

MATTOMAT

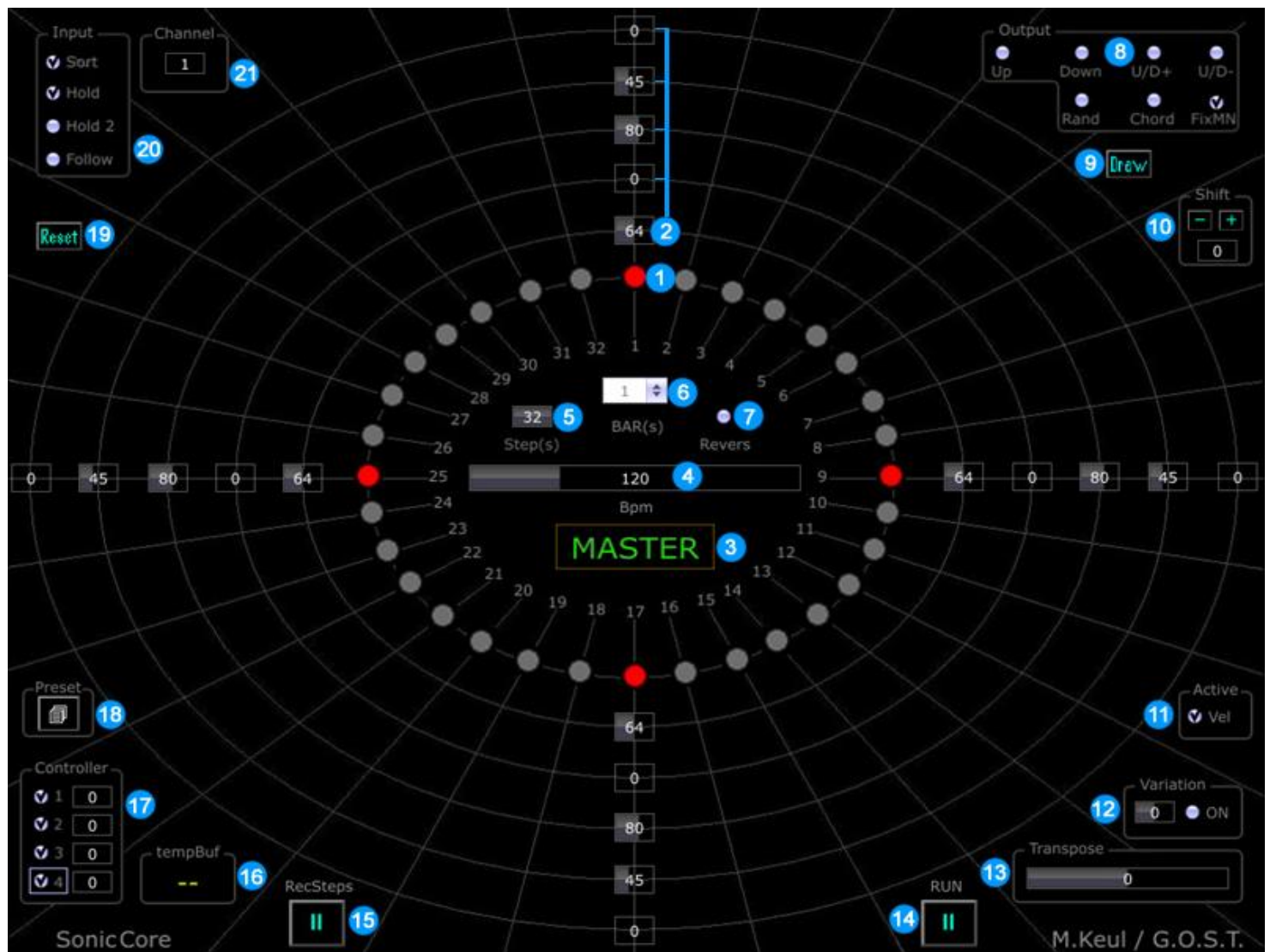
Thank you for purchasing Mattomat. Enjoy this flexible arpeggiator/step sequencer for the Sonic Core platform Scope PCI/XITE.

Mattomat is a plug-in which combines the functionality of an arpeggiator as well as a step sequencer. Mattomat can be connected with any MIDI capable sound module, each Scope sound device, as well as external hardware synths or the software synth of your favourite audio sequencer. Mattomat is a powerful tool for all types of rhythmical music. Thirty-two steps are positioned in an attractive cycle design. Each active step can have its individual velocity value plus four additional individual CC MIDI parameter values. This way your sequences have their own specific character.

Installation

Copy all the files into their corresponding folders in the Scope PCI/App or Scope XITE/App folders. The Mattomat device itself can be copied anywhere, i.e. into your synth folder. If you are using a Windows 32-bit system, use the .sys files of the x86 folder, for Windows 64-bit use the .sys files of the x64 folder.

The already existing file **SurfaceInterface.pep** needs to be replaced with this new one.



1. The Steps
2. Velocity and the CC Parameter
3. Master and Slave for synchronisation
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The device icon in the Scope/XITE project window has the following connection options:
MIDI In (green triangle left) connect your keyboard to control the pitch of your arpeggio/sequence.

CLK (green triangle top) is the MIDI Clock input for synchronising Mattomat to the master clock of another device via MIDI Clock.

CC (green triangle top) is a separate input to control MIDI CC parameters.

MIDI Out (red triangle right) is for System Exclusive parameters.

ARP (red triangle right) here is Mattomat's output of the Arpeggio/Sequence, needs to be connected to your sound device's MIDI In.

CLK (red triangle down) offers the MIDI Clock output to synchronise Mattomat with other MIDI Clock capable devices.

1. Active Steps shape the general pattern of your sequences. Click once on a grey step, it will light up red and turn active. Non-active steps will create a pause.

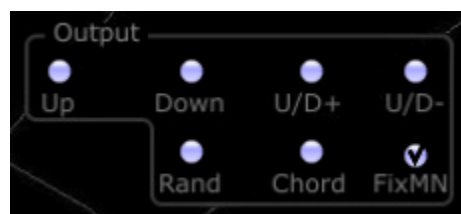
It is possible to activate/deactivate the steps whilst running. The duration of a step corresponds with the decay value of your connected synthesizer. A short decay will generate percussive steps, a long decay generates longer steps. By using the individual controller values each step can vary in length, a powerful tool to customise your sequence.

2. Next to the step cycle you will find the velocity value cycle. There are two ways to shape this value: click into the corresponding value window and change the value by holding down the left mouse button and move the mouse left or right.

Or use the draw Menu (see Chapter 9) and draw a line for all of the active steps. This works as well for the other four MIDI CC windows.

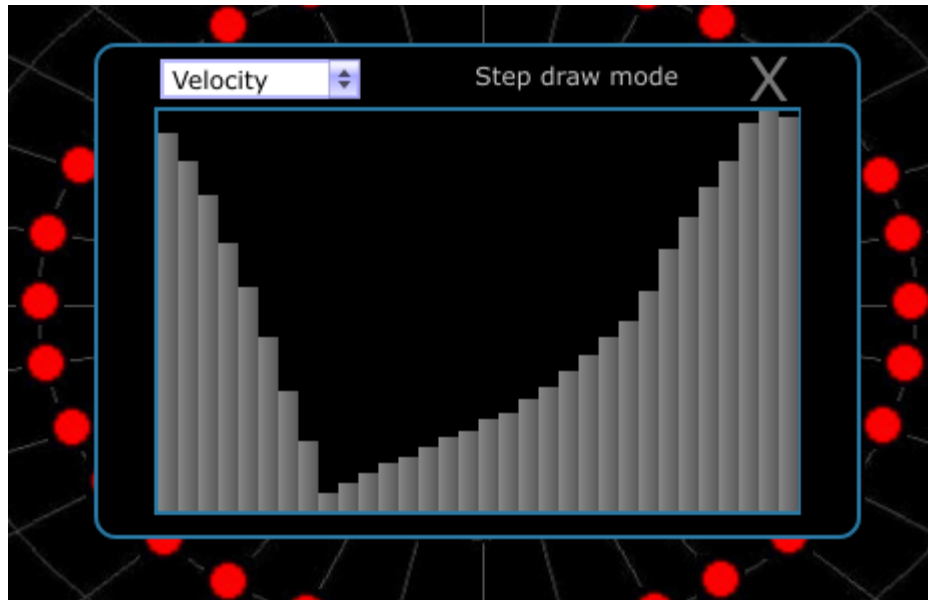


3. The Master button indicates the synchronisation status of each Mattomat, click into the green field in the middle and select Master or Slave mode. The speed bar indicates what bpm number is set, and can be reduced by using the mouse and held down left click or increased. An assignment by CC hardware controller is also possible (see Chapter 19).
4. Here you select the bpm value, click into the field, hold down the left button of your mouse and change the tempo by moving left or right. It is also possible to double-click in the box and type the desired bpm number with digits.
5. Here you decide how many steps it takes for one full cycle. Standard is 32 steps but you can choose any number between 1 and 32. This way Mattomat can produce odd numbered rhythms like 5/4, 7/8 or 9/8.
6. Bar(s) Here you decide how many bars it takes for one full cycle in relation to the bpm speed. The duration of one cycle can be equivalent to 1, 2, 3 or 4 bars. With a four bar registration the sequence will allow you to play thirty-two 8th notes, the two bar registration gives you thirty-two 16th notes and the one bar registration gives you thirty-two 32nd notes.
7. The Reverse button shows the rotation direction. Standard is a clockwise rotation, but you can change the direction of an already existing sequence to anticlockwise rotation.



8. In the Output menu you can select a variety of seven different Arpeggio interpretations, like i.e. the arpeggio classics Up and Down. The keys that you play on your keyboard will be transformed differently according to the output mode. Mattomat offers two Up/Down variations, Up/Down+ doubles the highest and lowest note, Up/Down- changes the direction immediately once the highest or lowest note is played. Random distributes the played notes randomly. Chord plays all played notes at once. The FixMn (fixed MIDI notes) operates like a standard

hardware step sequencer. Here you can select a fixed note to each step. Please notice that this FixMn function shares the same space with the velocity cycle, to register the fixed MIDI notes you have to deactivate the velocity button (see Chapter 11) so the first row of values next to the steps is showing either the velocity value or the FixMn tone height value. At this moment the tone height will be displayed in numbers only. So a low **C** is displayed as No.36, the neighbouring **C#** will be No.37 and so on.



9. The Draw menu is one of Mattomat's extraordinary features: one click opens a separate menu where all of the active steps velocity are shown in one window. Simply hold down the right mouse button and drag your desired velocity curve in one go. Left top you can select the other four assignable CCs curves as well. This draw feature allows a a quick and convenient design of your sequences individual parameters.

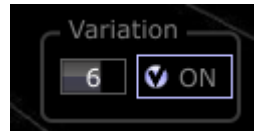


10. The Shift menu allows you to shift an existing sequence clockwise or anticlockwise. Enter a digit into the small window and press the + or - button and you will see that the whole sequence is shifted.

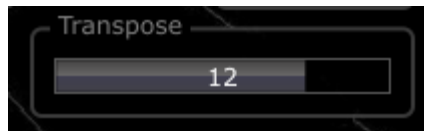


11. The Velocity button switches the cycle of velocity values on. Once you have registered all the steps with the desired value, you can hide the velocity cycle again. Please notice that this FixMn function shares the same space with the

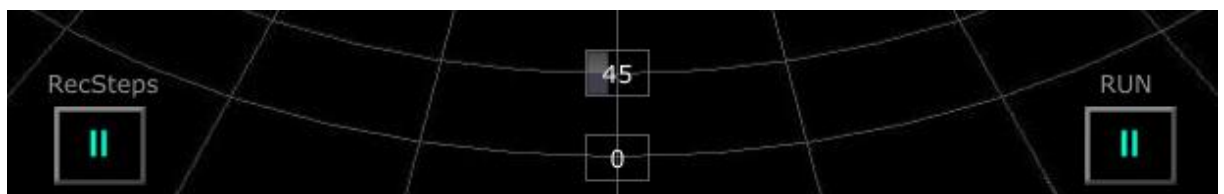
velocity cycle, to register the FixMn (fixed MIDI notes Chapter 8) you have to switch on the FixMn option in the output mode and deactivate the velocity button.



12. Variation is a flexible parameter to enhance the running sequence. Here you can shift the entire sequence for one full cycle. In active mode it shifts the sequence according to the value in the small window. At +12 i.e. it plays the sequence first one normal cycle and then the same sequence one octave higher, at -12 one octave lower and returns to the original pitch alternating the two pitches after each cycle.



13. The Transpose fade allows you to transpose the running sequence according to the registered value in the middle. It can be varied whilst running. Transpose can be adjusted (like numerous other parameters) to an external hardware controller (see Chapter 18).



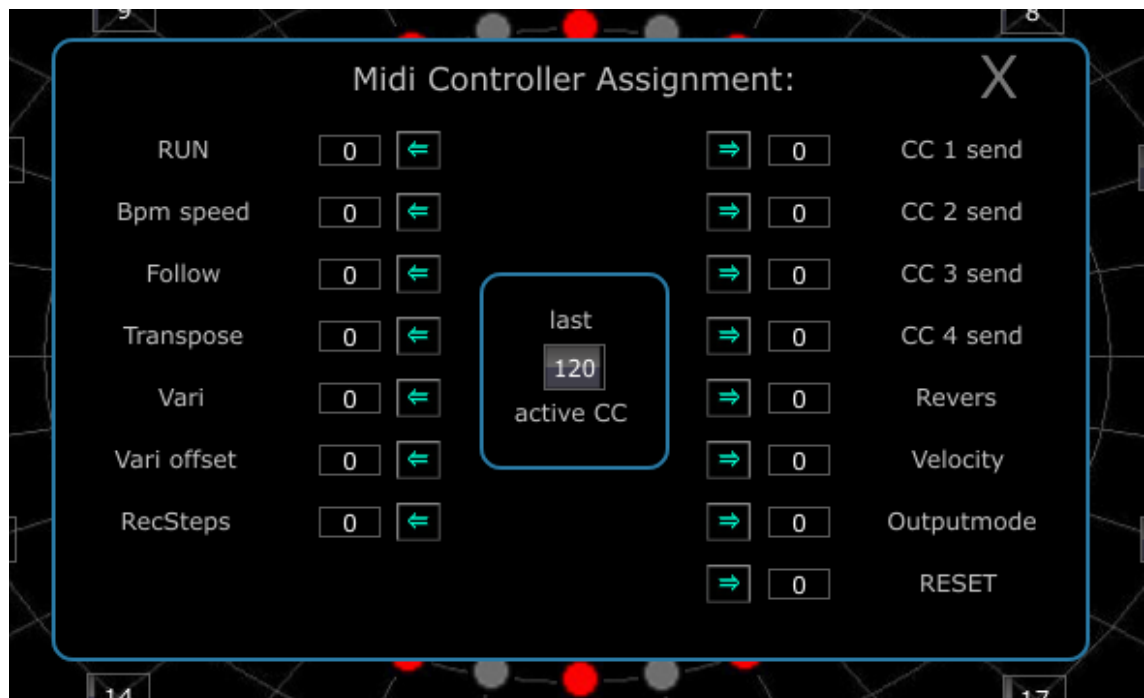
14. Run starts and stops the sequence. The button disappears when Mattomat is in slave mode.
15. RecSteps is a function to actually record a sequence via keyboard into Mattomat. To do so, you have to deactivate all buttons, including Sort, in the Input Menu (see Chapter 20). Because Mattomat doesn't have a Metronome function it is recommended to use this RecSteps function while Mattomat runs in slave mode to any kind of click or beat, making it possible to hit the right note at the right time. According to the speed and bar registration it might take a while until you have made a perfect recording.
16. The Tempbuf (temporary MIDI buffer) menu shows you how many notes are currently stored in that buffer, it shows for example how many notes have been pressed in the last chord. If the Hold function is deactivated (see Chapter 20) then

the Tempbuf will empty once you take your hands off the keyboard and the last Note Off message was sent.

17. In the Controller menu you can connect the MIDI CC parameter with the individual synthesizer's parameter. The number behind each CC needs to be registered in the synth itself too. Let's say you want to register individual Cut-off values within the sequence, select a number in the Controller menu and select the same number by right-clicking on the synth's Cut-off parameter. Those four CC cycles are the secret behind Mattomat's individuality. Take your time to find a matching registration for each step and you will be surprised how lively your sequence will sound.

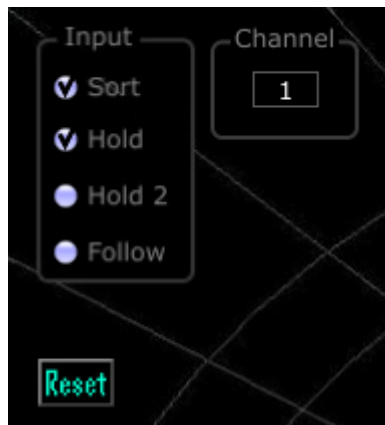


18. The Preset button has a double function: a left-click opens the preset list, here you can store your sequences in the usual way. Please note, the preset window might "hide" behind the Mattomat device and not be visible. If so, then please drag the Mattomat out of the way... (sorry folks). A right-click opens the MIDI Controller Assignment menu.



Here you can assign hardware controllers to the most important parameters. To do so, first you must connect the CC input (green triangle top) in the project window with your hardware controller. Then move one of your hardware faders once and click on the the green arrow next to the desired parameter. As well you can type the desired CC number into the field next to your parameter from Run to Reset.

19. One click on the reset buttons deletes all the notes in the temporary buffer.



20. In the Input menu you can select how the incoming keyboard notes are interpreted in various terms. Sort decides whether notes are sorted in line or, if deactivated, in the order of been played. Unsorted, it's even possible to push the same key several times and it will be played repeatedly. Unsorted mode is necessary for the RecSteps function (see Chapter 15). An active sort mode lines up the played notes according to their pitch and sends this information to the Output. Hold 1 mode allows you to add more notes in the MIDI buffer. In Hold 2 mode newly played notes will replace the existing notes in the MIDI buffer. The following function allows to play all the notes which currently are in the buffer with one single key on your keyboard. First play same notes, then activate the follow button and press a new key, your entire sequence will be transposed.

21. Here you select the active MIDI channel for each Mattomat.

The demo project and the preset files

To demonstrate a variety of sequences and sounds we have added a Scope PCI/XITE project: **Mattomat + Minimax.pro**. Here Mattomat and Minimax are already connected and have their own specific matching presets. According to your hardware you might have to connect the mixers L+R output to your desired hardware output. There are two presets in the demo folder: **MINIMAX Release.pre** and **MATTOMAT Release.pre**. Load those two into the devices. Then load the corresponding presets in the Bank Nr. **0 Release** and start Mattomat. More than twenty presets will demonstrate the variety of Mattomat possibilities. Note that you can change the presets of both devices, Mattomat and Minimax, altogether with Program Change from your keyboard, convenient for a live situation. For a potential synchronisation with your audio sequencer Mattomat's MIDI input is already connected with the **Sequencer Midi Source 2** module. If you are using Cubase, Ableton or Logic, make sure you are sending a MIDI Clock from there and switch Mattomat to Slave mode. According to a variety of involved details like buffer size and others, it will be necessary to adjust Mattomat's beat to your Master clock's beat. Try to shift the signals with either a delay in the Minimax channel or, if possible, shift the beat in your audio sequencer software for a few milliseconds. Since Mattomat has an ultra-fast reaction, usually Mattomat is a few milliseconds upfront. It is recommended to use a separate sequencer MIDI source module for the MIDI Clock, so that MIDI notes and MIDI Clock are not mixed in one connection.

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