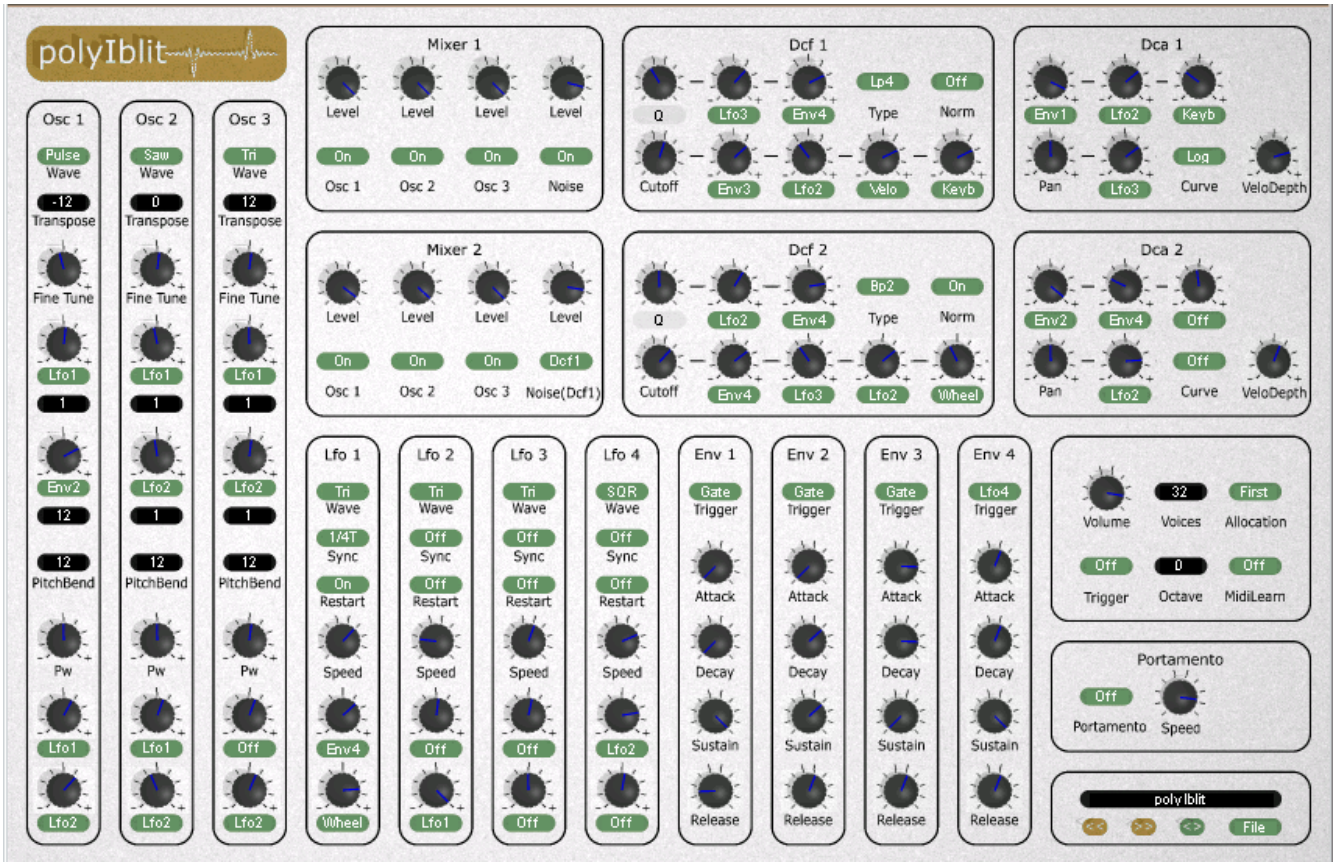
polyIblit



polyIblit is a VST 2.3 compatible software synthesizer.
Programmed by Andreas Ersson ers@bostreammail.net

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Oscillator

Parameters

Wave

Sets the oscillator output waveform.
Range: Sine/Tri/Saw/Pulse.

Transpose

Transpose the oscillator.
Range: ±48 semitones.

Fine Tune

Detunes the oscillator.
Range: ±100cent.

Pitch Modulation

The oscillator frequency can be simultaneously modulated by two modulation sources.

Depth

Sets the modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the oscillator frequency.

Range

Sets the modulation range.
Range: 0-48 semitones.

PitchBend

Sets the pitch bend range.
Range: ±24 semitones.

Pw

Controls the pulse width of the oscillator when *Wave* is set to Pulse or the slope of the triangle wave when *Wave* is set to Tri.
Range: 1-99%

Pulse width/Slope Modulation

The pulse width/slope can be simultaneously modulated by two modulation sources.

Depth

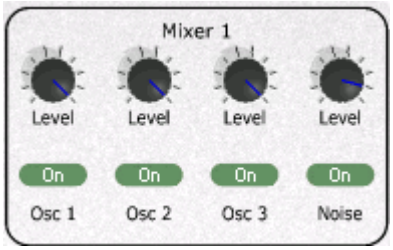
Sets the modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the pulse width/slope.

Mixer

The Mixer controls the output levels of the oscillators and the noise generator.
It also controls if an oscillator or the noise generator is fed through the filter or if the filter is bypassed.



Parameters

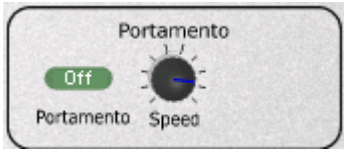
On/Off

Controls if the oscillator or noise generator is turned off, fed through the filter (On) or if it is fed directly to the Dca (Bypass).
In the Noise On/Off option menu in Mixer 2, the output from Dcf1 can be selected as input to Dcf2 instead of the noise generator.
Range: Off/On/Bypass

Level

Sets the output level of the oscillator or noise generator.
Range: -70dB-+6dB

Portamento



Parameters

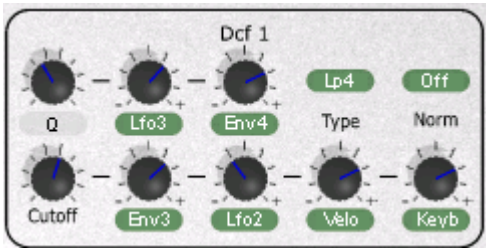
Portamento On/Off

Turns the portamento on or off.
Range: On/Off

Speed

Sets the portamento speed.
Range: 0-100%

DCF



Parameters

Q

Sets the Q (resonance) of the filter.
The maximum Q value can be increased by clicking on the "Q" label.
When the "Q" label is red the maximum Q value is increased.

Q Modulation

The filter Q can be simultaneously modulated by two modulation sources.

Depth

Sets the Q modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the filter Q.

Type

Sets the filter type.
LP1 one-pole low pass filter
LP2 two-pole low pass filter
LP4 four-pole low pass filter
HP1 one-pole high pass filter
HP2 two-pole high pass filter
HP4 four-pole high pass filter
BP2 two-pole band pass filter
BP4 four-pole band pass filter

Norm

Filter Normalization.
When activated the output of the filter is normalized at the cutoff frequency i.e. the filter gain at the cutoff frequency is 0dB.
Range: On/Off

Cutoff

Sets the cutoff frequency of the filter.
Range: 20Hz-16.2kHz

Cutoff Modulation

The cutoff frequency can be simultaneously modulated by four modulation sources.

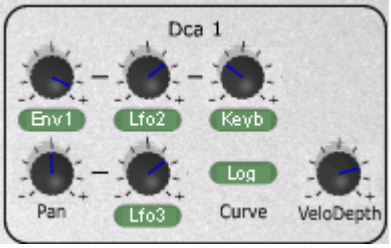
Depth

Sets the cutoff modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the cutoff frequency.

DCA



Parameters

Envelope Depth

Sets the envelope modulation depth.
Range: ±100%

Envelope

Sets the envelope that controls the Dca.
Range: Env1/Env2/Env3/Env4

Amplitude Modulation

The amplitude can be simultaneously modulated by two modulation sources.

Depth

Sets the amplitude modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the Dca.

Pan

Sets the pan of the Dca output signal.
Range: ±100%

Pan Modulation

The pan can be modulated by one modulation source.

Depth

Sets the pan modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the Dca.

Curve

Sets the velocity curve.
Range: Off/Lin/Log.

VeloDepth

Sets the velocity depth.
Range: ±100%

Envelope Generator
Parameters

Trigger

The envelope can be triggered from one of several different sources.

Gate
The envelope is controlled by Note On midi messages.
LFO1,LFO2,LFO3 or LFO4
The envelope is controlled by the selected LFO.
The gate signal is 'on' as long as the output from the LFO is greater than zero.
This means that the gate signal is 'on' for half a period when Sine,Tri,Saw or SQR waveform is selected.
For the 25% duty cycle pulse the gate signal is 'on' for 0.25 period and for the 12.5% duty cycle pulse the gate signal is 'on' for 0.125 period.
Porta
The envelope is controlled by the same mechanism that controls the portamento i.e. the gate signal is 'on' as long as there are overlapping notes.
CC16-CC19
The envelope is controlled by midi Control Change messages.
The gate signal is 'on' as long as the CC value is larger than 64(0.5).

Attack

Sets the attack time of the envelope.
Range: 1ms-5s

Decay

Sets the decay time of the envelope.
Range: 5ms-4s

Sustain

Sets the sustain level of the envelope.
Range: 0-100%

Release

Sets the release time of the envelope.
Range: 5ms-3s

LFO

Parameters

Wave

Sets the output waveform of the Lfo.

Sine Sine waveform
Sine+ Sine waveform with offset.
Output amplitude is between 0.0 and 1.0.
Tri Triangle waveform
Tri+ Triangle waveform with offset.
Output amplitude is between 0.0 and 1.0.
Saw Sawtooth waveform
Saw+ Sawtooth waveform with offset.
Output amplitude is between 0.0 and 1.0.
SQR Square waveform
SQR+ Square waveform with offset.
Output amplitude is between 0.0 and 1.0.
25% Pulse waveform with 25% duty cycle
25%+ Pulse waveform with 25% duty cycle and offset.
Output amplitude is between 0.0 and 1.0.
12.5% Pulse waveform with 12.5% duty cycle
12.5%+ Pulse waveform with 12.5% duty cycle and offset.
Output amplitude is between 0.0 and 1.0.
S/H Sample and hold

Sync

Controls if the Lfo shall be synced to the host tempo.

Restart

Controls how the Lfo behaves when a new key is being pressed.
When not activated the Lfo is in free run.
When activated the Lfo will restart when a new note is being triggered.
Range: Off/On

Speed

Sets the Lfo speed.
Range: 0.01Hz-20Hz

Speed Modulation

The Lfo speed can be modulated by one modulation source.

Depth

Sets the speed modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the speed.

Amplitude Modulation

The output amplitude can be modulated by one modulation source.

Depth

Sets the amplitude modulation depth.
Range: ±100%

Modulation Source

Any of the Modulation Sources can be used to modulate the amplitude.

Control

Parameters

Volume

Sets the output volume.
Range: -70-+6dB

Voices

Sets the maximum number of voices that can be played.
Range: 1-32

Allocation

Controls which voice that will be used when a new voices is being triggered and there are no free voices left.
When First is selected the first(oldest) voices is used.
When Last is selected the latest voice that were triggered is used. This can be useful if you for example play a chord with the left hand and lead with the right hand and you don't want to 'steal' any voices from the chord.
Range: Last/First

Trigger

Controls how the envelope generators behaves when a new note is being triggered. This will only affect the envelopes if monophonic mode is used(Voices=1) or if there are no free voices left.
When not activated the envelope generators are only re-trigged when a new key is being pressed and no other key is being held down.
When activated the envelope generators will be re-triggered when a new key is being pressed or when the latest key that was pressed down is released.
Range: On/Off

Octave

Sets the global transpose.
This affects all oscillators.
Range: ±4 octaves

MidiLearn

All controllers(except MidiLearn OptionMenu and Program controllers) can be assigned to a midi-cc.
To assign a controller to a midi-cc:
1. Set MidiLearn to 'On'.
2. Select the controller by left clicking on it.
3. Send the midi-cc to the plugin.
4. Repeat step 2 and 3 until you have a assigned all controllers you want to.
If you want to deassign a controller, just right click on it.
5. Set MidiLearn to 'Off'.

Off: Midi Learn function is disabled.
On: Midi Learn function is enabled.
Import: Import midi automation settings from a file.
Export: Export midi automation settings to a file.
Reset: Clears all midi automation settings.

Programs

Changing Program

The active program can be changed by either using the prev/next buttons (<<,>>) or by selecting a new program in the program drop down menu (<>).

Program Name

To change the name of a program, click in the text edit box and enter the new name.

Copy Program

A program can be copied to any program location in any instance of the polyiblit.
To copy a program, select the program you want to copy, select "Copy Program" in the File menu or press Ctrl-c (if your host supports this), activate the instance of polyIblit that you want to copy the program to, select a program location and select "Paste Program" in the File menu or press Ctrl-v (if your host supports this).

Load Program

To load a program from file, select the program location you want to load the program to, select "Load Program" in the File menu, select a program and press "Open".

Load Bank

To load a bank from file, select "Load Bank" in the File menu, select the program you want to load and press "Open".

Save Program

To save a program to file, select "Save Program", enter a file name and press "Save".

Save Bank

To save a bank to file, select "Save Bank", enter a file name and press "Save".

Modulation Sources

Off

If *Off* is selected no modulation source is used.

Env1-Env4

The selected envelope generator is used as modulation source.

Lfo1-Lfo4

The selected Lfo is used as modulation source.

Keyb

The midi note number is used as modulation source.

Velo

The midi velocity is used as modulation source.

Wheel

The modulation wheel is used as modulation source.

PBend

The pitch bend is used as modulation source.

CC16-CC19

The selected midi control change is used as modulation source.