Block by Block: (Nearly) Foolproof Kivrim Sarah Goslee http://www.stringpage.com

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Ram's horn or kivrim is a lovely pattern, but a perennial source of frustration to novices. It isn't a hard pattern at all, but if you don't know much about tablet weaving it can be baffling. To get it working smoothly, you need to know two important things:

- ▲ **First Law of Tablet Weaving:** The thread that *crosses the top* when you turn a tablet is the one that shows.
- Second Law of Tablet Weaving: An S-threaded tablet turned forward twists the threads together in a Z direction, as does a Z-threaded tablet turned backwards.

That's pretty dense: what do the laws mean for this pattern?

Setup

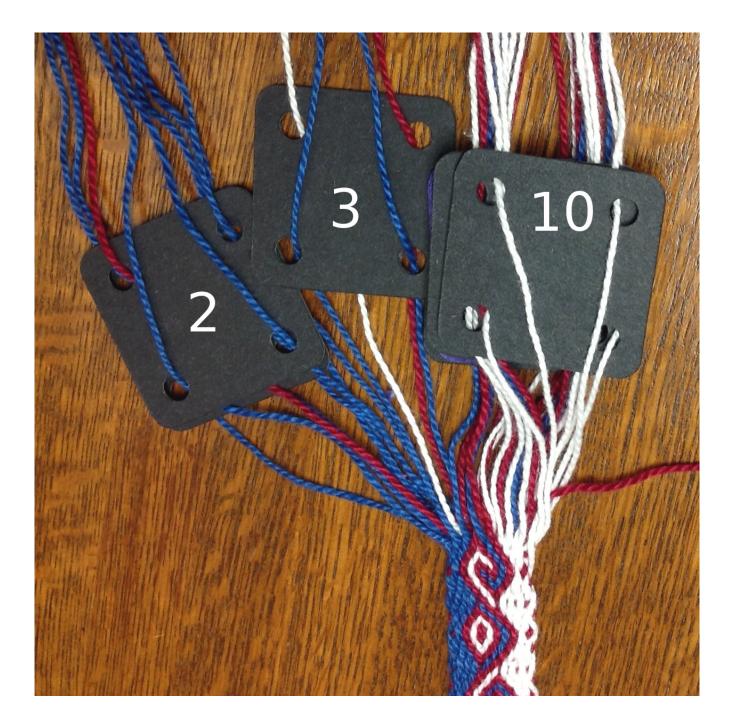
The basic kivrim pattern only uses ten tablets. It looks much neater with solid colored selvage cards always turned the same direction, but I'm not going to talk about those here. Here's a setup

1	1	١	1	١	1	1	1	1	1
۱	۱	1	١	۱.	۱.	1	1	1	1
1	1	1	١	1	1	1	1	1	1
١	١	١	١	١	١	1	1	1	1
z	z	z	z	z	z	S	S	S	s

Warp end, face of band Warp end, reverse of band Cloth end, reverse of band Cloth end, face of band diagram:

Labeling the holes of a tablet A-B-C-D can be incredibly confusing. Instead, I'm going to use relative positioning. A weaving warp has two ends: the end that you weave at (cloth end), and the end that is all unwoven warp (warp end), and two holes of a square tablet point toward each end. A tablet woven band has a side you intend to be the top (face), and a side that is the back (reverse), and two holes of the tablet are on the face side, and two on the bottom. So when you're setting up a warp, each hole of a tablet can be defined by which end and which side it's on. If you look at the setup diagram, the holes are in order moving around the tablet from cloth end face, to the bottom of the band, to warp end face at the top edge of the diagram.

The first tablet on the left has all blue threads. The second tablet has three blue and one red thread, and the red thread is in the "top back" hole, at the warp end and the face of the band. The third tablet has two blue threads, in both cloth end holes. The warp end reverse hole ("bottom back") has a red thread, and the warp end face hole has a white thread. Photo 1 shows the second and third tablets, and the tenth, so you can see the order of the threads in relation to the woven end of the warp.

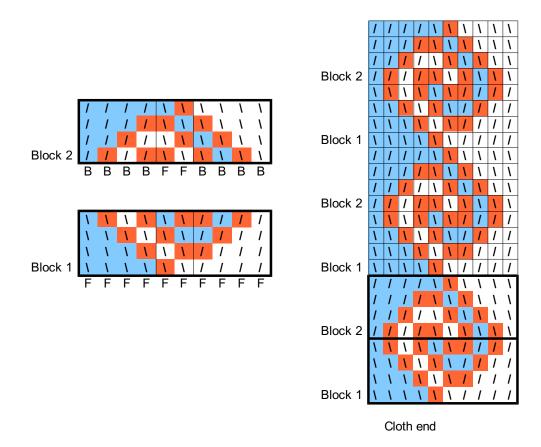


The other important setup issue is the threading direction. The first six tablets are Z-threaded, and tablets 7-10 are S-threaded. I use Collingwood's definition, which means that for a Z-threaded tablet the threads enter on the left at the cloth end and leave on the right at the warp end of the tablet, and for a S-threaded tablet enter on the right at the cloth end and leave on the left at the warp end. If you look at a Z-threaded tablet from the face side, the threads travel through it like this / - the same as the center of a Z. For an S-threaded tablet, they travel like \. When you turn a Z-threaded tablet forward, the threads in the band twist around each other in the opposite direction: \ and they twist / if you turn it backward. An S-threaded tablet is just the opposite: a forward turn twists the threads / and a backward \. You can see both threadings in Photo 1. (2025 note: I no longer use S and Z to describe threading direction, but did at the time of writing this.)

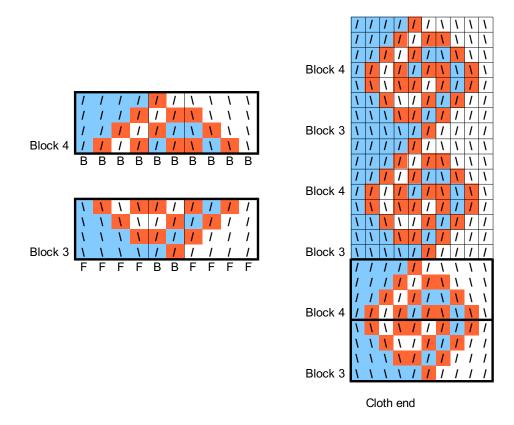
Bonus: If you use the setup diagram above, you can check your threading by turning the tablets four times forward, inserting a weft each time. If your tablets match the diagram, the color sequence will match the diagram exactly: the woven band should look just like the diagram. That way it's easy to check your setup before you start weaving. I drew the desired twist direction right on the diagram, so you can also check the threading direction: each color change should be slanted in the direction shown by the $\$ and / in the squares.

Weaving spirals

Extra bonus: you've just woven the first half of the basic kivrim pattern. I'll call the four turns forward sequence **Block** 1. **Block 2** is nearly the same: most of the tablets turn four times backward instead. The exception: tablets 5 and 6, which keep turning forward. So: 1-4 backward, 5-6 forward, 7-10 backward. Repeat for a total of four. Because we're working with square tablets, any sequence of four consecutive turns in the same direction will bring the tablets back to their starting points. At the end of any block, you can check for mistakes by making sure your tablets are all just as they're shown in the setup diagram. Basic kivrim alternates block 1 and block 2.



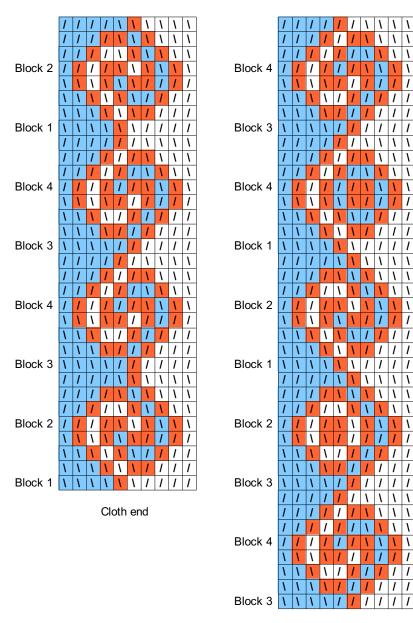
But that's not all! By simply changing the turning pattern of those middle two tablets, you can change the direction of the spirals. **Block 3** turns the edge tablets (1-4, 7-10) forward and the center tablets (5-6) backward, and **Block 4** turns them all backward (4 times each, of course).



At the end of each block, the tablets are back to the setup position, so you can mix and match the four blocks in any order you'd like: switching from spiral to spiral. Depending on how you choose to arrange them, you can get double-spiral horns or little diamonds where the changes occur.

Take a look at the pattern diagrams below. See how the turning direction of the tablets affects the order of the colors and the twist direction in the band on the diagrams, and see if you can spot the same things in the photo of the sample band. Try to match the blocks up with the band itself. The more you understand about how the way you thread and turn the tablets is reflected in the woven band, the less likely you will be to become frustrated and throw the whole mess across the room.





Cloth end

1 1

1 1

1 1 1

1 1

1 1

1 1 1

1 1