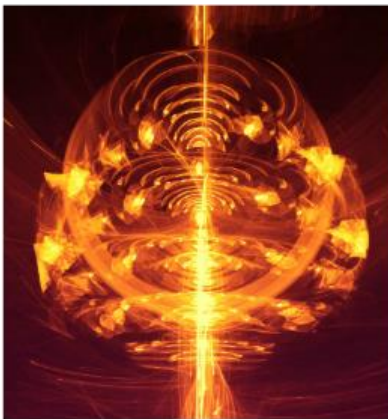
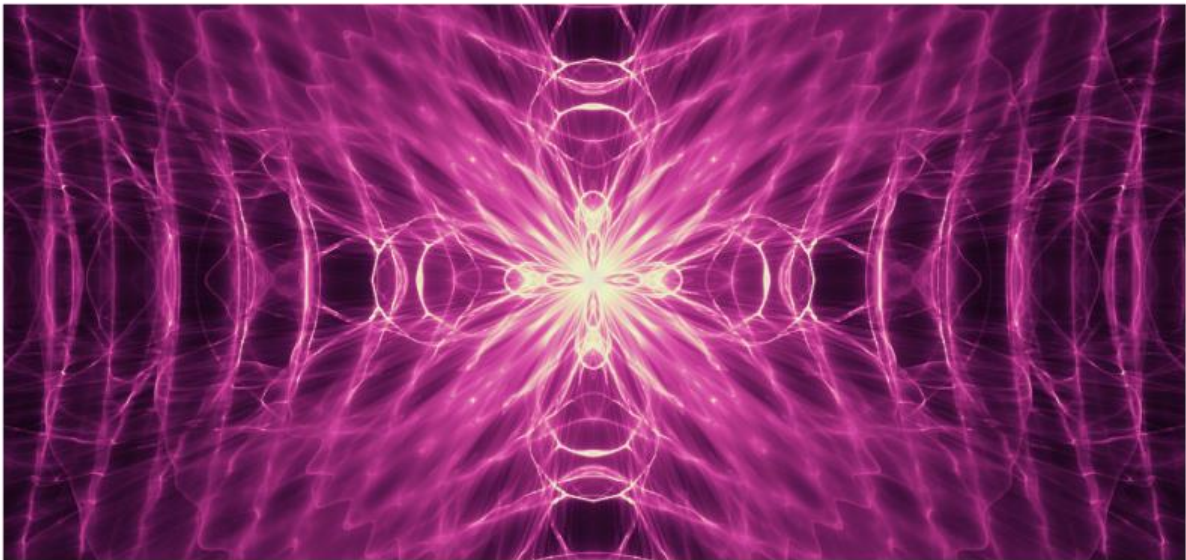


The logo for Amberlight 2 features a circular emblem on the left containing a stylized, golden, swirling design. To the right of the emblem, the text "Amberlight 2" is written in a large, bold, orange font with a thick black outline.

# Amberlight 2

User Manual  
v. 2.1



# Introduction

Welcome to Amberlight 2!

Amberlight is a unique art software that creates computer generated images and animations. Millions of particles are flying through your scene and you can drive them with the special Amber fields. No matter if you are an advanced artist or a complete art beginner, playing and experimenting with its tools you are able to create fantastic images and motion graphics. In the world of computer art this is a one-of-a-kind tool that will broaden your artistic horizons and unveils a very new art experience.

Amberlight 2 is boosted with many innovative features including advanced animation mode, modifiers and variations. From now on, users can breathe life into their artworks and create flawless animations saved as video or image sequences.

Similarly to Flame Painter, Amberlight was originally created as an experimental project in my 'I am an Artist' series. The initial vision was to create the application where anyone could create original artworks. It was made both as a tool for artists as well as for people without artistic skills who want to create something unique. Lack of inspiration and motivation are often the reasons why we people are not creative, however, I believe the tools that we use can become the inspiration for creativity. I think that with tools, which inspire you, everyone can be an artist.

In this manual you'll find general information covering all necessary details you need to know for a hassle-free use of this software. We've prepared for you explanations of its features, useful hints and some technical background of Amberlight.

Thanks for purchasing Amberlight. We hope you'll have a great time!

*Peter Blaškovič*  
*Creator of Amberlight*

# Table of Contents

Introduction.....	2
Welcome to Amberlight 2!.....	2
Table of Contents .....	3
Getting Started .....	5
Installing and Registering Amberlight .....	5
Amberlight Interface .....	7
Scene Panel .....	8
Parameters Panel .....	8
Modifiers Panel .....	9
Variations .....	9
Wave.....	9
Contrast Curve Panel.....	10
Filter Panel.....	10
Navigator Panel .....	10
Palette Panel .....	11
Layers Panel.....	12
Timeline Panel.....	12
Edit Fields .....	14
The Menu Bar .....	16
File Menu.....	16
Edit Menu .....	18
Scene Menu.....	18
Filter Menu .....	19
View Menu .....	19
Window Menu.....	19
Help Menu.....	20
Animation .....	21
Create a New Scene .....	21
Playback Speed and Playback Looping.....	22
Work with Timeline .....	23

Animate fields (simple example).....	24
Experiment with Modifiers.....	26
Rendering Animation Preview.....	28
Final Render.....	29
Creating, Opening and Saving Scene.....	31
Creating a New Scene.....	31
Opening a Scene.....	31
Saving a Scene.....	31
Closing an Application.....	32
Publish an Image to Gallery.....	33
Creating a Gallery account.....	33
Publish image from Amberlight to Gallery.....	33
Edit your profile and artworks in Gallery.....	33
Keyboard Shortcuts.....	34
Copyright & Credits.....	36
Amberlight End-User Software License Agreement.....	37

# Getting Started

## Installing and Registering Amberlight

### Download & Install

After purchasing Amberlight from our website, you receive an email with a download link and registration details.

#### Mac OS X Users

Download a .dmg file from link provided in a registration email. Locate the Amberlight Installer file named "Amberlight 2.1.dmg". Double-click on the installer to complete the installation.

#### Windows Users

Download a .zip file from link provided in a registration email. Locate the Amberlight Installer file named "Amberlight 2.1.zip". Extract a .zip folder and double-click on the .exe installer to complete the installation.

### Registration

Fill in your registration details provided in your registration email. Please check if you are connected to the Internet, the Internet connection is required for activation to check the registration details.

*TIP: We recommend to **copy & paste** your Registration Key and ID in order to avoid misspelling numbers with letters and vice versa.*

### Application Launch

You'll see an Intro Tutorial during first launch of an application, or after every updating to the newer version. This tutorial will guide you through the most essential Amberlight tools. You can run an Intro Tutorial from a Menu -> Help anytime.

## System Requirements

Intel or AMD processor, OpenGL 2.0 graphic card, 1GB RAM, 40 MB free disk space, Windows XP, Vista, 7, 8, 10, or Mac OS X 10.6 and newer.

## Getting Support for Amberlight

If you need help using Amberlight, please refer to the included manual first. We tried to make it easy to read and full of information you may need to know.

If you have any question, technical issue with Amberlight, or you would like just to greet us, you are welcome to send us an email at [support@escapemotions.com](mailto:support@escapemotions.com).

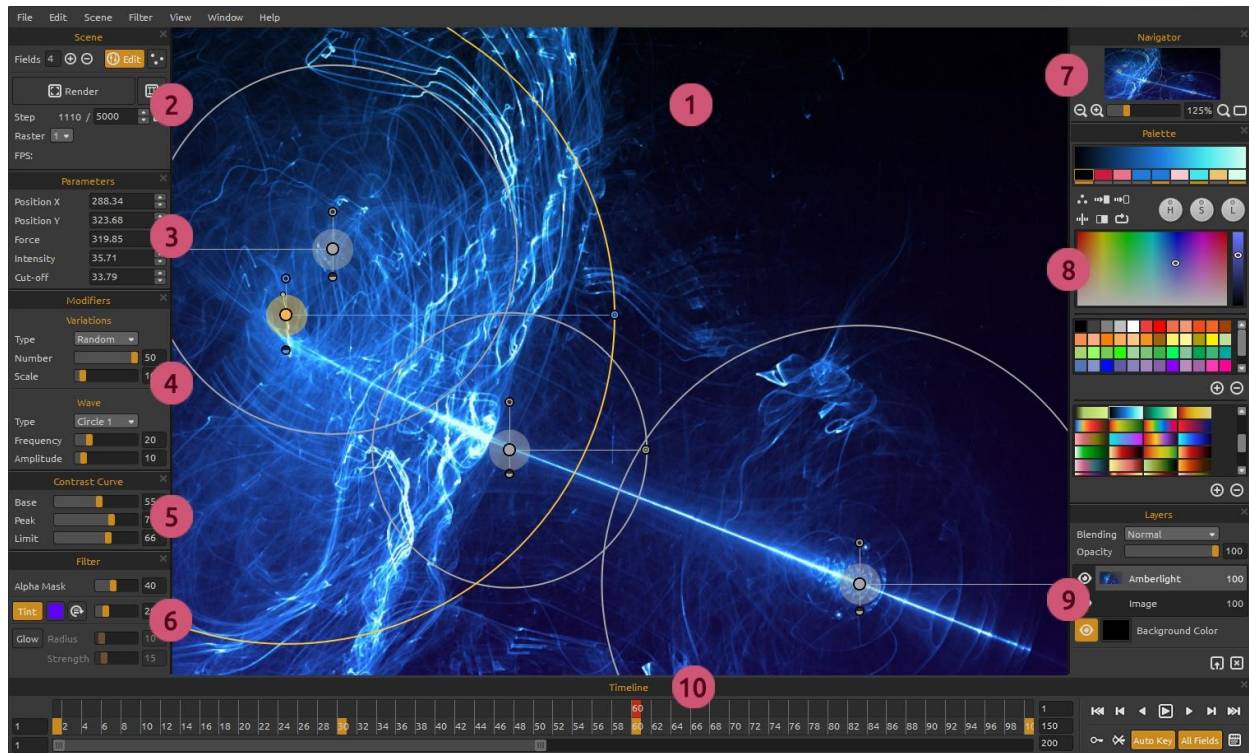
Before asking questions please read **FAQ** section on the website <http://amberlight.escapemotions.com> first. If the answer is not there, please add your computer configuration to your email (Windows / Mac OS, 32/64bit OS, processor, graphics card, memory). This will help us provide answers much faster.

## Community

Let's keep in touch on our social channels - click on any icon and visit our pages on Facebook, Twitter, Pinterest, Google+, Tumblr, YouTube, DeviantArt, Behance and Instagram.



# Amberlight Interface

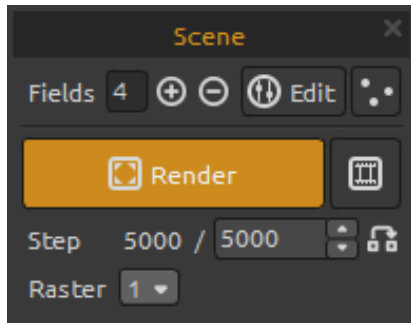


- 1 - Viewport
- 2 - Scene Panel
- 3 - Parameters Panel
- 4 - Modifiers Panel
- 5 - Contrast Curve Panel
- 6 - Filter Panel
- 7 - Navigator Panel
- 8 - Palette Panel
- 9 - Layers Panel
- 10 - Timeline Panel

This is a default Amberlight interface. You can change it according to your needs.

*TIP: All panels are dockable - you can modify, change positions and adjust the width of panels.*

## Scene Panel



**Fields** - Set the number of fields (1-12).

⊕ / ⊖ - Add or remove selected fields.

⬆️ ⬆️ **Edit** - Switch to Edit fields mode.

•• **Random** - Random scene and fields.

🖼️ **Render** - Render actual frame.

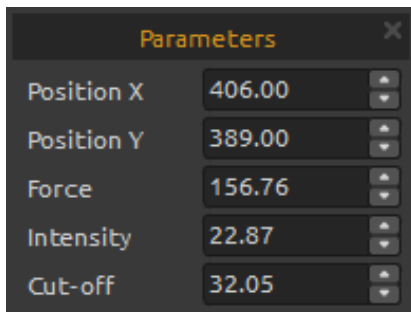
🎞️ **Render animation** - Render animation preview.

**Step** - Set the number of render steps - iterations. If you would like to have smoothly rendered scene, set it to 10000. If you need a print quality set higher number.

🔗 **Use actual value** - Use the value from Step as a final value.

**Raster** - Select raster value (1-8). Set Raster to higher values for preview purposes, the rendering will be faster.

## Parameters Panel



**Position X** - Set the position X of the field.

**Position Y** - Set the position Y of the field.

**Force** - Set the force of the field.

**Intensity** - Set the intensity of the field.

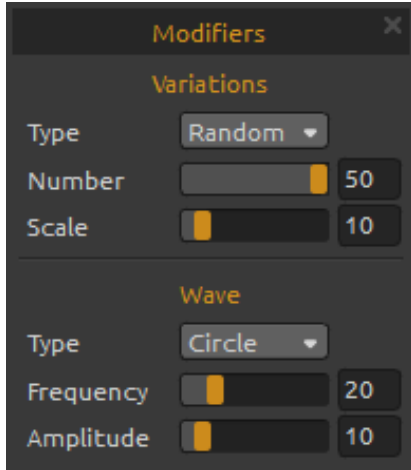
**Cut-off** - Set the cut-off of the field.

More about fields parameters and how to edit them can be found in '[Edit Fields](#)' section.



## Modifiers Panel

Experiment with field modifiers and manipulate the final look. Modifiers are divided into:



### Variations

There are two **types** of variations to choose from:

**Random** - Fields will create random shapes and formations.

**Uniform** - Fields will create uniform shapes and formations.

**Number** - Select number of variations (1-50). Number affects how many variations will be created on the scene.

**Scale** - Scale the variations (1-100). Scale affects the position of each variation. When the scale is lower, the variations will be rendered closer to each other. When the scale is higher, variations will be rendered further from each other.

### Wave

Wave is a modifier, which affect the final look. There are six different **types** of wave modifier to choose from:

**None** - No wave modifier is used.

**Circle** - Circle wave.

**Square** - Square wave.

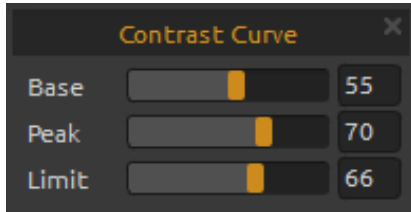
**Vertical** - Vertical wave.

**Horizontal** - Horizontal wave.

**Frequency** - Set the rate with which waves will be repeated on the scene (1-100).

**Amplitude** - Set the amplitude of the wave (1-100). The amplitude is half the distance between the minimum and maximum values of the wave.

## Contrast Curve Panel



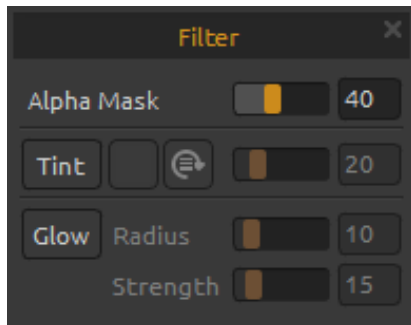
There are four different contrast settings:

**Base** - Set the base of the contrast curve - shadows (1-100).

**Peak** - Set the peaks of the curve - highlights (1-100).

**Limit** - Set the limit of the curve peak (1-100).

## Filter Panel



Filter parameters to experiment with:

**Alpha Mask** - Amberlight's image opacity (0 - 100).

**Tint** - Turn on and off tint gradient, rotate tint and set the tint color and radius (0 - 100).

**Glow** - Turn on and off glow effect.

**Radius** - Set the glow radius (0 - 100).

**Strength** - Set the glow strength (0 - 100).

## Navigator Panel



**Zoom Out** - Zoom out from your scene (at a minimum size of 5%).

**Zoom In** - Zoom in on your scene (at a maximum size of 2000%).

**Zoom Slider** - Set the zoom using the zoom slider (1 - 2000%).

**Reset Zoom** - Check the zoom value here. Press the button to reset the zoom to 100%.

**Fit to screen** - Set the scene to fit the screen.

## Palette Panel



Choose and set up your gradient transition for scene. Click on the color button you want to change and select the color from palette. You can switch on/off the color you want to use in the gradient.

- **Palette** - Open the system color palette.
- ▶▶ **Gradient to White** - Change gradient transition to white color.
- ▶□ **Gradient to Black** - Change gradient transition to black color.
- || **Flip** - Flip gradient.
- **Invert** - Invert colors in gradient.
- ↻ **Shift** - Shift gradient colors to right.

**H | S | L** - Change hue, saturation and lightness for all colors in gradient.

**Palette** - Select the color.

**Color set** - A palette of the default set of colors. You can add custom colors - they will be saved for a further painting project even when an application is closed.

⊕ / ⊖ - Add and remove colors from Color set.

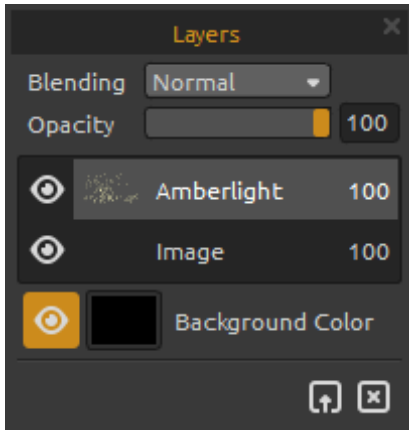
**Gradients** - Select the gradient from the Gradients list.

⊕ / ⊖ - Add and remove gradients from the lists.



To use a **monochromatic color** instead of a gradient, set the first color of the gradient to black, the middle to the color you want to use and the last color to white.

## Layers Panel



Use Layers panel window to edit and manipulate with layers.

**Blending** - Layer blending mode.

**Opacity** - Set the opacity of the layer (0 - 100).

**Eye** - Show or hide the active layer.

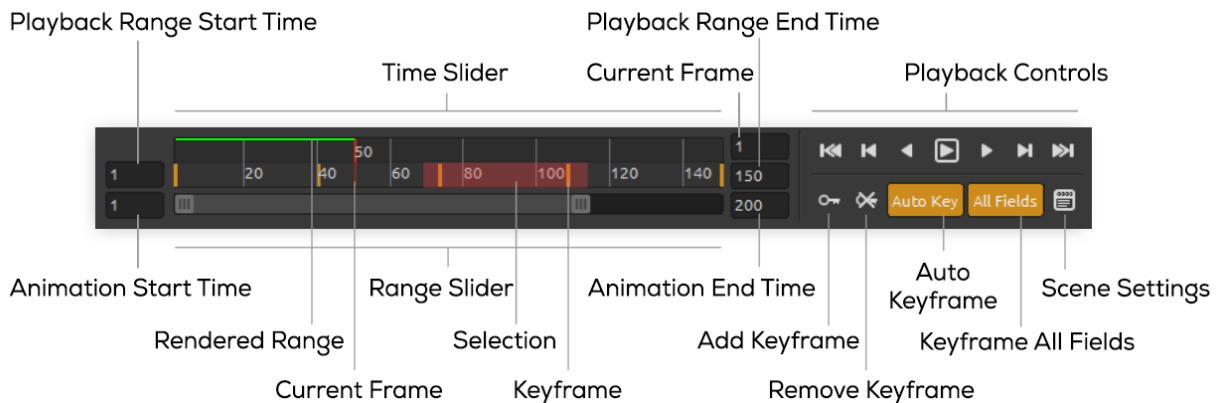
**Background Color** - Show / Hide *Background Color* and select its color. To save a scene with transparent background, hide the background color by clicking the Eye icon and save as .png.

**Import Image** - Import the second image for composition.

**Clear Layer** - Clear the *Amberlight* or *Image* layer.

## Timeline Panel

Use Timeline panel to create animation, edit and manipulate frames and keys.



**Playback Range Start Time** - Set the start time of playback range. You can change it by entering a new start time. If you enter a value that is greater than the Playback Range End Time, the Playback Range Start Time is shifted to one unit less than Playback Range End Time.

**Playback Range End Time** - Set the end time of playback range. You can change it by entering a new end time. If you enter a value that is less than the Playback Range Start Time, the Playback Range End Time is shifted to one unit more than Playback Range Start Time.

**Animation Start Time** - Set the number of the first frame in animation.

**Animation End Time** - Set the number of the last frame in animation.

**Current Frame** - The entry field indicates the current frame. You can change the current frame by entering a new value.


**Range Slider** - Set the playback range.


**Time Slider** - Control the playback range, keys and selections within the playback range.


**Rendered Range** - Green line indicates frames, which have already been rendered via 'render animation' function.



**Selection** - Select multiple keys to copy, cut, paste or delete.


#### Playback Controls:


 **Go to Start** - Go to playback range start time.


 **Previous Keyframe** - Go to the previous keyframe.


 **Previous Frame** - Go to the previous frame.


 **Play** - Play the animation. When animation is playing, the button changes to **Stop** button 

 **Next Frame** - Go to the next frame.

 **Next Keyframe** - Go to the next keyframe.

 **Go to End** - Go to the playback range end time.

 **Add Keyframe** - Add a new keyframe.

 **Remove Keyframe** - Remove selected keyframe or keyframes.

**Auto Key** - Automatic keyframing. Key will be automatically created on the current frame. Turn off if you want to set keys manually.

**All Fields** - Key frame all fields. Keys will be created for all fields. Turn off if you want to key only a selected field.

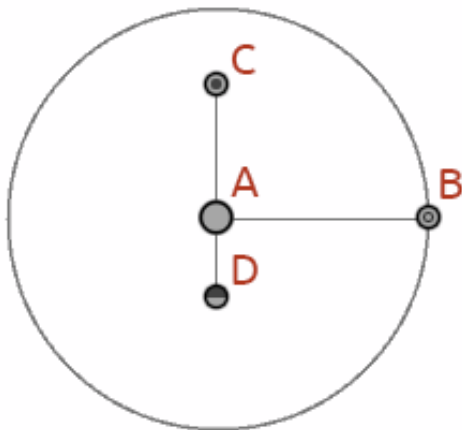
 **Scene Settings** - Open Scene Settings dialog window.

## Edit Fields

Press **Edit** button in Scene panel or **Left Mouse Button** on the scene to edit fields. You can set number of fields in Scene panel from 1 to 12. Every field is represented as a circle with position X, Y and 3 parameters. With these parameters you can set how the fields will influence particles.

### Field parameters

**Center Position - (A)** - Press LMB (Left Mouse Button) on a center circle button and set position of the field on a scene. You can set it manually in the Parameters panel, where you enter values for Position X and Position Y.



**Force - (B)** - Press LMB on a button and set the force of the field with moving it left and right. Right from the center has the field positive force (+) and on a left from the center is negative force (-). You can set it manually in the Parameters panel.

**Intensity - (C)** - Press LMB on a button and set the field intensity with moving it up and down. Distance from the center sets the intensity value. Up from the center is higher and down is lower. With this parameter you change how intense is the influence of the field on the particles. You can set it manually in the Parameters panel.

**Cut-off - (D)** - Press LMB on a button and set the field cut-off with moving it down from the circle center. Distance from the circle center sets the distance, where the particles will stop from the field. You can set it manually in the Parameters panel.

## Working with fields

To **copy the properties** of selected field, use Ctrl + C / Cmd + C or Edit -> Copy Field Properties.

To **paste the properties** to selected field, use Ctrl + V / Cmd + V or Edit -> Paste Field Properties.

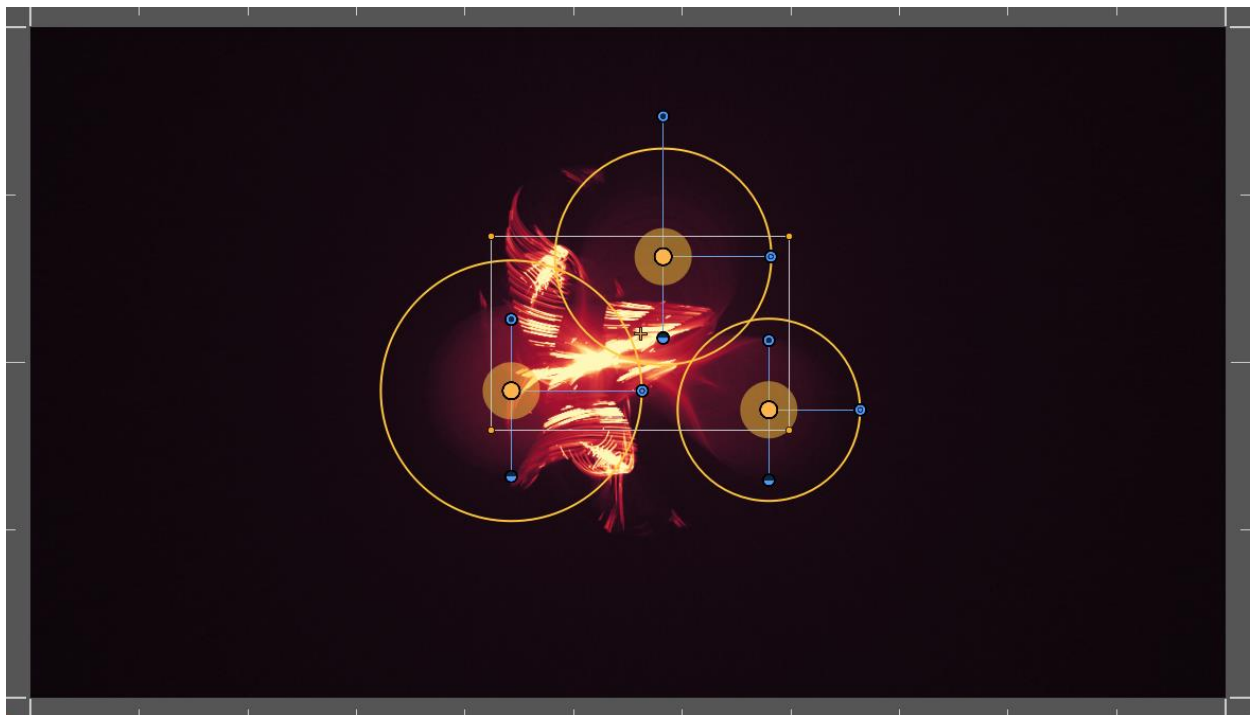
To **duplicate** selected field or fields, use Ctrl +D / Cmd + D or Edit -> Duplicate Fields.

**Select all fields** using Ctrl + A / Cmd +A or Edit -> Select All Fields.

You can also select fields by click and drag to pan, scale or rotate selected fields.

Use Shift to only **pan** the fields and Control / Cmd to only **rotate** the fields.

The center of the rotation is displayed as ( + ) symbol. You can place the center anywhere on the scene by click and drag ( + ) to desired position.



**View grids** to position the fields more precisely via menu Scene -> Snap to Grid. The center of the field, the center of selection and keyframes are snapped to grid.

You can set the number of grids in **Preferences Panel**.

# The Menu Bar

**File** - Contains items related to loading, saving, exporting and publishing your images.

**Edit** - Contains items related to editing tools and fields.

**Scene** - Contains items related to editing tools, the scene and rendering.

**Filter** - Contains items related to the image filters.

**View** - Contains items related to the viewport.

**Windows** - Contains items related to dock panels and user interface.

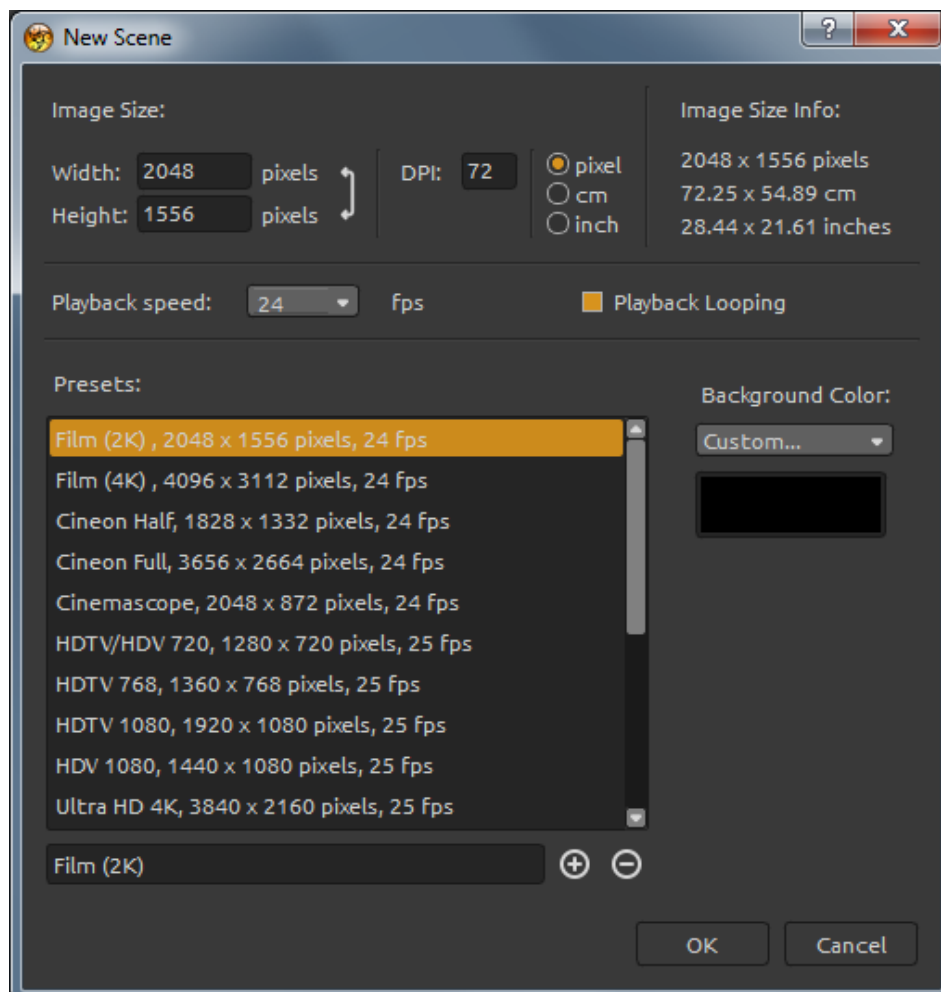
**Help** - Contains items that let you get help on the application, or look for updates on website.

## File Menu



The File Menu contains items related to your scene. They work as follows:

**New...** - Open a dialog that allows you to create a new scene with new settings.

You can set the width and height of the new scene in pixels, centimeters or inches, set the playback speed in frames per second (FPS), select playback looping, background color and image DPI:





You can also choose from variety of scene size presets or add / remove presets using  /  buttons.

**Open...** - Open a file dialog that allows you to load a scene from disk.

**Open recent...** - Open one of the last saved works.

**Save...** - Save your scene in .amb, .png, .jpg, .bmp and .tif file format. If you have not saved it before, you are prompted to enter a name.

**Save As...** - Save a copy of your current scene as a new one.

**Import Image...** - Import .png, .jpg, .bmp and .tif image to *Image layer*. Image is resized to fit the actual scene size, but you can change it to any size. Press Enter to confirm or Esc to cancel.

**Export Image...** - Export .png, .jpg, .bmp, and .tif image file from Amberlight.

**Publish Image...** - Publish your image to Escape Motions Gallery.

**Publish Preferences...** - Set *Your name*, *Email ("Your ID")* and *Password* to gallery and optionally a link to your *Website*.

Learn more about Publish options in '[Publish an Image to Gallery](#)' section.

**Preferences...** - Set General and Keyboard preferences.

- **General**
  - Startup Screen - Show "New Scene" dialog at application startup. Check this option if you want the New Scene dialog to open every time you launch the application.
  - Scene - Zoom at cursor. Check this option if you want to zoom at the cursor, not at the scene center.
  - Jpeg compression - Set the quality of jpeg file.
  - Interface - Set the scale to resize the interface (90-200%).
  - Spinbox editing sensitivity - Set the sensitivity of spinbox editing for Mouse or Tablet.
  - Memory - Set the maximum used memory.
  - Grid - Set the number of horizontal and vertical grids (maximum is 100).
- **Keyboard**
  - Set custom keyboard shortcuts. Click Reset to reset the current shortcut or Delete to delete the shortcut. Click Reset All to reset all shortcuts.

Click **OK** to continue or **Cancel** if you decide not to.

**Quit** - Close the application. (*Only on Windows*)

For more information on creating, opening and saving your images, see the '[Creating a New Scene](#)' section later on in the manual.

*TIP: You can also **Drag and Drop** an image from any application, file manager or internet browser directly to Amberlight if the application allows it.*

## Edit Menu

**Undo** - Undo the last operation you performed. Maximum number of undo steps is set to 100.

**Redo** - Redo the last operation you undid.

**Copy Field Properties** - Copy the properties of selected field.

**Paste Field Properties** - Paste the properties on selected field.

**Duplicate Fields** - Duplicate selected field or fields.

**Select All Fields** - Select all fields.

## Scene Menu

**Scene Settings...** - Open a dialog that allows you to set a scene size. You can select if you want to **Keep aspect ratio** of the scene and if you want to **Scale fields**.

**Edit** - Edit fields, their position and parameters - Force, Intensity and Cut-off.

**Edit Trajectory** - Edit keys and animation trajectory tangents. Each key has two tangents, left and a right. Moving tangents of a key changes the shape of the animation trajectory.

**Reset Tangents** - Reset the tangents to default.

**Random** - Random scene and fields parameters.

**Snap to Grid** - Use grid to position the fields more precisely. You can set the number of grids in Preferences Panel.

**Crop** - Select the area you want to crop. Cropped area will be placed on the scene and fields will be scaled accordingly.

**Render Image** - Render actual frame.

**Render Animation** - Render animation to get a preview of how the final render will look like.

**Final Render** - Render final animation and save to computer. Select the path, filename and file format - either as an image sequence in .jpg, .png, .bmp, .tif or as a video in .mov or .mkv file format.

## Filter Menu

**Tint** - Turn on and off Tint filter. Set the color, rotation and strength.

**Glow** - Turn on and off Glow filter. Set the glow Radius and Strength.

**Tile** - Tile layer horizontally and vertically for repetitive images.

## View Menu

**Zoom In** - Zoom in on your scene (at maximum size of 2000%).

**Zoom Out** - Zoom out from your scene (at a minimum size of 5%).

**Zoom 100%** - Check up a zoom value. Press the button to reset the zoom to 100%.

**Fit to Screen** - Set the scene to fit the screen.

**Stay on Top** - Application will stay always on top of other applications.

**Enter Full Screen** - Enter full screen mode.

## Window Menu

The Window Menu contains items related to dock panels and interface:

**Scene** - Show or hide Scene dock panel.

**Parameters** - Show or hide Parameters dock panel.

**Modifiers** - Show or hide Modifiers dock panel.

**Contrast Curve** - Show or hide Contrast curve dock panel.

**Filter** - Show or hide Filter dock panel.

**Navigator** - Show or hide Navigator dock panel.

**Palette** - Show or hide Palette dock panel.

**Layers** - Show or hide Layers dock panel.

**Timeline** - Show or hide Timeline dock panel.

Uncheck the panel to hide it from UI. Check the panel to bring it to user interface.

## Help Menu

**Help** - Open this document.

**Send Feedback...** - Send us feedback if you have any problem, some idea or just like the program. You can choose from 3 feedback types:

**Bravo** - Would you like to express how cool Amberlight is?

**Idea** - Do you have any feature in mind that would be a great addition to Amberlight?

**Bug** - Did you spot any strange behavior when using Amberlight?

Just enter your email address and write us a message - we read each and every one. ☺

**Amberlight Website** - Link to website: <http://amberlight.escapemotions.com>.

**Intro Tutorial** - Show the Intro Tutorial. This tutorial will guide you through the most essential Amberlight tools.

**About Amberlight** - Get some basic information on Amberlight, copyright and credits. (*In Help menu only on Windows*).

**Show Library Folder** - Show folder where gradients are saved.

# Animation

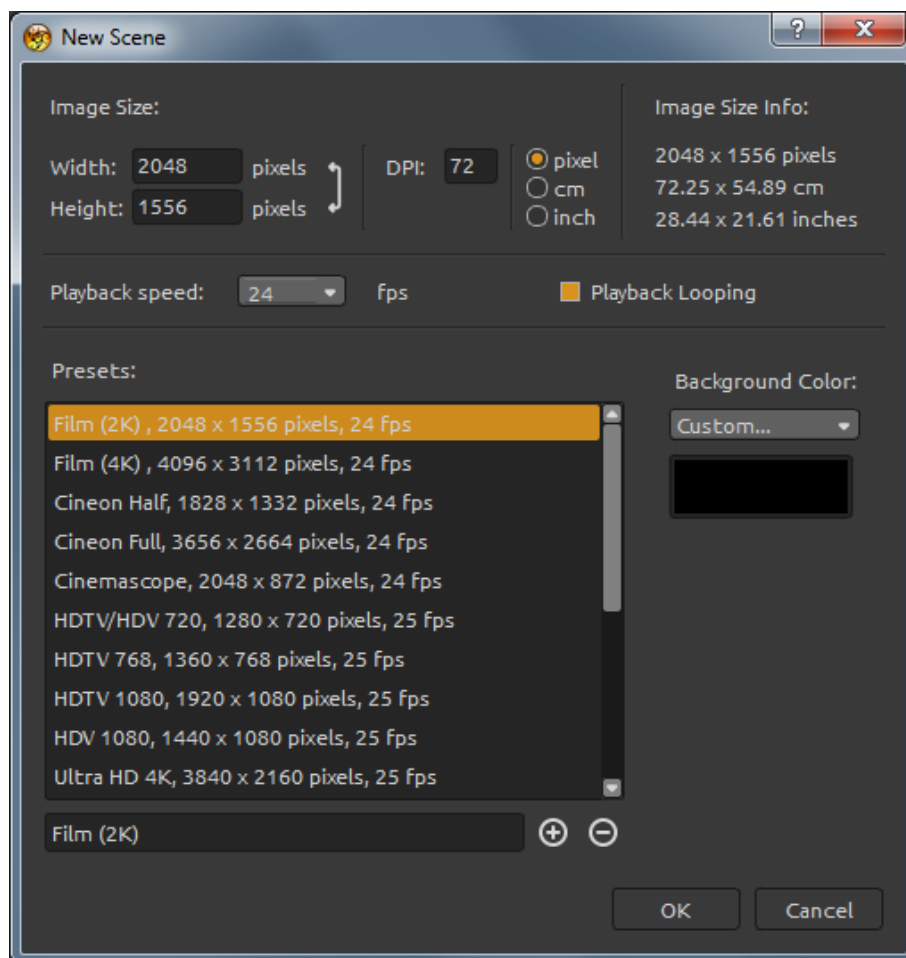
This section describes how to create animation in Amberlight:


1. Create a new scene
2. Set Playback speed and Playback looping
3. Work with timeline
4. Animate fields (simple example)
5. Experiment with modifiers
6. Render animation preview
7. Final render


## 1. Create a New Scene

In this section we'll describe how to create a new scene in Amberlight:

1. Click File -> New... and a New Scene window appears:



2. Set the width, height and DPI of the scene manually or select from the list of scene size presets.
3. Set the playback speed in FPS and enable / disable playback looping (more about playback speed and playback looping in the following section).
4. Save your custom scene settings using  button for future reference.
5. Set the background color. Choose from Black, White or Transparent (None) or select your own Custom color from the system color palette.
6. Click OK to continue or Cancel if you decide not to.

You can change these settings anytime during your work on animation from the menu Scene -> Scene Settings or directly from the timeline by clicking on Scene Settings button .

## 2. Playback Speed and Playback Looping

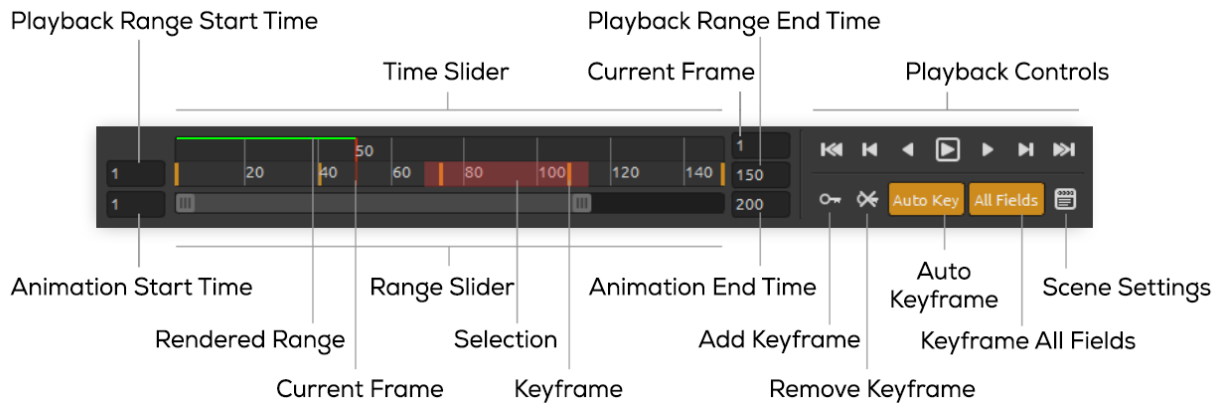
When creating a new scene you can easily set FPS values and Playback looping. **FPS** refers to **frames per second** or how many frames need to be drawn for every second that goes by in real time. This feature is essential when considering how long should the final video from Amberlight be. The recommended fps setting is between 25-30 fps, however this depends on what purpose the video will be used for. Set the Playback looping, if you want the video to create a continuous repetitive video outcome.

You can change the playback speed and looping before the Final render.

*TIP: To count how many frames you need for your video, think about your final video length in frames per seconds. If Playback speed is set to 30 FPS and you need the final video to be 30 seconds long, you will need to create 900 frames (30 FPS x 30 seconds).*

### 3. Work with Timeline

Use Timeline panel to create animation, edit and manipulate frames and keys.



Set the number of frames by setting **Animation Start Time** and **Animation End Time**. Manually set the **Playback Range Start Time** and **Playback Range End Time**. Click and drag **Range Slider** to move around the timeline. The **Time Slider** displays the playback range and keys you've set for selected frames.

The **Playback Controls** control animation playback. You may recognize the conventional buttons for play and rewind (return to the start time). The stop button appears only when the animation is playing. To find out which operation a button represents, hold the mouse pointer over it:

⏮ **Go to Start** - Go to playback range start time.

⏪ **Previous Keyframe** - Go to the previous keyframe.

⏩ **Previous Frame** - Go to the previous frame.

▶ **Play** - Play the animation. When animation is playing, the button changes to **Stop** button ◻

▶ **Next Frame** - Go to the next frame.

⏩ **Next Keyframe** - Go to the next keyframe.

⏭ **Go to End** - Go to the playback range end time.

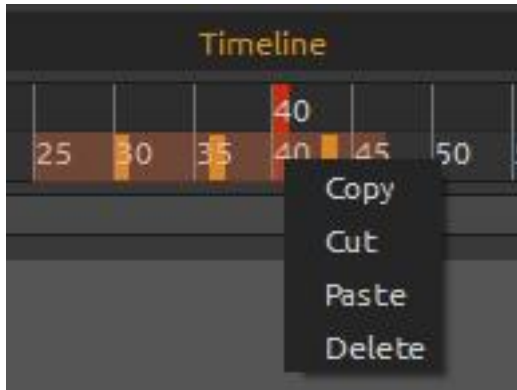
🔑 **Add Keyframe** - Add a new keyframe.

✂ **Remove Keyframe** - Remove selected keyframe or keyframes.

**Auto Key** - Automatic keyframing. Key will be automatically created on the actual frame. Turn off if you want to set keys manually.

**All Fields** - Key frame all fields. Keys will be created for all fields. Turn off if you want to key only a selected field.

 **Scene Settings** - Open Scene Settings dialog window.



You can manipulate with a selected key or keys directly in the timeline.

Move a key using click & drag. Select multiple keys at once by click & drag or with Shift key.

Move them or right-click the selection and choose to **Copy**, **Cut**, **Paste** or **Delete** selected keys.

## 4. Animate fields (simple example)

Below you can find an example of a simple animation. We will create animation with two fields.

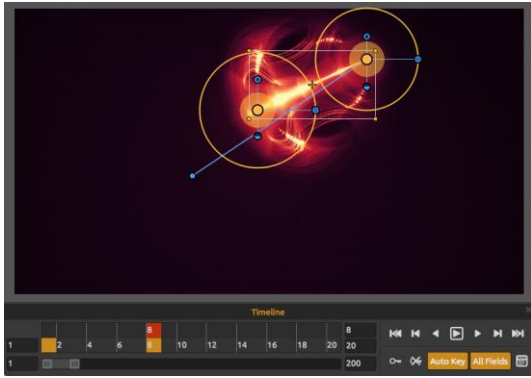


1. Set the starting position of fields. Default number of fields on the scene is 4. Easily add or remove fields using  $\oplus$  /  $\ominus$  buttons in the Scene panel or type in the exact number in the Fields section. To edit fields, either click Edit button in the Scene panel or click directly on the scene with left mouse button. You can add or remove the fields anytime during the process. More about editing fields can be found in '**Edit Fields**' section.

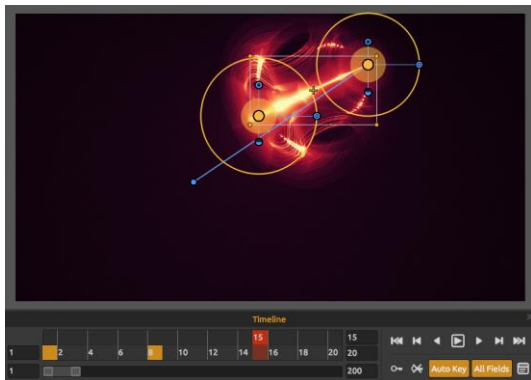


2. Move to frame 8 on timeline.

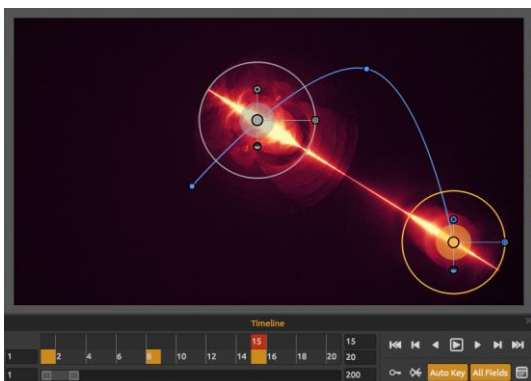




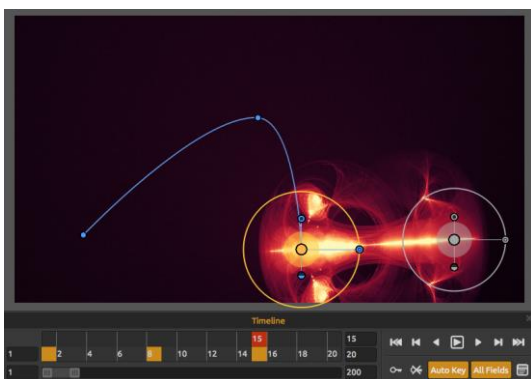
3. Select all fields using Ctrl + A or highlight them using multi-selection (click and drag).  
Move fields to desired position.  
As "Auto Key" is on, key will be automatically created on frame 8.



4. Move to frame 15 on timeline.



5. Click on field 1 and move it to desired position.  
Key for this field will be automatically created on frame 15.

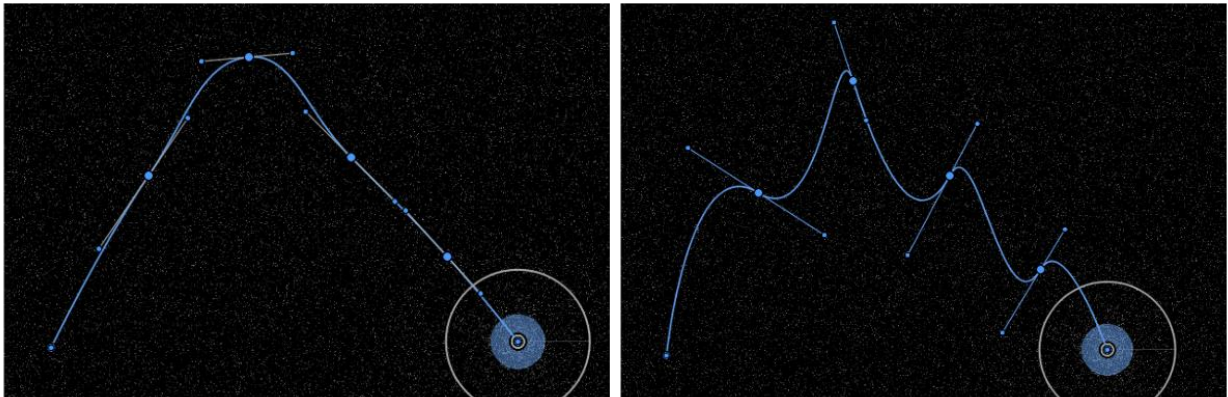


6. Click on field 2 and move it to desired position.  
Key for this field will be automatically created on frame 15.

To view the animation trajectory of a field, click on the field's center.

The keys on the trajectory are displayed as nodes. You can edit the position of the keys directly on the curve.

To edit keys and animation trajectory, go to menu bar: "Scene" -> "Edit trajectory". The tangents on every key will appear. Each key has two tangents, left and a right. Moving tangents of a key changes the shape of the animation trajectory:



To reset tangents to default, go to menu: "Scene" -> "Reset tangents".

## 5. Experiment with Modifiers

Modifiers will help you shape and change the final look of the scene. They are divided into two groups: Variations and Wave.

### Variations

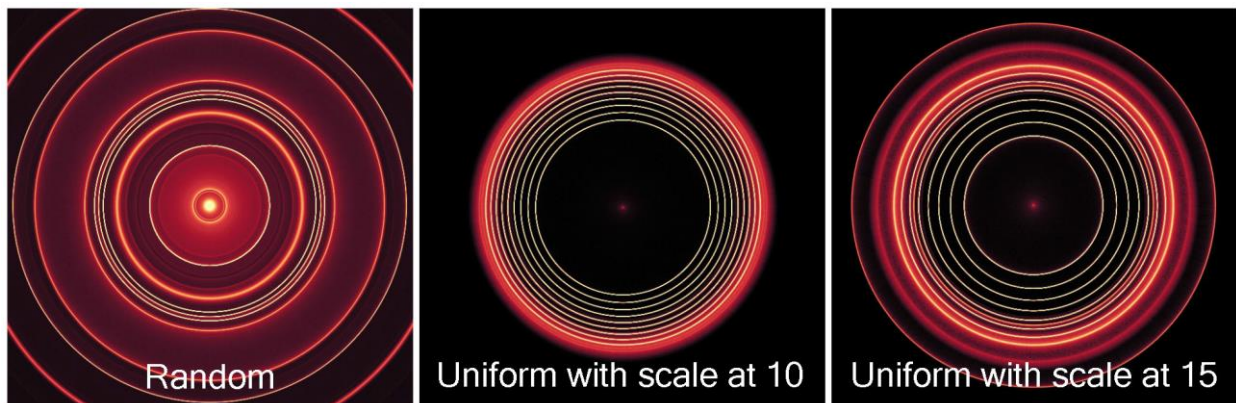
There are two types of variations to choose from:

**Random** - Fields will create random shapes and formations.

**Uniform** - Fields will create uniform shapes and formations.

You can select the **Number** of variations that affects how many variations will be created on the scene. Besides adding variations, you can also scale them. **Scale** affects the position of each variation: when set to low values, the variations will be rendered closer to each other. When the scale is higher, the distance between each variation will be greater.

### Examples of random and uniform variations:



### Wave

There are five different types of wave to choose from:

**None** - No wave modifier is used.

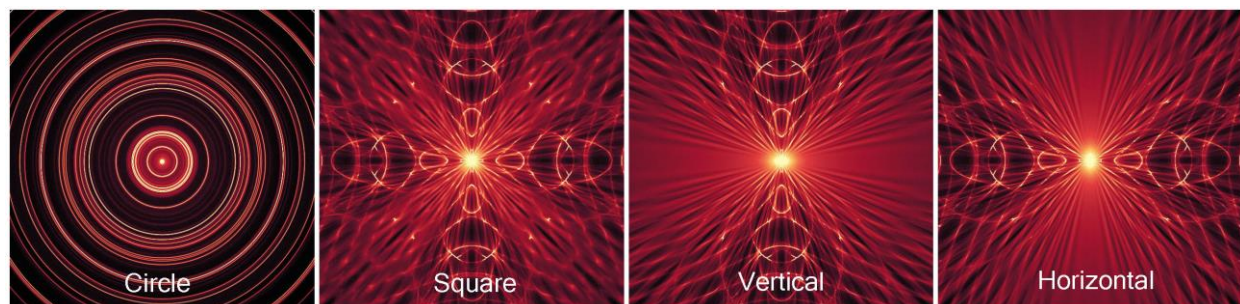
**Circle** - Circle wave.

**Square** - Square wave.

**Vertical** - Vertical wave.

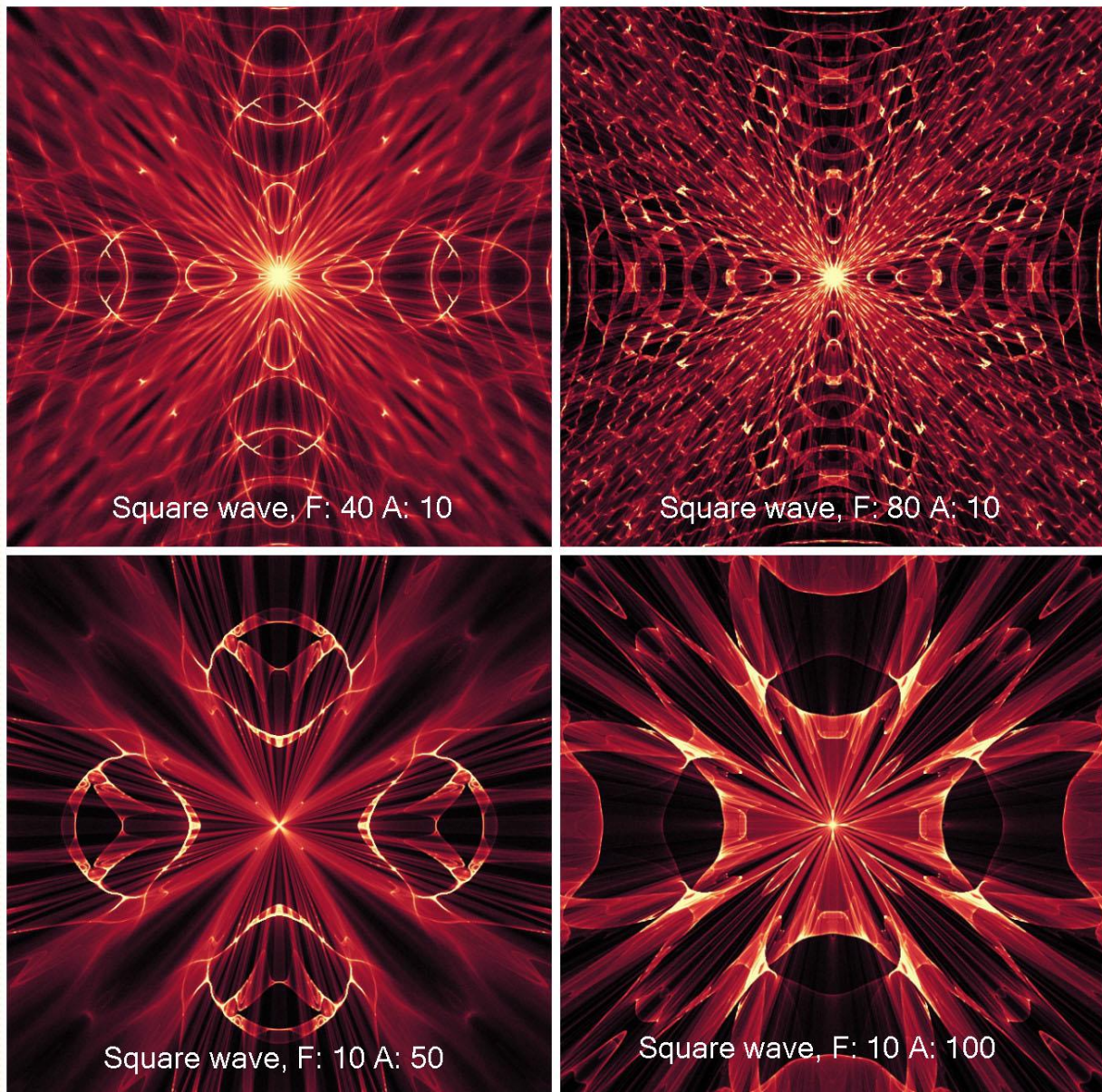
**Horizontal** - Horizontal wave.

### Examples of wave modifier types:



Set **Frequency** of the waves, or in other words, the rate at which waves are repeated on the scene. Choose how strong the waves should be with **Amplitude** slider. The amplitude represents half the distance between the minimum and maximum values of the wave.

Examples of a square wave modifier with different frequency and amplitude settings:



## 6. Rendering Animation Preview

To check how animation will actually look, you can use Render animation button in the Scene panel. You don't have to render animation preview before running Final render. Render animation serves only for preview purposes.

With Raster set to 1, the render will be smoother, the image will be of higher quality but it will also take more time to render the animation. Set Raster to 8 to get faster rendering with low quality preview.

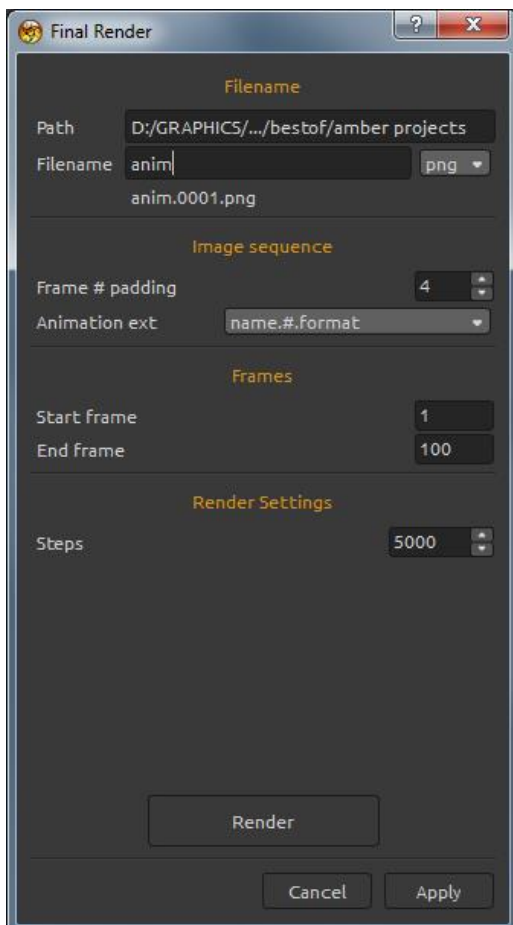
Frames that have already been rendered in the animation preview are marked with green on the timeline.

*Note: Rendering is a compute-intensive operation. When you have many keys and frames set, it may be time consuming. We suggest you to set Raster to higher values to get the approximate look of animation much quicker. The quality of the animation preview does not correspond to quality of the final render.*

## 7. Final Render

When you are satisfied with animation, select from Menu: Scene -> Final render.

Select path, filename and file format - either as an image sequence in .jpg, .png, .bmp, .tif or as a video in .avi, mov, .mkv or .webm format.



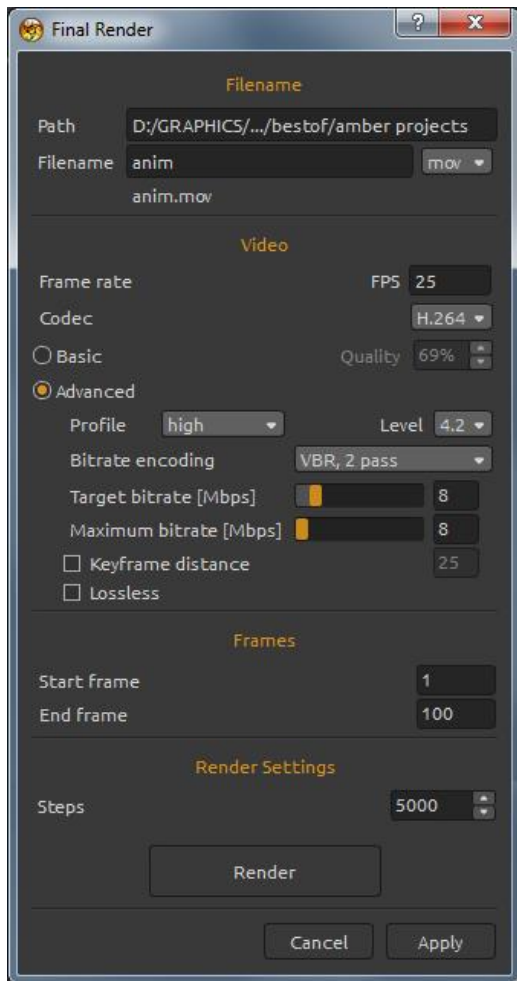
For **image sequence**, set frame padding and animation extension.

Choose the start frame, end frame and number of rendering steps.

Click **Render** to start final render or **Cancel** if you decide not to.

Click **Apply** to apply the changes.

You can create animation from the image sequence using third-party applications.



For **video**, set frame rate in FPS. Select the codec for video format:

- .avi: h264, huffyUV (lossless compression)
- .mov: h264, h265
- .mkv: h264, h265, huffyUV (loseless compression)
- .webm: VP8

Choose between basic or advanced quality settings.

**Basic** - set the quality in %. The higher is the quality, the larger will be the file.

**Advanced** - set the advanced settings for selected codec, including profile, level, bitrate encoding, target / maximum bitrate and keyframe distance. Check lossless compression if you want the original and decompressed video to be identical. Lossless compression option is not available for VP8 codec.

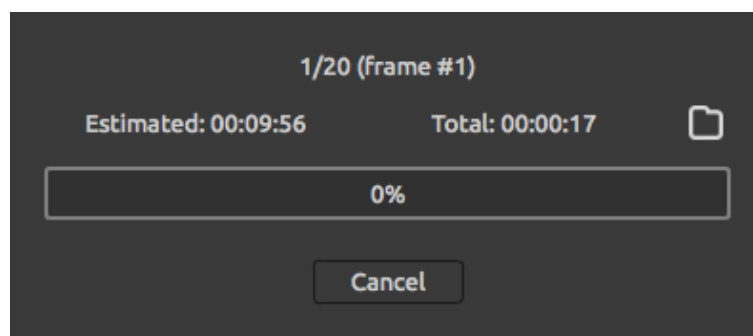
These settings are for advanced users who are familiar with H.264, H.265 and VP8 codecs.

Choose the start frame and end frame and number of rendering steps.

Click **Render** to start final render or **Cancel** if you decide not to.

Click **Apply** to apply the changes.

When the final render starts, the application calculates the estimated time of the render:





*Note: The more steps you set for final render, the longer it will take to render the final animation. Large animations can take even few hours. We suggest you to render such animations when you don't use your computer actively, for example during the night.*

# Creating, Opening and Saving Scene

## Creating a New Scene

To create a new scene, select the **New...** option from the File Menu. When you do this, the New scene window appears. This window lets you set the size of your new scene, and set up the settings you're going to use. In 'Image Size Info' section you can set the image print resolution in DPI.

You can choose from scene size presets and add / remove your own using the  /  buttons.

Set the playback speed in FPS and playback looping.

You can select the color of the background selecting **Custom...** in a scroll-down menu. The choice of the preset **Black**, **White** and **None** (transparent) background is available as well.

Finally, click **OK** to create a new scene, or **Cancel** if you decide not to.

## Opening a Scene

To open a scene, select the **Open...** option from the File Menu. This panel lets you open an image (PNG, JPG, BMP, TIFF) or previously saved image (in AMB file format) and set up the properties. When opening a previously saved image, the image will be again re-rendered.

Finally, click **OK** to open the image, or **Cancel** if you decide not to.

To open a recently saved image, select the **Open Recent** option from the File Menu. This option lets you select one of the last saved artworks in .amb, .png, .jpg, .bmp and .tif file formats.

## Saving a Scene

To save your scene, use the **Save...** option in the File Menu. The native format is an **AMB file format**, which contains all the information about the image and the layers. Use this format if you want to edit scene later. When you open a saved scene later, the scene will be again re-rendered. We advise you to save your work regularly to avoid any problems while getting used to new software.

If you wish to save your scene with specific settings or in a form that can be read by other applications, use the **Save As...** option in the File Menu. It allows you to save your scene as a PNG, JPEG, BMP or TIFF file.

*Note: Please be aware that only AMB file contains all the image information. PNG, TIF and BMP file save only color and transparency information. Transparency is not saved in JPG format.*

Finally, click **OK** to save the painting or **Cancel** if you decide not to.

## Closing an Application

If you want to close an application, you can choose from the following options depending on your operating system:

### Windows user

- click on File Menu -> Quit, or
- press a Close button in the upper right corner of an application, or
- use a shortcut Ctrl+W or Alt+F4

### Mac OS user

- click on Amberlight Menu-> Quit, or
- press a Quit button in the upper left corner of an application, or
- use a shortcut Cmd-Q on Mac OS

*Note: Please don't forget to save your image before closing the application.*



# Publish an Image to Gallery

## Creating a Gallery account

To publish your images, firstly you have to create an account. To create an account, you have two options:

### From application:

Create your Gallery account from application menu **File** -> **Publish Preferences**. Set *Your name*, *Email* ("*Your ID*") and *Password* to gallery and optionally a link to your *Website*.

### From website:

On Gallery website press **login** -> **Create Account** and enter "*Your ID*" (registration email). We will send you a *Password*, which you can change later on.

Note: You can find "*Your ID*" in menu **Help** -> **About Amberlight**. If "*Your ID*" does not exist, enter your active email.

## Publish image from Amberlight to Gallery

To publish your image, use the **Publish...** option in the File Menu. Enter the *Image Name*, a *image Description* and *Tags*. Click **Publish** button. Your image will be published on Gallery website ([www.escapemotions.com/gallery](http://www.escapemotions.com/gallery)) where you can edit images later on.

## Edit your profile and artworks in Gallery

If you have already created an account, go to Gallery website, press **login** and enter "*Your ID*" and *Password*.

In **Edit Pictures** section you can edit your artworks name, description, tags and other settings.

In **My Profile** section you can change your *Password*.

*Note: Only images may be posted to our online Gallery. To share a video, upload it to Youtube or Vimeo video-sharing websites.*

# Keyboard Shortcuts

	Windows	Mac OS
New...	Ctrl-N	Cmd-N
Open...	Ctrl-O	Cmd-O
Save	Ctrl-S	Cmd-S
Save As...	Ctrl-Shift-S	Cmd-Shift-S
Quit	Ctrl-Q	Cmd-Q
Import Image...	Ctrl-I	Cmd-I
Publish mage...	Ctrl-P	Cmd-P
Preferences	Ctrl-,	Cmd-,
Undo	Ctrl-Z	Cmd-Z
Redo	Ctrl-Shift-Z	Cmd-Shift-Z
Copy Field Properties	Ctrl-C	Cmd-C
Paste Field Properties	Ctrl-V	Cmd-V
Duplicate Fields	Ctrl-D	Cmd-D
Select All Fields	Ctrl-A	Cmd-A
Delete Fields	Del	Del
Scene Settings...	Ctrl-E	Cmd-E
Edit Mode	E	E
Pan Selected Fields	Left Mouse Button (LMB)	
Scale Selected Fields	Shift + LMB	Shift + LMB
Rotate Selected Fields	Ctrl + LMB	Cmd + LMB
Increase Value +1	Up	Up
Decrease Value -1	Down	Down
Increase Value +10	Pg Up	Pg Up
Decrease Value -10	Pg Down	Pg Down
Move Scene	Right Mouse Button (RMB)	
Previous Keyframe	Ctrl-Left	Cmd-Left
Next Keyframe	Ctrl-Right	Cmd-Right
Previous Frame	Left	Left
Next Frame	Right	Right
Play / Stop	Spacebar	
Add Keyframe	S	S
Remove Keyframe	Del	Del
Zoom In	Ctrl - +	Cmd - +

Zoom Out	Ctrl - -	Cmd - -
Zoom 100%	Ctrl - 0	Cmd - 0
Zoom In   Out	Mouse Scroll or Alt + Mouse	Scroll
Fit to Screen	Ctrl-.	Cmd-.
Help	F1	Cmd + ?

# Copyright & Credits

Amberlight © 2013-2016 Escape Motions, s.r.o.

Amberlight © 2009-2012 Peter Blaškovič

## Amberlight Team:

Peter Blaškovič, Michal Fapšo, Ľuboš Tóth, Miroslav Sedlák, Anton Poživenec, Veronika Klimeková, Andrea Hornáková, Jaroslav Kaša

## Special Thanks to:

Everyone who contributed with ideas, suggestions, or helped to finalize Amberlight, especially to Mark Schafer, Shannon Hoppe, Casey Herbert, Tomáš Lancz and Rastislav Piovarči.

**Translation and corrections:** Tanya Hayman, Veronika Klimeková, Marta Fernandez, Andrea Hornáková, Irene Briz.

**User Interface Icons:** "Batch" by Adam Whitcroft.

## Libraries & Tools:

This application has been developed with the following libraries:

Qt 4.8 - LGPL license (2.1) - <http://qt-project.org/downloads/>

QuaZIP - LGPL license (2.1) - <http://sourceforge.net/projects/quazip/>

CryptoPP - Boost Software License (1.0) - <http://www.cryptopp.com/>

FFmpeg with libx264, libx265 and libvpx - <https://www.ffmpeg.org/>

H.264/AVC license by MPEGLA - <http://www.mpegla.com>

H.265/HEVC license by MPEGLA - <http://www.mpegla.com>

Complete list of licenses is available in the installation folder: Amberlight 2/Licenses.

Thanks to God for all creative ideas.

# Amberlight End-User Software License Agreement

Copyright 2013-2016 Escape Motions, s.r.o. All Rights Reserved.

Copyright 2009-2013 Peter Blaskovic. All Rights Reserved.

This license is a legal agreement between you and Escape Motions for the use of Amberlight software (the "Software"). By downloading, installing, copying, or otherwise using the Software, you acknowledge that you have read terms and conditions of this license, understand them, and agree to be bound by them. If you do not agree with these terms and conditions, Escape Motions is unwilling to license the Software to you, and you are not authorized and may not use the Software.

## Permitted Use

You may install the Software on multiple computers provided that not more than one of those computers is in use simultaneously and that those computers are solely for your own personal use.

The Software may be installed on a computer that is for multiple users but it may not be installed on more than one computer regardless of whether those computers are operated simultaneously or not.

Users may use the Software for commercial, or for-profit activities as well as for personal, non-commercial, or non-profit activities.

You may not remove the copyrights notices from the Software. You may make one (1) copy of the Software for back-up or archival purposes.

## Restrictions

This is a SINGLE COPY SOFTWARE LICENSE. The Software is copyrighted and protected by law and international treaty. This is a license, not a transfer of title, and unless you have been granted prior, written consent from Escape Motions you may not:

- a, Reproduce, distribute, or transfer the Software, or portions thereof, to any third party.
- b, Sell, rent, lease, assign, or sublet the Software or portions thereof.
- c, Grant rights to any other person.
- d, Modify, decompile, reverse engineer, disassemble, or create derivative works based on the Software or the documentation in whole or in part.
- e, Use the Software in violation of any international law or regulation.

You must not intentionally or unintentionally make the Software available on any web server, ftp server, file sharing network, shared directory, or other location where any other person can acquire a copy of the Software. You are responsible for keeping the Software safe from being copied by others.

## **Display of Copyright Notices**

All copyright and proprietary notices and logos within the Software files must remain intact.

## **Indemnity**

You agree to indemnify and hold harmless Escape Motions for any third-party claims, actions or suits, as well as any related expenses, liabilities, damages, settlements or fees arising from your use or misuse of the Software, or a violation of any terms of this license.

The Software may contain technical inaccuracies or typographical errors, so changes and/or updates may be affected without notice. Escape Motions may also make improvements and/or other changes to the Software at any time without notice.

## **Disclaimer Of Warranty**

THE SOFTWARE IS PROVIDED \"AS IS\", WITHOUT WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, AS TO THE SOFTWARE OR ITS OPERATION, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF QUALITY, PERFORMANCE, NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. FURTHER, PETER BLASKOVIC DOES NOT WARRANT THAT THE SOFTWARE OR ANY RELATED SERVICE WILL ALWAYS BE AVAILABLE.

## **H.264/AVC and H.265/HEVC License Notice**

To the extent that the Software contains AVC and HEVC encoding and/or decoding functionality, commercial use of AVC and HEVC requires additional licensing and the following provision applies: THE AVC AND HEVC FUNCTIONALITY IN THIS PRODUCT IS LICENSED HEREIN ONLY FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER TO ENCODE VIDEO IN COMPLIANCE WITH THE AVC AND HEVC STANDARD ("AVC VIDEO" / "HEVC VIDEO") AND/OR DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR AVC AND HEVC VIDEO THAT WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC AND HEVC VIDEO. INFORMATION REGARDING OTHER USES AND LICENSES MAY BE OBTAINED FROM MPEG LA L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com).

## **Limitations Of Liability**

YOU ASSUME ALL RISK ASSOCIATED WITH THE INSTALLATION AND USE OF THE SOFTWARE. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS OF THE SOFTWARE BE LIABLE FOR CLAIMS, DAMAGES OR OTHER LIABILITY ARISING FROM, OUT OF, OR IN CONNECTION WITH THE SOFTWARE. LICENSE HOLDERS ARE SOLELY RESPONSIBLE FOR DETERMINING THE APPROPRIATENESS OF USE AND ASSUME ALL RISKS ASSOCIATED WITH ITS USE, INCLUDING BUT NOT LIMITED TO THE RISKS OF PROGRAM ERRORS, DAMAGE TO EQUIPMENT, ANY LOST PROFITS, BUSINESS INTERRUPTION, LOSS OF DATA OR SOFTWARE PROGRAMS, OR UNAVAILABILITY OR INTERRUPTION OF OPERATIONS.