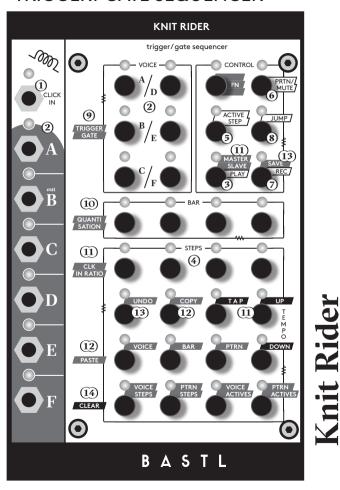
TRIGGER / GATE SEQUENCER



Knit rider is a 6 voice trigger / gate step sequencer.

instruction

It has a CLOCK INPUT for an external clock, but it also has a builtin clock generator.

There are 6 trigger/gate outputs (0-5V): A.B.C.D.E and F. The button grid on Knit Rider is divided into 4 zones. The largest is the bottom 4x4 grid used for step editing. Above is a 1x4 zone for setting the bar and substeps for each desired step. Then we have two 3x2 zones. The left one is used to select the voice and the right one has six function buttons.

3 Play/stop

Press the play button to start playback of the sequencer. Press it again to stop the playback. If the sequencer is in MASTER mode, it will start running. In SLAVE mode, it will wait for an incoming clock signal. See master/slave for more details.

4 Step and substep editing

Select a voice you want to edit by pressing the voice button. By pressing on individual STEPs you activate triggers in the current sequence. By pressing the BAR buttons, you select which bar you are editing (please note that by default only the first 16-step bar is activated - see active step for more). Using the STEP buttons and the BAR buttons in combination sets substeps. In each step, 4 substep triggers can occur. Hold down any STEP button and the BAR button LEDs will show you which substeps are activated. Press any BAR buttons while holding the STEP button to activate or deactivate a substep trigger at the point.

5 Active step/sequence length

Individual steps can be deactivated so they are skipped by the sequencer. This can be used to set the sequence length or for creating polyrhytmic patterns. Press the ACTIVE STEP button to enter Active Step Mode. The steps that are activated are indicated by the light. Use the voice buttons to select the voice for which you want to edit the active steps. Press the several voice buttons

to edit their active steps together (is that correct?). Pressing a STEP button will mark the step as the last step of the sequence. Use the BAR buttons to navigate through the bars. To deactivate individual steps, hold down the FN button and press the steps you want to deactivate. Holding the FN button and pressing a BAR button activates or deactivates all steps in that bar.

6 Pattern/mute

Hold down the PATTERN button to enter change pattern mode. Press a STEP button to load that pattern. Use the BAR buttons to navigate through all the 64 patterns. When you hold down the PATTERN button, the VOICE buttons show you which voices are activated. By pressing one of them, you can mute and unmute individual voices.

Recording

Press the RECORD button to start recording. You can record a sequence in real time now, by tapping the voice buttons. The recording is affected by the quantisation settings - see FN button for more. Press RECORD again to stop recording.

8 Jump

Hold down the JUMP button and press one of the STEP buttons to activate the jump feature. It will repeat the step you are holding. This is great for non-linear playback of patterns.

FN button functions

All the following functions are accessed by holding down the FN button and pressing the buttons with according FN indications.

Trigger/Gate

Voices can be in Trigger mode or in Gate mode. This affects the output trigger signal but also step editing and recording. When in trigger mode, each voice output outputs 1ms trigger signals. Simple step editing activates only the first sub step and in record mode, the button press puts only one substep into the sequencer.

In GATE mode simple step editing activates all substeps in the step which means a continuous gate signal. In record mode all substeps are filled while the voice button is held down.

10 Quantisation

The Quantisation setting applies to the record mode. The first

button on the left basically turns quantisation off, so while recording, triggers will be set at the nearest substep. The second button quantises your input to every second substep. Pressing the third button quantises only to the first substep and pressing the fourth will record triggers only to every second full step.

Master/Slave

Master/slave selects whether the clock source is internal or external

Internal tempo is adjusted by the Tempo Up, Down and Tap buttons. Up and down take the bpm up or down by 2 bpm. The tap tempo reads the tempo from your finger tapping on the tap button.

The external tempo setting has a clock divider, which specifies how many substeps have to be interpolated in between two clock pulses (1,2,4 or 8).

CLK IN RATIO

The external tempo setting has a clock divider, which specifies how many substeps have to be interpolated in between two clock pulses (1,2,4 or 8).

12 Copy, Paste

The copy and paste functions are here to make your workflow faster. Copy remembers what was set when you pressed it. PASTE VOICE will paste all steps and active step settings to the currently selected voice, from the voice or pattern that was selected when you pressed copy.

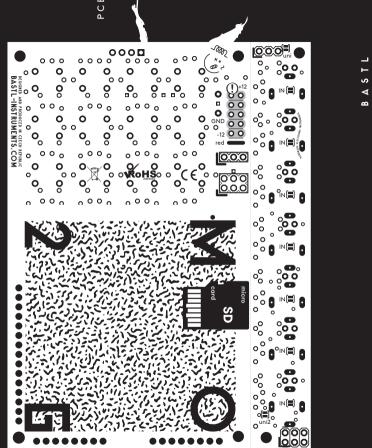
PASTE BAR will paste all voices (steps and active steps) from the previously selected bar to the currently selected bar. PASTE PTRN will paste all pattern settings, steps and active steps.

13 Save, Undo

The Save button will save the current state of the Knit Rider. Any further changes can be discarded by pressing UNDO, which takes you back to when you pressed the save button last time.

14 Clear

The Clear button makes it easier to erase steps and active step data. Clear VOICE STEPS clears all step settings for the current voice, Clear PTRN STEPS does it for all voices, Clear VOICE ACTIVES will clear all active steps for the current voice and Clear PTRN ACTIVES will do it for all voices.



technical details

■ 16HP width

B

- 35mm deep (skiff friendly)
- power consumption: +12: <35mA
- PTC fuse and diode protected 10 pin power connector
- handmade in Brno. Czech republic

- master or slave tempo sync selectable slave tempo
- 6 voices with individual outputs each can be set as trigger or gate
- each pattern has 4 bars with 16 steps each each step has 4 sub steps

(so there's a total of 256 steps per pattern)

- 64 patterns total
- simple and fast real-time editing
- record function with quantisation settings
- play/stop button (for sync in slave mode)
- mute function for each voice
- jump function (repeats a certain step)
- adjustable master tempo by tap or up, down (in 2 bpm increments)
- active step sets how many steps there are for each voice or for all instruments – it's possible to deactivate individual steps
- saves everything on a microSD card (accessible from the back side)
- copy & paste functions for fast workflow (paste a voice, bar or pattern)
- clear function (for one voice, all voices, active steps in one voice, all active steps)
- undo function takes you back to your last saved state

Before connecting the ribbon cable to this module disconnect your system from power!



Double check the polarity of the ribbon cable and that it is not shifted in any direction. the red cable should match the -12V rail both on the module and on the bus board!

please make sure of the following

- you have a standard pinout eurorack bus board
- you have +12V and -12V rails on that bus board
- the power rails are not overloaded by current

Although we put protection circuits in the device, we do not take any responsibility for damages caused by wrong power supply connection.

After you connected everything, double-checked it and closed your system, so no power lines can be touched by hand, turn on your system and test the module.

