

# StormGate1

User's manual



#### **About StormGate1**

StormGate1 is a unique, innovative and versatile rhythmic gate effect which lets you draw amplitude patterns (or in other words: volume changes patterns) with simple but powerful drawing tools, randomize gating sequences, chain patterns and more! SG1 is not only a valid tool for dance and ambient music pads (or noises), which is its most straightforward application, but it is also well suited to simulating compressor sidechaining with great control over the gain reduction behavior.

# **Drawing Envelopes**

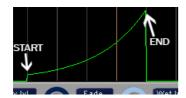
You can draw amplitude patterns in the big panel (A) using the drawing tools available (B).





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- The FREE drawing tool lets you draw the volume pattern "by hand"
- The **STEP** drawing tool lets you draw a straight horizontal lines (constant volume)
- The SPIKE drawing tool lets you draw exponential envelopes starting from the drawing point and ending at zero volume. This is useful for imitating plucked or percussive sounds.
- The EXP tool lets you draw exponential lines. If you draw from top to bottom you
  will get a decaying exponential, if you draw from bottom to top you will get an attack
  exponential. The drawing direction is always left to right and the length of the
  exponential is quantized to the closest grid line.



Both the **STEP** and the **SPIKE** tools can generate lines from 1 to 4 steps in length, depending on the **TOOL SIZE** settings.





### Using patterns

In StormGate1 a pattern is an envelope. A pattern can be any length from 1 to 8 eighth of notes (quavers) or from 1 to 12 eighth note triplets.

To change the length of the pattern (in steps) use the STEPS plus and minus buttons, and to select the basic rhythmic unit of the steps use the switch below. As soon as you change the step rhythmic unit the change will be reflected in the drawing grid as well.



Each of the 16 patterns available is designated with a letter of the English alphabet, from A to P.



You can use the pattern selection buttons for both editing the pattern and recording pattern switching via automation.

In StormGate1 each pattern can be "chained" with any other pattern. By chaining we mean that once a pattern has been played once through the integrated sequencer will switch automatically the to the next pattern you select. To chain a pattern simply select a pattern in the pattern chain selection row (marked with the >> symbol). You can also chain a pattern to itself to have it running continuously.

The FOLLOW button lets StormGate1 select and display automatically the pattern currently played.

When you select a pattern in the user interface the FOLLOW function will be turned off to prevent automatic pattern switching when editing the currently selected pattern.

Remember to turn FOLLOW back on after editing if you want to see patterns displayed as they are being played.

## Synchronization

StormGate1 features an advanced synchronization algorithm, which lets you synchronize the pattern switch to the song tempo using either free, one quarter or one eighth resolution.



**OFF** mode (no synchronization) is very useful when you want to trigger the envelopes. To simulate a "pure triggering" mode, just chain the patterns you want to trigger with an empty one chained to itself.

**PTN** mode will simply wait until the end of the current pattern before switching to the new one.

**Quarter** and **Eighth** modes will quantize the pattern switching point to the closest quarter or eighth note in the song position. This switch is very useful when you want accurate

synchronization and are recording pattern switching via automation, which may not be very precise (because of design implications) with some hosts. In general you should anticipate slightly the pattern change for the best results.

**IMPORTANT**: StormGate1 also features "intelligent" loop support. Please make sure you understand this section.

Let's make a simple example:

You have a pattern chained with another one (A >> B >> A >> B, etc...) and you switch to pattern A at the beginning of the 3<sup>rd</sup> measure. Later you set a loop in your sequencer (for editing purposes) starting from the half of the 3<sup>rd</sup> measure and ending at the end of the 4<sup>th</sup> measure.

StormGate1 will recognize this situation, because it will take in account the pattern switching position (3<sup>rd</sup> measure), and will play the last half of pattern A (when playing the last half of 3<sup>rd</sup> measure) and then pattern B (for the whole 4<sup>th</sup> measure).

To take advantage of the advanced loop support make sure that StormGate1 understands the pattern switching position. In our example you should start playing your song across the measures 2-3, where the pattern switching happens, and then StormGate1 will play the loop correctly.

#### Levels

Below the envelope display StormGate1 offers two volume controls: one for the original signal (**Dry IvI**) and one for the gated signal (**Wet IvI**). The balance control (**Fade**) lets you fade between the two signals.



When you use StormGate1 for pure rhythmic gating effects it is necessary to have separate volumes for the original and the gated signals, because the original signal will probably sound louder then the gated one. You should find the right balance between the Dry and Wet levels, so you can fade between them without perceiving a big volume change (unless this is what you want to do).

If you are going to use the plug-in to simulate compressor side-chaining you should set both the Dry IvI and the Wet IvI to 0dB and use the Fade control to set the proper compression amount.



#### **Functions**

StormGate1 offers several editing functions, which can be selected from the functions popup menu and applied with the button on the left of the function's name.

Function name	Effect
Сору	Copies the envelope
Paste	Pastes the envelope
Invert	Inverts (flips) the amplitude of the envelope (upside-down)
Smooth decay	Smooths the decay of the pattern
Smooth full	Smooths both the attacks and decay peaks
Rotate left	Rotates the pattern to the left by one rhythmic unit
Rotate right	Rotates the pattern to the right by one rhythmic unit
Reverse	Reverses (mirror) the envelope
Shuffle	Shuffles pattern subdivisions randomly
RND: Pulse	Produces random pulses (flat steps)
RND: Spikes	Produces random spikes (exponential steps)
RND: Wild	Random smooth envelope
Normalize	Normalizes the amplitude of the envelope

# **MIDI** integration

If you host offers MIDI support for effects you can switch the patterns by sending MIDI notes from C1 to D#2.

#### Final words

Please visit <a href="http://www.araldfx.com">http://www.araldfx.com</a> for free updates and more information;

You can subscribe AraldFX mailing list by creating your own AraldFX account to stay informed about software updates and new releases.

If you like StormGate1 please consider upgrading to StormGate3, which offers many additional features including multiband noise gating, filtering, envelopes recording and much more!

Special thanks to all the nice people who helped with their feedback and support to the realization of this plug-in: juanjio, fabi, bodan, shamann and many other on the KVR forums, to all the AraldFX members, supporters and friends and to Mr. Lee Ray for revising this manual.

Thank you for using StormGate1! I hope you will enjoy it.

Aldo Trianti, AraldFX