# COMPOSER

Functional brief for a Monome Norns sequencer

## INTRODUCTION

Composer is a **sequencer** for the Monome Norns. It **requires the Grid** to function.

Its primary purpose is to allow for **polyphonic** sequencing over **midi** or to the **PolyPerc synth engine**, and to allow for the musician to create **structures beyond a single pattern**. And that's it.

# THE BASICS

## NOTES ON AND OFF

In its most basic form, composer allows you to activate a note as the sequencer is running, by turning it **on or off** on the Grid. The vertical line is the scale and the horizontal line is the progression. In default, with a clean pattern, this would mean that all the buttons on the bottom row are C3, the row above is C#3, and row above that D3 and so on. For reference, there's the **Awake** script on Norns, which functions the same way. One button on the grid activates the note. Turn it off, and there's a rest, not a note, on that button. Any scales selected in the Edit section will adapt accordingly

## TIES

To create a sustained note, press the first desired button on the grid, keep it pressed and then move to the desired end button along the horizontal line. Say second row, third button and then second row, seventh button. This creates a sustained note that prolongs from the third to the seventh button.

## OCTAVES

Since the Grid has eight buttons from top to bottom, this obviously poses a limit for anyone who wants to venture beyond just an octave or two. By turning the Enc2 button, you move up and down along the scale. Turn it left, you move down. Turn it right, you move up. For reference, the Animator script uses a similar method but cycles through octaves. In this case, we move up or down until we reach the end.

The bottom end being C0 and the top end being C8 (or whatever is appropriate for the Norns architecture).

This allows the musician to easily write something that spans over many octaves, by sampling moving up and down along the grid and activate notes accordingly.

In companions, Awake handles this partly by adding a second track which alters octaves. While this is a clever and creative method to apply variations, it's not appropriate for pieces where you want more control.

**PATTERN LENGTH**

A pattern can be anything from 1 to 64 steps. By turning Enc3, you adjust pattern length. 64 is just a recommended number and the implementation should rather allow for the end length (64) to be dynamically altered from the script, should we find a need that many users want pattern lengths longer than 64 steps. The limit should be set by design, not technology. However, especially in grid-based sequencers, it can quickly become overwhelming with long patterns lengths and isn't always as awesome as you'd think it to be. So to start with 64 seems like as good a guess as any.

**PATTERNS**

The musician can at any point switch between patterns, by pressing the bottom right Grid button. This switches the Grid view to a pattern view, where the top horizontal row now features your patterns. In the first version those would be sixteen, pattern01 being the top left button, pattern02 being the one right next to it, and so on.

Switching from one pattern to the next, doesn't stop the sequencer nor resets the pattern. On the next 1/16th note, it simply switches to that pattern and continues.

Push the bottom right Grid button again to switch back to pattern editing of notes. Any edits are saved in the pattern. You don't have to save, nor can you recall them. They are what they are.