



Glass Opus

Introduction

Glass Opus is an open source rotoscoping software for students and artists. The software will provide a variety of features to allow the users to see their work from start to finish. Drawing with a variety brushes and vectors, image manipulation and object tracking via an included AI package, and filtering are among the many features than one can employ to create their vision.

The focus of Glass Opus, and the team behind it, is to provide a free software that students and artists can use to further their work and portfolio. This is often a difficult endeavor for artists due to the restrictive cost of major software. Since Glass Opus is open source, users can tweak features or add their own to suit specific needs. It will also serve as a foundation for those who seek to improve their knowledge in image processing and manipulation, as well as basic graphics programming.

Refer to this manual while using the software to further familiarize yourself with Glass Opus. After opening the program, importing and image or video, please refer to this user guide to understand the software. To avoid destroying created work, please read through the whole manual.

Software Use and Liability

Upon first uses of Glass Opus, remember to check your project saves to ensure creative decisions and progress has been recorded. The developers cannot be held liable for software and / or system crashes, progress and data loss, large file writes to the disk, or any other inconvenience caused.

Copyright

Glass Opus is not copyrighted. Save for the core purpose as software for creatives, the developers intend this software as an instructional introduction or those interested in or pursuing image manipulation.

Getting started checklist

- Make sure that the operating system running Glass Opus is up-to-date Windows, ideally 10, or although 8 could be used. Linux based systems are currently not supported.
- Make sure the latest version of Glass Opus and C++ distribution are installed.
- If you are a developer, make sure to have the latest version of Qt, MSVC, C++ distribution, and OpenCV are installed. During development, Qt 5.13/5.15, MVSC 2017/2019 and C++ distribution 2017, and OpenCV 4.5.1 were used.

Basic Assumptions

- When starting the software, it can be assumed that the brush is set to size **xx**, spray density set to 0 (no spray), patterning off, color defaulted to black, and the brush application method to overwrite.
- Each new spline vector is set to default upon creation. This entails both spline vector colors set to black, the mode set to color vector, and its filter set to greyscale. By default, the tapers will both be zero, with the taper type being double taper.
- When starting up Glass Opus, the editing mode will be set to brushing.
- Each new layer will be instantiated as a blank layer, meaning all pixels' alpha value (opacity) will be set to 0, being completely transparent.
- When importing an image or video, it will be placed in the backmost layer of the frame.
- Exporting an Image when working with multiple frames (a video) will render the current editing frame to an image. As with vide export, the user can decide upon the file name and location.

General Note

- By design and current design limitations, layer filters are not applied to the active / working layer. They are applied to layers not being worked on and to all layers during image and video export. The is being addressed in future releases.

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Keyboard and Mouse Controls

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