

## Introduction

*7 Grids is a system for practicing and memorizing material to be used in improvised solos. It is a twelve key system. It is self contained.*

*You will be asked to memorize grids and the material couched in them. You will be asked to import the practiced material into solo lines, at first in pre-selected measures, later randomly.*

*You will not be asked to read transcribed solos or master every available chord/scale relationship or compile involved rhythmic lexicons. You will not find any discography here-- if you're interested in improvising we'll assume the foregoing items are on your shopping list.*

*For now, a few simple items have been selected for you to practice. There is no deadline involved; decide how many exercises you have time for and practice these. At some point they will be memorized. At some point your speed will exceed that of our practice CD. Practice without or program CD allowing you to increase speed.*

## Practice Guidelines.

- *Practice the material in the order given.*
- *Practice 20-24 sessions in any month period.*
- *Practice by repetition rather than by clock time. Two to three repetitions per page will do.*
- *Practice aerobically. Keep moving from page to page. Momentum resembles the action of a solo.*
- *Practice through your mistakes; these will go away after a while. Should some gremlins persist, however, set aside a non-grid segment and work them over.*

*Average time of session; 32 minutes*

## Insert guidelines

*As the material becomes easy, try fitting it into solo lines (see Key: "inserts")  
The Jamie Aebersold play-along series is indispensable for insert drill. Try these albums:*

1. *Blues In All Keys, Vol. 42*
2. *Maiden Voyage, Vol 54*
3. *Killer Joe, Vol 70.*

## Before beginning, please take note:

- *Before starting this system, singers would do well to read the addendum*
- *Chord calls do not dictate contents of the measure; rather the measure contents are (but one) workable option for the given chord call.*
- *Tablature is suggested only. It is presumed the individual will modify fingerings as necessary.*

*Now turn to our key.*



## Key

Look over the terms and descriptions listed below. It's a very small list and it's not overly formal. Knowledge of music theory is helpful but not utterly necessary. If you practice the material, taking note of the words in use, terminology will be comfortable soon enough.

**Grid:** A discreet ordering by interval of the twelve pitches in our notation system. This handbook uses seven orders or grids. Any material can be run through any grids. Grids may themselves be chords or scales but here we're keeping them distinct; material means one thing, grids another. The term "Grids" is informal; my students coined it in 1988.

**Sets:** Grids One, Two, and Three sound all twelve keys before repeating the first key. The remaining grids, however, repeat the first key before having played all twelve keys. These grids have been organized into Sets ensuring that all twelve keys be played.

**Control Grid:** A secondary grid used to order sets. See grids four, five six or seven. What is the interval featured in these grids? How many sets are there? What is the control grid?

**MBP (Most Basic Pattern):** A four note pattern consisting of two steps and a skip (ascending) or one skip and two steps (descending). Our MBP's will be major or minor in character. MBP is my own term.

**Half Scale:** The first five notes of a scale ascending or descending. We'll use major and minor half scales only. Later, starting on page 32 we'll take these half scales to the octave creating major, be-bop and Dorian scales.

**Triad:** A three note chord arranged in thirds. We'll use only two, the major and minor triad (see Grid three). The note upon which the triad is built is called the root. The remaining notes are called the third and the fifth, reflection their distance intervallically from the root. Later we'll add a seventh to the triad giving us three types of Seventh Chords.

**Inserts:** The placement of anything you've practiced into an improvisation. Inserts may be spontaneous or pre-chosen for a particular measure. In all instances inserts must be accurate, for instance, major material must be performed against major or dominant chords.

**Enharmonic Note:** In notation, all pitches have at least two possible spellings. For instance, Ab can be spelled G#, Eb can be spelled D# and so on.

**Enharmonic Trades:** Each grid features a discreet interval. At times, however, we will use an enharmonic trade for ease of handling. For instance, Grid 5 features sets of minor third related events. Ideally, a set beginning on C would show the following: C Eb Gb Bbb! Here we have (prudently, I might add) substituted this: C Eb F# A. The set handles easily and sounds the same as the first grouping. We can live with that.

**Invert:** Reverse the direction of the material as presented.

A simple inventory will be easy to practice,  
easy to understand, and easy to use.  
Complex inventories might well prove  
impossible to practice in their entirety.  
Understanding and usage might not occur in  
an acceptable period of time, if ever.

Let us begin.

Grid One  
 Progression by Fourth  
 Sample: Major MBP

C C F F

1 2 3 4

3 5 2 5 | 5 2 5 3 | 3 5 2 5 | 5 2 5 3

Bb Bb Eb Eb

5 6 7 8

5 1 3 5 | 3 5 3 1 | 1 3 5 3 | 3 5 3 1

Ab Ab Db Db

9 10 11 12

9 4 1 3 | 1 3 1 4 | 4 1 3 1 | 1 3 1 4

F# F# B B

13 14 15 16

13 2 4 1 | 4 1 4 2 | 2 4 1 4 | 4 1 4 2

- \* Practice as written
- \* Practice odd numbered measures
- \* Practice even numbered measures

E E A A

17 18 19 20

17 18 19 20

D D G G

21 22 23 24

21 22 23 24

Grid Two  
 Progression by Fifth  
 Sample: Minor MBP

C min                      C min                      G min                      G min

1                      2                      3                      4

3 0 1 0                      1 0 3                      3 0 1 0                      0 1 0 3

D min                      D min                      A min                      A min

5                      6                      7                      8

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

E min                      E min                      B min                      B min

9                      10                      11                      12

2 4 0 4                      4 0 4 2                      2 4 0 4                      4 0 4 2

F# min                      F# min                      C# min                      C# min

13                      14                      15                      16

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

- \* Practice as written
- \* Practice odd measures only
- \* Practice even measures only

Ab min                      Ab min                      Eb min                      Eb min

17                      18                      19                      20

17                      18                      19                      20

Bb min                      Bb min                      F min                      F min

21                      22                      23                      24

21                      22                      23                      24

Can you do the rest from memory?

C                      C min                      G                      G min

25                      26                      27                      28

25                      26                      27                      28

Grid Three  
 Progression by Half Step  
 Sample: Major Triad

The tablature is organized into four systems, each with two staves (musical notation and guitar fretboard). Measure numbers 1 through 16 are indicated below the fretboard staves.

- System 1:** Measures 1-4. Chords: C, C Maj 7, C#, C# Maj 7.
- System 2:** Measures 5-8. Chords: D, D Maj 7, Eb, Eb Maj 7.
- System 3:** Measures 9-12. Chords: E, E Maj 7, F, F Maj 7.
- System 4:** Measures 13-16. Chords: F#, F# Maj 7, G, G Maj 7.

- \* Practice as written
- \* Practice odd numbered measures
- \* Practice even numbered measures



Ab                      Ab maj 7                      A                      A maj 7

17                      18                      19                      20

17                      18                      19                      20

Bb                      Bb maj 7                      B                      B maj 7

21                      22                      23                      24

21                      22                      23                      24

Alternate (See-Saw) from Memory

C                      C#                      D                      Eb

25                      26                      27                      28

25                      26                      27                      28

Grid Three  
 Progression by Half Step  
 Sample: Minor Triad

C min                      C min 7                      B min                      B min 7

1                      2                      3                      4

1                      2                      3                      4

Bb min                      Bb min 7                      A min                      A min 7

5                      6                      7                      8

5                      6                      7                      8

Ab min                      Ab min 7                      G min                      G min 7

9                      10                      11                      12

9                      10                      11                      12

F# min                      F# min 7                      F min                      F min 7

13                      14                      15                      16

13                      14                      15                      16

- \* Practice as is
- \* Practice odd measures only
- \* Practice even measures only

E min                      E min 7                      Eb min                      Eb min 7

17                      18                      19                      20

17                      18                      19                      20

D min                      D min 7                      Db min                      Db min 7

21                      22                      23                      24

21                      22                      23                      24

Can you play alternating major and minor triads like this?

C                      C min                      C#                      C# min

25                      26                      27                      28

25                      26                      27                      28

Grid Four  
 Progression by Whole Step  
 Sample: Major Half Scale

Set One

The sheet music for Set One consists of three systems, each with a melodic line in the bass clef and a fretboard diagram below it. The progression is as follows:

- System 1:** Chords C, C7, D, D7. Measures 1-4.
- System 2:** Chords E, E7, F#, F#7. Measures 5-8.
- System 3:** Chords Ab, Ab7, Bb, Bb7. Measures 9-12.

The fretboard diagrams show fingerings for each measure, with numbers 1-4 indicating the fingers used. The melodic lines are written in 4/4 time, with notes and rests corresponding to the chord changes.

CD Track 5

- \* Practice as is
- \* Practice odd measures only
- \* Practice even measures only

Set Two

B B7 C# C#7

13 14 15 16

13 14 15 16

Eb Eb7 F F7

17 18 19 20

17 18 19 20

G G7 A A7

21 22 23 24

21 22 23 24

CD Track 6

\* Practice as is  
 \* Practice odd measures only  
 \* Practice even measures only

Grid Four  
 Progression by Whole Step  
 Sample: Minor Half Scale

Set One

C min                      C min 7                      Bb min                      Bb min 7

1                      2                      3                      4

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

1                      2                      3                      4

Ab min                      Ab min 7                      F# min                      F# min 7

5                      6                      7                      8

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

5                      6                      7                      8

E min                      E min 7                      D min                      D min 7

9                      10                      11                      12

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

9                      10                      11                      12

CD Track 7

- \* Practice as is
- \* Practice odd numbered measures
- \* Practice even numbered measures

Set Two

B min                      B min 7                      A min                      A min 7

13                      14                      15                      16

13                      14                      15                      16

G min                      G min 7                      F min                      F min 7

17                      18                      19                      20

17                      18                      19                      20

Eb min                      Eb min 7                      Db min                      Db min 7

21                      22                      23                      24

21                      22                      23                      24

CD Track 8

Can you swing major and minor a whole step back and forth?

C                      Bb                      C min                      Bb min

25                      26                      27                      28

25                      26                      27                      28

Grid Five Ascending  
 Progression by Minor Third  
 Sample: Minor Half Scale & Minor Triad  
 Control: Grid Three

Set One

C min Eb min F# min A min

1 2 3 4

3 5 1 3 5 1 3 4 1 3 4 1 2 4 6 2 4 5 7 9 5

1 2 3 4

Set Two

B min D min F min Ab min

5 6 7 8

2 4 5 2 4 5 2 3 5 2 3 5 1 3 5 1 3 4 6 8 4

5 6 7 8

Set Three

Bb min C# min E min G min

9 10 11 12

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

9 10 11 12

CD Track 9

\* Practice as is  
 \* Mix starting sets



Grid Five Descending  
 Progression by Minor Third  
 Sample: Major Triad  
 Control: Grid Three

Set One

C A F# Eb

13 14 15 16

12 9 5 7 9 6 2 4 6 3 4 1 3 5 1 3 5

13 14 15 16

Set Two

B Ab F D

17 18 19 20

11 8 4 6 8 5 1 3 5 2 3 5 2 4 5 2 4

17 18 19 20

Set Three

Bb G E C#

21 22 23 24

10 7 3 5 7 4 5 2 4 1 2 4 1 3 4 1 3

21 22 23 24

CD Track 10

Grid Six Ascending  
 Progression by Major Third  
 Sample: Major MBP  
 Control: Grid Three

Set One

C E Ab C

Set Two

B Eb G B

Set Three

Bb D F# Bb

Set Four

A C# F A

CD Track 11

\* Practice as is  
 \* Vary start set

Grid Six Descending  
 Sample: Major Triad  
 Control: Grid Three

Set One

Set One musical notation (measures 17-20):

- Measures: 17, 18, 19, 20
- Chords: C, Ab, E, C
- Fingerings: 12, 9, 5, 7, 8, 5, 1, 3, 4, 1, 2, 4, 0

Set Two

Set Two musical notation (measures 21-24):

- Measures: 21, 22, 23, 24
- Chords: B, G, Eb, B
- Fingerings: 11, 8, 4, 6, 7, 4, 0, 2, 3, 0, 1, 3, 4

Set Three

Set Three musical notation (measures 25-28):

- Measures: 25, 26, 27, 28
- Chords: Bb, F#, D, Bb
- Fingerings: 10, 7, 3, 5, 6, 3, 4, 1, 2, 4, 0, 2, 3

Set Four

Set Four musical notation (measures 29-32):

- Measures: 29, 30, 31, 32
- Chords: A, F, Db, A
- Fingerings: 9, 6, 2, 4, 5, 2, 3, 0, 1, 3, 4, 1, 2

CD Track 12

Grid Seven Ascending  
 Progression by Tritone  
 Sample: Major Triad Ascending  
 Control: Grid Three

Chords: C, F#, C#, G, D, Ab, Eb, A, E, Bb, F, B

Measures: 1, 2, 3, 4, 5, 6

CD Track 13

Grid Seven Ascending  
 Sample: Major Triad Descending  
 Control: Grid Three

Chords: F#, C, G, Db, Ab, D, A, Eb, Bb, E, B, F

Measures: 7, 8, 9, 10, 11, 12

CD Track 14

- \* Practice as is
- \* Vary start measure
- \* Using the above layout, substitute major MBPs

Try Major MBP using the following grid chord calls

C F# C C# G C# D Ab D Eb A Eb

The image shows a musical exercise on a guitar fretboard from fret 13 to 16. It consists of two staves: a bass clef staff and a guitar staff. The bass clef staff shows a sequence of notes: C (fret 13), D (fret 14), E (fret 15), F# (fret 16), G (fret 17), A (fret 18), B (fret 19), and C (fret 20). The guitar staff shows the corresponding fret numbers for each note: 13, 14, 15, 16, 17, 18, 19, and 20. The fret numbers are: 13, 3, 0, 2, 0, 4, 1, 3, 6, 5, 14, 4, 15, 16.

## The Short Turnaround ( ii mi7 – V7 – I )

Think of the Turnaround as a two-chord progression to a particular (target) chord

In the Short Turnaround the first two chords receive two beats apiece before resolving on the target. This resolving characteristic frees the target from any preset number of beats.

*For a more thorough discussion of the Turnarounds and Turnbacks see the addendum.*

Short Turn Around  
 Minor MBP / Major MBP / Root Note  
 Control: Grid One

D min 7      G7      C      G min 7      C7      F

C min 7      F7      Bb      F min 7      Bb7      Eb

Bb min 7      Eb7      Ab      Eb min 7      Ab7      Db

Ab min 7      Db7      Gb      C# min 7      F#7      B

\* Practice as is  
 \* Vary Starting point

F# min 7      B7      E      B min 7      E7      A

17      18      19      20

4   1   2   6   4   6   8   11   9   2   4   0   4   2   4   1   4   2

E min 7      A7      D      A min 7      D7      G

21      22      23      24

2   4   0   4   2   4   6   9   7   0   2   3   2   0   2   4   2   0

CD Track 15

Try using Grid 4 as your practice grid

D min 7      G7      C      C min 7      F7      Bb

25      26      27      28

0   2   3   2   0   2   4   7   5   3   0   1   0   3   0   2   5   3



The Long Turnaround  
 In the Long Turnaround, the first two chords receive four beats apiece, while the target remains unspecified in duration. Let's try it.

Long Turnaround  
 Minor Half Scale + Minor MBP / Major Half Scale + Major MBP / Root Note  
 Control: Grid One

D min7    G7    C

1    2    3

G min7    C7    F

4    5    6

C min7    F7    Bb

7    8    9

F min7    Bb7    Eb

10    11    12

Bb min7 Eb7 Ab

13 14 15

13 14 15

Eb min7 Ab7 Db

16 17 18

16 17 18

G# min7 C#7 F#

19 20 21

19 20 21

C# min7 F#7 B

22 23 24

22 23 24

**F# min7** **B7** **E**

25 26 27

4 1 2 4 6 2 1 4 | 4 6 8 9 11 8 6 4 | 9

25 26 27

**B min7** **E7** **A**

28 29 30

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

28 29 30

**E min7** **A7** **D**

31 32 33

2 4 0 2 4 0 4 2 | 2 4 6 7 9 6 4 2 | 7

31 32 33

**A min7** **D7** **G**

34 35 36

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

34 35 36

CD Track 16

Think: Minor side of each long turnaround can be used as a short turnaround!

**D min7** **G7** **C** **G min 7** **C7** **F**

37 38 39 40

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

37 38 39 40

The Turnback (iii mi7 -- VI 7 -- ii mi7 -- V7 -- I)

Adding a Turnaround to a Turnaround creates the most common kind of Turnback. We'll start out Turnbacks on the third of the target chord. For learning we will use the Short version (two beats per chord with the target unspecified in duration).

At this point, there's no turning back!

Turn Back  
Minor MBP Same Minor Half Scale  
Control: Grid One

E min7      A7      D min7      G7      C

1      2      3

1      2      3

A min7      D7      G min7      C7      F

4      5      6

4      5      6

D min7      G7      C min7      F7      Bb

7      8      9

7      8      9

G min7      C7      F min7      Bb7      Eb

10      11      12

10      11      12

Turnbacks often occur at the very end of phrases and songs, in other words "highlight" areas. The use of simple material citing the existence of the Turnback is therefore not merely practical for learning but aesthetically pleasing.

C min7                  F7                  Bb min7                  Eb7                  Ab

13                                  14                                  15

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

F min7                  Bb7                  Eb min7                  Ab7                  Db

16                                  17                                  18

3 0 1 5 3 1 0 3 | 1 3 4 3 1 4 3 1 | 4

Bb min7                  Eb7                  Ab min7                  Db7                  Gb

19                                  20                                  21

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

Eb min7                  Ab7                  Db min7                  Gb7                  Cb

22                                  23                                  24

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

G# min7                  C#7                  F# min7                  B7                  E

25    26    27

1 3 4 8 6 4 3 1 | 4 1 2 6 4 2 1 4 | 2

C# min7                  F#7                  B min7                  E7                  A

28    29    30

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

F# min7                  B7                  E min7                  A7                  D

31    32    33

4 1 2 6 4 2 1 4 | 2 4 0 4 2 0 4 2 | 0

B min7                  E7                  A min7                  D7                  G

34    35    36

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

CD Track 17

\* Practice as is  
 \* Think: any one can be used in a short turnaround

## 7<sup>th</sup> Chords and Partner Scales

We will now add three seventh chords and three full scales into the mix. Placing a selected third on to our by now familiar Major or Minor triads will give us Major 7<sup>th</sup>, Dominant 7<sup>th</sup> and Minor 7<sup>th</sup> chords. Note that these three seventh chords are those used most often in Turnarounds.

We will as well take our Half Scales on to the octave, creating one full scale for each seventh chord. The scales selected are: (for Major 7<sup>th</sup> chords) the Major Scale, (for Dominant 7<sup>th</sup> chords) the Bebop scale, and (for Minor 7<sup>th</sup> chords) the Dorian scale.

Our choice of grids is random. After having practiced the chords and scales as presented, run the material through different grids. In fact, why not re-route everything we've practiced to this point?

For instance...

# Major MBP versus the 7 Grids

Can you run this material through all seven grids?

From memory?

Using the grid ribbon? (see addendum)

## Grid one

C F Bb Eb

Grid one musical notation: Bass clef, 4/4 time signature. Staff 1: Notes C2, D2, E2, F2, G2, A2, Bb2, Eb2. Staff 2: Fingering 1 2 3 4. Staff 3: Fingering 3 0 2 0 | 3 0 2 5 | 3. Staff 4: Fingering 1 2 3 4.

## Grid two

C G D A

Grid two musical notation: Bass clef, 4/4 time signature. Staff 1: Notes C3, D3, E3, F3, G3, A3. Staff 2: Fingering 5 6 7 8. Staff 3: Fingering 3 0 2 0 | 0 2 4 7 | 0. Staff 4: Fingering 5 6 7 8.

## Grid three

C C# D Eb

Grid three musical notation: Bass clef, 4/4 time signature. Staff 1: Notes C3, D3, E3, F3, C#3, D3, Eb3. Staff 2: Fingering 9 10 11 12. Staff 3: Fingering 3 0 2 0 | 4 1 3 1 | 0. Staff 4: Fingering 9 10 11 12.

## Grid four (set one)

C D E F#

Grid four (set one) musical notation: Bass clef, 4/4 time signature. Staff 1: Notes C3, D3, E3, F#3. Staff 2: Fingering 13 14 15 16. Staff 3: Fingering 3 0 2 0 | 0 2 4 2 | 2. Staff 4: Fingering 13 14 15 16.



Grid five (set one)

C Eb F# A

17 18 19 20

3 0 2 0 | 1 3 0 3 | 4

17 18 19 20

Detailed description: This block contains the musical notation for Grid five (set one). It consists of two staves. The top staff is a bass clef staff with a key signature of one sharp (F#) and a 4/4 time signature. It contains four measures of music, with measure numbers 17, 18, 19, and 20 written below. The notes are: C2 (17), D2 (18), E2 (18), F#2 (19), G2 (19), A2 (19), B2 (19), C3 (20). The bottom staff is a guitar fretboard diagram with two strings (A and B) and four measures. Measure numbers 17, 18, 19, and 20 are written below. The fret numbers are: 3 (17), 0 (18), 2 (18), 0 (18), 1 (19), 3 (19), 0 (19), 3 (19), 4 (20).

Grid six (set one)

C E Ab

21 22 23 24

3 0 2 0 | 2 4 1 4 | 1

21 22 23 24

Detailed description: This block contains the musical notation for Grid six (set one). It consists of two staves. The top staff is a bass clef staff with a key signature of one sharp (F#) and a 4/4 time signature. It contains four measures of music, with measure numbers 21, 22, 23, and 24 written below. The notes are: C2 (21), D2 (22), E2 (22), F#2 (23), G2 (23), Ab2 (24), B2 (24), C3 (24). The bottom staff is a guitar fretboard diagram with two strings (A and B) and four measures. Measure numbers 21, 22, 23, and 24 are written below. The fret numbers are: 3 (21), 0 (22), 2 (22), 0 (22), 2 (23), 4 (23), 1 (23), 4 (23), 1 (24).

Grid seven

C F# C# G

25 26 27 28

3 0 2 0 | 4 1 3 6 | 4

25 26 27 28

Detailed description: This block contains the musical notation for Grid seven. It consists of two staves. The top staff is a bass clef staff with a key signature of one sharp (F#) and a 4/4 time signature. It contains four measures of music, with measure numbers 25, 26, 27, and 28 written below. The notes are: C2 (25), D2 (26), E2 (26), F#2 (27), G2 (27), C#2 (28), D#2 (28), E3 (28). The bottom staff is a guitar fretboard diagram with two strings (A and B) and four measures. Measure numbers 25, 26, 27, and 28 are written below. The fret numbers are: 3 (25), 0 (26), 2 (26), 0 (26), 4 (27), 1 (27), 3 (27), 6 (27), 4 (28).

Lets move on to 7th chords and scales!

Major Seventh Chord  
Grid Three

The image displays a musical exercise for Major Seventh Chords, organized into four rows of two staves each. The top staff of each row is a bass clef staff with a 4/4 time signature, and the bottom staff is a guitar staff. The exercises are numbered 1 through 16, corresponding to the following chords: C Maj 7, C Maj 7, C# Maj 7, C# Maj 7, D Maj 7, D Maj 7, Eb Maj 7, Eb Maj 7, E Maj 7, E Maj 7, F Maj 7, F Maj 7, F# Maj 7, F# Maj 7, G Maj 7, and G Maj 7. Each measure contains a bass line with a single note and a guitar line with a chord shape. The guitar staff includes fret numbers (0-8) and string indicators (A and B strings).

- \* Practice as is
- \* Practice odd measures only
- \* Practice even measures only

Ab Maj 7

Ab Maj 7

A Maj 7

A Maj 7

Bb Maj 7

Bb Maj 7

B Maj 7

B Maj 7

Can you swing the Major 7th chord back and forth?

C Maj 7

C# Maj 7

D Maj 7

Major Scale  
Grid Three

C Maj7                      Db Maj7                      D Maj7

Eb Maj7                      E Maj7                      F Maj7

F# Maj7                      G Maj7                      Ab Maj7

A Maj7                      Bb Maj7                      B Maj7

\* Practice as is  
\* Invert the scale direction

Major Scale  
Grid Three Inversion

C Maj7                      Db Maj7                      D Maj7

13                      14                      15

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

13                      14                      15

*You're on your own! Fill in Chord Calls and Scales*

Eb Maj7

16                      17                      18

16                      17                      18

19                      20                      21

19                      20                      21

22                      23                      24

22                      23                      24

Dominant 7 chord  
Grid One

C7 C7 F7 F7

1 2 3 4

A B 3 2 0 3 | 3 0 2 3 | 1 0 3 1 | 1 3 0 1

Bb7 Bb7 Eb7 Eb7

5 6 7 8

A B 1 0 3 1 | 1 3 0 1 | 1 0 3 6 | 6 3 0 1

Ab7 Ab7 Db7 Db7

9 10 11 12

A B 4 3 1 4 | 4 1 3 4 | 4 3 1 4 | 4 1 3 4

F#7 F#7 B7 B7

13 14 15 16

A B 4 3 6 9 | 9 6 3 4 | 2 1 4 2 | 2 4 1 2

- \* Practice as is
- \* Practice odd measures
- \* Practice even measures

E7 E7 A7 A7

17 18 19 20

2 1 4 7 7 4 1 2 | 0 4 2 0 0 2 4 0

D7 D7 G7 G7

21 22 23 24

0 4 2 5 5 2 4 0 | 3 2 0 3 3 0 2 3

Bebop Scale  
Grid Three

The image displays eight examples of the Bebop Scale Grid Three for bass guitar, each consisting of a musical staff and a fretboard diagram. The scales are: C7, C#7, D7, Eb7, E7, F7, F#7, and G7. Each scale is shown in a 6/8 time signature. The fretboard diagrams include fingerings (1-4) and starting fret numbers (1-8) for each scale.

\* Practice as is  
\* Invert the direction of each scale



Ab7 A7

9 10

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

9 10

Bb7 B7

11 12

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

11 12

Minor 7th Chord  
Grid Four Descending

Set One

C min 7                      C min 7                      Bb min 7                      Bb min 7

1                      2                      3                      4

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

1                      2                      3                      4

Ab min 7                      Ab min 7                      F# min 7                      F# min 7

5                      6                      7                      8

5 4 2 1 4 4 1 2 4 2 0 4 2 2 4 0 2

5                      6                      7                      8

E min 7                      E min 7                      D min 7                      D min 7

9                      10                      11                      12

2 0 4 7 7 4 0 2 0 3 2 5 5 2 3 0 3

9                      10                      11                      12

CD Track 22

- \* Practice as is
- \* Practice odd measures only
- \* Practice even measures only

Set Two

B min 7                      B min 7                      A min 7                      A min 7

13                      14                      15                      16

G min 7                      G min 7                      F min 7                      F min 7

17                      18                      19                      20

Eb min 7                      Eb min 7                      Db min 7                      Db min 7

21                      22                      23                      24

CD Track 23

We've added a 9th. Can you do the same?

C min 9                      C min 9                      Bb min 9

25                      26                      27                      28

\* Practice as is  
 \* Practice odd measures only  
 \* Practice even measures only

Dorian Scale  
Grid One

C min 7                      F min 7

1                                      2

T                                      T

A                                      A

B                                      B

1                                      2

3   0   1   3   0   2   3   5   7                      3   0   1   3   5   7   8   10   12

Bb min 7                      Eb min 7

3                                      4

T                                      T

A                                      A

B                                      B

3                                      4

1   3   4   1   3   0   1   3   5                      1   3   4   1   3   5   7   8   10

Ab min 7                      Db min 7

5                                      6

T                                      T

A                                      A

B                                      B

5                                      6

4   1   2   4   1   3   4   1   3                      4   1   2   4   1   3   4   6   8

F# min 7                      B min 7

7                                      8

T                                      T

A                                      A

B                                      B

7                                      8

2   4   0   2   4   1   2   4   1                      2   4   0   2   4   1   2   4   6

E min 7      A min 7

Musical notation for E min 7 and A min 7 chords. The E min 7 chord is shown in bass clef with notes G2, Bb2, D3, F3, and A2. The A min 7 chord is shown in bass clef with notes C3, E3, G3, Bb3, and A2. Below each chord is a guitar fretboard diagram with fingerings: E min 7 (9) 2 4 0 2 4 6 7 9 11; A min 7 (10) 0 2 3 0 2 4 0 2 4.

D min 7      G min 7

Musical notation for D min 7 and G min 7 chords. The D min 7 chord is shown in bass clef with notes F2, Ab2, Bb2, D3, and F3. The G min 7 chord is shown in bass clef with notes Bb2, D3, F3, Ab3, and G2. Below each chord is a guitar fretboard diagram with fingerings: D min 7 (11) 0 2 3 0 2 4 5 7 9; G min 7 (12) 3 0 1 3 0 2 3 0 2 3.

CD Track 24

Can you play the scale from the 9th down?

C min 9      F min 9      Bb min 9

Musical notation for C min 9, F min 9, and Bb min 9 chords. The C min 9 chord is shown in bass clef with notes Bb2, C3, Eb3, F3, Ab3, and C4. The F min 9 chord is shown in bass clef with notes Eb3, F3, Ab3, Bb3, C4, and F4. The Bb min 9 chord is shown in bass clef with notes Gb3, Ab3, Bb3, C4, Eb4, and Bb3. Below each chord is a guitar fretboard diagram with fingerings: C min 9 (13) 7 5 3 2 0 3 1 0 3; F min 9 (14) 0 3 1 0 3 1 4 3 1; Bb min 9 (15) 5.

## Pentatonic and Blues Scales

Let's begin with two versions of the pentatonic scale: Major and minor.

To an ascending Major MBP, add one more whole step. You now have a Major Pentatonic Scale.

For a minor pentatonic scale, start a major pentatonic from its highest note (the note you just added.) Think of this note as the key note. You'll notice the overall sound is minor.

So, we have one scale with both major and minor character. This scale has been placed in Grid Five.

Let's practice it.

Major Pentatonics  
Major Pentatonics adjusted to Minor  
Grid Five

### Set One

Set One

**C Major / A minor**

Staff 1: C Major (ascending and descending) and A minor (ascending and descending).  
Fretboard 1: C Major (1, 3, 0, 2, 0, 2, 0, 2, 0, 3) and A minor (2, 0, 3, 0, 2, 0, 2, 0, 3, 0).

**A Major / F# minor**

Staff 2: A Major (ascending and descending) and F# minor (ascending and descending).  
Fretboard 2: A Major (3, 0, 2, 4, 2, 4, 2, 4, 2, 0) and F# minor (4, 2, 0, 2, 4, 2, 4, 2, 0, 2).

**Gb Major / Eb minor**

Staff 3: Gb Major (ascending and descending) and Eb minor (ascending and descending).  
Fretboard 3: Gb Major (5, 2, 4, 1, 4, 1, 4, 1, 4, 2) and Eb minor (6, 1, 4, 1, 3, 6, 3, 1, 4, 1).

Eb C min

7 8

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

CD Track 25

Set Two

B G# min

9 10

2 4 1 4 1 4 2 4 2 4 1 4 1 4 2 4

Ab F min

11 12

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

F D min

13 14

3 0 2 5 7 5 2 0 3 0 3 0 2 5 2 0 3 0

D B min

15 16

0 2 4 2 4 2 4 2 0 2 0 2 4 2 4 2 0 2

CD Track 26

Set Three

Bb G min

17 18

17 18

G E min

19 20

19 20

E C# min

21 22

21 22

C# A# min

23 24

23 24

CD Track 27



## The Blues Scale

Practice the material as presented on the following page, and then come on back (exercise page follows)

Against the emotionally heated backdrop Blues create, it's difficult to coolly lay down protocol! But that's our job here, so let's get on with it.

**Protocol One:** One scale per key; if the Blues is in C major or minor, play the C Blues Scale only. It will work throughout regardless of the chord changes.

**Protocol Two:** Run the entire scale up and/or down; it will sound fine.

**Protocol Three:** Break the scale up into two and three note groups and repeat these shorter ideas, (sometimes called "riffs"). Now and then these may clatter against the existing chord; experience will teach you when to bail!

Blues Scale  
Grid Three Ascending

Set One

C7 C#7 D7 Eb7

1 2 3 4

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

1 2 3 4

E7 F7 F#7 G7

5 6 7 8

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

5 6 7 8

Ab7 A7 Bb7 B7

9 10 11 12

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

9 10 11 12

Blues Scale Inverted  
Grid Three

The musical score is divided into three systems, each with a bass clef staff and a guitar fretboard diagram below it. Measure numbers are indicated below the bass staff.

**System 1 (Measures 13-16):**

- Measure 13: Chord C7. Bass staff: G2, F3, E3, D3. Fretboard: 5 3 0 | 4 3 1 | 3
- Measure 14: Chord C#7. Bass staff: G#2, F#3, E3, D3. Fretboard: 4 | 2 4 | 0 1 4 6
- Measure 15: Chord D7. Bass staff: G2, F3, E3, D3. Fretboard: 7 5 2 | 1 0 | 3 0
- Measure 16: Chord Eb7. Bass staff: G2, F3, E3, D3. Fretboard: 1 4 | 1 2 3 6 8

**System 2 (Measures 17-20):**

- Measure 17: Chord E7. Bass staff: G2, F3, E3, D3. Fretboard: 9 7 4 3 2 0 | 2
- Measure 18: Chord F7. Bass staff: G2, F3, E3, D3. Fretboard: 3 | 1 3 4 5 8 10
- Measure 19: Chord F#7. Bass staff: G2, F3, E3, D3. Fretboard: 11 9 6 5 4 2 | 4
- Measure 20: Chord G7. Bass staff: G2, F3, E3, D3. Fretboard: 0 3 5 6 7 10 12

**System 3 (Measures 21-24):**

- Measure 21: Chord Ab7. Bass staff: G2, F3, E3, D3. Fretboard: 1 | 4 1 0 | 4 2 4
- Measure 22: Chord A7. Bass staff: G2, F3, E3, D3. Fretboard: 0 3 | 0 1 2 | 0 2
- Measure 23: Chord Bb7. Bass staff: G2, F3, E3, D3. Fretboard: 3 1 | 3 2 1 | 4 1
- Measure 24: Chord B7. Bass staff: G2, F3, E3, D3. Fretboard: 2 | 0 2 3 4 | 2 4

## Insert Solos

All competent improvisers insert memorized material into their solos. This material is re--cycled, varied, and augmented through the improviser's career.

The following written out solos recap some of the things we've learned.

You'll have to read them but that shouldn't be problematic if you've practiced well. Play them as is. Once played to your satisfaction try soloing with a mix of insertions you feel might work and ideas that just pop up. Once done ask the following questions:

Did my inserts sound good?

Did my inserts blend with the idea being played?

If you answered positively, welcome aboard! You're now ready for Vol. II of the Grid series.

Insert Solo One  
 Inserts: Major and Minor MBP and Triads

C7 F7 C7 G min7 C7

C MBP Maj F Maj Triad C MBP Maj Short Turn Around

3 0 2 0 3 2 5 3 0 2 0 0 2 3 7 5 7 9 12

F7 F7 C7 E min7 A7

F Maj Triad F MBP Maj C Triad Long Turnaround Excerpt

10 5 2 3 5 2 0 3 0 2 3 2 4 0 4 2 0 4 2

D min7 G7 E min7 A7 D min7 G7

D MBP min G MBP Maj Turnback .....

0 2 3 2 0 4 7 2 4 0 4 2 0 4 2 0 2 3 2 0 3 2 0

CD Track 29

Insert Solo Two  
 Inserts: Seventh Chords, Scales

C7 F7 C7 G min7 C7

C Bebop Scale F MBP Major C Half Scale Short Turnaround

3 0 2 3 0 2 3 4 | 5 2 0 3 | 3 0 2 3 0 0 | 3 1 0 3 3 0 2 0

F7 F7 C7 E min7 A7

F Bebop Scale F Dom 7th Chord C Dom 7th Chord

10 9 8 7 5 3 2 0 | 3 2 5 8 8 | 3 2 0 3 3 0 2 3 | 2

D min7 G7 E min7 A7 D min7 G7

D min 7th chord G half scale G MBP Maj long turnaround D min 7 chord G Maj MBP

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

CD Track 30

Insert Solo Three  
 Inserts: Blues, Pentatonic scale

C7                      F7                      C7                      G min7                      C7

Blues lick                      Blues scale                      Blues lick                      Major Pentatonic

5 5 3 5                      5 3 0 4 3 1 3                      5 5 3 5                      3 0 2 0 2 5 7 9

F7                      F7                      C7                      E min7                      A7

Blues lick                      Blues lick                      Major Pentatonic                      Blues lick

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

D min7                      G7                      E min7                      A7                      D min7                      G7

Long Turnaround.....                      Blues lick                      Blues lick

0 2 3 0 2 3 2 0                      0 2 4 5 7 4 2 0                      5 5 3 5                      8 5

CD Track 31

Insert Solo Four  
Your Own Creation

C7                      F7                      C7                      G min 7              G7

Turn around

F7                      F7                      C7                      E min 7              A7

Turn around

D min 7                      G7                      E min 7              A7              D min 7              G7

Slow Turnaround                      Turnback

CD Track 32



## Addendum

Turnarounds are complicated, yes, but absolutely necessary to our work here. Because of this, we will limit ourselves to Turnarounds (and Turnbacks) in major or dominant style keys.

Let's assemble a short turnaround.

We're in the key of C. Ascending, the notes of our C scale are: C D E F G A B and the octave C. Each note has a numerical equivalent as well: C = 1, D = 2, E = 3 and so on.

Let's extract D (2), G (5) and C (1).

Using the notes of our scale, let's build a seventh chord over D (2) and G (5) leaving C (1) as a simpler major triad. The progression should read: Dmi7, G7, C Major. Play through it. Remember: the first two chords receive two beats, the target as many as you wish.

On pages 23 and 24 the minor and major MBP have been combined into Short Turnarounds in all twelve major or dominant style keys. Let's practice these.

Turnbacks often occur at the very end of phrases and songs, in other words "highlight" areas. The use of simple material citing the existence of the Turnback is therefore not merely practical for learning but aesthetically pleasing as well. (The following is laid out on CD Track 17, play along or just listen.)

Return to the Scale of C. Extract, in order, E (3), A (6), D (2) and C (1). Over E and A, build the same order of seventh chords noting that A7 uses a pitch (C#) not found in the key of C. The progression should read: Emin, A7, Dmi7, G7, C Maj. Play through this. Maintain a two-beats-per chord feel.

On pages 26 - 28 the Minor MBP and half scale have been arranged to provide Turnbacks in all twelve Major or Dominant style keys.

Whether artistry can be taught is debatable; whether artistry can be attained without skill is not.

7 Grids teaches skills. Artistry is up to you

Grid One: Movement by Perfect Fourth

C F Bb Eb Ab Db/C# F# B E A D G [C]

Grid Two: Movement by Perfect Fifth

C G D A E B F# C#/Db Ab Eb Bb F [C]

Grid Three: Movement by Half Step

C C#/Db D D#/Eb E F F#/Gb G G#/Ab A A#/Bb B [C]

Grid Four: Movement by Whole Step

Set One: C D E F# G#/Ab Bb [C]

Set Two: C# D#/Eb F G A B [C#]

Grid Five: Movement by Minor Third

Set One: C Eb F# A [C]

Set Two: C# E G Bb [C#]

Set Three: D F Ab Cb/B [D]

Grid Six: Movement by Major Third

Set One: C E G# [C]

Set Two: Db F A [Db]

Set Three: D F# A#/Bb [D]

Set Four: Eb Gb B [Eb]

Grid Seven: Movement by Tritone (Control Grid One)

C - F# F - B Bb - F# Eb - A Ab - D C# - F

F# - C B - F E - A# A - D# D - G# G - C#