

Model 268e Graphic Waveform Generator

firmware version 1.1.0

Consists of four oscillators with whether shared or independent dynamic waveform database. Imagine an oscillator as a virtual logger tape with observable window upon which any kind of external processes can be recorded, graphically represented and immediately played back in an audio domain. The user interface includes display, speed control of virtual tape, various data input facilities, modulation bus control, logger algorithm selector and the small but useful computational engine that expands the functionality even further.

First of all, on algorithms. They define how exactly the logger behaves. The **continuous** is much like a meteorograph tracking ever-changing pattern with never-stopping high speed reel. The **m'detector** is like a seismograph and stays idle until some activity is detected. The algorithm is selectable with yellow button or by an external pulse. Each algorithm's input source can be set in an easily mastered one-page menu. Just push the **mod bus handle** knob, select an object to change, push to "catch" it and dial the appropriate value, push again to select another object, and so on. Use the **steady** button to revert to normal operation.

The **manual** knob provides the first data input facility driving the virtual stylus. The second one is the cv input labeled **external**, while the third one covered under the grey bananas array and named in menu as **individual**, implements the per-oscillator drawing.

The **steady** button acts in two different manners depending on selected algorithm. In **continuous**, it freezes the virtual tape until pressed again or an external pulse occurs on related input. Held in **m'detector**, it sample-and-holds the active input and fills the tape with constant value forming a horizontal line.

The **external** input is bound with two special outputs. The one labeled **df** produces a differential function, in other words, the faster is the cv the higher is the voltage on violet banana. The pulse on red banana occurs each time the cv direction changed. All these might be useful in a situation when time-spectrum correlation is desirable.

The **CONTROL & MODULATION INPUTS** section is responsible for pitch, modulation input and depth. Grey banana inputs can be indexed or biased in the menu. Notice, even engaged as a waveform source for either or both algorithms, those inputs preserve the ability to control the modulation depth.

Holding **mod bus handle** knob connects or disconnects the module from the store/recall functionality of the Buchla 200e series compatible preset management devices. If no preset management device presented in the system the last configuration still can be stored by holding **mod bus handle** knob and will be automatically recalled on next startup.

P.S. What you see on the display is just a half of waveform. To avoid undesired discontinuities the resulting one consists of two symmetrical halves forming something like a “wavelet”, visually.