

Feeling the 7:4 Polyrhythm

by Dennis Winge

Feeling the 7 against 4 polyrhythm may be one of the harder polyrhythms to feel initially, but it is a ton of fun to master and implement in your music.

We will use a rhythm map of the lowest common multiple of 7 and 4, which is 28. We are going to start with your foot tapping in 4 while your hand taps in 7. [Note: “tapping in 4” means we are feeling each subdivision in groups of 7 beats, which only results in four taps, and vice versa for “tapping in 7”.] First, look at the diagram, then follow the steps below.

Figure 1 - 7:4 from the perspective of 7

unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
7 count	1	e	&	a	2	e	&	a	3	e	&	a	4	e	&	a	5	e	&	a	6	e	&	a	7	e	&	a
7 beat	x				x				x				x				x				x				x			
resulting count	1				2			a	3				4		&		5				6	e			7			
4 beat	x							x							x							x						

1. say the “7 count” above, out loud, slowly, where every syllable is equally spaced
2. tap your foot on the beats “1” “2” “3” “4” “5” “6” “7” while counting the above, so that you are now playing the “7 beat” line in the table
3. continue tapping and saying each beat aloud slowly, and add the “a of 2,” the “& of 4,” and the “e of 6” so that you are now saying the “resulting count” line
4. let your hand tap only the “1,” the a of 2,” the “& of 4,” and the “e of 6” so that you are now saying only the beats marked in the “4 beat” line.

It may take time to master the above, so remember to practice it slowly. When you have mastered the above, we’ll move on to the same relationship from the perspective of 4.

Figure 2 - 7:4 from the perspective of 4

unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
4 count	ta	ki	da	ta	ka	di	mi	ta	ki	da	ta	ka	di	mi	ta	ki	da	ta	ka	di	mi	ta	ki	da	ta	ka	di	mi
4 beat	1							2							3							4						
resulting count	ta				ka			ta	ki				di		ta		da				mi	ta			ta			
7 count	1	e	&	a	2	e	&	a	3	e	&	a	4	e	&	a	5	e	&	a	6	e	&	a	7	e	&	a
7 beat	x				x				x				x				x				x				x			

[DISCLAIMER: The following is the technical way to think of 7 against 4, but there are potentially easier methods to follow this explanation.]

In order to break up four equal groups, we must have a way of counting 7 subdivisions for each beat. Not only does counting “1 2 3 4 5 6 7” four times have problems because the syllables in “sev-en” take two beats to count, but it also gets confusing to try and keep our place as to what beat we are currently subdividing as we count.

In Konnakol, the syllables for 3 is “ta-ki-da” (“takeeda”) and the syllables for 4 are “ta-ka-di-mi” (“takadimee”). We put these together, as in “ta-ki-da-ta-ka-di-mi,” to make 7.

1. say the “4 count” above, out loud, slowly, where every syllable is equally spaced
2. tap your foot on the first beat of each 7-beat set (i.e. TA-ki-da-ta-ka-di-mi, TA-ki-da-ta-ka-di-mi, etc.). You are now tapping the “4 beat” line in the table
3. continue tapping, but now change the way you count to the “7-count” as we saw in Figure 1
4. let your hand tap only the first beat of each 4-beat cycle so that your hand is now playing in 7 while your foot is tapping in 4

As the disclaimer says, the above procedure is not easy. Here is another way to approach the 7:4 relationship. We are going to build up from 7 over 1 bar to 7 over 2 bars, then over 3 bars, then 4.

You already know how to subdivide one beat into seven:

unit	1	2	3	4	5	6	7
1 count	ta	ki	da	ta	ka	di	mi

Seven over two bars consists of taking the above and only saying every other syllable:

unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2 count	ta	ki	di	ta	ka	di	mi	ta	ki	di	ta	ka	di	mi
over 2 bars	ta		di		ka		mi		ki		ta		di	
result	ta		ki		da		ta		ka		di		mi	

You have now put 7 evenly spaced notes over two bars. By using the same method of taking every other note, we can get to 7 notes over four bars:

unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
4 count	ta	ki	da	ta	ka	di	mi	ta	ki	da	ta	ka	di	mi	ta	ki	da	ta	ka	di	mi	ta	ki	da	ta	ka	di	mi
over 2 bars	ta		di		ka		mi		ki		ta		di		ta		di		ka		mi		ki		ta		di	
over 4 bars	ta				ka				ki				di				di				mi				ta			
result	ta				ki				da				ta				ka				di				mi			

Really this just another way to approach the perspective of 7 that we saw initially, as the “result” line in Figure 2 is the same as the “7-beat” line from Figure 1.