DRIVESHAPER OPERATION MANUAL

BY SYNTHESCIENCE

Driveshaper Operation Manual

First of all congratulations and thank you for choosing the Driveshaper by Synthescience.
We hope that you'll find this a useful plugin for your processing needs.
To get the best from its features, please take some time to read this manual as it provides vital information about the plugins performance.

The Synthescience Team.

1. Introduction

The Driveshaper follows in the steps of the Drivefactor, an overdrive/distortion plugin.
As such it bears many resemblances to it, mainly from the front panel. However the way it works greatly difers from it in the way that it uses "Waveshape" or "Foldback" distortion to acheive its peculiar sound instead of the more classic overdrive/distortion aproach.
Foldback distortion is a common place in the Digital synthesizers domain and as short explaination we can say that it can easily transform your sound into something resembling much the typical sound of a nice frequency modulation (FM) or phase distortion digital synth, with a lot of "growl" and "grit" to it. Typical applications may be synth lead lines, guitars, basslines, vocals, pads, well almost anything you can remember of but solo lead lines works very great and polyphonic textures can become really magical and weird after getting the Driveshaper treatment (with a little caution perhaps).
The Driveshaper is a somewhat temperamental plugin and it reacts to what you throw at it in a dynamic way, responding differently to soft and loud input sounds offering various interesting nuances with growling musicality associated to it. Take your time to experiment this little wonder and surprise yourself with what comes out of it. By the way if you add some chorus, phasing or delay after it, then it may get you out for good. Enjoy the drive.

The Driveshaper can be used either in Stereo or Mono tracks, but if you use it on a Mono track, select input mode to ST-ST (if you select ST-M the input sound is likely to drop out by half)

The Driveshaper is fully automatable and has the ability to store 64 presets. It ships with a few already pre programmed ones that will show what its all about.

Installation procedure: Unzip the file, then copy the DLL's into your VstPlugins folder.

2. Front Panel controls

The controllers in the Driveshaper may be operated in three different ways:

Circular type controls – The grey knobs like Drive, Wshp Mode, Tone, Level and Blend.
Toggle controls – Phase, Input Mode, Limit and Process – On/Off.
Click controls (only active while clicked) – The effects nameplate which shows additional information about the plugin (like plugin version and credits).

Description of controls

Drive – Adjusts the level or intensity of the Drive signal that feeds the Waveshaper input.

Wshp Mode – Selectable between seven different waveshaping modes, from A to G.
The first three **A**, **B** and **C** are based in a sinusoidal curve and are the ones that most resemble the classical FM sound. The fourth **D** is based on a triangular waveshape curve and sligthly difers from the first three in sound. The last three **E**, **F** and **G** are based in three different custom designs and yeld some very peculiar sounds that on some ocasions resembles the previous four but had theyr own fingerprint and attitude.
Its important to say that the output sound is greatly dependent from the Drive values and the very own nature of the input sound.

Description of controls (continued)

Tone – The Tone knob is conected to a low pass filter wich allows some cutting of the high frequency content from the overdriven signal, therefore smoothing it out a bit if necessary.

Phase - Inverts the phase of the waveshape signal against the direct signal, allowing for more sound sculpting options, especially if you combine it with the Blend knob at middle values or less.

Level – Adjusts the output level of the processed signal.

Blend – The Blend knob allows the mixing of the dry signal with the processed signal, ranging from Dry (only the input signal is outputed) to Eff (only the processed signal is outputed) and everything in between.

Input Mode – The Input Mode allows for two distinct choices of routing the input signal, St-St (Stereo to Stereo) and St-M (Stereo to Mono).
Stereo to Stereo allows for an independent routing of the left and right input signals inside the plugins internal arquitecture where each audio stream (left and right respectively) is processed separated from one another, keeping the stereo impression even if the ammount of waveshaping applied is high.
Stereo to Mono combines both signals from the left and right channel into one, that way eliminating any stereo impression of the input signals but contributing to a more Lo-Fi or centered sort of sound.

Limit – The Limit switch is linked to an internal limiter module and is selectable between five steps: Off (no limiting of the processed signal takes place), 0db (limits the output signal to 0db), -3db (limits the output signal to -3db), -6db (limits the output signal to -6db) and -12db (limits the output signal to -12db). It is advisable to set it at least at -0db or below in order to avoid extreme high level output when using high Drive and Level settings and to provide a more controlled output even with drasting settings.

Process – The process switch allows for switching the effect on or off (bypass mode).

Led Meter indicators – The Driveshaper features independent Led meters for displaying Input and Output signal levels, for easy monitoring of what goes in and what goes out.

About Box - By clicking and holding the mouse arrow over the effect nameplate reveals further details of the effect.

3. Midi Controllers

(There is a total of 9 different midi controllers assigned to the Driveshaper plugin as shown in the below box.)

Driveshaper midi controller list
10 Drive
11 Wshp Mode (7 steps)
12 Tone
13 Phase invert switch
14 Level
15 Blend
16 Input Mode (stereo to stereo or stereo to mono)
17 Limit switch
18 Process (On - Off)

4. Credits and Acknowledgement

Manual by Synthescience
Graphics and Programming by Synthescience
This Plugin uses software modules by David Haupt
Synthescience products are developed with SynthEdit development system
By Jeff McClintock.
Vst Plugin Technology by Steinberg Media Technologies AG.