πλ² Firmware V2.0 Update Release Notes

- Using the editor, the PL2 firmware can now be updated with:

a) the MIDI channel PL2 is supposed to use, including "omni"
b) low and high MIDI note limits
c) the default program PL2 starts with after turning on

With Firmware V1.5, the πλ² always started with #1, "Upright Bass". This allowed using the πλ² on ordinary E-Pianos, e.g. to layer a bass sound to the piano sound. With Firmware V2.0, you can now chose which sound it starts with and also keep it from being played on high notes. (Please note, for this example, you need a sound with NOTE PRIORITY (#89) set to "lowest".)

- While the "digital filter cutoff" controller is at zero (0), filter cutoff is controlled via MIDI "note on" velocity now

- Using the filter LFO modulation while "note priority" (#89) is set, modulation gets faster, to make the generation of instant "wobble" effects easy.

- It's possible to fine tune PL2:

Use the pitch bender to find the correct pitch, now while you hold it, change the program (MIDI program change) at least one time. In order to release it, bring the pitch bender to its minimum or maximum position, or reset PL2.

If you play along with a church organ, you can be sure it's not on 440Hz. Here you go.

- Support for MIDI Active Sensing

- Support for MIDI Polyphonic Aftertouch:

You can increase the volume of each sound, starting at the velocity value up to maximum using polyphonic aftertouch.

- Improved load time on MIDI program change

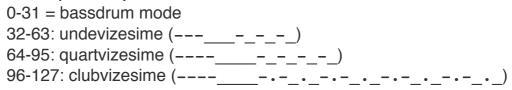**- Functionality for PWM2 (#23/#95) on Waveform #1:**

Using different settings for PWM1 and PWM2 changes the waveform on consideration of two cycles.

- New MIDI Controller #3:

0 = normal mode

1 = second mode
2..127 undefined

- Waveform (#24/#75) defines the submode in "second mode":

0-31 = bassdrum mode
32-63: undevizesime (–––___–_–_–_)
64-95: quartvizesime (––––____–_–_–_–_)
96-127: clubvizesime (––––____–._–_._–._–_._–._–_._)

It's no longer four, but seven waveforms in total!

- Bassdrum Mode:

Splits the keyboard into a lower part for a bassdrum sound, and an upper part for a noise sound.
While the bass drum sound's pitch is key-controlled, the noise currently has no dependency on which key is played.

The digital state variable filter samplerate is usually 125kHz, in bass drum mode it's only 50kHz.

- Using bassdrum mode changes the meaning of some controllers:

PWM1 (#25/#76): Timbre of bassdrum
PWM2 (#23/#95): Kick attack of bassdrum
PWM1&2 (#10): Changes timbre and kick at the same time
DC Offset Wave (on/off) (#83): Release sound of bassdrum
Portamento Time (#5): Release time of bassdrum

While Out Volume (#7) and DC Offset Filter (#22/#94) affect both, the bassdrum and the noise sound, most controllers only effect the noise. This is true for the digital filter, the ADSR envelope and the OSC Volume (#20/#92), which is basically the noise volume here. Some controllers are not used in bassdrum mode.

- There's four new presets:

Program 4 was: Mario, now **Cempilo** (quartvizesime wave form)
Program 22 was: Neon Light, now: **Neon Wobble** ("wobble effect")
Program 23 was: Herr Schneider, now: **PR-L08** (bassdrum mode)
Program 24 was: Numb, now: **PR-L09** (bassdrum mode)

The update doesn't change the 32 user sounds, only the four ROM sounds are modified.

- There's an audio demo for Firmware V2.0:

http://www.ploytec.com/pl2_fw2_demo.mp3
http://www.ploytec.com/pl2   https://www.facebook.com/PLsquared