

ProtoPlasm Synthesizer Pro

The Next Generation Pad & Texture Synthesizer by H.G. Fortune



One of the special features of this synthesizer is a very easy to handle modulation-system with 8 LFO/S&H-outputs plus optical control derived from even patternlike LFO-waveforms as modsources. So You can do quite amazing and complex modulations with only very few settings. Basically this synthesizer is best suited for highly vivid pads and textures but you can also do bass, leads etc. More than 1000 patches included with Pro Version: see Appendix.

The basic features are:

- three digital PCM-wave oscillators powered by **75 different waveforms** of enhanced quality
- each oscillator's level can be modulated by different sources
- one LP filter (24db Lowpass) with adjustable Boost and ADSR EG
- one HP filter (12db Hipass) with adjustable Boost and ADSR EG
- two shapeable LFO with patternlike waveforms (bpm-synced)
- one shapeable standard LFO (bpm-synced)
- one shapeable Sample & Hold with pattern (bpm-synced)
- each LFO and S&H provide an additional Mix-out for mixed LFO-shapes
- 'magic eyes' as visual control for LFO & S&H in motion
- one ADSR EG for VCA
- adjustable level for direct, LP and HP output with separate pan each
- stereo-delay for PingPong effects (bpm-synced)

Within the registered Pro version there is also the option of using a wavefile instead of the inbuilt internal waveforms at each oscillator. Wavefiles can be up to 24Bit!

The features in detail

The sound-sources



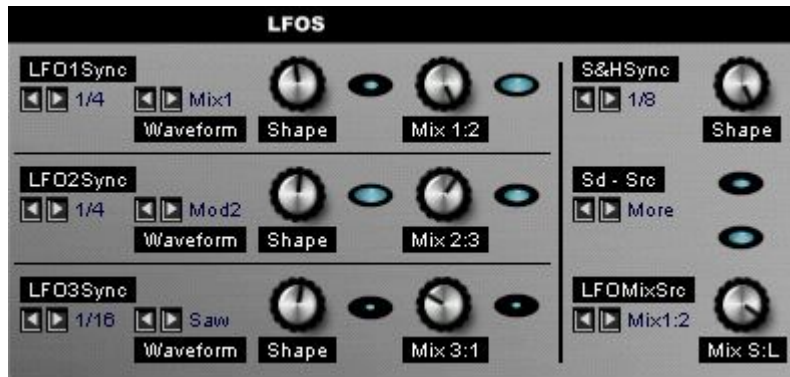
There are three oscillators with octave range adjustable -2 to +2 **[Oct]**aves, **[semi]**tones for osc. 2 & 3 and fine detuning **[Det2<1>3]** so osc.2 is tuned a bit downward while osc.3 is tuned a bit upward for a more vivid sound. There is also an unlabeled **[Mute]** button for each oscillator between waveselect and the level knob. The button left of waveselect (registered version only!) switches between internal soundsources and wavefile, loops are supported within wavefiles. The **[Level]** knobs determine the basic output level of each oscillator. Next to this there is a selector **[LvIMod]** for a source to modulate the output level of each oscillator followed by a knob to adjust level for modulation **[ModAmt]**.

The Filter section



There are two independent filters one 24dB lowpass filter with resonance **[Q]** and a 12dB hipass filter with resonance. Each filter can be modulated by an ADSR-EG and/or a selectable modsource from the LFO-section. The **[ModBal]** determines the amount of modulation between ADSR EG and LFO-source. The **[Boost]** knob provides an adjustable enhancement of the current filter frequency.

The LFO section



The LFO section offers three shapeable LFO's and one shapeable Sample and Hold, all bpm-synced (by divisors 1/16note to 8 bars) plus outputs for mixed waveshapes. In addition osc. 1 and 2 also provide patternlike (Mod1-3) waveforms for far more flexible modulations. All in all this provides a very comfortable way in getting really complex and vivid modulations and due to the concept this is easier to be handled than e.g. an 8stage envelope. Also there are 'magic eyes' to see the motion of each output!

The LFO-Modulation Stepper



This one is really tricky as it switches modulation sources from all LFO, Mix and S&H outputs in sequence or at random. In sequence mode You can set first and last step, also determine direction (forward, backward, Bounce 1 & 2). Even Tempo-Sync is adjustable.

The sources are:

- L1 - LFO1 output
- L2 - LFO2 output
- L3 - LFO3 output
- SH - S&H output
- M1 - Mix1:2 output
- M2 - Mix2:3 output
- M3 - Mix3:1 output
- M4 - Mix:S:L output

At destination this Mod-source is labelled: LMS and LMS- (for inverted)

Note: If You do not use the LFO-Mod Stepper within a patch it is useful to set mode to **Off** to save a bit CPU. It is also connected to Lazy-Function of LFO and LazyAll.

The Mix and VCA section



The output section provides an **[A] [D] [S] [R]** envelope generator for shaping the overall signal with **Attack**, **Decay**, **Sustain** and **Release**. Also You can mix the amount of level from outputs of direct(unfiltered signal), Lowpass and HiPass filter. In addition to this there is an independant pan-setting for each output.

There are four **[Lazy?!]** buttons to randomize certain sets of parameters for All, Oscillator, Filter and LFO sections. This is a really easy way to generate new ideas for new patches ;-)

Delay and Main Out section



This stereo delay is synced to host clock at selectable division-settings by **[Dly-Ping-L]** and **[Dly-Pong-R]**. Use the **[Dly-Lvl]** knob to adjust the amount of delayed signal to the normal signal while the two **[Fdbck]** knobs determine the amount of repetitions of each delay. This is useful to get more delay repetitions at shorter delay times while the other delay has a longer delay time setting. So you can compensate the repetitions on the shorter delay vanishing too early. If you want to have a continuous delay when switching from one patch to the next it is advisable to have the divisional settings at the same divisor then no clicks should occur.

[Main-Vol] controls the overall output of the synthesizer.

General hints: 1. When moving a knob or slider you can also press <Ctrl> on the PC-keyboard for fine adjustments. 2. Long release settings at the ADSR EGs use more CPU.

Known bugs: loading a single patch program (*.fxp) to first program number (and only there) may change the waveform of the oscillators. This does not apply when loading a patchbank file (*.fxb)! This has to be fixed in the development-environment.

Bugs Fixed:

Bug fixed for Ableton Live and Fruity Loops: those no longer can pull out unused data,
LFO-Sync corrected, Position of Semi(tone) buttons of oscillators 2 and 3 corrected.

Credits, thanks and further info

The ProtoPlasm Synthesizer has been created with Synthedit by Jeff McClintock with only two further modules by David Haupt and one by Dan Worrall.

The stunning GUI has been done by **Vera Kinter** (Brno, Czech Republic) - very big thanks!

Preset patches were kindly done by:

Timothy Conrardy (TC); Vera Kinter (VK); Annabelle (ANN); Dimitri Schkoda (DS); Derek Kay (DK); Stephan Müsch/rsmus7 (SM); Rene Ebenhan (R); Steve Blenkinsopp (Waveform); Miguel Matas (MTZ) and vurt (v)

A big thanks also goes to all who have helped, betasted and taken part elsewhere within this project also those at KvR esp.: vurt, Jack Dark and some others. Not to forget www.pluginindex.de for providing a direct download for Prototypx which has become ProtoPlasm now.

H. G. Fortune

near Bonn (Germany) August, 29th 2005

updated: November, 16th 2005

The eight voice version of ProtoPlasm is available via Paypal or ShareIt for 27,00 Euro

Please visit www.flomo-art.de/se or www.hgfortune-vsti.net.tc for further details.

If You like to get a special bundle of my Synthesizers please ask for a special price!

There is a also **Free Version of ProtoPlasm** - limited to 2 voices instead of 8, no wavefile option and no LFO-Modulation Stepper and no updates.

Other VSTI by H. G. Fortune are:

STS-21 Space Transition Synthesizer

X-Wheel of Fortune II Pro

X-Wheel of Fortune II (Freeware)

X-Wheel of Fortune Pro

Homepage: www.hgf-synthesizer.de

email: fortune@flomo-art.de

Appendix

List of internal waves: now 75 - new ones in right column

001.Interstellar	026.KS-HumOhh	051.JustAFlute
002.Overdrive	027.KS-Nebulous	052.S-BigGongL
003.Fat-CS-080	028.KS-FatBras	053.DXEP-Base
004.SyncedOsc	029.KS-Spectral	054.Octavian
005.MajesticBrass	030.KS-Syncer	055.AtkSyn
006.Orkestra	031.KS-Pudding	056.MSawBras
007.FogString	032.ModChord	057.SynAthmoL
008.MysticVox	033.Chord2	058.AsianMetal
009.FaintVox	034.ArcaneRealms	059.Mythosfer
010.ChoirString	035.PPG-OrgVox	060.BenVoxMet
011.FogChoir	036.PPGVox	061.SwellStrs
012.Bassical	037.SawPad	062.ArcaNostra
013.HauntedPia	038.SynSquarA	063.MinorAtm2
014.DropDown	039.BellMagic	064.XtraOrchst
015.ShiverBell	040.SynBas1	065.LowVox
016.MetalBell	041.SynBas2	066.HuanFlute
017.Bella_Donna	042.SynBas3	067.Trumping
018.SpaceBells	043.BullSynBas	068.DrawbarOrg
019.InsideTube	044.FullPoly	069.OmziFSteps
020.AlienSpectr	045.FM2Slow	070.OmziFMyth
021.Nocturnal	046.LongSync	071.OutLand-2
022.6T-FilterFM	047.DistSync	072.MovinBell
023.6T-Ferox	048.Fulldrive	073.InTheWoods
024.6T-Basics	049.NoiseChoir	074.LightningL
025.KS-EthnoBlo	050.VA-Vox	075.Mars-Siren

More than 1000 patches (1 new internal bank and 9 external .fxb-files):

New patchbanks: (labeled with -75 indicating usage of added waveforms within this update.)

ProtoPlasm-75-Internal.fxb = 128 patches by Vera Kinter (VK), Annabelle (ANN) & Dimitri Schkoda (DS)

ProtoPlasm-75-Bank2.fxb = 128 patches by Vera Kinter (VK) & Annabelle (ANN)

ProtoPlasm-75-Bank3-DS.fxb = 128 patches by Dimitri Schkoda (DS)

Check for more patches for download on the webpage:

www.hgf-synthesizer.de/se/ProtoPlasm/ProtoPlasm.html

patchbanks of prior release:

ProtoPlasmBank0 = old internal = 128 Patches

ProtoPlasmBank1-TC-VK-DK-SM-HGF.fxb = 128 patches by Tim Conrardy, Vera Kinter, Derek Kay, Stephan Müsch, HGF

ProtoPlasmBank2-DS1.fxb = 128 patches by Dimitri Schkoda

ProtoPlasmBank3-DS2a.fxb = 128 patches by Dimitri Schkoda

ProtoPlasmBank4-DS2b-WvF-R-v-M.fxb = 45 patches by Dimitri Schkoda, Waveform, Rene Ebenhan, vurt, Miguel Matas

ProtoPlasmBank5-LMS-HGF-VK.fxb = 65 patches featuring LMS by Vera Kinter & HGF

Bank6-DS-Atom_Spheres_01.fxb = 128 new patches by Dimitri Schkoda

(The 'curious' long names of banks might be helpful when searching for patches by a certain contributor)

List of MIDI-Controllers (CC) used within the ProtoPlasm

>CC	Destination
> 07	Main Volume
>13	Sample & Hold Shape
>14	LFO Mix S:L
>15	LFO Mix Source
>16	LFO 1 Sync
>17	LFO 1 Waveform
>18	LFO 1 Shape
>19	LFO 1 Mix 1:2
>20	LFO 2 Sync
>21	LFO 2 Waveform
>22	LFO 2 Shape
>23	LFO 2 Mix 2:3
>24	LFO 3 Sync
>25	LFO 3 Waveform
>26	LFO 3 Shape
>27	LFO3 Mix 3:1
>29	Left Delay Feedback
>30	Right Delay Feedback
>31	Delay Level
>74	Mix>VCA Dir Pan
>75	LoPass Pan
>76	Hipass Pan
>77	Lopass Filter Cutoff
>78	Lopass Filter Q
>79	Lopass Filter Attack
>80	Lopass Filter Decay
>81	Lopass Filter Sustain
>82	Lopass Filter Release
>83	Lopass Filter Envelope Amount
>84	Lopass Filter ModBal
>85	Lopass Filter LFO Modulation Source
>87	Hipass Filter Cutoff
>88	Hipass Filter Q
>89	Hipass Filter Attack
>90	Hipass Filter Decay
>91	Hipass Filter Sustain
>92	Hipass Filter Release
>93	Hipass Filter Envelope Amount
>94	Hipass Filter ModBal
>95	Hipass Filter LFO Modulation Source
>102	LFO Modulation Stepper Step 1
>103	LFO Modulation Stepper Step 2
>104	LFO Modulation Stepper Step 3
>105	LFO Modulation Stepper Step 4
>106	LFO Modulation Stepper Step 5
>107	LFO Modulation Stepper Step 6
>108	LFO Modulation Stepper Step 7
>109	LFO Modulation Stepper Step 8
>110	Osc 1 Wave Select
>111	Osc 2 Wave Select
>112	Osc 3 Wave Select
>113	Osc 1 Level Modulation
>114	Osc 2 Level Modulation
>115	Osc 3 Level Modulation
>116	Osc 1 Mod Amount
>117	Osc 2 Mod Amount
>118	Osc 3 Mod Amount

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