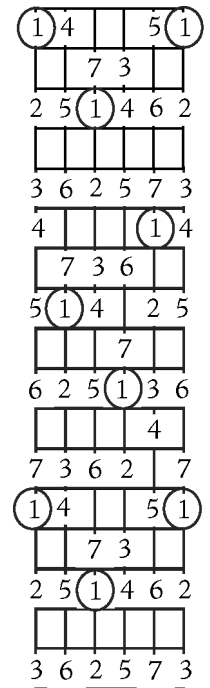
<u>written</u>	<u>formula</u>	<u>spoken</u>	<u>other written forms</u>
ma7	1-3-5-7	major seventh	Δ , $\Delta 7$, maj7, M7
7	1-3-5-b7	dominant seventh	dom.7
m7	1-b3-5-b7	minor seventh	mi7, min.7, -7
m7b5	1-b3-b5-b7	minor seventh or half-diminished	mi7b5, min7b5, $\emptyset 7$
dim.7	1-b3-b5-bb7 (= 6)	diminished seventh	$^{\circ} 7$, m6b5
ma7b5	1-3-b5-7	major seventh flat five	$\Delta 7b5$, maj7b5
ma7#5	1-3-#5-7	major seventh sharp five	$\Delta 7\#5$, maj7#5
7b5	1-3-b5-b7	(dominant) seventh flat five	dom.7b5
7#5	1-3-#5-b7	(dominant) seventh sharp five	dom.7#5
6	1-3-5-6	(major) sixth	ma6, M6
m6	1-b3-5-6	minor sixth	mi6, min6
7sus.4	1-4-5-b7	(dominant) seventh suspended fourth	dom.7sus4
7sus.2	1-2-5-b7	(dominant) seventh suspended second	dom.7sus2
m(ma7)	1-b3-5-7	minor, major seventh	m(7)

Find Chord Tones With Major Scale Fingerings

Use the seven in-position major scale fingerings shown below to find chord tones. The circled number should be placed on the note that names the chord root. The remaining numbers correspond to the chord formula.

If a formula designates a flatted note, move the location for that numbered tone one fret toward the head of the guitar. If a formula designates a sharped note, move the location for that numbered tone one fret toward the bridge of the guitar.

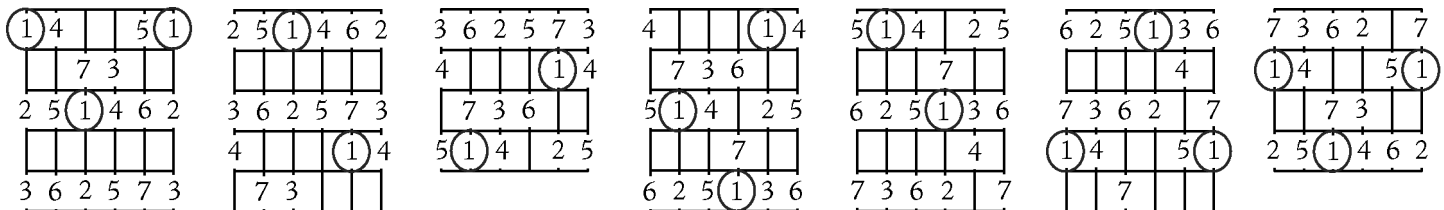
When a note is out of reach, it can be moved to the next larger or smaller string as necessary. Notes duplicate on adjacent strings four or five frets away (not counting the fret on which you begin). When a note becomes out of reach toward the head of the guitar, it can be moved up five frets toward the guitar body on the next larger string (four frets from the second to third string). When a note becomes out of reach toward the body of the guitar, it can be moved down five frets toward the head of the guitar on the next smaller string (four frets from the third to second string). These relationships can be seen on the full-fretboard diagram at the right.



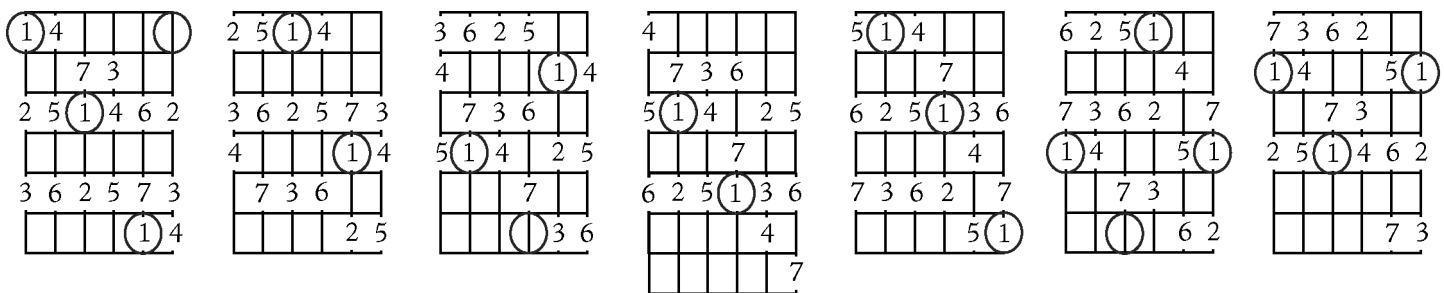
For a more detailed description of chord construction, read the [Encyclopedia Of Chord Fingering](#).

In-Position Major Scale Fingerings

In playing a scale where there are duplicate notes on strings two and three, play either note (not both).

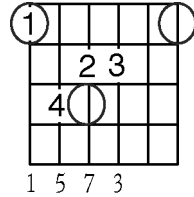


Three Note Per String Major Scale Fingerings

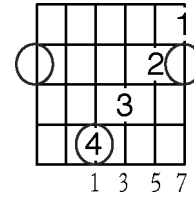


Begin With 157300 and 135700, Modify to Most Seventh Chord Fingerings

major 7
serial number 157300



major 7
serial number 001357



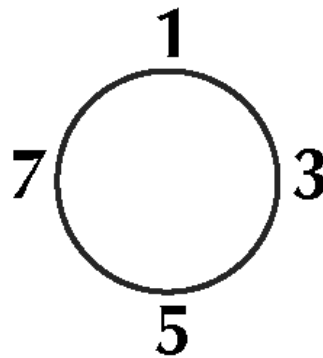
chord serial numbers

In my serial number chord system, the number 157300 represents chord tones in order from the sixth (largest) to first (smallest) string. The serial number system applies to all fretted chords only, not open string chords. “1” represents the root, “3” the third, “5” the fifth and “7” the seventh of the chord. Zeros (“0”) represent a string that is not to be sounded.

The serial numbers can be appended with numbers for the fingers. In this case, the serial number is followed by a forward slash, then numbers to represent the fretting hand fingers in order from the sixth to first string. When a string is not fretted, a zero is shown. The first chord above would be 157300/142300 and the second chord would be 001357/004321. Notice that these are not hyphenated: “157300” indicates six numbers, which would be written with hypens as “1-5-7-3-0-0”. “157300” does not indicate “one hundred fifty seven thousand, three hundred.

Inversions on the Same String Set (four options)

With inversions on the same string set, each chord tone is moved up the neck on the same string to the next higher chord tone. “1” moves up to “3”, “3” moves up to “5”, “5” moves up to “7” and “7” moves up to “1”. This can be illustrated by clockwise movement on this inversion cycle:



Examples of these inversions are shown below:

1573 primary chord

1573	3715	5137	7351
1 5 7 3	3 7 1 5	5 1 3 7	7 3 5 1

1573, fifth up an octave

10735	30157	50371	70513
1 7 3 5	3 1 5 7	5 3 7 1	7 5 1 3

1573, seventh up an octave

15037	37051	51073	73015
1 5 3 7	3 7 5 1	5 1 7 3	7 3 1 5

1357 primary chord

some of these are impractical to finger

1357	3571	5713	7135
1 3 5 7	3 5 7 1	5 7 1 3	7 1 3 5

1357, fifth up an octave

and next to highest note moved to next larger string

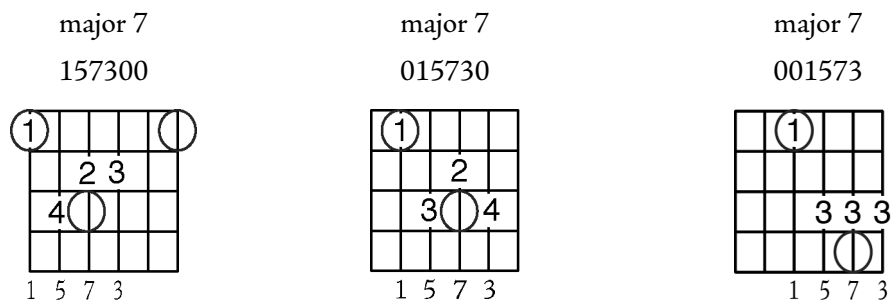
some of these are only usable in other qualities

13705	35107	57301	71503
1 3 7 5	3 5 1 7	5 7 3 1	4 7 1 5 3

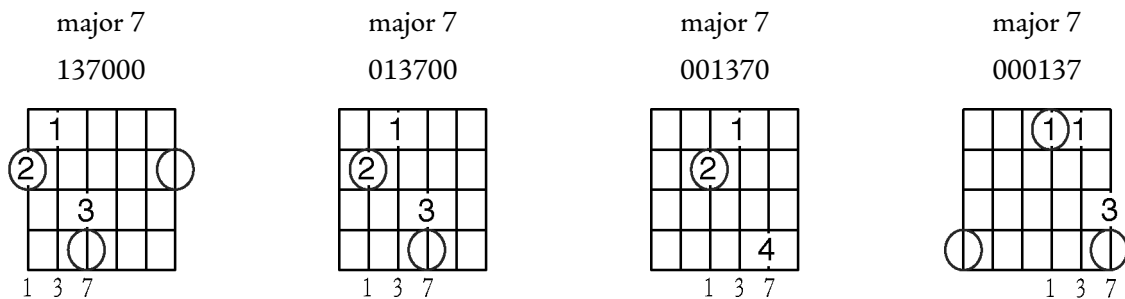
Change String Set (two, three or four options)

It seems most organized to begin with the chord on the largest set of strings, then move each note in the chord to the next smaller string. Remember, when changing string set by moving all notes to the next smaller string, any note moving from the third string to the second string must relatively be moved up one fret.

In the set of chords below, the first chord has scale tones 1-5-7-3 respectively on strings 6-5-4-3. As the tones are moved to strings 5-4-3-2 in the next diagram, the note labeled “3” below the diagrams moves from the third to second string and must move relatively one fret higher than the other notes. This is due to the fact that notes repeat at five fret intervals between each pair of strings (not counting the fret on which you begin), *except* between the third and second string, where notes repeat at four fret intervals. This relationship is evident in the tuning method of comparing each string fretted at the fifth fret to the same note on the next smaller string open, *except* the third string is fretted at the fourth fret and compared to the second string open.



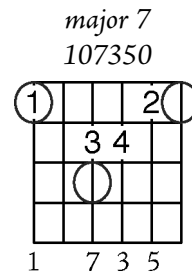
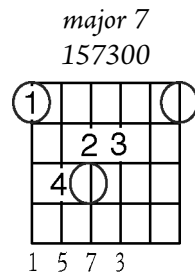
In the next set of chords below, the first chord has scale tones 1-3-7 respectively on strings 6-5-4. Moving the notes to strings 5-4-3 requires no change, since there is no issue regarding changing notes from the third to second string. As the tones are moved from strings 5-4-3 to strings 4-3-2 in the next diagram, the note labeled “7” below the diagrams moves from the third to second string and must move relatively one fret higher (closer to the guitar body) than the other notes. In the last two diagrams, the note labeled “3” moves from the third to second string relatively one fret higher (closer to the guitar body). This last move may look as if the notes labeled “1” and “7” have moved down a fret (toward the head of the guitar), which they are. It is *relatively* the same thing.



Invert (three options)

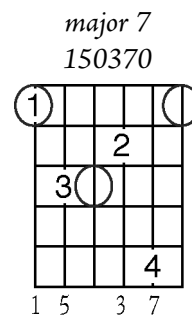
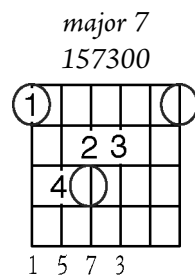
raise the fifth one octave

In the diagrams below, the fifth of the first chord has been moved up an octave in the second chord. The second chord can then be modified to all of the various qualities, inversions on the same string set and changing string sets.



raise the seventh one octave

In the diagrams below, the seventh of the first chord has been moved up an octave in the second chord. The second chord can then be modified to all of the various qualities, inversions on the same string set and changing string sets.



Omit the Root or the Fifth: Three Note Seventh Chords

omit the fifth

This is the original 157300 chord and its variation without a fifth.

<i>major 7</i> 157300	<i>major 7</i> 107300
1 5 7 3	1 7 3

The 107300 chord can be modified to many seventh chord types. This family (with 107300 and variations with altered “7” and “3”) can be used where a chord with a b5 or #5 is specified, but where the altered fifth is not essential. The version below begins with an inversion of the original 157300 chord (above) on the second string set. Notice that each tone of the 513700 chord has moved up one chord tone (see the previous section: Inversion on the Same String Set).

<i>major 7</i> 513700	<i>major 7</i> 013700
5 1 3 7	1 3 7

Omit The Root

This is the original 157300 chord and its variation without a root.

<i>major 7</i> 157300	<i>major 7</i> 057300
1 5 7 3	5 7 3

Voice Leading

Voice leading is a designed movement for each of the notes in a chord to a designated note in the next chord. Conservative voice leading is usually best, where each note moves to the closest note in the next chord. If a note can remain in the next chord, it should. Notes that must change are routed to the closest note, spanning the smallest interval possible.

Conservative Voice-Leading

With conservative voice leading for major scale-tone chord progression with roots ascending in fourths, the root and third of the current chord remain to become the fifth and seventh of the next chord, respectively. The fifth descends to become the root of the next chord. The seventh descends to become the third of the next chord. See [Voice Leading/Descend Five and Seven Voicings](#).

FINGERING FAMILIES OF SEVEN SEVENTH CHORD TYPES

Going down the column of four chords in each string set inverts the chord down the string set

String Set 6-4-3-2

	major 7	7 (dominant)	minor 7	minor 7b5	diminished 7	7#5	7b5
root in bass 107350							
third in bass 301570							
fifth in bass 503710							
7th in bass 705130							

String Set 5-4-3-2

	major 7	7 (dominant)	minor 7	minor 7b5	diminished 7	7#5	7b5
root in bass 015730							
third in bass 037150							
fifth in bass 051370							
7th in bass 073510							

String Set 4-3-2-1

	major 7	7 (dominant)	minor 7	minor 7b5	diminished 7	7#5	7b5
root in bass 001573							
third in bass 003715							
fifth in bass 005137							
7th in bass 007351							

String Set 5-3-2-1

	major 7	7 (dominant)	minor 7	minor 7b5	diminished 7	7#5	7b5
root in bass 010735							
third in bass 030157							
fifth in bass 050371							
7th in bass 070513							

String Set 6-5-4-3

	major 7	7 (dominant)	minor 7	minor 7b5	diminished 7	7#5	7b5
root in bass 157300							
third in bass 371500							
fifth in bass 513700							
7th in bass 735100							

See the first five chords in each of these families in arpeggios in [Default Scales, Chords and Arpeggios/Default Seventh Arpeggios](#).

FINGERING FAMILIES OF 14 QUADRAD TYPES

107350 Family of Fourteen Types

<i>major 7</i>	<i>7 (dom.)</i>	<i>m7</i>	<i>m7b5</i>	<i>dim.7</i>	<i>m6</i>	<i>6</i>
1 7 3 5	1 b7 3 5	1 b7 b3 5	1 b7 b3 b5	1 6 b3 b5	1 6 b3 5	1 6 3 5
<i>7b5</i>	<i>7#5</i>	<i>7sus.4</i>	<i>7sus.2</i>	<i>ma7b5</i>	<i>ma7#5</i>	<i>m(ma7)</i>
1 b7 3 b5	1 b7 3 #5	1 b7 4 5	1 b7 2 5	1 7 3 b5	1 7 3 #5	1 7 b3 5

503710 Family of Fourteen Types

(perfect fourth root movement companion to 107350, trading 1 & 5, 3 & 7)

<i>major 7</i>	<i>7 (dom.)</i>	<i>m7</i>	<i>m7b5</i>	<i>dim.7</i>	<i>m6</i>	<i>6</i>
5 3 7 1	5 3 b7 1	5 b3 b7 1	b5 b3 b7 1	b5 b3 6 1	1 6 b3 5	5 3 6 1
<i>7b5</i>	<i>7#5</i>	<i>7sus.4</i>	<i>7sus.2</i>	<i>ma7b5</i>	<i>ma7#5</i>	<i>m(ma7)</i>
b5 3 b7 1	#5 3 b7 1	5 4 b7 1	5 2 b7 1	b5 3 7 1	#5 3 7 1	5 b3 7 1

015730 Family of Fourteen Types

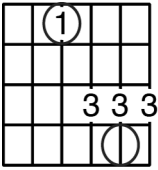
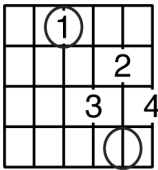
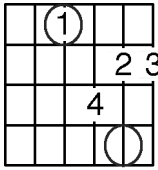
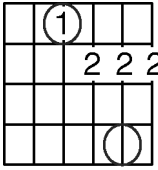
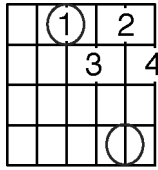
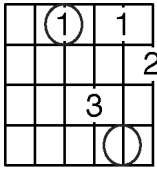
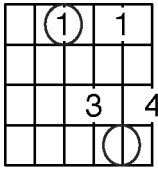
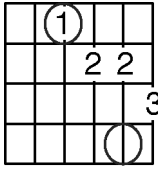
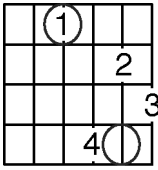
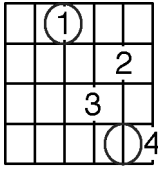
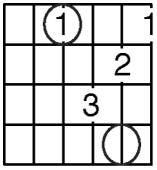
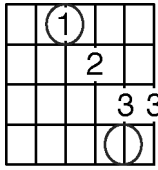
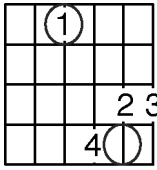
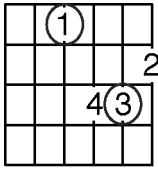
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<i>7b5</i>	<i>7#5</i>	<i>7sus.4</i>	<i>7sus.2</i>	<i>ma7b5</i>	<i>ma7#5</i>	<i>m(ma7)</i>

051370 Family of Fourteen Types

(perfect fourth root movement companion to 015730, trading 1 & 5, 3 & 7)

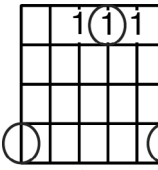
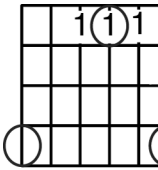
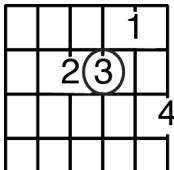
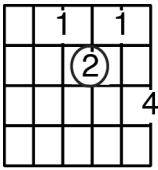
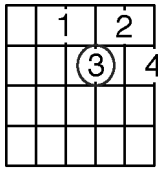
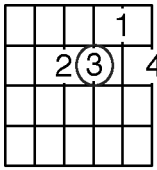
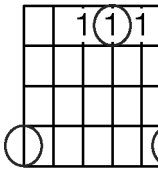
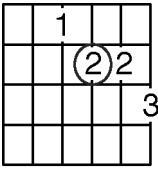
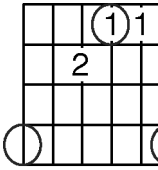
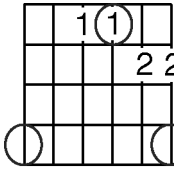
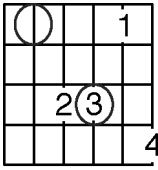
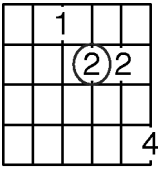
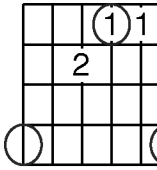
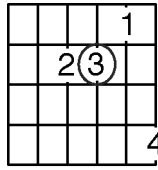
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<i>7b5</i>	<i>7#5</i>	<i>7sus.4</i>	<i>7sus.2</i>	<i>ma7b5</i>	<i>ma7#5</i>	<i>m(ma7)</i>

001573 Family of Fourteen Types

<p>major 7</p>  <p>1 5 7 3</p>	<p>7 (dom.)</p>  <p>1 5 b7 3</p>	<p>m7</p>  <p>1 5 b7 b3</p>	<p>m7b5</p>  <p>1 b5 b7 b3</p>	<p>dim.7</p>  <p>1 b5 6 b3</p>	<p>m6</p>  <p>1 5 6 b3</p>	<p>6</p>  <p>1 5 6 3</p>
<p>7b5</p>  <p>1 b5 b7 3</p>	<p>7#5</p>  <p>1 #5 b7 3</p>	<p>7sus.4</p>  <p>1 5 b7 4</p>	<p>7sus.2</p>  <p>1 5 b7 2</p>	<p>ma7b5</p>  <p>1 b5 7 3</p>	<p>ma7#5</p>  <p>1 #5 7 3</p>	<p>m(ma7)</p>  <p>1 5 7 b3</p>

005137 Family of Fourteen Types

(perfect fourth root movement companion to 001573, trading 1 & 5, 3 & 7)

<p>major 7</p>  <p>5 1 3 7</p>	<p>7 (dom.)</p>  <p>5 1 3 b7</p>	<p>m7</p>  <p>5 1 b2 b7</p>	<p>m7b5</p>  <p>b5 1 b3 b7</p>	<p>dim.7</p>  <p>b5 1 b3 6</p>	<p>m6</p>  <p>5 1 b3 6</p>	<p>6</p>  <p>5 1 3 6</p>
<p>7b5</p>  <p>b5 1 3 b7</p>	<p>7#5</p>  <p>#5 1 3 b7</p>	<p>7sus.4</p>  <p>5 1 4 b7</p>	<p>7sus.2</p>  <p>5 1 2 b7</p>	<p>ma7b5</p>  <p>b5 1 3 7</p>	<p>ma7#5</p>  <p>#5 1 3 7</p>	<p>m(ma7)</p>  <p>5 1 b3 7</p>

157300 Family of Fourteen Types

157300

<i>major 7</i>	<i>7 (dom.)</i>	<i>m7</i>	<i>m7b5</i>	<i>dim.7</i>	<i>m6</i>	<i>6</i>
<i>7b5</i>	<i>7#5</i>	<i>7sus.4</i>	<i>7sus.2</i>	<i>ma7b5</i>	<i>ma7#5</i>	<i>m(ma7)</i>

157300 Family of 14 Types

513700

<i>major 7</i>	<i>7 (dom.)</i>	<i>m7</i>	<i>m7b5</i>	<i>dim.7</i>	<i>m6</i>	<i>6</i>
<i>7b5</i>	<i>7#5</i>	<i>7sus.4</i>	<i>7sus.2</i>	<i>ma7b5</i>	<i>ma7#5</i>	<i>m(ma7)</i>

MEMORIZE FULL FRETBOARD CHORD TONES

Visualize Fifths (roots and fifths)

By visualizing full fretboard perfect fifths, you can choose any adjacent pair of notes (making a fourth or fifth) and add to them to create triads and seventh chords. If a chord has a $\sharp 3$ and $\sharp 7$, or $b3$ and $b7$, those notes are a perfect fifth from on another also, so they can be visualized as such.

By visualizing full fretboard diminished fifths, you can choose any adjacent pair of notes (making a fourth or fifth) and add to them to create diminished triads and minor seventh flat five chords.

If a chord has a $\sharp 3$ and $b7$ (dominant seventh type chords), or $b3$ and $\sharp 7$ (minor major seventh chords), those notes are a diminished fifth from on another also, so they can be visualized as such.

Dominant seventh chords are conveniently easy to construct, since the interval from the third to the flattened seventh is the same when it is inverted. That is, the interval up or down from $\sharp 3$ to $b7$ is the same, and the interval up or down from $b7$ to $\sharp 3$ is the same.

Visualize Serial Intervals

Stacked major seconds. Six of them make $9b5\sharp 5$ = whole tone scale

Stacked minor thirds. Four of them make a diminished seventh chord

Stacked major thirds. Three of them make an augmented triad.

Stacked perfect fourths (each analyzed from lower pitch, up):

three notes: $7sus4n5$, $sus4$, $sus2$

four notes: $m7/11\sharp 5$, $7sus4$, $sus2/4$, $6sus2$

five notes: unusable chord, $m7/11$, instable root, instable root, $ma6/9$

Notice that the stacked perfect fifths shown below create the same lists of chords as the stacked perfect fourths in reverse order.

Stacked perfect fifths (each analyzed from lower pitch, up):

three notes: $sus2$, $sus4$, $7sus4n5$

four notes: $6sus2$, $sus2/4$, $7sus4$, $m7/11n5$

five notes: $ma6/9$, instable root, instable root, $m7/11$, unusable chord

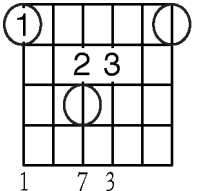
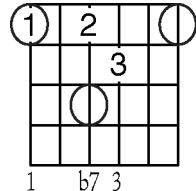
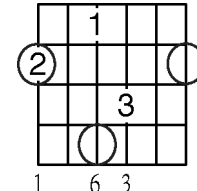
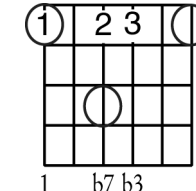
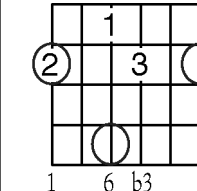
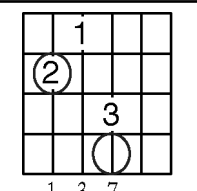
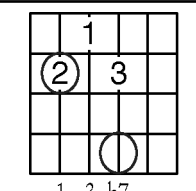
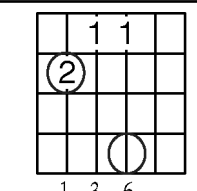
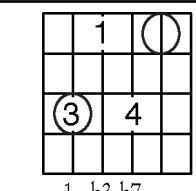
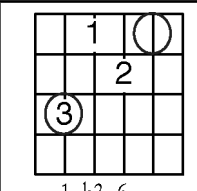
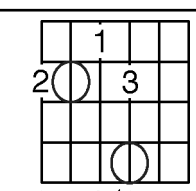
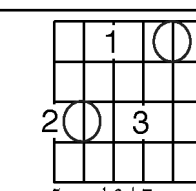
Scale-Tone Seventh Chord Progression

- **Start With Three-Note Seventh Chords**
- **Constructing Scale-Tone Seventh Chords**
- **Major Scale-Tone Stepwise Seventh Chords**
- **Major Sharp Five Scale-Tone Stepwise Seventh Chords**
- **Melodic Minor Scale-Tone Stepwise Seventh Chords**
- **Perfect Fourth Cadences**

START WITH THREE-NOTE SEVENTH CHORDS

Before getting bogged down with the complexities of fingering and theory, let's play basic blues and jazz progressions as Freddy Green did with Count Basie, using three-note seventh chords. We'll figure out the theory of construction later, but first just play some chord progressions.

Fingering Library

	major seventh	dominant seventh	major sixth	minor 7 or m7b5	dim. 7 or m6
sixth string root	 1 7 3	 1 b7 3	 1 6 3	 1 b7 b3	 1 6 b3
fifth string root	 1 3 7	 1 3 b7	 1 3 6	 1 b3 b7	 1 b3 6
fifth string missing root		 5 3 b7		 5 b3 b7	

Twelve Bar Blues

version 1

C7			
F7		C7	
G7		C7	

version 2

C7		F7	
F7		C7	
G7		C7	

(I Got) Rhythm Changes

classic I VIm IIIm V derived from I Got Rhythm and hundred of other songs

Bbma7 (Ima7)	Gm7 (VIm7)	Cm7 (IIIm7)	F7 (V7)
1 7 3	1 b3 b7	1 b7 b3	1 3 b7

full song

3 F B E A C F
G C F D G
5 A D G C E A
7 B E A D B
9 D G C F A D
12 E A D G B E
15 G C F D G
A D G C E A

A
Bbmaj7 Gm7 Cm7 F7 Bbmaj7 Gm7 Cm7 F9

7 B E A D B
C F G C
9 B E
D G C F A D
12 E A D G B E
15 G C F D G
A D G C E A

Bbmaj7 Bb7 Eb6 Eo7

7 B E A D B
C F G C
9 B E
D G C F A D
12 E A D G B E
15 G C F D G
A D G C E A

Dm7 G7 Cm7 F7 Bbmaj7 F7 Bbmaj7

17 B E A D B
C F G C
9 B E
D G C F A D
12 E A D G B E
15 G C F D G
A D G C E A

Am7 D9 Dm7 G7 Gm7 C7 Cm7 F7

repeat section A

Eight Bar Gospel Blues

Diagram 1: C7 (1 3 b7)

Diagram 2: F7 (1 2 3, 1 b7 3)

Diagram 3: F#07 (1 3 b3, 2 3 1)

5 C7 A7 Dm7 G7 C7 F7 C7 G7

Swing Blues (jazz blues)

E form, key of G

open	E A D G B E						
	F C F						
	B E A						
III	G C F D G						
	B						
V	A D G C E A						
	F						
VII	B E A D B						
	C F G C						
IX	B E						
	D G C F A D						
XII	E A D G B E						

Diagram 1: G7 (1 2 3, 1 b7 3)

Diagram 2: C7 (1 3 b7, 2 3 1)

Diagram 3: G7 (1 2 3, 1 b7 3)

Diagram 4: C7 (1 3 b7, 2 3 1)

Diagram 5: C#07 (1 3 b7, 2 3 1)

Diagram 6: G7 (1 2 3, 1 b7 3)

Diagram 7: E7 (1 2 3, 1 b7 3)

Diagram 8: Am7 (1 2 3, 1 b7 b3)

Diagram 9: D7 (1 3 b7, 2 3 1)

Diagram 10: G7 (1 2 3, 1 b7 3)

Diagram 11: G7 (1 2 3, 1 b7 3)

Diagram 12: G7 (1 2 3, 1 b7 3)

C7 C#07 G7 E7 Am7 D7 G7

A form, key of C

open E A D G B E
 F C F C F
 B E A
 III G C F D G
 V A D G C E A
 F
 VII B E A D B
 C F G C
 IX D G C F A D
 XII E A D G B E

1 3 b7

1 b7 3

1 3 b7

C7 F7 C7

1 b7 3

1 6 b3

1 3 b7

1 b7 3

F7 F#o7 C7 A7

1 b3 b7

1 b7 3

1 3 b7

1 b7 3

1 b3 b7

1 b7 3

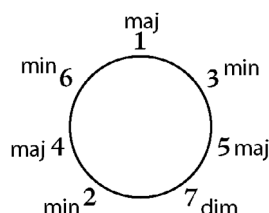
1 3 b7

Dm7 G7 C7 A7 Dm7 G7 C7

CONSTRUCTING MAJOR SCALE-TONE SEVENTH CHORDS

the tertian cycle

The traditional method of building chords with the major scale is to use every-other note. Pairs of notes in this cycle such as 13, 24, 35, 46, 57, 61, are said to be an interval of a scale-tone third. The continuous cycle of thirds is called the *tertian cycle*. This makes use of the number cycle shown below:



tertian quadrads

Four notes in a row from this cycle, such as 1357, 2461, 3572, etc., form a major scale tone seventh chord. Four note chords can be called *quadrads*. Four note chords specifically constructed in thirds (such as 1357) can be called *tertian quadrads*, but are more typically called *scale-tone seventh chords*. The term *seventh chord* is ambiguously used to refer to the family of seventh chords of various qualities. Major seventh, minor seventh, dominant seventh, etc., are collectively referred to as “seventh chords” also. Sad, but true.

major scale-tone seventh chords by roman numeral

Roman numerals (I, II, III, IV, etc.) are used to number the steps of a major scale one which chords are built. The letter name of a chord is a letter A through G, and may be followed by a sharp or flat, indicating its modification up or down a half step (one fret). To make a chord progression transposable (changable to other keys) and to compare it to other progressions, names are replaced with roman numerals. The description of the chord quality that followed the letter name remains the same. In the key of F (where Bb is the fourth step of the F major scale), Bbma7b5 would be written as IVma7b5.

major scale tone	1	2	3	4	5	6	7
major scale tones	1-3-5-7	2-4-6-1	3-5-7-2	4-6-1-3	5-7-2-4	6-1-3-5	7-2-4-6
quality	ma7	m7	m7	ma7	7	m7	m7b5
formula on root	1-3-5-7	1-b3-5-b7	1-b3-5-b7	1-3-5-7	1-3-5-b7	1-b3-5-b7	1-b3-b5-b7
roman numeral name	Ima7	IIIm7	IIIIm7	IVma7	V7	VIIm7	VIIIm7b5
literal name in F	Fma7	Gm7	Am7	Bbma7	C7	Dm7	Em7b5
literal name in Bb	Bbma7	Cm7	Dm7	Ebma7	F7	Gm7	Am7b5

MAJOR SCALE-TONE STEPWISE SEVENTH CHORDS

root position (root in bass), E form chords: string set 6-4-3-2, 107350 voicing

<i>F</i> ma7 I	<i>G</i> m7 III	<i>A</i> m7 V	<i>B</i> ♭ma7 VI	<i>C</i> 7 VIII	<i>D</i> m7 X	<i>E</i> m7♭5 XII
1 7 3 5	1 b7 b3 5	1 b7 b3 5	1 7 3 5	1 b7 3 5	1 b7 b3 5	1 b7 b3 b5

root position (root in bass), A form chords: string set 5-4-3-2, 015730 voicing

<i>B</i> ♭ma7 I	<i>C</i> m7 III	<i>D</i> m7 V	<i>E</i> ♭ma7 VI	<i>F</i> 7 VIII	<i>G</i> m7 X	<i>A</i> m7♭5 XII
1 5 7 3	1 5 b7 b3	1 5 b7 b3	1 5 7 3	1 5 b7 3	1 5 b7 b3	1 b5 b7 b3

root position, combined E form and A form

<i>B</i> ♭ma7 VI	<i>C</i> m7 VIII	<i>D</i> m7 V	<i>E</i> ♭ma7 VI	<i>F</i> 7 VIII	<i>G</i> m7 III	<i>A</i> m7♭5 IV
1 7 3 5	1 b7 b3 5	1 5 b7 b3	1 5 7 3	1 5 b7 3	1 b7 b3 5	1 b7 b3 b5

second inversion (fifth in bass), E form chords: string set 6-4-3-2, 503710 voicing

the major seventh fingerings are dissonant, so they are more often arpeggiate

<i>D</i> ma7 III	<i>E</i> m7 V	<i>F</i> ♯m7 VII	<i>G</i> ma7 VIII	<i>A</i> 7 X	<i>B</i> m7 XII	<i>C</i> ♯m7♭5 XIV
5 3 7 1	5 b3 b7 1	5 b3 b7 1	5 3 7 1	5 3 b7 1	5 3 7 1	b5 b3 b7 1

second inversion (fifth in bass), E form chords: string set 6-4-3-2, 051370 voicing

<i>F</i> ma7 II	<i>G</i> m7 III	<i>A</i> m7 V	<i>B</i> ♭ma7 VII	<i>C</i> 7 IX	<i>D</i> m7 X	<i>E</i> m7♭5 XII
5 1 3 7	5 1 b3 b7	5 1 b3 b7	5 1 3 7	5 1 3 b7	5 1 b3 b7	b5 1 b3 b7

descend five and seven, roots ascend perfect fourths (7-3-6-2-5-1-4), sixth string bass

When complete four note seventh chords (one of each different note: root, third, fifth and seventh) progress with roots ascending in perfect fourths, the most conservative voice movement (the smallest interval change) is to descend the fifth and seventh (thinking from each chord root) of each chord one scale tone. This succession cycles every fourteen chords, then repeats. The last chord in the sequence would continue the cycle by moving up twelve frets. The example below uses the G major scale.

This subject is explored further in [Perfect Fourth Cadences](#), later in this chapter.

<i>F#m7b5</i> XIII	<i>Bm7</i> XII	<i>Em7</i> XII	<i>Am7</i> X	<i>D7</i> X	<i>Gma7</i> VIII	<i>Cma7</i> VIII
1 b7 b3 b5	5 b3 b7 1	1 b7 b3 5	5 b3 b7 1	1 b7 3 5	5 3 7 1	1 7 3 5

<i>F#m7b5</i> VIII	<i>Bm7</i> VII	<i>Em7</i> V	<i>Am7</i> V	<i>D7</i> III	<i>Gma7</i> III	<i>Cma7</i> I
b5 b3 b7 1	1 b7 b3 5	5 b3 b7 1	1 b7 b3 5	5 3 b7 1	1 7 3 5	5 3 7 1

descend five and seven, roots ascend perfect fourths (7-3-6-2-5-14), fifth string bass

<i>Em7b5</i> XII	<i>Am7</i> XII	<i>Dm7</i> X	<i>Gm7</i> X	<i>C7</i> IX	<i>Fma7</i> VIII	<i>Bbma7</i> VII
b5 1 b3 b7	1 5 b7 b3	5 1 b3 b7	1 5 b7 b3	5 1 3 b7	1 5 7 3	5 1 3 7

<i>Em7b5</i> VII	<i>Am7</i> V	<i>Dm7</i> V	<i>Gm7</i> III	<i>C7</i> III	<i>Fma7</i> II	<i>Bbma7</i> VII
1 b5 b7 b3	5 1 b3 b7	1 5 b7 b3	5 1 b3 b7	1 5 b7 3	5 1 3 7	1 5 7 3

root position (root in bass), D form chords: string set 4-3-2-1, 001573 voicing

<i>E</i> \flat <i>ma</i> 7 I	<i>F</i> <i>m</i> 7 III	<i>G</i> <i>m</i> 7 V	<i>A</i> \flat <i>ma</i> 7 VI	<i>B</i> \flat 7 VIII	<i>C</i> <i>m</i> 7 X	<i>D</i> <i>m</i> 7 \flat 5 XII
1 5 7 3	1 5 \flat 7 \flat 3	1 5 \flat 7 \flat 3	1 5 7 3	1 5 \flat 7 3	1 5 \flat 7 \flat 3	1 \flat 5 \flat 7 \flat 3

second inversion (fifth in bass), A/G form chords: string set 4-3-2-1, 001573 voicing

<i>B</i> \flat <i>ma</i> 7 III	<i>C</i> <i>m</i> 7 IV	<i>D</i> <i>m</i> 7 VI	<i>E</i> \flat <i>ma</i> 7 VIII	<i>F</i> 7 X	<i>G</i> <i>m</i> 7 XI	<i>A</i> <i>m</i> 7 \flat 5 XIII
5 1 3 7	5 1 \flat 3 \flat 7	5 1 \flat 3 \flat 7	5 1 3 7	5 1 3 \flat 7	5 1 3 \flat 7	\flat 5 1 \flat 3 \flat 7

descend five and seven, roots ascend perfect fourths (7-3-6-2-5-1-4), fourth string bass

<i>E</i> <i>m</i> 7 \flat 5 XIV	<i>A</i> <i>m</i> 7 XIII	<i>D</i> <i>m</i> 7 XII	<i>G</i> <i>m</i> 7 XI	<i>C</i> 7 X	<i>F</i> <i>ma</i> 7 X	<i>B</i> \flat <i>ma</i> 7 VIII
1 \flat 5 \flat 7 \flat 3	5 1 \flat 3 \flat 7	1 5 \flat 7 \flat 3	5 1 \flat 3 \flat 7	1 5 \flat 7 3	5 1 3 7	1 5 7 3

<i>E</i> <i>m</i> 7 \flat 5 VIII	<i>A</i> <i>m</i> 7 VII	<i>D</i> <i>m</i> 7 VI	<i>G</i> <i>m</i> 7 V	<i>C</i> 7 V	<i>F</i> <i>ma</i> 7 III	<i>B</i> \flat <i>ma</i> 7 III
\flat 5 1 \flat 3 \flat 7	1 5 \flat 7 \flat 3	5 1 \flat 3 \flat 7	5 1 \flat 3 \flat 7	5 1 3 \flat 7	1 5 7 3	5 1 3 7

root position (root in bass), C form chords: string set 5-4-3-2, 013570 voicing

some of the fingerings are difficult to reach

<i>D</i> <i>ma</i> 7 II	<i>E</i> <i>m</i> 7 III	<i>F</i> \sharp <i>m</i> 7 V	<i>G</i> <i>ma</i> 7 VII	<i>A</i> 7 VIII	<i>B</i> <i>m</i> 7 X	<i>C</i> \sharp <i>m</i> 7 \flat 5 XII
1 3 5 7	1 \flat 3 5 \flat 7	1 \flat 3 5 \flat 7	1 3 5 7	1 3 5 \flat 7	1 \flat 3 5 \flat 7	1 \flat 3 \flat 5 \flat 7

string set 5-3-2-1, 010735 voicing

<i>Bbma7</i> I	<i>Cm7</i> III	<i>Dm7</i> V	<i>Ebma7</i> VI	<i>F7</i> VIII	<i>Gm7</i> X	<i>Am7b5</i> XI
1 7 3 5	1 b7 b3 5	1 b7 b3 5	1 7 3 5	1 5 b7 3 5	1 b7 b3 5	1 b7 b3 b5

string set 4-3-2-1, 001357 voicing

Not everyone can fret the chords which involve a barre with the second finger.

<i>Gma7</i> II	<i>Am7</i> III	<i>Bm7</i> V	<i>Cma7</i> VII	<i>D7</i> VIII	<i>Em7</i> X	<i>F#m7b5</i> XII
1 3 5 7	1 b3 5 b7	1 b3 5 b7	1 3 5 7	1 3 5 b7	1 b3 5 b7	1 b3 b5 b7

combined string sets 5-3-2-1 and 4-3-2-1

<i>Dma7</i> V	<i>Em7</i> V	<i>F#m7</i> VII	<i>Gma7</i> V	<i>A7</i> V	<i>Bm7</i> III	<i>C#m7b5</i> III
1 7 3 5	1 b7 b3 5	1 b7 b3 5	1 5 7 3	5 3 b7 1	1 b7 b3 5	1 b7 b3 b5
<i>Gma7</i> V	<i>Am7</i> VII	<i>Bm7</i> IX	<i>Cma7</i> V	<i>D7</i> VI	<i>Em7</i> IV	<i>F#m7b5</i> IV
1 5 7 3	1 5 b7 b3	1 5 b7 b3	5 1 3 7	1 5 b7 3 5	1 b7 b3 5	1 b5 b7 b3

MAJOR SHARP FIVE SCALE-TONE STEPWISE SEVENTH CHORDS

To show the relationship to major scale tone chords, harmonic minor scale-tone chords are shown as major #5. If the tone center is placed on step six of major sharp five, the scale (or mode) is harmonic minor (Aeolian natural seven).

Seventh chords built on first and sixth steps of major sharp five, Ima7#5 and VIIm(ma7), are rarely used. Instead, this set is commonly combined with major scale tone chords.

F Major Sharp Five Creates D Harmonic Minor on Its Sixth Step

See the [table of major sharp five scales](#) in all keys, showing the harmonic minor scales they create on their sixth step.

<i>I</i> ma7#5	<i>II</i> m7	<i>III</i> 7	<i>IV</i> ma7	<i>#V</i> dim.7	<i>VI</i> m(ma7)	<i>VII</i> m7b5
<i>F</i> ma7#5	<i>G</i> m7	<i>A</i> 7	<i>Bb</i> ma7	<i>C#</i> dim.7	<i>D</i> m(ma7)	<i>E</i> m7b5
<i>I</i>	<i>III</i>	<i>V</i>	<i>VI</i>	<i>VIII</i>	<i>X</i>	<i>XII</i>

Combining Major and Major Sharp Five Scale-Tone Chords

In this common composite of major and major #5, Ima7 and VIIm7 are major scale-tone chords; III7 and #Vdim7 are major sharp five scale tone chords; IIIm7, IVma7 and VIIIm7b5 are common to both.

major and major #5 numbering for the columns of chords below:

<i>I</i> ma7	<i>II</i> m7	<i>III</i> 7	<i>IV</i> ma7	<i>#V</i> dim7	<i>VI</i> m7	<i>VII</i> m7b5
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Aeolian mode and harmonic minor numbering for the columns of chords below:

<i>bIII</i> ma7	<i>IV</i> m7	<i>V</i> 7	<i>VI</i> ma7	<i>VII</i> dim7	<i>I</i> m7	<i>II</i> m7b5
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string set 6-4-3-2, 107350 voicing

<i>F</i> ma7	<i>G</i> m7	<i>A</i> 7	<i>Bb</i> ma7	<i>C#</i> dim7	<i>D</i> m7	<i>E</i> m7b5
<i>I</i>	<i>III</i>	<i>V</i>	<i>VI</i>	<i>IX</i>	<i>X</i>	<i>XII</i>

string set 5-4-3-2, 015730 voicing

<i>Bb</i> ma7 I	<i>C</i> m7 III	<i>D</i> 7 V	<i>Eb</i> ma7 VI	<i>F#</i> dim7 IX	<i>G</i> m7 X	<i>A</i> m7b5 XII
1 5 7 3	1 5 b7 b3	1 5 b7 3	1 5 7 3	1 b5 6 b3	1 5 b7 b3	1 b5 b7 b3

string set 5-4-3-2, 013570 voicing

Some of the fingerings are difficult to reach.

<i>D</i> ma7 II	<i>E</i> m7 III	<i>F#</i> 7 V	<i>G</i> ma7 VII	<i>A#</i> dim7 VIII	<i>B</i> m7 X	<i>C#</i> m7b5 XII
1 3 5 7	1 b3 5 b7	1 3 5 b7	1 3 5 7	1 b3 b5 6	1 b3 5 b7	1 b3 b5 b7

combined string sets 6-4-3-2 and 5432

<i>Bb</i> ma7 VI	<i>C</i> m7 VIII	<i>D</i> 7 V	<i>Eb</i> ma7 VI	<i>F#</i> dim7 IV	<i>G</i> m7 V	<i>A</i> m7b5 VII
1 7 3 5	1 b7 b3 5	1 5 b7 3	1 5 7 3	b3 1 b5 6	b3 1 5 b7	b3 1 b5 b7
<i>D</i> ma7 V	<i>E</i> m7 V	<i>F#</i> 7 VII	<i>G</i> ma7 VII	<i>A#</i> dim7 VI	<i>B</i> m7 IV	<i>C#</i> m7b5 IV
1 5 7 3	1 3 b7 1	1 3 b7 1	1 3 5 7	b5 1 b3 6	b3 b7 1 5	1 b5 b7 b3

string set 5-3-2-1, 010735 voicing

<i>Bb</i> ma7 I	<i>C</i> m7 III	<i>D</i> 7 V	<i>Eb</i> ma7 VI	<i>F#</i> dim7 VIII	<i>G</i> m7 X	<i>A</i> m7b5 XI
1 7 3 5	1 b7 b3 5	1 5 b7 3 5	1 7 3 5	1 6 b3 b5	1 b7 b3 5	1 b7 b3 b5

string set 4-3-2-1, 001573 voicing

<i>E^bma7</i> I	<i>Fm7</i> III	<i>G7</i> V	<i>A^bma7</i> VI	<i>Bdim7</i> IX	<i>Cm7</i> X	<i>Dm7^b5</i> XII
1 5 7 3	1 5 b7 b3	1 5 b7 3	1 5 7 3	1 b5 6 b3	1 5 b7 b3	1 b5 b7 b3

string set 4-3-2-1, 001357 voicing

Not everyone can fret the chords which involve a barre with the second finger.

<i>Gma7</i> II	<i>Am7</i> III	<i>Bm7</i> V	<i>Cma7</i> VII	<i>Ddim7</i> VIII	<i>Em7</i> X	<i>F[#]m7^b5</i> XII
1 3 5 7	1 b3 5 b7	1 3 5 b7	1 3 5 7	1 b3 b5 6	1 b3 5 b7	1 b3 b5 b7

combined string sets 5-3-2-1 and 4321

<i>Dma7</i> V	<i>Em7</i> V	<i>F[#]7</i> VII	<i>Gma7</i> V	<i>A[#]dim7</i> VI	<i>Bm7</i> III	<i>C[#]m7^b5</i> III
1 7 3 5	1 b7 b3 5	5 3 b7 1	1 5 7 3	1 b5 6 b3	ε 1 k2 k7	1 b7 b3 b5
<i>Gma7</i> V	<i>Am7</i> VII	<i>B7</i> IX	<i>Cma7</i> V	<i>D[#]dim7</i> VI	<i>Em7</i> IV	<i>F[#]m7^b5</i> IV
1 5 7 3	1 5 b7 b3	1 5 b7 3 5	5 1 3 7	b5 1 b3 6	1 b7 b3 5	1 b5 b7 b3

MELODIC MINOR SCALE-TONE STEPWISE SEVENTH CHORDS

Melodic minor is used in classical music with a different version for ascending and descending. It ascends as major with flat three and descends as major with flat three, flat six and flat seven. We will use the ascending form only, as major with flat three. The first and third chords, I_m(ma7) and III_ma7#5, are rarely used. Instead, this set is commonly combined with major scale tone chords.

string set 6-4-3-2, 107350 voicing

<i>F</i> _m (ma7) I	<i>G</i> _m 7 III	<i>A</i> _b ma7#5 IV	<i>B</i> _b 7 VI	<i>C</i> 7 VIII	<i>D</i> _m 7 _b 5 X	<i>E</i> _m 7 _b 5 XII
1 7 b3 5	1 b7 b3 5	1 7 3 #5	1 b7 3 5	1 b7 3 5	1 b7 3 5	1 b7 b3 b5

Combining Melodic Minor Scale-Tone Triads and Sevenths

Since the I_m(ma7) and III_ma7#5 are rarely usable, triads are substituted.

string set 6-4-3-2, 107350 voicing

<i>F</i> _m I	<i>G</i> _m 7 III	<i>A</i> _b aug IV	<i>B</i> _b 7 VI	<i>C</i> 7 VIII	<i>D</i> _m 7 _b 5 X	<i>E</i> _m 7 _b 5 XII
1 5 1 b3 5 1	1 b7 b3 5	1 1 3 #5	1 7 3 5	1 b7 3 5	1 b7 b3 b5	1 b7 b3 b5

stringset 5-4-3-2, 015730 voicing

<i>B</i> _b <i>m</i> I	<i>C</i> _m 7 III	<i>D</i> _b aug IV	<i>E</i> _b 7 VI	<i>F</i> 7 VIII	<i>G</i> _m 7 _b 5 X	<i>A</i> _m 7 _b 5 XII
1 5 1 b3	1 5 b7 b3	1 5 b7 b3	1 5 b7 3	1 5 b7 3	1 b5 b7 b3	1 b5 b7 b3

string set 5-4-3-2, 013570 voicing

Some of the fingerings are difficult to reach.

<i>Dm</i> II	<i>Em7</i> III	<i>Faug.</i> IV	<i>G7</i> VI	<i>A7</i> VIII	<i>Bm7</i> X	<i>C#m7b5</i> XII
1 b3 5 1	1 b3 5 b7	1 3 #5 1	1 3 5 b7	1 3 5 b7	1 b3 b5 b7	1 b3 b5 b7

string set 5-3-2-1, 010735 voicing

<i>Bbm</i> I	<i>Cm7</i> III	<i>Dbaug</i> IV	<i>Eb7</i> VI	<i>F7</i> VIII	<i>Gm7b5</i> X	<i>Am7b5</i> XI
1 5 1 b3 5	1 b7 b3 5	1 1 3 #5	1 5 b7 3 5	1 5 b7 3 5	1 b7 b3 b5	1 b7 b3 b5

string set 4-3-2-1, 001573 voicing

<i>Ebm</i> I	<i>Fm7</i> III	<i>Gbaug.</i> IV	<i>Ab7</i> VI	<i>Bb7</i> VIII	<i>Cm7b5</i> X	<i>Dm7b5</i> XII
1 5 1 b3	1 5 b7 b3	1 #5 1 3	1 5 b7 3	1 5 b7 3	1 b5 b7 b3	1 b5 b7 b3

string set 4-3-2-1, 001357 voicing

Not everyone can fret the chords which involve a barre with the second finger.

<i>Gm</i> II	<i>Am7</i> III	<i>Bbaug</i> V	<i>C7</i> VII	<i>D7</i> VIII	<i>Em7b5</i>	<i>X F#m7b5</i> XII
1 b3 5 1	1 b3 5 b7	1 3 #5 1	1 3 5 b7	1 3 5 b7	1 b3 b5 b7	1 b3 b5 b7

PERFECT FOURTH CADENCES

Harmonic cadences are devices to establish a chord as the expected ending chord, and therefore its root as the tone center. This can be established for the piece of music as a whole, and for secondary and temporary tone centers during the piece.

The oldest cadence in music history is “V to I”, where the chord on the fifth step of the key scale (called the dominant) leads to the chord on the first step of the key scale. This chord on the fifth of the scale of the intended tonic is commonly a dominant seventh type chord (or altered dominant seventh in jazz). When the intended tonic is not the first step of the parent major scale, the the seventh type chord on the fifth of the intended tonic is called a *secondary dominant*.

In jazz, a *flat five substitute* chord replaces the chord on the fifth with one a flat fifth above or below the root of the chord on the fifth of the tonic. The note a flat fifth above or below any given note is the same note. The *flat five substitute* becomes a chord built on the upper chromatic neighbor to the tonic, on the root up a half step (one fret) from the root of the intended tonic chord.

The 7-3-6-2-5-1-4 Series of Perfect Fourths

This is the most common structural source for cadences. The major scale is the only scale whose notes can be ordered in a continuous series of seven perfect fourths.

Four-note scale-tone chords constructed in thirds can accurately be called *major scale-tone tertian quadrads*, but are commonly called *major scale-tone seventh chords*.

Major Scale-Tone Seventh Chords in Perfect Fourths, 3-Note Voicings

root in bass, trade three and seven, no fifth

VIIIm7b5	III7	VIIm7	IIm7	V7	IIma7	IVma7
F#m7(b5)nr XIV	B7 XIII	Em7 XII	Am7 X	D7 X	Gma7 IX	Cma7 VIII
1 b7 b3	1 3 b7	1 b7 b3	1 b3 b7	1 b7 3	1 3 7	1 7 3

F#m7(b5) VII 	B7 VII 	Em7 V 	Am7 V 	D7 IV 	Gma7 III 	Cma7 II
1 b3 b7	1 b7 3	1 b3 b7	1 b7 b3	1 3 b7	1 7 3	1 3 7
F#m7(b5) IX 	B7 VIII 	Em7 VII 	Am7 V 	D7 V 	Gma7 IV 	Cma7 III
1 b7 b3	1 3 b7	1 b7 b3	1 b3 b7	1 b7 3	1 3 7	1 7 3
F#m7(b5) XIV 	B7 XIV 	Em7 XII 	Am7 XII 	D7 XI 	Gma7 X 	Cma7 IX
1 b3 b7	1 b7 3	1 b3 b7	1 b7 b3	1 3 b7	1 7 3	1 3 7

Recognizing II-V-I Cadences in Chord Progressions

Memorize letter names in perfect fourths. The sequence is B-E-A-D-G-C-F with every note flat, followed by B-E-A-D-G-C-F (all natural), then B-E-A-D-G-C-F with all notes sharp, as shown below.

the perfect fourth series

B#-E#-A#-D#-G#-C#-F#-B-E-A-D-G-C-F-Bb-Eb-Ab-Db-Gb-Cb-Fb

Any consecutive seven of the letters in the perfect fourth series constitutes the numbered tones “7-3-6-2-5-1-4” for a particular major scale. Notice that “1” is the next to last letter in the series, so the major scale for any seven consecutive letters would be the next to last letter (reading left to right).

“II-V-I” would be the fourth through sixth letters of any consecutive seven letters, where the sixth letter is “1”. Go through a jazz fake book and look for “II-V-I” occurring multiple times in the same piece. The “II-V-I’s” will often occur in many keys in the same song. Next, you’ll need to determine whether those “II-V-I’s” are major or minor.

Recognizing II-V-I cadences is a beginning. You’ll then look for longer sequences of fourths in the “7-3-6-2-5-1-4” order: VIIIm7b-IIIIm7 (usually III7)-VIm7-IIIm7-V7-Ima7-IVma7.

Major II-V-I Cadences

In major mode, “II m 7-V7-Ima7” is a “II-V-I” cadence. II m 7 may be II m 9 or other versions of II m 7 that include 2, 4 or 6 in the key of the chord root. V7 may be V9, or other versions that include 2, 4 or 6 in the key of the chord root. Ima7 may be Ima9, I6, or other versions that include 2 or 6.

Minor II-V-I Cadences

In minor mode, “II m 7 b 5-V7-Im7” (B m 7 b 5-E7-Am7) is a “II-V-I” cadence. Their origin is VII m 7 b 5-III7-VI m 7 of the parent major scale (C major scale), where the key is established on VI minor. The chord roots are then re-numbered, so VII m 7 b 5 becomes II m 7 b 5 ((B m 7 b 5))=, III7 becomes V7 (E7) and VI m 7 becomes Im7. The III7 chord (functioning as V7) may optionally have #5, b9 or #9.

II V I Cadences of Four Parent Scale Types

major scale	II m 13	V13	Ima9
harmonic minor scale	II m 7 b 5	V7 b 9 b 13	Im
melodic minor scale	II m 7 b 5	V9 b 13	Im
harmonic major scale	II m 13 b 9	V9 b 13	Ima9

other options:

melodic minor VII b 5#5 b 9#9 for the II chord, harmonic minor V and Im
V13 b 9#9#11 using half/whole diminished scale

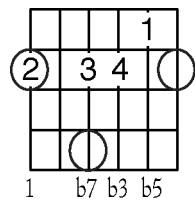
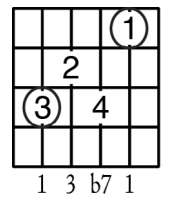
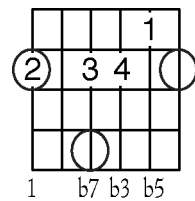
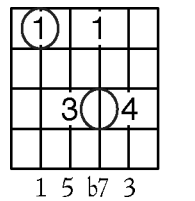
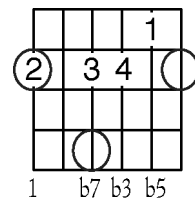
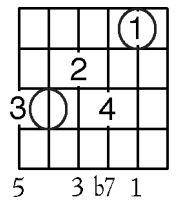
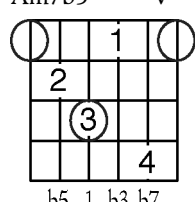
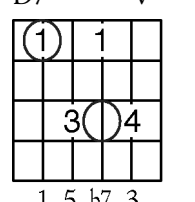
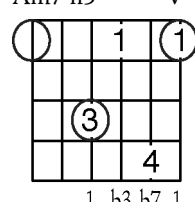
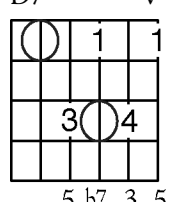
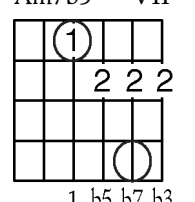
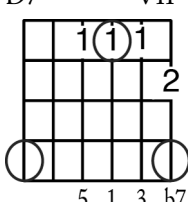
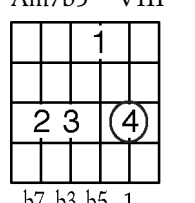
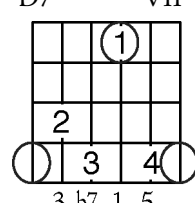
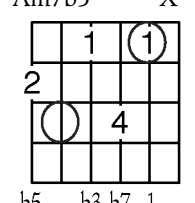
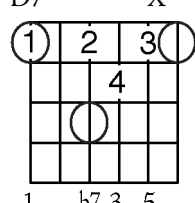
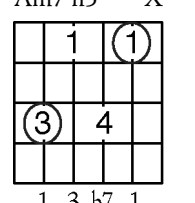
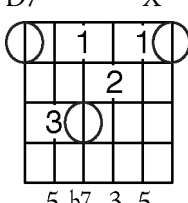
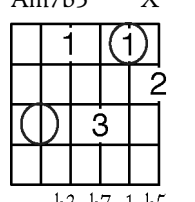
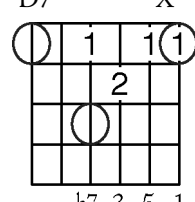
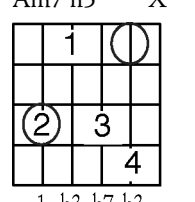
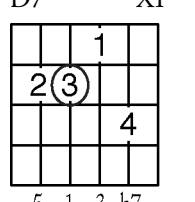
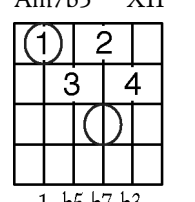
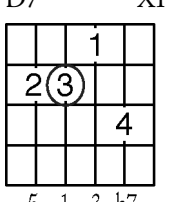
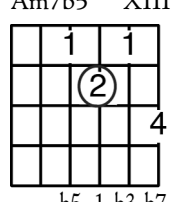
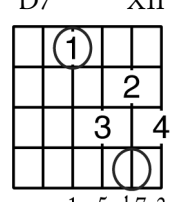
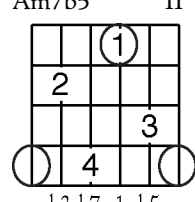
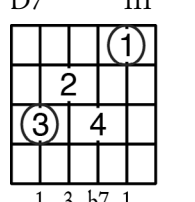
IIm7-V7

The most common cadence in jazz is IIm7 to V7 in major mode. Here are some of the better fingerings for the key of G, where IIm7 is Am7 and V7 is D7.

<p>Am7 V</p> <p>1 b7 b3 5</p>	<p>D7 V</p> <p>1 5 b7 3</p>	<p>Am7 V</p> <p>1 b7 b3 5</p>	<p>D7 III</p> <p>1 3 b7 1</p>	<p>Am7 V</p> <p>1 b7 b3 5</p>	<p>D7 III</p> <p>5 3 b7 1</p>
<p>Am7 V</p> <p>5 1 b3 b7</p>	<p>D7 V</p> <p>1 5 b7 3</p>	<p>Am7 V</p> <p>1 b3 b7 1</p>	<p>D7 V</p> <p>5 b7 3 5</p>	<p>Am7 VII</p> <p>1 5 b7 b3</p>	<p>D7 VII</p> <p>5 1 3 b7</p>
<p>Am7 IX</p> <p>b7 b3 5 1</p>	<p>D7 VII</p> <p>3 b7 1 5</p>	<p>Am7 X</p> <p>5 b3 b7 1</p>	<p>D7 X</p> <p>1 b7 3 5</p>	<p>Am7 X</p> <p>1 3 b7 1</p>	<p>D7 X</p> <p>5 b7 3 5</p>
<p>Am7 X</p> <p>b3 b7 1 5</p>	<p>D7 X</p> <p>b7 3 5 1</p>	<p>Am7 X</p> <p>1 b3 b7 b3</p>	<p>D7 XI</p> <p>5 1 3 b7</p>	<p>Am7 XII</p> <p>1 5 b7 b3</p>	<p>D7 XI</p> <p>5 1 3 b7</p>
<p>Am7 XIII</p> <p>5 1 b2 b7</p>	<p>D7 XII</p> <p>1 5 b7 3</p>	<p>Am7 II</p> <p>b3 b7 1 5</p>	<p>D7 III</p> <p>1 3 b7 1</p>		

IIm7b5-V7

The minor version of the II-V cadence is IIm7 \flat 5 to V7 (optional #5, \flat 9, #9). Its origin is VIIIm7b5-III7 of its parent major scale. Here are some of the better fingerings for the key of G minor, where IIm7 \flat 5 is Am7 \flat 5 and V7 is D7.

Am7 \flat 5 IV  1 \flat 7 \flat 3 \flat 5	D7 III  1 3 \flat 7 1	Am7 \flat 5 IV  1 \flat 7 \flat 3 \flat 5	D7 V  1 5 \flat 7 3	Am7 \flat 5 IV  1 \flat 7 \flat 3 \flat 5	D7 III  5 3 \flat 7 1
Am7 \flat 5 V  \flat 5 1 \flat 3 \flat 7	D7 V  1 5 \flat 7 3	Am7 n5 V  1 \flat 3 \flat 7 1	D7 V  5 \flat 7 3 5	Am7 \flat 5 VII  1 \flat 5 \flat 7 \flat 3	D7 VII  5 1 3 \flat 7
Am7 \flat 5 VIII  \flat 7 \flat 3 \flat 5 1	D7 VII  3 \flat 7 1 5	Am7 \flat 5 X  \flat 5 \flat 3 \flat 7 1	D7 X  1 \flat 7 3 5	Am7 n5 X  1 3 \flat 7 1	D7 X  5 \flat 7 3 5
Am7 \flat 5 X  \flat 3 \flat 7 1 \flat 5	D7 X  \flat 7 3 5 1	Am7 n5 X  1 \flat 3 \flat 7 \flat 3	D7 XI  5 1 3 \flat 7	Am7 \flat 5 XII  1 \flat 5 \flat 7 \flat 3	D7 XI  5 1 3 \flat 7
Am7 \flat 5 XIII  \flat 5 1 \flat 3 \flat 7	D7 XII  1 5 \flat 7 3	Am7 \flat 5 II  \flat 3 \flat 7 1 \flat 5	D7 III  1 3 \flat 7 1		

Major Scale-Tone Seventh Chords in Perfect Fourths, Four-Note Voicings

107350 to 015730 with III7

<p>B m7b5 VI</p> <p>1 b7 b3 b5</p>	<p>E 7 VII</p> <p>1 5 b7 3</p>	<p>A m7 V</p> <p>1 b7 b3 5</p>	<p>D m7 V</p> <p>1 5 b7 b3</p>	<p>G 7 III</p> <p>1 b7 3 5</p>	<p>C ma7 III</p> <p>1 5 7 3</p>	<p>F ma7 I</p> <p>1 7 3 5</p>
<p>B m7b5 XIV</p> <p>1 b5 b7 b3</p>	<p>E 7 XII</p> <p>1 b7 3 5</p>	<p>A m7 XII</p> <p>1 5 b7 b3</p>	<p>D m7 X</p> <p>1 b7 b3 5</p>	<p>G 7 X</p> <p>1 5 b7 3</p>	<p>C ma7 VIII</p> <p>1 7 3 5</p>	<p>F ma7 VIII</p> <p>1 5 7 3</p>

107350 to 015730 with III m7

<p>B m7b5 VI</p> <p>1 b7 b3 b5</p>	<p>E m7 VII</p> <p>1 5 b7 b3</p>	<p>A m7 V</p> <p>1 b7 b3 5</p>	<p>D m7 V</p> <p>1 5 b7 b3</p>	<p>G 7 III</p> <p>1 b7 3 5</p>	<p>C ma7 III</p> <p>1 5 7 3</p>	<p>F ma7 I</p> <p>1 7 3 5</p>
<p>B m7b5 XIV</p> <p>1 b5 b7 b3</p>	<p>E m7 XII</p> <p>1 b7 b3 5</p>	<p>A m7 XII</p> <p>1 5 b7 b3</p>	<p>D m7 X</p> <p>1 b7 b3 5</p>	<p>G 7 X</p> <p>1 5 b7 3</p>	<p>C ma7 VIII</p> <p>1 7 3 5</p>	<p>F ma7 VIII</p> <p>1 5 7 3</p>

301570 to 037150 with III7 (inversion of 107350 to 015730)

<p>B m7b5 IX</p> <p>b3 1 b5 b7</p>	<p>E 7 IX</p> <p>3 b7 1 5</p>	<p>A m7 VII</p> <p>b3 1 5 b7</p>	<p>D m7 VII</p> <p>b3 b7 1 5</p>	<p>G 7 V</p> <p>3 1 5 b7</p>	<p>C ma7 V</p> <p>3 1 5 7</p>	<p>F ma7 III</p> <p>3 1 5 7</p>
<p>B m7b5 XVI</p> <p>b3 b7 1 b5</p>	<p>E 7 XIV</p> <p>3 1 5 b7</p>	<p>A m7 XIV</p> <p>b3 b7 1 5</p>	<p>D m7 XII</p> <p>b3 1 5 b7</p>	<p>G 7 XII</p> <p>3 b7 1 5</p>	<p>C ma7 X</p> <p>3 1 5 7</p>	<p>F ma7 X</p> <p>3 7 1 5</p>

301570 to 037150 with III^m7 (inversion of 107350 to 015730)

B m7b5 IX b3 1 b5 b7	E m7 IX b3 b7 1 5	A m7 VII b3 1 5 b7	D m7 VII b3 b7 1 5	G 7 V 3 1 5 b7	C ma7 V 3 7 1 5	F ma7 III 3 1 5 7
B m7b5 XVI b3 b7 1 b5	E m7 XIV b3 1 5 b7	A m7 XIV b3 b7 1 5	D m7 XII b3 1 5 b7	G 7 XII 3 b7 1 5	C ma7 X 3 1 5 7	F ma7 X 3 7 1 5

503710 to 051370 with III⁷ (inversion of 107350 to 015730)

B m7b5 XII b5 b3 b7 1	E 7 XIII 5 1 3 b7	A m7 X 5 b3 b7 1	D m7 X 5 1 b3 b7	G 7 VIII 5 3 b7 1	C ma7 IX 5 1 3 7	F ma7 VI 5 3 7 1
B m7b5 VII b5 1 b3 b7	E 7 V 5 3 b7 1	A m7 V 5 1 b3 b7	D m7 III 5 b3 b7 1	G 7 IV 5 1 3 b7	C ma7 I 5 3 7 1	F ma7 II 5 1 3 7

503710 to 051370 with III^m7 (inversion of 107350 to 015730)

B m7b5 XII b5 b3 b7 1	E m7 XII 5 1 b3 b7	A m7 X 5 b3 b7 1	D m7 X 5 1 b3 b7	G 7 VIII 5 3 b7 1	C ma7 IX 5 1 3 7	F ma7 VI 5 3 7 1
B m7b5 VII b5 1 b3 b7	E m7 V 5 b3 b7 1	A m7 V 5 1 b3 b7	D m7 III 5 b3 b7 1	G 7 IV 5 1 3 b7	C ma7 I 5 3 7 1	F ma7 II 5 1 3 7

107350 to 013720 with III7

<p>B m7b5 VI</p> <p>1 b7 b3 b5</p>	<p>E 7b9 VI</p> <p>1 3 b7 b2</p>	<p>A m7 V</p> <p>1 b7 b3 5</p>	<p>D m9 III</p> <p>1 b3 b7 2</p>	<p>G 7 III</p> <p>1 b7 3 5</p>	<p>C ma9 II</p> <p>1 3 7 2</p>	<p>F ma7 I</p> <p>1 7 3 5</p>
<p>B 7b9 XIII</p> <p>1 3 b7 b2</p>	<p>E 7#5 XII</p> <p>1 b7 3 #5</p>	<p>A m9 X</p> <p>1 b3 b7 2</p>	<p>D m7 X</p> <p>1 b7 b3 5</p>	<p>G 9 IX</p> <p>1 3 b7 2</p>	<p>C ma7 VIII</p> <p>1 7 3 5</p>	<p>F ma9 VII</p> <p>1 3 7 2</p>

107350 to 013720 with III7

<p>B m7b5 VI</p> <p>1 b7 b3 b5</p>	<p>E 7 V</p> <p>1 3 b7 1</p>	<p>A m7 V</p> <p>1 b7 b3 5</p>	<p>D m7 III</p> <p>1 b3 b7 1</p>	<p>G 7 III</p> <p>1 b7 3 5</p>	<p>C ma7 I</p> <p>1 3 7 1</p>	<p>F ma7 I</p> <p>1 7 3 5</p>
<p>B m7 XII</p> <p>1 b3 b7 1</p>	<p>E 7 XII</p> <p>1 b7 3 5</p>	<p>A m7 X</p> <p>1 b3 b7 1</p>	<p>D m7 X</p> <p>1 b7 b3 5</p>	<p>G 7 VIII</p> <p>1 3 b7 1</p>	<p>C ma7 VIII</p> <p>1 7 3 5</p>	<p>F ma7 VI</p> <p>1 3 7 1</p>

107350 to 013720 with III7m

<p>B m7b5 VI</p> <p>1 b7 b3 b5</p>	<p>E m7 V</p> <p>1 b3 b7 1</p>	<p>A m7 V</p> <p>1 b7 b3 5</p>	<p>D m7 III</p> <p>1 b3 b7 1</p>	<p>G 7 III</p> <p>1 b7 3 5</p>	<p>C ma7 I</p> <p>1 3 7 1</p>	<p>F ma7 I</p> <p>1 7 3 5</p>
<p>B m7 XII</p> <p>1 b3 b7 1</p>	<p>E m7 XII</p> <p>1 b7 b3 5</p>	<p>A m7 X</p> <p>1 b3 b7 1</p>	<p>D m7 X</p> <p>1 b7 b3 5</p>	<p>G 7 VIII</p> <p>1 3 b7 1</p>	<p>C ma7 VIII</p> <p>1 7 3 5</p>	<p>F ma7 VI</p> <p>1 3 7 1</p>

Summary Of Chord Progression Types

- [Fourths](#)
- [Stepwise](#)
- [Chromatic](#)
- [Cadences](#)
- [Substitution](#)
- [Archetypal by Style](#)
- [Primary Song Progression](#)
- [Elaboration](#)
- [Abbreviation](#)
 - [Conceptually for Improv](#)
 - [Simplified Comping behind Improv](#)
- [Vamp](#)
- [Pedal Point](#)

Abbreviating And Elaborating Chord Progression

Elaboration

- **Enhancing a Single Chord**
- **Cluster Playing**
- **Changing Moods with Chord Qualities And Modes**
- **Cadences In Fourths with Optional Flat Five Substitutes**
- **Darkening and Substitute Modes**
- **Diminished-Sounding Dominant Progression**
- **Chromatic Passing Chords**
- **Chromatic Ascent or Descent in One or More Voices**
- **Neighboring Scale-Tone Chords, IV-V-I, VI-V-I**
- **Neighboring Scale Tone Chords**
- **Elaborating with a Commonality Chord**
- **Quartal Chords Used Abstractly**
- **Sequenced Elaboration**

Abbreviation

- **Omitting Passing Chords**
- **Omitting Cadences**
- **Summarizing with a Commonality Chord**

ELABORATION

ENHANCING A SINGLE CHORD

CLUSTER PLAYING

CHANGES MOODS WITH CHORD QUALITIES AND MODES

CADENCES IN FOURTHS WITH OPTIONAL FLAT FIVE SUBSTITUTES

I I#dim II, II bII7 I,

DARKENING AND SUBSTITUTE MODES

darkening order of modes, substitute minor II V for major II V

II is a summary for II V

DIMINISHED-SOUNDING DOMINANT PROGRESSION

m7b5 in minor thirds, 13b9 over b2 in minor thirds

CHROMATIC PASSING CHORDS

CHROMATIC ASCENT OR DESCENT IN ONE OR MORE VOICES

ascend from minor root, ascend from fifth

NEIGHBORING SCALE TONE CHORDS

IV V VI_m, IV V I. Scale tone neighbor, harmonized scalar bass with two consecutive scale-tone chords

I-II-III or I-VII-VI progression

stepwise root movement up or down a third to a secondary root

ELABORATING WITH A COMMONALITY CHORD

QUARTAL CHORDS USED ABSTRACTLY

SEQUENCED ELABORATION

ABBREVIATION

Comping Strategies

- **Communicate to Coordinate Parts**
- **Summarizing the “Comper”**
- **Multiple Chording Instruments**
- **Keeping Time Parts**
- **Isolate by Pitch**
- **Isolate by Time**
- **Jazz Piano and Guitar Commentary**

Charlie Christian, Oscar Moore, Barney Kessel, Herb Ellis, Joe Pass, Wes Montgomery, Pat Martino, George Benson, Russell Malone, Ron Eschete, Jim Hall, Pat Metheny, Frank Vignola, Bireli Lagrene, Bill Frissel, John McLaughlin

COMMUNICATE TO COORDINATE PARTS

Awareness is everything. It really helps to talk to the other musicians about the game plan to make all of the parts audible and to bring out the important parts for the listener.

Clearly State Your Intention with Your Part

If the other chording instrument doesn't give you part of the bar or a range of pitch, try harder to clearly state your part. Repeat the part you intend, like playing on beats two and four, over and over. Use eye contact, body language, or verbal language (if you have the opportunity). Do your best to communicate and make it happen. Sometimes, you just have to revert to just keeping time or lay out (don't play) on a section and talk about it later.

SUMMARIZING THE COMPER

Summarize the Comper (Other Accompaniment Player)

If you can summarize what another comper is playing with a set of rules like the EXAMPLE below (listen for patterns in two bar segments):

starts every two bars on one
most commonly pushes three
never plays on two

Once you have summarized the comper's part, you should be able to duplicate the part, elaborate on it or play in spaces between it to make an ensemble part (ensemble parts are usually hard to make work).

If You Cannot Summarize

If you cannot summarize, play a keeping time part or play at a different rhythmic level if there is enough room in the arrangement for your added. Like verbal conversation, it hard to understand more than two or three significant voices (or parts) at once. Likewise in music, don't try to add another significant part if two or three are already going on.

Anticipate The Soloist as You Do Another Comper

The process is very similar in this communication mode. With another comper, you tend to duplicate or make ensemble parts, rarely making more than one significant statement together. Comping with a soloist, you find fewer points of common accent. You'll typically find yourself duplicating accents on more like a quarter or less of the soloists points of emphasis, as opposed to over half of these played by another comper.

Use a Looper Pedal

The best accompaniment to practice with is other musicians. Other musicians are not always available to back you up while you practice. The second best accompaniment to practice with is a looped pedal.

looper pedals with quantizing

Most looper pedals, like the Boss RC series (RC-1, RC-3, RC30, etc.) have quantizing, where they anticipate your tempo and cause the loop to repeat at the nearest beat. The longer the loop is, the more difficult you will find it to tap the pedal and make a seamless loop. For longer loops, listen to a metronome which you record the loop.

I like the idea of not saving loops, but demanding yourself to keep playing the accompaniment each time. Good practice.

looper pedals without quantizing

The TC Electronics Ditto looper is a great looper. It has no quantizing, so your loop may seem perfect. However, you may have slightly rushed or dragged the tempo and not noticed it.

get both

If you can afford it, get an RC-1 and a Ditto. The RC-1 will make it more clear when you have not retained your tempo. Then you can apply that skill to using the Ditto and have the very slight discrepancies recorded into the loop, so it has a human feel.

Five Common Steps With Software Players

These software applications play or generate comping rhythms. They are all different, and there is a preferred order in which to use them for our purposes. The software players are generally good to train yourself to play with a regular tempo, but you should regularly move on to using a looper or playing with another musician.

Chops and Impro-visor

Chops (Mac only) and Impro-visor (cross-platform) are not random. They the same comping rhythm over and over. Chops 1.2 (no new release available as of March, 2014) has fifteen styles and is \$4.99 for Mac. Impro-visor (v 5.16) has 131 styles and is free! On a Mac, you must (at your own risk) open system preferences/Security & Privacy, unlock (lower left) and temporarily make the setting "Allow applications downloaded from: Anywhere (you can change it back after installation).

Band In A Box

Band In A Box (midi versions) generates different parts for each section, but every time you play the section, it plays the part the same. It has hundreds (800?) midi styles. I don't like the idea of their audio loops, and only use the midi version, so I can discretely edit the midi.

Ireal Pro

Ireal Pro has a random generator, but follows a style. It is available for Mac, IOS (iPad and iPhone) and Android, but not PC (there are emulators, but that gets complicated). The random generator is a great test of your skills in the later part of your comping development. Use the five-se

which software in which order

So, if you had all of these programs, the best order of use would be Chops, Impro-visor, Band In A Box (midi versions), then Ireal Pro. At least use the free Impro-visor and learn to change the styles.

five steps to comping

1. Summarize a few bars of the comper from a recording. The predictably ranges from Chops (easiest) to Ireal Pro (most difficult). Play back the recording and see if you were right, repeat if necessary.
2. Play with the recording. Try to anticipate and play the same parts of the bar as the comper. Start with "keeping time", like just quarter notes (play on each beat). Where you can, play what you expect the "comper" to play. If the comper part is really easy to anticipate, play it with slight elaborations, like some "keeping time".

When anticipating is not working, play a keeping time part, like all quarter notes. Try cautiously to go back to anticipating a little at a time, as you can.

Going back and forth from keeping time to anticipating is very effective.

3. Sample a larger region of the tune, like twelve or sixteen bars and make a general summary. Usually there is so much more information in summarizing a larger section (12 bars instead of four) that you need to generalize. If the part was not random-generated (Ireal Pro only) and you can listen to it again, listen and see if you were right. If you are using Ireal Pro, try to record it, so you can play it back to see if you were right,

When you change a style in any of these programs the summary rules change, like playing with a different person.

4. Now play along with the longer section (step 4). Like with the smaller sampling, but more cautiously, play and combine anticipating, keeping time and elaborating on the other comping part. Of the software mentioned here, Ireal Pro is the best one to use before playing with another musician. Like people, Ireal has a random generator and plays differently every time, but within a style.
5. Play with an actual human being-the ultimate musical experience.

MULTIPLE CHORDING INSTRUMENTS

The Keyboardist

A piano has a range of seven octaves, roughly the same as an entire orchestra! Comping guitar is roughly the middle two octaves. A wise keyboard player will listen to the comping guitarist and be aware of the range in which the guitar is sounding, visualizing it on the keyboard and either avoiding that range or careful building ensemble parts with the guitar.

Likewise, a comping guitarist can visualize what part of the keyboard range they are playing in and watch the keyboardist to coordinate range and rhythm so the guitar and keyboard can both be heard. Middle "C" is the second string, first fret, equivalent to the third string, fifth fret or the fourth string, tenth fret.

The Other Guitarist Or Other Chording Instrument

Hopefully, you use at most two guitars. Three is really challenging. Any chording instrument needs consideration in coordinating parts, including keyboards, chording string instruments like banjo, accordion, melodica, harmonica and so on.

Like with a keyboard, two or more chording instruments should be aware of one another's range of pitch and placement in the bar rhythmically.

“KEEPING TIME” PARTS

Staccato Quarter Note Chords

Keep time by playing chords of the same value like all quarter notes. In the common time signatures like 4/4 and 3/4, quarter notes are one beat. In larger bands or orchestras of over four instruments, it is typical that the guitar plays staccato quarter notes (about half their duration, like an eighth note and an eighth note rest).

rhythmic feel with two or more instruments “keeping time”

When two or more instruments just keep time (with all quarter notes, for example), each chord usually takes a slightly long period of time to sound than it would on one of the instruments. If you listen to Charllie Christian with Benny Goodman, for example, he often doubles staccato quarter notes with his chords as the bass player is playing a staccato walking bass (or other quarter note bass). Probably due to the resonance of the bass (an its longer wave length as my friend Larry Frick suggested), the bass notes linger long that the guitar chord. The event starts with both of them (often including a snare also), but the bass continues a few milliseconds after the guitar has died out. The bass player and guitar player can work with this rhythmic dynamic and make the bass linger more or less and create different rhythmic feels.

One of the instruments can intentionally “slice” the beat and play ever so slightly before or after the beat. Before sounding aggressive and anxious, after sounding relaxed.

Other Durations of “Keeping Time” Parts

half or whole notes

If the mood directs less activity (in a ballad, for example), longer durations are appropriate. They are also useful in making your part audible with other parts when there is a lot of chordal activity. If the piano is playing fast syncopated eighth chords, you can duplicate or be different. By playing half or whole note chords, you are at a different rhythmic level and can be heard. To make your part “hipper” you may want to “push” the beat at the beginning of the chord and play on the “and” of the beat before the chord starts on the chart (or conceptually).

eighth or sixteenth notes

Similarly to using chords of longer duration, you can play eighth, eighth triplet or sixteenth (sixteenths are rare) in duplicating the snare or other chording instrument (piano or guitar). Of course, you can use them also if the drummer and other chording instrumentalist is playing long durations against you.

Thematic “Keeping Time” Parts

“Keeping time” parts don’t have to be uniform, such as all quarter note or eighth note chords. They can also be short and repetitive rhythmic themes. As Charlie Christian, Barney Kessel and Herb Ellis have illustrated, they also can be single note themes, single notes mixed with chords or top voiced chords.

Start With Common Tone Voicing

Learn to play the cadences for each chord in the 7362514 sequence that is the backbone of chord root movement with any particular tone of the parent major scale as the highest note (1, 2, 3, 4, 5, 6 or 7). Play through a jazz blues doing this, for example.

Here are the chords for Charlie Parker’s Au Privave or Now’s The Time (same chords) with common tone “1”.

Now’s tZhe Time or Au Privave (each cell is one bar)

<p>F13 VI</p>	<p>Bb9 V</p>	<p>F13 VI</p>	<p>F13 VI</p>		
<p>Bb7 VI</p>	<p>Bdim7 VI</p>	<p>F13 VI</p>	<p>A7#5 V</p>	<p>D7#9 IV</p>	
<p>G7 IV</p>	<p>C7sus4 III</p>	<p>F13 VI</p>	<p>D7#9 IV</p>	<p>Gm7 III</p>	<p>C7sus4 III</p>

See Voice Leading/[Jazz Blues/Common Tone](#) for more.

Learn Top Voice Leading

The process in voicing chords for comping over a melody requires an extensive knowledge of top voice leading. Joe Pass, Barney Kessel and Herb Ellis were leading experts. You need to be able to voice any cadence with any possible top voices and not conflict with the melody. Even when comping during an improvised section on the same chord progression as the head, it is good practice to know how to not conflict with the melody.

You need to conceive the important melody notes on each of the beats or “pushes”. Quarter note melody is clear, one note per beat. With an eighth note melody, the important notes are on the beat. With syncopated eighths, the important notes are those on the beat and those that “push” the beat (are on the “and” before the beat without a note on the beat the note precedes).

You need to thoroughly study the important cadences to songs with consideration of their top voice leading relationship to the melody.

First Voice Existing Cadences

To be progressive (and to make sure you get started), begin with common tone voicing on existing cadences in songs. There’s plenty of work to do in that category before enhancing the progression with added cadences .

Once you have a handle on playing the basic changes to a song with common tone voice leading you can begin scalar voice leading (see [Most Usable Voice Leading](#)).

Next, Superimpose Cadences

Like with the basic changes on a tune, start superimposing cadences to target chords with [common tone voice leading](#).

Listen to the other chording instruments and try to match the mood of the scale type, generally using major (see [II-V-I](#) and [I-VI-II-V](#)), [chromatic](#), [harmonic minor](#) or [melodic minor](#) cadences with like kind. As you practice each type, you will become able to recognize its sound when others play it.

Thoroughly study [Melodically Superimposed Cadences](#).

ISOLATE BY PITCH

Three note chords, can more easily “claim a range”. Even if you use four-note chords, work with the piano player to each play in separate ranges of pitch.

ISOLATE BY TIME

Playing Different Parts of the Bar

Create an ensemble part with the piano, where you play part of the bar, and they play another part. For example, while they play on beats one and three in 4/4, you play on beats two and four.

Play at a Different Rhythmic Levels

If the piano is playing at the quarter note level, play at the eighth, half or whole level. If the piano is at the eighth level, play at the sixteenth, quarter or half level.


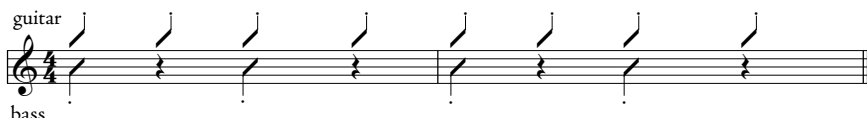
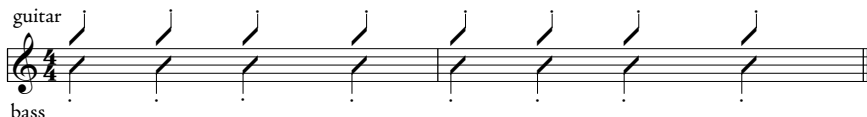
“Keeping Time” Ensemble Parts

Keeping time parts can be a composite of two or more instruments, each playing on a different part of the bar. Tower of Power does a superb job with this, as do most Afro Latin and Afro Latin ensembles and big bands in general.

JAZZ GUITAR AND PIANO COMMENTARY

These recordings are available on subscription sites like rdio.com, <http://www.rhapsody.com/> and other subscription sites. Or, you can buy them at amazon.com or itunes.com (or itunes store accessed from your device).

Charlie Christian

<u>title</u>	<u>album</u>	<u>comments</u>
Flying Home	Charlie Christian/Genius of the Electric Guitar or The Essential Benny Goodman or Benny Goodman's Greatest Hits or Benny Goodman/Benny Goodman Sextet	Moderato tempo. Staccato quarter notes accented on two and four with bass (see below). Two and four is called the "back beat" (one and three being the default metric accent). Due to the resonance of the bass, the bass lingers slightly longer on each note than the guitar chord.
		
Star Dust	Charlie Christian/Genius of the Electric Guitar or Benny Goodman/Benny Goodman Sextet	Slow tempo. "Tuba" style root and fifth bass on one and three with staccato quarter notes on all four beats. This reverses the rhythmic levels as compared to "Flying Home".
		
Rose Room	Charlie Christian/Genius of the Electric Guitar or Benny Goodman/Benny Goodman Sextet	Moderate tempo. "Tuba" style root and fifth bass on one and three with staccato quarter notes on all four beats (same as "Star Dust", above).
Seven Come Eleven	Charlie Christian/Genius of the Electric Guitar or Benny Goodman/Benny Goodman Sextet	Fast tempo. Charlie repeats a single note theme during the vibes solo and staccato quarter notes with the bass during the clarinet solo. Now, the guitar and bass have identical rhythms.
		

<u>title</u>	<u>album</u>	<u>comments</u>
Gone with "What" Wind	Charlie Christian/Genius of the Electric Guitar or Benny Goodman Sextet/Vintage Jazz	Fast tempo. Staccato quarter note chords with the bass, like "Seven Come Eleven", above.

<u>title</u>	<u>album</u>	<u>comments</u>
Grand Slam (Boy Meets Goy)	Charlie Christian/Genius of the Electric Guitar or Benny Goodman Sextet/Charlie Christian & Benny Goodman	Fast tempo. Lay out during clarinet solo. Muted staccato quarter note chords with the bass during the vibe solo (like "Seven Come Eleven", above).

<u>title</u>	<u>album</u>	<u>comments</u>
Air Mail Special	Charlie Christian/Genius of the Electric Guitar or The Essential Benny Goodman	Fast tempo. Staccato quarter note chords with the bass. Single note ensemble themes during head.

<u>title</u>	<u>album</u>	<u>comments</u>
Six Appeal	Charlie Christian/Genius of the Electric Guitar or Benny Goodman/Benny Goodman Sextet	Moderate tempo. Staccato quarter note chords on all four beats with bass on one and three (like Star Dust, but a faster tempo). Single note ensemble themes during head. Offbeat hits with vibes and piano starting at 1:53.

Oscar Moore (with Nat King Cole)

<u>title</u>	<u>album</u>	<u>comments</u>
Beautiful Moons	Nat King Cole/100 Unforgettable Hits or The Complete Capital Recordings	Moderately staccato quarter notes, heavily slicing before the beat (not on the "and", just a small fraction before the beat). Doesn't push the beat (play on the "and" before the beat, then not on the beat) when the piano does.

<u>title</u>	<u>album</u>	<u>comments</u>
Don't Blame Me	Nat King Cole/100 Unforgettable Hits or The Complete Capital Recordings	Moderately staccato quarter note chords, heavily slicing before the beat (not on the "and", just a small fraction before the beat). Some single note connection of chords. Secondary melody ensembled with the piano during the verses. Arpeggiated chords just before the bridge (especially at 2:54). Sounds worked-out, like Russell Malone's parts often do.

<u>title</u>	<u>album</u>	<u>comments</u>
I'm in the Mood for Love	Nat King Cole/100 Unforgettable Hits or The Complete Capital Recordings	Moderately staccato quarter note chords, heavily slicing before the beat (not on the "and", just a small fraction before the beat). Apart from Nat pushing beats on the "and". He sometimes "slices" before it with Oscar. Scalar top voice leading. Some single note connection of chords. Sounds worked-out.

<u>title</u>	<u>album</u>	<u>comments</u>
I'm Lost	Nat King Cole/100 Unforgettable Hits or The Complete Capital Recordings	Moderately staccato quarter note chords, heavily slicing before the beat (not on the "and", just a small fraction before the beat). Scalar top voice leading. Some single note connection of chords. Sounds worked-out.

<u>title</u>	<u>album</u>	<u>comments</u>
Straighthen up and Fly Right	Nat King Cole/100 Unforgettable Hits or The Complete Capital Recordings	Staccato quarter note chords, slicing before the beat. Scalar top voice leading.

Barney Kessel

<u>title</u>	<u>album</u>	<u>comments</u>
Jeepers Creepers	Barney Kessel/Kessel Plays Standards	Ensemble rhythm combines guitar and piano with quarter note chords and syncopated eighths during the tenor sax solo, starting at 1:40. At 2:14, ensemble rhythm combines guitar and the left hand of the piano during the piano solo, using lots of offbeat chords played nicely together.

<u>title</u>	<u>album</u>	<u>comments</u>
Prelude to a Kiss	Barney Kessel/Kessel Plays Standards	Secondary melody in top voice leading during the oboe head melodies.

<u>title</u>	<u>album</u>	<u>comments</u>
I Didn't Know What Time It Was	Barney Kessel/Kessel Plays Standards	Secondary melody in top voice leading during the oboe head melodies.

<u>title</u>	<u>album</u>	<u>comments</u>
64 Bars on Wilshire Avenue	Barney Kessel/Kessel Plays Standards	Ensemble rhythm combines guitar and piano with quarter note chords and syncopated eighths during the piano and sax solos. Seems to be carefully softer during the piano solo as Barney follows the pianists left hand.

<u>title</u>	<u>album</u>	<u>comments</u>
Seven Come Eleven	Oscar Peterson/The Essential Oscar Peterson	Too bad. Really awful guitar tone. Good performance otherwise. Staccato quarter note chords during the piano solo. Sometimes the time is a little out. It must have been really difficult at the fast rate Oscar P. was playing. Still... a man's got to know his limitations.

<u>title</u>	<u>album</u>	<u>comments</u>
I'm Glad There is You	Barney Kessel/Plays for Lovers	Melds nicely with the piano with legato quarter note chords, some half notes, some eighths during the vibe and piano solos.

<u>title</u>	<u>album</u>	<u>comments</u>
My Funny Valentine	Barney Kessel/Plays for Lovers	Arpeggiated chords, “bass-mid-top” comping during flute head. Arpeggiated thirds at 2:04. Top voice-lead secondary melody at 2:17 (end of head, before solo).
Just in Time	Barney Kessel/Let’s Cook!	Rhythmic comping based on style of pianist left hand during piano and vibe solos. Elaborates on piano comping by sustaining at the end of the bar.
Contemporary Blues	Barney Kessel/To Swing or not to Swing	Consistent staccato quarter note chords during the sax and piano solos. During the trumpet solo, Barney combines staccato quarter notes with mirroring of the solists rhythmic themes.
Indiana	Barney Kessel/To Swing or not to Swing	Consistent staccato quarter note chords during the sax, trumpet and piano solos.
On a Slow Boat to China	Barney Kessel/Kessel Plays Standards	Pairs with the piano making syncopated eighth comping rhythms during the piano and tenor sax solos.
I’ve Told Ev’ry Little Star	Sonny Rollins	Pairs with the piano making syncopated eighth comping rhythms during the tenor sax solos. Elaborates on the piano with sustain pushes.
Yardbird Suite	Hampton Hawes!!! with Barney Kessel, Shelly Mann & Red Mitchell	Consistent, soft staccato quarter note chords during piano solo. Sustains in cadences. Syncopated hits with Oscar’s left hand in the “B” section of the head at 5:43. Sliding arpeggio tones cadencing out of the “B” section at 5”48.
Watch What Happens	Peterson, Kessel, Niels-Henning Orsted Pederson at Ronnie Scotts 1974	Barney was sitting between the bassist and Oscar so they could watch Oscar’s left hand. Secondary melody with top voice leading in the “A” section of the head (during to sustained melody notes). Note the offbeat response with Barney’s chords to each of the last four notes of the “A” section (0:40). Staccato quarter note chords in the “B” section. Swing eighth chords during piano solo, muting on the upbeat/upstroke, except sustaining chords in cadences at the end of the section. Ending cadences with piano left hand.

<u>title</u>	<u>album</u>	<u>comments</u>
Wes' Tune	Oscar Peterson/History Of An Artist	Intro: hits on the "and of two". Backbeat (two and four) staccato quarter notes in the "A" section. Evil Ways (Santana)/Night Train (Wes Montgomery) rhythmic accent during the "B" section (0:57-1:01).

<u>title</u>	<u>album</u>	<u>comments</u>
Cheek To Cheek	Oscar Peterson/85 Essential Tracks	Consistent staccato quarter note chords during head (that's a good boy, Bernard).

<u>title</u>	<u>album</u>	<u>comments</u>
Take The "A" Train	Oscar Peterson/Plays Duke Ellington	Consistent staccato quarter note chords except three- chord offbeat hits at 1:40. Offbeat hits start the "B" section at 2:05.

Herb Ellis

<u>title</u>	<u>album</u>	<u>comments</u>
But Not For Me	Monty Alexander, Ray Brown, Herb Ellis/Triple Scoop	Ther head is a half time feel as if slow 4/4 with staccato eighth note chords, but written as 4/4. Staccato quarter note chords in the piano solo with chromatic voice leading. During the bass solo, the left hand of the piano and the guitar merge with the guitar occasionally pushing one (playing on the "and of four" and not on one). Full-band accents at 0:55 and 4:40 on the "and of two" and on four. End with full band pushes to beats 2, 3, 4 and 1.

<u>title</u>	<u>album</u>	<u>comments</u>
When Lights Are Low	Monty Alexander, Ray Brown, Herb Ellis/Triple Scoop	Moderate tempo. Guitar plays moderately staccato quarter note chords along with the bass during the head, with the bass playing half notes at the end (0:52). During the piano and solos, Herb uses moderately staccato quarter note chords with chromatic progression employing ascending diiminished and flat five substitutes descending chords.

<u>title</u>	<u>album</u>	<u>comments</u>
Have You Met Miss Jones?	Herb Ellis/Ellis in Wonderland	Moderate tempo. Moderately staccato quarter note chords. Chromatic progression employing ascending diiminished and flat five substitutes descending chords.

<u>title</u>	<u>album</u>	<u>comments</u>
Naptown Blues	Oscar Peterson/Hello Herbie	Herb uses up-tempo swing-style top-voiced chord licks to comp. Hard to come up with anything with Oscar's intensity. Not much room left. He's got the attention. But at 3:00, after Oscar just fired off his nuclear arsenal of cool harmonized licks, Herb finds a secondary melody style and starts responding. At 3:20 Herb plays a repetitive reflection. He could have done better, if he would sat back and listen to Oscar, summarizing his melody and reflecting themes back. Summarize and reflect. Keep a simple elegant core. Okay at 3:30, he's getting it. Great! Ride the wave! You got it man!

<u>title</u>	<u>album</u>	<u>comments</u>
Seven Come Eleven	Oscar Peterson/Hello Herbie	Nice chromatic secondary melody comping starting at 2:30. Ascend diminished chromatic diminished, descend chromatic flat five substitutes . More. Come on Herb, I can hear it. You can do it.
My Romance	Ron Carter Trio/ Something Else (with Kenny Barron)	In the waltz beginning of the head, Herb makes an ensemble part with Ron, where the bass note begins the figure, then two offbeat chords (“and of one” and the “and of two”) and on three. The waltz is followed by a moderate swing, walking bass 4/4, where the guitar softly supports Kenny Barron’s left hand, mostly duplicating it. Back to the waltz at 0:26. 4/4 supporting piano left hand again at 0:40. I would have liked the guitar mixed up a little louder in the piano solo starting at 0:54, where Herb supports the piano left hand again. Can’t hear it? Listen again, the guitar is in there, around 2:10, for example.
Summertime	Ron Carter Trio/Jazz, My Romance	Nice, supportive mildly staccato quarter note chords through the beginning of the head. Then, at 1:03, Herb vamps with a swing I IV I7 (like All Blues), followed by staccato quarter note chords as if with a walking bassline, against Ron’s bass solo. This walking part is paralleled by the piano left hand. After a descending chromatic chordal figure in the piano against a pedal bass figure, the piano solo is accompanied with walking bass and mildly staccato quarter note chords to parallel it and add harmony.
Sweet Lorraine	Ron Carter Trio/ Something Else (with Kenny Barron)	Mildly staccato quarter note chords, chromaticized mostly with descending flat five substitutes .
All The Things You Are	Herb Ellis/The Jazz Masters or Jazz Guitar Legends (Ray Brown-bass, Serge Ermoll-piano)	Guitar and left hand piano largely duplicating, with typical jazz piano rest pushes (playing on the “ands”). The guitar adds nice color. At 2:49, the guitar starts to add some more consecutive eighth syncopation, thematically.
Au Privave	Herb Ellis/The Jazz Masters or Jazz Guitar Legends (Ray Brown-bass, Serge Ermoll-piano)	Guitar and left hand piano largely duplicating, with typical jazz piano rest pushes. At 1:04, Herb adds a little secondary melody in octaves. Mildly staccato quarter notes during the bass solo that follows, with ascending diminished and descending flat five substitutes . Thematic swing-style licks in octaves during the piano solo, like Charlie Christian style played by Wes.
Autumn Leaves	Herb Ellis/The Jazz Masters or Jazz Guitar Legends (Ray Brown-bass, Serge Ermoll-piano)	At 2:48, Herb uses a staccato “Charleston” theme for his comping, with main accents on one and the “and of two”.

<u>title</u>	<u>album</u>	<u>comments</u>
I Love You	Herb Ellis/ The Jazz Masters or Jazz Guitar Legends (Ray Brown-bass, Serge Ermoll-piano)	The tempo is fairly fast, about 210 BPM. Ray Brown begins the head with this bass figure, rhythmically duplicated in chords by the guitar and piano. The piano makes an exception to “cap off” the phrase in the fourth bar, shown with stems up:



At 0:21, the bass starts fast walking bass. Against it, the piano and guitar setup this four-bar theme:



In the piano solo, the left hand piano and guitar feature offbeat accents. In the beginning of the sax solo, lay out, letting the bass and drums carry it. As the sax solo continues, build the piano and left hand team gradually resume the intensity of their offbeat accents.

<u>title</u>	<u>album</u>	<u>comments</u>
Triste	Herb Ellis/ The Jazz Masters or Jazz Guitar Legends (Ray Brown-bass, Serge Ermoll-piano)	Ray Brown sets up a two-bar bass theme (stems down) and Herb slyly counters with a pairs of eighth note chords (stems up) using an upward chromatic slur.



The idea is abstracted a little.

Many tunes have big open spaces, begging for an obligato response. About one of every three or four songs have this. These include Autumn Leaves, All the Things You Are, Black Orpheus, Blue Bossa, Cantelope Island, Caravan, Footprints, Golden Lady, Groovin' High, Have You Met Miss Jones?, How High The Moon, Meditation, Misty, Road Song, Song for My Father, Summertime, The Way You Look Tonight and You Are the Sunshine of My Life.


With tunes like Triste, Autumn Leaves, Caravan, In a Mellow Tone, you may wonder if the composer intended improvisation in the open spaces. With others like How Insensitive, you would want to be careful not to clutter.

So.....Herb took advantage of the space and played a secondary melody in the open spaces. This could have been chordal. If it was Barney Kessel or Oscar Peterson in that role, it probably would have been a top-voiced chordal secondary melody.

In the piano and flute solos, Herb reflects off the sidestick snare and plays a samba rhythmic theme. During the flute solo, the left hand of the piano, the sidestick snare and the guitar work together and are largely the same. If it was Oscar Peterson on piano, I doubt he would have laid out with his left hand during the piano solo. I like it both ways. I can enjoy Oscar's domination or Serge's team playing, either way.

Joe Pass

<u>title</u>	<u>album</u>	<u>comments</u>
Joy Spring	Joy Spring or Joe Pass/ Capitol Vaults Jazz Series	Starting at 4:42, guitar and piano just comp together. Was that the plan. They're playing well together, but was that the plan? It's pretty uneventful until the piano solo. During the piano solo at 5:25 Joe cops hits with the piano players left hand.

<u>title</u>	<u>album</u>	<u>comments</u>
Jive At Five	Count Basie/Kansas City Five	Staccato quarter notes with some pushes (especially to “1’), sometimes accenting the backbeat (two and four).
One o’ Clock Jump	Count Basie/Kansas City Five	Staccato quarter notes with some pushes (especially to “1’ and “3”), sometimes accenting the backbeat (two and four). Duplicating alot of Count Basie’s (pano) left hand during the Milt Jackson (vibes).
Cakewalk	Oscar Peterson/The Quartet Live, featuring Joe Pass	Staccato quarter notes with some pushes (especially to “1’), sometimes accenting the backbeat (two and four). In the “B” section at 0:40, Oscar uses alot of eighth rest-pushes (playing on the “and“ before the beat, then not on the beat). Here’s a typical example:
		
After a minute (at 1:41) Joe joins in and mimics.		
Caravan	Oscar Peterson, Joe Pass, Ray Brown/The Giants	During the piano solo, Joe comps at 360 BPM staccato quarter note chords briefly, then plays little flurries of eighths with down-up strumming. Courageous!
I’m Getting Sentimental over You	Oscar Peterson, Joe Pass, Ray Brown/The Giants	Moderately staccato quarter note chords during the piano solos. Some chromatic downward flat five substitutes , but mostly straight-forward voice leading with a single chord every two or four beats.
Who Cares	Oscar Peterson, Joe Pass, Ray Brown/The Giants	Syncopated eighth comping during the piano solo with some downward chrmoatic flat five substitutes (especially bII on beat four to target on beat one). Piano and guitar (mostly just guitar)play double whole note chords and whole note chords together during the bass solo.

Wes Montgomery

<u>title</u>	<u>album</u>	<u>comments</u>
Au Privave	Au Privave*guitar+piano-Wes Montgomery, Cannonball Adderley (alto), Ray Brown. Victor Feldman (piano/vibes), Louis Hayes (drms)	Wes locks tightly to duplicating the snare rhythms during the first alto sax solos (1:05-1:50) with seventh and ninth chords, employing chromatic descending flat five substitutes . During the bass solo, he uses two and three note chords with conservative voice leading. In the piano solo, he used an ostinato (repeating), pair of eighth note octaves as a pedal point followed by basic chords.

<u>title</u>	<u>album</u>	<u>comments</u>
Billie's Bounce	The Best of Wes Montgomery	Can't hear Wes. He appears to have laid out. It would have be awesome if he had copied the left hand piano and added occasional harmonies.
Baubles, Bangles And Beads	The Best of Wes Montgomery	During the piano and vibes solos (1:06-2:02), syncopated, staccato eighths, about three or four chords to the bar, mirroring the left hand piano. Alone with the vibes at 2:28, using whole note chords. The piano joins in for the ending turnaound. No bass nor drums durig the ending vibe solo.
Hymn for Carl	The Best of Wes Montgomery	Wes starts comping during the tenor sax solo at 0:57 with accents on the "and of one" and on three, along with the left hand of the piano. Then he plays whole note chords pushing one (on the "and of four"), while the piano left hand plays more busy syncopated eighths. At 1:24, he resumes a couple of offbeats per bar, then back to whole note chords (1:29), this pattern repeats with the chord progression.
Full House	Full House (live at Tsubo in Berkeley, California)	Beginning at 3:56 and through the sax and piano solos, Wes syncopates the fast waltz with chords on the upbeats, relecting on the left hand piano and snare. Sections end with sustasined dotted half note chords.
Sundown	Wes Montgomery/ Impressions-The Verve Jazz Sides	At 2:47, Wes mimics the left and piano with syncopated eighth note chords. At 3:12, he uses common tone flat three on top. At 4:47, he uses upward chromatic diminished voice leading to harmonize with the horn section.
Unit 7	Wes Montgomery/ Impressions-The Verve Jazz Sides	<p>To comp solos, Wes composed an accompaniment, rather than improvising. He used m7 to m6 in eighth note chords on one and the "and of two", with a single eighth note fifth-of-chord pickup on the "and of four". He made a 12 bar blues variation with m7 to m6 as follows:</p> <p>Gm, Gm, Gm, Gm (four bars so far), Cm, Cm, Gm, Bbm (that's four more bars) Ab (ma7 to 6), Abm, Bm7b5 to C7 (unique), Dm. On "and four and", he cadenced back in with Am7 Abm7 Gm7. Then he pushes one (on the "and of four") with six whole-note chords for most of his bridge (Gm7, C9, Fma7, A7b9, Dm7, G7), until ending with a four-chord cadence using the "and of one" and on three for Bb7, A7, Ab7, G7.</p> <p>Then on to a colorful modern swing blues in C, using a swing-sounding sixth lick on the I and IV chords with a IIm9 bII7#9 cadence. Each chord is played on "1", followed by the lick.</p> <p>This is innovative, but also predictable and not so much improvised comping.</p>

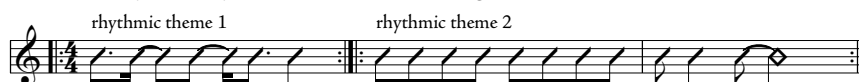
<u>title</u>	<u>album</u>	<u>comments</u>
Four on Six	Wes Montgomery/ Impressions-The Verve Jazz Sides	At 2:30, the piano solo starts with no guitar comping until 3:02, when he comes in with a few staccato hits on offbeats (starting with the Charleston “one” and the “and of two”) and pairs of chords with flat five substitutes during the cadences. At 4:40 he plays fast pairs of chords with lower chromatic embellishment (coming in from a half step below) and various versions of the chord to provide top voice leading (root on top, flat third on top, etc.). At 4:47, he ends with a fast flurry of triplets, most of which is just octaves.
Four on Six (live)	Wes Montgomery/ Impressions-The Verve Jazz Sides	Starting about 3:20 on this live recording, you can hear Wes again combining octaves with top voice-lead chords to play fast flurries. This is more of a solo, but its elements can be used in comping.
No Blues	Wes Montgomery/ Smokin’ at the Half Hote	Around 6:40-7:18, Wes comps the piano solo with staccato common tone chords.
Oh, You Crazy Moon	Wes Montgomery/ Smokin’ at the Half Hote	Tremolo (amp effect) chords! Wes uses sustained, mostly half note chords (2:36) during the piano solo. Note the arpeggiated cadences at 3:15.
One for My Baby	The Montgomery Brothers/Groove Yard or So Much Guitar!	Quarter and half note sustained chords during the piano solos on the B section (first at 2:16). He plays more staccato stabs with offbeat chords during the piano solo at 5:54.
Cariba	Full House (live at Tsubo in Berkeley, California)	During the piano and sax solos (starting at 1:38), Wes plays offbeat, staccato chords reflecting on the drummer’s sidestick rhythm. At 4:06, during the sax solo, he reflects upon the piano left hand as well as the sidestick for rhythm.
Freddie Freeloader	Portrait of Wes	Organ, not piano (more sustain than a piano). During the organ solo, Wes pairs with the snare for rhythm. Most of his chords are staccato, but he occasionally ends cadences with a sustained chord (nice effect).
Here’s that Rainy Day	from Jazz Casuals, Ralph Gleason TV show	During the piano solo, Wes pairs with the snare for rhythm with staccato chords.

Pat Martino

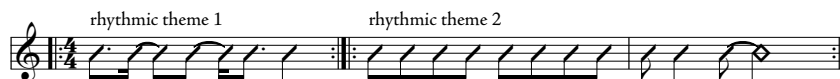
<u>title</u>	<u>album</u>	<u>comments</u>
Blue in Green	Pat Martino/Mission Accomplished	Pat comps with staccato quarter note chords, generally duplicating the left hand piano, sometimes laying out, sometimes continuing when the piano sustains. I would have liked more duplication of the piano left hand on the guitar.

<u>title</u>	<u>album</u>	<u>comments</u>
Sugar	70's Jazz Pioneers	Pat comps with staccato quarter note chords, generally duplicating the left hand organ.

<u>title</u>	<u>album</u>	<u>comments</u>
Sunny	Pat Martino/Live!	During the piano solo (5:50), Pat comps generally with quarter and eighth note chords, based on the typical rhythmic theme for the song:



Starting at 6:54, the piano soloist used the one-bar “rhythmic theme 1” (below) four times, then the two-bar “rhythmic theme 2” a couple of times. Pat played along cautiously, doing a good job of duplicating. During “rhythmic theme 2”, Pat was probably not sure where the accents were going to be placed, so went to playing continuous eighth note chords, also serving to build momentum to the end of the phrase.



George Benson

<u>title</u>	<u>album</u>	<u>comments</u>
Hipping the Hop	from Absolutely Live video	Awesome comping with Joe Sample's piano solo at 2:12. Joe is playing two or three chords a bar and George is elaborating with colorful chords and some octaves, like Wes.

<u>title</u>	<u>album</u>	<u>comments</u>
All Blues	George Benson/Witchcraft	At 6:30 George comps responsively to the snare and left hand piano: pushing two (on the “and of one”) with the snare and piano, reflects triplets from the piano at 7:30 and 7:53.

<u>title</u>	<u>album</u>	<u>comments</u>
Love for Sale	George Benson/ Witchcraft	George tends to use rhythmic themes in his comping. His comping with piano solo starts at 6:58 with this four-bar phrase:



Starting at 7:28. this two-bar phrase:



Oleo	George Benson/Jazz on A Sunday Afternoon, vol. 2 (Cafe Caribe 1973) or George Benson Quartet Live at Casa Caribe Club	Yeah, you'll need butter, this is blistering.! Since this tune is played at 350 BPM, George comps (starting at 4:05) at the half note level, playing chords mainly on beats one and three, occasionally on all four beats. The chord changes four two-bar sets of "rhythm changes" (I VI II V), except the third set of two bars is Vm7 I7 IVm7 bVII9 (or IVm6). The piano player is generally doing a simpler version of the same thing. They create syncopation by briefly sustaining on beats two or four. George adds occasional licks.
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<u>title</u>	<u>album</u>	<u>comments</u>
There Will Never be Another You	George Benson/Jazz on A Sunday Afternoon, vol. 2 (Cafe Caribe 1973) or George Benson Quartet Live at Casa Caribe Club	During the piano solo at about four through six minutes, George comps with a lot of attention to the pianists left hand. Here is a typical rhythm:



Listen for cool upward chromatic passages.

<u>title</u>	<u>album</u>	<u>comments</u>
Witchcraft	George Benson/Jazz on A Sunday Afternoon, vol. 2 (Cafe Caribe 1973) or George Benson Quartet Live at Casa Caribe Club	George improvises a funky comp style, closely following the pianists left hand and the snare. Nice top-voice leading and chord colors. Here is a typical four-bar example:



<u>title</u>	<u>album</u>	<u>comments</u>
All the Things You Are	George Benson/Jazz on A Sunday Afternoon, vol. 2 (Cafe Caribe 1973) or George Benson Quartet Live at Casa Caribe Club	The piano solo starts at four minutes. George comes in around 4:50. Generally the guitar and left hand piano are played well together, but just after George starts around 5:00, a funny thing happens (its during the last eight bars of the chord progression). George and the pianist are pushing different beats (see below). To me, the result is a little muddled. Shortly afterward, they get back in sync.

guitar

piano

<u>title</u>	<u>album</u>	<u>comments</u>
The Cooker	The George Benson Cookbook	Though this cut uses organ, not piano, the organ chords are generally short and similar in duration to those on piano. During the sax solo (starts at 2:43, the organ and guitar play funky sixteenth syncopations that are similar enough to work:

guitar

organ

<u>title</u>	<u>album</u>	<u>comments</u>
Take Five	Bad Benson (Philip Upchurch, rhythm guitar)	Like a Wes Montgomery comping part, this Philip Upchurch comping is very regular and guaranteed to fit, but not improvised. It may be a little monotonous, but who's listening to Philip?

1 e + a 2 e + a 3 e + a 4 e + a 5 e + a

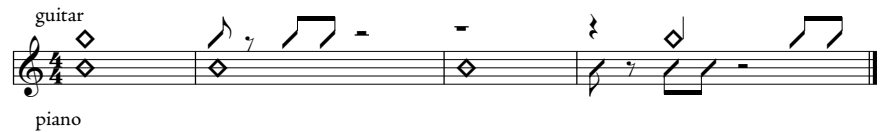
Russell Malone

<u>title</u>	<u>album</u>	<u>comments</u>
Jingles	live at Umbria Jazz 1999 with Benny Green (piano), Christian McBride (bass)	Russell lays out through Benny's piano solo. Sometimes that's best.

<u>title</u>	<u>album</u>	<u>comments</u>
I Can't Get Started	Ron Carter Trio/I Can't Get Started	During the head, the piano plays the melody and Russell arpeggiates chords. In the long bass solo (hey, it's Ron Carter!) that follows he continues arpeggiating for a while, then goes to legato quarter note chords (about 3/4 of a beat each) with common tone, scalar and chromatic top voice leading.

<u>title</u>	<u>album</u>	<u>comments</u>
Autumn Leaves	Ron Carter Trio-youtube	After playing the “A” section of the head with Ron, Russell plays staccato quarter note chords with scalar top voice leading through the “B” section. Back to melody and runs to begin the recap of the “A” section, followed by whole note chords in a newly composed section the trio added to the song. The piano solo follows the head with Russell playing quarter notes staccato chords. He uses alot of chromatic voice leading here, caused by flat five substitutes . A guitar solo follows, then a bass solo where Russell lays out. Russell plays melody in the ending head, rather than comping.

<u>title</u>	<u>album</u>	<u>comments</u>
There Will Never be Another You	Billy Taylor Trio (Billy Taylor piano)-youtube	The piano player is leaving it wide open for Russell by playing predominantly whole-note chords. This example of bars 17-20 of the piano solo show Russell’s rhythmic themes allowed by all the space.



Ron Eschete (“Esh-tay”)

<u>title</u>	<u>album</u>	<u>comments</u>
This Can’t be Love	Gene Harris Quartet/ Listen Here!	Ron comes in section “B” of the head (bars 9-12, at 0:12) with a complex rhythm, but plays it tightly against the piano (below). The rhythms he uses smartly predict the rhythms played with the piano in bars 5-8 of section “B”:



Ron ends the head with a bomba/cha cha combination, played against a quarter-note piano part.



Ron generally uses half note chords in comping the piano solo. He’s wise to play it safe by making “three” his first choice for pushes (the “and of two”). Like a good drummer on his snare, Ron is very attentive and echoes back most repeated phrases that Gene plays by repeating Gene’s rhythmic theme. Ron has probably worked out main ideas of the scalar and chromatic voice leading he is using.

<u>title</u>	<u>album</u>	<u>comments</u>
This Masquerade	Gene Harris Quartet/ Listen Here!	Standard staccato quarters during the head. Ron slices just before the bass player’s notes on the beat, playing early by only 5-10%. Listen ot the “B” section, starting at 1:19. Just that slice is worth the price of admission.

<u>title</u>	<u>album</u>	<u>comments</u>
Blue Bossa	Gene Harris Quartet/ Black and Blue	Check out the guitar and left hand piano action on the first nine bars of the head (starting at 0:25):

The image shows two staves of musical notation for the first nine bars of the head of 'Blue Bossa'. The top staff is labeled 'guitar' and the bottom staff is labeled 'piano'. Both staves are in 4/4 time and G major. The guitar part features a melodic line with eighth and quarter notes, including a triplet of eighth notes in the second bar. The piano part provides a harmonic accompaniment with chords and single notes, including a triplet of eighth notes in the second bar. The notation includes various rhythmic values, accidentals, and articulation marks.

This seems like an effective compromise between pre-composed comping parts like Wes Montgomery's popular recordings and improvised comping. I suspect Ron worked out ideas in a sketch manner and wisely left much of it to improvisation for a "live feel". Effective approach.

<u>title</u>	<u>album</u>	<u>comments</u>
I Remember You	Gene Harris Quartet/ Brotherhood	

<u>title</u>	<u>album</u>	<u>comments</u>
For Once in My Life	Gene Harris Quartet/ Brotherhood	

<u>title</u>	<u>album</u>	<u>comments</u>
I Told You So	Gene Harris Quartet/ Brotherhood	

<u>title</u>	<u>album</u>	<u>comments</u>
This Little Light of Mine	Gene Harris Quartet/ Brotherhood	

<u>title</u>	<u>album</u>	<u>comments</u>
Take the "A" Train	Gene Harris Quartet/A Little Piece Of Heaven	

<u>title</u>	<u>album</u>	<u>comments</u>
How Long Has This Been Going On?	Gene Harris Quartet/A Little Piece Of Heaven	

<u>title</u>	<u>album</u>	<u>comments</u>
Scotch and Soda	Gene Harris Quartet/A Little Piece of Heaven	

<u>title</u>	<u>album</u>	<u>comments</u>
My Little Suede Shoes	Gene Harris Quartet/A Little Piece of Heaven	

Jim Hall

<u>title</u>	<u>album</u>	<u>comments</u>
Abstract & Dreams	Jim Hall and Bill Evans/ Live at Town Hall	

<u>title</u>	<u>album</u>	<u>comments</u>
Darn that Dream	Jim Hall and Bill Evans/ Undercurrent	

<u>title</u>	<u>album</u>	<u>comments</u>
I Hear a Rhapsody	Jim Hall and Bill Evans/ Undercurrent	

<u>title</u>	<u>album</u>	<u>comments</u>
Loose Bloose (take 3)	Loose Bloose	

<u>title</u>	<u>album</u>	<u>comments</u>
My Funny Valentine	Jim Hall and Bill Evans/ Undercurrent	

<u>title</u>	<u>album</u>	<u>comments</u>
Romaine	Jim Hall and Bill Evans/ Undercurrent	

<u>title</u>	<u>album</u>	<u>comments</u>
Skating In Central Park	Jim Hall And Bill Evans/ Undercurrent	

<u>title</u>	<u>album</u>	<u>comments</u>
Stairway to the Stars	Jim Hall and Bill Evans/ Undercurrent	

<u>title</u>	<u>album</u>	<u>comments</u>
I've Got You under My Skin	Jim Hall and Bill Evans/ Cole Porter Songbook or Intermodulation	

<u>title</u>	<u>album</u>	<u>comments</u>
My Man's Gone Now	Jim Hall and Bill Evans/ Intermodulation	

<u>title</u>	<u>album</u>	<u>comments</u>
Turn out the Stars	Jim Hall and Bill Evans/ Intermodulation	

<u>title</u>	<u>album</u>	<u>comments</u>
Angel Face	Jim Hall and Bill Evans/ Intermodulation	

<u>title</u>	<u>album</u>	<u>comments</u>
Jazz Samba	Jim Hall and Bill Evans/ Intermodulation	

<u>title</u>	<u>album</u>	<u>comments</u>
All Across the City	Jim Hall and Bill Evans/ Intermodulation	

Pat Metheny

<u>title</u>	<u>album</u>	<u>comments</u>
Canteloupe Island	Pat Metheny, Herbie Hancock, Dave Holland, Jack DeJohnette-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Solar	Pat Metheny, Herbie Hancock, Dave Holland, Jack DeJohnette-youtube	

Frank Vignola

<u>title</u>	<u>album</u>	<u>comments</u>
Just in Time	Joey DeFrancesco Trio- youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Fly Me to the Moon	Joey DeFrancesco Trio- youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Speak Softly Love (Godfather)	Joey DeFrancesco Trio- youtube	

Bireli Lagrene

<u>title</u>	<u>album</u>	<u>comments</u>
Straight No Chaser	Elvin Jones, Joey DeFrancesco, Bireli Lagrene-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Body And Soul	Bireli Lagrene - Elvin Jones - Joey De Francesco (title not in header)- youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Night in Tunisia	Elvin Jones Trio with Joey DeFrancesco, Bireli Lagrene-youtube	

Bill Frissel

<u>title</u>	<u>album</u>	<u>comments</u>
It Could Happen to You	Chick Corea & Bill Frisiel-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Wave	Fred Hersch & Bill Frissel -youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Someday My Prince Will Come	Fred Hersch & Bill Frissel -youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
It Might as Well be Spring	Fred Hersch & Bill Frissel -youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Someday My Prince Will Come	Fred Hersch & Bill Frissel	

<u>title</u>	<u>album</u>	<u>comments</u>
Blue Monk	Fred Hersch & Bill Frissel -youtube -youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
My One and Only Love	Fred Hersch & Bill Frissel -youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
My Little Suede Shoes	Fred Hersch & Bill Frissel -youtube	

John McLaughlin

<u>title</u>	<u>album</u>	<u>comments</u>
Sing Me Softly of the Blues	John McLaughlin, Dennis Chambers, Joey DeFrancesco-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
My Favorite Things	John McLaughlin, Dennis Chambers, Joey DeFrancesco-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Naima	John McLaughlin, Elvin Jones, Joey DeFrancesco-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Turn Around	John McLaughlin, Chick Corea-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
Someday My Price Will Come	John McLaughlin, Chick Corea-youtube	

<u>title</u>	<u>album</u>	<u>comments</u>
My Romance	John McLaughlin, Chick Corea-youtube	

Quartal And Quintal Harmony

A large, light gray, stylized number '76' is positioned in the background behind the main title text. The '7' is a simple, bold shape, and the '6' has a circular cutout in its center.

- **Stacked Fourths and Fifths**

STACKED FOURTHS AND FIFTHS

One above and One below Major Pentatonic

Voice a fourth above and below or voice a fifth above and below each tone of the parent major scale. For C major, this creates the following chords:

scale tone number		1	2	3	5	6
letter in C major	C	D	E	G	A	
C major chord names		Csus.4	C6/9	Cma7/6	Cadd9	C6/9
D Dorian chord names		Dm7/11	Dsus.4	D6/9	D7sus.4	Dsus.2
E Phrygian chord names		--	Em7/11	Esus.4	--	Em7/11
F Lydian chord names		Fadd9	F6/9	Fma7#11	F6/9	Fma7/6
G Mixolydian chord names	G7sus.4	Gadd9	G6/9	Gsus.4	G6/9	
A Aeolian chord names		--	Am7/11	Am/9	Am7/11	Asus.4
B Locrian chord names		--	Bm7n5	Bm7/11n5	--	Bm7n5

Chords can be approached from a half step above or flatted. The effect is bluesy or eastern/exotic, depending on the mode. In major, for example, chords a half steps above 3 and 6 are bluesy; and half steps above 1, 2 and 5 are eastern/exotic.