

Karlheinz Essl

# fLOW 5.0

generative soundscape generator

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<http://www.essl.at/works/flow/download.html>



## Alert

By default, macOS Sierra will block the installation of apps that are not from the Mac App Store or created by identified developers. If you are unable to install fLOW on your Mac please follow the three steps below or go to Macworld.com for help.

1. In Finder, Control-click or right click the icon of the fLOW app.
2. Select "Open" from the top of contextual menu that appears.
3. Click "Open" in the dialog box. If prompted, enter an administrator name and password.

## About

fLOW is an audio computer program running on Apple Macintosh machines under Mac OS X. It generates an ever-changing and never repeating soundscape in real time that fills the space with flooding sounds that resemble - metaphorically - the timbres of water, fire, earth, and air.

Originally, this soundscape formed the basis of the site-specific work-in-progress fLOW that was carried out in numerous steps and took place in various location with changing musicians from different fields like New Music, experimental jazz, free improvisation and New Electronic Music. For each performance, the soundscape was interpreted and commented by live-musicians. Each realisation was developed for the specific place, taking into account its individual socio-cultural context. Besides music and sound, such a realisation could also include light installations, film projections, performance aspects, elaborated time scores and computer-generated Playing Strategies (<http://www.essl.at/works/playing-strategies.html>)

## Shareware registration

fLOW 5.0 is released as shareware. Please register your copy to ensure the further development of this program. You can purchase a registration code for \$ 20.00 by sending an e-mail request to [khz@essl.at](mailto:khz@essl.at)

**Only registered users can use the program without any restrictions: if not registered, fLOW will quit after 5 minutes.**

Once your purchase has arrived, you will receive a registration code by e-mail. Be sure that you have copied the content of your fLOW distribution to your hard disk first. Now control-click the program **fLOW 5.0.app** and select the option "Show Package Content". Double-click the folder "Content". Afterwards, double-click on the folder „Resources” where you find an empty text document named "Registration\_fLOW.txt". After double-clicking it (or opening it with TextEdit), type in your exact registration code and save the file.

Next time you run the program, no time restrictions are pending.

## System requirements

- Apple Macintosh Computer with Intel processor
- macOS 10.10 or later

## What's new in version 5.0?

- now runs with macOS 10.13
- optimized for 64 bit
- changed user interface

## Quick intro

- Start the application by double-clicking on **fLOW 5.0.app**
- Turn on "Audio" in the grey "Audio Status" window. Here you can also set the driver and the parameters for your audio interface.
- Select "start" in the upper left pull-down menu of the program window.
- The soundscape will start automatically. Listen and enjoy!
- Now the program will run entirely on its own. You can stop and restart it by selecting "stop" resp. "start" in the pull-down menu on the program window. You can manipulate the software's parameters by changing the respective pull-down menus from "auto" into "man". As the automatic mode is deactivated, and you can change the system parameters either by moving the sliders and knobs with your mouse, or by an attached MIDI controller (ctl #7 on chn 1-4).
- You can replace the four basic fLOW sounds ("water", "fire", "earth", "air") by your own material. Just go to the "Samples" menu and select a sound file - either AIFF or MP3 - one for each "element". Please note that the program requires mono files; if your sounds are stereo, only the left channel will be used. It is advised that the length of the samples should not exceed a duration of 1-2 minutes. Note that your own samples should loop smoothly in order to create the best results without clicks. MP3 files normally are not best suited for that purpose due to the nature of encoding - if you want professional results, you should always use AIFF files.
- If you want to record the output to disk, select the "Record" menu. Choose "Locate..." to locate a path on your hard disk where the sound file (by default it is named "snd.aif") will be written. Then select "Start" to begin the recording, and "Stop" to finish it.
- By default, fLOW plays through your default audio device. If you want to change it, go to the "Audio" menu and select "Settings..." Here you can determine which audio device you want to use (built-in loudspeakers, 3rd party sound cards etc.), and you can also change its parameters. However, this is an expert feature - don't play around with it if you don't know what you are doing!

## Functions

**Mixer:** if "auto" is selected, the program will automatically change the levels of the four sliders using random-driven algorithms. If "man" is chosen, one can adjust the levels manually by either using the mouse or an attached MIDI controller (channel 1-4 on controller number #7).

**Pitch:** the pitch (transposition) range. If "auto" is selected, the program will automatically change the range using random-driven algorithms. If "man" is chosen,

one can adjust the transposition range manually by either using the mouse or an attached MIDI controller (channel 5-6 on controller number 7).

**FX:** If "auto" is selected, the program will automatically change the rate of the 4 built-in FX processes (comb filter, ring modulation, frequency shift, flanger) by using random-driven algorithms. If "full" or "orig" is chosen, one can adjust the FX rate manually either by manipulating the knobs with the mouse or an attached MIDI controller (channel 7-10 on controller number #7). The "full" setting uses the full transposition range whereas "orig" does not apply any transposition at all.

**Plugins:** Now you can use up to three different VST or AU plugins with this program. Simply go to the "Audio" menu and select "Load PlugIn\_x...". In order to control its parameters, select "Control PlugIn\_x" from the same menu.

## Contact

Please report any bugs, problems or questions to:

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## History

1.1 light (released 22 Jul 1999)

- first public release

1.2 light (released 3 Mar 2001)

- fixed a problem that could have occurred under OS 9.1 and which would have resulted in system crashes in some rare cases
- LED display (level meter) added
- several improvements
- minor bug fixes

2.0 (released 1 Aug 2001)

- completely rewritten user interface
- numerous internal improvements
- new effect processors added
- registered users can change the sound material and save the output as an AIFF file to disk

### 3.0 (released 2 Jan 2004)

- fLOW is now running under OSX
- new and extended user interface
- access to the program's parameters (mouse or MIDI)
- new effect (flanger) added
- MP3 import
- improved composition algorithms

### 3.1 (released 6 Jan 2004)

- fixed a bug in audio initialisation
- screen graphic now updates properly
- rewritten and optimized compositional algorithms
- improved shareware registration handling
- several internal bug fixes and improvements

### 3.2 (released 6 Aug 2004)

- The program now supports 3rd party audio interfaces
- Changed registration handling
- Improved frequency shifter
- Several internal bug fixes and improvements

#### 3.2.1 (released 10 Aug 2004)

- Correcting a bug which could truncate a loaded soundfile

### 3.3 (released 23 Oct 2006)

- Released as Universal Binary

#### 3.3.1 (released 23 Oct 2006)

- missing registration file and status window added

### 3.4 (released 19 Jan 2007)

- improved user interface
- minor optimisation

### 4.0 (released 11 May 2013)

- optimized audio engine (32-bit)
- improved user interface
- now works with VST and AU plugins
- bug fixes

### 5.0 (released 26 Jul 2018)

- now runs with macOS 10.13
- optimized for 64 bit
- changed user interface

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Klosterneuburg, 26 Jul 2018

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