

*“Axiom (n) – a statement or proposition on which an abstractly defined structure is based”*

This module generates and outputs rhythms created using three such statements:

**Hits** - The number of notes to be played in each round of the sequence.

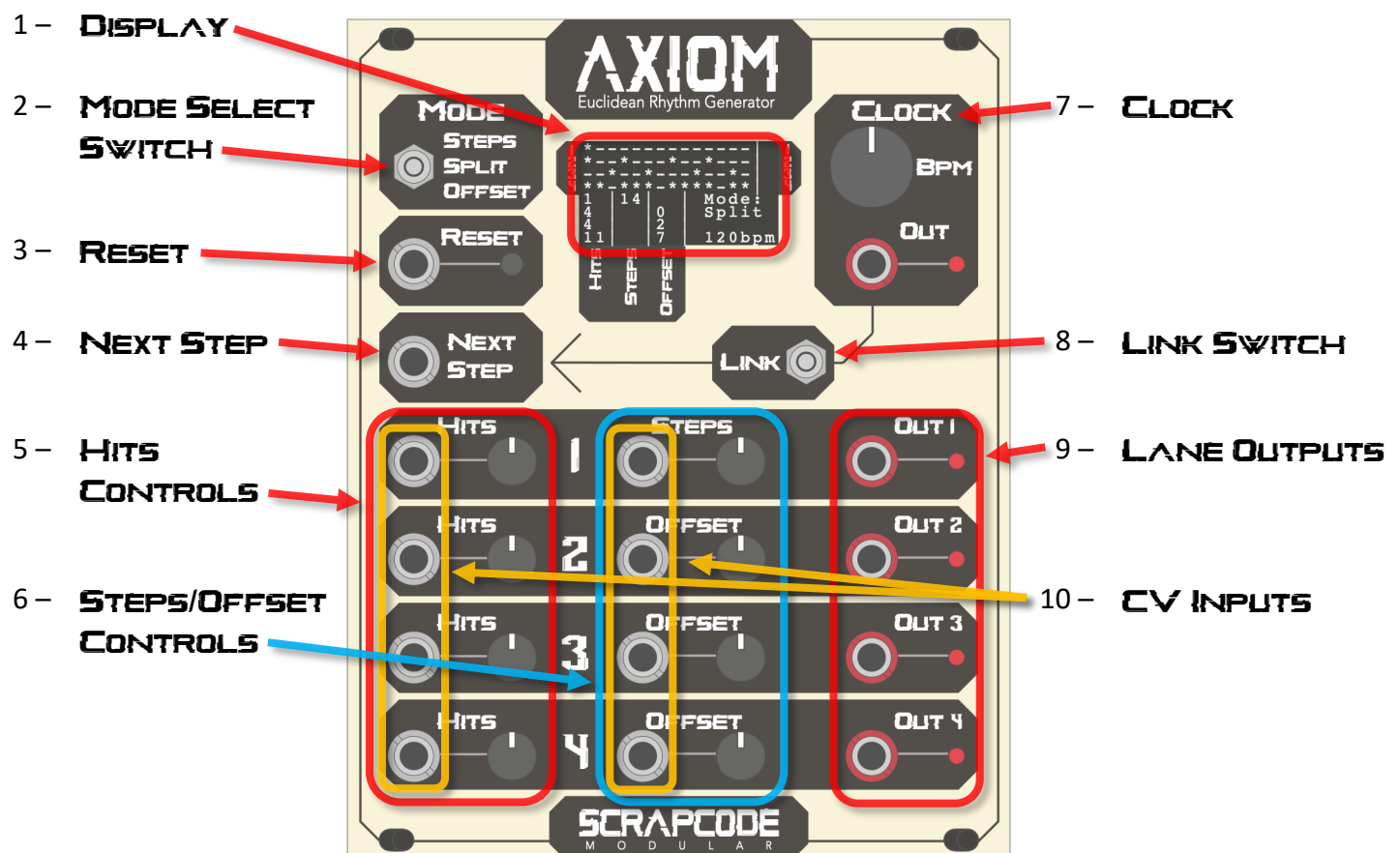
**Hits** are as evenly spaced as possible, with longer gaps tending towards the end of each sequence.

**Steps** - The number of **Steps** defines the length of each sequence.

**Offset** - The starting position from which each sequence begins, with any overflow wrapped around to the beginning.

These three parameters can be controlled using both the knobs and CV inputs.

Four independent sequences are available, with each controlled, displayed and outputted as a separate lane.





## 1 – DISPLAY

The top half of the screen shows the current state of all four sequencer lanes. A star is a *Hit*, a dash is a rest, and a vertical line signifies the end of the sequence. A highlighted position is the one which was most recently played.

The bottom-left part of the screen shows the current *Hits*, *Steps* and *Offset* values. Only currently accessible parameters will be visible (see 2 – **MODE SELECT SWITCH**).

The bottom-right of the screen shows the currently selected **MODE** and the **CLOCK** tempo.

## 2 – MODE SELECT SWITCH

This sets which parameters are affected by the **STEPS/OFFSET** controls:

- STEPS MODE - Only *Steps* are affected (all *Offsets* are set to 0).
- OFFSET MODE - Only *Offsets* are affected (all *Steps* are set to 16).
- SPLIT MODE - Parameters are affected as labelled on the unit.
  - The top row controls the *Steps* for all four lanes.
  - The bottom three rows control their respective lanes' *Offsets*.
  - The top lane's *Offset* is set to 0.

## 3 – RESET

A rising-edge trigger of 0-3V or greater on this input (or a press of the button) will reset the sequencer position on every lane, so that the next position played will be the first.

## 4 – NEXT STEP

This progresses the internal sequencer whenever a rising-edge trigger of 0-3V or greater is received.

## 5 – HITS CONTROLS

These determine the values of the *Hits* parameter for each lane.

## 6 – STEPS/OFFSET CONTROLS

These determine the values of the secondary parameters for each lane, as defined by the setting of the **MODE SELECT SWITCH**.



## 7 – CLOCK

The BPM knob sets the rate of an internal clock generator with a range from 20-240bpm.

Note that the tempo shown on the **DISPLAY** is for 1/4 notes, and the resolution of the sequencer is 16ths. This means that the frequency of outputted triggers is actually 4x the shown tempo.

## 8 – LINK SWITCH

This connects the output of the **CLOCK** to the **NEXT STEP** input.

Note that if the **LINK SWITCH** is active, both the internal **CLOCK** and **NEXT STEP** input can be used simultaneously to generate irregular sequence timings.

## 9 – LANE OUTPUTS

These output 6.5V pulses lasting 2ms whenever the sequencer is progressed and a **Hit** is found in the next position of the corresponding lane. An LED will also be illuminated to give visual feedback.

Note that output jacks are all identified by a red jack nut, and should never be directly connected to one another.

## 10 – CV INPUTS

If no cable is connected to a jack input, the corresponding knob will sweep through the full range of available values.

If a cable is connected, the full range of available values will be available with an input from -5V to +5V. In this case, the knob will act as a modifier on the inputted signal, ranging from -5V to +5V, with 12 o'clock having no effect.

## TECHNICAL NOTES

Rack Width	20HP
Rack Depth	30mm (including ribbon connector)
Absolute Maximums	This unit <b>must not</b> be subjected to input voltages greater than +12V or below -12V.
Power Requirements	Power is to be supplied on a 16-pin ribbon cable, as per the Eurorack standard. When installing, the power connector <b>must</b> be oriented with the -12V (usually signified by a red stripe) at the correct end, as shown by the labelling on the unit.
+5V Current Draw	38mA
+12V Current Draw	26mA
-12V Current Draw	2mA