# **Glitch 2** User Manual

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# System Requirements

Glitch is an audio effect plug-in that requires a DAW or compatible plug-in host in order to function correctly.

Any modern host with a sequencer (time line, tempo, bars, etc) and full support for VST 2.4 or AU plug-ins and should be compatible. To take full advantage of Glitch's features, the host should also have the ability to route MIDI note data into plug-in effects.

## Windows

- Any host with support for VST 2.4 plug-ins.
- Windows XP SP2, Vista, 7, or higher.
- 1024 x 768 or higher resolution.
- Any CPU with SSE.

# Mac OS X

- Any host with support for VST 2.4 or AU plug-ins.
- Mac OS X 10.4 or newer.
- 1024 x 768 or higher resolution.
- Intel CPU.

## Linux

- Any host with support for VST 2.4 plug-ins.
- Linux with GCC 4.X libs, X.org 7.1+.
- A real-time kernel is recommended.
- 1024 x 768 or higher resolution.
- Any CPU with SSE.

# Installation

The following text assumes that you have already downloaded either a demo version or a fully licensed version of Glitch from the <u>illformed.com</u> website. You should have a ZIP archive such as "Glitch2\_Demo\_Windows.zip" or "Glitch2\_Mac.zip" downloaded and ready before proceeding.

The installation process is essentially the same on all platforms. You simply extract the contents of the ZIP archive, and copy the files to the correct location on your system.

# Windows

Open the ZIP archive using Windows Explorer or a program such as <u>7-Zip</u>.

The ZIP archive contains both the 32-bit and 64-bit VST versions of Glitch, located within the "32bit" and "64bit" folders, respectively.

For each version that you wish to install, simply copy the complete folder to the desired location within your VST plug-ins folder, ensuring that the files "Glitch2.dll" and "Glitch2.res" are kept together.

If you don't know the exact location of your VST plug-ins folder, please check your host's user manual or preferences for more information.

A common default location is:

C:\Program Files\Steinberg\VstPlugins\

Finally, restart your host or re-scan your plug-ins list as needed.

## Mac OS X

Open the ZIP archive using Finder or a program such as <u>The Unarchiver</u>.

The ZIP archive contains both the VST and AU plug-in versions of Glitch, named "Glitch2.vst" and "Glitch2.component", respectively. Both the 32-bit and 64-bit versions of the plug-in are contained within each respective package.

#### VST

Copy "Glitch2.vst" into one of the following locations:

System-wide installation:

/Library/Audio/Plug-Ins/VST/

Single user installation:

```
~/Library/Audio/Plug-Ins/VST/
```

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#### AU

Copy "Glitch2.component" into one of the following locations:

System-wide installation: /Library/Audio/Plug-Ins/Components/ Single user installation: ~/Library/Audio/Plug-Ins/Components/

Finally, restart your host or re-scan your plug-ins list as needed. It may also be necessary to log out of OS X and then log back in again.

# Linux

Open the ZIP archive using the unzip command or another preferred method.

The ZIP archive contains both the 32-bit and 64-bit VST plug-in versions of Glitch, located within the "32bit" and "64bit" folders, respectively.

For each version that you wish to install, simply copy the complete folder to the desired location within your VST plug-ins folder, ensuring that the files "Glitch2.so" and "Glitch2.res" are kept together.

If you don't know the exact location of your VST plug-ins folder, please check your host's user manual or preferences for more information. You can also check your VST\_PATH environment variable.

Some common locations include:

Finally, restart your host or re-scan your plug-ins list as needed.

# Overview

# Interface



Ain't she pretty? We'll take a closer look at how everything works a little bit later!

# **Common Control Types**

Some controls can be manipulated in a variety of different ways. Let's take a look...

#### **Rotary Knobs**

The majority of effect parameters in Glitch are represented as rotary knobs. We all love playing with our knobs, don't we?



- To adjust the value, left-click and drag up/down.
- For more precise adjustments, hold the control key while dragging.
- Double-left-click to reset the parameter back to its default value.
- Click the text label below the parameter to input a new value directly.

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#### Value Boxes

Value boxes can manipulated in the following ways:

- Change value incrementally with the left/right arrow buttons.
- Change value incrementally with the mouse scroll wheel.
- Left-click and drag up/down to change value in small increments.
- Right-click and drag up/down to change value in larger increments.
- Double-click to input a value directly.

#### **Drop-down Lists**

Drop-down lists can be manipulated in the following ways:

- Change value incrementally with the left/right arrow buttons.
- Change value incrementally with the mouse scroll wheel.
- Click to expand the list and choose a specific value.

### **Programs & Scenes Concept**

Each Program in Glitch consists of 128 "Scenes" that correspond to each of the 128 possible MIDI note numbers. To change scenes, simply configure your host to route some MIDI note data into Glitch.

Each Scene is essentially a snapshot of the entire plug-in state that includes the sequencer pattern data, the sequencer beat and division settings, and the parameters of each individual effect module. It is therefore possible to create many different scenes – each with a drastically different sound if so desired – and then easily switch between them at the push of a key.



SCENE ◀ ▶ 001: C-0 ▼

Many of the effects can have a tonal quality to their sound when tuned a certain way. Try mapping the same effect to an entire octave of scenes, then give each scene its own unique tuning and jam on some MIDI keys to transform an effect into a glitchy synth!

# **Upper Interface**



In the upper section of the interface, you can find the logo and plug-in version, the program controls, and the master output controls.

# Logo

Click on the Glitch logo to open the about box. How exciting!

# **Program Controls**

#### **Program Selector**

Choose the current program.

#### Rename

Click the rename button AI to edit the current program name. To finish editing, simply press Return or click somewhere outside of the text edit field.

#### Сору

Copy the current program to the clipboard.

#### Paste

Overwrite the current program with data from the clipboard.

#### Init (Initialize)

Reset the current program and all scenes contained within it.

#### Quantize

The quantize setting affects the timing of incoming MIDI notes when triggering scene changes.

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When triggering MIDI notes live from an external controller, you may wish to enable Quantize in order to more easily synchronize scene changes to the beat. The incoming MIDI notes will be quantized to the time interval you choose, and any "late" notes will be delayed until the next interval occurs.

When sequencing MIDI notes directly in your host, it's usually best to leave Quantize disabled.

# **Master Output Controls**

Use the Mix, Pan and Volume parameters to control Glitch's final output. Amazing!

Try moving Glitch into the background by greatly reducing the master mix, allowing only a subtle amount of texture to creep through the mix instead of being 100% in your face. Sometimes, less is more!

# **Middle Interface**

| SCENE      |   |      |       |      |      | Seed   |  | EFFECT | rs   |       |      |      |        | SEQUENCE |       |      |      |        |              | vision |  |
|------------|---|------|-------|------|------|--------|--|--------|------|-------|------|------|--------|----------|-------|------|------|--------|--------------|--------|--|
|            | • | Сору | Paste | Init | Rand | Mutate |  | 337    | Сору | Paste | Init | Rand | Mutate | Сору     | Paste | Init | Rand | Mutate | <b>↓ ► 5</b> |        |  |
| Randomizer |   |      |       |      |      |        |  |        |      |       |      |      |        | _        |       |      |      |        |              |        |  |
| Modulator  | • |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Tape Stop  |   |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Retrigger  |   |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Reverser   |   |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Stretcher  | • |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Lofi       |   |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Distortion | • |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Gater      | • |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |
| Delay      |   |      |       |      |      |        |  |        |      |       |      |      |        |          |       |      |      |        |              |        |  |

In the middle section of the interface, you can find a variety of controls to manipulate the current scene and its properties, including the state of all effect modules and the state of the sequencer.

# **Scene Controls**

#### **Scene Selector**

Choose the current scene within the program.

You can trigger scene changes by routing MIDI note data into Glitch. Jam on it!

#### Сору

Copy the current scene to the clipboard.

#### Paste

Overwrite the current scene with data from the clipboard.

#### Init (Initialize)

Reset the current scene to its default state, including the sequencer and all effects.

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#### Rand (Randomize)

Completely randomize the current scene, including the seed, all effect states, the current sequencer pattern, and the number of beats and divisions per beat.

Looking for some instant gratification? Just randomize the entire scene!

#### Mutate

Mutate operates similarly to the Randomize function, but only changes things by a small amount. This is handy if you like what you currently have, but just want to give things a gentle nudge in a slightly different direction.

#### Seed

The seed – in conjunction with each effect's Randomizer weight – affects the outcome of any Randomizer blocks triggered by the sequencer.

If you fill the sequencer pattern with Randomizer blocks and choose a particular seed, it will result in the same sequence of "random" effects being chosen each time you play your song or project from the beginning. To obtain a new sequence of effects, simply roll the dice to pick a new random seed.

# **Effect Controls**

#### Сору

Copy the current state of all effects to the clipboard.

#### Paste

Overwrite the current state of all effects with data from the clipboard.

#### Init (Initialize)

Reset all effects back to their initial default state.

#### Rand (Randomize)

Completely randomize the state of all effects.

#### Mutate

Randomize the state of all effects by a small amount.

# **Sequencer Controls**

#### Сору

Copy the current sequencer pattern and beat settings to the clipboard.

#### Paste

The paste function offers two different modes:

- 1. Left-click to completely overwrite the current sequencer pattern and beat settings with data from the clipboard.
- 2. Right-click to perform a mix-paste. Any non-blank sequencer pattern data on the clipboard is pasted on top of the current sequencer pattern. The beat settings are not affected.

#### Init (Initialize)

Reset the current sequencer pattern and beat settings to their initial default state.

#### Rand (Randomize)

The randomize function offers two different modes:

- 1. Left-click to erase the current pattern and randomize once, to create a pattern which only has a single effect playing at any given moment in time.
- 2. Right-click to keep the existing pattern, but also add another layer of randomized blocks on top, gradually increasing the pattern density with each usage.

The selection of effects chosen by the pattern randomizer is determined by the weights set in the Randomizer module. If you wish to exclude an effect from the randomized pattern, you should set its Randomizer weight to 0%.

#### Mutate

Randomize the position and length of all sequencer blocks by a small amount.

#### Beats

Set the current sequencer pattern length in beats, ranging from 1 to 8 beats.

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#### **Divisions (Per Beat)**

Set the number of divisions per beat, ranging from 2 to 8 divisions.

At 4 divisions per beat, each sequencer step is equal to 1/16th note.
At 3 divisions per beat, each sequencer step is equal to 1/8th triplet note.
Experiment with odd timings and explore interesting new rhythms!

## Sequencer

The sequencer panel contains an effects list on the left side, and a pattern editor on the right side.

#### **Effects List**

Click an effect name to bring its controls into view in the lower section of the interface.

To the right of each effect name is a randomize button. "Roll the dice" to perform a very basic randomize function on the sequencer blocks for that particular effect, independent of the current seed or other Randomizer weight settings.

If an effect is currently being triggered by a Randomizer step, its name in the effects list will be highlighted with a white outline.

#### Pattern Editor

You can manipulate the pattern data in a variety of different ways:

- To create a block, left-click a blank step and drag to the desired length.
- To move a block, left-click its center and drag it to the desired new position.
- To resize a block, left-click and drag its edge to the desired new length.
- To split a long block into smaller pieces, middle-click at the desired point.
- To re-join two adjacent blocks, middle-click at the split point.
- To erase a single block, right-click or double-left-click on it.
- To erase multiple blocks, right-click and drag over the desired blocks.
- To erase an entire sequencer lane, double-right-click in the desired lane.

**Lower Interface** 



In the lower section of the interface, you can find all of the effect modules and their controls.

## **Common Effect Controls**

With the exception of the Randomizer which does not have a filter or mixer, all effect modules have the following common controls found on the right side of the interface.

#### Сору

Copy the state of the effect module to the clipboard.

#### Paste

Overwrite the state of the effect module with data from the clipboard.

#### Init (Initialize)

Reset the effect module back to its initial default state.

#### Rand (Randomize)

Completely randomize the state of the effect module.

#### Mutate

Randomize the state of the effect module by a small amount. The current parameter values are first taken into account, and then increased or decreased by a small amount based around their current value.

#### Filter Type

Disable the filter completely, or choose between low-pass (LP), high-pass (HP), band-pass (BP) and band-stop (BS) modes, respectively.

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#### Freq (Frequency) & Q

Set the filter's cutoff/center frequency, and Q factor/bandwidth.

#### Mix, Pan & Volume

Set the effect module's dry/wet mix level, stereo panning, and final output level.

# **Additional Credits**

Application and plug-in framework by Eduard Müller.

This software uses the FreeImage open source image library. See <u>http://freeimage.sourceforge.net</u> for details. FreeImage is used under the FIPL, version 1.0.

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