Tutorial 5E: Rhythmic Pulses

Welcome! In this tutorial you'll learn:

1. About pulses
2. How to create triplet pulses
3. How to create non-triplet pulses
4. How to shift between pulses

Enjoy the learning!

Other Level 5 Tutorials

5A: Playing Outside, Part 1

5B: Playing Outside, Part 2

5C: Rhythmic Freedom, Part 1

5D: Rhythmic Freedom, Part 2

5H: The Matrix

► Your music can change rhythmic directions when you learn to use pulses effectively. The techniques of creating pulses, shifting to them, & returning from them give you & your group some exciting possibilities for rhythmic growth.

Part 1 – About Pulses

A) What is a pulse?

*A *pulse* is the basic, underlying beat in the tune, usually the quarter-note. So far, you've used double-time, half-time, and triple-time to change the rhythmic pulse of the tune. You can also create other new pulses that increase by other amounts instead of by doubling or halving. These unusual pulses can create some very interesting rhythmic shifts in a tune.

B) How do I establish a new pulse?

1 Repeat the *rhythm* of the new pulse enough until it feels like a new quarter-note pulse. For example, suppose you keep repeating dotted quarter-notes in 4/4 time. Now there are two pulses: the original quarter-note pulse the band is playing and your new, slightly slower pulse made of dotted quarters. *This new pulse can then be imagined as your new quarter-note pulse*.

2 Subdivide the new pulse into eighth-notes (swing or straight) and play other rhythms based on the new pulse. This causes a strikingly different metric feel.

C) What are some sample pulses I can use?

*Here are some ways to create new quarter-note pulses, along with descriptions of whether the new pulse feels faster or slower than the original quarter-note pulse:

New Quarter-note Pulse	Faster/Slower
Quarter-note triplets (2/3)	Faster (3/2)
8th-note triplets (1/3)	Much faster (3)
Dotted quarter-notes (3/2)	Slower (2/3)
Alternate quarters, 8ths (3/2)	Slower (2/3)
4-note bracket, 3/4 time (3/4)	Faster (4/3)

D) How do I return from pulses?

*To return from a new pulse back to the old pulse, you need to use a rhythm that's the *inverse fraction* of the new pulse. For example, suppose you switch to a new pulse of quarter-note triplets. They are 2/3 the value of the original quarter-notes. So, your return pulse should be 3/2 of a quarter-note (the inverse fraction), or a dotted quarter-note. It may sound a bit complicated, but it's fairly easy to memorize inverse rhythms for the most common pulses.

Part 2 – Creating Triplet Pulses

*You can use quarter-note triplets or eighth-note triplets as the source for your new pulse.

A) How do I use quarter-note triplet pulses?

*The example below converts consecutive quarter-note triplets into a new quarter-note pulse. The new feel is 3/2 as fast (quarter-note goes from 120 - 180).
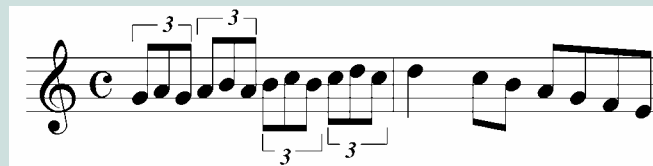
Quarter =120; Old quarter triplet = new quarter (180)

*To return to the original tempo, play a return pulse of *dotted quarter-notes*. After you feel several of these go by, switch back to the old (slower) tempo.

▶ **TRY IT –** Play original quarter-notes at a comfortable speed. Repeat quarter-note triplets to set up the new pulse. Once you feel the new pulse, subdivide it into swing rhythms, then return to the original quarter-note pulse. Then return to the original quarter-note pulse.

B) How do I use eighth-note triplet pulses?

*The example below converts consecutive 8th-note triplets into a new quarter-note pulse. This usually works best with a slow original tempo, because the new feel is 3 times as fast (quarter-note from 60 to 180).

Quarter = 60; Old 8th triplet = new quarter (180)

*To return to the original tempo, play a return pulse of *dotted half-notes*. After you feel several of these go by, switch back to the old (slower) tempo.

▶ **TRY IT –** Same as the previous Try-It; use 8th-note triplets then return to the original pulse. Practice Pages

Part 3 – Using Non-Triplet Pulses

*You can also use dotted quarter-notes, alternating 8ths and quarters, or bracket notes (4 over 3 or 5 over 4) as the new pulse.

A) How do I use a dotted quarter-note pulse?

*The example below converts consecutive dotted quarter-notes into a new quarter-note pulse. The new feel is slower (2/3 of the original).

Quarter = 180; dotted-quarter =   new quarter (120)

*To return to the original tempo, play a pulse of *quarter-note triplet*s. After you feel several of these go by, switch back to the old (faster) tempo.

▶ **TRY IT –** Same as the previous Try-It; use dotted quarter-notes then return to the original pulse.

B) How do I use a dotted half-note pulse?

*The example below converts consecutive dotted half-notes into a new quarter-note pulse. The new feel is 3 times as slow (like the opposite of triple-time), so it works best with a fast original tempo).

Quarter = 60; dotted-half =   new quarter (180)

*To return to the original tempo, play consecutive *eighth-note triplet*s. After you feel several groups of these go by, switch back to the old (faster) tempo.

▶ **TRY IT –** Same as Basic for Exercise A; use dotted half-notes then return to the original pulse.

B) How do I use alternating rhythm values in a pulse?

*You can create an interesting pulse by playing a pair of alternating rhythms, where the first value is twice as long as the second. This imitates the feel of uneven swing eighth-notes, where the downbeat eighth is twice as long as the offbeat. The best alternating rhythms to use are quarter vs. eighth, or half vs. quarter.

*This example converts alternating quarter-notes and 8th-notes into new swing eighth-notes. The new feel is slower (2/3 of the original tempo), and you go directly to 8th-notes in the new pulse, not to quarters.

Quarter = 180; quarter + 8th =   new quarter (120)

*To return to the original tempo, play a pulse of *quarter-note triplet*s. After you feel several of these go by, switch back to the old (faster) tempo.

(Part 3 – Using Non-Triplet Pulses)

*The next example converts alternating half-notes and quarter-notes into new swing eighth-notes. To return, play a pulse of half-note triplets.

Quarter = 200; =   new quarter (100)

▶ **TRY IT –** Same as the previous Try-It; use alternating quarter-notes & 8ths, then return to the original pulse.

*Then use alternating half-notes and quarter-notes then return to the original pulse.

C) How do I use a pulse of dotted quarters in 3/4?

*The example below converts consecutive dotted quarter-notes in 3/4 time into a new quarter-note pulse. The new feel is slower (2/3 the original tempo). This switch is fairly easy to do because each dotted quarter-note is half a bar in 3/4 time.

Quarter = 180; dotted-quarter =   new quarter (120)

*To return to the original tempo, play a pulse of *quarter-note triplets*. After you feel several of these go by, switch back to the old (faster) tempo.

▶ **TRY IT –** Same as the previous Try-It; use alternating quarter-notes & 8th-notes, then return to the original pulse. Same as Basic for Exercise A; use alternating quarter-notes and eighth-notes then return to the original pulse.

C) How do I use a pulse of a 4-note bracket in 3/4?

*The 3/4 example below converts a 4-note group into a new quarter-note pulse. The new feel is faster (4/3 the original tempo).

Quarter = 120; bracket quarter =   new quarter (160)

*To return to the original tempo, play a pulse of *dotted quarter-note*s. After you feel several of these go by, switch back to the old (faster) tempo.

► **TRY IT –** Same as the previous Try-It; use 4-note brackets in 3/4 then return to the original pulse.

Part 4 – Shifting Pulses

A) How do I practice shifting pulses?

*Shifting a rhythmic pulse can be tricky. Here's a practice method you can use to strengthen your rhythmic pulse skills.

*The idea is to sing a simple melody, switch to a new rhythm pulse, and switch back to the old rhythm pulse.

Here are the steps:

1 Choose a simple tune with mostly quarter-notes (such as "Yankee Doodle," "Twinkle, Twinkle, Little Star," or "Ode to Joy."

2 Choose a new rhythm pulse to use for the tune.

3 Sing the first few bars of the tune in a *slower* tempo.

4 At a selected spot, start imagining each note as the new rhythm pulse.

5 Convert the new rhythm pulses into quarter-notes.

6 Continue singing the new quarter-notes for a while.

7 At a selected spot, imagine the inverse fraction as a rhythm pulse for returning to the old tempo.

8 Convert the return rhythm pulse into the old quarter-note pulse.

9 Continue singing the old quarter-note pulses.

*As an example, here's how to convert "Yankee Doodle" to dotted quarter-note pulses and back. Notice the repeated notes on the triplet pulses; that variation helps you visualize the triplet groups.

C C D E | C E D G |

Hum quarter-notes

C C D E | C - B G |

Hum dotted quarters (same as slower quarter-notes)

C C D E | F E D C |

Keep humming the new slower quarter-notes

(6/4) B B G A A B | C - C - |

Hum quarter-note triplets (same as old, fast quarter-notes)

(Part 4 – Shifting Pulses)

As you think dotted quarters, subdivide them into 8th-notes (1-2-3, 1-2-3). Then subdivide the new quarters as 1-2, 1-2. In the 6/4 bar, three quarter-note triplets equal a half-note (2 quarter-notes) in the old pulse.

▶ **TRY IT – Basic**: Select a song with a simple melody. Follow the steps above to convert the song into dotted-quarter pulses and back. Medium: Follow the steps to convert the song into another type of pulse (quarter-note triplets, 8th-note triplets, dotted halves).

B) Can I use new rhythms in the new pulse?

*After you shift to a new pulse, you can play 3/4 rhythms instead of 4/4 rhythms, creating a 3-against-4 feeling in the new pulse. For example:
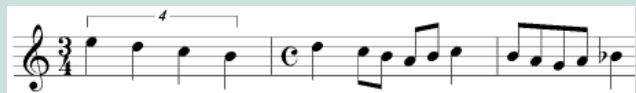
*You can shift into the new pulse by yourself, or all or part of your group can shift with you. Group shifts are easiest if the tune is modal (few or no chord changes) or a blues.

*With more involved chord progressions, it's best if at least one player stays in the old tempo, for reference.

C) How can my group use shifting pulses?

Consider these approaches to shifting pulses:

• Only the soloist switches; the rest of the group follows the regular tempo and chords.

• Two people switch: soloist plus chords, soloist plus drums, or soloist plus bass. The other players keep a steady rhythm in the old pulse.

• Three people switch. Usually the bass will stay on the old pulse as a reference.

• Everyone changes. In this case, play the chords to fit the new pulse, then everyone returns at the end of a chorus. If the whole group does the shift, be sure everyone knows how to get back to the original meter.

*Shifting smoothly to and from rhythmic feels requires concentration and practice but is definitely worth it.

That's all for Tutorial 5E!

There is no Quiz for this Tutorial.