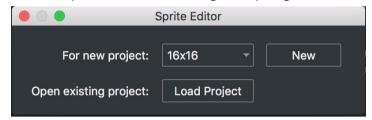
### **User Guide**

## When opening the program

The window that will open when running the program is this:

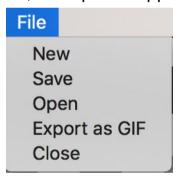


To start a new project, select the size of the sprite and press the new button.

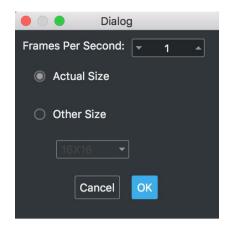
To open a saved project, click the "Load Project", select the project file in the dialog window and click the "Open" button.

#### Menu bar

Clicking the "File" drop-down, five options appear:



- New: this option will start a new project.
- **Save**: this option will open the "Save" dialog window, where it is possible to navigate through folder and save the current project with the specified name.
- **Open**: this option will open the "Open" dialog window, where it is possible to navigate through folder and open an existing project.
- **Export as GIF**: this option is used to save the project as a GIF. It will open a dialog window:

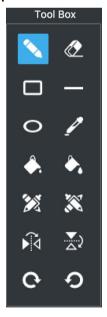


In the dialog window, it is possible to select the number of frames per seconds and the size of the pictures. When clicking "OK", the "Save Animation" dialog window will open and it will be possible to navigate through the folders and save the project in a GIF with the specified name.

- Close: this option will close the program.

#### **Tool Box**

This box contains the tools to paint on the frames.



- **Pen Tool**: draw freehand edges.
- **Eraser**: erases pixels to a transparent layer.
- **Rectangle Tool**: draws a rectangle with a diagonal equal to the distance between the clicked pixel and the released pixel.
- **Line Tool**: draws a line as long as the distance between the clicked pixel and the released pixel.

- **Ellipse tool**: draws an ellipse that is inscribed in the rectangle whose diagonal is equal to the distance between the clicked pixel and the released pixel.
- Color Picker Tool: retrieves the color of the clicked pixel.
- Bucket: fill an area of connected pixels with the same color.
- **Color Caster:** replace the color of all pixels with the color of a given pixel with another specified color.
- **Horizontal Mirror Pen Tool**: draw freehand edges and mirror them horizontally.
- **Vertical Mirror Pen Tool**: draw freehand edges and mirror them vertically.
- Flip Horizontal: reflect the whole frame horizontally.
- Flip Vertical: reflect the whole frame vertically.
- Rotate Clockwise: rotate the whole frame clockwise by 90 degrees.
- **Rotate Counter-clockwise**: rotate the whole frame counter-clockwise by 90 degrees.

#### Undo/Redo



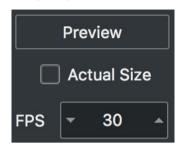
- **Undo** button: undo the previous operation.
- Redo button: redo a previously undone operation.

# Size/Alpha/Color Box



- Size: the slider determines the size in pixels of the tool.
- Alpha: the slide bar determines the transparency of the pixel.
- **Color**: determines the selected color to draw. When clicked, the color window opens and allows the choice of the color.

#### **Preview**



The "**Preview**" button opens a window that shows the sequence of all the frames at the speed in frame per seconds specified in the drop-down below. If the box "Actual Size" is checked, the preview will show the actual size of the frames.

#### **Frame Panel**

- Frame Panel: shows the collection of all the frames.



- Add Frame: adds a new frame to the Frame Panel.
- **Duplicate Frame**: duplicates the current frame and adds the copy to the Frame Panel.
- Remove Frame: removes the current frame from the project.
- **Move Left**: moves the current frame one position to the left in the Frame Panel.
- **Move Right**: moves the current frame one position to the right in the Frame Panel.
- **Clear Frame**: clears the current frame. All pixels in the frame become transparent.