STYX

User Guide

The reverb to swear by



NYX-DSP

1 Introduction

Styx, a journey into Hell. If you're wondering about the name, have you ever tried to make a reverb?

Styx is built from a feedback delay network, with seven distinct spaces each modelled to represent a place in the Greek underworld. Yes, we watched The Odyssey, and yes, we thought it was great. Each space provides a completely unique character that can't be found in any other reverb.

Styx is also a reactive reverb. It listens to what you feed it, and adjusts accordingly. The character of the space adapts to ensure clarity and further define the space's character according to the source.

And every journey down the Styx is watched. At the centre of the panel sits the Oracle's scrying pool, and every note you play ripples across its surface. The Oracle sees each of the seven spaces as you pass through them. Look closely, and so can you.

2 Installation

2.1 System requirements

	macOS	Windows
System	macOS 12 or later	Windows 10 or later, 64-bit
Processor	Apple Silicon or Intel	Any 64-bit
Formats	VST3, AU	VST3
Host	Any VST3 or AU host	Any VST3 host

2.2 Installing

Download Styx for your platform from nyx-dsp.com. There's no installer. Unzip and copy the plugin into the folder for its format.

Format	Copy to
VST3, Windows	C:\Program Files\Common Files\VST3
VST3, macOS	/Library/Audio/Plug-Ins/VST3
AU, macOS	/Library/Audio/Plug-Ins/Components

Restart your DAW, or rescan its plugins, and Styx will appear under NYX-DSP.

2.3 Activation

The first time Styx opens, it asks for a license key. Paste in the key from your purchase email and click **Activate**. Activation happens online; there's no iLok, no dongle and no account software running in the background.

Not bought it yet? Click **Start Free Trial** for seven days of the full plugin. If you buy a license later, enter it in the same place. There's nothing to reinstall.

Each license can be active on up to three machines at once. If you reach that limit, **Manage Activations** appears so you can release one of the others.

3 Quick start

1. Put Styx on a track, or on an aux with **Dry** pulled all the way down.
2. Pick a space with the arrows under the pool, or click its name for the list. **Elysian**, the default, is a good place to start.
3. Set the room with **Size** and the length of the tail with **Envelope**. **Damping** darkens or brightens it.
4. Drive it with **Gain**. The harder you drive it, the more the space moves.
5. Trim the tail with **Lo cut** and **Hi cut**, then balance with **Dry** and **Wet**.

4 How it works

4.1 The engine

At the heart of every space is a feedback delay network: 8 or 16 delay lines feeding back through a lossless mixing matrix. Each line has its own absorption filter, which gives the lows, mids and highs their own decay characteristics.

4.2 Listening to you

Styx measures audio independently in the background, and uses its readings to move the reverb in real time. The following characteristics are automated:

- **Pre-delay** follows your level, drifting with the phrase rather than jumping on each note. In most spaces, playing louder pulls the reverb closer; in Tartarus and Erebus it pushes it further away.
- **Duck and bloom** reshape the decay. Transients shorten the tail to prevent mud, and sustained notes let it open out. Phlegethon instead holds its tail wide open for a moment after every hit.
- **The ceiling** is a separate high shelf that moves with your level. It darkens most spaces as you play harder, and opens a few, like Phlegethon, brighter.
- **High spread** widens the top of the tail as you play harder; the lows stay centred and mono-safe.
- **Size and width** take a nudge from your level on top of their knobs. Most rooms open out as you play harder; Erebus closes in.
- **Dissonance**: in some spaces the reverb's pitch bends, slightly or perhaps dramatically.

How far each of these moves is tuned per space. Phlegethon flares on every hit; Lethe barely stirs unless you push it hard.

5 The seven spaces

Tainaron *The Cave*

A rocky cave mouth. But not just any cave. The Gate to the Underworld, guarded by Cerberus. A hard slap off the near wall, then a ring like no cave you've encountered before.

Asphodel *Meadow of Flowers*

Open and neutral. A ground bounce, a few reflections off the tree line, then distant answers from the valley walls, each later and duller than the last. No room boom.

Tartarus *The Abyss*

The largest space: endless and cold. Almost nothing arrives early, the sub lingers long after everything else, and the tail never quite settles.

Erebus *Shadow Realm*

Total darkness. Vast and empty, with nothing in the presence range and wind moving through the tail. By far the darkest space.

Lethe *River of Forgetting*

Hazy, watery and sleepy. The tail seeps in rather than arriving, swims slowly, and hardly reacts to how you play.

Phlegethon *River of Fire*

A roaring blaze. Every hit catches and swells, roars for a moment, then dies down, heavy in the lows, with a brightness that flickers through the tail. Size and Envelope stretch the whole fire, from a quick flare to a slow-burning roar.

Elysian *Realm of the Gods*

Big, open and bright, built for a lead vocal. It stays attached to the source, then blooms into a long, luminous tail that widens as you push it.

6 Controls



1 Gain
2 Crunch
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4 Size
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6.1 Input

Gain

Drive into the reverb, ±24 dB. The harder you drive it, the harder the space reacts, but equally, pulling back can soften the character of a space, particularly the automated responses.

Crunch

Tape saturation on the wet signal. At zero it's clean. Quiet sources crunch as hard as loud ones.

Smash

A limiter after Crunch. At zero it's transparent; turn it up to pull the ceiling down, with makeup gain bringing the level back.

6.2 Character

Size

Scales the room. Bigger rooms also ring longer, by an amount set per space.

Envelope

The length of the tail. The centre is the space's own length, and each space has its own range.

Damping

Tilts the decay. Up darkens the tail, down brightens it, and the centre leaves the space as it is.

Width

Stereo width of the tail, from mono to full.

Diffusion

How quickly the onset turns from separate echoes into a smooth wash.

Shimmer

At zero it's off. The first half adds sparkle: the top of the tail glistens and drifts upward as it fades. From about 40% a halo fades in, a pitched-up copy of the tail's upper band that climbs out of it and thins as it rises. Each space voices it differently.

6.3 The Spaces

The Oracle's scrying pool

Read with the eyes of the Oracle and see the future. Or get an idea of how your reverb is looking as you dial in its character. One or the other.

Space

Step through the seven spaces with the arrows, or click the readout to select from a dropdown.

6.4 Tone

Lo cut

A 12 dB/octave high-pass on the wet signal, 20 Hz to 2 kHz.

Hi cut

A 12 dB/octave low-pass on the wet signal, 1 to 20 kHz.

6.5 LFO

LFO rate

Speed of the chorus, up to 8 Hz.

LFO depth

How much the chorus moves the tail.

6.6 Pan

Pan rate

Speed of the auto-pan, up to 8 Hz, independent of the chorus.

Pan depth

How far the tail swings across the stereo field. The level holds steady as it moves.

6.7 Output

HQ / LL

Latency of Styx's automatic pitch stage: HQ, about 120 ms, or LL, about 50 ms. Your DAW compensates either way. It can't be automated, so set it before you record.

VU

Output peak level, left and right.

Dry

Level of the untouched input.

Wet

Level of the reverb. Separate faders rather than a mix knob, so you can keep the dry at unity, or pull it to zero on a send, without touching the wet.

6.8 Panel

Light / dark

Switches the panel between light and dark finishes.

Manual

Congratulations! You found the manual.