

Tutorial 5H: The Matrix



Welcome! In this tutorial you'll learn how to:

1. Understand The Matrix
2. Use symmetrical sequencing
3. Construct and move Matrix components
4. Integrate Matrix components in solos

Enjoy the learning!

Other Tutorials

- 5A: Playing Outside, Part 1
- 5B: Playing Outside, Part 2
- 5C: Rhythmic Freedom, Part 1
- 5D: Rhythmic Freedom, Part 2
- 5E: Rhythmic Pulses

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- ▶ The Matrix is an interesting approach for organizing and developing your outside playing. It was developed by Rich Dixon, guitarist for the jazz group BRIJJ.

Part 1 – Understanding The Matrix

A) What is The Matrix?

*The Matrix © is a system developed by Rich Dixon, guitarist for BRIJJ. It provides an effective way to meet the two goals of outside playing stated above. The Matrix uses symmetrical sequencing, described below, to help you create a world of “controlled atonality.”

*By nature, the Matrix is a high-energy approach to melody, moving quickly through keys while keeping strong interval and harmonic relationships. When you combine The Matrix with other improvisation concepts (see *Integrating the Matrix* later in this chapter) you can lead the listener inside and outside the key, with smooth and effective ideas.

*You can listen to Rich’s solos that use concepts from The Matrix. They are MP3 guitar solos in the BRIJJ Solos folder on the CD.

*In the future Rich plans to publish an entire method describing The Matrix in detail. This chapter is a brief look at the basics of The Matrix, courtesy of Rich.

B) What do I need to know to use it?

*To understand and use The Matrix you should be comfortable with the concepts in the topics listed below. If you’re not, you should review them before you continue with this chapter.

Transposed Sequences	Tutorial 3E
Whole-Tone Scales	Tutorial 3K
Diminished Chords and Scales	Tutorial 3K
Outside Notes and Keys	Tutorial 5A
Sequencing & Developing Outside Ideas	Tutorial 5B

*Remember that it definitely takes a while to master The Matrix. (Rich is still working on it!) At first you may need to rework the same patterns and ideas repeatedly until they are comfortable. In time you’ll expand the number of ideas you can play, as well as develop and vary them “in flight” – a very rewarding experience! As Rich describes it, it’s a “melodic and harmonic roller-coaster ride.”

Part 2 – Symmetrical Sequencing

A) What is symmetrical sequencing?

(Part 2 – Symmetrical Sequencing)

*The Matrix is built on the idea of “symmetrical sequencing,” which divides the chromatic scale into equal parts. You have already learned some of the basics of symmetrical sequencing in this book, as listed in the chapters above.

*The basic types of symmetrical scale divisions are diminished and augmented. Each of these is described below. As you see and learn these divisions, think of them as ways to visualize the chromatic scale and ways you can organize your approach.

B) How do diminished scale divisions work?

*The diminished version divides the scale into halves (at the #4) then into equal quarters (outlining the diminished 7 chord) as shown below.

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C C# D Eb E F F# G Ab A Bb B C

Diminished division: chromatic scale into half, at the #4

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C C# D Eb E F F# G Ab A Bb B C

Diminished division: chromatic scale into quarters (diminished 7 arpeggio)

*The diminished scales you learned earlier (diminished-1 and diminished whole-tone) are good choices for soloing in this context.

- ▶ **TRY IT – Basic:** Using the information above as a guide, create diminished scale divisions for the other diminished-1 scale that begins on C# (Db).

C) How do augmented scale divisions work?

*The augmented version divides the scale into thirds (augmented triad) and then into sixths (whole-tone intervals):

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C C# D Eb E F F# G Ab A Bb B C

Augmented division: chromatic scale into half, at the #4

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C C# D Eb E F F# G Ab A Bb B C

Augmented division: chromatic scale into thirds (augmented arpeggio)

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*The whole-tone scale you learned earlier is a good choice for soloing in this context.

*You can also divide the scale into half and then sixths, creating a whole-tone set, but this lacks the diminished or augmented sense that the other scale divisions have.

- ▶ **TRY IT – Basic:** Using the information above as a guide, create augmented scale divisions for the other whole-tone scale that begins on C# (Db).

Part 3 – Construction and Movement

*With symmetrical sequencing in mind, you can now focus on the two major activities of the Matrix:

- Building a component motif
- Moving (transposing) the component motif

*Keep these important points in mind: The Matrix *builds* components via *diminished* scale divisions. It *moves* them via *augmented* scale divisions. The different use of scale divisions between building and moving provides contrast and fuels interesting ideas in The Matrix.

A) How do I build components?

As explained earlier, the diminished scale division produces the diminished-1 scale. This is what The Matrix uses to build components. The intervals in this scale that *don't* belong to the augmented scale division are the b3 and 4th. (The #4 belongs to both scales.) With The Matrix, you build components based mostly on b3's and 4ths.

In a C diminished-1 scale (C Db Eb E F# G A Bb B), there are many intervals of b3's and 4ths:

b3's: C to Eb, Db to E, E to G, F# to A, G to Bb, A to C, Bb to Db (every pair that skips one note)

4ths: Db to F#, E to A, G to C, Bb to Eb (both notes in the scale)

4ths: C to F, Eb to Ab, F# to B, and A to D (only the bottom note of each pair is in the scale)

Here are some sample Matrix components using the C diminished-1 scale:





B) What are some sample components?

*You can experiment with the above intervals and mix them to create Matrix components. Here are the basic ways to get combinations:

- Reverse the contours of some parts of the components.
- Use any one interval in the examples above (b3 or 4th) to create a 2-note component.
- Create a 3-note component by attaching a different interval at the end, such as m3 joined to a 4th, 5th, or M2; or a 4th joined to a m3 or M2. The attached note may be outside the diminished scale. It's helpful if the second interval starts somewhat close to the end of the first interval.

- Combine two intervals (b3 and 4th) to get a 4-note motif.



- ▶ **TRY IT – Basic:** Using the information above as a guide, create several new 2-note, 3-note, and 4-note components. **Medium:** Transpose your new components to the 6 easier keys and practice them.

C) How do I move components?

*With The Matrix, you move the component motifs by intervals found in the *augmented* scale division:

- Whole-step
- Major 3rd

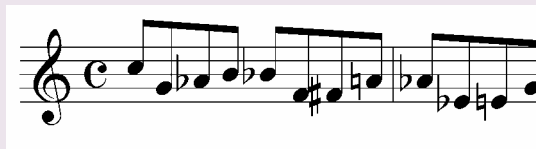
*It takes a while to get used to *moving* the components by using different intervals than they were *built* with, but that's what makes the Matrix! To get the hang of moving components,

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2 Quickly chose a movement (whole-step or major 3rd), up or down.

D) What are some sample component movements?

The examples below show some of the many ways you can move Matrix components to create interesting melodies. Try them as written and then transpose them to different keys for extra practice. Vary the rhythms and contours as you like.



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- **TRY IT** – Basic: Choose a 2-note Matrix component and move it by whole-steps. Medium: Choose a 3-note Matrix component and move it by major thirds. Challenge: Choose a 4-note Matrix component where 2 notes are reversed, and move it by major thirds.

E) How do I combine component movements?

*In a longer phrase, you can combine different movements of Matrix components. This gives you a lot of freedom in creating outside melodies. For examples of longer Matrix lines, listen to Rich's guitar solos in the MP3 Solos folder on the CD, for tunes titled The Matrix and Toasted Oafs (first half).

Part 3 – Integrating The Matrix

The Matrix is a system that fits with other tools of improvisation. When you integrate Matrix melodies smoothly into your solos, your audience gets the best of the inside and outside worlds. The key integration methods are these:

- Use variation and development within Matrix melodies for extra interest.
- Use solid transitions in and out of The Matrix for strong context.

A) How do I use variation and development with The Matrix?

*With a Matrix melody or pattern, there is room for variation, development, and expression. This adds more interest and helps the Matrix melody fit into your scheme of rhythms and development in the solo.

Here are a few of the techniques you can use:

- Rhythmic variations – introduce triplets, dotted quarters, etc. into the melodies
- 3 against 4 – use 3/4 rhythms or contours of 3 or 6
- Offset contours – start the patterns an 8th-note earlier or later
- Transposing one or more components up or down
- Rhythmic development ideas such as augmentation, fragmentation, and displacement

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- ▶ **TRY IT** – Basic: Choose a 4-note Matrix component, move it by major thirds, and vary the rhythms. Medium: Same as Basic; use one of the other techniques listed above. Challenge: Same as Basic; use two of the other techniques listed above.
- B)** How do I use transitions with The Matrix?
- *Getting in and out of Matrix phrases smoothly helps you use the concept more effectively. Here are some suggestions for good transitions with The Matrix:
- Use the ending note of a “normal phrase” as the starting note of a Matrix component.
 - At certain spots within a Matrix phrase, linger in the current key a while. Then jump back into building Matrix components for your melody.
 - Return to the original key strongly, such as with a blues motif in minor or dominant, or arpeggios and color tones in the home key.
- ▶ **TRY IT** – Basic: Use suggestion #1 above. Medium: Use suggestion #3 above. Challenge: Use suggestion #2 above.

That's all for Tutorial 5H!
There is no Quiz for this Tutorial.