Tone Event

Version 2019-09-02, edit 2019-12-07

This module can be used both as standalone and as stage of a step sequencer. It provides GATE and CV output signals, that can be used to control any sound source. Together with a P.moon **Stepper** module several **Tone Event** modules can form a step sequencer.

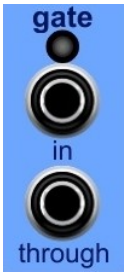
Function

Like in a common step sequencer this module provides a tone event, that consists of a GATE voltage as tone on/off signal as well as a CV voltage that represents tone frequency. CV can be modified for key tracking with a KEYB input voltage.
Sometimes it is wanted to repeat a note during one step. Therefore Tone Event has an extra ARP input jack. Operation of this input is controllable with an enable control voltage and a toggle button.
In order to couple several **Tone Event** modules easily, there are some *through* output jacks installed. These jacks can be used to chain several modules.

On the top of **Tone Event** module there is an editable label. It is filled with “1” as default. You can edit it after a double click on the label field.

Basically **Tone Event** consists of two main sections. Digital section processes GATE and ARP signals, analogue section handles KEYB and CV. For logical processing signals are seen as OFF, when voltage is lower or equal to 2.5 volts and ON, when voltage is greater than 2.5 volts.

Gate Section



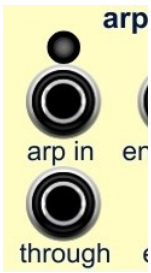
LED indicates an ON signal (< 2.5 V) at ***gate in***.

gate in gets the voltage, that determines begin and end of a tone event. This could come from a **P.moon Stepper**.

gate through repeats signal from ***gate in***.

If ***arp enable*** is OFF, ***gate out*** repeats ***gate in*** signal.
If ***arp enable*** is ON, ***gate out*** signal will only appear, when ***gate in*** and ***arp in*** are ON.

Arp Section



LED indicates an ON signal (< 2.5 V) at ***arp in***.

A signal on ***arp in*** can be used to create multiple tone events during one gate on, when ***arp enable in*** is ON.

arp through repeats signal from ***arp in***.

LED indicates an ON signal (< 2.5 V) at ***arp enable in***.

While ***enable in*** is ON, ***arp in*** controls ***gate out***. ***gate out*** signal will only appear, when ***gate in*** and ***arp in*** are ON.

This toggle button lets you enable arp function without active ***enable in*** signal.

Tune Section

This knob lets you adjust CV voltage for tone frequency.

When this toggle button is active, tune voltage will be rounded to exact 1/12 volt half tone steps. (quantising)

Determines the maximum voltage of the ***tune*** knob. Range can be set from 1 to 10 volts. (1 to 10 octaves)

Transposes tune by octaves. It can be selected from -9 to +9.

Voltage on ***keyb in*** is added to tune voltage. It lets you transpose tone for key tracking.

keyb through repeats ***keyb in*** voltage.

amount knob determines amount of ***keyb in*** voltage, that is added to tune voltage.

Indicated tone represents voltage, that will be output at ***cv out***.

Voltage on ***cv out*** jack is total sum of tune section voltage.

Trig Section

These outputs are installed for special use, like triggering a P.moon **Stepper**. Both jacks send out only short pulses of some milliseconds length.

Sends one pulse at beginning of a ***gate in*** signal.

Sends one pulse at every beginning of an ***arp in*** signal, while ***enable in*** and ***gate in*** are ON.