

# Tools For Improvisation (Bass Clef)

A brief manual on the fundamental  
components of jazz theory

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# TOOLS FOR IMPROVISATION

## PREFACE

**Improvisation** is more of an idea than a specific discipline, more of an art than a science. As a composer, I prefer to define **improvisation** as “spontaneous composition.” This is one of many ways to define improvisation, and it is up to each individual to adopt their own view of what improvisation might be.

In the medium of **jazz**, improvisation plays many roles. The most obvious role of improvisation in jazz is in soloing over the chord changes of jazz standards; but improvisation also affects the interpretation of a chart, the arrangement of a horn section, the voicing and rhythms of an accompaniment, and numerous other components of jazz music. In point of fact, good soloing is every bit as well-planned as any other aspect of a jazz performance, and requires a great deal of preparation, study, and rehearsal.

The following textbook was drawn from class notes written for a workshop given from Fall of 2012 to Spring 2013 at **Music Center of the Northwest** in Seattle, WA. These notes- and the eventual textbook- were written to fill a need: a well-organized, comprehensive theory book which addresses the most fundamental tools necessary for a good foundation in jazz improvisation. The tools in this manual can also be applied to any other improvisation-based musical medium, including rock, blues, bluegrass, modern experimental classical music, and contemporary pop; but in this book they are organized and presented from a jazz perspective.

The single most important concept in improvisation is **melody**. All good improvisation is grounded in the search for an expressive melody. While improvisation may also include broad swathes of gesture and texture, and may venture into the realm of the completely abstract in which notes function as individual components of sound and timbre, **melody** remains a critical idea in the mind of the modern jazz audience. As all music is a dialogue between performer and listener, it is a wise idea to keep the notion of **melody** firmly in the foreground as you develop your improvisational vocabulary.

Have fun, and thanks for reading.

-David Matthew Shere

Seattle, WA

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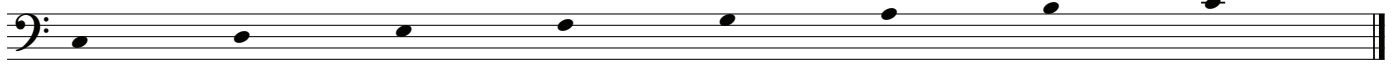




# Chapter 1- The Major Scale

**C major scale- parent scale; mode I**  
**(Also known as "C Ionian mode;" mother of all Western scales)**

David M. Shere



<b>R</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>R</b>
<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>A</b>	<b>B</b>	<b>C</b>

a. A **musical scale** is a series of notes arranged in order from lowest to highest, or highest to lowest.

b. **The Major scale** is the basis for all Western music theory. It is also the most important scale that you can master technically on your instrument. The **major scale** is a **diatonic scale**, or a scale with 7 notes.

c. The **musical alphabet** consists of the following seven letters: [ABCDEFG] These letters refer to the white keys on a piano keyboard and are known as **natural** notes.

d. **The C major scale** is made up of the **natural** notes ordered from **C to C**: [CDEFGABC]  
 This scale contains all the information that we will eventually need to construct the following musical objects:

1. intervals      2. melodies      3. arpeggios      4. chords      5. sequences      6. other scales

and numerous other musical ideas.

e. In the above diagram, we are looking at the **C major scale** defined by two additional pieces of information:

1. **scale degrees**      2. **note names**

1.1 **Scale degree** is the number value assigned to a scale tone based on its order of appearance in the scale. For theory purposes, the first scale tone is usually referred to as **R** (for **root**) instead of **1** (although occasionally we will use **1** instead of **R**).

1.2 **Major scale degrees** are numbered [R234567].

2.1 **Note name** is the letter assigned to a note to distinguish it from other notes.

2.2 **Root** is the defining note of a scale, mode, or key; the letter that gives a scale, mode, or key its name.

f. There are **five additional notes** in Western music based on the black keys of a piano keyboard. These notes are called **accidentals**, or **sharps and flats**.

1. The symbol for **sharp** is [#].

2. The symbol for **flat** is [b].

Each accidental has two names. The names of the **accidentals** are as follows:



[C#/Db]

[D#/Eb]

[F#/Gb]

[G#/Ab]

[A#/Bb]



3. A **natural** [♮] symbol is used to indicate a **natural** note after the occurrence of an **accidental** note with the same **letter name**. **Examples:** [C♯, C♮]; [E♭, E♮]; [A♯, A♮]; [G♭, G♮]



g. If we put all the **natural notes** and all the **accidentals** together, we get the **chromatic scale**:

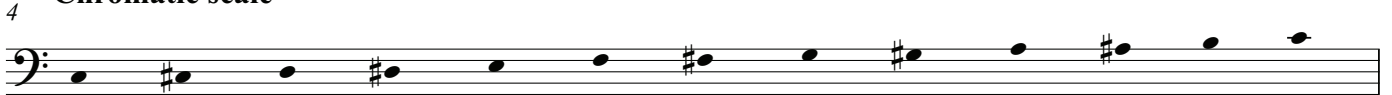
C♯/D♭	D♯/E♭	F♯/G♭	G♯/A♭	A♯/B♭			
C	D	E	F	G	A	B	C

1. The **chromatic scale** corresponds with the order of the white and black keys on the piano keyboard.

2. The distance between any two adjacent notes in the **chromatic scale** is called a **half-step**.

**Examples of half-steps:** [C-C♯]; [B-B♭]; [E-F]; [G♯-A]; [E♭-D]; [D-D♭]

#### Chromatic scale



3. **Sharps** are typically used when **ascending half-steps** from one note to the next.

4. **Flats** are typically used when **descending half-steps** from one note to the next.



h. An **interval** is the distance between any two notes.

1. The **interval** between any two adjacent notes in the **major scale** is known as a **second (2nd)**.

A **2nd** is the distance from one note in the musical alphabet to another note one letter away.

**Example:** C to D is a **2nd**: [C-D]

2. There are two basic types of **2nds**:

2.1 **Major 2nd (M2)**- contains 2 half-steps from one letter to the next. **Example:** [C-D] = [C-C♯-D]

2.2 **minor 2nd (m2)**- contains 1 half-step from one letter to the next. **Example:** [E-F]

3. A **Major 2nd** is also known as a **whole-step**. A **whole-step** equals two **half-steps**.

j. The intervals of the **major scale** are the same regardless of the **root** of the scale.

k. Moving a scale or other musical object from one key to another is called **transposition**.

#### C major scale

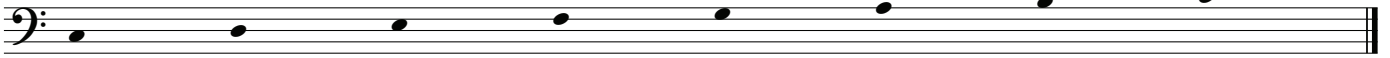


M2          M2          m2          M2          M2          M2          m2

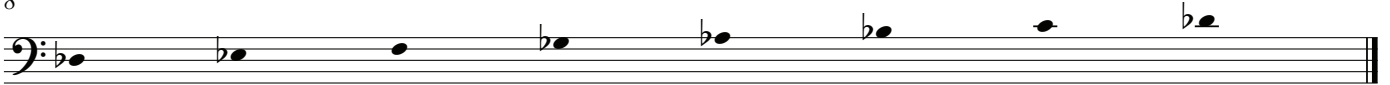
4

m. There are **12 major scales**, one for every note in the **chromatic scale**.

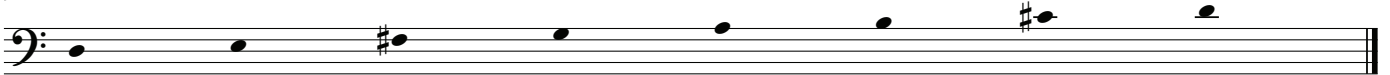
7 C major



8 D $\flat$  major



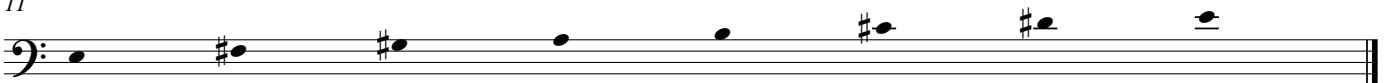
9 D major



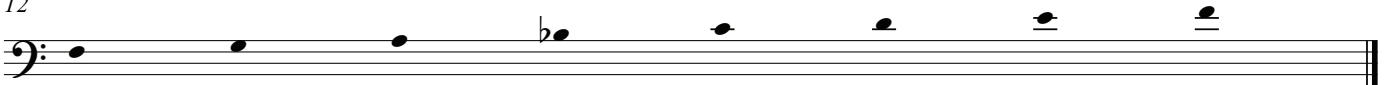
10 E $\flat$  major



11 E major

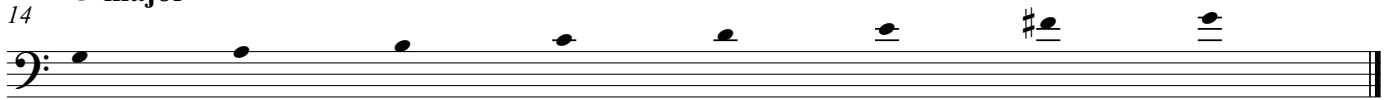
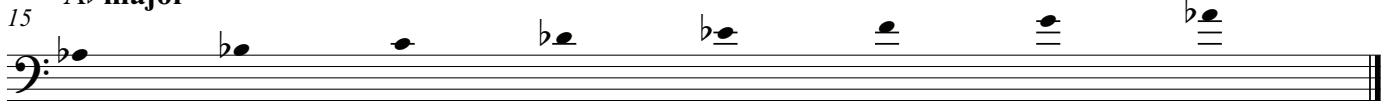


12 F major

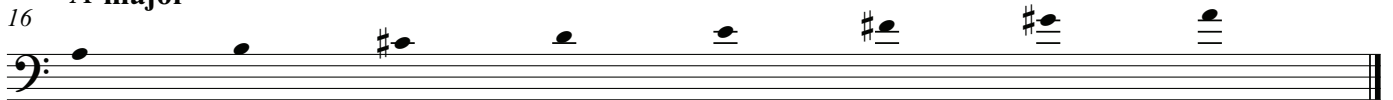


13 G $\flat$  major

## 14 G major

15 A $\flat$  major

## 16 A major

17 B $\flat$  major

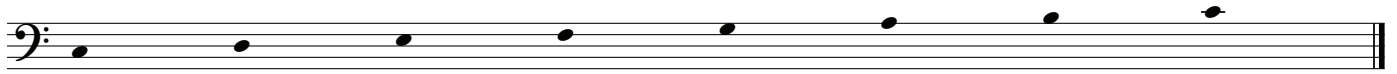
## 18 B major



## Chapter 2- Major Scale Harmony

**C major scale- parent scale; mode I**  
 (Also known as "C Ionian mode;" mother of all Western scales)

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a. When single notes are played one after the other in a given order, the resulting sound is called **melody**. A **scale** is an example of **melody**.

b. If two or more notes are played simultaneously, the resulting sound is called **harmony**.

To "**harmonize**" a note or scale means to "**add harmony to**" a note or scale.

**Harmony** is classified in two ways:

1. **intervals**
2. **chords**

**Per Chapter 1:** h. An **interval** is the distance between two notes.

1.1 A **melodic interval** is the distance between two notes played one after the other.

1.2 A **harmonic interval** is the distance between two notes played simultaneously.

1.3 In this section, we are dealing with intervals known as **thirds (3rds)**.

A **3rd** is the distance from one note in the musical alphabet to another note two letters away.

**Example:** C to E is a 3rd [C-E]

There are two basic types of **3rds**:

1.3.1 **Major 3rd (M3)**- contains 4 half-steps from one letter to the next. **Example:** [C-E] = [C-C#-D-D#-E]

1.3.2 **minor 3rd (m3)**- contains 3 half-steps from one letter to the next. **Example:** [D-F] = [D-D#-E-F]

### Melodic 3rds

2

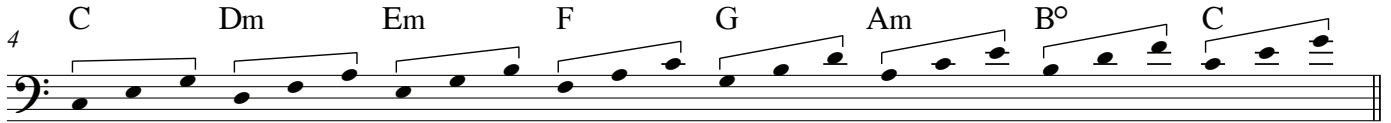
M3      m3      m3      M3      M3      m3      m3      M3

### Harmonic 3rds

3

M3      m3      m3      M3      M3      m3      m3      M3

### Melodic triads (arpeggios)



I      ii      iii      IV      V      vi      vii°      I

### Harmonic triads (chords)



I      ii      iii      IV      V      vi      vii°      I  
 Major      minor      minor      Major      Major      minor      diminished      Major

2.1 A **chord** is a harmony containing three (3) or more notes.

2.2 An **arpeggio** is the notes of a chord played melodically.

2.3 The notes of any **chord** or **arpeggio** are referred to as **chord tones**.

c. A **triad** is a harmony containing three (3) notes. **Triads** are the most fundamental type of **chord**.

1. **Triads** are comprised of any two adjacent **3rds**, and occur naturally within the **major scale**.

**Example: C, E and G** are a **triad [C-E-G]**

2. **Triads** differ in **quality** based on the types of **3rds** they contain.

3. **Chord symbols** are shorthand notation used to indicate **chord quality**.

**Example: Dm (D minor)** is a **chord symbol**.

4. There are four basic types of **triads**:

4.1 **Major [M3+m3]**

4.2 **minor [m3+M3]**

4.3 **diminished [m3+m3]**

4.4 **Augmented [M3+M3]\***

\*The **Augmented triad** is derived from the **Harmonic** and **Melodic minor scales**, and does not occur in the Major scale.

5. **Roman numerals** are used to indicate the **quality** of a **triad**, and the **scale degree** on which the **triad** is based.

I = Major; 1st degree

ii = minor; 2nd degree

iii = minor; 3rd degree

IV = Major; 4th degree

V = Major; 5th degree

vi = minor; 6th degree

vii° = diminished; 7th degree

## 8 7th arpeggios

$C^{\Delta 7}$     $Dm^7$     $Em^7$     $F^{\Delta 7}$     $G^7$     $Am^7$     $B^{\circ 7}$     $C^{\Delta 7}$   
 $I^7$     $ii^7$     $iii^7$     $IV^7$     $V^7$     $vi^7$     $vii^{\circ 7}$     $I^7$

## 7th chords

$C^{\Delta 7}$     $Dm^7$     $Em^7$     $F^{\Delta 7}$     $G^7$     $Am^7$     $B^{\circ 7}$     $C^{\Delta 7}$   
 $I^7$     $ii^7$     $iii^7$     $IV^7$     $V^7$     $vi^7$     $vii^{\circ 7}$     $I^7$   
**Major7th**   **minor7th**   **minor7th**   **Major7th**   **Dominant7th**   **minor7th**   **half diminished7th**   **Major7th**

d. A **7th (seventh) chord** is a harmony containing four (4) notes.

1. **7th chords** are comprised of any three adjacent **3rds**, and occur naturally within the **major scale**.

**Example:** C, E, G, and B are a **7th chord [C-E-G-B]**

2. **7th chords** differ in **quality** based on the types of **3rds** they contain.

3. **7th chords** have distinct **chord symbols** used to indicate **chord quality**.

3.1 While there is generally a **common practice** in the use of **7th chord symbols**, there is a certain amount of variation in **chord symbology** from one publication to the next.

**Example:**  $Dm^7$  (D minor 7th) is a **chord symbol**.

4. There are five basic types of **7th chords**:

4.1 **Major 7th** [ $M3+m3+M3$ ]

4.2 **minor 7th** [ $m3+M3+m3$ ]

4.3 **Dominant 7th** [ $M3+m3+m3$ ]

4.4 **half-diminished 7th** [ $m3+m3+M3$ ]\*

4.5 **(fully) diminished 7th** [ $m3+m3+m3$ ]\*\*

\*The **half-diminished 7th chord** is also known as **Minor 7th, flat 5** [ $m7(b5)$ ].

\*\*The **(fully) diminished 7th chord** is derived from the **Harmonic minor scale**, and does not occur in the Major scale.

5. **Roman numerals** are used to indicate the **quality** of a **7th chord**, and the **scale degree** on which the **7th chord** is based.

$I^7$  = Major 7th; 1st degree

$ii^7$  = minor 7th; 2nd degree

$iii^7$  = minor 7th; 3rd degree

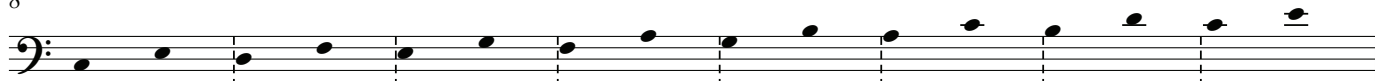
$IV^7$  = Major 7th; 4th degree

$V^7$  = Dominant 7th; 5th degree

$vi^7$  = minor7th; 6th degree

$vii^{\circ 7}$  = half-diminished 7th; 7th degree

8 Melodic 3rds



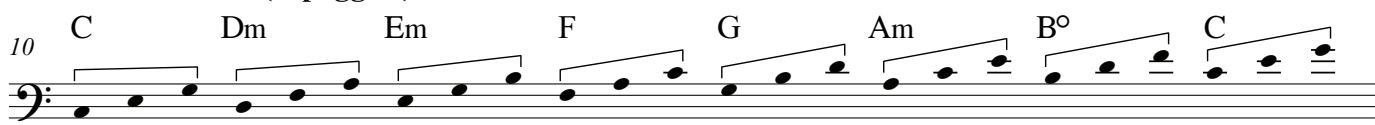
M3 m3 m3 M3 M3 m3 m3 M3

9 Harmonic 3rds



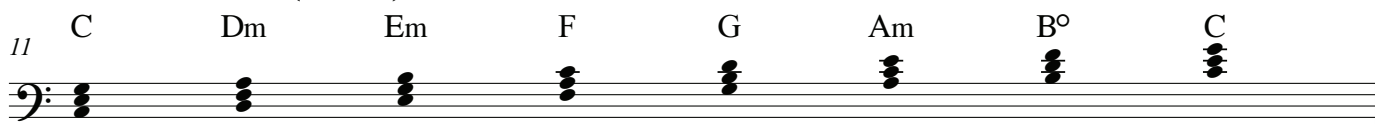
M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)



I ii iii IV V vi vii° I

Harmonic triads (chords)



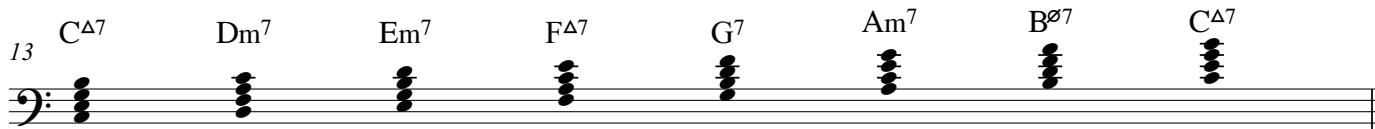
I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

7th arpeggios



I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>o7</sup> I<sup>7</sup>

7th chords



I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>o7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

10 **Db major**

14 **Melodic 3rds**

M3 m3 m3 M3 M3 m3 m3 M3

15 **Harmonic 3rds**

M3 m3 m3 M3 M3 m3 m3 M3

**Melodic triads (arpeggios)**

16 **Db Ebm Fm Gb Ab Bbm C<sup>o</sup> Db**

I ii iii IV V vi vii<sup>o</sup> I

**Harmonic triads (chords)**

17 **Db Ebm Fm Gb Ab Bbm C<sup>o</sup> Db**

I ii iii IV V vi vii<sup>o</sup> I  
Major minor minor Major Major minor diminished Major

**7th arpeggios**

18 **Db<sup>Δ7</sup> Ebm<sup>7</sup> Fm<sup>7</sup> Gb<sup>Δ7</sup> Ab<sup>7</sup> Bbm<sup>7</sup> C<sup>ø7</sup> Db<sup>Δ7</sup>**

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

**7th chords**

19 **Db<sup>Δ7</sup> Ebm<sup>7</sup> Fm<sup>7</sup> Gb<sup>Δ7</sup> Ab<sup>7</sup> Bbm<sup>7</sup> C<sup>ø7</sup> Db<sup>Δ7</sup>**

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th



D major

20 Melodic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

21 Harmonic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)

22

I ii iii IV V vi vii° I

Harmonic triads (chords)

23

I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

7th arpeggios

24

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>o7</sup> I<sup>7</sup>

7th chords

25

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>o7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

**E<sup>b</sup> major**

26 **Melodic 3rds**

A musical staff in bass clef with a key signature of two flats (B-flat and E-flat). It contains eight measures of music, each with a single note. The notes are: G2, A2, B-flat2, C3, D3, E-flat3, F3, G3. The intervals between consecutive notes are: M3, m3, m3, M3, M3, m3, m3, M3.

M3      m3      m3      M3      M3      m3      m3      M3

27 **Harmonic 3rds**

A musical staff in bass clef with a key signature of two flats. It contains eight measures, each with a triad of notes. The triads are: G2-A2-B-flat2, A2-B-flat2-C3, B-flat2-C3-D3, C3-D3-E-flat3, D3-E-flat3-F3, E-flat3-F3-G3, F3-G3-A2, G3-A2-B-flat2.

M3      m3      m3      M3      M3      m3      m3      M3

**Melodic triads (arpeggios)**

28

A musical staff in bass clef with a key signature of two flats. It contains eight measures, each with an arpeggiated triad. The triads are: G2-A2-B-flat2, A2-B-flat2-C3, B-flat2-C3-D3, C3-D3-E-flat3, D3-E-flat3-F3, E-flat3-F3-G3, F3-G3-A2, G3-A2-B-flat2.

I      ii      iii      IV      V      vi      vii<sup>o</sup>      I

**Harmonic triads (chords)**

29

A musical staff in bass clef with a key signature of two flats. It contains eight measures, each with a chord. The chords are: G2-A2-B-flat2, A2-B-flat2-C3, B-flat2-C3-D3, C3-D3-E-flat3, D3-E-flat3-F3, E-flat3-F3-G3, F3-G3-A2, G3-A2-B-flat2.

I      ii      iii      IV      V      vi      vii<sup>o</sup>      I  
Major      minor      minor      Major      Major      minor      diminished      Major

**7th arpeggios**

30

A musical staff in bass clef with a key signature of two flats. It contains eight measures, each with an arpeggiated 7th chord. The chords are: G2-A2-B-flat2-C3, A2-B-flat2-C3-D3, B-flat2-C3-D3-E-flat3, C3-D3-E-flat3-F3, D3-E-flat3-F3-G3, E-flat3-F3-G3-A2, F3-G3-A2-B-flat2, G3-A2-B-flat2-C3.

I<sup>7</sup>      ii<sup>7</sup>      iii<sup>7</sup>      IV<sup>7</sup>      V<sup>7</sup>      vi<sup>7</sup>      vii<sup>o7</sup>      I<sup>7</sup>

**7th chords**

31

A musical staff in bass clef with a key signature of two flats. It contains eight measures, each with a 7th chord. The chords are: G2-A2-B-flat2-C3, A2-B-flat2-C3-D3, B-flat2-C3-D3-E-flat3, C3-D3-E-flat3-F3, D3-E-flat3-F3-G3, E-flat3-F3-G3-A2, F3-G3-A2-B-flat2, G3-A2-B-flat2-C3.

I<sup>7</sup>      ii<sup>7</sup>      iii<sup>7</sup>      IV<sup>7</sup>      V<sup>7</sup>      vi<sup>7</sup>      vii<sup>o7</sup>      I<sup>7</sup>  
Major7th      minor7th      minor7th      Major7th      Dominant7th      minor7th      half diminished7th      Major7th

E major

32 Melodic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

33 Harmonic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)

34 E F#m G#m A B C#m D#° E

I ii iii IV V vi vii° I

Harmonic triads (chords)

35 E F#m G#m A B C#m D#° E

I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

7th arpeggios

36 E<sup>Δ7</sup> F#m<sup>7</sup> G#m<sup>7</sup> A<sup>Δ7</sup> B<sup>7</sup> C#m<sup>7</sup> D#<sup>ø7</sup> E<sup>Δ7</sup>

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

7th chords

37 E<sup>Δ7</sup> F#m<sup>7</sup> G#m<sup>7</sup> A<sup>Δ7</sup> B<sup>7</sup> C#m<sup>7</sup> D#<sup>ø7</sup> E<sup>Δ7</sup>

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

38 Melodic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

39 Harmonic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)

40 F Gm Am Bb C Dm E° F

I ii iii IV V vi vii° I

Harmonic triads (chords)

41 F Gm Am Bb C Dm E° F

I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

7th arpeggios

42 FΔ7 Gm7 Am7 BbΔ7 C7 Dm7 Eø7 FΔ7

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

7th chords

43 FΔ7 Gm7 Am7 BbΔ7 C7 Dm7 Eø7 FΔ7

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

G<sup>b</sup> major

44 Melodic 3rds

M3      m3      m3      M3      M3      m3      m3      M3

45 Harmonic 3rds

M3      m3      m3      M3      M3      m3      m3      M3

Melodic triads (arpeggios)

46 G<sup>b</sup>      A<sup>b</sup>m      B<sup>b</sup>m      C<sup>b</sup>      D<sup>b</sup>      E<sup>b</sup>m      F<sup>o</sup>      G<sup>b</sup>

I      ii      iii      IV      V      vi      vii<sup>o</sup>      I

Harmonic triads (chords)

47 G<sup>b</sup>      A<sup>b</sup>m      B<sup>b</sup>m      C<sup>b</sup>      D<sup>b</sup>      E<sup>b</sup>m      F<sup>o</sup>      G<sup>b</sup>

I      ii      iii      IV      V      vi      vii<sup>o</sup>      I

Major      minor      minor      Major      Major      minor      diminished      Major

7th arpeggios

48 G<sup>b</sup>Δ<sup>7</sup>      A<sup>b</sup>m<sup>7</sup>      B<sup>b</sup>m<sup>7</sup>      C<sup>b</sup>Δ<sup>7</sup>      D<sup>b</sup>7      E<sup>b</sup>m<sup>7</sup>      F<sup>o</sup>7      G<sup>b</sup>Δ<sup>7</sup>

I<sup>7</sup>      ii<sup>7</sup>      iii<sup>7</sup>      IV<sup>7</sup>      V<sup>7</sup>      vi<sup>7</sup>      vii<sup>o7</sup>      I<sup>7</sup>

7th chords

49 G<sup>b</sup>Δ<sup>7</sup>      A<sup>b</sup>m<sup>7</sup>      B<sup>b</sup>m<sup>7</sup>      C<sup>b</sup>Δ<sup>7</sup>      D<sup>b</sup>7      E<sup>b</sup>m<sup>7</sup>      F<sup>o</sup>7      G<sup>b</sup>Δ<sup>7</sup>

I<sup>7</sup>      ii<sup>7</sup>      iii<sup>7</sup>      IV<sup>7</sup>      V<sup>7</sup>      vi<sup>7</sup>      vii<sup>o7</sup>      I<sup>7</sup>

Major7th      minor7th      minor7th      Major7th      Dominant7th      minor7th      half diminished7th      Major7th

16 **G major**

50 **Melodic 3rds**

M3    m3    m3    M3    M3    m3    m3    M3

51 **Harmonic 3rds**

M3    m3    m3    M3    M3    m3    m3    M3

**Melodic triads (arpeggios)**

52    G    Am    Bm    C    D    Em    F#°    G

I    ii    iii    IV    V    vi    vii°    I

**Harmonic triads (chords)**

53    G    Am    Bm    C    D    Em    F#°    G

I    ii    iii    IV    V    vi    vii°    I

Major    minor    minor    Major    Major    minor    diminished    Major

**7th arpeggios**

54    G<sup>Δ7</sup>    Am<sup>7</sup>    Bm<sup>7</sup>    C<sup>Δ7</sup>    D<sup>7</sup>    Em<sup>7</sup>    F#<sup>ø7</sup>    G<sup>Δ7</sup>

I<sup>7</sup>    ii<sup>7</sup>    iii<sup>7</sup>    IV<sup>7</sup>    V<sup>7</sup>    vi<sup>7</sup>    vii<sup>ø7</sup>    I<sup>7</sup>

**7th chords**

55    G<sup>Δ7</sup>    Am<sup>7</sup>    Bm<sup>7</sup>    C<sup>Δ7</sup>    D<sup>7</sup>    Em<sup>7</sup>    F#<sup>ø7</sup>    G<sup>Δ7</sup>

I<sup>7</sup>    ii<sup>7</sup>    iii<sup>7</sup>    IV<sup>7</sup>    V<sup>7</sup>    vi<sup>7</sup>    vii<sup>ø7</sup>    I<sup>7</sup>

Major7th    minor7th    minor7th    Major7th    Dominant7th    minor7th    half diminished7th    Major7th

56 Melodic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

57 Harmonic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)

58

I ii iii IV V vi vii° I

Harmonic triads (chords)

59

I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

7th arpeggios

60

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

7th chords

61

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

A major

62 Melodic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

63 Harmonic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)

64 A Bm C#m D E F#m G#° A

I ii iii IV V vi vii° I

Harmonic triads (chords)

65 A Bm C#m D E F#m G#° A

I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

7th arpeggios

66 A<sup>Δ7</sup> Bm<sup>7</sup> C#m<sup>7</sup> D<sup>Δ7</sup> E<sup>7</sup> F#m<sup>7</sup> G#<sup>ø7</sup> A<sup>Δ7</sup>

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

7th chords

67 A<sup>Δ7</sup> Bm<sup>7</sup> C#m<sup>7</sup> D<sup>Δ7</sup> E<sup>7</sup> F#m<sup>7</sup> G#<sup>ø7</sup> A<sup>Δ7</sup>

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th



68 Melodic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

69 Harmonic 3rds

M3 m3 m3 M3 M3 m3 m3 M3

Melodic triads (arpeggios)

70 B $\flat$  Cm Dm E $\flat$  F Gm A $^{\circ}$  B $\flat$

I ii iii IV V vi vii $^{\circ}$  I

Harmonic triads (chords)

71 B $\flat$  Cm Dm E $\flat$  F Gm A $^{\circ}$  B $\flat$

I ii iii IV V vi vii $^{\circ}$  I

Major minor minor Major Major minor diminished Major

7th arpeggios

72 B $\flat$  $\Delta$ <sup>7</sup> Cm<sup>7</sup> Dm<sup>7</sup> E $\flat$  $\Delta$ <sup>7</sup> F<sup>7</sup> Gm<sup>7</sup> A $\emptyset$ <sup>7</sup> B $\flat$  $\Delta$ <sup>7</sup>

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>7</sup> I<sup>7</sup>

7th chords

73 B $\flat$  $\Delta$ <sup>7</sup> Cm<sup>7</sup> Dm<sup>7</sup> E $\flat$  $\Delta$ <sup>7</sup> F<sup>7</sup> Gm<sup>7</sup> A $\emptyset$ <sup>7</sup> B $\flat$  $\Delta$ <sup>7</sup>

I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii $\emptyset$ <sup>7</sup> I<sup>7</sup>

Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

**B major**

74 **Melodic 3rds**



M3 m3 m3 M3 M3 m3 m3 M3

75 **Harmonic 3rds**



M3 m3 m3 M3 M3 m3 m3 M3

**Melodic triads (arpeggios)**



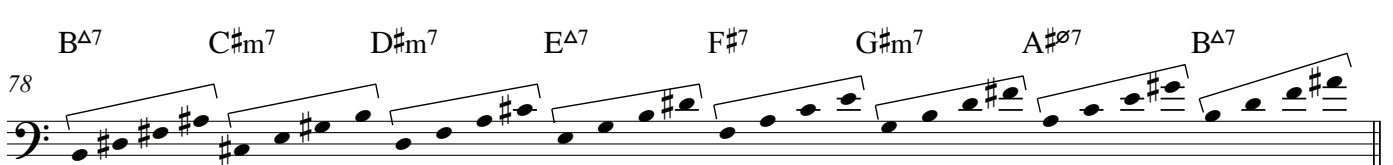
I ii iii IV V vi vii° I

**Harmonic triads (chords)**



I ii iii IV V vi vii° I  
Major minor minor Major Major minor diminished Major

**7th arpeggios**



I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>°7</sup> I<sup>7</sup>

**7th chords**



I<sup>7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>°7</sup> I<sup>7</sup>  
Major7th minor7th minor7th Major7th Dominant7th minor7th half diminished7th Major7th

# Chapter 3- Major Scale Modes (I. Relative)

**Modes** are extremely useful tools for improvisation, particularly in jazz.

- a. A **mode** can be defined as 1. a **scale-within-a-scale**, or 2. a **permutation** (re-ordering) of a scale that begins and ends on a note other than the **root** of the **parent scale** or **key**.
- b. Modes can be derived by **rotating** through the notes of any given scale.
- c. **Modes** can also be defined as **secondary scales**, derived from a **parent scale**.
  - 1. A **parent scale** is the scale from which a set of modes is derived.

d. The most important modes are the **modes of the Major scale**.

1. The **major scale** is a **diatonic** scale, as are each of its **modes**.

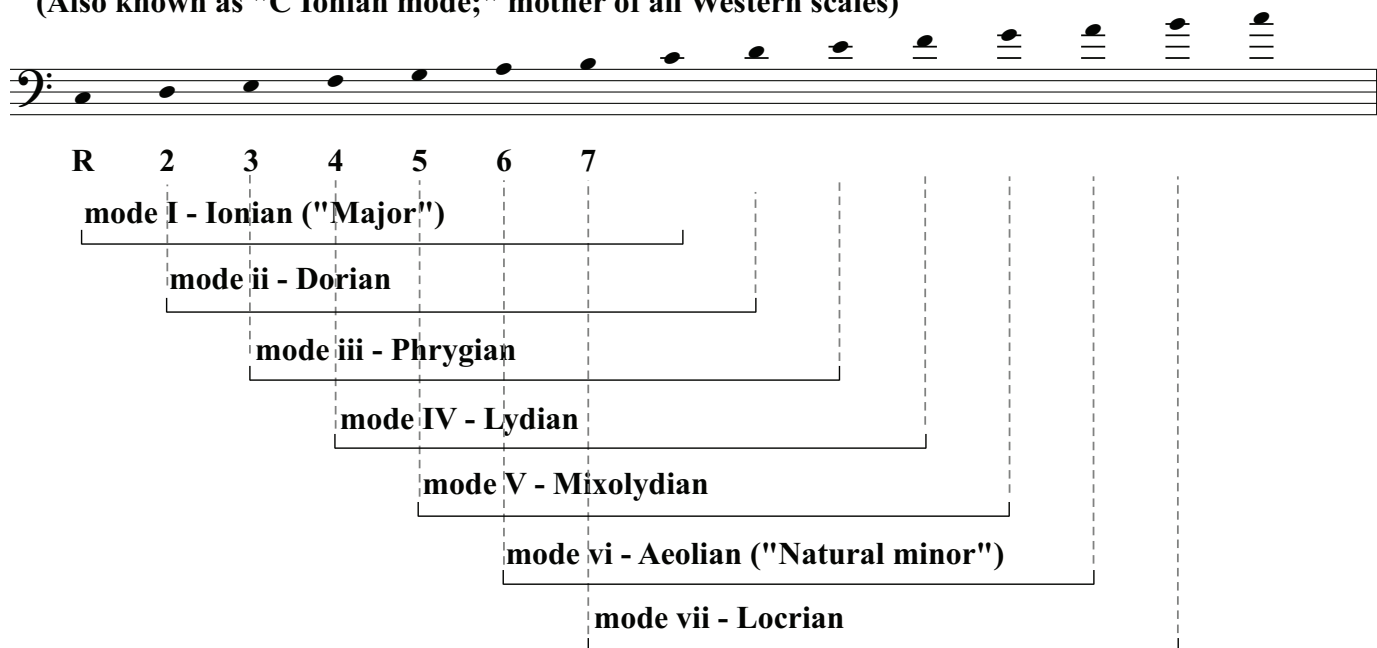
2. **Major scale modes** can be grouped together in two separate, but equally important ways:

2.1 **Relative modes**- the group of modes derived from a single scale in a single key.

2.2 **Parallel modes**- the group of modes derived from different scales in different keys, but sharing a common **root**.

e. In this chapter, we will be looking at **relative modes**.

**C major scale- parent scale; mode I**  
(Also known as "C Ionian mode;" mother of all Western scales)



1. All of the **modes** shown in the diagram above are derived from a single scale, the **C major scale**. Each of the **12 major scales** has its own set of **relative modes**.

1.1 **Ionian mode** is the 1st mode of any major key, starting and ending on the root of the key.

**Ionian mode** is also known as the **Major scale**.

1.2 **Dorian mode** is the 2nd mode of any Major/Ionian scale.

1.3 **Phrygian mode** is the 3rd mode of any Major/Ionian scale.

1.4 **Lydian mode** is the 4th mode of any Major/Ionian scale.

1.5 **Mixolydian mode** is the 5th mode of any Major/Ionian scale.

1.6 **Aeolian mode** is the 6th mode of any Major/Ionian scale.

1.7 **Locrian mode** is the 7th mode of any Major/Ionian scale.

2. Every mode in the previous diagram can be said to be **relative** to the **C major scale**.  
 3. Every mode in the previous diagram has a different **root**, based on its beginning and ending notes within the **C major scale**.

3.1 A **root** is the defining note of a scale, mode, or key; the letter that gives a scale, mode, or key its name.

3.2 **Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian** are traditional historical names for the modes of the major scale, derived from Greek churches.

4. Each **relative mode** derived from a **parent scale** corresponds to a specific **7th chord** also derived from the parent scale. The corresponding **chord** and **mode** are based on the same **scale degree**.

4.1 Notes from the **mode** may be used to improvise melodies over the corresponding **chord**.

4.2 Viewing **chords** and **modes** as corresponding pairs is known as the **chord-scale** approach.

2 C<sup>Δ7</sup> C Ionian scale; mode I

I<sup>7</sup>

**Per Chapter 2: b.2.3** The notes of any **chord** or **arpeggio** are referred to as **chord tones**.

5. In the mode diagram above (and all following pages):

5.1 **Black noteheads** represent **chord tones**.

5.2 **White noteheads** represent **passing tones**.

5.1.1 **Modes** contain **chord tones** associated with their corresponding **chords**.

5.2.1 A **passing tone** is any scale note that is not a **chord tone**.

5.3 **Chord tones** and **passing tones** within a scale are often referred to as **inside notes**.

6. An **outside note** is any note that is not a part of the **chord** or its corresponding **mode**.

3 C<sup>Δ7</sup> C Ionian scale; mode I

I<sup>7</sup>

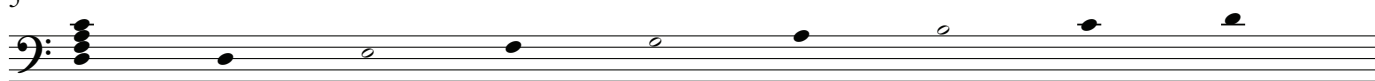
Examples of **outside notes**

4 C<sup>Δ7</sup> C Ionian scale; mode I



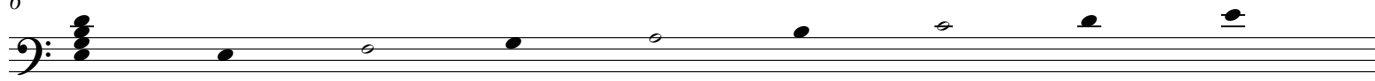
I<sup>7</sup>

5 Dm<sup>7</sup> D Dorian scale; mode ii



ii<sup>7</sup>

6 Em<sup>7</sup> E Phrygian scale; mode iii



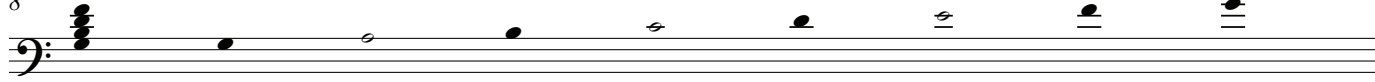
iii<sup>7</sup>

7 F<sup>Δ7</sup> F Lydian scale; mode IV



IV<sup>7</sup>

8 G<sup>7</sup> G Mixolydian scale; mode V



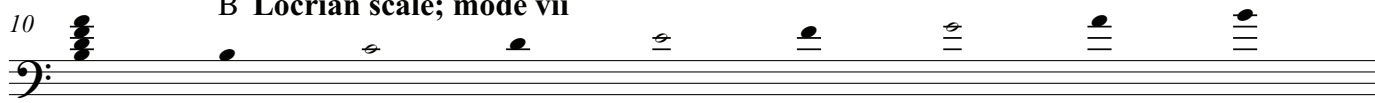
V<sup>7</sup>

9 Am<sup>7</sup> A Aeolian scale; mode vi ("Natural minor")



vi<sup>7</sup>

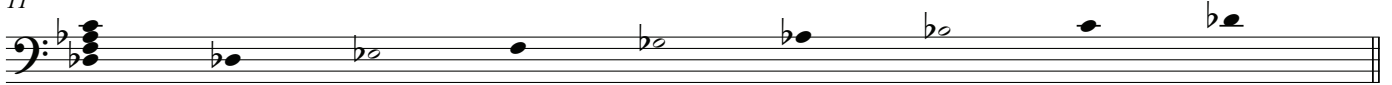
10 B<sup>ø7</sup> B Locrian scale; mode vii



vii<sup>o7</sup>

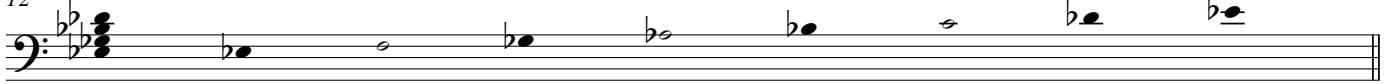
24 **D<sup>b</sup>major**

11 **D<sup>b</sup>Δ<sup>7</sup> D<sup>b</sup> Ionian scale; mode I**



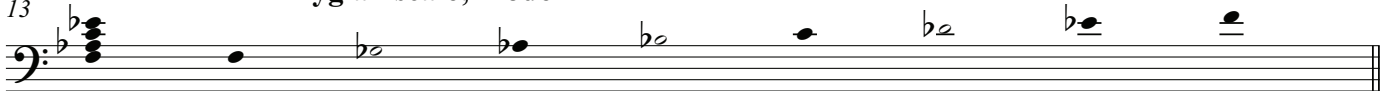
I<sup>7</sup>

12 **E<sup>b</sup>m<sup>7</sup> E<sup>b</sup> Dorian scale; mode ii**



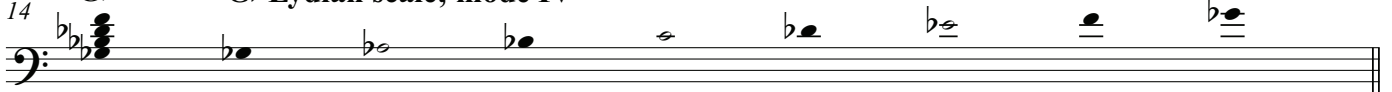
ii<sup>7</sup>

13 **Fm<sup>7</sup> F Phrygian scale; mode iii**



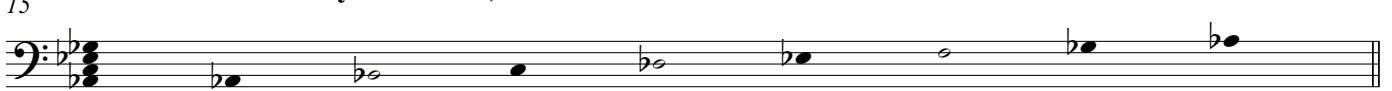
iii<sup>7</sup>

14 **G<sup>b</sup>Δ<sup>7</sup> G<sup>b</sup> Lydian scale; mode IV**



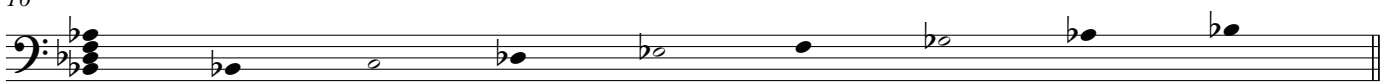
IV<sup>7</sup>

15 **A<sup>b</sup>Δ<sup>7</sup> A<sup>b</sup> Mixolydian scale; mode V**



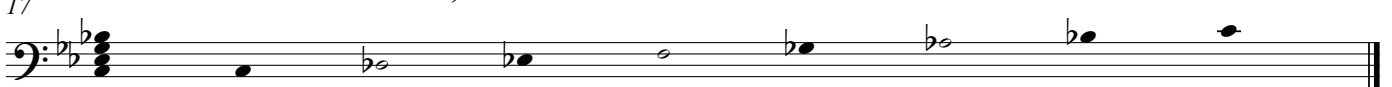
V<sup>7</sup>

16 **B<sup>b</sup>m<sup>7</sup> B<sup>b</sup> Aeolian scale; mode vi ("Natural minor")**



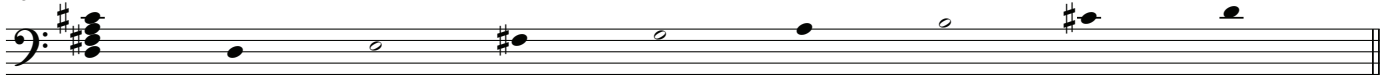
vi<sup>7</sup>

17 **C<sup>∅</sup> C Locrian scale; mode vii**



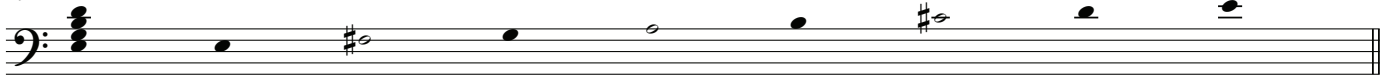
vii<sup>∅7</sup>

18 D<sup>Δ7</sup> D Ionian scale; mode I



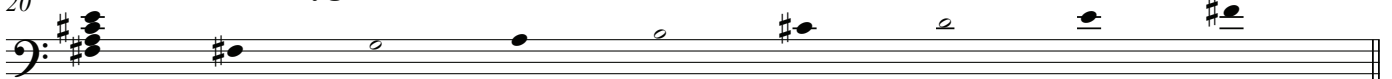
I<sup>7</sup>

19 E<sup>m7</sup> E Dorian scale; mode ii



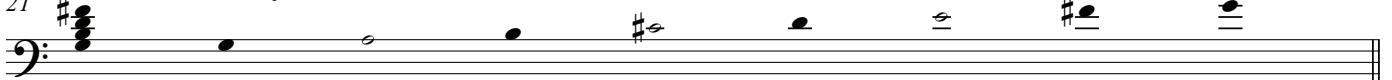
ii<sup>7</sup>

20 F#<sup>m7</sup> F# Phrygian scale; mode iii



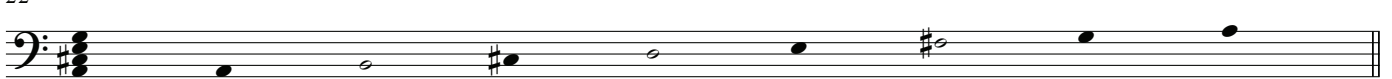
iii<sup>7</sup>

21 G<sup>Δ7</sup> G Lydian scale; mode IV



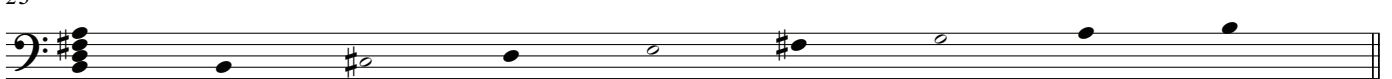
IV<sup>7</sup>

22 A<sup>7</sup> A Mixolydian scale; mode V



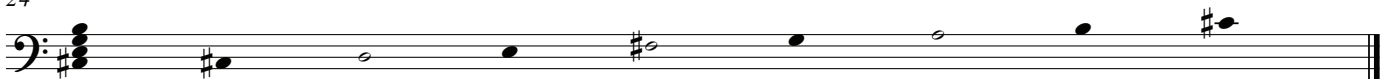
V<sup>7</sup>

23 B<sup>m7</sup> B Aeolian scale; mode vi ("Natural minor")



vi<sup>7</sup>

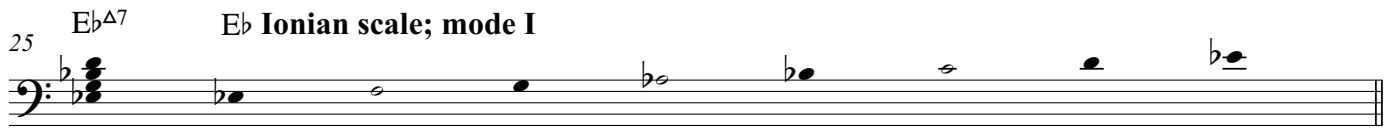
24 C#<sup>ø7</sup> C# Locrian scale; mode vii



vii<sup>ø7</sup>

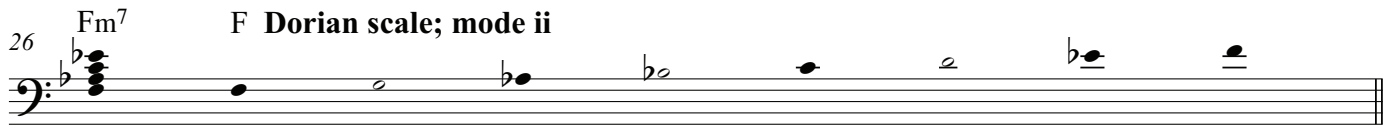
26 **E<sup>b</sup>major**

25 **E<sup>b</sup>Δ<sup>7</sup>      E<sup>b</sup> Ionian scale; mode I**



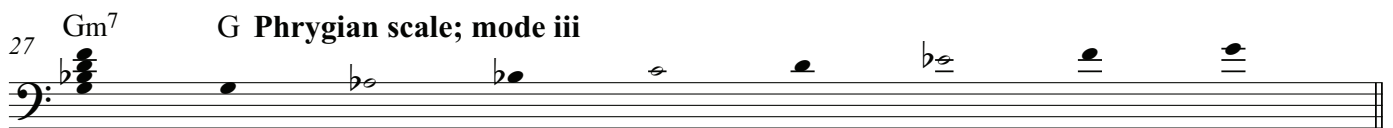
I<sup>7</sup>

26 **Fm<sup>7</sup>      F Dorian scale; mode ii**



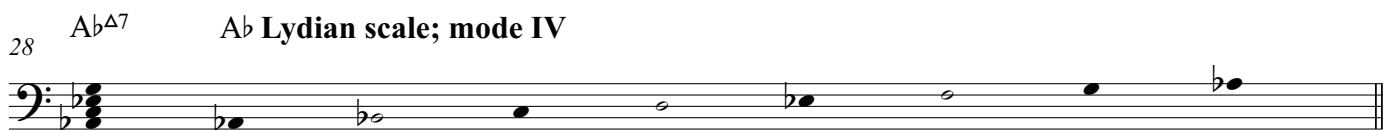
ii<sup>7</sup>

27 **Gm<sup>7</sup>      G Phrygian scale; mode iii**



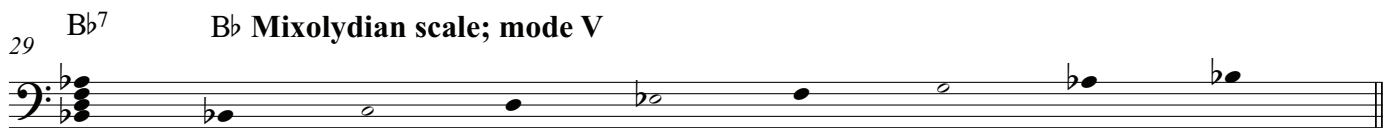
iii<sup>7</sup>

28 **A<sup>b</sup>Δ<sup>7</sup>      A<sup>b</sup> Lydian scale; mode IV**



IV<sup>7</sup>

29 **B<sup>b</sup>7      B<sup>b</sup> Mixolydian scale; mode V**



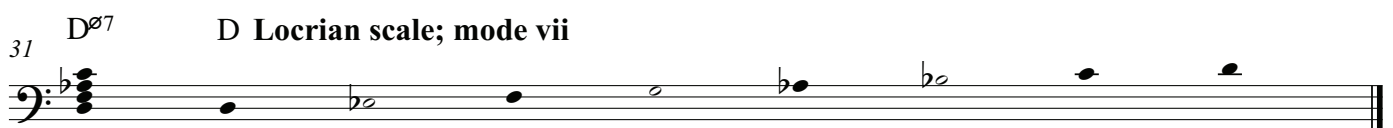
V<sup>7</sup>

30 **Cm<sup>7</sup>      C Aeolian scale; mode vi ("Natural minor")**



vi<sup>7</sup>

31 **D<sup>ø</sup>7      D Locrian scale; mode vii**

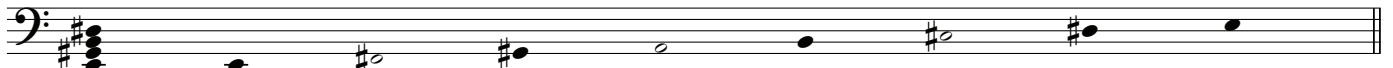


vii<sup>ø7</sup>



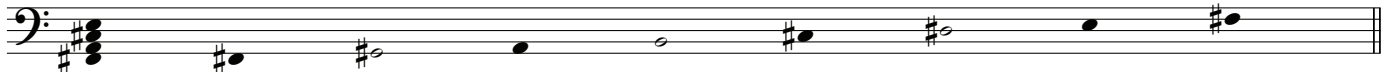
E major

32 E<sup>Δ7</sup> E Ionian scale; mode I



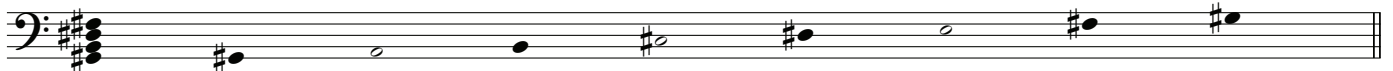
I<sup>7</sup>

33 F#m<sup>7</sup> F# Dorian scale; mode ii



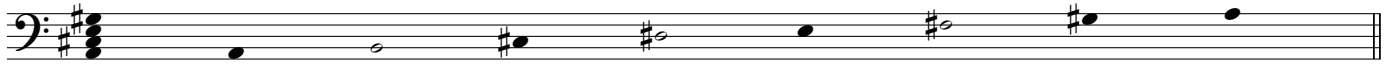
ii<sup>7</sup>

34 G#m<sup>7</sup> G# Phrygian scale; mode iii



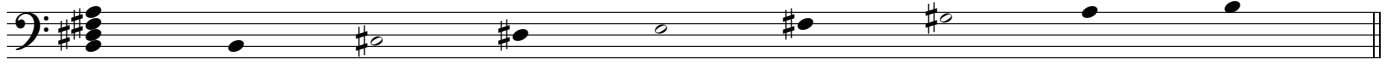
iii<sup>7</sup>

35 A<sup>Δ7</sup> A Lydian scale; mode IV



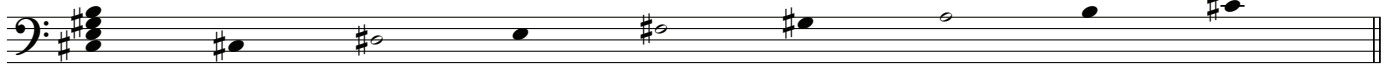
IV<sup>7</sup>

36 B<sup>7</sup> B Mixolydian scale; mode V



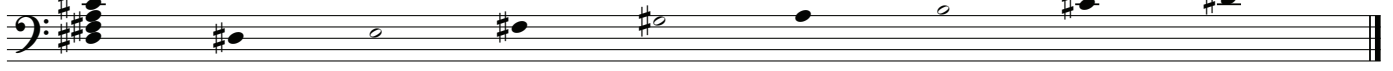
V<sup>7</sup>

37 C#m<sup>7</sup> C# Aeolian scale; mode vi ("Natural minor")



vi<sup>7</sup>

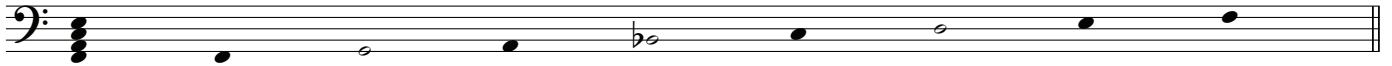
38 D#<sup>∅7</sup> D# Locrian scale; mode vii



vii<sup>∅7</sup>

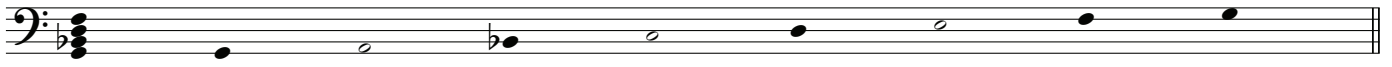
28 F major

39 F $\Delta$ 7 F Ionian scale; mode I



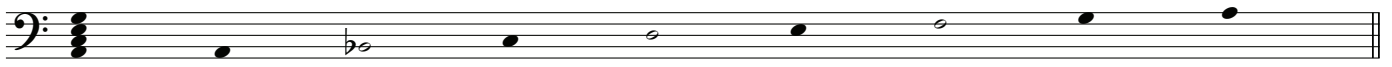
I<sup>7</sup>

40 Gm<sup>7</sup> G Dorian scale; mode ii



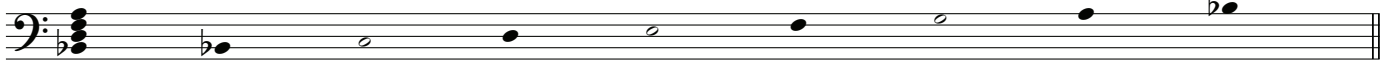
ii<sup>7</sup>

41 Am<sup>7</sup> A Phrygian scale; mode iii



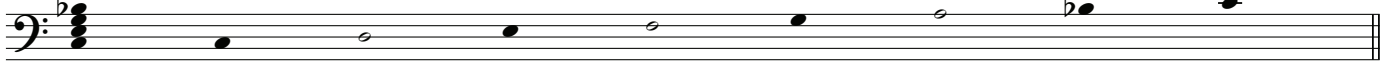
iii<sup>7</sup>

42 Bb $\Delta$ 7 Bb Lydian scale; mode IV



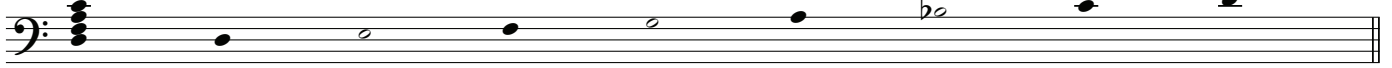
IV<sup>7</sup>

43 C<sup>7</sup> C Mixolydian scale; mode V



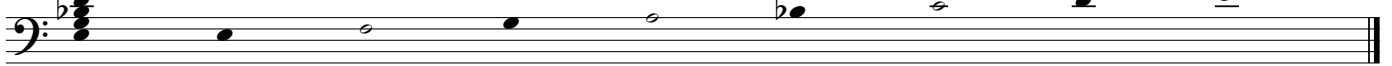
V<sup>7</sup>

44 Dm<sup>7</sup> D Aeolian scale; mode vi ("Natural minor")



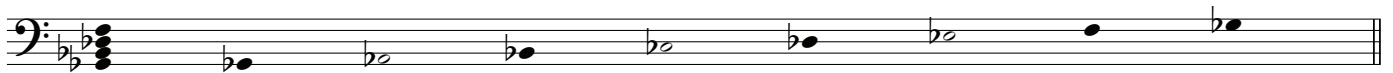
vi<sup>7</sup>

45 E $\emptyset$ 7 E Locrian scale; mode vii



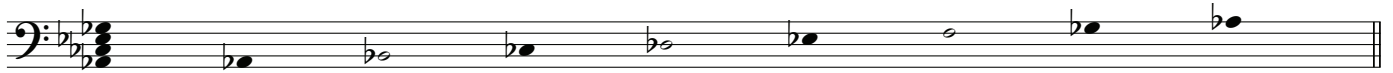
vii<sup>o7</sup>

46 G $\flat$  $\Delta$ 7 G $\flat$  Ionian scale; mode I



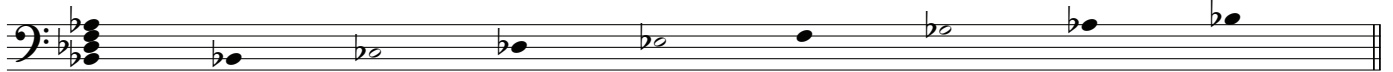
I<sup>7</sup>

47 Abm<sup>7</sup> Ab Dorian scale; mode ii



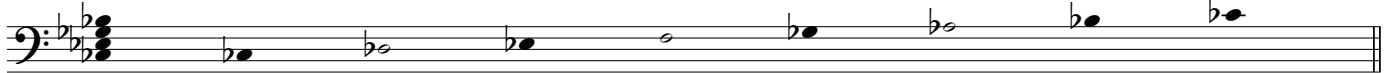
ii<sup>7</sup>

48 Bbm<sup>7</sup> Bb Phrygian scale; mode iii



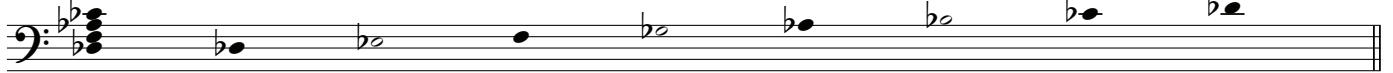
iii<sup>7</sup>

49 Cb $\Delta$ 7 Cb Lydian scale; mode IV



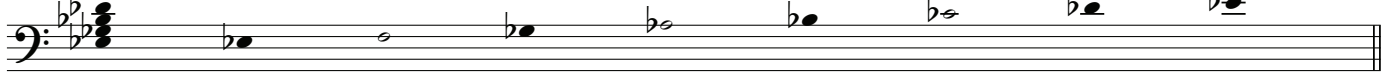
IV<sup>7</sup>

50 Db<sup>7</sup> Db Mixolydian scale; mode V



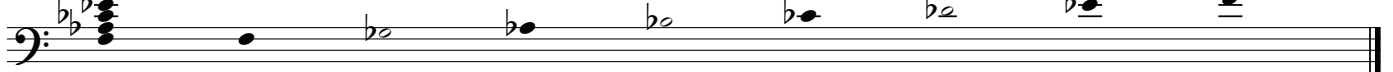
V<sup>7</sup>

51 Ebm<sup>7</sup> Eb Aeolian scale; mode vi ("Natural minor")



vi<sup>7</sup>

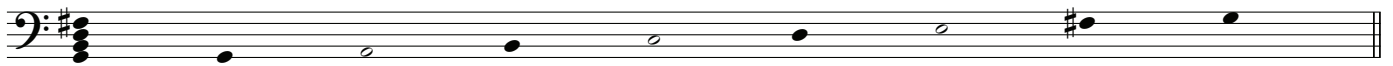
52 F $\emptyset$ 7 F Locrian scale; mode vii



vii<sup>o7</sup>

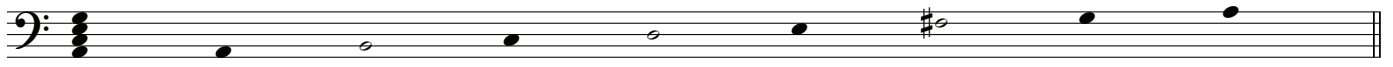
30 G major

53 G<sup>Δ7</sup> G Ionian scale; mode I



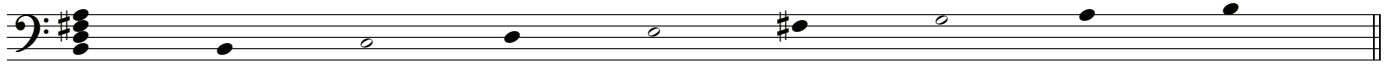
I<sup>7</sup>

54 Am<sup>7</sup> A Dorian scale; mode ii



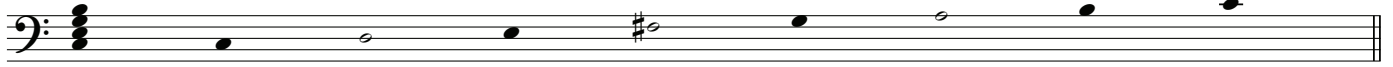
ii<sup>7</sup>

55 Bm<sup>7</sup> B Phrygian scale; mode iii



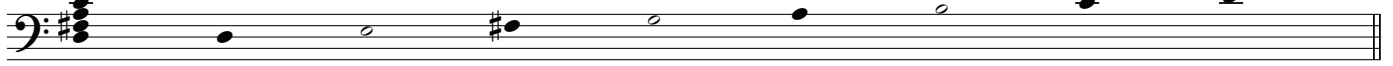
iii<sup>7</sup>

56 C<sup>Δ7</sup> C Lydian scale; mode IV



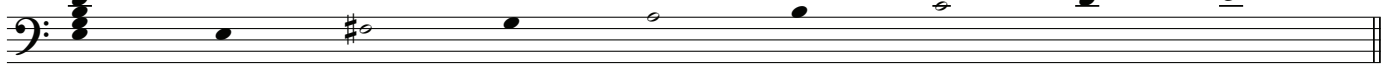
IV<sup>7</sup>

57 D<sup>7</sup> D Mixolydian scale; mode V



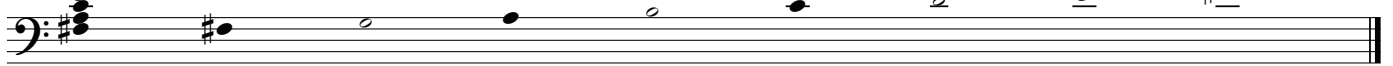
V<sup>7</sup>

58 Em<sup>7</sup> E Aeolian scale; mode vi ("Natural minor")



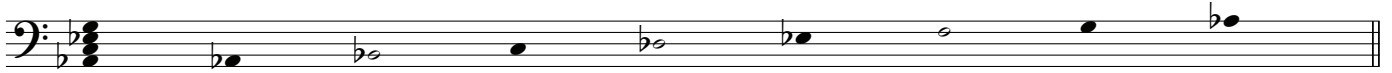
vi<sup>7</sup>

59 F#<sup>ø7</sup> F# Locrian scale; mode vii



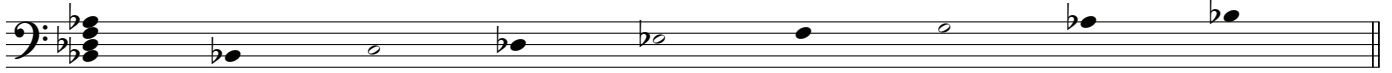
vii<sup>ø7</sup>

60 A $\flat$  $\Delta$ <sup>7</sup> A $\flat$  Ionian scale; mode I



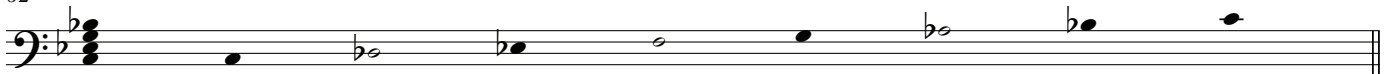
I<sup>7</sup>

61 B $\flat$ m<sup>7</sup> B $\flat$  Dorian scale; mode ii



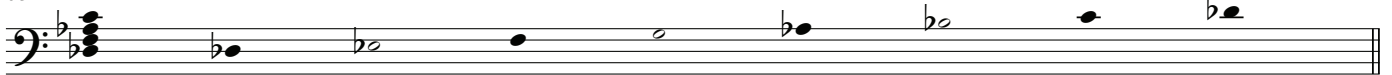
ii<sup>7</sup>

62 C $m$ <sup>7</sup> C Phrygian scale; mode iii



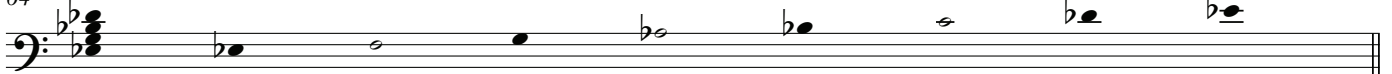
iii<sup>7</sup>

63 D $\flat$  $\Delta$ <sup>7</sup> D $\flat$  Lydian scale; mode IV



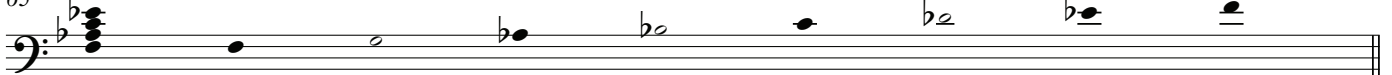
IV<sup>7</sup>

64 E $\flat$ <sup>7</sup> E $\flat$  Mixolydian scale; mode V



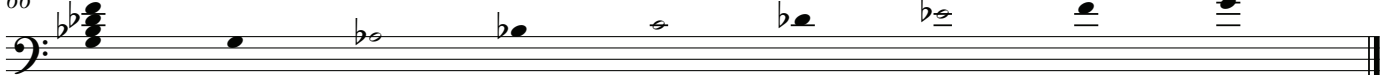
V<sup>7</sup>

65 F $m$ <sup>7</sup> F Aeolian scale; mode vi ("Natural minor")



vi<sup>7</sup>

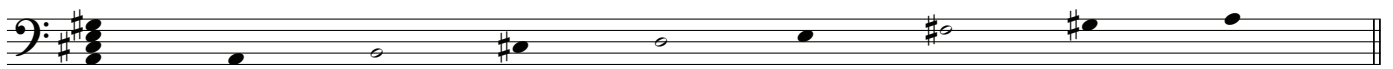
66 G $\delta$ <sup>7</sup> G Locrian scale; mode vii



vii<sup>o7</sup>

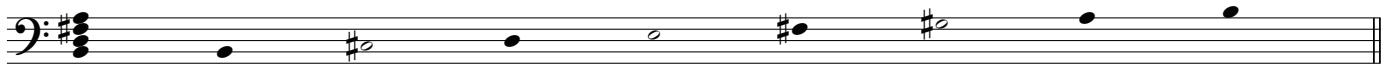
32 A major

67 A<sup>Δ7</sup> A Ionian scale; mode I



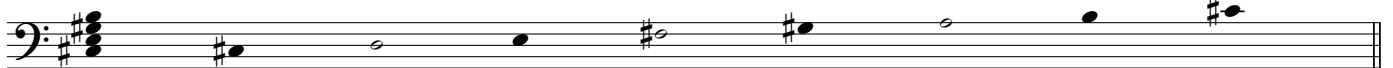
I<sup>7</sup>

68 Bm<sup>7</sup> B Dorian scale; mode ii



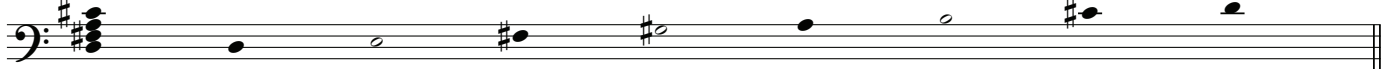
ii<sup>7</sup>

69 C#m<sup>7</sup> C# Phrygian scale; mode iii



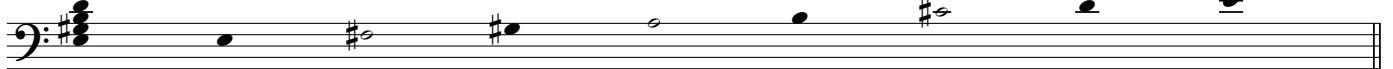
iii<sup>7</sup>

70 D<sup>Δ7</sup> D Lydian scale; mode IV



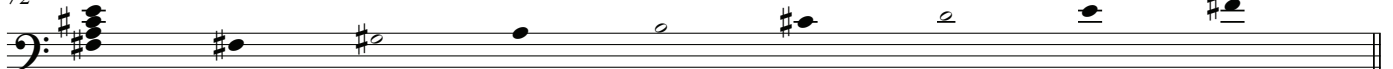
IV<sup>7</sup>

71 E<sup>7</sup> E Mixolydian scale; mode V



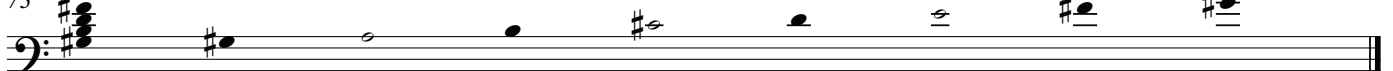
V<sup>7</sup>

72 F#m<sup>7</sup> F# Aeolian scale; mode vi ("Natural minor")



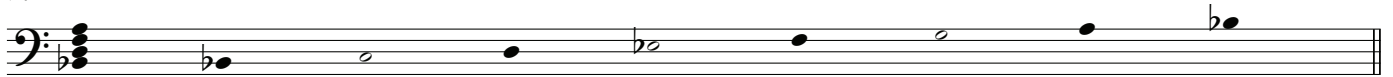
vi<sup>7</sup>

73 G#m<sup>7</sup> G# Locrian scale; mode vii



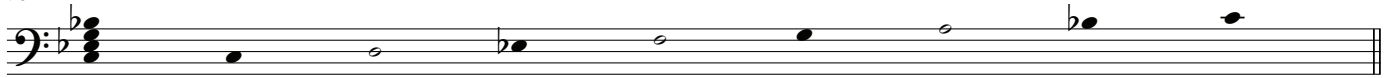
vii<sup>o7</sup>

74 B $\flat$  $\Delta$ <sup>7</sup> B $\flat$  Ionian scale; mode I



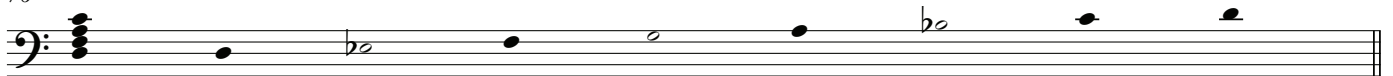
I<sup>7</sup>

75 C $m$ <sup>7</sup> C Dorian scale; mode ii



ii<sup>7</sup>

76 D $m$ <sup>7</sup> D Phrygian scale; mode iii



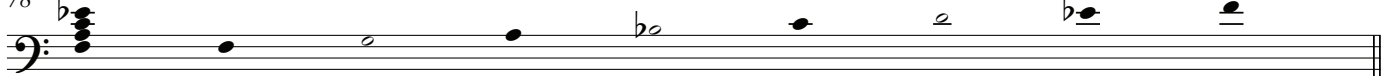
iii<sup>7</sup>

77 E $\flat$  $\Delta$ <sup>7</sup> E $\flat$  Lydian scale; mode IV



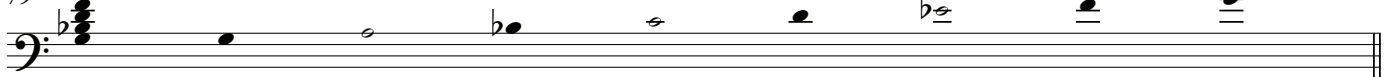
IV<sup>7</sup>

78 F<sup>7</sup> F Mixolydian scale; mode V



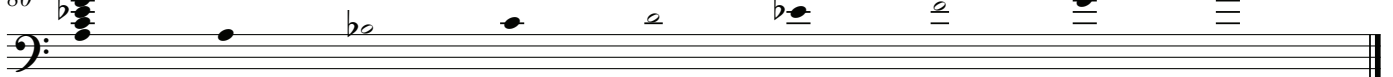
V<sup>7</sup>

79 G $m$ <sup>7</sup> G Aeolian scale; mode vi ("Natural minor")



vi<sup>7</sup>

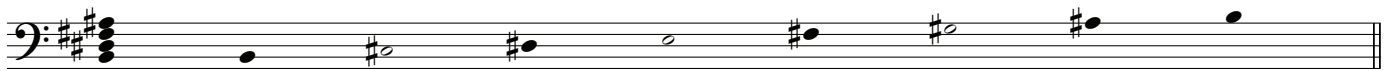
80 A $\emptyset$ <sup>7</sup> A Locrian scale; mode vii



vii<sup>o7</sup>

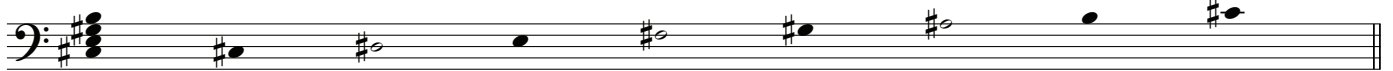
34 **B major**

81 **B<sup>Δ7</sup> B Ionian scale; mode I**



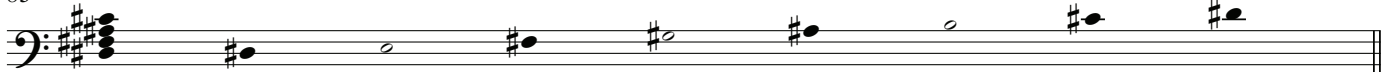
**I<sup>7</sup>**

82 **C#m<sup>7</sup> C# Dorian scale; mode ii**



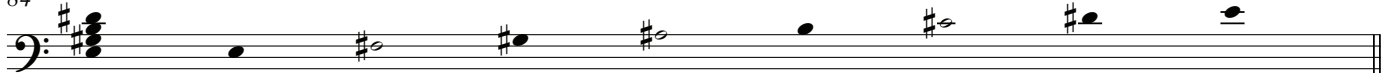
**ii<sup>7</sup>**

83 **D#m<sup>7</sup> D# Phrygian scale; mode iii**



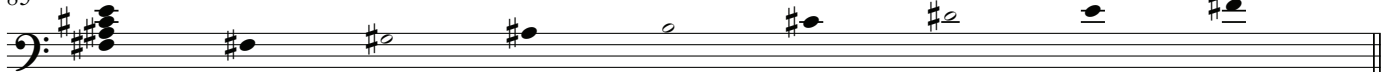
**iii<sup>7</sup>**

84 **E<sup>Δ7</sup> E Lydian scale; mode IV**



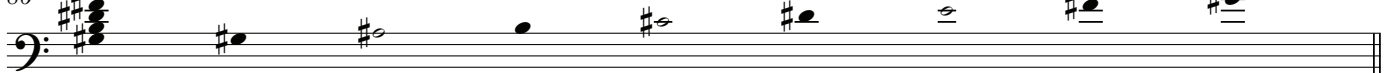
**IV<sup>7</sup>**

85 **F#m<sup>7</sup> F# Mixolydian scale; mode V**



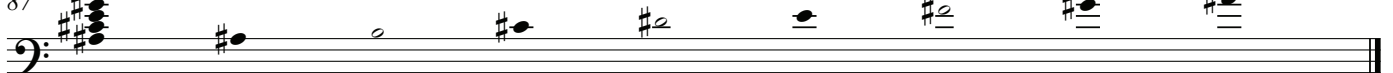
**V<sup>7</sup>**

86 **G#m<sup>7</sup> G# Aeolian scale; mode vi ("Natural minor")**



**vi<sup>7</sup>**

87 **A#<sup>ø7</sup> A# Locrian scale; mode vii**



**vii<sup>ø7</sup>**



# Chapter 4- Major Scale Modes

## (II. Parallel)

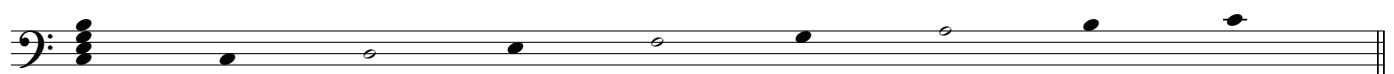
**Per Chapter 3: 2. Major scale modes** can be grouped together in two separate, but equally important ways:

1. **Relative modes**- the group of modes derived from a single scale in a single key.
2. **Parallel modes**- the group of modes derived from different scales in different keys, but sharing a common **root**.

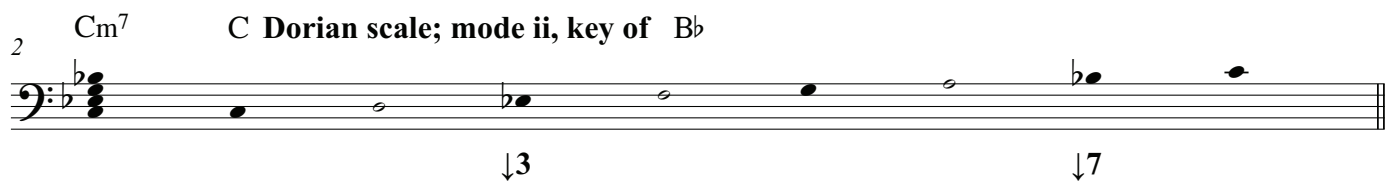
In this chapter, we will be looking at **parallel modes**.

a. Consider the scales **C Ionian** and **C Dorian**:

$C^{\Delta 7}$       **C Ionian scale; mode I**



2       $Cm^7$       **C Dorian scale; mode ii, key of B $\flat$**



1. Both **modes** shown in the diagram above are derived from different **major scales**, but share a common **root**, in this case the root **C**.

2. **C Ionian mode** and **C Dorian mode** can be said to be **parallel scales**.

3. The note **C** is known as the **pitch axis** for any mode or scale with the **root C**.

3.1 **Pitch axis theory** is a comparative theory of parallel scales, modes, and arpeggios based on the **major scale** as a "default" scale.

4. For the purposes of comparison, the following notation will be used regarding accidentals:

4.1 When a **natural** note is made **flat** ( $\flat$ ), it is said to be **lowered** ( $\downarrow$ ).

4.2 When a **sharp** note is made **natural** ( $\natural$ ), it is said to be **lowered** ( $\downarrow$ ).

4.3 When a **natural** note is made **sharp** ( $\sharp$ ), it is said to be **raised** ( $\uparrow$ ).

4.4 When a **flat** note is made **natural** ( $\natural$ ), it is said to be **raised** ( $\uparrow$ ).

5. Using **Ionian mode (the major scale)** as our "default" scale, we can draw a qualitative comparison between **Ionian** and **Dorian mode**.

5.1 **C Ionian** contains the notes [E] and [B].

5.2 **C Dorian** contains the notes [E $\flat$ ] and [B $\flat$ ].

5.3 **C Dorian mode** is equivalent to **C Ionian mode** with a

**lowered** ( $\flat$ )3, and **lowered** ( $\flat$ )7.

6. This qualitative comparison is known as **analysis**, and can be used to derive **scale formulas**.

6.1 A **scale formula** is a description of a **mode** comparative to its **parallel major scale**.

6.2 The **scale formula** for **Dorian mode** is [ $\downarrow$ 3, $\downarrow$ 7].

36  $C^{\Delta 7}$  C Ionian scale; mode I

3

4  $Cm^7$  C Phrygian scale; mode iii, key of  $A^b$

↓2      ↓3                      ↓6      ↓7

b. C Ionian mode and C Phrygian mode are parallel scales.

1.1 C Ionian contains the notes [D],[E],[A] and [B].

1.2 C Phrygian contains the notes [D $\flat$ ],[E $\flat$ ],[A $\flat$ ] and [B $\flat$ ].

2. C Phrygian mode is equivalent to C Ionian mode with a

lowered (b)2, lowered (b)3,

lowered (b)6, and lowered (b)7.

3 The scale formula for Phrygian mode is [ $\downarrow$ 2, $\downarrow$ 3, $\downarrow$ 6, $\downarrow$ 7].

5  $C^{\Delta 7}$  C Ionian scale; mode I

6  $C^{\Delta 7}$  C Lydian scale; mode IV, key of G

↑4

c. C Ionian mode and C Lydian mode are parallel scales.

1.1 C Ionian contains the note [F].

1.2 C Lydian contains the note [F $\sharp$ ].

2. C Lydian mode is equivalent to C Ionian mode with a

raised ( $\sharp$ )4.

3. The scale formula for Lydian mode is [ $\uparrow$ 4].

7  $C^{\Delta 7}$  C Ionian scale; mode I

8  $C^7$  C Mixolydian scale; mode V, key of F

d. C Ionian mode and C Mixolydian mode are parallel scales.

1.1 C Ionian contains the note [B].

1.2 C Mixolydian contains the note [Bb].

2. C Mixolydian mode is equivalent to C Ionian mode with a lowered (b)7.

3. The scale formula for Mixolydian mode is [ $\downarrow 7$ ].

9  $C^{\Delta 7}$  C Ionian scale; mode I

10  $Cm^7$  C Aeolian scale; mode vi ("Natural minor"), key of Eb

e. C Ionian mode and C Aeolian mode are parallel scales.

1.1 C Ionian contains the notes [E],[A] and [B].

1.2 C Aeolian contains the notes [Eb],[Ab] and [Bb].

2. C Aeolian mode is equivalent to C Ionian mode with a lowered (b)3, lowered (b)6, and lowered (b)7.

3. The scale formula for Aeolian mode is [ $\downarrow 3, \downarrow 6, \downarrow 7$ ].

11 C<sup>Δ7</sup> C Ionian scale; mode I

12 C<sup>∅7</sup> C Locrian scale; mode vii, key of D<sup>b</sup>

f. C Ionian mode and C Locrian mode are parallel scales.

1.1 C Ionian contains the notes [D],[E],[G],[A] and [B].

1.2 C Locrian contains the notes [D<sup>b</sup>],[E<sup>b</sup>],[G<sup>b</sup>],[A<sup>b</sup>] and [B<sup>b</sup>].

2. C Locrian mode is equivalent to C Ionian mode with a

lowered (b)2, lowered (b)3,  
lowered (b)5, lowered (b)6, and lowered (b)7.

3. The scale formula for Locrian mode is [↓2,↓3,↓5,↓6,↓7].

g. SUMMARY of parallel mode formulas:

1.1 Ionian = [R234567]

1.2 Dorian = [↓3,↓7]

1.3 Phrygian = [↓2,↓3,↓6,↓7]

1.4 Lydian = [↑4]

1.5 Mixolydian = [↓7]

1.6 Aeolian = [↓3,↓6,↓7]

1.7 Locrian = [↓2,↓3,↓5,↓6,↓7]

2. Each parallel mode corresponds to a specific 7th chord, derived from the chord tones contained within the mode.

2.1 The corresponding chord and mode are based on the same root.

### Per Chapter 3:

Notes from the mode may be used to improvise melodies over the corresponding chord.

Viewing chords and modes as corresponding pairs is known as the chord-scale approach.

3.1 Accidentals are also known as enharmonic equivalents.

Example: [C<sup>#</sup>] and [D<sup>b</sup>] are enharmonic equivalents.

3.2 When studying parallel modes, we often use modes based on enharmonic equivalent roots, depending on what key the mode is derived from.

Examples: [D<sup>b</sup> Dorian = C<sup>#</sup> Dorian]; [G<sup>b</sup> Aeolian = F<sup>#</sup> Aeolian]

3.3 Enharmonic equivalents are used to reduce the number of accidentals that occur in a scale.

13 C<sup>Δ7</sup> C Ionian scale; mode I

A musical staff in bass clef with a C<sup>Δ7</sup> chord. The scale notes are C, D, E, F, G, A, B, C, all marked with a fermata.

14 Cm<sup>7</sup> C Dorian scale; mode ii, key of B<sup>b</sup>

A musical staff in bass clef with a Cm<sup>7</sup> chord. The scale notes are C, D, E<sup>b</sup>, F, G, A, B, C, all marked with a fermata. Below the staff, there are two downward-pointing arrows with the numbers 3 and 7.

15 Cm<sup>7</sup> C Phrygian scale; mode iii, key of A<sup>b</sup>

A musical staff in bass clef with a Cm<sup>7</sup> chord. The scale notes are C, D<sup>b</sup>, E<sup>b</sup>, F, G, A<sup>b</sup>, B<sup>b</sup>, C, all marked with a fermata. Below the staff, there are four downward-pointing arrows with the numbers 2, 3, 6, and 7.

16 C<sup>Δ7</sup> C Lydian scale; mode IV, key of G

A musical staff in bass clef with a C<sup>Δ7</sup> chord. The scale notes are C, D, E, F<sup>#</sup>, G, A, B, C, all marked with a fermata. Below the staff, there is one upward-pointing arrow with the number 4.

17 C<sup>7</sup> C Mixolydian scale; mode V, key of F

A musical staff in bass clef with a C<sup>7</sup> chord. The scale notes are C, D, E, F, G, A, B<sup>b</sup>, C, all marked with a fermata. Below the staff, there is one downward-pointing arrow with the number 7.

18 Cm<sup>7</sup> C Aeolian scale; mode vi ("Natural minor"), key of E<sup>b</sup>

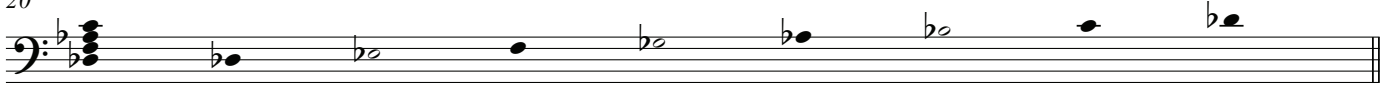
A musical staff in bass clef with a Cm<sup>7</sup> chord. The scale notes are C, D, E<sup>b</sup>, F, G, A<sup>b</sup>, B<sup>b</sup>, C, all marked with a fermata. Below the staff, there are three downward-pointing arrows with the numbers 3, 6, and 7.

19 C<sup>∅7</sup> C Locrian scale; mode vii, key of D<sup>b</sup>

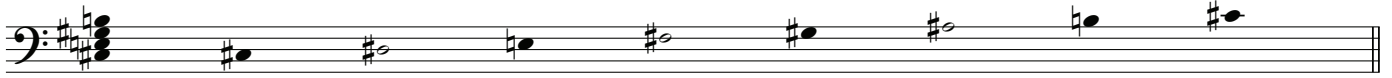
A musical staff in bass clef with a C<sup>∅7</sup> chord. The scale notes are C, D<sup>b</sup>, E<sup>b</sup>, F, G<sup>b</sup>, A<sup>b</sup>, B<sup>b</sup>, C, all marked with a fermata. Below the staff, there are six downward-pointing arrows with the numbers 2, 3, 5, 6, and 7.

40 **D<sup>b</sup> root**

20 **D<sup>b</sup>Δ<sup>7</sup> D<sup>b</sup> Ionian scale; mode I**

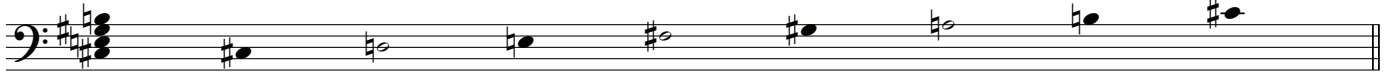


21 **C<sup>#</sup>m<sup>7</sup> C<sup>#</sup> Dorian scale; mode ii, key of B**



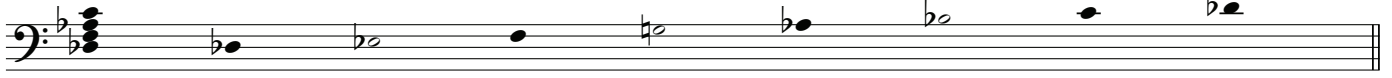
↓3  
**enharmonic equivalent of D<sup>b</sup> Dorian**

22 **C<sup>#</sup>m<sup>7</sup> C<sup>#</sup> Phrygian scale; mode iii, key of A**



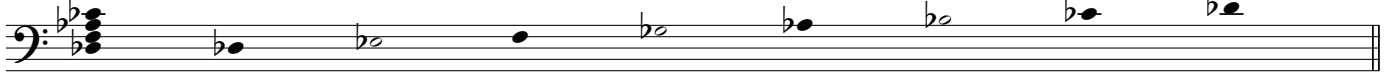
↓2 ↓3 ↓6 ↓7  
**enharmonic equivalent of D<sup>b</sup> Phrygian**

23 **D<sup>b</sup>Δ<sup>7</sup> D<sup>b</sup> Lydian scale; mode IV, key of A<sup>b</sup>**



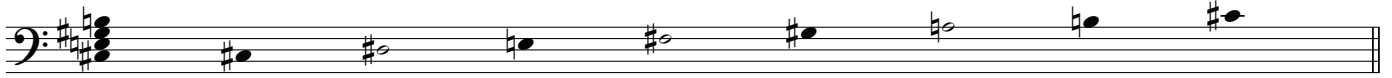
↑4

24 **D<sup>b</sup>7 D<sup>b</sup> Mixolydian scale; mode V, key of G<sup>b</sup>**



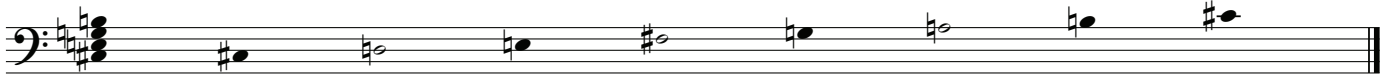
↓7

25 **C<sup>#</sup>m<sup>7</sup> C<sup>#</sup> Aeolian scale; mode vi ("Natural minor"), key of E**



↓3 ↓6 ↓7  
**enharmonic equivalent of D<sup>b</sup> Aeolian**

26 **C<sup>#</sup>Δ<sup>7</sup> C<sup>#</sup> Locrian scale; mode vii, key of D**



↓2 ↓3 ↓5 ↓6 ↓7  
**enharmonic equivalent of D<sup>b</sup> Locrian**

27  $D^{\Delta 7}$  D Ionian scale; mode I

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

28  $Dm^7$  D Dorian scale; mode ii, key of C

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

29  $Dm^7$  D Phrygian scale; mode iii, key of B $\flat$

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

30  $D^{\Delta 7}$  D Lydian scale; mode IV, key of A

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

31  $D^7$  D Mixolydian scale; mode V, key of G

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

32  $Dm^7$  D Aeolian scale; mode vi ("Natural minor"), key of F

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

33  $D^{\circ 7}$  D Locrian scale; mode vii, key of E $\flat$

↓1 ↓2 ↓3 ↓4 ↓5 ↓6 ↓7

42 **E<sup>b</sup> root**

34 **E<sup>b</sup>Δ<sup>7</sup>     E<sup>b</sup> Ionian scale; mode I**

35 **E<sup>b</sup>m<sup>7</sup>     E<sup>b</sup> Dorian scale; mode ii, key of D<sup>b</sup>**

36 **D<sup>#</sup>m<sup>7</sup>     D<sup>#</sup> Phrygian scale; mode iii, key of B**

enharmonic equivalent of E<sup>b</sup> Phrygian

37 **E<sup>b</sup>Δ<sup>7</sup>     E<sup>b</sup> Lydian scale; mode IV, key of B<sup>b</sup>**

38 **E<sup>b</sup>7     E<sup>b</sup> Mixolydian scale; mode V, key of A<sup>b</sup>**

39 **E<sup>b</sup>m<sup>7</sup>     E<sup>b</sup> Aeolian scale; mode vi ("Natural minor"), key of G<sup>b</sup>**

40 **D<sup>#</sup>ø<sup>7</sup>     D<sup>#</sup> Locrian scale; mode vii, key of E**

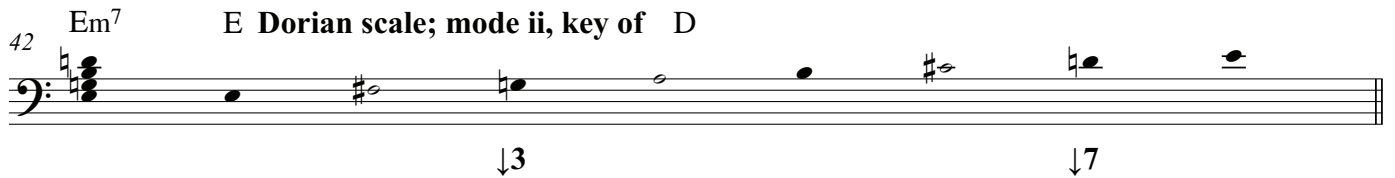
enharmonic equivalent of E<sup>b</sup> Locrian



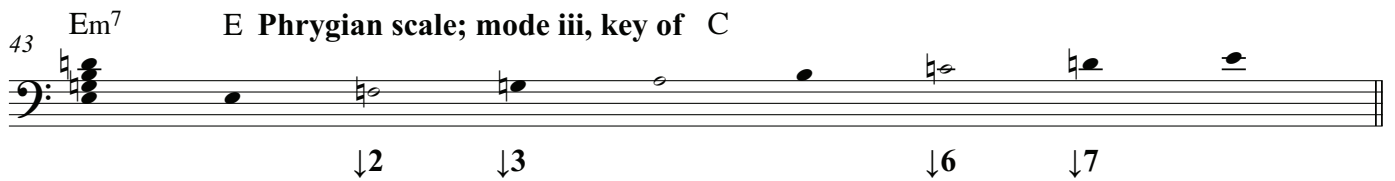
41 E<sup>Δ7</sup> E Ionian scale; mode I



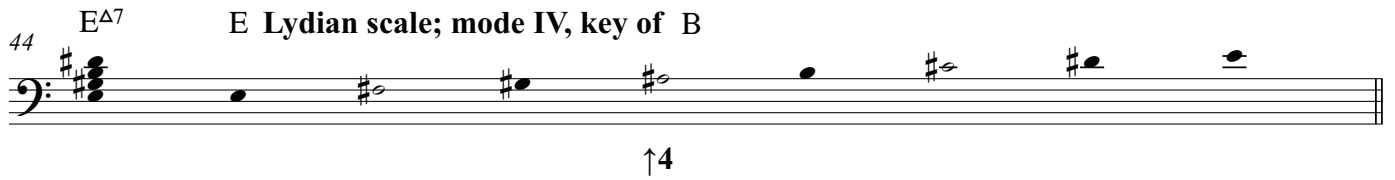
42 E<sup>m7</sup> E Dorian scale; mode ii, key of D



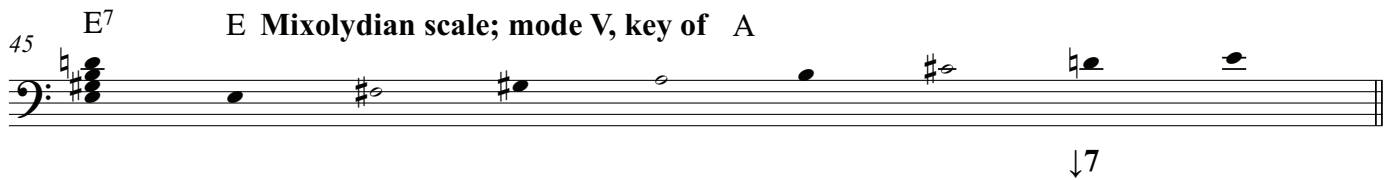
43 E<sup>m7</sup> E Phrygian scale; mode iii, key of C



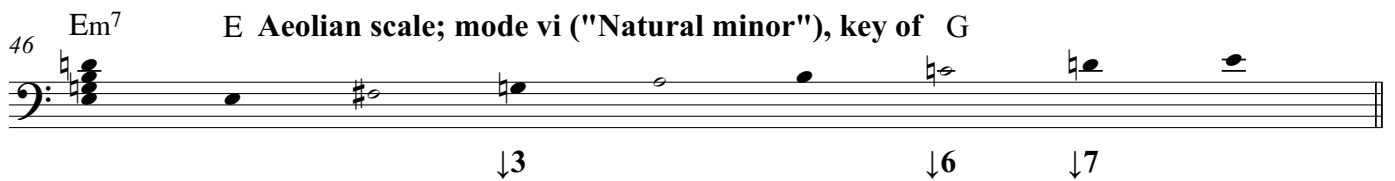
44 E<sup>Δ7</sup> E Lydian scale; mode IV, key of B



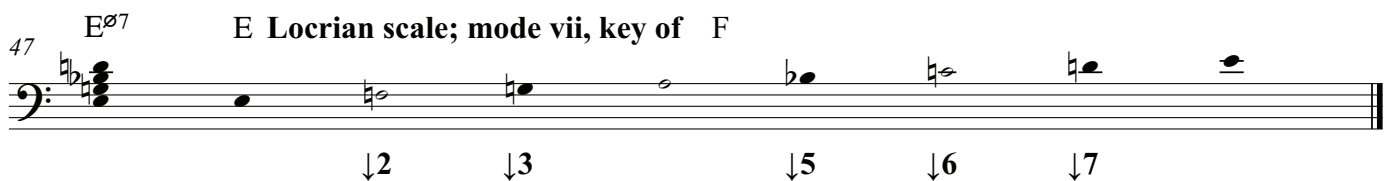
45 E<sup>7</sup> E Mixolydian scale; mode V, key of A



46 E<sup>m7</sup> E Aeolian scale; mode vi ("Natural minor"), key of G



47 E<sup>ø7</sup> E Locrian scale; mode vii, key of F



44 F root

48 F $\Delta$ 7 F Ionian scale; mode I

↓3 ↓7

49 Fm7 F Dorian scale; mode ii, key of Eb

↓3 ↓7

50 Fm7 F Phrygian scale; mode iii, key of Db

↓2 ↓3 ↓6 ↓7

51 F $\Delta$ 7 F Lydian scale; mode IV, key of C

↑4

52 F7 F Mixolydian scale; mode V, key of Bb

↓7

53 Fm7 F Aeolian scale; mode vi ("Natural minor"), key of Ab

↓3 ↓6 ↓7

54 F $\emptyset$ 7 F Locrian scale; mode vii, key of Gb

↓2 ↓3 ↓5 ↓6 ↓7

55 G $\flat$  $\Delta$ 7 G $\flat$  Ionian scale; mode I

The musical staff shows the G $\flat$  Ionian scale starting on G $\flat$  (B $\flat$  on the staff). The notes are: G $\flat$ , A $\flat$ , B $\flat$ , C $\flat$ , D $\flat$ , E $\flat$ , F $\flat$ , G $\flat$ . The key signature has two flats.

56 F $\sharp$ m7 F $\sharp$  Dorian scale; mode ii, key of E

The musical staff shows the F $\sharp$  Dorian scale starting on F $\sharp$  (C $\sharp$  on the staff). The notes are: F $\sharp$ , G $\sharp$ , A $\sharp$ , B, C, D, E, F $\sharp$ . The key signature has three sharps.

↓3

↓7

enharmonic equivalent of G $\flat$  Dorian

57 F $\sharp$ m7 F $\sharp$  Phrygian scale; mode iii, key of D

The musical staff shows the F $\sharp$  Phrygian scale starting on F $\sharp$  (C $\sharp$  on the staff). The notes are: F $\sharp$ , G $\sharp$ , A $\flat$ , B, C, D, E, F $\sharp$ . The key signature has three sharps.

↓2

↓3

↓6

↓7

enharmonic equivalent of G $\flat$  Phrygian

58 G $\flat$  $\Delta$ 7 G $\flat$  Lydian scale; mode IV, key of D $\flat$

The musical staff shows the G $\flat$  Lydian scale starting on G $\flat$  (B $\flat$  on the staff). The notes are: G $\flat$ , A $\flat$ , B $\flat$ , C $\flat$ , D $\flat$ , E $\flat$ , F $\sharp$ , G $\flat$ . The key signature has two flats.

↑4

59 F $\sharp$ 7 F $\sharp$  Mixolydian scale; mode V, key of B

The musical staff shows the F $\sharp$  Mixolydian scale starting on F $\sharp$  (C $\sharp$  on the staff). The notes are: F $\sharp$ , G $\sharp$ , A $\sharp$ , B, C, D, E $\flat$ , F $\sharp$ . The key signature has three sharps.

↓7

enharmonic equivalent of G $\flat$  Mixolydian

60 F $\sharp$ m7 F $\sharp$  Aeolian scale; mode vi ("Natural minor"), key of A

The musical staff shows the F $\sharp$  Aeolian scale starting on F $\sharp$  (C $\sharp$  on the staff). The notes are: F $\sharp$ , G $\sharp$ , A $\sharp$ , B, C, D, E $\flat$ , F $\sharp$ . The key signature has three sharps.

↓3

↓6

↓7

enharmonic equivalent of G $\flat$  Aeolian

61 F $\sharp$  $\emptyset$ 7 F $\sharp$  Locrian scale; mode vii, key of G

The musical staff shows the F $\sharp$  Locrian scale starting on F $\sharp$  (C $\sharp$  on the staff). The notes are: F $\sharp$ , G $\sharp$ , A $\flat$ , B, C, D, E $\flat$ , F $\sharp$ . The key signature has three sharps.

↓2

↓3

↓5

↓6

↓7

enharmonic equivalent of G $\flat$  Locrian

62 G<sup>Δ7</sup> G Ionian scale; mode I

↓3 ↓7

63 Gm<sup>7</sup> G Dorian scale; mode ii, key of F

↓3 ↓7

64 Gm<sup>7</sup> G Phrygian scale; mode iii, key of Eb

↓2 ↓3 ↓6 ↓7

65 G<sup>Δ7</sup> G Lydian scale; mode IV, key of D

↑4

66 G<sup>7</sup> G Mixolydian scale; mode V, key of C

↓7

67 Gm<sup>7</sup> G Aeolian scale; mode vi ("Natural minor"), key of Bb

↓3 ↓6 ↓7

68 G<sup>ø7</sup> G Locrian scale; mode vii, key of Ab

↓2 ↓3 ↓5 ↓6 ↓7

69 **Ab<sup>Δ7</sup>** **Ab Ionian scale; mode I**

70 **Abm<sup>7</sup>** **Ab Dorian scale; mode ii, key of Gb**

↓3 ↓7

71 **G#m<sup>7</sup>** **G# Phrygian scale; mode iii, key of E**

↓2 ↓3 ↓6 ↓7

enharmonic equivalent of Ab Phrygian

72 **Ab<sup>Δ7</sup>** **Ab Lydian scale; mode IV, key of Eb**

↑4

73 **Ab<sup>7</sup>** **Ab Mixolydian scale; mode V, key of Db**

↓7

74 **G#m<sup>7</sup>** **G# Aeolian scale; mode vi ("Natural minor"), key of B**

↓3 ↓6 ↓7

enharmonic equivalent of Ab Aeolian

75 **G#<sup>ø7</sup>** **G# Locrian scale; mode vii, key of A**

↓2 ↓3 ↓5 ↓6 ↓7

enharmonic equivalent of Ab Locrian

76 **A<sup>Δ</sup>7** A Ionian scale; mode I

A B C D E F# G A

77 **A<sup>m</sup>7** A Dorian scale; mode ii, key of G

A B C D E F G A

↓3 ↓7

78 **A<sup>m</sup>7** A Phrygian scale; mode iii, key of F

A Bb C D E F G A

↓2 ↓3 ↓6 ↓7

79 **A<sup>Δ</sup>7** A Lydian scale; mode IV, key of E

A B C D E F# G A

↑4

80 **A7** A Mixolydian scale; mode V, key of D

A B C D E F G A

↓7

81 **A<sup>m</sup>7** A Aeolian scale; mode vi ("Natural minor"), key of C

A B C D E F G A

↓3 ↓6 ↓7

82 **A<sup>∅</sup>7** A Locrian scale; mode vii, key of Bb

A Bb C D Eb F G A

↓2 ↓3 ↓5 ↓6 ↓7

83 B $\flat$  $\Delta$ 7 B $\flat$  Ionian scale; mode I

84 B $\flat$ m7 B $\flat$  Dorian scale; mode ii, key of A $\flat$

85 B $\flat$ m7 B $\flat$  Phrygian scale; mode iii, key of G $\flat$

86 B $\flat$  $\Delta$ 7 B $\flat$  Lydian scale; mode IV, key of F

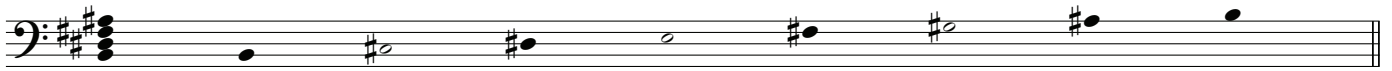
87 B $\flat$ 7 B $\flat$  Mixolydian scale; mode V, key of E $\flat$

88 B $\flat$ m7 B $\flat$  Aeolian scale; mode vi ("Natural minor"), key of D $\flat$

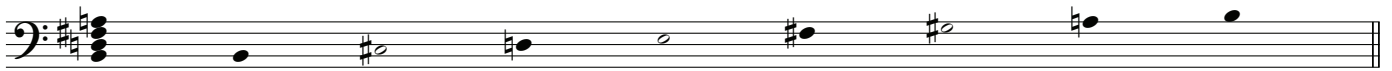
89 A $\sharp$  $\emptyset$ 7 A $\sharp$  Locrian scale; mode vii, key of B

enharmonic equivalent of B $\flat$  Locrian

90 **B<sup>Δ7</sup> B Ionian scale; mode I**



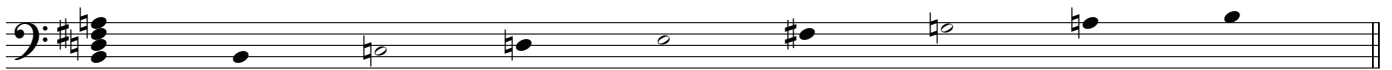
91 **Bm<sup>7</sup> B Dorian scale; mode ii, key of A**



↓3

↓7

92 **Bm<sup>7</sup> B Phrygian scale; mode iii, key of G**



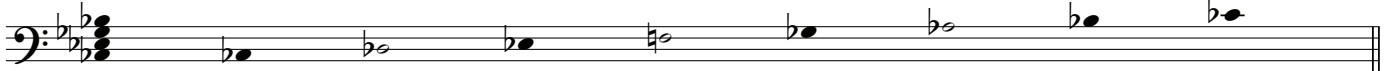
↓2

↓3

↓6

↓7

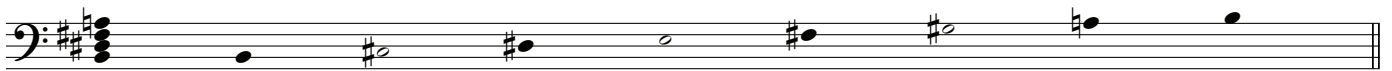
93 **Cb<sup>Δ7</sup> Cb Lydian scale; mode IV, key of Gb**



↑4

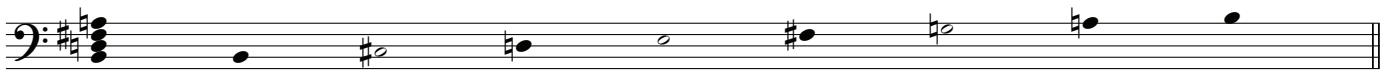
**enharmonic equivalent of B Lydian**

94 **B<sup>7</sup> B Mixolydian scale; mode V, key of E**



↓7

95 **Bm<sup>7</sup> B Aeolian scale; mode vi ("Natural minor"), key of D**

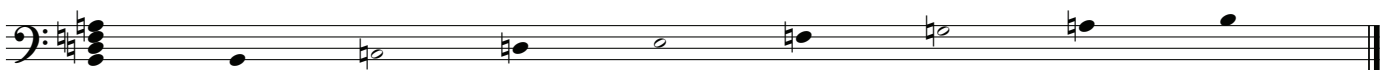


↓3

↓6

↓7

96 **B<sup>ø7</sup> B Locrian scale; mode vii, key of C**



↓2

↓3

↓5

↓6

↓7



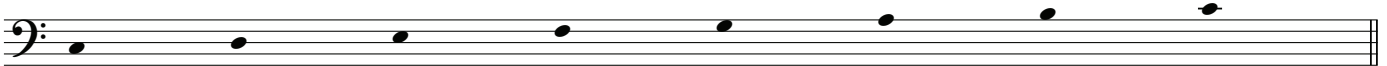
# Chapter 5- Harmonic analysis part I: Common Major Scale Chord Progressions

**Per Chapter 3:** c.1. A **parent scale** is the scale from which a set of modes is derived.

a. A **parent scale** is also the scale from which a set of **chords** is derived.

**C major** is an example of a parent scale:

## C major



**Per Chapter 2:** b.2.1 A **chord** is a harmony containing three (3) or more notes.

b. The **major scale** can be harmonized to produce **chords**.

**Per Chapter 2:** d. A **7th (seventh) chord** is a harmony containing four (4) notes.

c. **7th chords** are the most common type of chord used in jazz.

d. **Chords** may be organized into **chord progressions**.

1. A **chord progression** is a series or sequence of **chords**, defined in order of appearance from first to last.

1.2 **Chord progressions** are also referred to as **chord changes**.

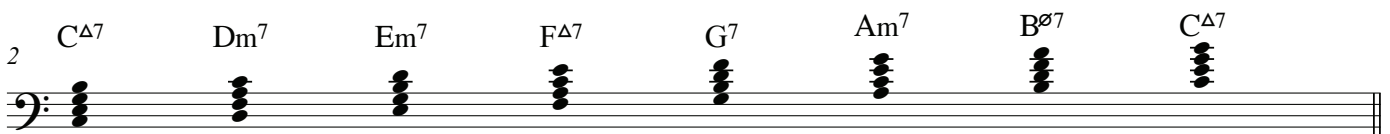
1.3 **Chord progressions** produce the harmonic background which is used to accompany **melodies**.

1.4 **Chord progressions** are also the harmonic background against which soloists **improvise**.

2. A **naturally occurring progression** is the default progression of chords generated by **harmonizing** the notes of a scale in order from first to last, and lowest to highest.

The following example shows the **naturally occurring progression** of **7th chords** produced by **harmonizing** the **major scale**:

## 7th chords



I <sup>7</sup>	ii <sup>7</sup>	iii <sup>7</sup>	IV <sup>7</sup>	V <sup>7</sup>	vi <sup>7</sup>	vii <sup>ø7</sup>	I <sup>7</sup>
Major7th	minor7th	minor7th	Major7th	Dominant7th	minor7th	half diminished7th	Major7th

e. **Chords** may also be organized into **progressions** in any order that appeals to the composer of a piece of music.

**Examples:** [I-V-vi-IV]; [IV-vi-iii-V]

In this chapter, we will be looking at **common chord progressions** derived from the **major scale**.

f. **Common chord progressions** are sequences of chords that are predictably found time and again in written music works (such as jazz lead sheets). 9:

1. When and if **chords** in a sequence follow **common chord progressions**, we can determine that all the chords in the sequence are derived from the same **parent scale**.

1.1 **Common chord progressions** may be determined by a process of elimination:

If two or more adjacent **chords** can be traced to a single **parent scale**, then those chords can be said to be **related**, and improvised against using the same **parent scale** and **relative modes**. Only the **chord tones** vary from one chord to the next.

2. Composers often make use of **common chord progressions**.

3. **Common chord progressions** tend to accompany **melodies** which are traditional (and evolutionary) in nature.

4. Composers working in improvisational styles make use of **common chord progressions** in order to allow soloists to apply a **common vocabulary of traditional melodic ideas** when improvising over chord changes.

g. **Analysis** is the study of musical form and structure.

1. **Analysis** includes the study of **chords** and their **parent scales**. This is called **harmonic analysis**.

1.1 One of the most important functions of **analysis** is determining the **Roman numeral** identity of a chord based on its place in the **naturally occurring progression** of its **parent scale**.

1.2 **Chords** in written music works are often used in contexts in which their **parent scales** are not readily obvious. The challenge of analysis is tracing isolated chords back to their parent scales.

1.3 **Chords** can often be traced back to more than one potential **parent scale**, as many scales share certain types of chords.

2. Analysis of the **naturally occurring progression** of a major scale can be represented by the **Roman numeral** values corresponding to each chord's place in the scale:

[I-ii-iii-IV-V-vi-vii]

3. Any **chord progression** can be represented by a series of **Roman numerals**.

3.1 **Roman numeral analysis** reduces a chord progression to a series of **Roman numerals** corresponding to each chord's place in the scale from which it is derived.

**Examples:** [I-ii-vi-IV-ii-V]; [iii-vi-IV-V-I]; [I-V-vi-IV]; [IV-vi-iii-V]

4. Studying **common chord progressions** is a useful tool for determining which scales, modes, and chord tones to use when soloing over a given chart, lead sheet, or other written music work.

4.1 **Common chord progressions** and their accompanying scales should be committed to memory in order to achieve the best results when improvising.

4.2 When **common chord progressions** are committed to memory, it becomes easier to identify the appropriate scale choices for soloing over a given chart, lead sheet, or other written music work.

h. Examples of **common chord progressions** (C major parent scale):

### 1. [V-I] progression

$V^7$                    $I^7$   
 Dominant7th      Major7th

Corresponding **modes** and **chord tones**

$V^7$                    $I^7$   
 Dominant7th                          Major7th

1.1 The previous example is a **[V-I] chord progression**, pronounced "five-one." This progression is known as a **[V-I] turnaround**.

A **turnaround** is a short chord progression that leads from one melodic phrase into another melodic phrase.

1.2 The **[V] chord** and **[I] chord** are both derived from the same **parent scale** (C major in this case).

1.3 **Melodies** may be improvised over each **chord** using the same **parent scale**.

1.4 **Melodies** may also be improvised over each **chord** using the specific **modes** and **chord tones** corresponding to each **chord**.

## 2. [IV-V-I] progression

6

F<sup>Δ7</sup>      G<sup>7</sup>      C<sup>Δ7</sup>

IV<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>

Major7th      Dominant7th      Major7th

Corresponding **modes** and **chord tones**

7

F<sup>Δ7</sup> F Lydian scale; mode IV      G<sup>7</sup> G Mixolydian scale; mode V      C<sup>Δ7</sup> C Ionian scale; mode I

IV<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>

Major7th      Dominant7th      Major7th

2.1 The previous example is a **[IV-V-I] chord progression**, pronounced "four-five-one." This progression is known as a **[IV-V-I] turnaround**.

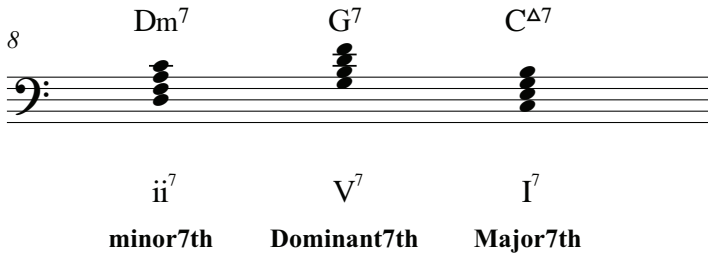
2.2 The **[IV] chord**, **[V] chord**, and **[I] chord** are all derived from the same **parent scale**.

2.3 **Melodies** may be improvised over each **chord** using the same **parent scale**.

2.4 **Melodies** may also be improvised over each **chord** using the specific **modes** and **chord tones** corresponding to each **chord**.

3. [ii-V-I] progression

8



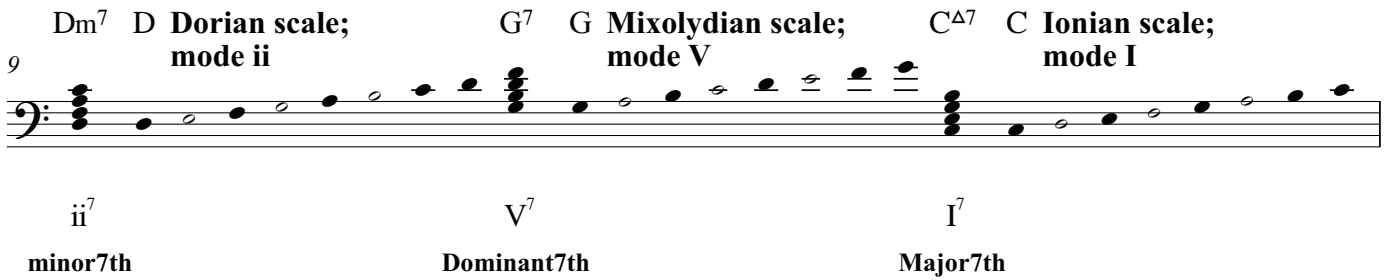
Dm<sup>7</sup>      G<sup>7</sup>      C<sup>Δ7</sup>

ii<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>

minor7th      Dominant7th      Major7th

Corresponding modes and chord tones

9



Dm<sup>7</sup> D Dorian scale; mode ii      G<sup>7</sup> G Mixolydian scale; mode V      C<sup>Δ7</sup> C Ionian scale; mode I

ii<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>

minor7th      Dominant7th      Major7th

3.1 The previous example is a **[ii-V-I] chord progression**, pronounced "two-five-one." This progression is known as a **[ii-V-I] turnaround**.

3.2 The **[ii] chord**, **[V] chord**, and **[I] chord** are all derived from the same **parent scale**.

3.3 Prior statements 2.3 and 2.4 apply.

## 4. [iii-vi-ii-V-I] progression

10

Em<sup>7</sup>      Am<sup>7</sup>      Dm<sup>7</sup>      G<sup>7</sup>      C<sup>Δ7</sup>

iii<sup>7</sup>      vi<sup>7</sup>      ii<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>

minor7th      minor7th      minor7th      Dominant7th      Major7th

## Corresponding modes and chord tones

13

Em<sup>7</sup>    E Phrygian scale;  
mode iii

Am<sup>7</sup>    A Aeolian scale;  
mode vi ("Natural minor")

iii<sup>7</sup>      vi<sup>7</sup>

minor7th      minor7th

14

Dm<sup>7</sup>    D Dorian scale;  
mode ii

G<sup>7</sup>    G Mixolydian scale;  
mode V

C<sup>Δ7</sup>    C Ionian scale;  
mode I

ii<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>

minor7th      Dominant7th      Major7th

4.1 The previous example is a **[iii-vi-ii-V-I] chord progression**, pronounced "three-six-two-five-one." This progression is known as a **[iii-vi-ii-V-I] turnaround**.

4.2 This progression is also known as a **falling 5ths progression**, as the root notes of each chord [E-A-D-G-C] are 5 letters apart descending through the musical alphabet:

[E-D-C-B-A-G-F-E-D-C-B-A-G-F-E-D-C]

4.3 Prior statements 2.3 and 2.4 apply.

5. [IV-vii-iii-vi-ii-V-I] progression

IV<sup>7</sup> Major7th      vii<sup>ø7</sup> half diminished7th      iii<sup>7</sup> minor7th      vi<sup>7</sup> minor7th      ii<sup>7</sup> minor7th      V<sup>7</sup> Dominant7th      I<sup>7</sup> Major7th

Corresponding modes and chord tones

IV<sup>7</sup> Major7th      vii<sup>ø7</sup> half diminished7th

iii<sup>7</sup> minor7th      vi<sup>7</sup> minor7th

ii<sup>7</sup> minor7th      V<sup>7</sup> Dominant7th      I<sup>7</sup> Major7th

5.1 The previous example is a [IV-vii-iii-vi-ii-V-I] chord progression, pronounced "four-seven-three-six-two-five-one."

5.2 This progression is also a **falling 5ths progression**; the root notes of each chord [F-B-E-A-D-G-C] are 5 letters apart descending through the musical alphabet:

[F-E-D-C-B-A-G-F-E-D-C-B-A-G-F-E-D-C-B-A-G-F-E-D-C]

5.3 Prior statements 2.3 and 2.4 apply.

## 6. [ii-V-I-IV-vii-iii-vi] progression

24

Dm<sup>7</sup>      G<sup>7</sup>      C<sup>Δ7</sup>      F<sup>Δ7</sup>      B<sup>ø7</sup>      Em<sup>7</sup>      Am<sup>7</sup>

ii<sup>7</sup>      V<sup>7</sup>      I<sup>7</sup>      IV<sup>7</sup>      vii<sup>ø7</sup>      iii<sup>7</sup>      vi<sup>7</sup>

minor7th    Dominant7th    Major7th    Major7th    half diminished7th    minor7th    minor7th

Corresponding **modes** and **chord tones**

28

Dm<sup>7</sup>    D    Dorian scale; mode ii      G<sup>7</sup>    G    Mixolydian scale; mode V

ii<sup>7</sup>      V<sup>7</sup>

minor7th      Dominant7th

29

C<sup>Δ7</sup>    C    Ionian scale; mode I      F<sup>Δ7</sup>    F    Lydian scale; mode IV

I<sup>7</sup>      IV<sup>7</sup>

Major7th      Major7th

30

B<sup>ø7</sup>    B    Locrian scale; mode vii      Em<sup>7</sup>    E    Phrygian scale; mode iii      Am<sup>7</sup>    A    Aeolian scale; mode vi ("Natural minor")

vii<sup>ø7</sup>      iii<sup>7</sup>      vi<sup>7</sup>

half diminished7th      minor7th      minor7th

6.1 The previous example is a [ii-V-I-IV-vii-iii-vi] **chord progression**, pronounced "two-five-one-four-seven-three-six."

6.2 This progression is also a **falling 5ths progression**.

6.3 Prior statements 2.3 and 2.4 apply.



7. [I-iii-vi-IV-ii-V-vii-I] progression

32 C<sup>Δ7</sup> Em<sup>7</sup> Am<sup>7</sup> F<sup>Δ7</sup> Dm<sup>7</sup> G<sup>7</sup> B<sup>ø7</sup> C<sup>Δ7</sup>

I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>  
 Major7th minor7th minor7th Major7th minor7th Dominant7th half diminished7th Major7th

Corresponding modes and chord tones

36 C<sup>Δ7</sup> C Ionian scale; mode I Em<sup>7</sup> E Phrygian scale; mode iii

I<sup>7</sup> iii<sup>7</sup>  
 Major7th minor7th

37 Am<sup>7</sup> A Aeolian scale; mode vi ("Natural minor") F<sup>Δ7</sup> F Lydian scale; mode IV

vi<sup>7</sup> IV<sup>7</sup>  
 minor7th Major7th

38 Dm<sup>7</sup> D Dorian scale; mode ii G<sup>7</sup> G Mixolydian scale; mode V

ii<sup>7</sup> V<sup>7</sup>  
 minor7th Dominant7th

39 B<sup>ø7</sup> B Locrian scale; mode vii C<sup>Δ7</sup> C Ionian scale; mode I

vii<sup>ø7</sup> I<sup>7</sup>  
 half diminished7th Major7th

7.1 The previous example is a [I-iii-vi-IV-ii-V-vii-I] chord progression, pronounced "one-three-six-four-two-five-seven-one." Variations of this progression are frequently found in classically influenced music; the progression evolved out of the rules of four-part choral writing.

7.2 Prior statements 2.3 and 2.4 apply.

60 j. Parent scales and common chord progressions in all keys  
(corresponding modes and chord tones omitted):

C Major

1. [V-I] progression

G<sup>7</sup> C<sup>Δ7</sup>

2. [IV-V-I] progression

F<sup>Δ7</sup> G<sup>7</sup> C<sup>Δ7</sup>

40

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

3. [ii-V-I] progression

Dm<sup>7</sup> G<sup>7</sup> C<sup>Δ7</sup>

4. [iii-vi-ii-V-I] progression

Em<sup>7</sup> Am<sup>7</sup> Dm<sup>7</sup> G<sup>7</sup> C<sup>Δ7</sup>

42

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

F<sup>Δ7</sup> B<sup>ø7</sup> Em<sup>7</sup> Am<sup>7</sup> Dm<sup>7</sup> G<sup>7</sup> C<sup>Δ7</sup>

46

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

Dm<sup>7</sup> G<sup>7</sup> C<sup>Δ7</sup> F<sup>Δ7</sup> B<sup>ø7</sup> Em<sup>7</sup> Am<sup>7</sup>

50

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

C<sup>Δ7</sup> Em<sup>7</sup> Am<sup>7</sup> F<sup>Δ7</sup> Dm<sup>7</sup> G<sup>7</sup> B<sup>ø7</sup> C<sup>Δ7</sup>

54

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

IV<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

vii<sup>ø7</sup>

I<sup>7</sup>

1. [V-I] progression

2. [IV-V-I] progression

58

V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

3. [ii-V-I] progression

4. [iii-vi-ii-V-I] progression

60

ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

64

IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

68

ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

72

I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

62 D Major

1. [V-I] progression

A<sup>7</sup> D<sup>Δ7</sup>

76

V<sup>7</sup> I<sup>7</sup>

2. [IV-V-I] progression

G<sup>Δ7</sup> A<sup>7</sup> D<sup>Δ7</sup>

IV<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

3. [ii-V-I] progression

Em<sup>7</sup> A<sup>7</sup> D<sup>Δ7</sup>

78

ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

4. [iii-vi-ii-V-I] progression

F<sup>Δm7</sup> Bm<sup>7</sup> Em<sup>7</sup> A<sup>7</sup> D<sup>Δ7</sup>

iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

G<sup>Δ7</sup> C<sup>Δ#o7</sup> F<sup>Δm7</sup> Bm<sup>7</sup> Em<sup>7</sup> A<sup>7</sup> D<sup>Δ7</sup>

82

IV<sup>7</sup> vii<sup>o7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

Em<sup>7</sup> A<sup>7</sup> D<sup>Δ7</sup> G<sup>Δ7</sup> C<sup>Δ#o7</sup> F<sup>Δm7</sup> Bm<sup>7</sup>

86

ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> vii<sup>o7</sup> iii<sup>7</sup> vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

D<sup>Δ7</sup> F<sup>Δm7</sup> Bm<sup>7</sup> G<sup>Δ7</sup> Em<sup>7</sup> A<sup>7</sup> C<sup>Δ#o7</sup> D<sup>Δ7</sup>

90

I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>o7</sup> I<sup>7</sup>

1. [V-I] progression

2. [IV-V-I] progression

94

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

3. [ii-V-I] progression

4. [iii-vi-ii-V-I] progression

96

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

100

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

104

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

108

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

IV<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

vii<sup>ø7</sup>

I<sup>7</sup>

## E Major

## 1. [V-I] progression

B<sup>7</sup> E<sup>Δ7</sup>

112

V<sup>7</sup> I<sup>7</sup>

## 2. [IV-V-I] progression

A<sup>Δ7</sup> B<sup>7</sup> E<sup>Δ7</sup>

112

IV<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 3. [ii-V-I] progression

F<sup>♯m7</sup> B<sup>7</sup> E<sup>Δ7</sup>

114

ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 4. [iii-vi-ii-V-I] progression

G<sup>♯m7</sup> C<sup>♯m7</sup> F<sup>♯m7</sup> B<sup>7</sup> E<sup>Δ7</sup>

114

iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 5. [IV-vii-iii-vi-ii-V-I] progression

A<sup>Δ7</sup> D<sup>♯ø7</sup> G<sup>♯m7</sup> C<sup>♯m7</sup> F<sup>♯m7</sup> B<sup>7</sup> E<sup>Δ7</sup>

118

IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 6. [ii-V-I-IV-vii-iii-vi] progression

F<sup>♯m7</sup> B<sup>7</sup> E<sup>Δ7</sup> A<sup>Δ7</sup> D<sup>♯ø7</sup> G<sup>♯m7</sup> C<sup>♯m7</sup>

122

ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup>

## 7. [I-iii-vi-IV-ii-V-vii-I] progression

E<sup>Δ7</sup> G<sup>♯m7</sup> C<sup>♯m7</sup> A<sup>Δ7</sup> F<sup>♯m7</sup> B<sup>7</sup> D<sup>♯ø7</sup> E<sup>Δ7</sup>

126

I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

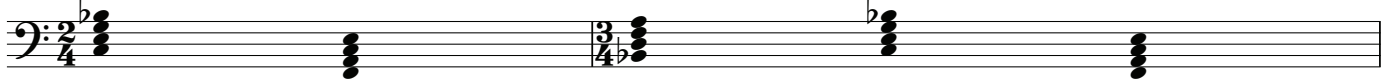
1. [V-I] progression

C<sup>7</sup> F<sup>Δ7</sup>

2. [IV-V-I] progression

B<sup>b</sup>Δ<sup>7</sup> C<sup>7</sup> F<sup>Δ7</sup>

130



V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

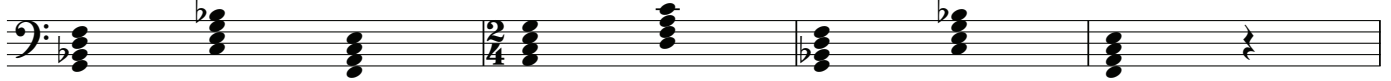
3. [ii-V-I] progression

Gm<sup>7</sup> C<sup>7</sup> F<sup>Δ7</sup>

4. [iii-vi-ii-V-I] progression

Am<sup>7</sup> Dm<sup>7</sup> Gm<sup>7</sup> C<sup>7</sup> F<sup>Δ7</sup>

132



ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

B<sup>b</sup>Δ<sup>7</sup> E<sup>ø7</sup> Am<sup>7</sup> Dm<sup>7</sup> Gm<sup>7</sup> C<sup>7</sup> F<sup>Δ7</sup>

136

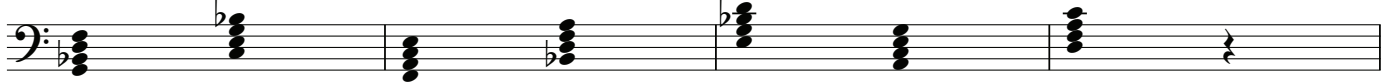


IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

Gm<sup>7</sup> C<sup>7</sup> F<sup>Δ7</sup> B<sup>b</sup>Δ<sup>7</sup> E<sup>ø7</sup> Am<sup>7</sup> Dm<sup>7</sup>

140



ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

F<sup>Δ7</sup> Am<sup>7</sup> Dm<sup>7</sup> B<sup>b</sup>Δ<sup>7</sup> Gm<sup>7</sup> C<sup>7</sup> E<sup>ø7</sup> F<sup>Δ7</sup>

144



I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

1. [V-I] progression

Db<sup>7</sup> Gb<sup>Δ7</sup>

2. [IV-V-I] progression

Cb<sup>Δ7</sup> Db<sup>7</sup> Gb<sup>Δ7</sup>

148

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

3. [ii-V-I] progression

Abm<sup>7</sup> Db<sup>7</sup> Gb<sup>Δ7</sup>

4. [iii-vi-ii-V-I] progression

Bbm<sup>7</sup> Ebm<sup>7</sup> Abm<sup>7</sup> Db<sup>7</sup> Gb<sup>Δ7</sup>

150

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

Cb<sup>Δ7</sup> F<sup>ø7</sup> Bbm<sup>7</sup> Ebm<sup>7</sup> Abm<sup>7</sup> Db<sup>7</sup> Gb<sup>Δ7</sup>

154

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

Abm<sup>7</sup> Db<sup>7</sup> Gb<sup>Δ7</sup> Cb<sup>Δ7</sup> F<sup>ø7</sup> Bbm<sup>7</sup> Ebm<sup>7</sup>

158

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

Gb<sup>Δ7</sup> Bbm<sup>7</sup> Ebm<sup>7</sup> Cb<sup>Δ7</sup> Abm<sup>7</sup> Db<sup>7</sup> F<sup>ø7</sup> Gb<sup>Δ7</sup>

162

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

IV<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

vii<sup>ø7</sup>

I<sup>7</sup>



# G Major

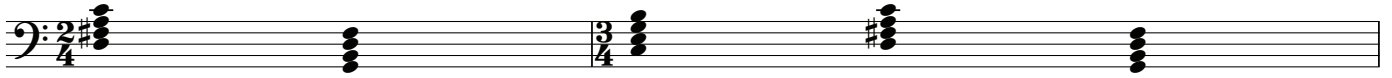
## 1. [V-I] progression

D<sup>7</sup> G<sup>Δ7</sup>

## 2. [IV-V-I] progression

C<sup>Δ7</sup> D<sup>7</sup> G<sup>Δ7</sup>

166



V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 3. [ii-V-I] progression

Am<sup>7</sup> D<sup>7</sup> G<sup>Δ7</sup>

## 4. [iii-vi-ii-V-I] progression

Bm<sup>7</sup> Em<sup>7</sup> Am<sup>7</sup> D<sup>7</sup> G<sup>Δ7</sup>

168

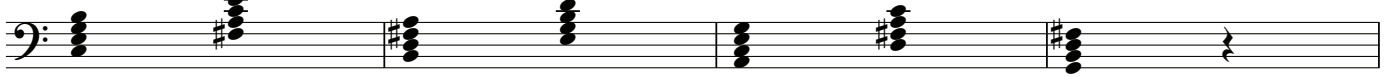


ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 5. [IV-vii-iii-vi-ii-V-I] progression

C<sup>Δ7</sup> F<sup>♯ø7</sup> Bm<sup>7</sup> Em<sup>7</sup> Am<sup>7</sup> D<sup>7</sup> G<sup>Δ7</sup>

172



IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 6. [ii-V-I-IV-vii-iii-vi] progression

Am<sup>7</sup> D<sup>7</sup> G<sup>Δ7</sup> C<sup>Δ7</sup> F<sup>♯ø7</sup> Bm<sup>7</sup> Em<sup>7</sup>

176



ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup>

## 7. [I-iii-vi-IV-ii-V-vii-I] progression

G<sup>Δ7</sup> Bm<sup>7</sup> Em<sup>7</sup> C<sup>Δ7</sup> Am<sup>7</sup> D<sup>7</sup> F<sup>♯ø7</sup> G<sup>Δ7</sup>

180



I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

**1. [V-I] progression**

E<sup>b</sup>7                      A<sup>b</sup>Δ7

184

V<sup>7</sup>                      I<sup>7</sup>

**2. [IV-V-I] progression**

D<sup>b</sup>Δ7                      E<sup>b</sup>7                      A<sup>b</sup>Δ7

IV<sup>7</sup>                      V<sup>7</sup>                      I<sup>7</sup>

**3. [ii-V-I] progression**

B<sup>b</sup>m7                      E<sup>b</sup>7                      A<sup>b</sup>Δ7

186

ii<sup>7</sup>                      V<sup>7</sup>                      I<sup>7</sup>

**4. [iii-vi-ii-V-I] progression**

Cm7                      Fm7                      B<sup>b</sup>m7                      E<sup>b</sup>7                      A<sup>b</sup>Δ7

iii<sup>7</sup>                      vi<sup>7</sup>                      ii<sup>7</sup>                      V<sup>7</sup>                      I<sup>7</sup>

**5. [IV-vii-iii-vi-ii-V-I] progression**

D<sup>b</sup>Δ7                      G<sup>ø</sup>7                      Cm7                      Fm7                      B<sup>b</sup>m7                      E<sup>b</sup>7                      A<sup>b</sup>Δ7

190

IV<sup>7</sup>                      vii<sup>ø7</sup>                      iii<sup>7</sup>                      vi<sup>7</sup>                      ii<sup>7</sup>                      V<sup>7</sup>                      I<sup>7</sup>

**6. [ii-V-I-IV-vii-iii-vi] progression**

B<sup>b</sup>m7                      E<sup>b</sup>7                      A<sup>b</sup>Δ7                      D<sup>b</sup>Δ7                      G<sup>ø</sup>7                      Cm7                      Fm7

194

ii<sup>7</sup>                      V<sup>7</sup>                      I<sup>7</sup>                      IV<sup>7</sup>                      vii<sup>ø7</sup>                      iii<sup>7</sup>                      vi<sup>7</sup>

**7. [I-iii-vi-IV-ii-V-vii-I] progression**

A<sup>b</sup>Δ7                      Cm7                      Fm7                      D<sup>b</sup>Δ7                      B<sup>b</sup>m7                      E<sup>b</sup>7                      G<sup>ø</sup>7                      A<sup>b</sup>Δ7

198

I<sup>7</sup>                      iii<sup>7</sup>                      vi<sup>7</sup>                      IV<sup>7</sup>                      ii<sup>7</sup>                      V<sup>7</sup>                      vii<sup>ø7</sup>                      I<sup>7</sup>

A Major

1. [V-I] progression

E<sup>7</sup> A<sup>Δ7</sup>

2. [IV-V-I] progression

D<sup>Δ7</sup> E<sup>7</sup> A<sup>Δ7</sup>

202

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

3. [ii-V-I] progression

Bm<sup>7</sup> E<sup>7</sup> A<sup>Δ7</sup>

4. [iii-vi-ii-V-I] progression

C<sup>♯</sup>m<sup>7</sup> F<sup>♯</sup>m<sup>7</sup> Bm<sup>7</sup> E<sup>7</sup> A<sup>Δ7</sup>

204

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

5. [IV-vii-iii-vi-ii-V-I] progression

D<sup>Δ7</sup> G<sup>♯</sup>ø<sup>7</sup> C<sup>♯</sup>m<sup>7</sup> F<sup>♯</sup>m<sup>7</sup> Bm<sup>7</sup> E<sup>7</sup> A<sup>Δ7</sup>

208

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

6. [ii-V-I-IV-vii-iii-vi] progression

Bm<sup>7</sup> E<sup>7</sup> A<sup>Δ7</sup> D<sup>Δ7</sup> G<sup>♯</sup>ø<sup>7</sup> C<sup>♯</sup>m<sup>7</sup> F<sup>♯</sup>m<sup>7</sup>

212

ii<sup>7</sup>

V<sup>7</sup>

I<sup>7</sup>

IV<sup>7</sup>

vii<sup>ø7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

7. [I-iii-vi-IV-ii-V-vii-I] progression

A<sup>Δ7</sup> C<sup>♯</sup>m<sup>7</sup> F<sup>♯</sup>m<sup>7</sup> D<sup>Δ7</sup> Bm<sup>7</sup> E<sup>7</sup> G<sup>♯</sup>ø<sup>7</sup> A<sup>Δ7</sup>

216

I<sup>7</sup>

iii<sup>7</sup>

vi<sup>7</sup>

IV<sup>7</sup>

ii<sup>7</sup>

V<sup>7</sup>

vii<sup>ø7</sup>

I<sup>7</sup>

70 B $\flat$  Major

1. [V-I] progression

F $^7$  B $\flat\Delta^7$

220

V $^7$  I $^7$

2. [IV-V-I] progression

E $\flat\Delta^7$  F $^7$  B $\flat\Delta^7$

IV $^7$  V $^7$  I $^7$

3. [ii-V-I] progression

Cm $^7$  F $^7$  B $\flat\Delta^7$

222

ii $^7$  V $^7$  I $^7$

4. [iii-vi-ii-V-I] progression

Dm $^7$  Gm $^7$  Cm $^7$  F $^7$  B $\flat\Delta^7$

iii $^7$  vi $^7$  ii $^7$  V $^7$  I $^7$

5. [IV-vii-iii-vi-ii-V-I] progression

E $\flat\Delta^7$  A $\emptyset^7$  Dm $^7$  Gm $^7$  Cm $^7$  F $^7$  B $\flat\Delta^7$

226

IV $^7$  vii $\emptyset^7$  iii $^7$  vi $^7$  ii $^7$  V $^7$  I $^7$

6. [ii-V-I-IV-vii-iii-vi] progression

Cm $^7$  F $^7$  B $\flat\Delta^7$  E $\flat\Delta^7$  A $\emptyset^7$  Dm $^7$  Gm $^7$

230

ii $^7$  V $^7$  I $^7$  IV $^7$  vii $\emptyset^7$  iii $^7$  vi $^7$

7. [I-iii-vi-IV-ii-V-vii-I] progression

B $\flat\Delta^7$  Dm $^7$  Gm $^7$  E $\flat\Delta^7$  Cm $^7$  F $^7$  A $\emptyset^7$  B $\flat\Delta^7$

234

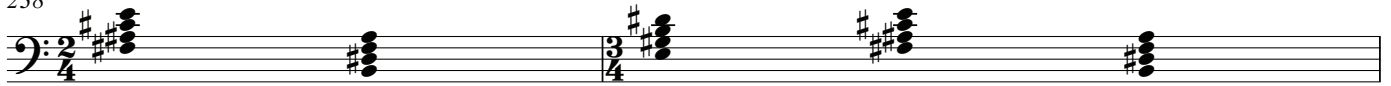
I $^7$  iii $^7$  vi $^7$  IV $^7$  ii $^7$  V $^7$  vii $\emptyset^7$  I $^7$

# B Major

## 1. [V-I] progression

F#7 BΔ7

238

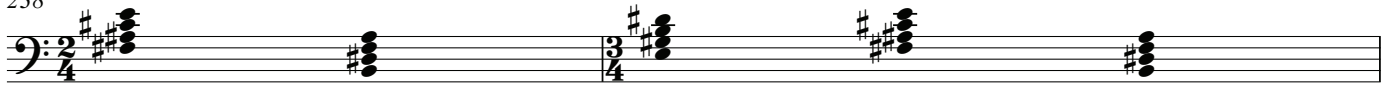


V<sup>7</sup> I<sup>7</sup>

## 2. [IV-V-I] progression

EΔ7 F#7 BΔ7

238



IV<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 3. [ii-V-I] progression

C#m7 F#7 BΔ7

240



ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 4. [iii-vi-ii-V-I] progression

D#m7 G#m7 C#m7 F#7 BΔ7

240



iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 5. [IV-vii-iii-vi-ii-V-I] progression

EΔ7 A#ø7 D#m7 G#m7 C#m7 F#7 BΔ7

244



IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup>

## 6. [ii-V-I-IV-vii-iii-vi] progression

C#m7 F#7 BΔ7 EΔ7 A#ø7 D#m7 G#m7

248



ii<sup>7</sup> V<sup>7</sup> I<sup>7</sup> IV<sup>7</sup> vii<sup>ø7</sup> iii<sup>7</sup> vi<sup>7</sup>

## 7. [I-iii-vi-IV-ii-V-vii-I] progression

BΔ7 D#m7 G#m7 EΔ7 C#m7 F#7 A#ø7 BΔ7

252



I<sup>7</sup> iii<sup>7</sup> vi<sup>7</sup> IV<sup>7</sup> ii<sup>7</sup> V<sup>7</sup> vii<sup>ø7</sup> I<sup>7</sup>

## Chapter 6- Harmonic analysis part II: Unrelated Chords

### A Discussion of Harmonic Analysis

9:

a. **Harmonic analysis** is the process of examining **chord progressions** in music, and determining the **parent scale** of each chord in order to better interpret and/or improvise melodies.

1. It is important to regularly study **jazz charts**, and determine what **scales** may be used to **improvise** over the individual **chords** of each tune.

2. **Harmonic analysis** typically begins with the assumption that individual **chords** and/or **chord progressions** can be traced back to a specific **scale** or **key**. This is generally true.

2.1 **HOWEVER**, chord progressions in most jazz standards cannot be analyzed as being in a single **major** or **minor key**. In point of fact, the following is true:

**Most jazz charts change keys and scales often, without any indication as to scale or key other than the chord symbols.**

2.2 You cannot rely on key signatures in jazz charts to tell you what key you are in, or what scales you need to use to improvise.

2.3 You need to rely on the chord symbols and the melody of the tune to determine what scales are best used for improvising.

#### **MOST IMPORTANT:**

3. Often, each chord in a progression is derived from a different parent scale than the adjacent chords.

3.1 **If each chord** in a progression is derived from a different **parent scale** than the adjacent chords, **then each chord** in the progression can be said to be **unrelated** to the adjacent chords.

3.2 **If each chord** in a progression can be said to be **unrelated** to the adjacent chords, **then each chord** requires a different **mode** and set of **chord tones** than the adjacent chords.

#### **EXAMPLES:**

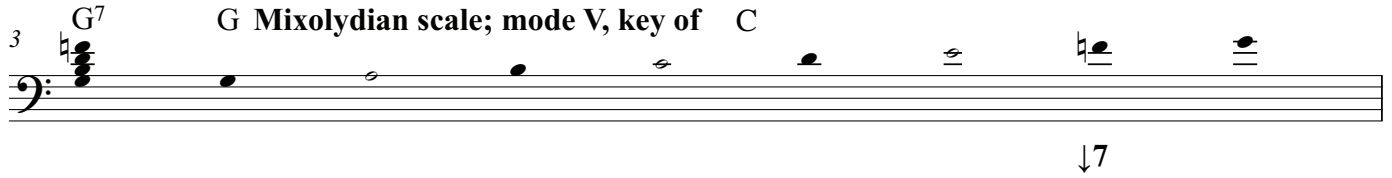
##### **Example 1: [G7-C7-D7-Eb7]**

The image shows a bass clef staff with four chords: G7, C7, D7, and Eb7. Each chord is represented by a vertical stack of notes with accidentals indicating the 7th degree of the scale.

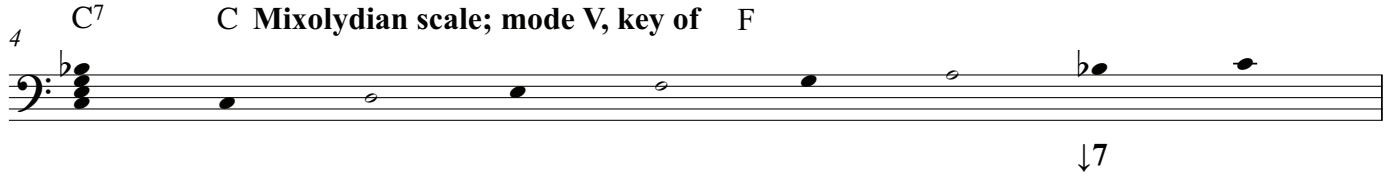
This **chord progression** is made up entirely of **dominant 7th chords**. As each major scale contains only one **dominant 7th chord** when harmonized, logic dictates that each **chord** is derived from a different **parent scale**, and therefore each chord requires a different **mode** to solo against the chord.

The most common choice for soloing against **dominant 7th chords** is the **Mixolydian mode**.

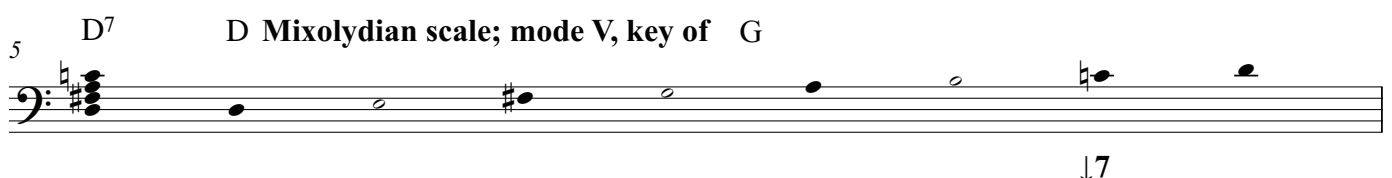
3  $G^7$  G Mixolydian scale; mode V, key of C



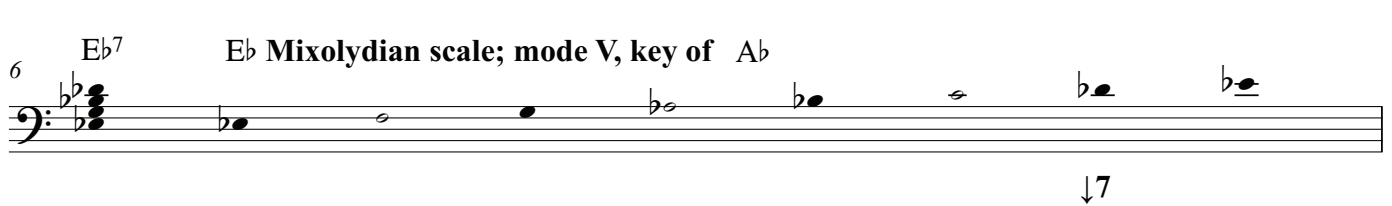
4  $C^7$  C Mixolydian scale; mode V, key of F



5  $D^7$  D Mixolydian scale; mode V, key of G



6  $E^b7$  Eb Mixolydian scale; mode V, key of Ab



Each chord in this progression uses a **Mixolydian mode** that is derived from a different **parent scale** ( $G^7 = C$  major;  $C^7 = F$  Major;  $D^7 = G$  major;  $E^b7 = A^b$  major). Therefore, soloing over each **chord** requires moving to a different **key** for each chord.

74 **Example 2**

Like example 1, this **chord progression** is made up entirely of **dominant 7th chords**.

The most common choice for soloing against **dominant 7th chords** is the **Mixolydian mode**.

enharmonic equivalent of  $G\flat$  Mixolydian

ETC.

While our modal choices may seem obvious when dealing with **dominant 7th chords**, there is often a certain amount of ambiguity in determining which modes may be used to solo over certain chords, as we will see in **example 3**.

**Mode** choices for **major scale chords** may be summarized by the following list:

1. **Major 7th chords** = Ionian [I]; Lydian [IV]
2. **Minor 7th chords** = Dorian [ii]; Phrygian [iii]; Aeolian [vi]
3. **Dominant 7th chords** = Mixolydian [V]
4. **Half-diminished 7th chords** = Locrian [vii]

Some of these chords will have additional mode choices when we study **minor scale modes**.



**Example 3: [Dm7-Ebm7]**

11 Dm<sup>7</sup> Eb<sup>m7</sup>

This **chord progression** is made up entirely of **minor 7th chords**.

As each major scale contains three **minor 7th chords** when harmonized, there are three possible **modes** that can be used to solo against any **minor 7th chord**. These are:

1. **Dorian** mode;
2. **Phrygian** mode;
3. **Aeolian** mode.

12 Dm<sup>7</sup> D Dorian scale; mode ii, key of C

13 Eb<sup>m7</sup> Eb Dorian scale; mode ii, key of Db

14 Dm<sup>7</sup> D Phrygian scale; mode iii, key of Bb

15 D#<sup>m7</sup> D# Phrygian scale; mode iii, key of B

enharmonic equivalent of Eb Phrygian

16 Dm<sup>7</sup> D Aeolian scale; mode vi ("Natural minor"), key of F

17 Eb<sup>m7</sup> Eb Aeolian scale; mode vi ("Natural minor"), key of Gb

76 **Example 4: [D7sus-F7sus-E $\flat$ 7sus-D $\flat$ 7sus]**

The image shows a musical staff in bass clef with four chords. Above the staff, the chords are labeled: D<sup>7</sup>SUS, F<sup>7</sup>SUS, E $\flat$ <sup>7</sup>SUS, and D $\flat$ <sup>7</sup>SUS. The first chord, D<sup>7</sup>SUS, is on a treble clef staff with a bass clef symbol below it, and is labeled '18'. The second chord, F<sup>7</sup>SUS, has a flat sign above the staff. The third chord, E $\flat$ <sup>7</sup>SUS, has a flat sign above the staff. The fourth chord, D $\flat$ <sup>7</sup>SUS, has a flat sign above the staff. Each chord is represented by a group of notes on the staff.

This **chord progression** is made up entirely of **7th sus (suspended) chords**.

**7th sus** chords are a type of chord in which the **major 3rd** or **minor 3rd** has been replaced by the **2nd** (in this case) or **4th** note of the scale, and are therefore neither **major** nor **minor** in quality.

(**Additional chord tones** are explained more thoroughly in Chapter 7).

**D7sus** is harmonically equivalent to both **D7** and **Dm7**, due to the absence of a **M3** or **m3**.

As a result, there is more than one appropriate **mode** choice for each chord.

Two possible choices for soloing against **7th sus chords** are:

1. the **Mixolydian mode**;
2. the **Dorian mode**.

19 **D<sup>7</sup>** **D Mixolydian scale; mode V, key of G**

↓7

20 **F<sup>7</sup>** **F Mixolydian scale; mode V, key of B $\flat$**

↓7

21 **E $\flat$ <sup>7</sup>** **E $\flat$  Mixolydian scale; mode V, key of A $\flat$**

↓7

22 **D $\flat$ <sup>7</sup>** **D $\flat$  Mixolydian scale; mode V, key of G $\flat$**

↓7

23 **Dm<sup>7</sup>** **D Dorian scale; mode ii, key of C**

↓3

↓7

24 **Fm<sup>7</sup>** **F Dorian scale; mode ii, key of E $\flat$**

↓3

↓7

25 **E $\flat$ m<sup>7</sup>** **E $\flat$  Dorian scale; mode ii, key of D $\flat$**

↓3

↓7

26 **C $\sharp$ m<sup>7</sup>** **C $\sharp$  Dorian scale; mode ii, key of B**

↓3

↓7

enharmonic equivalent of D $\flat$  Dorian

## Chapter 7- Additional Chord Tones

David M. Shere

**C major scale- parent scale; mode I**  
**(Also known as "C Ionian mode;" mother of all Western scales)**



- a. In order to further our understanding of **harmonic analysis**, we must better develop our understanding of
1. **Chord construction;**
  2. Deriving scales from individual **chord tones**.

b. All **harmonic analysis** assumes the function of every note in the **chromatic scale** in relation to the **Major scale**.

1. The following diagram shows how all 12 notes in the **chromatic scale** function against the key of **C major**, showing:

- 1.1 **Natural** scale tones (scale tones that are unchanged from the parent scale);
- 1.2 **flat** scale tones (scale tones that are lowered from the parent scale);
- 1.3 **sharp** scale tones (scale tones that are raised from the parent scale).

2 Key of C

<b>MAJOR</b>							
R	2	3	4	5	6	7	To
	9		11		13		
<b>Flat</b>							
b9		b3		b5	b6	b7	
<b>Sharp</b>							
	#9		#11	#5	#6	#13	

2. **Flat** and **sharp** scale tones in the above diagram refer to specific **chord tones** that may be **added to** or **changed** within a chord. These notes must also be **added to** or **changed** within a corresponding mode, in order to adapt the mode for soloing against more complex chords.

- 2.1 The notes labelled **(2,4)** are known as **suspensions**. ((9,11) are also sometimes referred to as suspensions.)
- 2.1.1 The abbreviation **sus** means to use one of these notes in place of the **3rd** of a chord.
- 2.1.2 The abbreviation **add** means to add these notes to a chord, keeping the **3rd**.

2.2 The notes labelled **(9,11,#11,13,b13)** are known as **extensions**.

2.3 The notes labelled **(b9,#9,b5,#5)** are known as **alterations**.

2.4 The notes labelled **(6,b6)** are typically used in place of the **7th** of a chord.

The following pages carry the previous diagram through the remaining 11 keys.  
**Flat** and **sharp** notes may also be spelled as **natural** (#).

Key of D $\flat$

4

<b>MAJOR</b>						
R	2	3	4	5	6	7
	9		11		13	
<b>Flat</b>		<b>MINOR</b>				
	b9	b3		b5	b6	b7
					b13	
<b>Sharp</b>						
		#9	#11	#5	#6	#13

Key of D

5

<b>MAJOR</b>						
R	2	3	4	5	6	7
	9		11		13	
<b>Flat</b>		<b>MINOR</b>				
	b9	b3		b5	b6	b7
					b13	
<b>Sharp</b>						
		#9	#11	#5	#6	#13

Key of E $\flat$

6

<b>MAJOR</b>						
R	2	3	4	5	6	7
	9		11		13	
<b>Flat</b>		<b>MINOR</b>				
	b9	b3		b5	b6	b7
					b13	
<b>Sharp</b>						
		#9	#11	#5	#6	#13

Key of E

7

MAJOR

R 2 3 4 5 6 7  
9 11 13

Flat  
b9 b3 b5 b6 b7  
b13

Sharp  
#9 #11 #5 #6 #13

Key of F

8

MAJOR

R 2 3 4 5 6 7  
9 11 13

Flat  
b9 b3 b5 b6 b7  
b13

Sharp  
#9 #11 #5 #6 #13

Key of F#

9

MAJOR

R 2 3 4 5 6 7  
9 11 13

Flat  
b9 b3 b5 b6 b7  
b13

Sharp  
#9 #11 #5 #6 #13

Key of G

10

MAJOR

MINOR

R 2 3 4 5 6 7

Flat 9 11 13

Sharp 9 11 5 6 13

Detailed description: This diagram shows the triads and extensions for the key of G. The Major triad (G-B-D) is highlighted in a box labeled 'MAJOR'. The Minor triad (G-Bb-D) is highlighted in a box labeled 'MINOR'. The notes are arranged in three staves: the top staff shows the root (R), the middle staff shows flats (Flat), and the bottom staff shows sharps (Sharp). Extensions are indicated by numbers 2, 3, 4, 5, 6, 7, 9, 11, and 13. The G major triad notes are G (R), B (2), and D (3). The G minor triad notes are G (R), Bb (2), and D (3). Extensions for G major include Bb9, B11, D5, E6, and F#13. Extensions for G minor include Bb9, Bb11, D5, Eb6, and F#13.

Key of Ab

11

MAJOR

MINOR

R 2 3 4 5 6 7

Flat 9 11 13

Sharp 9 11 5 6 13

Detailed description: This diagram shows the triads and extensions for the key of Ab. The Major triad (Ab-Bb-D) is highlighted in a box labeled 'MAJOR'. The Minor triad (Ab-Bb-D) is highlighted in a box labeled 'MINOR'. The notes are arranged in three staves: the top staff shows the root (R), the middle staff shows flats (Flat), and the bottom staff shows sharps (Sharp). Extensions are indicated by numbers 2, 3, 4, 5, 6, 7, 9, 11, and 13. The Ab major triad notes are Ab (R), Bb (2), and D (3). The Ab minor triad notes are Ab (R), Bb (2), and D (3). Extensions for Ab major include Bb9, Bb11, D5, Eb6, and F#13. Extensions for Ab minor include Bb9, Bb11, D5, Eb6, and F#13.

Key of A

12

MAJOR

MINOR

R 2 3 4 5 6 7

Flat 9 11 13

Sharp 9 11 5 6 13

Detailed description: This diagram shows the triads and extensions for the key of A. The Major triad (A-C#-E) is highlighted in a box labeled 'MAJOR'. The Minor triad (A-C-E) is highlighted in a box labeled 'MINOR'. The notes are arranged in three staves: the top staff shows the root (R), the middle staff shows flats (Flat), and the bottom staff shows sharps (Sharp). Extensions are indicated by numbers 2, 3, 4, 5, 6, 7, 9, 11, and 13. The A major triad notes are A (R), C# (2), and E (3). The A minor triad notes are A (R), C (2), and E (3). Extensions for A major include Bb9, B11, C#5, D#6, and E#13. Extensions for A minor include Bb9, B11, C5, D#6, and E#13.

Key of B $\flat$

13

**MAJOR**

R 2 3 4 5 6 7  
9 11 13

**MINOR**

Flat 9 3 5 6 7  
b9 b3 b5 b6 b13

**Sharp**

9 11 5 6  
#9 #11 #5 #6 #13

Key of B

14

**MAJOR**

R 2 3 4 5 6 7  
9 11 13

**MINOR**

Flat 9 3 5 6 7  
b9 b3 b5 b6 b7

**Sharp**

9 11 5 6  
#9 #11 #5 #6 #13



# Chapter 8- Basic Chord Construction

a. In the same manner that modes can be studied in both their **relative** and **parallel** contexts, chords may also be studied in both **relative** and **parallel** contexts.

1. We have seen that every **major scale** produces the following **naturally occurring progression**, **relative** to each major key:

[I-ii-iii-IV-V-vi-vii]

2. In this chapter, we are studying every **triad** and **7th chord** in their **parallel** contexts, as they are constructed against a single root.

Key of C

## TRIADS

C	Cm	C <sup>o</sup>	C <sup>+</sup>	C(sus4)	C(sus2)
M	m	d	A		

<b>Major</b>	<b>minor</b>	<b>diminished</b>	<b>Augmented</b>	<b>Suspended4th</b>	<b>Suspended2nd</b>
5	5	b5	#5	5	5
3	b3	b3	3	4	2
R	R	R	R	R	R

## 7th CHORDS

2

C <sup>Δ</sup> 7	C7	Cm7	C <sup>ø</sup> 7	C <sup>o</sup> 7
------------------	----	-----	------------------	------------------

<b>Major7th</b>	<b>Dominant7th</b>	<b>Minor7th</b>	<b>Half-diminished7th</b>	<b>Diminished7th</b>
7	b7	b7	b7	bb7
5	5	5	b5	b5
3	3	b3	b3	b3
R	R	R	R	R

## ALTERED 7th CHORDS

3

Cm(maj7)	Cmaj7(#5)	Cmaj7(b5)	C <sup>o</sup> maj7	C7(#5)	C7(b5)
----------	-----------	-----------	---------------------	--------	--------

<b>Minor-major7th</b>	<b>Major7th(#5)</b>	<b>Major7th(b5)</b>	<b>Diminished-Maj7th</b>	<b>Dominant7th(#5)</b>	<b>Dominant7th(b5)</b>
7	7	7	7	b7	b7
5	#5	b5	b5	#5	b5
b3	3	3	b3	3	3
R	R	R	R	R	R

**Per Chapter 3:**

5.3 **Chord tones** and **passing tones** within a scale are often referred to as **inside notes**.

b:

**Per Chapter 3:**

6. An **outside note** is any note that is not a part of the **chord** or its corresponding **mode**.

b. An **inside note** is a melody note that corresponds directly to any one of the notes in an underlying chord.

1. In order to play the **inside notes** of any given chord, we must know what notes any given chord symbol on a chart indicates.

1.1 **7** = the **7th** of a chord. A 7th may be **natural, flat, or double-flat**.

1.2 **5** = the **5th** of a chord. A 5th may be **natural, altered sharp, or altered flat**.

1.3 **3** = the **3rd** of a chord. A 3rd may be **Major** or **minor**.

1.4 **R** = the **root** of a chord. The root of a chord indicates the **scale** or **mode** the chord is based on.

1.5 **4** = the **4th** of a chord. A 4th may be **added** or **suspended**.

**Suspended** means "in place of the 3rd of a chord."

1.5 **2** = the **2nd** of a chord. A 2nd may be **added** or **suspended**.

**Per Chapter 7:**

b. All **harmonic analysis** assumes the function of every note in the **chromatic scale** in relation to the **Major scale**.

2. **Chord tones** are analyzed respective to their position within the **major scale** of the **root** of the **chord**.

2.1 The **major scale** is the assumed underlying structure of all **harmonic analysis**.

2.2 The name of each chord type is partly evolutionary, and partly based on logic.

2.2.1 The terms "**Major**" and "**minor**," for instance, mean "**large**" and "**small**", and are used to distinguish between the **3rd** note of a **major scale** (four half-steps from the root), and the **lowered** or **flatted 3rd** of a **minor scale** (three half-steps from the root).

2.2.2 There are etymological, mathematical, and scientific reasons behind all musical terms, not all of which are readily apparent on the surface, and some of which require a study of acoustic physics to determine their origins.

2.2.3 The best strategy for understanding the differences between chords types is not to over-analyze the specific terminology, but rather to simply commit each chord type and its corresponding note values to memory, as you would a vocabulary list. The terminology merely serves to mark the difference between one chord type and the next.

The following pages show all **triads, 7th chords, and altered 7th chords** in the remaining 11 keys.

Key of D $\flat$

TRIADS

5

D $\flat$       D $\flat$ m      D $\flat$  $^\circ$       D $\flat$  $^+$       D $\flat$ (sus4)      D $\flat$ (sus2)

M      m      d      A

7th CHORDS

6

D $\flat$  $^{\Delta 7}$       D $\flat$  $^7$       C $\sharp$ m $^7$       C $\sharp$  $^\circ 7$       C $\sharp$  $^\circ 7$

ALTERED 7th CHORDS

7

C $\sharp$ m(maj7)      D $\flat$ maj7( $\sharp$ 5)      D $\flat$ maj7(b5)      C $\sharp$  $^\circ$ maj7      D $\flat$ 7( $\sharp$ 5)      D $\flat$ 7(b5)

Key of D

TRIADS

8

D      Dm      D $^\circ$       D $^+$       D(sus4)      D(sus2)

M      m      d      A

7th CHORDS

9

D $^{\Delta 7}$       D $^7$       Dm $^7$       D $^\circ 7$       D $^\circ 7$

ALTERED 7th CHORDS

10

Dm(maj7)      Dmaj7( $\sharp$ 5)      Dmaj7(b5)      D $^\circ$ maj7      D7( $\sharp$ 5)      D7(b5)

Key of E $\flat$ 

## TRIADS

11

E $\flat$  M      E $\flat$ m m      E $\flat$  $^\circ$  d      E $\flat$  $^+$  A      E $\flat$ (sus4)      E $\flat$ (sus2)

||5/4

## 7th CHORDS

12

E $\flat$  $\Delta$ 7      E $\flat$ 7      E $\flat$ m7      E $\flat$  $\emptyset$ 7      E $\flat$  $^\circ$ 7

||6/4

## ALTERED 7th CHORDS

13

E $\flat$ m(maj7)      E $\flat$ maj7(#5)      E $\flat$ maj7(b5)      E $\flat$  $^\circ$ maj7      E $\flat$ 7(#5)      E $\flat$ 7(b5)

||6/4

Key of E

## TRIADS

14

E M      Em m      E $^\circ$  d      E $^+$  A      E(sus4)      E(sus2)

||5/4

## 7th CHORDS

15

E $\Delta$ 7      E7      Em7      E $\emptyset$ 7      E $^\circ$ 7

||6/4

## ALTERED 7th CHORDS

16

Em(maj7)      Emaj7(#5)      Emaj7(b5)      E $^\circ$ maj7      E7(#5)      E7(b5)

||6/4

Key of F

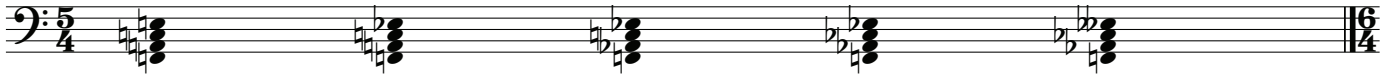
## TRIADS

17 F Fm F<sup>o</sup> F<sup>+</sup> F(sus4) F(sus2)  
M m d A



## 7th CHORDS

18 F<sup>Δ</sup>7 F7 Fm7 F<sup>ø</sup>7 F<sup>o</sup>7



## ALTERED 7th CHORDS

19 Fm(maj7) Fmaj7(#5) Fmaj7(b5) F<sup>o</sup>maj7 F7(#5) F7(b5)



Key of Gb

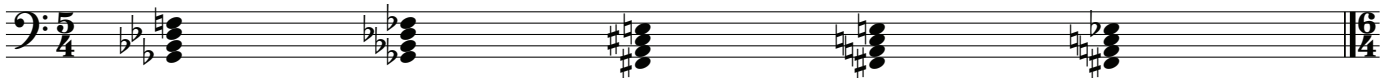
## TRIADS

20 Gb F#m F<sup>o</sup> Gb<sup>+</sup> Gb(sus4) Gb(sus2)  
M m d A



## 7th CHORDS

21 Gb<sup>Δ</sup>7 Gb7 F#m7 F#<sup>ø</sup>7 F#<sup>o</sup>7



## ALTERED 7th CHORDS

22 F#m(maj7) Gbmaj7(#5) Gbmaj7(b5) F#<sup>o</sup>maj7 Gb7(#5) Gb7(b5)



Key of G

## TRIADS

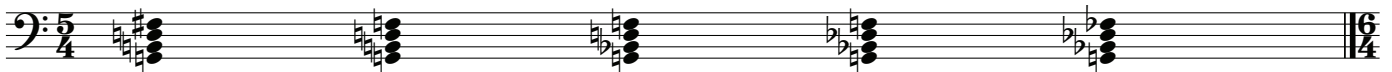
23      G                  Gm                  G<sup>o</sup>                  G<sup>+</sup>                  G(sus4)                  G(sus2)

         M                  m                  d                  A



## 7th CHORDS

24      G<sup>Δ</sup>7                  G7                  Gm7                  G<sup>o</sup>7                  G<sup>o</sup>7



## ALTERED 7th CHORDS

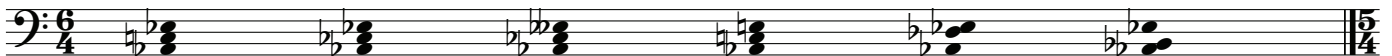
25      Gm(maj7)                  Gmaj7(#5)                  Gmaj7(b5)                  G<sup>o</sup>maj7                  G7(#5)                  G7(b5)

Key of A<sup>b</sup>

## TRIADS

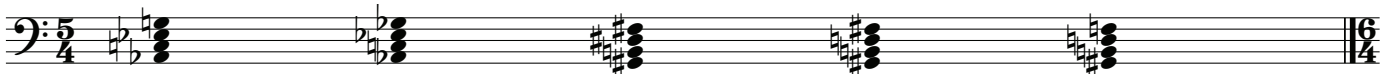
26      A<sup>b</sup>                  A<sup>b</sup>m                  A<sup>b</sup><sup>o</sup>                  A<sup>b</sup><sup>+</sup>                  A<sup>b</sup>(sus4)                  A<sup>b</sup>(sus2)

         M                  m                  d                  A



## 7th CHORDS

27      A<sup>b</sup>Δ7                  A<sup>b</sup>7                  G#m7                  G#<sup>o</sup>7                  G#<sup>o</sup>7



## ALTERED 7th CHORDS

28      A<sup>b</sup>m(maj7)                  A<sup>b</sup>maj7(#5)                  A<sup>b</sup>maj7(b5)                  G#<sup>o</sup>maj7                  A<sup>b</sup>7(#5)                  A<sup>b</sup>7(b5)



Key of A

TRIADS

29 A Am A° A+ A(sus4) A(sus2)  
M m d A

7th CHORDS

30 A<sup>Δ</sup>7 A<sup>7</sup> Am<sup>7</sup> A<sup>ø</sup>7 A<sup>o</sup>7

ALTERED 7th CHORDS

31 Am(maj7) Amaj7(#5) Amaj7(b5) A<sup>o</sup>maj7 A7(#5) A7(b5)

Key of B<sup>b</sup>

TRIADS

32 B<sup>b</sup> B<sup>b</sup>m B<sup>b</sup>° B<sup>b</sup>+ B<sup>b</sup>(sus4) B<sup>b</sup>(sus2)  
M m d A

7th CHORDS

33 B<sup>b</sup>Δ<sup>7</sup> B<sup>b</sup>7 B<sup>b</sup>m<sup>7</sup> B<sup>b</sup>ø<sup>7</sup> B<sup>b</sup>o<sup>7</sup>

ALTERED 7th CHORDS

34 B<sup>b</sup>m(maj7) B<sup>b</sup>maj7(#5) B<sup>b</sup>maj7(b5) B<sup>b</sup>o<sup>+</sup>maj7 B<sup>b</sup>7(#5) B<sup>b</sup>7(b5)

Key of B

## TRIADS

35

B	Bm	B <sup>o</sup>	B <sup>+</sup>	B(sus4)	B(sus2)
M	m	d	A		

## 7th CHORDS

36

B <sup>Δ</sup> 7	B <sup>7</sup>	Bm <sup>7</sup>	B <sup>o</sup> 7	B <sup>o</sup> 7
------------------	----------------	-----------------	------------------	------------------

## ALTERED 7th CHORDS

37

Bm(maj7)	Bmaj7(#5)	Bmaj7(b5)	B <sup>o</sup> maj7	B7(#5)	B7(b5)
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1 **Quarter**

2 **Eighth**

3 **Eighth triplet**

4 **Quarter + Eighth triplet**

5 **"Swing" Eighth**

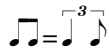
a. In jazz, the most basic unit of rhythm is the **swing 8th note**.

1. **Swing eighth note**- an eighth note written as a standard "straight" eighth note, but with an implied triplet feel.

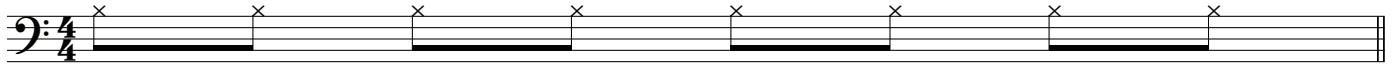
1.1 **Swing eighth notes** are typically written as **straight 8th notes** in order to simplify the written notation of a jazz chart.

1.2 Play measure 5 above as if it were written like measure 4 and you will have achieved **swing eighth notes**.

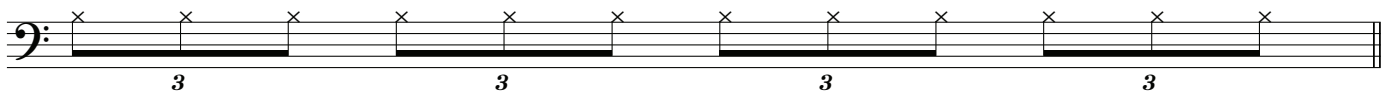
2. "True" swing eighths are not quite implied triplets, and not quite straight eighth notes either. "True" swing eighths reside rhythmically somewhere in between a triplet and a straight eighth. The closer to a triplet you are, the "harder" you are swinging; the closer to a straight eighth you are, the "smoother" or "cooler" your swing becomes.



### "Swing" Eighth



### 7 Eighth triplet



b. In jazz rhythm, "swing" eighth notes and eighth triplets both share an implied triplet pulse (although "swing" eighths may be played "smoother" than a literal triplet).

**When we subdivide the beat into smaller denominations such as sixteenth notes, we typically revert to an implied straight eighth note pulse.**

c. The easiest way to gain an understanding of the relationship between

1. "straight" eighth notes,
2. "swing" eighth notes,
3. eighth note triplets, and
4. sixteenth notes

is to listen to as many professional jazz performances as possible.

d. Jazz musicians such as

1. John Coltrane,
2. "Cannonball" Adderly,
3. Joe Pass,
4. Bill Evans,
5. Miles Davis,
6. Pat Metheny,
7. Charlie Parker,

and many others are masters of transitioning between different rhythmic groups, and playing against multiple implied rhythmic pulses.

## 8 "Straight" Eighth (no implied triplet)



## 9 "Straight" Sixteenth (no implied triplet)



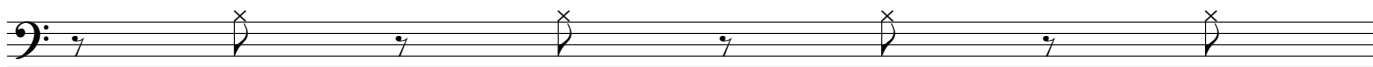
e. Sixteenth notes are typically brought into use for slower-tempo and mid-tempo jazz standards, in order to lend greater rhythmic interest and variety to melodic lines, and allow for greater melodic variety within a smaller rhythmic space. Using sixteenth notes takes a great deal of practice work and applied technical skill.

The best way to practice transitioning between eighths, triplets, and sixteenths is to devise scale exercises that make use of these groups.

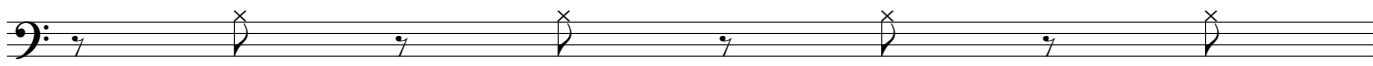
94 **SYNCOPATION**



10 **"Swing" Eighth**



11 **"Straight" Eighth (no implied triplet)**

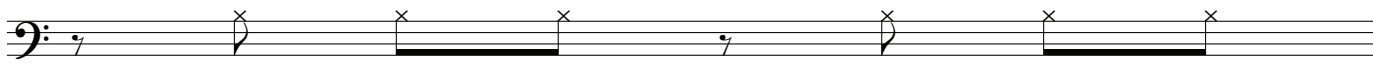


f. **Syncopation** is a type of rhythmic phrasing in which the accents of a melody are placed on the **weak beats** of rhythmic groups. This is typically accomplished through the use of **rests**.

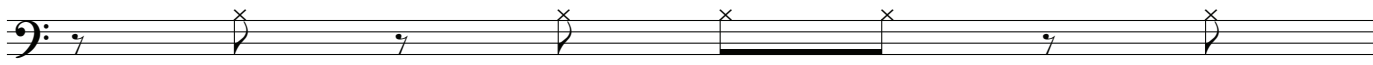
1. A **weak beat** is any secondary or even beat: 2, 4, "&," etc.
2. A **strong beat** is a primary or odd beat: 1, 3, 5, etc.

For the purposes of this chapter we are looking only at **eighth note** syncopations, but syncopation can take place within any rhythmic denomination (half, quarter, eighth, sixteenth, or 32nd notes; or any other type of grouping).

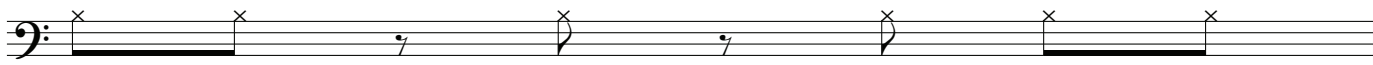
12



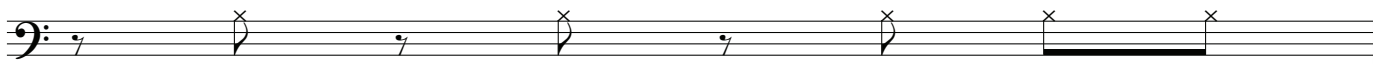
13



14

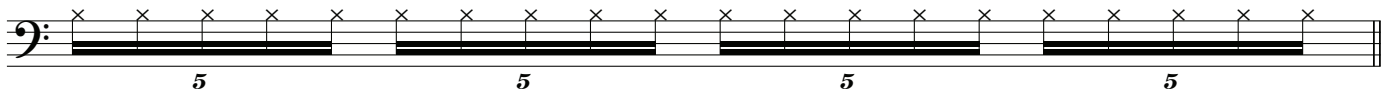


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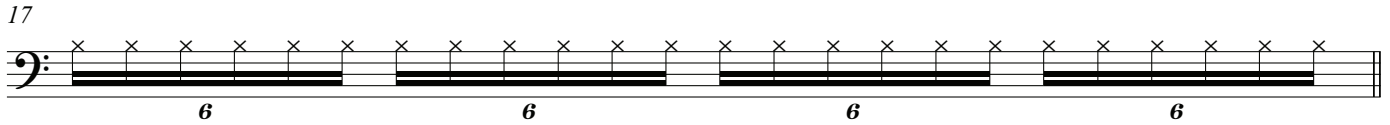


## TUPLETS

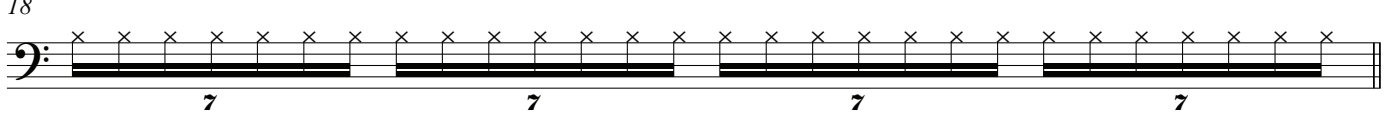
### 16 Quintuplet



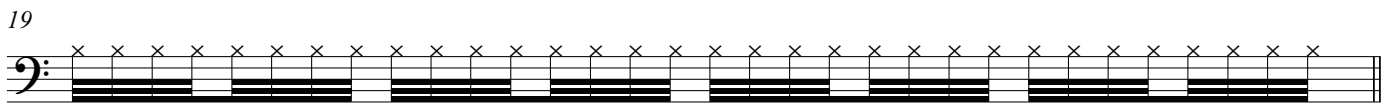
### 17 Sextuplet



### 18 Septuplet



### 19 32nd note



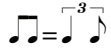
g. Slower or mid-tempo **rhythmic pulses** can be further subdivided into increments smaller than **16th notes**. This page shows four examples of ways a rhythmic pulse can be further subdivided.

1. Groupings which are not exponents of "2" (2, 4, 8, 16, 32, etc.) are called **tuplets**. This page contains three examples of **tuplet** groupings.

2. **Tuplets** can be used to create even greater rhythmic interest and melodic variety, and are often used to obscure the rhythmic pulse or play "outside" of the rhythm.

h. This page shows several exercises which are designed to help you practice varying rhythmic patterns.

**"Straight" Eighth (no implied triplet)**



23 **"Swing" Eighth**



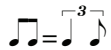
**Eighth triplet**

26



**"Straight" Sixteenth (no implied triplet)**

29

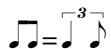


**"Swing" Eighth + Eighth triplet**

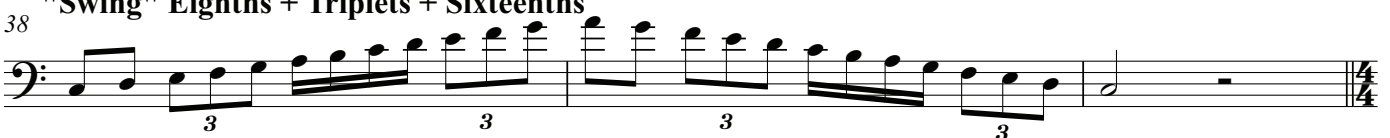
32



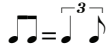
35 **"Swing" Eighths + Sixteenths**



38 **"Swing" Eighths + Triplets + Sixteenths**



j. This section consists of a number of short phrase studies to once again focus on "swing" rhythm.



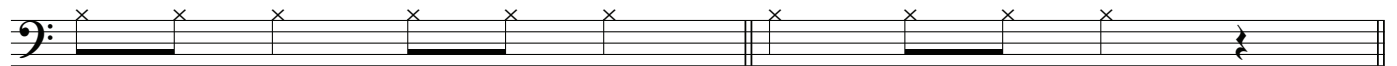
43



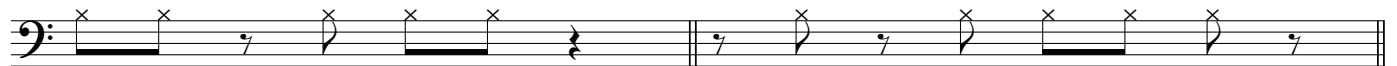
45



47



49



51



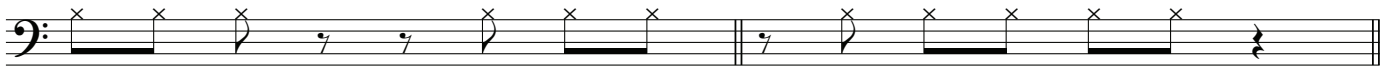
53



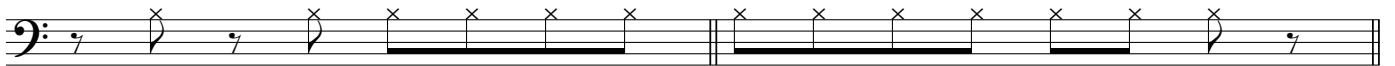
55



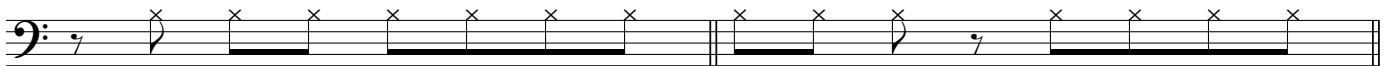
57



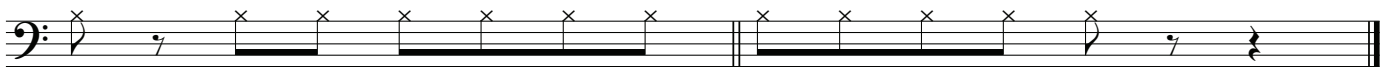
59



61



63





## Chapter 10- Practice Strategies

### PRACTICE TIPS

#### I. Keep a detailed practice journal.

- a. Write down everything that you practice each day.
- b. At the end of each practice session, make note of the following details:
  1. Which items are progressing well;
  2. Which items need extra work and focus;
  3. Which exercises or music pieces you didn't get to in this session. Schedule these items for a specific future session, preferably the next one.
- c. Sample journal entry:

“Practiced 2-octave C major scale 4x

Practiced all modes in C major 2x each

Practiced all 7<sup>th</sup> arpeggios in C major 2x each

Practiced “Maiden Voyage” and “Summertime” with backing tracks

Next session: Practice 2-octave Db-major scale

Practice all modes and 7<sup>th</sup> arpeggios in Db major

Practice “Solar” by Miles Davis”

#### II. Build a core warm-up routine that takes 5-10 minutes.

- a. Pick 2-3 specific, effective exercises that you know can be relied upon to prepare you for a performance, and make these part of your daily routine.
- b. For example: As a guitarist, my core warm-up consists of the chromatic scale, A Ionian and B Dorian, and 3-5 minutes of free-associating random exercises from my journals. My regular practice routine is much more elaborate than this of course, but in a pinch at a gig, or before a performance, this is often all I have time for.

- III. **Rotate through your exercises on a long-term schedule.**
  - a. As you accumulate more and more melodic ideas and exercises, you will find that it's not possible to practice every single idea and exercise every day. Build a schedule that allows you to rotate through your practice materials on a weekly, monthly or other basis.
  - b. Prioritize your exercises according to order of importance.
  - c. Always include your core warm-up in every practice session.
- IV. **Record yourself:**
  - a. Practicing exercises;
  - b. Playing over changes;
  - c. Free-associating melodies and patterns;
  - d. Playing at rehearsals and gigs.
- V. **Keep manuscript paper handy and write down all your exercises and melodic ideas.**
  - a. Write down any new exercises, melodies, or patterns that you come up with during a practice or "jam" session. The more you get into a habit of doing this, the faster you will come up with new ideas and the easier it will be to commit previous ideas to memory.
  - b. Keep records of all exercises you have borrowed from other sources (published, transcribed) that you use routinely.
  - c. Using shorthand is fine; the goal is to put your ideas on paper so that you can clear your short-term memory bank.
  - d. Refer to your recordings and transcribe any ideas you may have played that sound "fresh" and interesting, even if you are convinced that you'll remember them easily. You will find that writing these ideas down allows you to develop them later, sometimes in directions you can't anticipate.
  - e. Try composing melodic ideas, patterns, and exercises on paper before playing them. You will find that this helps you guide your improvisational thought process into more disciplined channels where you have much greater control during actual performances.
- VI. **Listen to recordings of the songs you are working on.**
  - a. Make a repertoire list.
  - b. Steal licks from your favorite artists and transcribe them.

# Chapter 11- Exercises

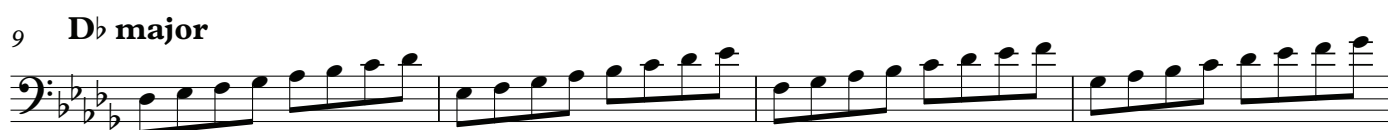
## All major diatonic modes

David M. Shere

### C major



Practice each set of modes both forward and backward.



33 **E major**

37

41 **F major**

45

49 **Gb major**

53

57 **G major**

61



65 **A<sup>b</sup> major**

Four measures of music in A-flat major, bass clef. The melody consists of eighth notes: G2, A2, Bb2, C3, D3, E3, F3, G3, A3, Bb3, C4, D4, E4, F4, G4, A4, Bb4, C5.

69

Four measures of music in A-flat major, bass clef. The melody continues with eighth notes: D4, E4, F4, G4, A4, Bb4, C5, D5, E5, F5, G5, A5, Bb5, C6, D6, E6, F6, G6, A6, Bb6, C7.

73 **A major**

Four measures of music in A major, bass clef. The melody consists of eighth notes: G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5.

77

Four measures of music in A major, bass clef. The melody continues with eighth notes: D4, E4, F4, G4, A4, B4, C5, D5, E5, F5, G5, A5, B5, C6, D6, E6, F6, G6, A6, B6, C7.

81 **B<sup>b</sup> major**

Four measures of music in B-flat major, bass clef. The melody consists of eighth notes: G2, A2, Bb2, C3, D3, E3, F3, G3, A3, Bb3, C4, D4, E4, F4, G4, A4, Bb4, C5.

85

Four measures of music in B-flat major, bass clef. The melody continues with eighth notes: D4, E4, F4, G4, A4, Bb4, C5, D5, E5, F5, G5, A5, Bb5, C6, D6, E6, F6, G6, A6, Bb6, C7.

89 **B major**

Four measures of music in B major, bass clef. The melody consists of eighth notes: G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5.

93

Four measures of music in B major, bass clef. The melody continues with eighth notes: D4, E4, F4, G4, A4, B4, C5, D5, E5, F5, G5, A5, B5, C6, D6, E6, F6, G6, A6, B6, C7. The piece concludes with a double bar line and a 4/4 time signature.

C major



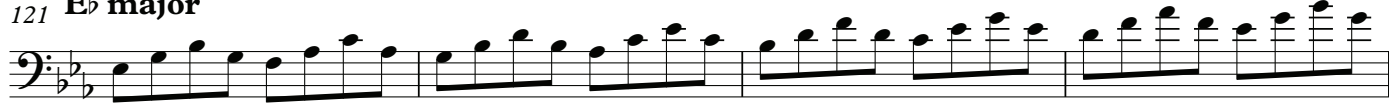
105 D $\flat$  major



113 D major



121 E $\flat$  major



129 E major



133



137 F major



141



145 Gb major



149



153 G major



157



161 **A<sup>b</sup> major**

165

**A major**

169



173

**B<sup>b</sup> major**

177



181

185 **B major**

189





# All diatonic seventh arpeggios

## C major

Four measures of C major arpeggios in bass clef, 4/4 time. The notes are: C2-E2-G2-A2 | C2-E2-G2-A2 | C2-E2-G2-A2 | C2-E2-G2-A2.

197

Four measures of C major arpeggios in bass clef, 4/4 time. The notes are: C2-E2-G2-A2 | C2-E2-G2-A2 | C2-E2-G2-A2 | C2-E2-G2-A2. The piece ends with a double bar line and a key signature change to three flats.

## 201 D $\flat$ major

Four measures of D $\flat$  major arpeggios in bass clef, 4/4 time. The notes are: D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2 | D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2 | D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2 | D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2.

205

Four measures of D $\flat$  major arpeggios in bass clef, 4/4 time. The notes are: D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2 | D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2 | D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2 | D $\flat$ 2-F $\flat$ 2-A $\flat$ 2-B $\flat$ 2. The piece ends with a double bar line and a key signature change to one flat.

## 209 D major

Four measures of D major arpeggios in bass clef, 4/4 time. The notes are: D2-F#2-A2-B2 | D2-F#2-A2-B2 | D2-F#2-A2-B2 | D2-F#2-A2-B2.

213

Four measures of D major arpeggios in bass clef, 4/4 time. The notes are: D2-F#2-A2-B2 | D2-F#2-A2-B2 | D2-F#2-A2-B2 | D2-F#2-A2-B2. The piece ends with a double bar line and a key signature change to two flats.

## 217 E $\flat$ major

Four measures of E $\flat$  major arpeggios in bass clef, 4/4 time. The notes are: E $\flat$ 2-G $\flat$ 2-A2-B2 | E $\flat$ 2-G $\flat$ 2-A2-B2 | E $\flat$ 2-G $\flat$ 2-A2-B2 | E $\flat$ 2-G $\flat$ 2-A2-B2.

221

Four measures of E $\flat$  major arpeggios in bass clef, 4/4 time. The notes are: E $\flat$ 2-G $\flat$ 2-A2-B2 | E $\flat$ 2-G $\flat$ 2-A2-B2 | E $\flat$ 2-G $\flat$ 2-A2-B2 | E $\flat$ 2-G $\flat$ 2-A2-B2. The piece ends with a double bar line and a key signature change to three sharps.

225 **E major**

229

233 **F major**

237

241 **Gb major**

245

249 **G major**

253



257 **A<sup>b</sup> major**

261

**A major**

265



269

**B<sup>b</sup> major**

273



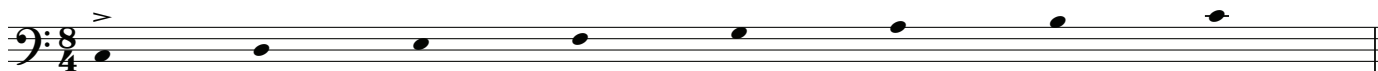
277

281 **B major**

285



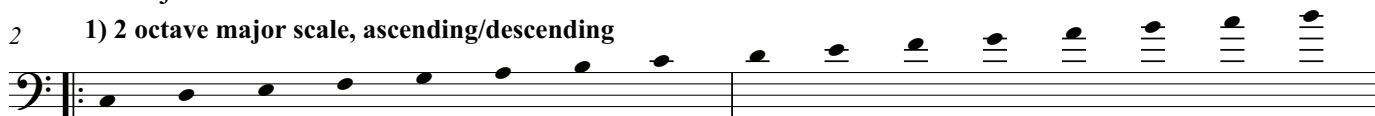
110 C major scale- parent scale; mode I  
 (Also known as "C Ionian mode;" mother of all Western scales)



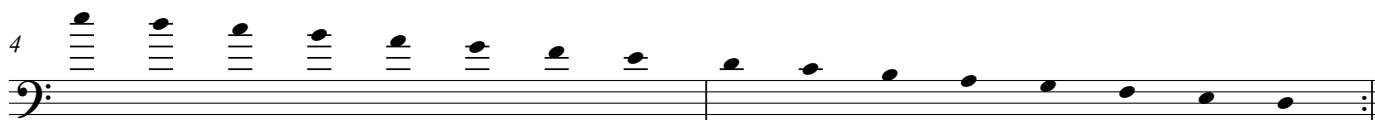
[R 2 3 4 5 6 7]  
 SCALE DEGREES

C major

2 1) 2 octave major scale, ascending/descending



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
 NUMBER VALUES (similar to scale degrees)



17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

6 2) SKIPPED 3rds starting on 1



1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

8 3) SKIPPED 3rds starting on 2



2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

**IN ORDER TO MAKE THE MOST EFFICIENT USE OF YOUR PRACTICE TIME,**  
 you should focus on a few key things that will maximize the development of your technique for the minimum amount of time spent.

Practicing all 12 major scales in 2 octaves, in skipped 3rds starting on the first note of the scale, and in skipped 3rds starting on the second note of the scale, is one possible way to maximize your practice time.

By doing this, you are basically practicing all your modes and all your 7th arpeggios in every key using the fewest possible number of notes.

D $\flat$  major

10 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

14 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

16 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

D major

18 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

22 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

24 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

E $\flat$  major

26 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

30 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

32 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

E major

34 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

38 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

40 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

F major

42 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

G $\flat$  major

50 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

## G major

## 58 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

## 62 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

## 64 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

A $\flat$  major

## 66 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

## 70 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

## 72 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4



A major

74 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

76

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

2) SKIPPED 3rds starting on 1

78

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

3) SKIPPED 3rds starting on 2

80

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

Bb major

82 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

84

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

2) SKIPPED 3rds starting on 1

86

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

3) SKIPPED 3rds starting on 2

88

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

## B major

90 1) 2 octave major scale, ascending/descending

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2

94 2) SKIPPED 3rds starting on 1

1 3 5 7 9 11 13 15 17 15 13 11 9 7 5 3

96 3) SKIPPED 3rds starting on 2

2 4 6 8 10 12 14 16 18 16 14 12 10 8 6 4

C root

Melodic examples using every mode

C<sup>Δ7</sup>

C Ionian scale; mode I



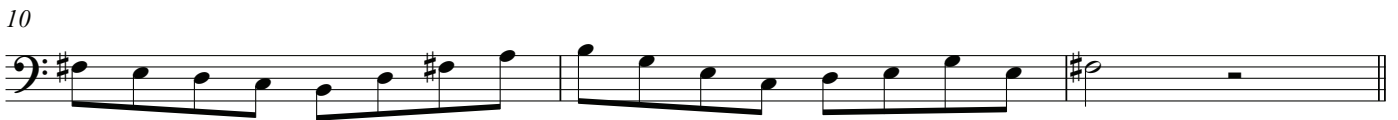
Cm<sup>7</sup> C Dorian scale; mode ii, key of B<sup>b</sup>



Cm<sup>7</sup> C Phrygian scale; mode iii, key of A<sup>b</sup>



C<sup>Δ7</sup> C Lydian scale; mode IV, key of G



C<sup>7</sup> C Mixolydian scale; mode V, key of F



Cm<sup>7</sup> C Aeolian scale; mode vi ("Natural minor"), key of E<sup>b</sup>



C<sup>ø7</sup> C Locrian scale; mode vii, key of D<sup>b</sup>



118 **D $\flat$ root**

**D $\flat$  $\Delta$ 7 D $\flat$ Ionian scale; mode I**

22



**C $\sharp$ m7 C $\sharp$ Dorian scale; mode ii, key of B**

25



**C $\sharp$ m7 C $\sharp$ Phrygian scale; mode iii, key of A**

28



**D $\flat$  $\Delta$ 7 D $\flat$ Lydian scale; mode IV, key of A $\flat$**

31



**D $\flat$ 7 D $\flat$ Mixolydian scale; mode V, key of G $\flat$**

34



**C $\sharp$ m7 C $\sharp$ Aeolian scale; mode vi ("Natural minor"), key of E**

37



**C $\sharp$  $\emptyset$ 7 C $\sharp$ Locrian scale; mode vii, key of D**

40



D root

D<sup>Δ7</sup> D Ionian scale; mode I

43



Dm<sup>7</sup> D Dorian scale; mode ii, key of C

46



Dm<sup>7</sup> D Phrygian scale; mode iii, key of B<sup>b</sup>

49



D<sup>Δ7</sup> D Lydian scale; mode IV, key of A

52



D<sup>7</sup> D Mixolydian scale; mode V, key of G

55



Dm<sup>7</sup> D Aeolian scale; mode vi ("Natural minor"), key of F

58



D<sup>ø7</sup> D Locrian scale; mode vii, key of E<sup>b</sup>

61



120 **E<sup>b</sup>root**

**E<sup>b</sup>Δ<sup>7</sup> E<sup>b</sup> Ionian scale; mode I**

64

Musical notation for the E<sup>b</sup> Ionian scale, mode I. The scale is written in bass clef, 4/4 time, starting on E<sup>b</sup> (B<sup>1</sup>). The notes are: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>. The notation shows a sequence of eighth notes: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>, followed by a whole note E<sup>b</sup> at the end of the line.

**E<sup>b</sup>m<sup>7</sup> E<sup>b</sup> Dorian scale; mode ii, key of D<sup>b</sup>**

67

Musical notation for the E<sup>b</sup> Dorian scale, mode ii. The scale is written in bass clef, 4/4 time, starting on E<sup>b</sup> (B<sup>1</sup>). The notes are: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>. The notation shows a sequence of eighth notes: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>, followed by a whole note E<sup>b</sup> at the end of the line.

**D<sup>#</sup>m<sup>7</sup> D<sup>#</sup> Phrygian scale; mode iii, key of B**

70

Musical notation for the D<sup>#</sup> Phrygian scale, mode iii. The scale is written in bass clef, 4/4 time, starting on D<sup>#</sup> (F<sup>2</sup>). The notes are: D<sup>#</sup>, E, F, G, A, B, C, D<sup>#</sup>. The notation shows a sequence of eighth notes: D<sup>#</sup>, E, F, G, A, B, C, D<sup>#</sup>, followed by a whole note D<sup>#</sup> at the end of the line.

**E<sup>b</sup>Δ<sup>7</sup> E<sup>b</sup> Lydian scale; mode IV, key of B<sup>b</sup>**

73

Musical notation for the E<sup>b</sup> Lydian scale, mode IV. The scale is written in bass clef, 4/4 time, starting on E<sup>b</sup> (B<sup>1</sup>). The notes are: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>. The notation shows a sequence of eighth notes: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>, followed by a whole note E<sup>b</sup> at the end of the line.

**E<sup>b</sup>7 E<sup>b</sup> Mixolydian scale; mode V, key of A<sup>b</sup>**

76

Musical notation for the E<sup>b</sup> Mixolydian scale, mode V. The scale is written in bass clef, 4/4 time, starting on E<sup>b</sup> (B<sup>1</sup>). The notes are: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>. The notation shows a sequence of eighth notes: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>, followed by a whole note E<sup>b</sup> at the end of the line.

**E<sup>b</sup>m<sup>7</sup> E<sup>b</sup> Aeolian scale; mode vi ("Natural minor"), key of G<sup>b</sup>**

79

Musical notation for the E<sup>b</sup> Aeolian scale, mode vi. The scale is written in bass clef, 4/4 time, starting on E<sup>b</sup> (B<sup>1</sup>). The notes are: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>. The notation shows a sequence of eighth notes: E<sup>b</sup>, F, G, A, B<sup>b</sup>, C, D, E<sup>b</sup>, followed by a whole note E<sup>b</sup> at the end of the line.

**D<sup>#</sup>ø<sup>7</sup> D<sup>#</sup> Locrian scale; mode vii, key of E**

82

Musical notation for the D<sup>#</sup> Locrian scale, mode vii. The scale is written in bass clef, 4/4 time, starting on D<sup>#</sup> (F<sup>2</sup>). The notes are: D<sup>#</sup>, E, F, G, A, B, C, D<sup>#</sup>. The notation shows a sequence of eighth notes: D<sup>#</sup>, E, F, G, A, B, C, D<sup>#</sup>, followed by a whole note D<sup>#</sup> at the end of the line.

E root

E<sup>Δ7</sup> E Ionian scale; mode I

85



Em<sup>7</sup> E Dorian scale; mode ii, key of D

88



Em<sup>7</sup> E Phrygian scale; mode iii, key of C

91



E<sup>Δ7</sup> E Lydian scale; mode IV, key of B

94



E<sup>7</sup> E Mixolydian scale; mode V, key of A

97



Em<sup>7</sup> E Aeolian scale; mode vi ("Natural minor"), key of G

100



E<sup>ø7</sup> E Locrian scale; mode vii, key of F

103



122 **F root**

**F $\Delta$ 7 F Ionian scale; mode I**

106



**Fm<sup>7</sup> F Dorian scale; mode ii, key of Eb**

109



**Fm<sup>7</sup> F Phrygian scale; mode iii, key of Db**

112



**F $\Delta$ 7 F Lydian scale; mode IV, key of C**

115



**F<sup>7</sup> F Mixolydian scale; mode V, key of Bb**

118



**Fm<sup>7</sup> F Aeolian scale; mode vi ("Natural minor"), key of Ab**

121



**F $\emptyset$ 7 F Locrian scale; mode vii, key of Gb**

124





G $\flat$  $\Delta$ 7 G $\flat$ Ionian scale; mode I

127



F $\sharp$ m7 F $\sharp$ Dorian scale; mode ii, key of E

130



F $\sharp$ m7 F $\sharp$ Phrygian scale; mode iii, key of D

133



G $\flat$  $\Delta$ 7 G $\flat$ Lydian scale; mode IV, key of D $\flat$

136



F $\sharp$ 7 F $\sharp$ Mixolydian scale; mode V, key of B

139



F $\sharp$ m7 F $\sharp$ Aeolian scale; mode vi ("Natural minor"), key of A

142



F $\sharp$  $\emptyset$ 7 F $\sharp$ Locrian scale; mode vii, key of G

145



124 **G root**

**G<sup>Δ7</sup> G Ionian scale; mode I**

148

Musical notation for the G Ionian scale (mode I) in 4/4 time. The scale is written in bass clef and consists of the notes G, A, B, C, D, E, F#, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

**Gm<sup>7</sup> G Dorian scale; mode ii, key of F**

151

Musical notation for the G Dorian scale (mode ii) in 4/4 time. The scale is written in bass clef and consists of the notes G, A, Bb, C, D, E, F, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

**Gm<sup>7</sup> G Phrygian scale; mode iii, key of Eb**

154

Musical notation for the G Phrygian scale (mode iii) in 4/4 time. The scale is written in bass clef and consists of the notes G, Ab, Bb, C, D, Eb, F, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

**G<sup>Δ7</sup> G Lydian scale; mode IV, key of D**

157

Musical notation for the G Lydian scale (mode IV) in 4/4 time. The scale is written in bass clef and consists of the notes G, A, B, C#, D, E, F, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

**G<sup>7</sup> G Mixolydian scale; mode V, key of C**

160

Musical notation for the G Mixolydian scale (mode V) in 4/4 time. The scale is written in bass clef and consists of the notes G, A, B, C, D, Eb, F, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

**Gm<sup>7</sup> G Aeolian scale; mode vi ("Natural minor"), key of Bb**

163

Musical notation for the G Aeolian scale (mode vi, "Natural minor") in 4/4 time. The scale is written in bass clef and consists of the notes G, Ab, Bb, C, D, Eb, F, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

**G<sup>ø7</sup> G Locrian scale; mode vii, key of Ab**

166

Musical notation for the G Locrian scale (mode vii) in 4/4 time. The scale is written in bass clef and consists of the notes G, Ab, Bb, C, Db, Eb, F, G. The notation shows the scale ascending and then descending, with a whole note G at the end of the line.

Ab<sup>Δ7</sup> Ab Ionian scale; mode I

169



Abm<sup>7</sup> Ab Dorian scale; mode ii, key of Gb

172



G#m<sup>7</sup> G# Phrygian scale; mode iii, key of E

175



Ab<sup>Δ7</sup> Ab Lydian scale; mode IV, key of Eb

178



Ab<sup>7</sup> Ab Mixolydian scale; mode V, key of Db

181



G#m<sup>7</sup> G# Aeolian scale; mode vi ("Natural minor"), key of B

184



G#<sup>ø7</sup> G# Locrian scale; mode vii, key of A

187



126 **A root**

**A<sup>Δ7</sup> A Ionian scale; mode I**

190



**Am<sup>7</sup> A Dorian scale; mode ii, key of G**

193



**Am<sup>7</sup> A Phrygian scale; mode iii, key of F**

196



**A<sup>Δ7</sup> A Lydian scale; mode IV, key of E**

199



**A<sup>7</sup> A Mixolydian scale; mode V, key of D**

202



**Am<sup>7</sup> A Aeolian scale; mode vi ("Natural minor"), key of C**

205



**A<sup>ø7</sup> A Locrian scale; mode vii, key of Bb**

208



**B $\flat$ root**

**B $\flat$  $\Delta$ 7    B $\flat$  Ionian scale; mode I**

211



**B $\flat$ m7    B $\flat$  Dorian scale; mode ii, key of A $\flat$**

214



**B $\flat$ m7    B $\flat$  Phrygian scale; mode iii, key of G $\flat$**

217



**B $\flat$  $\Delta$ 7    B $\flat$  Lydian scale; mode IV, key of F**

220



**B $\flat$ 7    B $\flat$  Mixolydian scale; mode V, key of E $\flat$**

223



**B $\flat$ m7    B $\flat$  Aeolian scale; mode vi ("Natural minor"), key of D $\flat$**

226



**A $\sharp$  $\emptyset$ 7    A $\sharp$  Locrian scale; mode vii, key of B**

229



128 **B root**

**B<sup>Δ7</sup> B Ionian scale; mode I**

232



**Bm<sup>7</sup> B Dorian scale; mode ii, key of A**

235



**Bm<sup>7</sup> B Phrygian scale; mode iii, key of G**

238



**Cb<sup>Δ7</sup> Cb Lydian scale; mode IV, key of Gb**

241



**B<sup>7</sup> B Mixolydian scale; mode V, key of E**

244



**Bm<sup>7</sup> B Aeolian scale; mode vi ("Natural minor"), key of D**

247



**B<sup>ø7</sup> B Locrian scale; mode vii, key of C**

250



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