LiNEAR-MOTION ALGORiTHMiC™

SYNARP™

SNAKE LiNE ARPEGGiATOR™

Manual

- **Introduction**

  Thanks for download **SynArp**™ plug-in.
  SynArp™ suggest Arpeggiator which is more interactive, and is unique in VST plug-in.
  Linear-motion-Algorithm™ enable unprecedented interactive performance expression
  by reacting to a change of the input chords and Those cardinality seamlessly.
  Please enjoy **SynArp !**

- **Install/Setup SynArp™ Arpaggiator Plug-in**

  Download Pluggo Runtime from Cycling'74 site, and please install it.

  Put **SynArp** plug-in(.dll) in an arbitrary VST folder.

  Start a host application, and load plug-in as "a VST-Instrument".
  (For details, please refer to a manual of each host application.)

- **Setup MIDI Track**

  Make Two MIDI-Tracks with in a host application. and assume it **MIDI Track-1, MIDI Track-2** each.
  Choose each input and output of **MIDI Track-1,2** as follows.
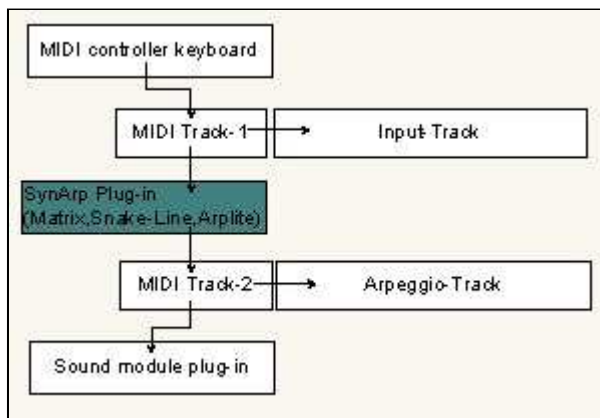
  o Choose a controller (a keyboard) as an input source of MIDI Track-1.
  o Choose SynArp plug-in (Matrix,Snake-Line,Arplite) as an output source of MIDI Track-1.
  o Choose SynArp plug-in (Matrix,Snake-Line,Arplite) as an input source of MIDI Track-2.
  o Choose an arbitrary VST instrument or a sound module as an output source of MIDI Track-2.

     In MIDI Track-1 a source (which you play with keyboards) of an arpeggio,
     and An arpeggio generated with **SynArp** returns to MIDI Track-2.

     ※ Example above is a way in Cubase,Nuendo etc.,
     In the case of other host applications, please refer to each manual.

Feature

A form of a characteristic arpeggio-line to draw of **Snake-Line-Arpeggiator** is made by turning down a direction of an arpeggio-line with note-on, note-off, and the random pulse information that can set density .
Furthermore,**Auto-quantize** changing quantize with the number of the input notes, and **note-hold** with pedal control,
Snake-Line-Arpeggiator generate unique arpeggio line more interactively by a combination of these functions,
The arpeggio-line to run through as drawing a fluent curve without note-leaps was enabled by a combination with **Linear-Mortion-Algorhythm**.

Linear-Mortion-Algorythm™

In the case of approximate Arppegiator with simple algorithm, accompanied with a occurrence of an note-leaps with a change of an input chord.
As this reason, it pronounce input note (reffer to a list) in specific order simply.
As well as it,there is the kind that used re-trigger for as these measures.
In the case of this algorithm, deal with "change of an input chord" by giving "re-trigger"(reset) every note-on information.
However, in this case, an arpeggio line is reset with every "re-trigger" (a chord change), and a natural line form breaks off.
"Linear-Mortion-Algorhythm(L.M.A)"solves these problems.
L.M.A, does return position-information of pronounced note by referring to a list at every pronunciation (trigger), then calculate the next note based on the position-information and appoint it.
The smooth arpeggio line which is not affected by a change of an input chord is enabled by this.

Linear-Mortion-Algorythm™
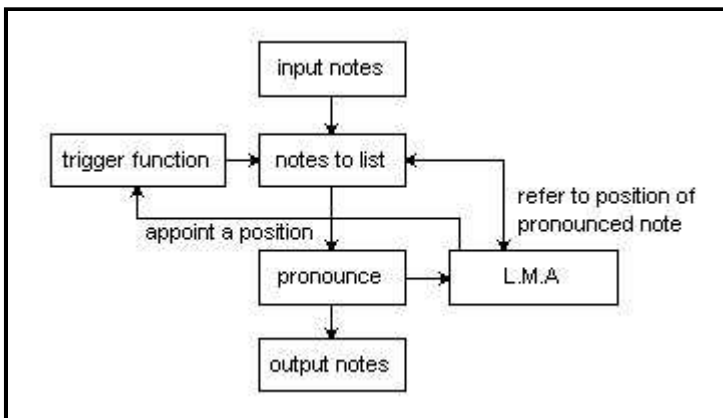
Explanation of each part

[DIRECTION]
　　Set a form of an arpeggio.
[MIN-ACT-HLD]
　　Setting about Key-on.
　　　　MIN : Set the minimum number of notes in the input chords.
　　　　　　　Get rid of unevenness of a timing of the chord input by setting it precisely.
　　　　　　　This is the way that the fastest, and is effective,
　　　　　　　when sample a chord precisely from keyboad.
　　　　　　　When you play a chord of 3 or 4 notes, you should set it to 3.
　　　　ACT : Display an active state by indicator.
　　　　HOLD : Hold of an input chord and you can add a notes.
　　　　　　　You can control it in controller **#69** .

[Pedal]
　　Set a mode of sustine-pedal effect with control change **#64**.
　　　　Sustine : Sustine-pedal effect.
　　　　　　　　This is not the through transmission of a ″#64-sustine″message
　　　　　　　　such as to sound module/midi-track.
　　　　　　　　and effect is added by Matrix itself as a duration date.
　　　　　　　　It is reflected directly for output MIDI-duration data.
　　　　Sus-hold 1. : hold of a notes.
　　　　Sus-hold 2. :The mode which turned over in ON/OFF of Sus-hold 1.
　　　　Aro-on. : An arpeggio starts in pedal on, and an arpeggio is off in pedal off.
　　　　Aro-off. : Turning over mode of Arp-on.

　　　※Controller messege (except #64,#69) is just handed to an DAW track and/or sound module.

[TURN]
　　Choose turn trigger of an arpeggio.
　　　　Non : An arpeggio runs with a form set in Direction.
　　　　Note-on : Let an arpeggio turn with Note-on trigger.
　　　　Note-off : Let an arpeggio turn with Note-off trigger.
　　　　Note-on/off : Let an arpeggio turn with Note-on/off trigger.
　　　　Random : Let an arpeggio turn according to the density that you set in number box at random.
　　　　LED : Display trigger of note-on/off,and random turn when random is chosen ,
　　　　　　　and motion status of each up/down by lighting.

[RANGE]
　　Set the range of arpeggio. Sets top and bottom value individually by Shift+click.
　　　　RangeBar : Set a range by a range bar.
　　　　Playd : Set a played -range(such as on keyboads) as a arpeggio-range.
　　　　　　　By this setting, you can control an arpeggio-range in real time
　　　　　　　by pressed key-position.
　　　　Ctrl-16 : Control range with controller **#16**.

[Quantize]
Appoint a note-value.

TRIG / BEAT : Set the number of times of trigger per every beat.

BPM : Set a tempo（beat per minuttes）.

SYNC : Synchronization with a host.

[Auto-Quantize]
Change the Quantize gradually depending on the number of the input-notes .

A－B : Regular TRIG(the value which set in TRIG) at a set point of A,
and the number of TRIG changes to a value of RATIO at a set point of B .

RATIO : Set RATIO with a multiple of the number of regular TRIG.(x0.25 ~ x4.0)

SLOPE : When value is over 1.0 , RATIO change gradually and slowly.

ON : Switch Auto-Quantize on.

Dur% : Set duration in a ratio of a note value set in Quantize.
～50% for staccato,100% for legato,100%～ for pedal effect.

[MODE]
Choose a play mode.

poly : play poly mode.

mono : play mono mode.

VELO.: Set velocity.

[Recorder]
Performance in [Snake-Line-Arpeggiator] is possible to record with this recorder.
and it is possible to store/read as midifile.

Click it in order of **[Rec]** → **[play]** to do a record.
[Rec] button serves as a function of an auto record start.

Red LED turns on when you click a **[Rec]** button.
In this state, recorder start a record automatically when you begin to play on your key-boad.

[play] – Playback of a recorded performance.
[stop] –Stop a record or a playback.
[load] –Read a midi-file for play back.
[save] –Store a recorded performance as a midi-file.