

Algoritmarte ModSpace - User Manual

Latest version of the ModSpace firmware: [v1.01](#) (2024-05-25)
Latest version of this manual can be downloaded [here](#).
Official site: <https://www.algoritmarte.com/modular>

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Introduction

Algoritmarte ModSpace is part of a series of software modules oriented towards the creation of generative (minimalist) (ambient) music that can be used on the **Electrosmith Daisy Patch 20HP** Eurorack module [[Daisy Patch product page here](#)].

By default it generates a sequence of stereo random microtonal waves but it has also a large set of configurable parameters that can be used to tweak its behaviour and produce interesting variations. I used its generative algorithm in some of my experimental pieces (e.g. [this one](#) and [this one](#)).

Like all the generative modules in the series, don't expect either to have full control over it or to be able to reproduce the sequences you obtain a second time, so keep the recorder handy!

It can be used alone, but I recommend pairing it with other eurorack modules, especially with a reverb and/or a granular processor.

Installation

STEP 1) Download the latest [firmware here \(.bin file\)](#)

STEP 2) Connect the Daisy Patch to your computer using a Micro-USB cable.

STEP 3) Turn on the Daisy Patch.

STEP 4) Then you can use the online **Daisy Web Programmer** here:

<https://electro-smith.github.io/Programmer/>

>>> USE A BROWSER WITH MIDI SUPPORT SUCH AS CHROME <<<

Click "Connect"; Select "Patch" platform; "Select the firmware file from your computer" (or drag and drop it onto the page); Click "Program".

Licence / usage terms

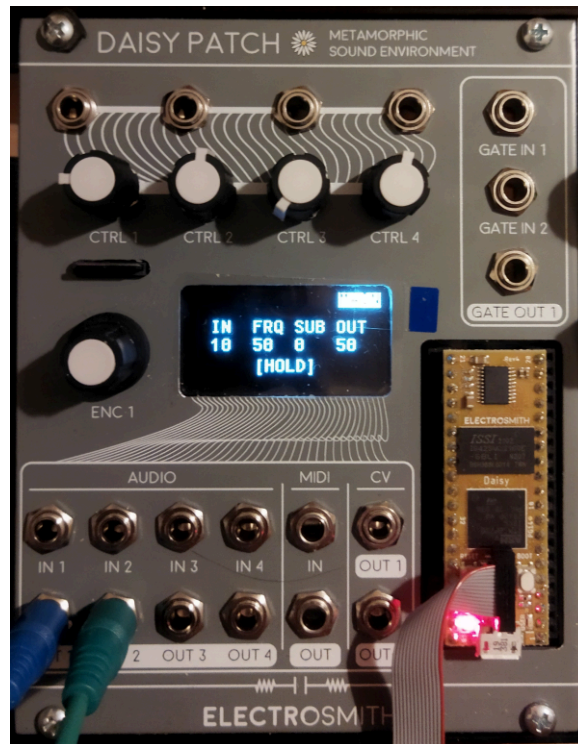
Algoritmarte ModSpace is totally free for personal/private use (it has no limitations, except a slightly longer splash screen at power-up): if you use it in commercial music, or music distributed through the social or music platforms (e.g. YouTube, Spotify, Bandcamp, Facebook, ...) you should purchase a regular registered licence for a few (very few) bucks. *{At the moment the new site is still under development so email me for more information to get a registered licence see Contact paragraph below}*.

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It should not be redistributed or published on other sites.

Instructions

This is the MAIN screen that appears when you turn on the Daisy:



The module can be used simply by picking the audio output from the OUT1 output (OUT1/OUT2 if you want a stereo signal), no other connections are needed unless you want to add (or extract) some modulation. When you use the module for the first time set the knobs in this way:

- CTRL1 (IN) --> 0 (fully CCW)
- CTRL2 (FRQ) --> 100 (fully CW)
- CTRL3 (SUB) --> 0 (fully CCW)
- CTRL4 (OUT) --> 50 (half way)

Inputs / Outputs / Knobs

The description of the inputs / outputs / knobs used:

OUT1	Main Left Audio Output	
OUT2	Main Right Audio Output	
IN1	Left Audio Input	(optional)
IN2	Right Audio Input	(optional)
CTRL1	Input Volume	Its value is displayed in the MAIN screen (IN)

CTRL2	Main frequency shift	Its value is displayed in the MAIN screen (FRQ)
CTRL3	Sub-oscillator frequency	Its value is displayed in the MAIN screen (SUB)
CTRL4	Output volume	Its value is displayed in the MAIN screen (OUT)
OUT3	A "copy" of the IN1 signal	(optional)
OUT4	A "copy" of the IN2 signal	(optional)
CVOUT1	Extra random pitch 1V/Oct	
CVOUT2	Extra envelope (ASR)	
GATE1	A gate that is high on the Attack stage of the extra envelope CVOUT2	
Main Encoder Press	Toggle the [HOLD] mode ON or OFF; when in HOLD mode the voices/envelopes don't evolve and stay fixed.	

The CVOUT1 / CVOUT2 / GATE1 signals can be used to control an external voice similar to those that are generated internally, but they can also be used as generic modulation sources (see also the ATT.CV1 / ATT.CV2 parameters).

Parameters

Navigation tips:

- the current page (MAIN, CFG or OUT) is displayed in the top right corner of the display; it is in reverse colour when in "page mode";
- in page mode you can change the current page by turning the encoder left/right. To access the parameters on a page click the encoder;
- then you can scroll over each parameter and to change it click the encoder, modify the value, and click the encoder again to confirm its value

- to return to page mode select the EXIT entry, or click and hold the encoder for half a second or more.

The parameters can be found in the configuration page (CFG) and the output page (OUT).

Parameter	Values	Description
CFG Page		
VOICES	0-6 (default 4)	Number of "waves" that can be active at the same time (the duration is random)
SCALE	micro chrom major minor penta random cust1 cust2 cust3 cust4	Scale used when selecting new pitches for the waves. The scales are fixed, except the random scale: whenever you select it some random notes are picked from the chromatic scale and used for the waves. See note (*) below.
LENGTH	0.1-9.9 (default 4.0)	scale factor for the (random) duration of the waves (0.1 is a very short wave, 9.9 is an extremely long wave)
LENG.CV	0.1-9.9 (default 4.0)	scale factor for the (random) duration of the extra wave available using OUTCV1/OUTCV2
PTC.OFF	0-24 (default 0)	semitones added to the pitches (similar to the FRQ knob, but with a more extended range)
EXIT	return to page navigation mode	Or click and hold the encoder for half a second or more
OUT Page		
ATT.CV1	0-100 (default 100)	attenuator for the OUTCV1 signal

ATT.CV1	0-100 (default 100)	attenuator for the OUTCV1 signal
IN VOL	0.0-12.0 (default 1.0)	Extra gain of the (stereo) input; you can turn it up if you connect a standard LINE LEVEL device to the inputs (otherwise it would be barely audible).
OUT VOL	0.0-5.0 (default 1.0)	Extra gain of the (stereo) output.
SYN.VOL	0.0-10.0 (default 10.0)	Volume of the generated "waves" (can be used to find the right balance with respect an external input signal)
EXIT	return to page navigation mode	Or click and hold the encoder for half a second or more

(*) when changing the scale parameter, press and hold the encoder for more than 1 second to create a new internal (pseudo) random generator. Especially when using a standard scale (e.g. the pentatonic) it can lead to different and more interesting pitch sequences.

Contact for feedback/suggestions/info

If you have some feedback/questions, or found a bug, or want to suggest a feature you would like to see implemented, write to me; the email address is:

modular [at] algoritmartec.com

Firmware History / Changelog

v1.01	First release	[download]