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Uncharted Waters

Navigating lines outside the key center

There have been moments, I'm sure, in the course of playing a tune or jamming over a progression, that you've come across a chord or two that didn't quite "belong" in the song's key center. It happens to all of us. Suddenly, the scale you've been soloing with no longer fits—in fact, it sounds terrible! What ends up happening is that you either lay out altogether for the duration of the mystery chord, or you try to muddle your way through it, hunting and pecking, praying that at least some of the notes will work. Well, fear no more, for I'm here to give you a few tips that may help you overcome this intimidating situation.

Let's start at the beginning. Before you attempt to solo over any progression, you should look it over. Is the progression completely diatonic, or are there chords out of the key center? Are there any chords that may be unfamiliar to you? It's important to isolate potential trouble spots and work on them in advance.

If you're playing over a series of diatonic chord changes, as in FIGURE 1, the solution is pretty obvious—you can easily use one scale throughout the entire progression and it'll sound fine. Since FIGURE 1 is in the key of E major, you can use the E Ionian (major) or E major-pentatonic scale to solo over the entire groove.

FIGURE 1 E B A C#m FIGURE 2 E B A C FIGURE 3
C Lydian scale

The image displays three musical figures. Figure 1 consists of four chords: E major, B major, A major, and C#m. Figure 2 consists of four chords: E major, B major, A major, and C major. Figure 3 shows the C Lydian scale. Below the notation are guitar fretboard diagrams for each figure, showing fingerings for the strings.

AUDIO FILES FIGURE 1 (80 bpm)

[AIFF Audio File](#) (Macintosh)

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AUDIO FILES FIGURE 2 (80 bpm)

[AIFF Audio File](#) (Macintosh)

[WAVE Audio File](#) (Windows) 

AUDIO FILES FIGURE 3 (80 bpm)

[AIFF Audio File](#) (Macintosh)

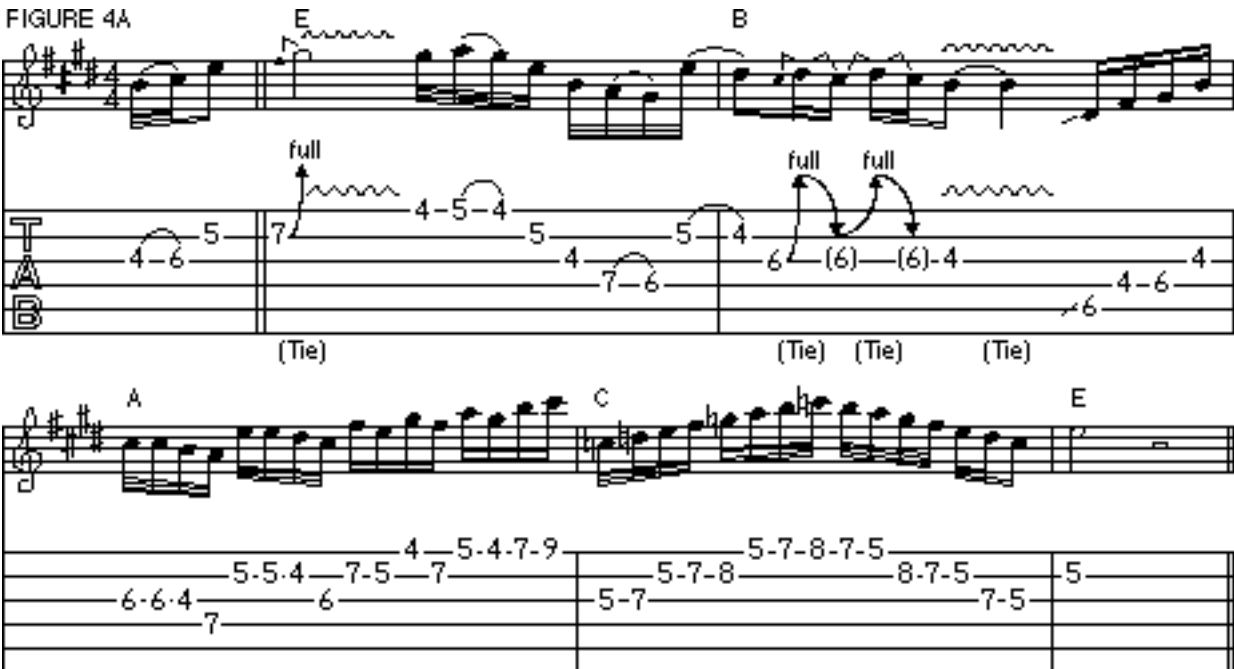
[WAVE Audio File](#) (Windows) 

But suppose the progression "borrows" a major chord that's not in the key, like the C chord in FIGURE 2. Well, that's where you'll have to do some pre-planning. In this case, there's a tried-and-true rule you can pretty much follow: whenever there's a single non-diatonic major chord in a progression, play the Lydian scale built on the root of the chord over it. In other words, since there's a C chord in the otherwise diatonic progression in the key of E, you'll have to play the C Lydian scale (FIGURE 3) over that-and only that-chord.

Be forewarned-simply playing the scale is not enough. Nothing gives away inexperienced improvisers faster than the sudden break in their solo's momentum caused by trying to play a scale that "works" or to force a line that they previously worked out. The key is to smoothly connect your lines so you sound like you're playing "through" the changes, not "over" them.

Compare FIGURES 4A and 4B.

FIGURE 4A



The figure shows a guitar solo in E major over a chord progression of E, B, and C. The solo is written in treble clef with a key signature of two sharps (F# and C#) and a 4/4 time signature. The solo consists of several phrases, with some notes marked with "full" and wavy lines indicating vibrato. The fretboard diagram below shows the corresponding fingerings for the solo lines.

Chord progression: E, B, C, E

Fingerings for the solo lines:

- Line 1: 4-6, 5, 7, 4-5-4, 5, 4, 5, 4, 6, (6)-(6)-4, 4-6, 4
- Line 2: 4-6, 5, 7, 4-5-4, 5, 4, 5, 4, 6, (6)-(6)-4, 4-6, 4
- Line 3: 4-6, 5, 7, 4-5-4, 5, 4, 5, 4, 6, (6)-(6)-4, 4-6, 4
- Line 4: 4-6, 5, 7, 4-5-4, 5, 4, 5, 4, 6, (6)-(6)-4, 4-6, 4

(Tie) (Tie) (Tie)

Chord progression: A, C, E

Fingerings for the solo lines:

- Line 1: 4-5-4-7-9, 5-7-8-7-5, 8-7-5, 5
- Line 2: 5-5-4-7-5-7, 5-7-8, 8-7-5, 7-5, 5
- Line 3: 6-6-4, 7, 6, 5-7, 7-5, 5
- Line 4: 7, 6, 5-7, 7-5, 5

FIGURE 4B

The musical score for Figure 4B is written in E major (one sharp) and 4/4 time. It features a guitar solo with the following structure:

- Section E:** Treble clef staff shows a melodic line starting on E4, moving up to E5. The bass staff shows fret numbers 4-6, 5, 7, 4-5-4, 5, 4, 7-6, 5, 4, 6, (6), (6)-4, 4-6, 4.
- Section B:** Treble clef staff shows a melodic line starting on B4, moving up to B5. The bass staff shows fret numbers 7, 4-5-4, 5, 4, 7-6, 5, 4, 6, (6), (6)-4, 4-6, 4.
- Section A:** Treble clef staff shows a melodic line starting on A4, moving up to A5. The bass staff shows fret numbers 4-6-4, 5-5-4, 7-5, 7, 4-5-4-7-9, 8-7-5, 8-7-8-5-7, 5, 7-5-7-4-5-4, 7, 6.
- Section C:** Treble clef staff shows a melodic line starting on C4, moving up to C5. The bass staff shows fret numbers 4-5-4-7-9, 8-7-5, 8-7-8-5-7, 5, 7-5-7-4-5-4, 7, 6.
- Section E:** Treble clef staff shows a melodic line starting on E4, moving up to E5. The bass staff shows fret numbers 4-5-4-7-9, 8-7-5, 8-7-8-5-7, 5, 7-5-7-4-5-4, 7, 6.

Annotations include "full" bends and "Tie" markings in the bass staff.

AUDIO FILES FIGURE 4A (80 bpm)

[AIFF Audio File](#) (Macintosh)

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AUDIO FILES FIGURE 4B (80 bpm)

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FIGURE 4A is an example of something an immature soloist might do, that is, sacrifice the whole flow of the solo by trying to nail the "correct" scale over a "trouble spot" in the progression. Notice how running the C Lydian scale (and starting on the root, no less!) has nothing to do with the bluesy feel of the rest of the solo. Now check out FIGURE 4B.

Even though I used C Lydian over the C chord, the line feels like one continuous idea. That's because I set up the change by smoothly resolving from one chord tone to another (from the third of A [C#] to the root of C). It's amazing what a simple half-step can do when you know how to use it.

To get this concept under your fingers, try this exercise: tape a diatonic progression that has one non-diatonic major chord (use Figure 2 as a starting point). Then try to craft your lines so that when you're switching to the chord that's not in the key center, the largest interval you play is a whole-step or half-step in either direction. You can also use a tone that's common to both scales (E, F#, A and B are found in both E Ionian and C Lydian). Using these initial guidelines will give your ideas greater melodic continuity. Next month, we'll go further in-depth into non-diatonic soloing.