

Apparently Gibbons are not very good at keeping track of large sequences of numbers.

Inspired by the random source on the Buchla Music Easel, the Gibbon is a digitally controlled complex random source generating a pair of both gate and CV signals. The random generator functions similar to an analog shift register. When the clock signal triggers an update and the next register value is loaded, there is a chance it will change. Think of it like a sequencer. The random generator cycles through the steps of the sequence and each time the sequencer jumps to the next step, there is a chance the value stored in that step will be replaced with a new value. The result is a random source that feels both random and evolutionary, with an ever evolving pattern cycle. Add to that adjustable pattern length, adjustable stored voltage difference range, the chance for triggers on clock subdivisions, and the output becomes even more chaotic.

Size 4hp Depth 24mm Power +12v 50mA / -12v 10mA

© 2020 Pittsburgh Modular Synthesizers

Despite what you may think, the point of this manual is to explain how the Gibbon works, not to make it more confusing.

Knobs and Jacks

Clock IO Jack External clock input, internal clock output, or randomized internal clock output depending on the clock mode selected.

Mod Input Jack External CV input used to mod the pattern variation.

Trigger LEDs Represents the trigger state of the clock (LED1), out a (LED2), and out b (LED3).

Stages Control Assigns the number of shift register stages from 1-24.

Spread Control Selects the general range of change when a shift register stages value changes. Smaller range to the left and a larger range to the right. Spread Control also sets the chance a stage value will change. Less chance to the left and more chance to the right.

Variation Control Determines the complexity of the output. Less variation will trigger fewer gates and reduce the chances of gates triggering on sub divisions of the clock. More variation increases the chances that a gate will trigger on the clock and sub divisions of the clock.

Out A Jack CV or gate output jack depending on selected output mode.

Out B Jack CV or gate output jack depending on selected output mode.



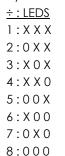
Clock Button

Modify clock related settings depending on selected clock mode. Pressing the Clock Button in external clock mode cycles through clock divisions 1-8. When in internal clock mode, the Clock Button functions as a tap tempo clock source.

Select Clock Source

Cycle through the 3 available clock modes. Press and hold the Mode Button then press the Clock Button to cycle through clock modes.

External Clock Mode LED1 lit. Clock IO Jack functions as clock input jack. Clock Button cycles through clock divisions 1-8.



Internal Clock Mode LED2 lit. Clock IO Jack functions as clock output jack. Tap tempo using Clock Button.

Internal Gate Mode LED3 lit. Clock IO Jack does not output a steady clock. Instead Clock IO Jack functions as random gate output. Tap tempo using Clock Button.

Free Running Mode

Disconnects the Gibbon from the clock source to create unclocked, chaotic updates. Press and hold Clock Button for 3 seconds to enable or disable free running mode.

Free Running Mode Off LED1 and LED2 lit. The selected clock source has full control.

Free Running Mode On LED2 and LED3 lit. Internal clock mode has no control over timing but the Clock IO Jack does influence timing when in external clock mode.



Mode Button

Selects between CV and Gate signal outputs for Out A Jack and Out B Jack.

Select Output Mode Cycle through the 3 available output modes. Press the Mode button to cycle through output modes.

Mode 1 LED 1 lit. Out A and Out B output CV signals. Mode 2 LED 2 lit. Out A outputs CV, Out B outputs a gate. Mode 3 LED 3 lit. Out A and Out B output gates.

Reset Clock Divider In external clock mode, press and hold the Clock Button then press the Mode button to reset the internal clock divider counter.

Clear Shift Register Values In internal clock mode or internal gate mode, press and hold the Clock Button then press the Mode button to clear the shift register CV values.

Clock Trigger Passive Variation Mode

The event that happens when the clock is triggered will use the chance algorithm of the last event that happened instead of its own chance algorithm. This may or may not make sense but in practice it means there may be less chance a gate/CV update will happen when the clock is triggered. That explanation probably did not help. Anyway... Press and hold Mode Button for 3 seconds to enable or disable clock trigger passive variation mode.

Clock Trigger Passive Variation Mode Off LED1 and LED2 lit. Variation chance is based on specific chance algorithm for on clock events.

Clock Trigger Passive Variation Mode On LED2 and LED3 lit. Variation chance is based on the last used chance algorithm.

