

# HYDRASYNTH

Version 1.3.1 update

The new Version 1.3.1 update adds some new features as well as fixes some known bugs.

# **New Features Include:**

- MPE support (SYSTEM page 5)
- MPE modulation matrix options (Mod matrix page)
- Warm mode (VOICE page)
- Snap mode Tighter Envelope attack time (Voice page 3)

## **MPE support**

SYSTEM PAGE 5 adds the parameter MPE. The options for this parameter are ON/OFF. This will allow the Hydrasynth to send and receive MPE messages that are used by many alternate controllers and some DAW's.

Enabling MPE will lock out, change or disable certain other system parameters.

These parameters are: AtTX = MPE Lock MIDI Tx & MIDI Rx = MPE Lock Overflow mode will be disabled

Since the Hydrasynth already supports polyphonic aftertouch, we automatically map MPE pressure to Poly aftertouch. Any patch that has PolyAftT as a modulation source, should respond automatically to a MPE controller sending pressure.

# MPE modulation matrix additions

With MPE support, we have added some new modulation sources.

MPE-X = This is normally pitch bend control.

MPE-Yabs = This is also referred to as controller 74 in some devices. This is absolute mode.

MPE-Yrel = This is also referred to as controller 74 in some devices. This is relative mode.

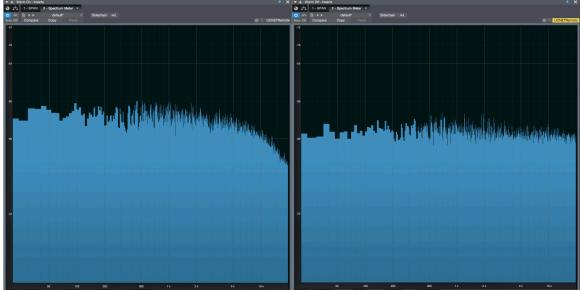
MPEoffVc = This is note off velocity.

# What is MPE?

MPE is a newer MIDI protocol that is used mainly by alternate controllers like the Roli, Haken Continuum, and Linnstrument. It breaks your synths voices into individual channels so that each note can have its own pitch bend, timbre and pressure control. Polyphonic aftertouch does the individual pressure control already but MPE just expands things. DAW's like Logic and Bitwig are supporting MPE and a number of softsynths are doing this as well. Check your DAW and other gear for MPE support.

## WARM mode

Warm Mode is a new option in Voice page 1. It simulates the frequency curve of a popular "warm" synthesizer.



The image below shows white noise from the Hydrasynth with Warm Mode ON (left) and OFF (right)

In the image above you can see that Warm Mode reduces the high end a bit while boosting the low end.

#### **Snap Mode**

We have shortened the initial attack time to allow for even sharper initial transients. With Snap Off, the original timing on the fade in of the waveform is retained. With Snap ON, the start time is shortened to be close to instant. This should help bass and percussive patches to stand out better.

#### **Bug Fixes - Keyboard**

- 1. Patch random will not randomize ribbon scale and voice scale lock now.
- 2. When you sort patch by name, patches with the same name will sort by patch number.
- 3. Overflow will not overflow in USB midi, just in midi DIN.
- 4. Add an anti-wiggle range for direct knobs in mod matrix assign.
- 5. FX EQ frequency curves are sharper now.
- 6. Now the ratio 20:1 of the Compressor is increased.
- 7. Add further protection to the boot loader, to prevent bricking the unit.
- 8. Fixed sustain pedal release bug will close notes that exceed 8 voice polyphony.
- 9. If knobs are in 'scale mode', they will act like absolute mode on the first move after boot up.
- 10. If knobs are in 'scale mode', they will act like absolute mode on the first movement after switching filter 1/2.
- 11. Some macro names are not center aligned.
- 12. Theremin in pitch bend mode and mono voice, a new note with holding Theremin will recover the pitch.
- 13. ARP works better with MPE and polyphonic aftertouch. In the past, the polyAT will only affect the current ARP note you played. Now it can affect the same note on all the octaves.
- 14. Fixed Vegas mode where the LED's could go crazy.

#### **Bug Fixes - Desktop**

- 1. Patch random will not randomize ribbon scale and voice scale lock now.
- 2. When you edit the "key" while holding the shift button, and press an disable pad, it will not quit the key edit mode now.
- 3. When you sort patch by name, patches with the same name will sort by patch number.
- 4. Overflow will not overflow in USB midi, just in midi DIN.
- 5. FX EQ frequency curves are sharper now.
- 6. Now the ratio 20:1 of the Compressor is increased.
- 7. Add an anti-wiggle range for direct knobs in mod matrix assign.
- 8. Add further protection to the boot loader, to prevent bricking the unit.
- 9. Fixed sustain pedal release bug will close notes that exceed 8 voice polyphony.
- 10. If knobs are in 'scale mode', they will act like absolute mode on the first move after boot up.
- 11. If knobs are in 'scale mode', they will act like absolute mode on the first movement after switching filter 1/2.
- 12. Fix the pad scale note error bugs in Phrygian and Locrian modes.
- 13. Theremin in pitch bend mode and mono voice, a new note with holding Theremin will recover the pitch.
- 14. Some macro names are not center aligned.
- **15.** ARP works better with MPE and polyphonic aftertouch. In the past, the polyAT will only affect the current ARP note you played. Now it can affect the same note on all the octaves.
- **16.** Fixed Vegas mode where the LED's could go crazy.